In-person participation by the public will be permitted. In addition, remote public participation is available in the following ways:

1. *Livestream online at www.atwater.org (Please be advised that there is a broadcasting delay. If you would like to participate in public comment, please use the option below).*
2. *Submit a written public comment prior to the meeting: Public comments submitted to cityclerk@atwater.org by 4:00 p.m. on the day of the meeting will be distributed to the City Council, and made part of the official minutes but will not be read out loud during the meeting.*
3. *Pursuant to Government Code Section § 54953, Councilmember Cale will be participating via teleconference at the following location: 550 Washington Blvd. Baltimore, MD 21230. This location is open to the public with the same opportunity to address the Council, and this agenda is duly posted at the teleconference location in advance of the Council meeting. Public comment from this address shall be allowed.*

Assistance will be provided to those requiring accommodations for disabilities in compliance with the Americans with Disabilities Act of 1990. Persons requesting accommodation should contact the City in advance of the meeting, and as soon as possible, at (209) 357-6241.

CITY OF ATWATER

City Council

AGENDA

Council Chambers
750 Bellevue Road
Atwater, California

May 13, 2024

CALL TO ORDER: **5:00 PM**

ROLL CALL: (City Council)
Ambriz ____, Button ___, Cale ____, Raymond ____, Nelson _____

CLOSED SESSION
Adjourn to Conference Room A

- **Pursuant to Government Code Section 54957, Public Employment Appointment; Title: City Manager**

- **Pursuant to Government Code Section 54957, Public Employment Appointment; Title: Police Chief**

REGULAR SESSION: (Council Chambers)

CALL TO ORDER: **6:00 PM**

INVOCATION:

PLEDGE OF ALLEGIANCE TO THE FLAG

ROLL CALL: (City Council)
Ambriz ____, Button ___, Cale ____, Raymond ____, Nelson _____

MAYOR OR CITY ATTORNEY REPORT OUT FROM CLOSED SESSION

SUBSEQUENT NEED ITEMS: (The City Clerk shall announce any requests for items requiring immediate action subsequent to the posting of the agenda. Subsequent need items require a two-thirds vote of the members of the City Council present at the meeting.)

APPROVAL OF AGENDA AS POSTED OR AS AMENDED: (This is the time for the City Council to remove items from the agenda or to change the order of the agenda.)

Staff's Recommendation: Motion to approve agenda as posted or as amended.

CEREMONIAL MATTERS:

- **Certificate of Recognition - 2023 Dispatcher of the Year**

- **Certificate of Recognition - 2023 Police Officer of the Year**

- **National Peace Officers Memorial Day, May 15, 2024 and National Police Week, May 13 - May 17, 2024**

  Staff's Recommendation: That Mayor Nelson present the proclamation to Police Chief Salvador, on behalf of the Police Department, recognizing the day of May 15, 2024 as National Peace Officers Memorial Day and the week of May 12 - May 18, 2024 as National Police Week.

- **National Public Works Week, May 19 - May 25, 2024**

  Staff's Recommendation: That Mayor Nelson present the proclamation to Public Works Director Vinson on behalf of the Public Works

Department, recognizing the week of May 19 - May 25, 2024 as National Public Works Week.

CONSENT CALENDAR

NOTICE TO THE PUBLIC

Background information has been provided on all matters listed under the Consent Calendar, and these items are considered to be routine. All items under the Consent Calendar are normally approved by one motion. If a Councilmember requests separate discussion on any item, that item will be removed from the Consent Calendar for separate action.

WARRANTS

1. **May 13, 2024**

   Staff's Recommendation: Approval of report as listed.

MINUTES: (City Council)

2. **April 22, 2024 - Regular meeting**

   Staff's Recommendation: Approval of minutes as listed.

RESOLUTIONS:

3. **Authorizing Grant Application Bureau of Justice Assistance 2024 Patrick Leahy Bulletproof Vest Partnership Program** (Police Chief Salvador)

   Staff's Recommendation: Adoption of Resolution No. 3459-24, authorizing the grant application to the United States Department of Justice, Office of Justice Programs, Bureau of Justice Assistance's 2024 Patrick Leahy Bulletproof Vest Partnership (BVP) Program; and authorizing the Mayor and/or Interim City Manager or designee to execute Grant Application, amendments, and all documents related to the grant, on behalf of the City, including administration, if awarded.

4. **Accepting and Adopting the prepared City of Atwater Existing Conditions Report and City of Atwater Existing Conditions Market Study Report prepared for the 2040 General Plan Update** (Interim City Manager Thompson)

   Staff's Recommendation: Adoption of Resolution No. 3458-24 Accepting and Adopting the City of Atwater Existing Conditions Report and the City of Atwater Existing Conditions Market Study Report for the 2040 General Plan Update.

5. **Approving and Adopting a List of Projects for Fiscal Year 2024-25 Funded by SB 1: The Road Repair and Accountability Act of 2017** (Public Works Director Vinson)

Staff's Recommendation: Adoption of Resolution No. 3457-24 approving and adopting the Fiscal Year 2024-25 annual list of projects funded by SB 1, The Road Repair and Accountability Act of 2017; and authorizes and directs the Interim City Manager to transmit a certified copy of the resolution to the California Transportation Commission.

AGREEMENTS:

6. **Authorizing and Approving a Cooperative Purchase, Purchase Agreement (Purchase Order) to Montrose Ford for the purchase of one (1) new 2023 Dodge Charger Police Vehicle and Equipment** (Police Chief Michael Salvador)

   Staff's Recommendation: Authorizes and approves a Cooperative Purchase, Purchase Agreement (Purchase Order), in a form approved by the City Attorney, to Montrose Ford, Akron, Ohio, for the purchase of one (1) new 2023 Dodge Charger Pursuit with Police Equipment, in the combined amount not to exceed $56,100; and authorizes and directs the Interim City Manager or designee to execute the Agreement (Purchase Order) on behalf of the City.

7. **Approving Memorandum of Understanding with the County of Merced Office of Emergency Services for the State Homeland Security Grant Programs Funding for Equipment, Planning, Administration, Training and Exercises** (CAL FIRE Battalion Chief Ayuso)

   Staff's Recommendation: Approval of the Memorandum of Understanding, in a form approved by the City Attorney, with the County of Merced Office of Emergency Services for the State Homeland Security Grant Programs Funding for Equipment, Planning, Administration, Training and Exercises; and authorizes and directs the City Manager, or designee, to execute any and all documents related to the Memorandum of Understanding on behalf of the City.

8. **Awarding Purchase to Tesco Controls, Inc of Sacramento, California for a Control Panel for the Future Storm Pond/Basin for Lower Shaffer Drainage Project**(Public Works Director Vinson)

   Staff's Recommendation: Award a purchase to Tesco Controls, Inc of Sacramento, California for a control panel for the future storm pond/basin for the future Lower Shaffer Drainage Project, in an amount not to exceed $215,000.00; and authorize and direct the Interim City Manager, or designee, to execute the Purchase Order on behalf of the City.

END OF CONSENT CALENDAR

REPORTS AND PRESENTATIONS FROM STAFF:

9. **Accepting the Qualified Bid, Authorizing and Approving a Purchase Agreement (Purchase Order) with Cooks Communications of Fresno for the lease purchase of Fifty (50) New Kenwood Portable Radios** (Police Chief Salvador)

   Staff's Recommendation: Accepts qualified bid, authorizes and approves a Purchase Agreement (Purchase Order) with Cooks Communications of Fresno, California, for the lease purchase of Fifty (50) new portable radios in an amount not to exceed $176,009.17; and authorizes and directs the Interim City Manager, or designee, to execute the purchase on behalf of the City.

10. **Approving Equipment/Software Lease-Purchase Agreement with Axon Taser for the Lease-Purchase of a Body Camera, In-Car Video, Conductive Energy Weapon, and Video Evidence Management System** (Police Chief Salvador)

    Staff's Recommendation: Approval of retiring the current Five-Year Lease-Purchase Agreement and execution of a New 10-year agreement, in a form approved by the City Attorney, with Axon Taser of Arizona, in the amount not to exceed $122,000 per year, over a 10-year period, for the Police Department's Current Body Camera System, Video evidence management system, In-car Video System, conductive energy weapons system; and authorizes and directs the Interim City Manager or designee to execute the Agreement on behalf of the City.

CITY MANAGER REPORTS/UPDATES:

11. **Update from the Office of the Interim City Manager**

COMMENTS FROM THE PUBLIC:

NOTICE TO THE PUBLIC

At this time any person may comment on any item which is not on the agenda. You may state your name and address for the record; however, it is not required. Action will not be taken on an item that is not on the agenda. If it requires action, it will be referred to staff and/or placed on a future agenda. Please limit comments to a maximum of three (3) minutes.

CITY COUNCIL REPORTS/UPDATES:

- **City Council Member Cale, District 1**
- **City Council Member Button, District 2**
- **City Council Member Ambriz, District 3**
- **Mayor Pro Tem Raymond, District 4**
- **Mayor Nelson**

CLOSED SESSION:
Continuation of Closed Session if necessary

ADJOURNMENT:

CERTIFICATION:

I, Kory J. Billings, City Clerk of the City of Atwater, do hereby certify that a copy of the foregoing agenda was posted at City Hall a minimum of 72 hours prior to the meeting.

_____
KORY J. BILLINGS
CITY CLERK

SB 343 NOTICE
In accordance with California Government Code Section 54957.5, any writing or document that is a public record, relates to an open session agenda item and is distributed less than 72 hours prior to a regular meeting will be made available for public inspection in the office of the City Clerk during normal business hours at 1160 Fifth Street, Atwater, California.

If, however, the document or writing is not distributed until the regular meeting to which it relates, then the document or writing will be made available to the public at the location of the meeting, as listed on this agenda at 750 Bellevue Road, Atwater, California.



In compliance with the federal Americans with Disabilities Act of 1990, upon request, the agenda can be provided in an alternative format to accommodate special needs. If you require special accommodations to participate in a City Council, Commission or Committee meeting due to a disability, please contact the City Clerk's Office a minimum of three (3) business days in advance of the meeting at (209) 357-6241. You may also send the request by email to cityclerk@atwater.org .

Unless otherwise noted, City Council actions include a determination that they are not a "Project" within the meaning of the California Environmental Quality Act (CEQA), and therefore, that CEQA does not apply to such actions.

MAY 2024

SUN	MON	TUE	WED	THU	FRI	SAT
			1	2	3	4
5	6	7	8	9	10	11
12 	13 City Council Meeting - 6:00 PM	14	15 Planning Commission Meeting - 6:00 PM	16	17	18
19	20	21 **Application Deadline** - Citizens' Oversight Committee Unscheduled Vacancy - 5:00 PM	22	23 **Merced County District 3 Supervisor McDaniel Office Hours - 1:30 PM - 3:30 PM**	24	25
26	27  **City Holiday Trash pick up delayed - 1 day**	28 Audit & Finance Meeting - 4:30 PM City Council Meeting - 6:00 PM	29 Community Services Event 4 PM - 6 PM	30 Community Open House (Prop 218) 6 PM Council Chambers	31	

JUNE 2024



SUN	MON	TUE	WED	THU	FRI	SAT
30						1
2	3	4	5	6	7	8
9	10 City Council Meeting - 6:00 PM	11	12	13	14	15 Community Open House (Prop 218) 10 AM Community Center
16 	17	18	19  **City Holiday**	20 Planning Commission Meeting - 6:00 PM	21	22
23	24 Audit & Finance Meeting - 4:30 PM City Council Meeting - 6:00 PM	25	26	27 **Merced County District 3 Supervisor McDaniel Office Hours - 1:30 PM - 3:30 PM**	28	29

Warrant Summary May 13, 2024

Prepared By: Joseph Murillo

Accounts Payable Warrant

		Amount
05/13/2024 Warrant	$	4,083,128.61
Prewrittens (Checks Processed Between Warrants)	$	73,685.76
Total Accounts Payable Warrants:	**$**	**4,156,814.37**

Additional Warrants

Date	Description		Amount
4/23/2024	AFLAC	$	442.77
4/23/2024	AFSCME District Council 57	$	1,164.45
5/3/2024	AFSCME District Council 57	$	1,164.45
4/23/2024	APOA Union Dues	$	2,709.25
5/3/2024	APOA Union Dues	$	2,621.35
4/23/2024	EPARS Employee 457 Plan (PNC Bank)	$	4,483.00
5/3/2024	EPARS Employee 457 Plan (PNC Bank)	$	4,538.00
4/29/2024	PERS Health - April 2024	$	40,834.31
5/2/2024	PERS Health - May 2024	$	118,611.74
4/23/2024	PERS Retirement 3/28/24 - 4/10/24	$	59,327.97
5/3/2024	PERS Retirement 4/11/24 - 4/24/24	$	61,746.15
4/23/2024	State Disbursement - Child Support	$	115.38
5/3/2024	State Disbursement - Child Support	$	115.38
Total Additional Warrants:		**$**	**297,874.20**

Payroll

Date	Description		Amount
4/18/2024	Net Payroll	$	197,388.65
4/23/2024	Federal Taxes	$	65,707.66
4/23/2024	State Taxes	$	8,402.12
5/2/2024	Net Payroll	$	203,194.85
5/3/2024	Federal Taxes	$	69,230.36
5/3/2024	State Taxes	$	8,924.00
Total Payroll:		**$**	**552,847.64**

Grant Total:	**$**	**5,007,536.21**

Mark Borba City Treasurer

Accounts Payable

Checks for Approval

User: jmurillo
Printed: 5/9/2024 - 1:58 PM



City of Atwater
Community Pride City Wide
750 Bellevue Road, Atwater CA 95301

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
0	04/23/2024	General Fund	Pers Benefits	PERS-RETIREMENT		2,908.76
0	04/23/2024	General Fund	Pers Benefits	PERS-RETIREMENT		15,987.18
0	04/23/2024	General Fund	Police Union Dues	ATWATER POLICE OFFICERS ASSN.		2,709.25
0	04/23/2024	General Fund	Miscellaneous Union Dues	AFSCME DISTRICT COUNCIL 57		1,164.45
0	04/23/2024	General Fund	Federal Income Tax Withheld	PAYROLL TAXES-FEDERAL		21,992.98
0	04/23/2024	General Fund	State Income Tax Withheld	PAYROLL TAXES-STATE		8,402.12
0	04/23/2024	General Fund	Fica/Medicare - Employee	PAYROLL TAXES-FEDERAL		4,142.89
0	04/23/2024	General Fund	Fica/Medicare - Employee	PAYROLL TAXES-FEDERAL		17,714.45
0	04/23/2024	General Fund	Fica/Medicare-Employer	PAYROLL TAXES-FEDERAL		4,142.89
0	04/23/2024	General Fund	Fica/Medicare-Employer	PAYROLL TAXES-FEDERAL		17,714.45
0	04/23/2024	General Fund	Pers Deduction	PERS-RETIREMENT		7,130.34
0	04/23/2024	General Fund	Pers Deduction	PERS-RETIREMENT		1,005.33
0	04/23/2024	General Fund	Pers Deduction	PERS-RETIREMENT		2,983.05
0	04/23/2024	General Fund	Pers Benefits	PERS-RETIREMENT		786.58
0	04/23/2024	General Fund	Pers Benefits	PERS-RETIREMENT		1,134.93
0	04/23/2024	General Fund	Pers Benefits	PERS-RETIREMENT		6,661.58
0	04/23/2024	General Fund	Pers Benefits	PERS-RETIREMENT		10,318.06
0	04/23/2024	General Fund	Pers Benefits	PERS-RETIREMENT		10,412.16
0	04/23/2024	General Fund	Deferred Compensation	PNC BANK		700.00
0	04/23/2024	General Fund	Deferred Compensation	PNC BANK		3,783.00
0	04/23/2024	General Fund	Aflac Premiums	AFLAC PLANS		221.38
0	04/23/2024	General Fund	Aflac Premiums	AFLAC PLANS		96.75
0	04/23/2024	General Fund	Aflac Premiums	AFLAC PLANS		124.64
0	04/23/2024	General Fund	Garnishments	STATE DISBURSEMENT UNIT		115.38
				Check Total:		142,352.60
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	ARMANDO ECHEVARRIA		867.97
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	HARRY E. DUNN		587.67
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	KIM BENGSTON-JENNINGS		523.12
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	ROBERT CALLAWAY		577.67
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	JESUS F. DURAN		1,579.79
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	DEBRA COURT		196.41
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	NELSON CRABB		601.67

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	LOIS BELT		246.34
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	ALLAN BOYER		649.67
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	ANTHONY CARDOZA		812.16
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	RANDALL CARROTHERS		1,429.18
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	JAMES ATKINSON		150.55
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	LINDA FERRERO		246.34
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	SCOTT DUNCAN		1,386.49
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	GLEN C. CARRINGTON		150.55
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	PATRICK FARETTA		1,624.52
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	STANLEY FEATHERS		587.67
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	GEORGE LOGAN		246.34
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	ELIZABETH WILDE		867.97
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	THOMAS PROTHRO		150.55
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	FRANK ORMOND		150.55
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	TONY RAMIREZ		867.97
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	BENJAMIN THOMAS		1,357.10
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	STEVE KJOS		587.67
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	DENNIS O. SPARKS		246.34
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	ADOLFO LOMELI		1,447.97
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	ROBERTO ROMERO		472.62
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	CHARLIE WOODS		587.67
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	DAVID WALKER		609.06
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	RICHARD HAWTHORNE		577.67
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	MARGARET MERRITT		150.55
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	JEFF MONDLOCH		184.34
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	BOBBY GREGORY		2,507.94
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	CYNTHIA THOMPSON		246.34
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	BARBARA RIIS CHRISTENSEN		577.67
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	FRANK PIETRO		510.45
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	JOSEPH HOFFAR		458.10
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	RENE MENDOZA		577.67
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	DARIN JANTZ		1,456.33
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	CHRISTIAN HAMBRECHT		666.34
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	GREG WELLMAN		609.67
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	JOHN RASMUSSEN		587.67
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	SAMUEL JOSEPH		1,553.12
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	EARL WEATHERS		587.67
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	ROBERT VASQUEZ		208.94
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	TYNA LAMISON		695.15
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	WILLIAM RICHARDS		196.41
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	NANCY WILLIAMS		246.34
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	KEN JENSEN		355.41
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	SANDY RAHN		762.27
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	CHRISTOPHER A. MCDANIEL		246.34

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	LEN GUILLETTE		1,054.58
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	MIKE STANFORD		855.06
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	KELLY SORENSEN		1,278.51
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	MICHAEL KEELER		150.55
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	JOHN SMOTHERS		740.16
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	JUAN SUFUENTES		1,650.12
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	DICK WISDOM		150.55
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	EDWARD VELASQUEZ		150.55
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	STEPHEN LUNDGREN		208.25
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	DOUGLAS P. TILLEY		246.34
0	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	JERRY MOORE		577.67
				Check Total:		40,834.31
0	05/03/2024	General Fund	Pers Benefits	PERS-RETIREMENT		9,927.10
0	05/03/2024	General Fund	Pers Deduction	PERS-RETIREMENT		8,760.33
0	05/03/2024	General Fund	Pers Deduction	PERS-RETIREMENT		1,008.34
0	05/03/2024	General Fund	Pers Deduction	PERS-RETIREMENT		2,992.08
0	05/03/2024	General Fund	Pers Benefits	PERS-RETIREMENT		9,837.40
0	05/03/2024	General Fund	Pers Benefits	PERS-RETIREMENT		1,134.93
0	05/03/2024	General Fund	State Income Tax Withheld	PAYROLL TAXES-STATE		8,765.73
0	05/03/2024	General Fund	State Income Tax Withheld	PAYROLL TAXES-STATE		158.27
0	05/03/2024	General Fund	Garnishments	STATE DISBURSEMENT UNIT		115.38
0	05/03/2024	General Fund	Federal Income Tax Withheld	PAYROLL TAXES-FEDERAL		23,481.81
0	05/03/2024	General Fund	Federal Income Tax Withheld	PAYROLL TAXES-FEDERAL		467.67
0	05/03/2024	General Fund	Fica/Medicare - Employee	PAYROLL TAXES-FEDERAL		18,048.21
0	05/03/2024	General Fund	Fica/Medicare - Employee	PAYROLL TAXES-FEDERAL		4,220.95
0	05/03/2024	General Fund	Fica/Medicare - Employee	PAYROLL TAXES-FEDERAL		70.37
0	05/03/2024	General Fund	Fica/Medicare - Employee	PAYROLL TAXES-FEDERAL		300.91
0	05/03/2024	General Fund	Fica/Medicare-Employer	PAYROLL TAXES-FEDERAL		4,220.95
0	05/03/2024	General Fund	Fica/Medicare-Employer	PAYROLL TAXES-FEDERAL		70.37
0	05/03/2024	General Fund	Fica/Medicare-Employer	PAYROLL TAXES-FEDERAL		300.91
0	05/03/2024	General Fund	Fica/Medicare-Employer	PAYROLL TAXES-FEDERAL		18,048.21
0	05/03/2024	General Fund	Pers Benefits	PERS-RETIREMENT		786.58
0	05/03/2024	General Fund	Pers Benefits	PERS-RETIREMENT		6,661.58
0	05/03/2024	General Fund	Pers Benefits	PERS-RETIREMENT		2,908.76
0	05/03/2024	General Fund	Pers Benefits	PERS-RETIREMENT		17,729.05
0	05/03/2024	General Fund	Deferred Compensation	PNC BANK		3,883.00
0	05/03/2024	General Fund	Deferred Compensation	PNC BANK		700.00
0	05/03/2024	General Fund	Police Union Dues	ATWATER POLICE OFFICERS ASSN.		2,621.35
0	05/03/2024	General Fund	Miscellaneous Union Dues	AFSCME DISTRICT COUNCIL 57		1,164.45
				Check Total:		148,384.69
0	05/02/2024	General Fund	Pers Health Payable	PERS-HEALTH		105,559.84

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
0	05/02/2024	Employee Benefits Fund	General Administration-Ins	PERS-HEALTH		348.35
0	05/02/2024	Employee Benefits Fund	Health Insurance, Retirees	PERS-HEALTH		11,042.26
0	05/02/2024	General Fund	Miscellaneous Bills	PERS-HEALTH		1,661.29
					Check Total:	118,611.74

Accounts Payable

Checks for Approval

User: jmurillo
Printed: 5/9/2024 - 10:07 AM

PREWRITTENS



City of Atwater
Community Pride City Wide

750 Bellevue Road, Atwater CA 95301

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
25082	04/23/2024	General Fund	Life Insurance Payable	UNUM LIFE INSURANCE		33.59
25082	04/23/2024	General Fund	Life Insurance Payable	UNUM LIFE INSURANCE		33.59
				Check Total:		67.18
25083	04/23/2024	General Fund	Life Insurance Payable	UNUM LIFE INSURANCE		179.89
25083	04/23/2024	General Fund	Life Insurance Payable	UNUM LIFE INSURANCE		96.99
25083	04/23/2024	General Fund	Life Insurance Payable	UNUM LIFE INSURANCE		82.84
				Check Total:		359.72
25084	04/23/2024	General Fund	Communications	AT&T MOBILITY		372.84
25084	04/23/2024	General Fund	Communications	AT&T MOBILITY		135.33
25084	04/23/2024	General Fund	Communications	AT&T MOBILITY		90.06
25084	04/23/2024	General Fund	Communications	AT&T MOBILITY		130.30
25084	04/23/2024	Information Technology Fund	Communications	AT&T MOBILITY		45.03
25084	04/23/2024	General Fund	Communications	AT&T MOBILITY		90.06
25084	04/23/2024	General Fund	Communications	AT&T MOBILITY		130.30
25084	04/23/2024	General Fund	Communications	AT&T MOBILITY		130.30
25084	04/23/2024	Internal Service Fund	Communications	AT&T MOBILITY		45.03
25084	04/23/2024	Water Enterprise Fund	Communications	AT&T MOBILITY		130.30
25084	04/23/2024	Gas Tax/Street Improvement	Communications	AT&T MOBILITY		45.03
25084	04/23/2024	Information Technology Fund	Communications	AT&T MOBILITY		124.40
25084	04/23/2024	Internal Service Fund	Communications	AT&T MOBILITY		43.92
25084	04/23/2024	General Fund	Communications	AT&T MOBILITY		43.92
25084	04/23/2024	Gas Tax/Street Improvement	Communications	AT&T MOBILITY		263.52
25084	04/23/2024	General Fund	Communications	AT&T MOBILITY		43.92
25084	04/23/2024	Water Enterprise Fund	Communications	AT&T MOBILITY		459.96
25084	04/23/2024	General Fund	Communications	AT&T MOBILITY		87.84
25084	04/23/2024	Sewer Enterprise Fund	Communications	AT&T MOBILITY		527.04
25084	04/23/2024	Internal Service Fund	Communications	AT&T MOBILITY		43.92
				Check Total:		2,983.02
25085	04/23/2024	America West LD	Utilities	MERCED IRRIGATION DISTRICT		169.15
25085	04/23/2024	Sewer Enterprise Fund	Utilities	MERCED IRRIGATION DISTRICT		680.27

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
25085	04/23/2024	Water Enterprise Fund	Utilities	MERCED IRRIGATION DISTRICT		425.13
25085	04/23/2024	Price Annexation LD	Utilities	MERCED IRRIGATION DISTRICT		228.87
25085	04/23/2024	Camellia Estates LD	Utilities	MERCED IRRIGATION DISTRICT		76.29
25085	04/23/2024	General Fund	Utilities	MERCED IRRIGATION DISTRICT		632.42
25085	04/23/2024	Atwater South LD	Utilities	MERCED IRRIGATION DISTRICT		471.07
25085	04/23/2024	Mello Ranch 2 LD	Utilities	MERCED IRRIGATION DISTRICT		724.73
25085	04/23/2024	Juniper Meadows LD	Utilities	MERCED IRRIGATION DISTRICT		38.17
25085	04/23/2024	Stone Creek LD	Utilities	MERCED IRRIGATION DISTRICT		342.13
25085	04/23/2024	Camellia Meadows LD	Utilities	MERCED IRRIGATION DISTRICT		76.29
25085	04/23/2024	Bell Crossing LD	Utilities	MERCED IRRIGATION DISTRICT		375.29
25085	04/23/2024	Mello Ranch LNDSCP	Utilities	MERCED IRRIGATION DISTRICT		61.97
25085	04/23/2024	Gas Tax/Street Improvement	Utilities	MERCED IRRIGATION DISTRICT		910.88
25085	04/23/2024	Price Annexation LMA	Utilities	MERCED IRRIGATION DISTRICT		117.04
25085	04/23/2024	Mello Ranch LD	Utilities	MERCED IRRIGATION DISTRICT		543.72
25085	04/23/2024	Stone Creek LNDSCP	Utilities	MERCED IRRIGATION DISTRICT		20.66
25085	04/23/2024	Bell Crossing LNDSCP	Utilities	MERCED IRRIGATION DISTRICT		20.66
25085	04/23/2024	Meadow View LD	Utilities	MERCED IRRIGATION DISTRICT		585.63
25085	04/23/2024	Aspenwood LD	Utilities	MERCED IRRIGATION DISTRICT		267.97
25085	04/23/2024	Applegate Ranch LD	Utilities	MERCED IRRIGATION DISTRICT		395.15
25085	04/23/2024	Applegate Ranch Lndscp	Utilities	MERCED IRRIGATION DISTRICT		20.66
25085	04/23/2024	Sewer Enterprise Fund	Utilities	MERCED IRRIGATION DISTRICT		5,792.23
				Check Total:		12,976.38
25086	04/23/2024	Gas Tax/Street Improvement	Utilities	PACIFIC GAS & ELECTRIC		121.28
25086	04/23/2024	Sewer Enterprise Fund	Utilities	PACIFIC GAS & ELECTRIC		51,878.79
				Check Total:		52,000.07
25087	04/23/2024	General Fund	Communications	VERIZON WIRELESS		342.09
25087	04/23/2024	General Fund	Communications	VERIZON WIRELESS		760.20
				Check Total:		1,102.29
25088	04/25/2024	General Fund	Printing & Advertising	MCCLATCHY COMPANY LLC		118.24
25088	04/25/2024	General Fund	Printing & Advertising	MCCLATCHY COMPANY LLC		123.82
25088	04/25/2024	General Fund	Printing & Advertising	MCCLATCHY COMPANY LLC		125.68
25088	04/25/2024	General Fund	Printing & Advertising	MCCLATCHY COMPANY LLC		129.40
25088	04/25/2024	General Fund	Printing & Advertising	MCCLATCHY COMPANY LLC		121.96
25088	04/25/2024	General Fund	Printing & Advertising	MCCLATCHY COMPANY LLC		118.24
				Check Total:		737.34
25089	04/26/2024	Water Enterprise Fund	Special Departmental Expense	MERCED COUNTY TAX COLLECTOR		50.00
25089	04/26/2024	Sewer Enterprise Fund	Special Departmental Expense	MERCED COUNTY TAX COLLECTOR		50.00

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
				Check Total:		100.00
25090	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	DAVID CHURCH		573.49
				Check Total:		573.49
25091	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	MANUEL DURAN		85.37
				Check Total:		85.37
25092	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	GARY FRAGO		410.10
				Check Total:		410.10
25093	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	LORIN MANN		643.16
				Check Total:		643.16
25094	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	WILLIAM MARTIN		867.97
				Check Total:		867.97
25095	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	BILL SWALLEY		150.55
				Check Total:		150.55
25096	04/29/2024	Employee Benefits Fund	Health Insurance, Retirees	LORI WATERMAN		529.12
				Check Total:		529.12
25097	04/29/2024	Water Enterprise Fund	Special Departmental Expense	MERCED COUNTY TAX COLLECTOR		50.00
25097	04/29/2024	Sewer Enterprise Fund	Special Departmental Expense	MERCED COUNTY TAX COLLECTOR		50.00
				Check Total:		100.00
				Report Total:		73,685.76

Accounts Payable

Checks for Approval

User: jmurillo
Printed: 5/9/2024 - 1:44 PM



City of Atwater
Community Pride City Wide
750 Bellevue Road, Atwater CA 95301

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
0	05/13/2024	General Fund	Office Supplies	QUADIENT FINANCE USA INC		1,000.00
0	05/13/2024	Successor Agency Debt Service	Cash with Fiscal Agent	THE BANK OF NEW YORK MELLON		956,000.00
0	05/13/2024	Successor Agency Debt Service	Cash with Fiscal Agent	THE BANK OF NEW YORK MELLON		37,926.00
0	05/13/2024	Sewer Enterprise Fund	Cash with Fiscal Agent	THE BANK OF NEW YORK MELLON		182,653.13
0	05/13/2024	Sewer Enterprise Fund	Cash with Fiscal Agent	THE BANK OF NEW YORK MELLON		59,583.33
0	05/13/2024	Sewer Enterprise Fund	Cash with Fiscal Agent	THE BANK OF NEW YORK MELLON		35,530.73
0	05/13/2024	Sewer Enterprise Fund	Cash with Fiscal Agent	THE BANK OF NEW YORK MELLON		92,916.67
0	05/13/2024	General Fund	Electronic Pmt Processing Exp	CHASE MERCHANT SERVICES		1,336.06
0	05/13/2024	General Fund	Electronic Pmt Processing Exp	CHASE MERCHANT SERVICES		34.28
0	05/13/2024	General Fund	Electronic Pmt Processing Exp	CHASE MERCHANT SERVICES		374.71
0	05/13/2024	General Fund	Electronic Pmt Processing Exp	CHASE MERCHANT SERVICES		25.00
0	05/13/2024	Water Enterprise Fund	Electronic Pmt Processing Exp	VANCO PAYMENT SOLUTIONS		37.03
0	05/13/2024	Sewer Enterprise Fund	Electronic Pmt Processing Exp	VANCO PAYMENT SOLUTIONS		37.03
0	05/13/2024	Sanitation Enterprise Fund	Electronic Pmt Processing Exp	VANCO PAYMENT SOLUTIONS		37.03
0	05/13/2024	Water Enterprise Fund	Electronic Pmt Processing Exp	SPRINGBROOK-GROUP		513.13
0	05/13/2024	Sewer Enterprise Fund	Electronic Pmt Processing Exp	SPRINGBROOK-GROUP		513.13
0	05/13/2024	Sanitation Enterprise Fund	Electronic Pmt Processing Exp	SPRINGBROOK-GROUP		513.12
0	05/13/2024	General Fund	Electronic Pmt Processing Exp	GLOBAL PAYMENTS INTEGRATED		881.98
0	05/13/2024	General Fund	Special Departmental Expense	NUANCE COMMUNICATIONS INC		3,240.00
0	05/13/2024	Internal Service Fund	Operations & Maintenance	CHEVRON USA INC		82.75
0	05/13/2024	Employee Benefits Fund	Unemployment Insurance	EMPLOYMENT DEVELOPMENT DEPT		9,697.00
				Check Total:		1,382,932.11
25098	05/13/2024	Water Enterprise Fund	Professional Services	ABS DIRECT INC		41.34
25098	05/13/2024	Sanitation Enterprise Fund	Professional Services	ABS DIRECT INC		41.35
25098	05/13/2024	Sewer Enterprise Fund	Professional Services	ABS DIRECT INC		41.34
25098	05/13/2024	Sewer Enterprise Fund	Professional Services	ABS DIRECT INC		128.25
25098	05/13/2024	Sanitation Enterprise Fund	Professional Services	ABS DIRECT INC		128.25
25098	05/13/2024	Water Enterprise Fund	Professional Services	ABS DIRECT INC		128.24
25098	05/13/2024	Water Enterprise Fund	Professional Services	ABS DIRECT INC		723.06
25098	05/13/2024	Sewer Enterprise Fund	Professional Services	ABS DIRECT INC		723.07
25098	05/13/2024	Sanitation Enterprise Fund	Professional Services	ABS DIRECT INC		723.07
25098	05/13/2024	Sewer Enterprise Fund	Office Supplies	ABS DIRECT INC		1,666.67

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
25098	05/13/2024	Sanitation Enterprise Fund	Office Supplies	ABS DIRECT INC		1,666.67
25098	05/13/2024	Water Enterprise Fund	Office Supplies	ABS DIRECT INC		1,666.66
				Check Total:		7,677.97
25099	05/13/2024	Internal Service Fund	Professional Services	AERIAL INSPECTION SERVICES		800.00
				Check Total:		800.00
25100	05/13/2024	General Fund	Professional Services	AG TOWING AND TRANSPORT		270.00
				Check Total:		270.00
25101	05/13/2024	General Fund	Special Departmental Expense	AIRGAS USA, LLC		116.57
25101	05/13/2024	General Fund	Special Departmental Expense	AIRGAS USA, LLC		529.40
				Check Total:		645.97
25102	05/13/2024	Public Safety Trans & Use Tax	Machinery & Equipment	ALLSTAR FIRE EQUIPMENT INC		1,557.03
				Check Total:		1,557.03
25103	05/13/2024	Internal Service Fund	Operations & Maintenance	ALLWAYS TOWING LLC		600.00
				Check Total:		600.00
25104	05/13/2024	Water Enterprise Fund	Special Departmental Expense	AM CONSTRUCTION SUPPLY, INC.		652.48
				Check Total:		652.48
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		348.90
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		57.35
25105	05/13/2024	General Fund	Office Supplies	AMAZON CAPITAL SERVICES		75.14
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		146.80
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		21.73
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		10.85
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		225.97
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		13.99
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		8.48
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		71.76
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		46.96
25105	05/13/2024	Information Technology Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		226.98
25105	05/13/2024	Information Technology Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		258.81
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		37.94
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		63.50
25105	05/13/2024	General Fund	Office Supplies	AMAZON CAPITAL SERVICES		8.36
25105	05/13/2024	General Fund	Various Classes	AMAZON CAPITAL SERVICES		29.80
25105	05/13/2024	General Fund	Various Classes	AMAZON CAPITAL SERVICES		46.89
25105	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	AMAZON CAPITAL SERVICES		32.50

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
25105	05/13/2024	Internal Service Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		21.21
25105	05/13/2024	Internal Service Fund	Small Tools	AMAZON CAPITAL SERVICES		77.20
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		326.19
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		105.46
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		32.57
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		18.37
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		10.76
25105	05/13/2024	General Fund	Office Supplies	AMAZON CAPITAL SERVICES		75.14
25105	05/13/2024	General Fund	Office Supplies	AMAZON CAPITAL SERVICES		38.57
25105	05/13/2024	General Fund	Office Supplies	AMAZON CAPITAL SERVICES		68.49
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		80.03
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		4.56
25105	05/13/2024	General Fund	Office Supplies	AMAZON CAPITAL SERVICES		712.26
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		304.49
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		37.94
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		754.68
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		94.50
25105	05/13/2024	General Fund	Office Supplies	AMAZON CAPITAL SERVICES		147.18
25105	05/13/2024	General Fund	Office Supplies	AMAZON CAPITAL SERVICES		21.43
25105	05/13/2024	General Fund	Office Supplies	AMAZON CAPITAL SERVICES		31.31
25105	05/13/2024	General Fund	Office Supplies	AMAZON CAPITAL SERVICES		21.43
25105	05/13/2024	General Fund	Office Supplies	AMAZON CAPITAL SERVICES		356.13
25105	05/13/2024	General Fund	Office Supplies	AMAZON CAPITAL SERVICES		38.61
25105	05/13/2024	General Fund	Office Supplies	AMAZON CAPITAL SERVICES		29.33
25105	05/13/2024	General Fund	Office Supplies	AMAZON CAPITAL SERVICES		8.30
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		81.55
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		24.57
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		23.69
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		255.55
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		73.16
25105	05/13/2024	General Fund	Office Supplies	AMAZON CAPITAL SERVICES		10.77
25105	05/13/2024	General Fund	Office Supplies	AMAZON CAPITAL SERVICES		8.92
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		61.98
25105	05/13/2024	General Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		11.47
25105	05/13/2024	General Fund	Various Classes	AMAZON CAPITAL SERVICES		37.93
25105	05/13/2024	General Fund	Various Classes	AMAZON CAPITAL SERVICES		7.38
25105	05/13/2024	General Fund	Various Classes	AMAZON CAPITAL SERVICES		14.75
25105	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	AMAZON CAPITAL SERVICES		76.11
25105	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	AMAZON CAPITAL SERVICES		64.79
25105	05/13/2024	Internal Service Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		43.27
25105	05/13/2024	Internal Service Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		97.82
25105	05/13/2024	Internal Service Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		8.01
25105	05/13/2024	Internal Service Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		163.10
25105	05/13/2024	Information Technology Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		21.20

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
25105	05/13/2024	Information Technology Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		21.63
25105	05/13/2024	Information Technology Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		399.03
25105	05/13/2024	Information Technology Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		72.71
25105	05/13/2024	Information Technology Fund	Special Departmental Expense	AMAZON CAPITAL SERVICES		59.90
				Check Total:		6,788.14
25106	05/13/2024	Internal Service Fund	Operations & Maintenance	APPLIED INDUSTRIAL TECH.		132.68
				Check Total:		132.68
25107	05/13/2024	Water Fund Capital Replacement	Installation-New Water Meters	AQUA METRIC		5,031.77
				Check Total:		5,031.77
25108	05/13/2024	Water Enterprise Fund	Accounts Payable	SHERYL ARNOLD		221.18
25108	05/13/2024	Sewer Enterprise Fund	Accounts Payable	SHERYL ARNOLD		57.21
25108	05/13/2024	Sanitation Enterprise Fund	Accounts Payable	SHERYL ARNOLD		32.08
				Check Total:		310.47
25109	05/13/2024	Internal Service Fund	Operations & Maintenance	ASSOCIATES LOCK & SAFE SERVICE		70.36
25109	05/13/2024	Internal Service Fund	Special Departmental Expense	ASSOCIATES LOCK & SAFE SERVICE		16.24
25109	05/13/2024	Internal Service Fund	Professional Services	ASSOCIATES LOCK & SAFE SERVICE		130.00
				Check Total:		216.60
25110	05/13/2024	General Fund	Communications	AT&T CALNET		158.44
25110	05/13/2024	Water Enterprise Fund	Communications	AT&T CALNET		318.66
25110	05/13/2024	Sewer Enterprise Fund	Communications	AT&T CALNET		494.44
25110	05/13/2024	Internal Service Fund	Communications	AT&T CALNET		591.79
25110	05/13/2024	General Fund	Communications	AT&T CALNET		286.21
				Check Total:		1,849.54
25111	05/13/2024	Gas Tax/Street Improvement	Professional Services	ATWATER CHIROPRACTIC, INC.		65.00
25111	05/13/2024	Sewer Enterprise Fund	Professional Services	ATWATER CHIROPRACTIC, INC.		65.00
				Check Total:		130.00
25112	05/13/2024	Employee Benefits Fund	Dental Insurance	BENEFIT COORDINATORS CORPORATION (BC		1,478.12
25112	05/13/2024	Employee Benefits Fund	Dental Insurance	BENEFIT COORDINATORS CORPORATION (BC		3,094.08
25112	05/13/2024	Employee Benefits Fund	Dental Insurance	BENEFIT COORDINATORS CORPORATION (BC		446.60
25112	05/13/2024	Employee Benefits Fund	Dental Insurance	BENEFIT COORDINATORS CORPORATION (BC		3,845.47
25112	05/13/2024	Employee Benefits Fund	Dental Insurance	BENEFIT COORDINATORS CORPORATION (BC		4,319.11
25112	05/13/2024	Employee Benefits Fund	Dental Insurance	BENEFIT COORDINATORS CORPORATION (BC		3,331.71
				Check Total:		16,515.09
25113	05/13/2024	Internal Service Fund	Professional Services	DON BENNER		300.00

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
				Check Total:		300.00
25114	05/13/2024	Risk Management Fund	Professional Services	BEST BEST & KRIEGER		4,619.30
25114	05/13/2024	General Fund	Professional Services	BEST BEST & KRIEGER		438.46
				Check Total:		5,057.76
25115	05/13/2024	General Fund	Special Departmental Expense	BIG CREEK LUMBER COMPANY		60.25
25115	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	BIG CREEK LUMBER COMPANY		237.67
25115	05/13/2024	Sewer Enterprise Fund	Small Tools	BIG CREEK LUMBER COMPANY		30.14
25115	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	BIG CREEK LUMBER COMPANY		68.70
25115	05/13/2024	Internal Service Fund	Special Departmental Expense	BIG CREEK LUMBER COMPANY		19.24
25115	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	BIG CREEK LUMBER COMPANY		40.79
25115	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	BIG CREEK LUMBER COMPANY		37.29
25115	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	BIG CREEK LUMBER COMPANY		63.22
25115	05/13/2024	Water Enterprise Fund	Special Departmental Expense	BIG CREEK LUMBER COMPANY		25.17
25115	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	BIG CREEK LUMBER COMPANY		37.29
25115	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	BIG CREEK LUMBER COMPANY		151.81
25115	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	BIG CREEK LUMBER COMPANY		156.84
25115	05/13/2024	Water Enterprise Fund	Special Departmental Expense	BIG CREEK LUMBER COMPANY		133.63
25115	05/13/2024	Water Enterprise Fund	Special Departmental Expense	BIG CREEK LUMBER COMPANY		27.97
25115	05/13/2024	Internal Service Fund	Small Tools	BIG CREEK LUMBER COMPANY		85.33
25115	05/13/2024	Internal Service Fund	Special Departmental Expense	BIG CREEK LUMBER COMPANY		23.25
25115	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	BIG CREEK LUMBER COMPANY		90.74
25115	05/13/2024	Water Enterprise Fund	Special Departmental Expense	BIG CREEK LUMBER COMPANY		139.63
25115	05/13/2024	General Fund	Special Departmental Expense	BIG CREEK LUMBER COMPANY		46.46
25115	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	BIG CREEK LUMBER COMPANY		95.46
25115	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	BIG CREEK LUMBER COMPANY		53.26
25115	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	BIG CREEK LUMBER COMPANY		53.26
25115	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	BIG CREEK LUMBER COMPANY		32.31
25115	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	BIG CREEK LUMBER COMPANY		18.30
25115	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	BIG CREEK LUMBER COMPANY		51.37
25115	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	BIG CREEK LUMBER COMPANY		148.80
25115	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	BIG CREEK LUMBER COMPANY		-151.81
25115	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	BIG CREEK LUMBER COMPANY		-53.26
				Check Total:		1,723.11
25116	05/13/2024	Risk Management Fund	Professional Services	RICHARD BLAK, PHD		465.00
25116	05/13/2024	Risk Management Fund	Professional Services	RICHARD BLAK, PHD		465.00
25116	05/13/2024	Risk Management Fund	Professional Services	RICHARD BLAK, PHD		465.00
				Check Total:		1,395.00
25117	05/13/2024	Internal Service Fund	Operations & Maintenance	BOBCAT CENTRAL, INC.		397.62

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
				Check Total:		397.62
25118	05/13/2024	Sewer Enterprise Fund	Uniform & Clothing Expense	BOOT BARN		195.74
25118	05/13/2024	Water Enterprise Fund	Uniform & Clothing Expense	BOOT BARN		200.00
				Check Total:		395.74
25119	05/13/2024	Sewer Enterprise Fund	Professional Services	BSK ASSOCIATES		5,145.00
25119	05/13/2024	Sewer Enterprise Fund	Professional Services	BSK ASSOCIATES		1,351.00
25119	05/13/2024	Water Enterprise Fund	Professional Services	BSK ASSOCIATES		204.00
25119	05/13/2024	Water Enterprise Fund	Professional Services	BSK ASSOCIATES		76.50
25119	05/13/2024	Water Enterprise Fund	Professional Services	BSK ASSOCIATES		204.00
25119	05/13/2024	Water Enterprise Fund	Professional Services	BSK ASSOCIATES		76.50
25119	05/13/2024	Water Enterprise Fund	Professional Services	BSK ASSOCIATES		127.50
25119	05/13/2024	Water Enterprise Fund	Professional Services	BSK ASSOCIATES		204.00
25119	05/13/2024	Water Enterprise Fund	Professional Services	BSK ASSOCIATES		58.50
25119	05/13/2024	1,2,3-TCP Fund	Professional Services	BSK ASSOCIATES		952.50
25119	05/13/2024	1,2,3-TCP Fund	Professional Services	BSK ASSOCIATES		952.50
25119	05/13/2024	Water Enterprise Fund	Professional Services	BSK ASSOCIATES		96.75
25119	05/13/2024	Water Enterprise Fund	Professional Services	BSK ASSOCIATES		25.50
25119	05/13/2024	Water Enterprise Fund	Professional Services	BSK ASSOCIATES		76.50
25119	05/13/2024	Water Enterprise Fund	Professional Services	BSK ASSOCIATES		76.50
25119	05/13/2024	Water Enterprise Fund	Professional Services	BSK ASSOCIATES		204.00
25119	05/13/2024	1,2,3-TCP Fund	Professional Services	BSK ASSOCIATES		2,476.50
				Check Total:		12,307.75
25120	05/13/2024	Internal Service Fund	Operations & Maintenance	BURTONS FIRE INC		304.50
				Check Total:		304.50
25121	05/13/2024	Water Enterprise Fund	Accounts Payable	PAUL CAHILL		40.36
25121	05/13/2024	Sewer Enterprise Fund	Accounts Payable	PAUL CAHILL		42.43
25121	05/13/2024	Sanitation Enterprise Fund	Accounts Payable	PAUL CAHILL		22.61
				Check Total:		105.40
25122	05/13/2024	General Fund	Special Departmental Expense	CAL FARM SERVICES		55.00
25122	05/13/2024	Internal Service Fund	Special Departmental Expense	CAL FARM SERVICES		44.26
				Check Total:		99.26
25123	05/13/2024	General Fund	Travel/Conferences/Meetings	JOHN CALE		441.80
25123	05/13/2024	General Fund	Travel/Conferences/Meetings	JOHN CALE		148.33
				Check Total:		590.13
25124	05/13/2024	General Fund	Special Departmental Expense	CALIFORNIA LANDSCAPE SUPPLY, INC.		527.62

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
25124	05/13/2024	General Fund	Maint. Buildings & Grounds	CALIFORNIA LANDSCAPE SUPPLY, INC.		1,241.61
				Check Total:		1,769.23
25125 *	05/13/2024	Water Enterprise Fund	Accounts Payable	MARIO CARMONA CATALAN		48.29
25125*	05/13/2024	Sewer Enterprise Fund	Accounts Payable	MARIO CARMONA CATALAN		58.02
25125*	05/13/2024	Sanitation Enterprise Fund	Accounts Payable	MARIO CARMONA CATALAN		32.50
				Check Total:		138.81
25126	05/13/2024	Sewer Enterprise Fund	Professional Services	CASCADE INTEGRATION AND DEVELOPMEN		6,018.18
				Check Total:		6,018.18
25127	05/13/2024	General Fund	Professional Services	CASEY LOGISTICS INC		456.00
25127	05/13/2024	Internal Service Fund	Professional Services	CASEY LOGISTICS INC		430.00
				Check Total:		886.00
25128	05/13/2024	Water Enterprise Fund	Accounts Payable	HUI CHEN		80.93
				Check Total:		80.93
25129	05/13/2024	Internal Service Fund	Special Departmental Expense	CINTAS CORP		29.35
25129	05/13/2024	Internal Service Fund	Uniform & Clothing Expense	CINTAS CORP		14.04
25129	05/13/2024	Internal Service Fund	Uniform & Clothing Expense	CINTAS CORP		18.93
25129	05/13/2024	General Fund	Uniform & Clothing Expense	CINTAS CORP		38.38
25129	05/13/2024	Sewer Enterprise Fund	Uniform & Clothing Expense	CINTAS CORP		74.55
25129	05/13/2024	Water Enterprise Fund	Uniform & Clothing Expense	CINTAS CORP		88.83
25129	05/13/2024	Gas Tax/Street Improvement	Uniform & Clothing Expense	CINTAS CORP		40.76
25129	05/13/2024	Internal Service Fund	Uniform & Clothing Expense	CINTAS CORP		14.04
25129	05/13/2024	General Fund	Uniform & Clothing Expense	CINTAS CORP		38.38
25129	05/13/2024	Sewer Enterprise Fund	Uniform & Clothing Expense	CINTAS CORP		74.55
25129	05/13/2024	Water Enterprise Fund	Uniform & Clothing Expense	CINTAS CORP		88.83
25129	05/13/2024	Internal Service Fund	Uniform & Clothing Expense	CINTAS CORP		18.93
25129	05/13/2024	Internal Service Fund	Special Departmental Expense	CINTAS CORP		29.35
25129	05/13/2024	Gas Tax/Street Improvement	Uniform & Clothing Expense	CINTAS CORP		40.76
25129	05/13/2024	Internal Service Fund	Special Departmental Expense	CINTAS CORP		29.35
25129	05/13/2024	Internal Service Fund	Uniform & Clothing Expense	CINTAS CORP		14.04
25129	05/13/2024	Internal Service Fund	Uniform & Clothing Expense	CINTAS CORP		18.93
25129	05/13/2024	General Fund	Uniform & Clothing Expense	CINTAS CORP		38.38
25129	05/13/2024	Gas Tax/Street Improvement	Uniform & Clothing Expense	CINTAS CORP		40.76
25129	05/13/2024	Sewer Enterprise Fund	Uniform & Clothing Expense	CINTAS CORP		74.55
25129	05/13/2024	Water Enterprise Fund	Uniform & Clothing Expense	CINTAS CORP		88.83
				Check Total:		914.52
25130	05/13/2024	Internal Service Fund	Communications	COMCAST		1,654.94

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
				Check Total:		1,654.94
25131	05/13/2024	Internal Service Fund	Communications	COMCAST		262.60
				Check Total:		262.60
25132	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	CONSOLIDATED ELECTRICAL DISTRIBUTORS		313.93
25132	05/13/2024	Gas Tax/Street Improvement	Small Tools	CONSOLIDATED ELECTRICAL DISTRIBUTORS		574.81
25132	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	CONSOLIDATED ELECTRICAL DISTRIBUTORS		126.23
25132	05/13/2024	ARPA-American Rescue Plan Act	Police Dept Remodel/Rehab	CONSOLIDATED ELECTRICAL DISTRIBUTORS		2,310.75
				Check Total:		3,325.72
25133	05/13/2024	Public Safety Trans & Use Tax	Machinery & Equipment	COOK'S COMMUNICATIONS		5,803.82
25133	05/13/2024	General Fund	Communications	COOK'S COMMUNICATIONS		769.63
25133	05/13/2024	General Fund	Communications	COOK'S COMMUNICATIONS		9,930.68
				Check Total:		16,504.13
25134	05/13/2024	General Fund	Office Supplies	CREATIVE COPY		217.70
				Check Total:		217.70
25135	05/13/2024	Water Enterprise Fund	Accounts Payable	CRESTVIEW APTS, LLC		2,400.41
				Check Total:		2,400.41
25136	05/13/2024	Internal Service Fund	Professional Services	D & D PEST CONTROL		52.00
25136	05/13/2024	Internal Service Fund	Professional Services	D & D PEST CONTROL		40.00
25136	05/13/2024	Internal Service Fund	Professional Services	D & D PEST CONTROL		34.00
25136	05/13/2024	Internal Service Fund	Professional Services	D & D PEST CONTROL		34.00
25136	05/13/2024	Internal Service Fund	Professional Services	D & D PEST CONTROL		34.00
25136	05/13/2024	Internal Service Fund	Professional Services	D & D PEST CONTROL		52.00
25136	05/13/2024	Internal Service Fund	Professional Services	D & D PEST CONTROL		34.00
25136	05/13/2024	Internal Service Fund	Professional Services	D & D PEST CONTROL		40.00
				Check Total:		320.00
25137	05/13/2024	ARPA-American Rescue Plan Act	City Bldg - Civic Center #2	DATA PATH		12,083.94
25137	05/13/2024	Information Technology Fund	Professional Services	DATA PATH		7,850.00
25137	05/13/2024	Information Technology Fund	Memberships & Subscriptions	DATA PATH		1,089.00
25137	05/13/2024	Information Technology Fund	Memberships & Subscriptions	DATA PATH		730.00
25137	05/13/2024	Information Technology Fund	Memberships & Subscriptions	DATA PATH		830.00
25137	05/13/2024	Information Technology Fund	Memberships & Subscriptions	DATA PATH		2,762.00
25137	05/13/2024	Information Technology Fund	Memberships & Subscriptions	DATA PATH		2,617.50
				Check Total:		27,962.44
25138	05/13/2024	General Fund	Various Recreation Classes	MARY ANN DAVIS		432.25

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
				Check Total:		432.25
25139	05/13/2024	General Fund	Training	TYLER DAVIS		145.31
				Check Total:		145.31
25140	05/13/2024	General Plan Update Fund	Professional Services	DE NOVO PLANNING GROUP		25,885.75
				Check Total:		25,885.75
25141	05/13/2024	Internal Service Fund	Operations & Maintenance	DELRAY TIRE		1,630.27
				Check Total:		1,630.27
25142	05/13/2024	General Fund	Professional Services	DEPT.OF FORESTRY & FIRE PROTECTION		448,244.95
25142	05/13/2024	Public Safety Trans & Use Tax	Professional Services	DEPT.OF FORESTRY & FIRE PROTECTION		730,258.35
25142	05/13/2024	CFD Districts	Professional Services	DEPT.OF FORESTRY & FIRE PROTECTION		100,000.00
				Check Total:		1,278,503.30
25143	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	DISPLAY SALES CO		2,865.39
				Check Total:		2,865.39
25144	05/13/2024	Water Enterprise Fund	Accounts Payable	DAVE DUNN		11.58
25144	05/13/2024	Sewer Enterprise Fund	Accounts Payable	DAVE DUNN		12.17
25144	05/13/2024	Sanitation Enterprise Fund	Accounts Payable	DAVE DUNN		6.83
				Check Total:		30.58
25145	05/13/2024	Water Enterprise Fund	Accounts Payable	ESEQUIEL/CONCEPCION DURAN		46.30
25145	05/13/2024	Sewer Enterprise Fund	Accounts Payable	ESEQUIEL/CONCEPCION DURAN		54.98
25145	05/13/2024	Sanitation Enterprise Fund	Accounts Payable	ESEQUIEL/CONCEPCION DURAN		27.73
				Check Total:		129.01
25146	05/13/2024	Internal Service Fund	Special Departmental Expense	ELITE IRON FENCING		890.00
25146	05/13/2024	Internal Service Fund	Professional Services	ELITE IRON FENCING		520.00
25146	05/13/2024	Internal Service Fund	Special Departmental Expense	ELITE IRON FENCING		3,250.00
25146	05/13/2024	Internal Service Fund	Professional Services	ELITE IRON FENCING		1,620.00
				Check Total:		6,280.00
25147	05/13/2024	General Fund	Uniform & Clothing Expense	ELITE UNIFORMS		462.78
25147	05/13/2024	General Fund	Uniform & Clothing Expense	ELITE UNIFORMS		145.03
25147	05/13/2024	General Fund	Uniform & Clothing Expense	ELITE UNIFORMS		36.81
				Check Total:		644.62
25148	05/13/2024	Public Safety Trans & Use Tax	Rents & Leases	ENTERPRISE FM TRUST		6,075.88

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
				Check Total:		6,075.88
25149	05/13/2024	Water Enterprise Fund	Accounts Payable	JORDAN ESQUIVEL		166.23
				Check Total:		166.23
25150	05/13/2024	General Fund	Professional Services	EVERBRIDGE INC		3,564.00
				Check Total:		3,564.00
25151	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	EWING IRRIGATION PRODUCTS INC.		443.73
25151	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	EWING IRRIGATION PRODUCTS INC.		259.76
				Check Total:		703.49
25152	05/13/2024	Water Enterprise Fund	Uniform & Clothing Expense	FASTENAL COMPANY		92.98
				Check Total:		92.98
25153	05/13/2024	Water Fund Capital Replacement	Installation-New Water Meters	FERGUSON WATERWORKS #1423		2,811.68
25153	05/13/2024	Water Fund Capital Replacement	Hydrant Replacement	FERGUSON WATERWORKS #1423		3,452.74
25153	05/13/2024	Water Fund Capital Replacement	Hydrant Replacement	FERGUSON WATERWORKS #1423		3,452.74
25153	05/13/2024	Water Fund Capital Replacement	Installation-New Water Meters	FERGUSON WATERWORKS #1423		1,037.35
25153	05/13/2024	Water Fund Capital Replacement	Installation-New Water Meters	FERGUSON WATERWORKS #1423		194.49
25153	05/13/2024	Water Fund Capital Replacement	Installation-New Water Meters	FERGUSON WATERWORKS #1423		1,518.30
25153	05/13/2024	Water Fund Capital Replacement	Installation-New Water Meters	FERGUSON WATERWORKS #1423		1,293.37
25153	05/13/2024	Water Fund Capital Replacement	Installation-New Water Meters	FERGUSON WATERWORKS #1423		2,811.68
25153	05/13/2024	Water Fund Capital Replacement	Installation-New Water Meters	FERGUSON WATERWORKS #1423		959.08
25153	05/13/2024	Water Enterprise Fund	Special Departmental Expense	FERGUSON WATERWORKS #1423		157.69
25153	05/13/2024	Water Fund Capital Replacement	Installation-New Water Meters	FERGUSON WATERWORKS #1423		445.37
25153	05/13/2024	General Fund	Maint. Buildings & Grounds	FERGUSON WATERWORKS #1423		160.33
				Check Total:		18,294.82
25154	05/13/2024	Internal Service Fund	Operations & Maintenance	FORD PRO		651.84
				Check Total:		651.84
25155	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	FOSTER'S PUMPS, INC.		1,574.08
25155	05/13/2024	Sewer Enterprise Fund	Professional Services	FOSTER'S PUMPS, INC.		4,662.50
				Check Total:		6,236.58
25156	05/13/2024	Internal Service Fund	Professional Services	FRESNO ROOFING COMPANY, INC.		1,118.76
				Check Total:		1,118.76
25157	05/13/2024	Water Enterprise Fund	Accounts Payable	FURNITURE ONE		121.31

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
				Check Total:		121.31
25158	05/13/2024	Water Enterprise Fund	Accounts Payable	ERIC GARCIA		5.67
				Check Total:		5.67
25159	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	GARTON TRACTOR INC		69.83
25159	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	GARTON TRACTOR INC		159.80
25159	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	GARTON TRACTOR INC		63.85
25159	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	GARTON TRACTOR INC		96.97
				Check Total:		390.45
25160	05/13/2024	Water Enterprise Fund	Accounts Payable	JAVIER GONZALEZ GALVAN		127.71
				Check Total:		127.71
25161	05/13/2024	Water Enterprise Fund	Special Departmental Expense	GRAINGER		174.13
25161	05/13/2024	Internal Service Fund	Special Departmental Expense	GRAINGER		330.96
				Check Total:		505.09
25162	05/13/2024	Public Safety Trans & Use Tax	Professional Services	GRIFFIN STRUCTURES INC		15,000.00
25162	05/13/2024	Public Safety Trans & Use Tax	Professional Services	GRIFFIN STRUCTURES INC		15,000.00
25162	05/13/2024	Public Safety Trans & Use Tax	Professional Services	GRIFFIN STRUCTURES INC		20,000.00
				Check Total:		50,000.00
25163	05/13/2024	General Fund	Pers Health Payable	CRYSTAL HERRERA		279.30
				Check Total:		279.30
25164	05/13/2024	General Fund	Maint. Buildings & Grounds	HORIZON		56.55
25164	05/13/2024	Water Enterprise Fund	Special Departmental Expense	HORIZON		110.12
25164	05/13/2024	General Fund	Maint. Buildings & Grounds	HORIZON		1,298.36
25164	05/13/2024	General Fund	Maint. Buildings & Grounds	HORIZON		508.87
25164	05/13/2024	General Fund	Coed Fall Softball	HORIZON		96.04
25164	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	HORIZON		7.92
25164	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	HORIZON		5.93
25164	05/13/2024	General Fund	Maint. Buildings & Grounds	HORIZON		590.45
				Check Total:		2,674.24
25165	05/13/2024	Information Technology Fund	Special Departmental Expense	IDVILLE		3,194.14
				Check Total:		3,194.14
25166	05/13/2024	General Fund	Professional Services	INDEPENDENT INVESTIGATIONS LLC		1,494.89
25166	05/13/2024	General Fund	Professional Services	INDEPENDENT INVESTIGATIONS LLC		648.24

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
				Check Total:		2,143.13
25167	05/13/2024	General Fund	Track Meet	INGRAHAM TROPHIES		433.91
25167	05/13/2024	General Fund	Special Departmental Expense	INGRAHAM TROPHIES		116.91
				Check Total:		550.82
25168	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	JAM SERVICES INC		48.94
				Check Total:		48.94
25169	05/13/2024	Internal Service Fund	Professional Services	JANI TEK CLEANING SOLUTIONS		11,693.00
				Check Total:		11,693.00
25170	05/13/2024	Gas Tax/Street Improvement	Professional Services	JLB TRAFFIC ENGINEERING, INC		3,520.46
25170	05/13/2024	Gas Tax/Street Improvement	Professional Services	JLB TRAFFIC ENGINEERING, INC		3,227.93
				Check Total:		6,748.39
25171	05/13/2024	Price Annexation LMA	Professional Services	JOE'S LANDSCAPING & CONCRETE		1,354.16
25171	05/13/2024	Pajaro Dunes LMA	Professional Services	JOE'S LANDSCAPING & CONCRETE		231.19
25171	05/13/2024	Juniper Meadows LNDSCP	Professional Services	JOE'S LANDSCAPING & CONCRETE		138.72
25171	05/13/2024	Aspenwood Lndscp	Professional Services	JOE'S LANDSCAPING & CONCRETE		395.05
25171	05/13/2024	Price Annexation LMA	Professional Services	JOE'S LANDSCAPING & CONCRETE		1,679.74
25171	05/13/2024	Price Annexation LMA	Professional Services	JOE'S LANDSCAPING & CONCRETE		863.39
25171	05/13/2024	Price Annexation LMA	Professional Services	JOE'S LANDSCAPING & CONCRETE		236.95
25171	05/13/2024	Sandlewood Square LMA	Professional Services	JOE'S LANDSCAPING & CONCRETE		376.67
25171	05/13/2024	Redwood Estates LMA	Professional Services	JOE'S LANDSCAPING & CONCRETE		232.49
25171	05/13/2024	Cottage Gardens ST & LMA	Professional Services	JOE'S LANDSCAPING & CONCRETE		154.94
25171	05/13/2024	Silva Ranch LNDSCP	Professional Services	JOE'S LANDSCAPING & CONCRETE		511.87
25171	05/13/2024	Mello Ranch LNDSCP	Professional Services	JOE'S LANDSCAPING & CONCRETE		382.08
25171	05/13/2024	Camellia Meadows LNDSCP	Professional Services	JOE'S LANDSCAPING & CONCRETE		289.06
25171	05/13/2024	Stone Creek LNDSCP	Professional Services	JOE'S LANDSCAPING & CONCRETE		827.69
25171	05/13/2024	Bell Crossing LNDSCP	Professional Services	JOE'S LANDSCAPING & CONCRETE		232.81
25171	05/13/2024	Atwater South LNDSCP	Professional Services	JOE'S LANDSCAPING & CONCRETE		1,084.18
25171	05/13/2024	Mello Ranch 2 LNDSCP	Professional Services	JOE'S LANDSCAPING & CONCRETE		592.99
25171	05/13/2024	Applegate Ranch Lndscp	Professional Services	JOE'S LANDSCAPING & CONCRETE		430.75
25171	05/13/2024	Meadow View LNDSCP	Professional Services	JOE'S LANDSCAPING & CONCRETE		356.12
25171	05/13/2024	Price Annexation LMA	Professional Services	JOE'S LANDSCAPING & CONCRETE		236.95
25171	05/13/2024	Price Annexation LMA	Professional Services	JOE'S LANDSCAPING & CONCRETE		1,679.74
25171	05/13/2024	Redwood Estates LMA	Professional Services	JOE'S LANDSCAPING & CONCRETE		232.49
25171	05/13/2024	Silva Ranch LNDSCP	Professional Services	JOE'S LANDSCAPING & CONCRETE		511.87
25171	05/13/2024	Stone Creek LNDSCP	Professional Services	JOE'S LANDSCAPING & CONCRETE		827.69
25171	05/13/2024	Price Annexation LMA	Professional Services	JOE'S LANDSCAPING & CONCRETE		863.39
25171	05/13/2024	Sandlewood Square LMA	Professional Services	JOE'S LANDSCAPING & CONCRETE		376.67

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
25171	05/13/2024	Pajaro Dunes LMA	Professional Services	JOE'S LANDSCAPING & CONCRETE		231.19
25171	05/13/2024	Cottage Gardens ST & LMA	Professional Services	JOE'S LANDSCAPING & CONCRETE		154.94
25171	05/13/2024	Mello Ranch LNDSCP	Professional Services	JOE'S LANDSCAPING & CONCRETE		382.08
25171	05/13/2024	Juniper Meadows LNDSCP	Professional Services	JOE'S LANDSCAPING & CONCRETE		138.72
25171	05/13/2024	Camellia Meadows LNDSCP	Professional Services	JOE'S LANDSCAPING & CONCRETE		289.06
25171	05/13/2024	Bell Crossing LNDSCP	Professional Services	JOE'S LANDSCAPING & CONCRETE		232.81
25171	05/13/2024	Atwater South LNDSCP	Professional Services	JOE'S LANDSCAPING & CONCRETE		1,084.18
25171	05/13/2024	Mello Ranch 2 LNDSCP	Professional Services	JOE'S LANDSCAPING & CONCRETE		592.99
25171	05/13/2024	Meadow View LNDSCP	Professional Services	JOE'S LANDSCAPING & CONCRETE		356.12
25171	05/13/2024	Aspenwood Lndscp	Professional Services	JOE'S LANDSCAPING & CONCRETE		395.05
25171	05/13/2024	Applegate Ranch Lndscp	Professional Services	JOE'S LANDSCAPING & CONCRETE		430.75
25171	05/13/2024	Price Annexation LMA	Professional Services	JOE'S LANDSCAPING & CONCRETE		1,354.16
				Check Total:		20,741.70
25172	05/13/2024	Water Enterprise Fund	Special Departmental Expense	JOHNSTONE SUPPLY		198.49
25172	05/13/2024	Internal Service Fund	Special Departmental Expense	JOHNSTONE SUPPLY		68.09
25172	05/13/2024	Internal Service Fund	Special Departmental Expense	JOHNSTONE SUPPLY		110.03
				Check Total:		376.61
25173	05/13/2024	Water Enterprise Fund	Accounts Payable	VIRGINIA JONES		164.63
25173	05/13/2024	Sewer Enterprise Fund	Accounts Payable	VIRGINIA JONES		25.20
25173	05/13/2024	Sanitation Enterprise Fund	Accounts Payable	VIRGINIA JONES		13.43
				Check Total:		203.26
25174	05/13/2024	Internal Service Fund	Professional Services	JORGENSEN COMPANY		209.59
				Check Total:		209.59
25175	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	KELLOGG SUPPLY		61.67
25175	05/13/2024	Internal Service Fund	Operations & Maintenance	KELLOGG SUPPLY		264.64
25175	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	KELLOGG SUPPLY		81.17
25175	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	KELLOGG SUPPLY		140.16
25175	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	KELLOGG SUPPLY		248.96
25175	05/13/2024	Internal Service Fund	Operations & Maintenance	KELLOGG SUPPLY		34.62
25175	05/13/2024	Sewer Enterprise Fund	Uniform & Clothing Expense	KELLOGG SUPPLY		367.57
				Check Total:		1,198.79
25176	05/13/2024	Internal Service Fund	Operations & Maintenance	LAWSON PRODUCTS		1,141.38
				Check Total:		1,141.38
25177	05/13/2024	General Fund	Professional Services	LEIST AND ASSOCIATES		3,929.65
25177	05/13/2024	General Fund	Professional Services	LEIST AND ASSOCIATES		5,971.10

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
				Check Total:		9,900.75
25178	05/13/2024	General Fund	Miscellaneous	LOOMIS		689.90
				Check Total:		689.90
25179	05/13/2024	Water Enterprise Fund	Accounts Payable	ERIC LU		296.88
				Check Total:		296.88
25180	05/13/2024	General Fund	Castle Park Deposits	ANA ROSA MARTINEZ		200.00
				Check Total:		200.00
25181	05/13/2024	General Fund	Printing & Advertising	MCCLATCHY COMPANY LLC		190.78
25181	05/13/2024	General Fund	Printing & Advertising	MCCLATCHY COMPANY LLC		112.66
25181	05/13/2024	General Fund	Printing & Advertising	MCCLATCHY COMPANY LLC		178.20
25181	05/13/2024	General Fund	Printing & Advertising	MCCLATCHY COMPANY LLC		205.66
25181	05/13/2024	SB1-Road Maint & Rehab RMRA	Fruitland Ave Rd Improvements	MCCLATCHY COMPANY LLC		393.52
				Check Total:		1,080.82
25182	05/13/2024	General Fund	Coed Fall Softball	MCNAMARA SPORTS		110.48
				Check Total:		110.48
25183	05/13/2024	General Fund	Youth Basketball	MERCED AREA SPORTS OFFICIALS, INC		320.00
25183	05/13/2024	General Fund	Youth Basketball	MERCED AREA SPORTS OFFICIALS, INC		970.00
25183	05/13/2024	General Fund	Coed Volleyball	MERCED AREA SPORTS OFFICIALS, INC		200.00
25183	05/13/2024	General Fund	Coed Volleyball	MERCED AREA SPORTS OFFICIALS, INC		175.00
25183	05/13/2024	General Fund	Coed Volleyball	MERCED AREA SPORTS OFFICIALS, INC		200.00
				Check Total:		1,865.00
25184	05/13/2024	Internal Service Fund	Operations & Maintenance	MERCED CHEVROLET		477.66
				Check Total:		477.66
25185	05/13/2024	Sanitation Enterprise Fund	Refuse Service Charge	MID-VALLEY DISPOSAL LLC		-1,270.58
25185	05/13/2024	Sanitation Enterprise Fund	Contract Admin Fee	MID-VALLEY DISPOSAL LLC		-19,126.71
25185	05/13/2024	Sanitation Enterprise Fund	Contract Admin Fee	MID-VALLEY DISPOSAL LLC		-19,418.57
25185	05/13/2024	Sanitation Enterprise Fund	AB 939 Support Fee	MID-VALLEY DISPOSAL LLC		-8,197.16
25185	05/13/2024	Sanitation Enterprise Fund	AB 939 Support Fee	MID-VALLEY DISPOSAL LLC		-8,322.24
25185	05/13/2024	Sanitation Enterprise Fund	Solid Waste Collectn/Disposal	MID-VALLEY DISPOSAL LLC		32,046.67
25185	05/13/2024	Sanitation Enterprise Fund	Solid Waste Collectn/Disposal	MID-VALLEY DISPOSAL LLC		277,408.11
				Check Total:		253,119.52
25186	05/13/2024	Internal Service Fund	Professional Services	MISTER CAR WASH		680.00

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
				Check Total:		680.00
25187	05/13/2024	General Fund	Communications	MOTOROLA SOLUTIONS INC		300.00
25187	05/13/2024	General Fund	Communications	MOTOROLA SOLUTIONS INC		300.00
				Check Total:		600.00
25188	05/13/2024	General Fund	Professional Services	MUNISERVICES LLC		408.69
				Check Total:		408.69
25189	05/13/2024	General Fund	Travel/Conferences/Meetings	MIKE NELSON		143.38
				Check Total:		143.38
25190	05/13/2024	Information Technology Fund	Communications	NEW HORIZON COMMUNICATIONS		2,450.63
				Check Total:		2,450.63
25191	05/13/2024	Internal Service Fund	Operations & Maintenance	O'REILLY AUTO PARTS		48.90
25191	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	O'REILLY AUTO PARTS		11.95
25191	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	O'REILLY AUTO PARTS		81.66
25191	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	O'REILLY AUTO PARTS		39.67
25191	05/13/2024	Internal Service Fund	Operations & Maintenance	O'REILLY AUTO PARTS		-75.81
25191	05/13/2024	Internal Service Fund	Operations & Maintenance	O'REILLY AUTO PARTS		27.50
25191	05/13/2024	Internal Service Fund	Operations & Maintenance	O'REILLY AUTO PARTS		166.38
25191	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	O'REILLY AUTO PARTS		18.90
25191	05/13/2024	Internal Service Fund	Operations & Maintenance	O'REILLY AUTO PARTS		9.79
25191	05/13/2024	Internal Service Fund	Operations & Maintenance	O'REILLY AUTO PARTS		185.23
25191	05/13/2024	Internal Service Fund	Operations & Maintenance	O'REILLY AUTO PARTS		121.01
25191	05/13/2024	Internal Service Fund	Operations & Maintenance	O'REILLY AUTO PARTS		46.81
25191	05/13/2024	Internal Service Fund	Operations & Maintenance	O'REILLY AUTO PARTS		367.43
25191	05/13/2024	Internal Service Fund	Operations & Maintenance	O'REILLY AUTO PARTS		26.61
25191	05/13/2024	Internal Service Fund	Operations & Maintenance	O'REILLY AUTO PARTS		23.28
25191	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	O'REILLY AUTO PARTS		48.92
25191	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	O'REILLY AUTO PARTS		13.03
25191	05/13/2024	Internal Service Fund	Operations & Maintenance	O'REILLY AUTO PARTS		259.89
25191	05/13/2024	Internal Service Fund	Operations & Maintenance	O'REILLY AUTO PARTS		-166.38
25191	05/13/2024	Internal Service Fund	Operations & Maintenance	O'REILLY AUTO PARTS		168.76
25191	05/13/2024	Internal Service Fund	Small Tools	O'REILLY AUTO PARTS		9.78
25191	05/13/2024	Internal Service Fund	Operations & Maintenance	O'REILLY AUTO PARTS		163.10
25191	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	O'REILLY AUTO PARTS		73.91
25191	05/13/2024	Internal Service Fund	Operations & Maintenance	O'REILLY AUTO PARTS		8.61
25191	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	O'REILLY AUTO PARTS		34.79
25191	05/13/2024	Internal Service Fund	Operations & Maintenance	O'REILLY AUTO PARTS		402.48
25191	05/13/2024	Internal Service Fund	Operations & Maintenance	O'REILLY AUTO PARTS		37.89

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
25191	05/13/2024	Internal Service Fund	Operations & Maintenance	O'REILLY AUTO PARTS		29.16
25191	05/13/2024	Internal Service Fund	Operations & Maintenance	O'REILLY AUTO PARTS		389.94
25191	05/13/2024	Internal Service Fund	Operations & Maintenance	O'REILLY AUTO PARTS		233.37
25191	05/13/2024	Internal Service Fund	Operations & Maintenance	O'REILLY AUTO PARTS		84.76
25191	05/13/2024	Internal Service Fund	Operations & Maintenance	O'REILLY AUTO PARTS		191.67
25191	05/13/2024	Internal Service Fund	Operations & Maintenance	O'REILLY AUTO PARTS		8.25
25191	05/13/2024	Internal Service Fund	Operations & Maintenance	O'REILLY AUTO PARTS		90.12
				Check Total:		3,181.36
25192	05/13/2024	Internal Service Fund	Operations & Maintenance	DANIEL ORTIZ		24.99
				Check Total:		24.99
25193	05/13/2024	Northwood Village LD	Utilities	PACIFIC GAS & ELECTRIC		757.70
25193	05/13/2024	Orchard Park Estates LD	Utilities	PACIFIC GAS & ELECTRIC		193.95
25193	05/13/2024	Woodview Garland LA	Utilities	PACIFIC GAS & ELECTRIC		18.12
25193	05/13/2024	Sandlewood Square LD	Utilities	PACIFIC GAS & ELECTRIC		32.63
25193	05/13/2024	Airport Business Park LD	Utilities	PACIFIC GAS & ELECTRIC		908.36
25193	05/13/2024	Atwater South LD	Utilities	PACIFIC GAS & ELECTRIC		-8.00
25193	05/13/2024	Sewer Enterprise Fund	Utilities	PACIFIC GAS & ELECTRIC		6,853.88
25193	05/13/2024	General Fund	Utilities	PACIFIC GAS & ELECTRIC		1,930.31
25193	05/13/2024	General Fund	Utilities	PACIFIC GAS & ELECTRIC		7,777.83
25193	05/13/2024	Gas Tax/Street Improvement	Utilities	PACIFIC GAS & ELECTRIC		16,301.10
25193	05/13/2024	Wildwood Estates LD	Utilities	PACIFIC GAS & ELECTRIC		-11.85
25193	05/13/2024	Shaffer Lakes West LD	Utilities	PACIFIC GAS & ELECTRIC		60.65
25193	05/13/2024	Price Annexation LD	Utilities	PACIFIC GAS & ELECTRIC		947.89
25193	05/13/2024	Pajaro Dunes LD	Utilities	PACIFIC GAS & ELECTRIC		29.00
25193	05/13/2024	Cottage Gardens LD	Utilities	PACIFIC GAS & ELECTRIC		-6.48
25193	05/13/2024	Water Enterprise Fund	Utilities	PACIFIC GAS & ELECTRIC		61,661.94
25193	05/13/2024	Woodhaven LD	Utilities	PACIFIC GAS & ELECTRIC		19.98
25193	05/13/2024	Sierra Parks LD	Utilities	PACIFIC GAS & ELECTRIC		319.25
25193	05/13/2024	Shaffer Lakes East LD	Utilities	PACIFIC GAS & ELECTRIC		244.91
25193	05/13/2024	Internal Service Fund	Utilities	PACIFIC GAS & ELECTRIC		5,365.77
25193	05/13/2024	General Fund	Utilities	PACIFIC GAS & ELECTRIC		1,536.43
25193	05/13/2024	Gas Tax/Street Improvement	Utilities	PACIFIC GAS & ELECTRIC		193.78
25193	05/13/2024	Water Enterprise Fund	Utilities	PACIFIC GAS & ELECTRIC		25,158.13
25193	05/13/2024	General Fund	Utilities	PACIFIC GAS & ELECTRIC		206.87
25193	05/13/2024	Internal Service Fund	Utilities	PACIFIC GAS & ELECTRIC		187.36
				Check Total:		130,679.51
25194	05/13/2024	Water Enterprise Fund	Accounts Payable	VANESSA PEREZ		14.42
				Check Total:		14.42
25195	05/13/2024	Water Enterprise Fund	Accounts Payable	DAVID PEREZ OCHOA		173.00

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
				Check Total:		173.00
25196	05/13/2024	General Fund	Various Classes	SHARON PERRY		50.00
				Check Total:		50.00
25197	05/13/2024	General Fund	Professional Services	PRECISION CIVIL ENGINEERING, INC.		13,986.25
25197	05/13/2024	General Fund	Professional Services	PRECISION CIVIL ENGINEERING, INC.		3,130.00
				Check Total:		17,116.25
25198	05/13/2024	General Fund	Tennis Key	PRESTON'S LOCK & KEY		26.10
				Check Total:		26.10
25199	05/13/2024	General Fund	Special Departmental Expense	PROFORCE		1,998.29
				Check Total:		1,998.29
25200	05/13/2024	Water Fund Capital Replacement	Canal Creek Utility Crossing	PROVOST & PRITCHARD CONSULTING GROU		1,358.20
				Check Total:		1,358.20
25201	05/13/2024	General Fund	Castle Park Deposits	JUNIOR PULIDO		200.00
25201	05/13/2024	General Fund	Castle Park Rental	JUNIOR PULIDO		250.00
				Check Total:		450.00
25202	05/13/2024	Water Enterprise Fund	Accounts Payable	STEPHEN PUTNAM		21.80
25202	05/13/2024	Sewer Enterprise Fund	Accounts Payable	STEPHEN PUTNAM		22.90
25202	05/13/2024	Sanitation Enterprise Fund	Accounts Payable	STEPHEN PUTNAM		12.84
				Check Total:		57.54
25203	05/13/2024	Sewer Enterprise Fund	Castle Sewer Interceptor	QUAD KNOPF		4,311.50
				Check Total:		4,311.50
25204	05/13/2024	General Fund	Special Departmental Expense	QUADIENT, INC.		4,804.57
				Check Total:		4,804.57
25205	05/13/2024	Internal Service Fund	Professional Services	RAZZARI DODGE CHRYSLER JEEP RAM		487.50
25205	05/13/2024	Internal Service Fund	Operations & Maintenance	RAZZARI DODGE CHRYSLER JEEP RAM		566.15
				Check Total:		1,053.65
25206	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	SAFE-T-LITE		338.31
				Check Total:		338.31
25207	05/13/2024	Internal Service Fund	Professional Services	SAN JOAQUIN VALLEY UNIFIED AIR POLLUTI		160.00

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
				Check Total:		160.00
25208	05/13/2024	General Fund	Training	DAVE SARGINSON		21.30
				Check Total:		21.30
25209	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	SASE COMPANY, INC.		329.48
				Check Total:		329.48
25210	05/13/2024	Public Safety Trans & Use Tax	Special Departmental Expense	SCOTT'S PPE RECON, INC.		556.61
				Check Total:		556.61
25211	05/13/2024	Water Enterprise Fund	Special Departmental Expense	SHANNON PUMP CO.		936.00
25211	05/13/2024	Water Enterprise Fund	Special Departmental Expense	SHANNON PUMP CO.		1,691.99
25211	05/13/2024	Water Enterprise Fund	Professional Services	SHANNON PUMP CO.		12,710.87
25211	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	SHANNON PUMP CO.		115.94
				Check Total:		15,454.80
25212	05/13/2024	Internal Service Fund	Special Departmental Expense	SHERWIN-WILLIAMS CO.		168.44
25212	05/13/2024	Internal Service Fund	Special Departmental Expense	SHERWIN-WILLIAMS CO.		42.80
25212	05/13/2024	Internal Service Fund	Special Departmental Expense	SHERWIN-WILLIAMS CO.		183.43
				Check Total:		394.67
25213	05/13/2024	General Fund	Special Departmental Expense	SIERRA MATERIALS & TRUCKING COMPANY		333.00
25213	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	SIERRA MATERIALS & TRUCKING COMPANY		399.03
25213	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	SIERRA MATERIALS & TRUCKING COMPANY		294.03
25213	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	SIERRA MATERIALS & TRUCKING COMPANY		205.03
25213	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	SIERRA MATERIALS & TRUCKING COMPANY		308.52
25213	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	SIERRA MATERIALS & TRUCKING COMPANY		552.03
25213	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	SIERRA MATERIALS & TRUCKING COMPANY		425.58
				Check Total:		2,517.22
25214	05/13/2024	General Fund	Community Center Deposits	MARISSA SMYTH		175.00
25214	05/13/2024	General Fund	Community Center Rental	MARISSA SMYTH		125.00
				Check Total:		300.00
25215	05/13/2024	Water Enterprise Fund	Accounts Payable	JOYCE STAUBIN		37.26
				Check Total:		37.26
25216	05/13/2024	General Fund	Professional Services	STERICYCLE INC		37.56
				Check Total:		37.56

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
25217	05/13/2024	Information Technology Fund	Special Departmental Expense	STOREY PRODUCTS		200.00
				Check Total:		200.00
25218	05/13/2024	Water Enterprise Fund	Accounts Payable	JOHN SULLIVAN		59.01
25218	05/13/2024	Sewer Enterprise Fund	Accounts Payable	JOHN SULLIVAN		61.99
25218	05/13/2024	Sanitation Enterprise Fund	Accounts Payable	JOHN SULLIVAN		34.74
				Check Total:		155.74
25219	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	SUNBELT RENTALS INC		689.38
25219	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	SUNBELT RENTALS INC		147.88
				Check Total:		837.26
25220	05/13/2024	Water Enterprise Fund	Special Departmental Expense	SUPERIOR POOL PRODUCTS LLC		882.26
25220	05/13/2024	Water Enterprise Fund	Special Departmental Expense	SUPERIOR POOL PRODUCTS LLC		1,548.60
25220	05/13/2024	Water Enterprise Fund	Special Departmental Expense	SUPERIOR POOL PRODUCTS LLC		619.44
				Check Total:		3,050.30
25221	05/13/2024	Water Enterprise Fund	Accounts Payable	ANNE TALCOTT		37.49
25221	05/13/2024	Sewer Enterprise Fund	Accounts Payable	ANNE TALCOTT		44.51
25221	05/13/2024	Sanitation Enterprise Fund	Accounts Payable	ANNE TALCOTT		24.95
				Check Total:		106.95
25222	05/13/2024	Water Enterprise Fund	Accounts Payable	KORIN TEDFORD		174.91
25222	05/13/2024	Sewer Enterprise Fund	Accounts Payable	KORIN TEDFORD		2.29
25222	05/13/2024	Sanitation Enterprise Fund	Accounts Payable	KORIN TEDFORD		1.28
				Check Total:		178.48
25223	05/13/2024	Water Enterprise Fund	Accounts Payable	CHRISTY TEKAAT		28.65
				Check Total:		28.65
25224	05/13/2024	Water Enterprise Fund	Special Departmental Expense	TELSTAR INSTRUMENTS		1,601.41
				Check Total:		1,601.41
25225	05/13/2024	Water Enterprise Fund	Utilities	TERRAFORM PHOENIX II ARCADIA HOLDING		4,917.51
25225	05/13/2024	Water Enterprise Fund	Utilities	TERRAFORM PHOENIX II ARCADIA HOLDING		16,141.46
25225	05/13/2024	Water Enterprise Fund	Utilities	TERRAFORM PHOENIX II ARCADIA HOLDING		5,886.76
25225	05/13/2024	Internal Service Fund	Utilities	TERRAFORM PHOENIX II ARCADIA HOLDING		2,666.40
				Check Total:		29,612.13
25226	05/13/2024	Information Technology Fund	Professional Services	TEXT MY GOV		10,500.00

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
				Check Total:		10,500.00
25227	05/13/2024	General Fund	Professional Services	THE UPS STORE		100.00
				Check Total:		100.00
25228	05/13/2024	Information Technology Fund	Communications	TPX COMMUNICATIONS		9,190.41
				Check Total:		9,190.41
25229	05/13/2024	Internal Service Fund	Professional Services	TRANE U.S. INC.		2,799.00
				Check Total:		2,799.00
25230	05/13/2024	Water Enterprise Fund	Professional Services	TWO BROTHERS CATHODIC SERVICES		1,000.00
				Check Total:		1,000.00
25231	05/13/2024	General Fund	Rents & Leases	UBEO WEST LLC		176.28
				Check Total:		176.28
25232	05/13/2024	Internal Service Fund	Operations & Maintenance	UNITED ROTARY BRUSH CORPORATION		5,094.52
				Check Total:		5,094.52
25233	05/13/2024	Water Enterprise Fund	Special Departmental Expense	VALLEY UTILITIE CONSTRUCTION, INC.		1,000.00
				Check Total:		1,000.00
25234	05/13/2024	Internal Service Fund	Operations & Maintenance	VAN DE POL		15,658.34
				Check Total:		15,658.34
25235	05/13/2024	Sewer Enterprise Fund	Professional Services	VEOLIA WATER NORTH AMERICA		183,175.28
				Check Total:		183,175.28
25236	05/13/2024	Employee Benefits Fund	Vision Insurance	VISION SERVICE PLAN (CA)		1,186.65
25236	05/13/2024	Employee Benefits Fund	Vision Insurance	VISION SERVICE PLAN (CA)		8.79
25236	05/13/2024	Employee Benefits Fund	Vision Insurance	VISION SERVICE PLAN (CA)		667.30
				Check Total:		1,862.74
25237	05/13/2024	Public Safety Trans & Use Tax	Improvements Other Than Bldg	VISTA PAINT CORPORATION		1,046.12
25237	05/13/2024	Public Safety Trans & Use Tax	Improvements Other Than Bldg	VISTA PAINT CORPORATION		22.21
25237	05/13/2024	Public Safety Trans & Use Tax	Improvements Other Than Bldg	VISTA PAINT CORPORATION		328.00
25237	05/13/2024	Public Safety Trans & Use Tax	Improvements Other Than Bldg	VISTA PAINT CORPORATION		169.41
25237	05/13/2024	Public Safety Trans & Use Tax	Improvements Other Than Bldg	VISTA PAINT CORPORATION		262.91
				Check Total:		1,828.65

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
25238	05/13/2024	SB1-Road Maint & Rehab RMRA	Fruitland Ave Rd Improvements	VVH CONSULTING SERVICES		8,705.00
25238	05/13/2024	General Fund	Professional Services	VVH CONSULTING SERVICES		4,430.00
25238	05/13/2024	Water Enterprise Fund	Professional Services	VVH CONSULTING SERVICES		17,720.00
25238	05/13/2024	General Fund	Professional Services	VVH CONSULTING SERVICES		1,250.00
25238	05/13/2024	General Fund	Professional Services	VVH CONSULTING SERVICES		1,935.00
25238	05/13/2024	General Fund	Professional Services	VVH CONSULTING SERVICES		337.50
25238	05/13/2024	General Fund	Professional Services	VVH CONSULTING SERVICES		18,495.00
25238	05/13/2024	Local Transportation Fund	Atwater Blvd & First St Signal	VVH CONSULTING SERVICES		200.00
25238	05/13/2024	Sewer Enterprise Fund	Eucalyptus/First Drainage Imp	VVH CONSULTING SERVICES		18,750.00
				Check Total:		71,822.50
25239	05/13/2024	Water Fund Capital Replacement	Project Retention	W.M. LYLES COMPANY		-15,305.00
25239	05/13/2024	Water Fund Capital Replacement	Well #20A Rehab	W.M. LYLES COMPANY		306,100.00
				Check Total:		290,795.00
25240	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	WARD ENTERPRISES		71.67
25240	05/13/2024	General Fund	Maint. Buildings & Grounds	WARD ENTERPRISES		171.55
				Check Total:		243.22
25241	05/13/2024	Water Fund Capital Replacement	Installation-New Water Meters	WATERFORD IRRIGATION SUPPLY, INC		125.19
25241	05/13/2024	Water Fund Capital Replacement	Installation-New Water Meters	WATERFORD IRRIGATION SUPPLY, INC		178.99
25241	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	WATERFORD IRRIGATION SUPPLY, INC		146.54
25241	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	WATERFORD IRRIGATION SUPPLY, INC		40.32
				Check Total:		491.04
25242	05/13/2024	General Fund	Professional Services	WEED MAN		1,174.00
				Check Total:		1,174.00
25243	05/13/2024	Internal Service Fund	Utilities	WEST COAST GAS CO. INC.		29.97
				Check Total:		29.97
25244	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	WINTON HARDWARE		106.65
25244	05/13/2024	Water Fund Capital Replacement	Installation-New Water Meters	WINTON HARDWARE		26.80
25244	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	WINTON HARDWARE		6.44
25244	05/13/2024	Gas Tax/Street Improvement	Special Departmental Expense	WINTON HARDWARE		32.31
25244	05/13/2024	Water Enterprise Fund	Special Departmental Expense	WINTON HARDWARE		88.30
25244	05/13/2024	Sewer Enterprise Fund	Special Departmental Expense	WINTON HARDWARE		8.15
				Check Total:		268.65
25245	05/13/2024	Water Enterprise Fund	Accounts Payable	WISDOM PROPERTY MANAGEMENT		30.53
25245	05/13/2024	Sewer Enterprise Fund	Accounts Payable	WISDOM PROPERTY MANAGEMENT		36.65
25245	05/13/2024	Sanitation Enterprise Fund	Accounts Payable	WISDOM PROPERTY MANAGEMENT		20.55

Check Number	Check Date	Fund Name	Account Name	Vendor Name	Void	Amount
				Check Total:		87.73
25246	05/13/2024	General Fund	Community Center Deposits	GEULEE YANG		350.00
25246	05/13/2024	General Fund	Community Center Deposits	GEULEE YANG		210.00
				Check Total:		560.00
25247	05/13/2024	Water Enterprise Fund	Accounts Payable	STANLEY YOUNG		123.47
				Check Total:		123.47
25248	05/13/2024	Internal Service Fund	Operations & Maintenance	O'REILLY AUTO PARTS		0.09
				Check Total:		0.09
25249	05/13/2024	Water Enterprise Fund	Professional Services	PIP PRINTING MARKETING & SIGNS		12,499.50
25249	05/13/2024	Sewer Enterprise Fund	Professional Services	PIP PRINTING MARKETING & SIGNS		12,499.50
				Check Total:		24,999.00
				Report Total:		4,083,128.61

*Note: Check 25125 is a reissue of Check # 24393 and is not included in Report Total.

CITY OF ATWATER

CITY COUNCIL

ACTION MINUTES

April 22, 2024

OPEN SESSION: (Council Chambers)

The City Council of the City of Atwater met in Open Session this date at 5:01 PM in the City Council Chambers located at the Atwater Civic Center, 750 Bellevue Road, Atwater, California; Mayor Nelson presiding.

ROLL CALL:

Present:	***City Council Members Cale, Mayor Pro Tem Raymond, Mayor Nelson***
Absent:	***City Council Member Ambriz, Button***
Staff Present:	***Interim City Manager Thompson, City Attorney Splendorio, Assistant City Clerk Martin***

CLOSED SESSION: (Conference Room A)

Conference with Labor Negotiators - Government Code Section 54957.6, Agency Negotiators: Interim City Manager Thompson and Human Resources Director Sousa Bargaining Units: AFSCME Local 2703 - Clerical Employees Unit, Miscellaneous Employees Unit and Mid-Managers Group

Pursuant to Government Code Section 54956.8, Conference with Real Property Negotiations regarding property price and terms of payment. Agency Negotiators: Interim City Manager Thompson. Negotiating Parties: Mister Car Wash Property Location: APN 156-060-011

Public Employee (Gov Code Section 54957); Title: City Manager

Mayor Nelson invited public comment on Closed Session items.

No one came forward to speak.

Mayor Nelson adjourned the meeting to Conference Room A for Closed Session at 5:02 PM. Closed Session was called to order at 5:05 PM.

Closed Session adjourned at 5:55 PM.

REGULAR SESSION: (Council Chambers)

The City Council of the City of Atwater met in Regular Session this date at 6:00 PM in the City Council Chambers located at the Atwater Civic Center, 750 Bellevue Road, Atwater, California; Mayor Nelson presiding.

INVOCATION:

The Invocation was led by Police Chaplain Miller.

PLEDGE OF ALLEGIANCE TO THE FLAG:

The Pledge of Allegiance was led by City Council Member Cale.

ROLL CALL: (City Council)

Present:	***City Council Members Cale, Mayor Pro Tem Raymond, Mayor Nelson***
Absent:	***City Council Member Ambriz, Button***
Staff Present:	***Interim City Manager Thompson, City Attorney Splendorio, Police Chief Salvador, Finance Director Nicholas, Public Works Director Vinson, City Clerk Billings, Assistant City Clerk Martin***

MAYOR OR CITY ATTORNEY REPORT OUT FROM CLOSED SESSION:

City Attorney Splendorio reported that the City Council received information, provided direction, and there was no reportable action.

SUBSEQUENT NEED ITEMS: ***None***

APPROVAL OF AGENDA AS POSTED OR AS AMENDED:

MOTION: ***Mayor Pro Tem moved to approve the agenda as posted. The motion was seconded by City Council Member Cale and the vote was: Ayes: Cale, Raymond, Nelson; Noes: None; Absent: Ambriz, Button The motion passed.***

CEREMONIAL MATTERS:

Oath of Office - Police Officer

City Clerk Billings administer the oath of office to the newly appointed Police Officers: Jaeda Ables, Edgar Maldonado, David Rivera and Tou Vang.

PRESENTATIONS:

Monthly report by Merced County District 3 Supervisor McDaniel

Merced County District 3 Supervisor McDaniel reported the following:

- ***Labor Negotiations – Merced County Sheriff's Department***
- ***Fire Stations closing doesn't affect District 3 operations***
- ***Merced County and State Budget discussions***

CONSENT CALENDAR:

Mayor Nelson opened public comment regarding items on the Consent Calendar.

Interim City Manager Thompson spoke regarding item #8 on the Consent Calendar. This item was removed for further discussion.

Mayor Nelson closed the public comment.

MOTION: City Council Member Cale moved to approve the Consent Calendar as amended. The motion was seconded by Mayor Pro Tem Raymond and the vote was: Ayes: Cale, Raymond, Nelson; Noes: None; Absent: Ambriz, Button. The motion passed.

TREASURER'S REPORT:

1. March 31, 2024

ACTION: Acceptance of report as listed.

WARRANTS:

2. a.) April 8, 2024
   b.) April 22, 2024

ACTION: Approval of warrants as listed.

MINUTES: (Audit and Finance Committee)

3. February 26, 2024 – Regular meeting

MINUTES: (Planning Commission)

4. a.) February 21, 2024 – Regular meeting
   b.) March 20, 2024 – Regular meeting

ACTION: Acceptance of minutes as listed.

MINUTES: (City Council)

5. a.) March 25, 2024 – Regular meeting
   b.) April 3, 2024 – Special meeting

ACTION: Approval of minutes as listed.

RESOLUTIONS:

6. Amending City of Atwater Classification Plan and Adopting City of Atwater Salary Schedule D-24, Effective March 28, 2024 (Interim City Manager Thompson and Human Resources Director Sousa)

ACTION: Adoption of Resolution No. 3452-24 Amending City of Atwater Classification Plan and Adopting Salary Schedule D-24, Effective March 28, 2024.

AGREEMENTS:

7. Approving On-Call Professional Services Agreements with Various Consultants for Right-of-Way Acquisition Services (Interim City Manager Thompson)

ACTION: Approval of Professional Services On-Call Master Agreements, in a form approved by the City Attorney with Associated Right of Way Services, Inc. of Walnut Creek, California, Hamner, Jewell & Associates of Arroyo Grande, California, and Paragon Partners Consultants, Inc. of Cypress, California for Right-of- Way Acquisition Services, in an amount not to exceed $200,000 per Task Order; and authorizes and directs the Interim City Manager or designee to execute the Agreement on behalf of the City.

8. Approving Subdivision Improvement Agreement Tentative Map No. 23- 22-0100 (Interim City Manager Thompson)

This item was removed from the Consent Calendar for separate discussion and possible action.

Interim City Manager Thompson provided background information on this item.

9. Approving the Funding Agreement between MCAG and the City of Atwater for the Buhach Widening at Livingston Canal Project and Authorizing and Directing the Interim City Manager to Execute all Documents Related to the Buhach Road Widening at Livingston Canal Project (Interim City Manager Thompson)

ACTION: ***Approval of Funding agreement with Merced County Association of Governments for the Buhach Widening at Livingston Canal Project for the Project Study Report Equivalent (PSR-E); and Adoption of Resolution No. 3453-24 approving budget amendment No. 12 amending fiscal year 2023-24 budget to establish a budget within the Measure V Regional Fund for the Preparation of the PSR-E for the Buhach Road Widening at Livingston Canal Project; and Adoption of Resolution No. 3454-23 Authorizing and Directing the City Manager to execute all documents related to the Buhach Road Widening at Livingston Canal Project.***

10. Approving Funding Agreement between the MCAG and the City of Atwater for the Bellevue Road Realignment Project and Authorizing and Directing the City Manager to Execute all Documents Related to the Bellevue Road Rehabilitation/Realignment Project (Interim City Manager Thompson)

ACTION: ***Approval of Funding Agreement with Merced County Association of Governments for the Bellevue Road Rehabilitation/Realignment project Plans, Specifications and Estimates (PS&E) Phase; and Adoption of Resolution No. 3455-24 approving Budget Amendment No. 13 Amending Fiscal Year 2023-24 budget to include the preparation of Plans, Specifications, and Estimates (PS&E) for the Bellevue Road Rehabilitation/Realignment Project; and Adoption of Resolution No. 3456-24 authorizing and directing the City Manager to execute all documents related to the Bellevue Road Rehabilitation/Realignment Project.***

AGREEMENTS:

Approving Subdivision Improvement Agreement Tentative Map No. 23- 22-0100 (Interim City Manager Thompson)

MOTION: ***Mayor Pro Tem Raymond moved to approve a Subdivision Improvement Agreement and Final Map No. 23-22-0100, in a form approved by the City Attorney, with Michael Fillebrown for public improvements related to the construction of a coffee shop with a drive-thru; and authorizes and directs the Interim City Manager, or designee, to execute the Agreement on behalf of the City. The motion was seconded by City Council Member Cale and the vote was: Ayes: Cale, Raymond, Nelson; Noes: None; Absent: Ambriz, Button. The motion passed.***

REPORTS AND PRESENTATIONS FROM STAFF:

Awarding Construction Services Agreement and Approving Budget Amendment Regarding the Suncrest Street and Fortuna Avenue Overlay Project (Public Works Director Vinson)

Public Works Director Vinson provided background information on this item.

Mayor Nelson opened public comment regarding this item.

Maria Delgado spoke regarding the scope of the project.

Margie Matus spoke regarding the scope of the project.

No one else came forward to speak.

Mayor Nelson closed public comment.

MOTION: ***City Council Member Cale moved to adopt Resolution No 3451-24 approving Budget Amendment No. 11 Amending Fiscal Year 2023-2024 Budget regarding Suncrest Street and Fortuna Avenue Overlay Project; and to award a General Construction Agreement, in a form approved by the City Attorney, to Consolidated Engineering Inc. of Valley Springs, CA, for the Suncrest Street and Fortuna Avenue Overlay Project, City Project 24-09, in an amount not to exceed $201,246 and authorize construction contract change orders up to an aggregate amount of $20,124.60 (10%); and authorizes and directs the Interim City Manager or designee to execute all contract documents on behalf of the City. The motion was seconded by Mayor Pro Tem Raymond and the vote was: Ayes: Cale, Raymond, Nelson; Noes: None; Absent: Ambriz, Button. The motion passed.***

Set Public Hearing Date for New Water and Sewer Rates and Rate Adjustments (Public Works Director Vinson)

Public Works Director Vinson provided background information on this item.

Theresa Jurotich, P.E., P.M.P. Manager with Raftelis presented a PowerPoint presentation regarding the New Water and Sewer Rates and Rate Adjustments

Mayor Nelson opened public comment regarding this item.

Pastor Rich Miller spoke regarding the rates.

No one else came forward to speak.

Mayor Nelson closed public comment.

CITY MANAGER REPORTS/UPDATES:

Interim City Manager Update

Interim City Manager Thompson reported the following:

- ***Provided information regarding the Unscheduled Vacancy on the Citizens' Oversight Committee for Public Safety Transaction and Use Tax***
- ***Provided information regarding the Community Services Event***
- ***Provided information regarding the Economic Development Expo in October 2024***

COMMENTS FROM THE PUBLIC:

Notice to the public was read.

Mayor Nelson clarified that under the Brown Act, members of the public are entitled to directly address the City Council and are not entitled to address their comments to other members of the public or to staff.

Mayor Nelson opened public comment.

Christan Santos, Field Representative for Congressman John Duarte, provided an update regarding Congressman Duarte's office.

Pastor Rich Miller spoke regarding his appreciation and the upcoming Law Enforcement event at his church.

Michelle Alison spoke regarding her appreciation for Police Chief Salvador attending an event and the City Council.

Mayor Nelson closed the public comment.

CITY COUNCIL REPORTS/UPDATES:

City Council comments

City Council Member Cale stated he was proud of the new officers and wanted to congratulate them.

Mayor Pro Tem Raymond thanked those for their positivity.

Mayor Nelson spoke regarding the Fire Department Pancake Breakfast and how all proceeds go towards the Annual Toy Drive.

ADJOURNMENT:

Mayor Nelson adjourned the meeting at 6:52 PM.

APPROVED:

_____
MIKE NELSON
MAYOR

ATTEST:

_____
JANELL MARTIN
ASSISTANT CITY CLERK

CITY COUNCIL
AGENDA REPORT

CITY COUNCIL

Mike Nelson, Mayor
Danny Ambriz — Tyler Button
John Cale — Brian Raymond

MEETING DATE: May 13, 2024
TO: Mayor and City Council
FROM: Michael Salvador, Police Chief
PREPARED BY: Michael Salvador, Police Chief
SUBJECT: **Authorizing Grant Application Bureau of Justice Assistance 2024 Patrick Leahy Bulletproof Vest Partnership Program** (Police Chief Salvador)

RECOMMENDED COUNCIL ACTION

Adoption of Resolution No. 3459-24, authorizing the grant application to the United States Department of Justice, Office of Justice Programs, Bureau of Justice Assistance's 2024 Patrick Leahy Bulletproof Vest Partnership (BVP) Program; and authorizing the Mayor and/or Interim City Manager or designee to execute Grant Application, amendments, and all documents related to the grant, on behalf of the City, including administration, if awarded.

I. BACKGROUND/ANALYSIS:

The U.S. Department of Justice (DOJ), Office of Justice Programs, Bureau of Justice Assistance (BJA) administers a federal funding program known as the 2024 Patrick Leahy Bulletproof Vest Partnership Program to further the mission of preventing or reducing injuries to police officers.

The purpose of the BVP Program is to reimburse states, units of local government, and federally recognized Indian tribes, i.e., jurisdictions, for up to 50 percent of the cost of body armor vests purchased for law enforcement officers.

Eligibility: States, units of local government, and federally recognized Indian tribes, i.e., jurisdictions, that employ eligible law enforcement officers are eligible to apply for BVP funds. Multiple law enforcement agencies (LEAs) within the same jurisdiction must submit their own application information and vest needs to the jurisdiction. The jurisdiction will then submit the LEA applications in one submission to BJA. This includes colleges and universities. All public colleges and universities are considered LEAs under their respective jurisdiction.

Body Armor Vest Requirements: Body armor vests purchased with BVP funds must have been tested through the National Institute of Justice (NIJ) Compliance Testing Program (CTP) and found to comply with the most current NIJ body armor standards, appear on the NIJ Compliant Products List as of the date the body armor was ordered,

be uniquely fitted, and be made in the United States. NIJ has started adding vests to the compliant products list for the new 0101.07 Standard. FY 2024 BVP funds may be used towards the purchase of eligible vests listed on the 101.06 Standard and the 0101.06 Standard. In addition, applicants must have a written mandatory wear policy for uniformed patrol officers in place at the time of application.

The Police Department has taken advantage of these funds in prior fiscal years to reduce the City's cost to provide body armor for its Police Officers. Body armor has a shelf life of approximately 5 years. The majority of the Department's body armor is approaching that time frame and is in need of replacement.

II. FISCAL IMPACTS:

This is a 50% reimbursable grant, with a 50% local match from the City. Once the grant is approved, staff will program the appropriation in the Fiscal Year 24-25 budget in the following accounts: Police Grant Fund Special Department expense 1005-XXXX-2021 along with increasing revenue in revenue account 1005-0000-3138. This item has been reviewed by the Finance Department.

III. LEGAL REVIEW:

This item has been reviewed by the City Attorney’s Office.

IV. EXISTING POLICY:

This item is consistent and assists in the execution of the Police Department Strategic Plan that was introduced on April 8, 2019.

V. ALTERNATIVES:

N/A

VI. INTERDEPARTMENTAL COORDINATION:

This item has been reviewed by all departments.

VII. PUBLIC PARTICIPATION:

The public will have opportunity to speak prior to City Council action.

VIII. ENVIRONMENTAL REVIEW:

This item is not a “project” under the California Environmental Quality Act (CEQA) as this activity does not cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, pursuant to Public Resources Code section 21065.

IX. STEPS FOLLOWING APPROVAL:

Upon City Council approval, the interim City Manager will execute the grant application paperwork and the Grant Coordinator will transmit the grant application paperwork to the DOJ.

Submitted by:



Michael Salvador, Police Chief
Approved by:



Greg Thompson, Interim City Manager

Attachments:

1. 3459-24 Grant Patrick Leahy Body Armor

CITY COUNCIL
OF THE
CITY OF ATWATER

RESOLUTION NO. 3459-24

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ATWATER AUTHORIZING THE APPLICATION FOR THE 2024 PATRICK LEAHY BULLETPROOF VEST PARTNERSHIP GRANT PROGRAM.

WHEREAS, The United States Department of Justice, Office of Justice Programs, Bureau of Justice Assistance has made funding available under the Patrick Leahy Bulletproof Vest Partnership grant program to provide federal funding to assist jurisdictions in the purchase of body armor for Law Enforcement Officers; and

WHEREAS, the City of Atwater is eligible to apply for funds from the Patrick Leahy Bulletproof Vest Partnership grant program in Federal fiscal year 2024; and

WHEREAS, Staff has determined a need to replace protective body armor issued to Atwater Police Officers

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Atwater does hereby authorize the grant application to the Patrick Leahy Bulletproof Vest Partnership grant program. The City of Atwater authorizes the City Manager, Mayor, and designee's to execute the Grant Application, and all other documents required for participation in the Patrick Leahy Bulletproof Vest Partnership grant program, and any amendments there to on behalf of the City of Atwater.

The foregoing resolution is hereby adopted this 13th day of May 2024.

AYES:
NOES:
ABSENT:

APPROVED:

_____
MIKE NELSON, MAYOR

ATTEST:

_____
KORY J. BILLINGS, CITY CLERK

CITY COUNCIL
AGENDA REPORT

CITY COUNCIL

Mike Nelson, Mayor
Danny Ambriz — Tyler Button
John Cale — Brian Raymond

MEETING DATE: May 13, 2024
TO: Mayor and City Council
FROM: Greg Thompson, Interim City Manager
PREPARED BY: Christina Thurman, Executive Assistant
SUBJECT: **Accepting and Adopting the prepared City of Atwater Existing Conditions Report and City of Atwater Existing Conditions Market Study Report prepared for the 2040 General Plan Update** (Interim City Manager Thompson)

RECOMMENDED COUNCIL ACTION

Adoption of Resolution No. 3458-24 Accepting and Adopting the City of Atwater Existing Conditions Report and the City of Atwater Existing Conditions Market Study Report for the 2040 General Plan Update.

I. BACKGROUND/ANALYSIS:

The City of Atwater is actively working on updating its General Plan, a crucial document that guides the city's long-term growth and development. The existing General Plan for Atwater dates back to 2000, and since then, significant changes have occurred in the city. New housing developments, evolving business and industry, and overall growth necessitate an updated plan. The General Plan covers various essential community topics, including land use, housing, economic development, circulation, safety, open spaces, environmental justice, and noise. It serves as a roadmap for decision-making and reflects the community's values and priorities.

On May 8, 2023, the City Council awarded a Professional Services Agreement to De Novo Planning of El Dorado Hills, for the preparation of a Comprehensive General Plan Update and Master Environmental Impact Report. As the City of Atwater is embarking on an exciting journey, the City is taking bold steps to make the General Plan a true, long-range plan that will chart the City's future over the next 20 years. In these initial stages of the General Plan update, two critical reports have been prepared :

- **Existing Conditions Report and Existing Conditions Market Study Report**: These reports provide high-level analysis for important topics such as land use, mobility, conservation, parks and recreation, infrastructure, community character, local and regional economy, the local real estate market for housing and other major land uses, the City's fiscal status as indicated by its General Fund, and

quality fo life in the City of Atwater.

As an initial step in the General Plan Update, these reports were prepared as an overview of the City's physical, environmental, economic, and demographic setting. Both reports provide background information and documents significant conditions, trends, and key issues for the City in preparation of its Land Uses and Economic Development portions of the General Plan. The reports are intended to document the baseline conditions in the City, while also providing contextual comparisons with neighboring cities and the County of Merced, where applicable. Both reports are only to serve as a comprehensive guidance document intended to stimulate discussion and generate ideas to further the future steps of the planning process for the General plan among stakeholders, policymakers, city staff, the consultants, property-owners, and residents of the City of Atwater.

II. FISCAL IMPACTS:

There are no fiscal impacts associated with council action of adopting these informational reports.

Sufficient funding for this service is available in the Fiscal Year 2023-24 Budget General Fund, General Plan Update, Professional Services expense, account number 1041-4010-3030.

This item has been reviewed by the Finance Department.

III. LEGAL REVIEW:

This item has been reviewed by the City Attorney.

IV. EXISTING POLICY:

This item is consistent with goal numbers one (1) through six (6) of the City's Strategic Plan.

V. ALTERNATIVES:

N/A

VI. INTERDEPARTMENTAL COORDINATION:

This item has been reviewed by all departments.

VII. PUBLIC PARTICIPATION:

The public will have an opportunity to provide comments on this item prior to City Council action.

VIII. ENVIRONMENTAL REVIEW:

This item is not a project under the California Environmental Quality Act (CEQA) as this activity does not cause either direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, pursuant to Public Resources Code Section 21065.

IX. STEPS FOLLOWING APPROVAL:

Following approval and option of the resolution, the City Clerk's office will upload the Existing Conditions Report and Existing Conditions Market Study Report to the City's website to promote transparency.

Submitted and Approved by:



Greg Thompson, Interim City Manager

Attachments:

1. 3458-24 Accepting and Adopting Existing Conditions Report and Market Study Report
2. Atwater ECR 4_25_24
3. Atwater Existing Conditions Market Report for Adoption

CITY COUNCIL
OF THE
CITY OF ATWATER

RESOLUTION NO. 3458-24

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ATWATER ACCEPT AND ADOPT THE EXISTING CONDITIONS REPORT AND THE CITY OF ATWATER EXISTING CONDITIONS MARKET STUDY REPORT PREPARED FOR THE 2040 GENERAL PLAN UPDATE

WHEREAS, the City is actively working on updating its General Plan, a crucial document that guides the city's long-term growth and development. The existing General Plan for Atwater dates back to 2000; and

WHEREAS, on May 8, 2023, the City Council awarded a Professional Services Agreement to De Novo Planning of Eldorado for the preparation of a Comprehensive General Plan Update and Master Environmental Report; and

WHEREAS, as an initial step in the General Plan update, these reports were prepared as an overview of the City's physical, environmental, economic, and demographic setting; and both these reports provide background information and documents significant conditions, trends, and key issues for the City in preparation of its Land Uses and Economic Development portions of the General Plan update; and

WHEREAS, these reports are intended to document the baseline conditions in the City, while also providing contextual comparisons with neighboring cities and the County of Merced, where applicable; and

WHEREAS, both reports are only to serve as a comprehensive guidance document intended to stimulate discussion and generate ideas to further the future steps of the planning process for the General Plan among stakeholders, policymakers, city staff, the consultants, property-owners, and residents of the City of Atwater.

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of Atwater that the Existing Conditions Report and City of Atwater Existing Conditions Market Study Report attached as **Exhibit "A" and Exhibit " B"** collectively is hereby approved.

BE IT FURTHER RESOLVED, that the City Council does hereby accept and adopt the Existing Conditions Report and City of Atwater Existing Conditions Market Study Report as guidance documents for the 2040 General Plan Update, and direct the City Clerk to post these documents on the City's website to promote transparency.

The foregoing resolution is hereby adopted this 13th day of May 2024.

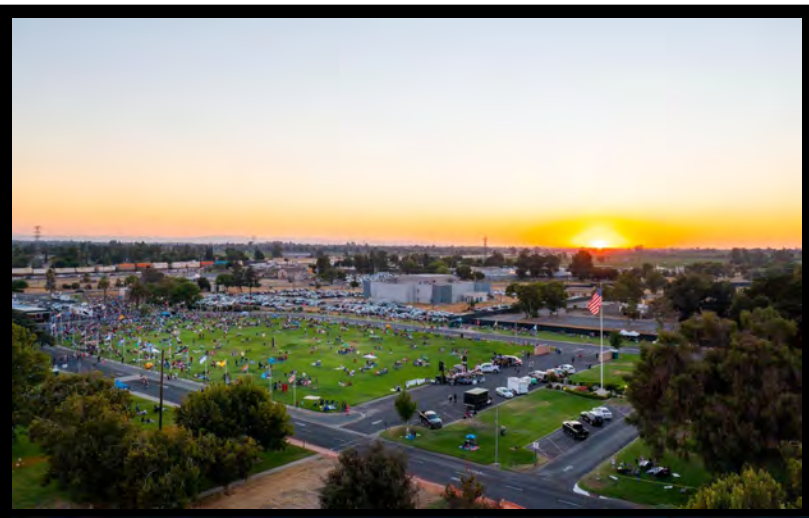
AYES:
NOES:
ABSENT:

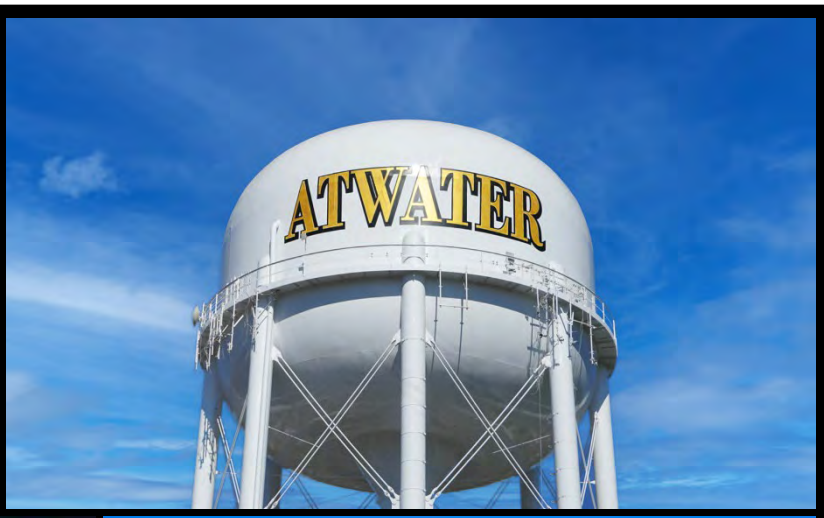
APPROVED:

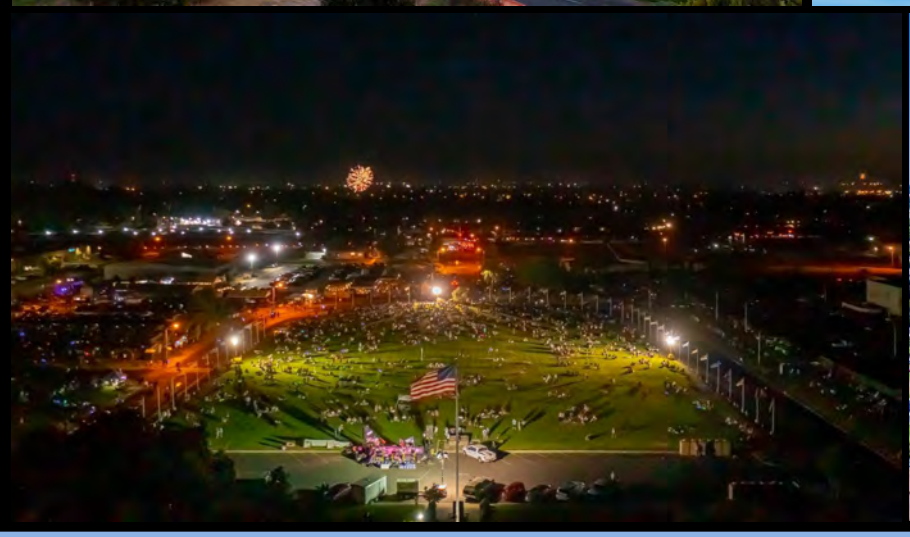
_____
MIKE NELSON, MAYOR

ATTEST:

_____
KORY J. BILLINGS, CITY CLERK









City of Atwater

Existing Conditions Report

April 2024

Prepared for the
City of Atwater by
De Novo Planning Group

De Novo Planning Group

A Land Use Planning, Design, and Environmental Firm

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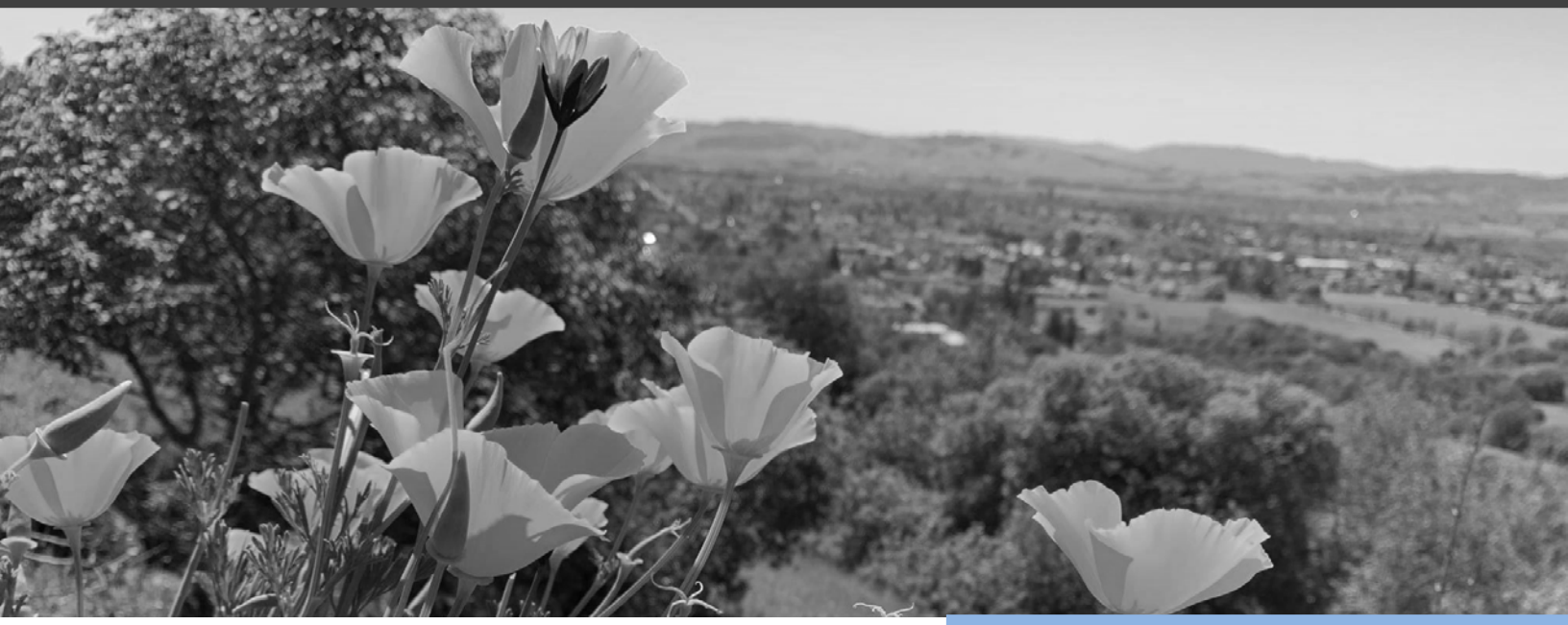
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INTRODUCTION



This Existing Conditions Report prepared for the General Plan Update provides an overview of the City of Atwater's physical, environmental, economic, and demographic setting. This document is intended to serve as a comprehensive reference document for community members, policymakers, staff, and the consultant team throughout the General Plan Update process.

This Chapter includes the following topics:

i. **Background**
ii. **Existing Conditions Report Contents**
iii. **General Plan Overview**
iv. **Using the General Plan**

INTRODUCTION

This chapter provides a brief background of the City of Atwater General Plan Update, summarizes the contents of this Existing Conditions Report, and provides an overview of the General Plan Update process. This chapter is divided into the following sections:

i. Background

ii. Existing Conditions Report Contents

iii. General Plan Overview

iv. Using the General Plan

I. BACKGROUND

The City of Atwater's existing General Plan was adopted in 2000. It was developed to anticipate the needs of the physical development of the community through the year 2020.

The Atwater General Plan identifies the community's vision for the future and provides a framework to guide decisions on growth, development, and conservation of open space and natural resources in a manner consistent with the quality of life desired by residents, businesses, and local elected officials, while also meeting the requirements of State planning law.

This Existing Conditions Report, which has been prepared to support and complement the General Plan Update, provides an overview of Atwater's physical, environmental, economic, and demographic setting, using the best available data at the time of publication. This document serves to establish the baseline conditions in Atwater, in order to help guide the development of the General Plan Update.

City staff, the General Plan Update consultant (De Novo Planning Group), and its subconsultants have worked together to ensure that this is an accurate and reliable source of information. This document is intended to serve as a comprehensive reference document for community members, policymakers, staff, and the consultant team.

The Atwater General Plan Update is a multi-year process that will include a comprehensive update of the General Plan, which sets a vision for the future of the city, goals and strategies to achieve the city's vision, and an Environmental Impact Report (EIR), which investigates the possible impacts of the General Plan Update policy changes to the surrounding physical environment.

This chapter summarizes the contents of this Existing Conditions Report, and provides a brief overview of the General Plan Update.

II. EXISTING CONDITION REPORT CONTENTS

To prepare a meaningful General Plan, existing conditions must be understood and documented. The Existing Conditions Report identifies development patterns, natural resources, socioeconomic conditions, and environmental constraints in the city and identifies the local regulatory environment for each topic. This report will be a resource for the Council, Planning Commission, City staff, and the De Novo team for the General Plan Update and Environmental Impact Report. The Existing Conditions Report makes extensive use of maps, graphics, and user-friendly non-technical terms to help make it accessible to the general public.

The Existing Conditions Report provides background data and serves as a technical framework, while the General Plan will focus on goals, policies, and implementation.

The following topic areas are addressed in this Existing Conditions Report:

CHAPTER 1.0 LAND USE, POPULATION, AND HOUSING

The Land Use Population, and Housing chapter of the Existing Conditions Report addresses land use and demographics, including issues related to land use patterns, community demographical and housing information. The information in this chapter provides both a historical and current perspective on land use and is intended to assist the General Plan update process by providing both historical context and a baseline of existing land use information to be used when formulating and considering amendments to the city's current land use pattern or when considering alternate growth and land use scenarios for the city.

CHAPTER 2.0 TRANSPORTATION AND CIRCULATION

The Circulation chapter of the Existing Conditions Report describes the circulation network. It assembles relevant transportation data from the City, County, Caltrans, and other agencies as appropriate. Data assembled includes recent average daily traffic (ADT) counts on City roadways and Caltrans facilities, citywide vehicle miles travelled (VMT), existing and planned roadway alignments and number of lanes, current and planned transit service, existing and planned non-motorized (bicycle and pedestrian) facilities, and other relevant studies and reports.

CHAPTER 3.0 ECONOMIC, REAL ESTATE MARKET, AND FISCAL CONDITIONS

The Economic and Real Estate Market, and Fiscal Conditions and Trends chapter within the Existing Conditions Report outlines both the current and anticipated economic and fiscal factors influencing the overall identity of Atwater. Subsequently, this information serves as the foundation for establishing a regulatory and policy framework, guiding and bolstering Atwater's fiscal and economic development goals.

CHAPTER 4.0 COMMUNITY SERVICES AND FACILITIES

The Community Services and Facilities Chapter of the Existing Conditions Report describes the existing conditions and regulatory context regarding community services, including, education, public safety services, and parks and recreational resources within the city. These facilities and services provide a framework that supports growth and development in the city. This chapter also describes existing service levels, and available resources.

CHAPTER 5.0 UTILITIES

The Utilities chapter of the Existing Conditions Report discusses the current state of utility infrastructure and services within the city. This chapter assesses the condition and capacity of water, wastewater, storm drainage, solid waste, energy, and telecommunication systems. By providing a detailed snapshot of the existing utilities landscape, this chapter lays the groundwork for informed decision-making and strategic planning, ensuring that the city's utility infrastructure continues to support sustainable growth, resilience, and the well-being of its residents.

CHAPTER 6.0 HAZARDS AND SAFETY

The Hazards and Safety chapter discusses existing conditions related to natural and man-made hazards and public safety issues, including but not limited to wildfire, flooding, and hazardous materials. By analyzing these community hazards, this chapter identifies high risk areas and issues that should be addressed through the Land Use Map and General Plan policy document.

CHAPTER 7.0 COMMUNITY NOISE

The Community Noise chapter of the Existing Conditions Report serves as a comprehensive assessment of the acoustic environment within the city. This chapter serves to provide a detailed overview of the current state of noise pollution, identifying its sources, and potential implications for future urban development. By examining noise levels from various sources such as transportation, urban uses, and construction activities, this report seeks to lay the foundation for sound policy recommendations that will help preserve tranquility and quality of life.

CHAPTER 8.0 CONSERVATION AND NATURAL RESOURCES

The Conservation and Natural Resources chapter of the Existing Conditions Report discusses conservation issues related to cultural and historic preservation, air quality, biological resources, geologic resources, and hydrology/water quality for the city. This chapter also discusses open space as it relates to the preservation of natural resources as part of the biological resources discussion, open space associated with managed production of surface water and groundwater resources as part of the hydrology discussion, and open space associated with public health related to geologic and hydrologic hazards as part of the geologic resources and hydrology discussions, respectively.

CHAPTER 9.0 ENVIRONMENTAL JUSTICE

The Environmental Justice chapter of the Existing Conditions Report analyzes the potential for Disadvantaged Communities (DACs) within Atwater, and addresses a wide range of topics related to Environmental Justice issue areas.

APPENDIX A: REGULATORY SETTING

Appendix A includes the State and Federal Regulatory Section of the Existing Conditions Report that provides a detailed overview of the various laws, regulations, and policies at both the state and federal levels that impact the planning and development of the City and Region. This section outlines the legal framework governing land use, environmental protections, and other critical aspects of urban and regional planning. It serves as a crucial reference guide for policymakers, planners, and stakeholders, ensuring that development and growth align with the broader legal landscape.

APPENDIX B: REFERENCES

Appendix B includes the References of sources and documents that have been consulted and cited throughout the Existing Conditions Report document. This section provides a means to verify the accuracy and credibility of the information and data presented in this document and includes a wide range of references, such as research studies, government regulations, expert reports, and other relevant materials.

III. GENERAL PLAN OVERVIEW

State law requires every city and county in California to prepare and maintain a planning document called a general plan. A general plan is a "constitution" or "blueprint" for the future physical development of a county or city. All future planning decisions and project approvals must be consistent with the general plan, including, but not limited to: specific plans, subdivisions, public works projects, and zoning decisions.

A general plan has four defining features:

General. As the name implies, a general plan provides general guidance for future land use, transportation, infrastructure, environmental, and resource decisions.

Long-Range. A general plan provides guidance on achieving a long-range vision of the future for a city or county. To reach this envisioned future, the general plan includes goals, policies, and implementation programs that address both near-term and long-term needs. The City's General Plan Update will look ahead approximately 20 years, to the year 2045.

Integrated and Coherent. The goals, policies, and implementation programs in a general plan must present a comprehensive, unified program for development and resource conservation. A general plan uses a consistent set of assumptions and projections to assess future demands for housing, employment, public services, and infrastructure. A general plan has a coherent set of policies and implementation programs that enables citizens to understand the vision of the general plan, and enables landowners, businesses, and industry to be more certain about how future planning decisions will be made and implemented.

Comprehensive. A general plan covers a wide range of social, economic, infrastructure, and natural resource issues. There are seven mandatory elements: land use, circulation, housing, conservation, open space, safety, and noise. State law allows local governments to organize and format their general plans however they desire, as long as the required topics or elements are addressed.

The Atwater General Plan is expected to address the following topics:

- Land Use: Establishes land use patterns and densities, and ensures that there are opportunities for growth to meet future needs, while protecting the city's lands and resources.
- Circulation: Guides decisions for how people of all ages and abilities can safely and efficiently get around the community— including by car, bike, walking, and transit. It will also consider new transportation technology and trends.
- Housing (to be updated on a separate timeline and is not a part of this work program)
- Conservation and Open Space: Provides measures to protect and improve the city's natural, historic, cultural, and biological resources. Addresses the topic of local and regional parks, recreation and open space, including trails and scenic areas.
- Community Noise: Provides measures to manage the effect of sound in the community, protecting the health and welfare of the community by promoting development and activities that are compatible with noise level criteria.
- Safety: Addresses natural and man-made safety hazards such as fires, flooding, seismic safety and geologic hazards, hazardous materials, aircraft, noise, and emergency operations and preparedness.

- Environmental Justice Addresses the fair and equitable treatment of all community members, regardless of their socioeconomic status, race, or ethnicity, in matters related to environmental policies, planning, and development.
- Parks and Recreation: Outlines the community's vision and strategies for managing and enhancing public parks, recreational facilities, and open spaces.
- Economic Development: Establishes strategies to support local businesses and enhanced economic vitality in the community.
- Sustainability: Addresses strategies, goals, and policies aimed at mitigating climate change, reducing greenhouse gas emissions, and ensuring long-term ecological, economic, and social well-being.
- Growth Management: Promotes orderly and fiscally sustainable growth, while maintaining high levels of public services and infrastructure. Growth management systems promote a variety of environmental, social, and economic goals, including balancing the service costs and revenues associated with development; protecting environmental and aesthetic qualities; encouraging the efficient use of land, water, and energy resources; preserving community identity; and protecting the economic base of the community.
- Administration and Implementation: General Plan implementation is necessary to achieve the vision laid out by the General Plan. The implementation section will provide feasible, practical implementation methods that ensure the General Plan does not “sit on the shelf” but instead achieves the goals it sets out.

IV. USING THE GENERAL PLAN

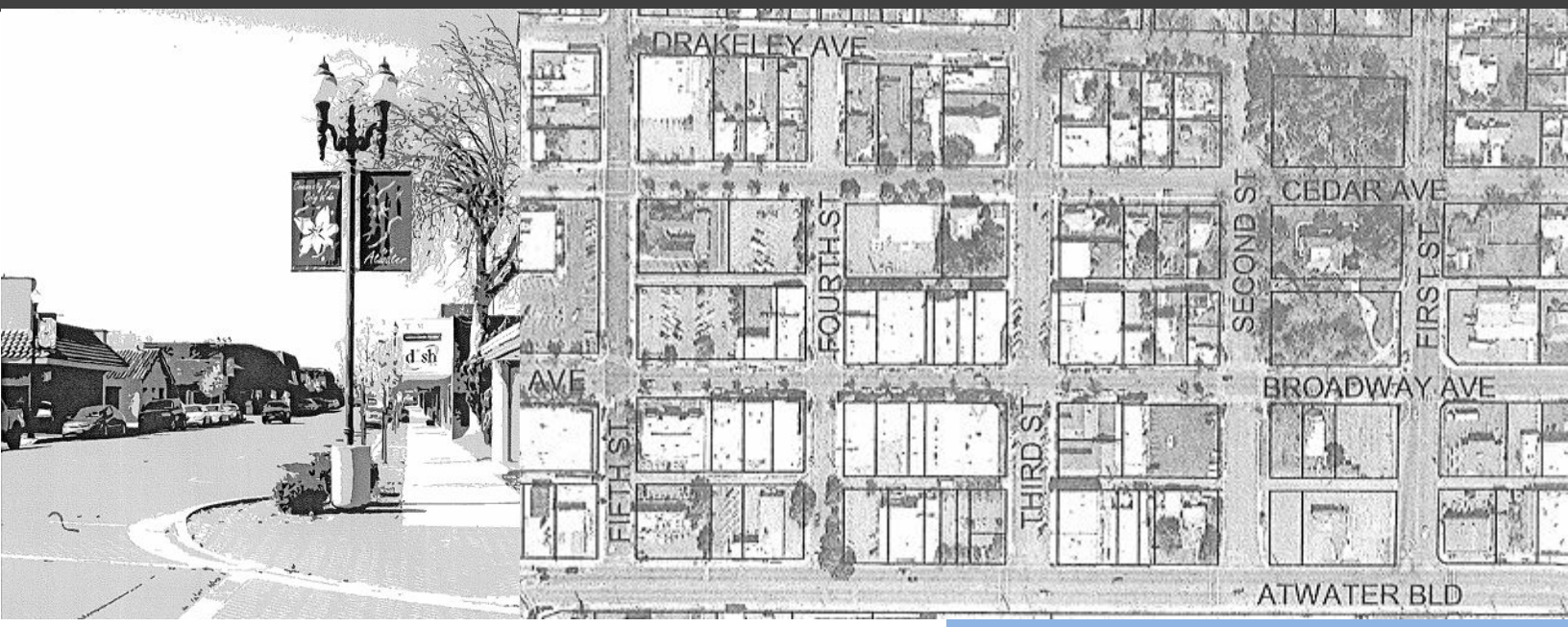
The General Plan is used by the City Council, Planning Commission, and City staff on a regular basis to make decisions with direct and indirect land use implications. It also provides a framework for inter-jurisdictional coordination of planning efforts among officials and staff of the City and other government agencies such as the State and Federal agencies, and other local jurisdictions.

The General Plan is the basis for a variety of regulatory mechanisms and administrative procedures. California planning law requires consistency between the General Plan and its implementation programs. Implementation programs and regulatory systems of the General Plan include zoning and subdivision ordinances, capital improvement programs, specific plans, environmental impact procedures, and building and housing codes.

Over time, the city's population, demographics, and economy will change, its goals will be redefined, and the physical environment in which its residents live and work will be altered. In order for the General Plan to be a useful document, it must be monitored and periodically revised to respond to and reflect changing conditions and needs.

The Goals and Policies document, developed in coordination with City staff, and decision-makers, is the essence of the General Plan. It contains the goals and policies that will guide future decisions within the city. This document also identifies a full set of implementation programs that will ensure the goals and policies in the General Plan are carried out.

Chapter 1
Land Use, Population and Housing



The Land Use, Population and Housing chapter describes, land use and development patterns, housing profiles, population, and household characteristics and trends in the City of Atwater. This chapter also identifies the local regulatory framework associated with land use. The information in this chapter provides a current perspective on land use in Atwater and is intended to assist the General Plan update process by providing a baseline of existing land use information to be used when formulating and considering amendments to the city's current land use pattern.

This Chapter includes the following topics:

1.1 Land Use
1.2 Housing
1.3 Population & Demographics

1.0 LAND USE, POPULATION, AND HOUSING

This chapter examines the land use and development patterns in Atwater, the city's housing stock, and population and demographic profiles. The information and analysis is intended to inform the General Plan Update process by providing both historical context and a baseline of existing land use, demographic, and housing development information. This chapter includes the following sections:

1.1 Land Use

1.2 Housing

1.3 Population and Demographics

FINDINGS, ISSUES AND OPPORTUNITIES

Land use

The majority of assessed land acreage (40.3 percent) within the City of Atwater city limits is single family residential uses. Other major land uses within the city include government (12.9 percent), and vacant (9.0 percent). Within the unincorporated portions within the Atwater SOI, 84.8 percent of lands are agricultural uses. The City of Atwater is primarily surrounded by Agricultural land in the west and southern portions of the city. Developed uses including Residential, Commercial, Business Park and Aviation/Manufacturing uses within the northeast and northwest portion of the planning area near the Winton and the Castle Airport unincorporated areas.

Population and Household Trends

The California Department of Finance (DOF) estimates the Atwater population at 31,418 persons and 10,136 households as of 2023. By population, Atwater is the third largest of the six incorporated cities in Merced County, ranking behind Merced and Los Banos. Merced County is the 23rd most populous of California's 58 counties. These rankings have been relatively unchanged since 2000, as the city, the county, and the state have all shown population growth. Since 2020 the number of city residents has been relatively unchanged; however, the number of households continued to grow, leading to a decline in average household size.

Regional Housing Needs Trends

Atwater's Regional Housing Needs Allocation has increased substantially from the previous cycle from 1,760 total units, to 3,017 units during the 2024- 2032 cycle.

Future Population Growth

Overall, Atwater and Merced County have shown population and household growth since 2010; however, since 2020, population estimates indicate that population growth has stalled for Atwater, but the county continues to see population growth. The most recent projections, which incorporated 2020 Census data, show more limited growth or even possible declines in population statewide. In contrast, Merced County's population is projected to increase even as the overall state population stagnates. Assuming Atwater mirrors county trends and maintains a constant percentage of the countywide population, as estimated by DOF, Atwater can be expected to grow gradually, from 31,751 in 2020 to approximately 37,000 persons in 2050, or about a 17 percent increase, with a commensurate increase in demand for housing.

Age Characteristics

Atwater has a relatively young population, with a 2020 median age of 33.2 years, which is lower than the state median of 37.5. This is largely due to the greater presence of non-adult children, who make up almost 30 percent of the Atwater population. Atwater shows an increasing percentage and number of persons 65 and older, as the "baby boom" generation ages. The growth in the population for all age groups may indicate demand for increased services targeting different age groups, especially children and the elderly, as well as housing suitable for household needs ranging from smaller homes for seniors who may be interested in downsizing and larger homes for young families.

Race and Ethnicity

Atwater and Merced County are "minority majority" areas. The city and county ethnic profiles are dominated by large and increasingly Latino populations, which may influence the types of retail and services demanded within the community.

Educational Attainment

The educational levels of an area's residents are a key driver of local economic potential; a more educated populace is likely to be associated with stronger economic conditions including higher resident incomes and a more fully employable labor force. Atwater, though, shows a lower level of educational achievement than California overall. Improving educational outcomes for local students could provide more employment opportunities and an improved quality of life for those residents and make Atwater more attractive to a broader range of employers.

Household and Per Capita Income

Atwater's resident income levels are below statewide levels. These income levels are likely associated with the lower educational attainment levels in the city, and result in lower per capita gross domestic product and retail sales in comparison to the state. Further, the prevailing incomes indicate that it will be important for the City to consider the need for housing types that are built and rented and/or sold at costs that can be more attainable to households with modest incomes.

1.1 LAND USE

This section describes land use and development patterns in the City of Atwater and identifies the local regulatory framework associated with land use. Existing land use conditions, including land uses by General Plan designation and assessed land uses, are described.

KEY TERMS

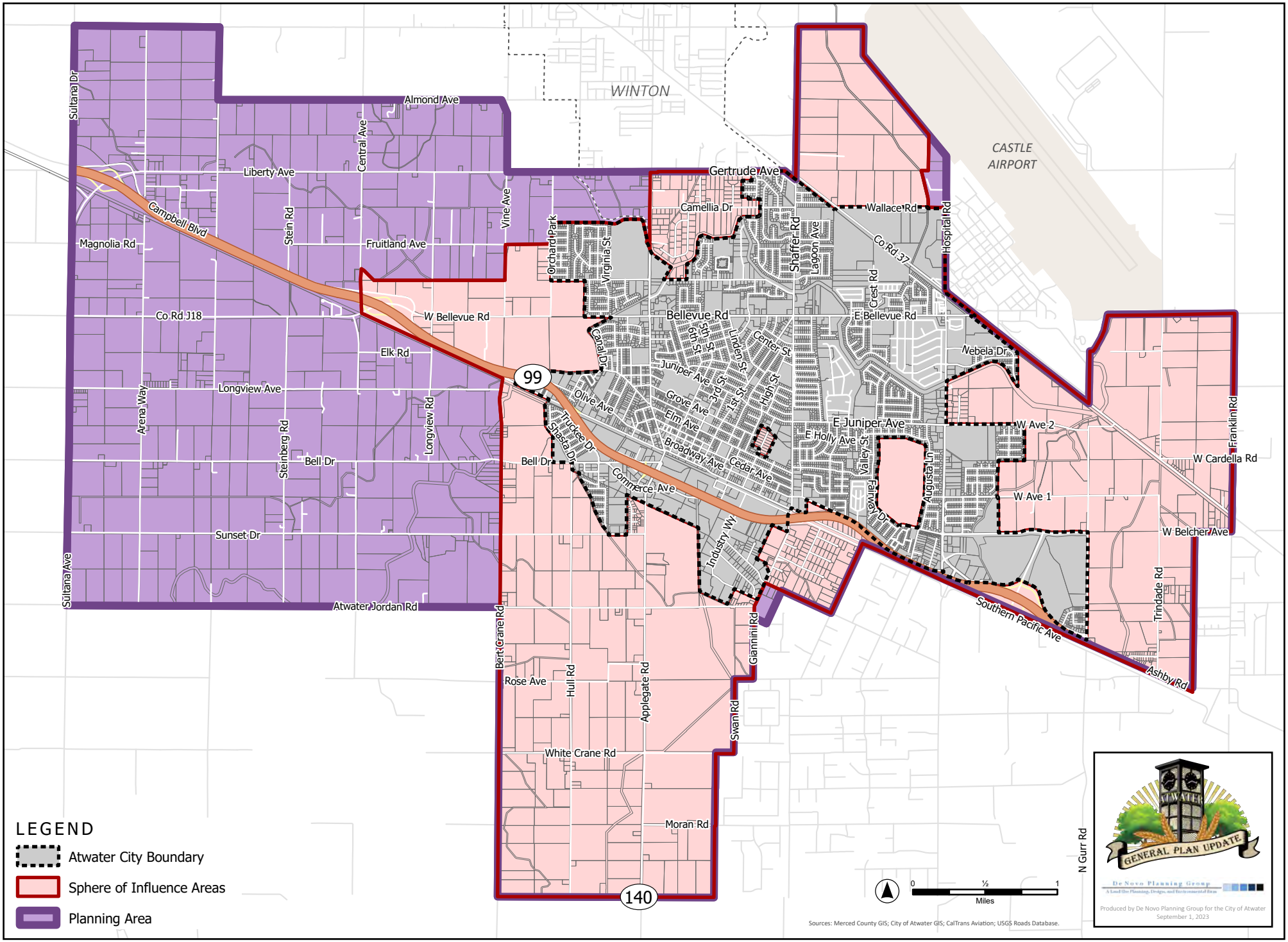
City Limits: The city limits include the area within a City's corporate boundary, over which the City exercises land use authority and provides public services.

Sphere of Influence: A Sphere of Influence (SOI) is the probable physical boundary and service area of a local agency, as adopted by a Local Agency Formation Commission (LAFCO). An SOI includes both incorporated and unincorporated areas within which a city or special district will have primary responsibility for the provision of public facilities and services.

Planning Area: For the purposes of the Atwater General Plan Update, the "planning area" is defined as all lands within the City Limits and SOI, as well as additional surrounding lands that may impact the city, or provide additional future opportunities for comprehensive planning.

Figure 1.1-1 shows the General Plan's planning areas.

Figure 1.1-1. Planning Areas



LOCAL REGULATORY FRAMEWORK

The regulatory framework discussion describes local regulations that guide land use decisions. Adopted plans that pertain to the City are also described.

City of Atwater General Plan

The City of Atwater's existing General Plan was adopted in 2000. It was developed to anticipate the needs of the physical development of the community through the year 2020. The General Plan identifies land uses based on the Land Use Map, and goals and policies established by the City's General Plan. The City's General Plan includes a broad goal policy framework that guides land use and planning decisions within the city.

Merced County General Plan

The County's General Plan establishes allowed land uses for lands within all unincorporated areas of the County, including the City of Atwater's SOI and planning area. While the City of Atwater's General Plan Land Use Map identifies land uses within the SOI, the County has ultimate land use planning and project approval authority in areas outside the Atwater City Limits until such lands are annexed to the City.

Local Agency Formation Commission of Merced County

In 1963, the State Legislature created a local agency formation commission (LAFCO) for each county, with the authority to regulate local agency boundary changes. Subsequently, the State has expanded the authority of a LAFCO. The goals of the LAFCO include preserving agricultural and open space land resources and providing for efficient delivery of services. The Merced LAFCO has authority over land use decisions in Merced County affecting local agency boundaries. Its authority extends to the incorporated cities, including annexation of County lands into a city, and special districts within the County. LAFCO has the authority to review and approve or disapprove the following:

- Annexations to or detachments from cities or districts.
- Formation or dissolution of districts.
- Incorporation or disincorporation of cities.
- Consolidation or reorganization of cities or districts.
- Establishment of subsidiary districts.
- Development of, and amendments to, Spheres of Influence. The Sphere of Influence (SOI) is the probable physical boundary and service area of each local government agency. This may extend beyond the current service area of the agency.
- Extensions of service beyond an agency's jurisdictional boundaries.
- Provision of new or different services by districts.
- Proposals that extend service into previously unserved territory in unincorporated areas.

In addition, the Merced County LAFCO conducts Municipal Service Reviews (MSRs) for services within its jurisdiction. An MSR typically includes a review of existing municipal services provided by a local agency or district and its infrastructure needs and deficiencies. It also evaluates financing constraints and

opportunities, management efficiencies, opportunities for rate restructuring and shared facilities, local accountability and governance, and other issues.

Legislation, including Assembly Bill 1555 and Senate Bill 244, has been enacted to encourage the identification and annexation of islands, which are unincorporated areas substantially surrounded by a city or cities.

Airport Land Use Commission Law (Public Utilities Code § 21670 et seq.)

The law, passed in 1967, authorized the creation of Airport Land Use Commissions (ALUC) in California. Per the Public Utilities Code, the purpose of an ALUC is to protect public health, safety, and welfare by encouraging orderly expansion of airports and the adoption of land use measures that minimizes exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses (§21670). Furthermore, each ALUC must prepare an Airport Land Use Compatibility Plan (ALUCP). Each ALUCP, which must be based on a twenty-year planning horizon, should focus on broadly defined noise and safety impacts.

The ALUC adopted Airport Land Use Compatibility Plan (ALUCP) addresses the Merced-Castle Airport. The ALUC adopted an update to the ALUCP on June 21, 2012.

The ALUC addresses three critical land use-planning concerns:

1. Compatibility of surrounding land uses with respect to airport noise levels;
2. Compatibility of surrounding land uses in terms of exposure of persons on the ground to crash hazards associated with aircraft; and
3. The need for appropriate height restrictions to protect the airspace used by aircraft.

The ALUC Airport Safety Map and Land Use Compatibility Guidelines for Safety, contained within the Airport Master Plan, regulate land uses and structure heights that may constitute a hazard to air navigation.

EXISTING SETTING

Land Use Patterns

When discussing land use, it is important to distinguish between planned land uses and existing land uses. The General Plan land use designations identify the long-term planned use of land, but may not present a complete picture of existing land uses. The Merced County Assessor's office maintains a database of existing (assessed) land uses on individual parcels, including an estimated number of dwelling units and related improvements such as non-residential building square footage. This information is used as the basis for property tax assessments and is summarized in Table 1.1-1 and depicted on Figure 1.1-2.

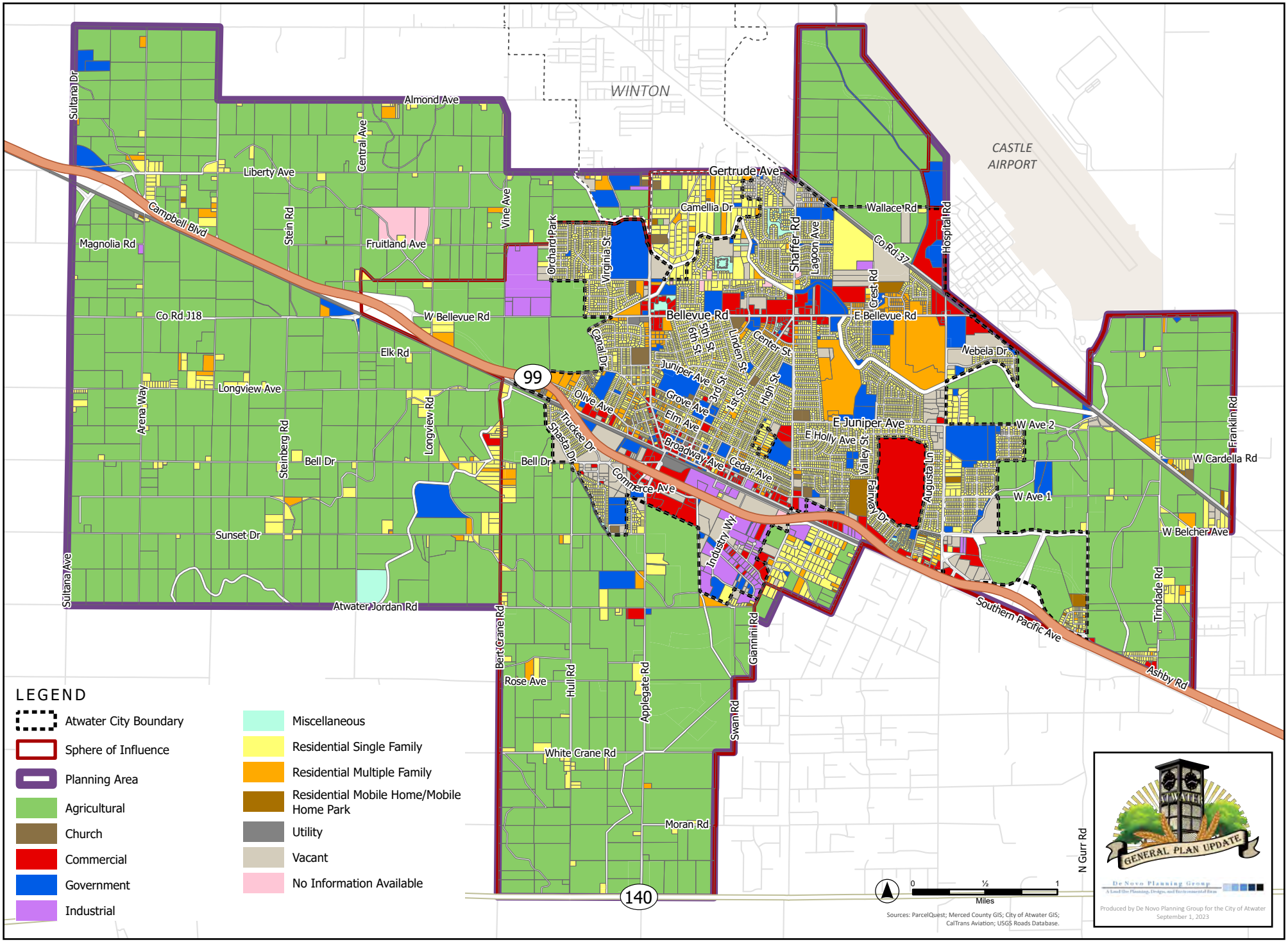
TABLE 1.1-1: ASSESSED LAND USES – ATWATER

Assessed Land Use	City (acres)	SOI (acres)	Planning Area (acres)	Total (acres)
Agricultural	237.87	5,108.33	6,063.94	11,410.14
Church	38.25	9.81	2.28	50.34
Commercial	321.45	138.30	4.48	464.23
Government	432.86	62.63	141.39	636.88
Industrial	109.80	106.14	3.81	219.75
Miscellaneous	31.32	--	31.17	62.49
Residential Mobile/Manufactured Home Park	30.21	--	--	30.21
Residential Mobile/Manufactured Homes	10.55	6.24	1.58	18.37
Residential Multiple Family	324.20	82.80	52.95	459.95
Residential Single Family	1,347.47	443.03	234.28	2,024.78
Utility	52.73	33.88	49.44	136.06
Vacant	398.25	36.11	6.31	440.68
No Data Available	12.23	--	53.29	65.52
Grand Total	3,347.20	6,027.28	6,644.92	16,019.41

SOURCE: MERCED COUNTY ASSESSOR'S OFFICE, 2023; DE NOVO PLANNING GROUP, 2023.

Existing assessed uses refer to the existing built environment and site uses, which may be different from the land use or zoning designations applied to land for planning purposes. Existing uses are based on data provided by the County Assessor. As shown in Table 1.1-1 and Figure 1.1-2 the majority of assessed land acreage (40.3 percent) within the City of Atwater city limits is single family residential uses. Other major land uses within the city include government (12.9 percent), and vacant (9.0 percent). Within the unincorporated portions within the Atwater SOI, 84.8 percent of lands are agricultural uses.

Figure 1.1-2. Assessed Land Uses



Atwater General Plan – Land Use Map

Figure 1.1-3 (General Plan Land Use Map) illustrates the City's current General Plan land use designations and their respective distributions throughout the city. Table 1.1-2 summarizes the City's General Plan land use designations and acreage. As shown in Table 1.1-2 and Figure 1.1-3 the predominate land uses within the city limits are low density residential followed by business park and commercial land uses. A brief description of each City General Plan Land Use Designation is described below.

TABLE 1.1-2: EXISTING GENERAL PLAN LAND USE DESIGNATIONS

Land Use Designation	City Limits	SOI	Planning Area	Grand Total
	Acreage	Acreage	Acreage	Acreage
AG: Agriculture	--	233.78	--	233.78
BP: Business Park	356.42	905.85	8.54	1,270.81
C: Commercial	380.95	318.20	--	699.15
CT: Commercial-Transition	3.88	--	--	3.88
DTR: Downtown Residential Transition	49.48	--	--	49.48
FPARK: Future Park	9.98	59.33	--	69.30
FSCH: Future School	19.06	16.49	--	35.55
HDR: High Density Residential	179.61	2.64	--	182.25
INST: Institutional	83.37	8.74	--	92.11
LDR: Low Density Residential	1,589.45	634.71	--	2,224.16
MDR: Medium Density Residential	85.75	151.68	--	237.44
MFG: Manufacturing	103.88	19.42	--	123.31
PARK: Park	54.92	--	--	54.92
PATH: Path	19.04	33.69	--	52.73
New Planning Area	--	--	6,617.97	6,617.97
Parcelized ROW	35.53	32.35	--	67.88
RT: Residential Transition	59.47	0.90	--	60.37
SCH: School	202.92	--	--	202.92
SOI: Sphere of Influence	--	130.05	--	130.05
UR: Urban Reserve	--	2,271.39	--	2,271.39
URBP: Urban Reserve/Business Park	--	220.51	--	220.51
VLDR: Very Low Density Residential	113.49	987.55	18.42	1,119.46
Grand Total	**3,347.20**	**6,027.28**	**6,644.92**	**16,019.41**

SOURCES: GIS LAND USE DATA FILE 2023; DE NOVO PLANNING GROUP, 2023.

VERY LOW DENSITY RESIDENTIAL (VLDR)

This designation accommodates the needs of residents who desire large parcels and the feeling of open space integrated with a suburban lifestyle. The permitted density range is 0 to 3.0 units per acre. The minimum parcel size permitted is 11,000 square feet, however, most parcels are greater in size. One single family residence is permitted per legally created lot. Typical land uses include: single family residences and residential accessory uses, churches, schools, parks, community care facilities, and necessary public utility and safety facilities. Secondary dwelling units may be permitted consistent with state and local regulations.

LOW DENSITY RESIDENTIAL (LDR)

This category provides for residential development at densities that are typical for existing single family residential subdivisions within the City. The permitted density range is 3.1 to 7.0 units per acre. Parcel sizes range from 5,000 to 11,000 square feet in area. All properties must be served by public sewer and water. Typical land uses include: single family residences and residential accessory uses, churches, schools, parks, community care facilities, and necessary public utility and safety facilities. Secondary dwelling units may be permitted consistent with state and local regulations.

MEDIUM DENSITY RESIDENTIAL (MDR)

This classification is designed to accommodate a variety of residential products including, but not limited to, single-family detached and attached units, zero lot line developments, duplexes, and multi-family structures. The permitted density range is 7.1 to 15.0 units per acre. Associated land uses include: residential accessory uses, churches, schools, parks, community care facilities, and necessary public utility and safety facilities.

HIGH DENSITY RESIDENTIAL (HDR)

This designation is intended to provide for multi-family units such as apartments, and/or condominiums in structures up to four stories in height. The permitted density range is 15.1 to 35 units per acre. Projects should include common open space and on-site recreational amenities such as tot lots, pools, or playground equipment. On-site day care facilities are also encouraged.

DOWNTOWN RESIDENTIAL TRANSITION (MIXED USE)

This designation provides for a full range of uses in Downtown Atwater including retail stores, eating and drinking establishments, commercial recreation, entertainment and cultural facilities, hospitals, hotels and motels, educational and social services, and government offices. Residential uses are appropriate up to 25 dwelling units per acre. Development and redevelopment projects shall be designed to have a strong pedestrian orientation with active uses occupying the ground floor. A mix of uses within a building-- such as, active ground floor uses, and upper story office and residential uses-- is appropriate. The maximum floor area ratio permitted is 2.0.

RESIDENTIAL TRANSITION (RT)

This designation is intended to provide a transition between commercial development and adjacent residential neighborhoods. It has also been applied in locations where a mix of commercial and residential land uses have been approved. The purpose of the classification is to encourage the development of apartments and certain compatible commercial uses, or the expansion and improvement of existing structures. Residential densities up to 21 units per acre are considered compatible. Commercial land uses which may be potentially compatible include, but are not limited to: medical, professional and business offices, parking lots and structures, personal service establishments, retail stores, restaurants, motels,

rooming and boarding homes, social halls, lodges, fraternal organizations and clubs, licensed nursing or convalescent homes, public and quasi-public uses, minor manufacturing when at least 75 percent of the product is sold on the premises. The maximum floor area ratio permitted is 0.35.

COMMERCIAL TRANSITION (CT)

This designation is also intended to provide a transition between commercial development and adjacent residential neighborhoods. Businesses which do not generate high volumes of traffic or noise, such as, professional office uses, low impact public uses, galleries, art and photography studios, church facilities, and other similar uses are generally considered compatible within this classification. The maximum floor area ratio permitted is 0.30

COMMERCIAL (COM)

This designation is intended to accommodate a wide range of commercial activities ranging from regional commercial facilities to general and neighborhood commercial uses. Establishments may range from retail to service and entertainment uses. Development may occur as a single structure, group of commercial uses (small- to medium-scale center) or regional mall type facility. Developments consisting of 75,000 square feet or more should incorporate landscaped public gathering areas with pedestrian oriented features such as benches in central locations. Common driveways and parking areas or other features should be utilized whenever possible to avoid impacts on the capacity of adjacent roadways. Commercial centers should present a unifying architectural theme, include an internal traffic circulation system and accommodations for transit services, as well as, a unifying landscape theme. The maximum floor area ratio permitted is 0.35.

MANUFACTURING (MFG)

This designation provides for a wide range of industrial activities which involve warehousing, manufacturing, processing, fabrication, and other similar operations. Some uses may be noisy, and prone to emit dust, vibration, odor, and/or glare, although these impacts must be mitigated at the property line to avoid negative impacts on adjacent uses. Businesses generally involve the frequent use of large trucks for pick-up and delivery of parts and products. Typical uses often have high utility demands and require special consideration for construction to accommodate heavy truck traffic. Uses can be developed independently or as part of a subdivision. The maximum floor area ratio permitted for most uses is 0.50. However a maximum floor area ratio of 0.60 is allowed for low employment industries, such as, warehousing, wholesaling, or distribution.

BUSINESS PARK (BP)

In contrast to the Manufacturing category, the Business Park designation provides for large buildings or a cluster of buildings usually developed in a “campus” style. Business uses may include manufacturing operations within completely enclosed buildings, associated offices, trade schools, and supporting child care and retail activities. Outside storage is limited and must be effectively screened with solid fencing and/or landscaping. The operations are quiet and require infrequent use of large trucks for pickup or delivery of parts or products.

Buildings are visually pleasing with extensive landscaping around buildings and parking areas. Projects with multiple buildings provide a strong pedestrian orientation between the structures. A typical project has vehicular access to a major street with on-site parking and a project identification sign. The maximum floor area ratio permitted is 0.40.

CASTLE AIRPORT AVIATION AND DEVELOPMENT CENTER (CAADC)

The City of Atwater has adopted land uses identified within the Castle Air Force Base Reuse Plan as the Land Use Plan for the Castle Airport Aviation and Development Center. These designations are incorporated into the General Plan by reference.

URBAN RESERVE (UR)

This designation has been applied to areas within the City of Atwater's proposed (2000) sphere of influence to indicate locations which may be suitable for urban development in the future. Current Merced County agricultural designations and permitted uses will apply in these areas until such time as the City's primary and secondary growth areas approach buildout.

URBAN RESERVE / BUSINESS PARK (UR/BP)

This designation has been applied to areas surrounding the CAADC site that are intended to remain at current Merced County agricultural designations until development demands warrant future transition to Business Park uses.

AGRICULTURE/AREA OF INTEREST (AG)

This designation has been applied both inside and outside of the City's proposed (2000) Sphere of Influence to indicate those locations where current agricultural and open space land uses are to be maintained in areas surrounding the City. Application of the term "Area of Interest" is intended to lay the groundwork for long-term agreements with the City and County of Merced relative to the maintenance of distinct boundaries and buffers between the City of Atwater, City of Merced, Community of Winton, McSwain, and Franklin-Beachwood.

INSTITUTIONAL (I)

This designation is intended for public and quasi-public facilities, including, but not limited to, government services and facilities, fire/police stations, wastewater treatment facilities, electrical substations, domestic water treatment and storage, and other similar uses. New facilities may be appropriate in any land use category based on need and environmental review. The Land Use Diagram will not be amended for new public facilities on sites that occupy less than 2 acres. The maximum floor area ratio permitted is 0.40.

SCHOOL (SCH)

This designation has been applied to areas with existing and proposed primary and secondary public school facilities. Of particular interest is the proposed High School site located on the south side of Avenue Two just east of Buhach Road. Although this designation has been applied based upon existing information, new facilities may be appropriate in any land use category based on need and environmental review. The maximum floor area ratio permitted is 0.40.

PARK (PK)

This designation has been applied to indicate the location of existing and planned public park facilities ranging from neighborhood to community parks. Additional parkland which may be dedicated and developed in conjunction with individual subdivisions need not receive a formal designation in order to be established. The maximum floor area ratio permitted is 0.10.

RECREATION (REC)

This designation is intended to accommodate commercial recreational facilities, including but not limited to, golf courses, driving ranges, tennis and racquet clubs, health clubs and spas, equestrian facilities, swim clubs, roller skating arenas, archery facilities, and other similar uses. The maximum floor area ratio permitted is 0.10.

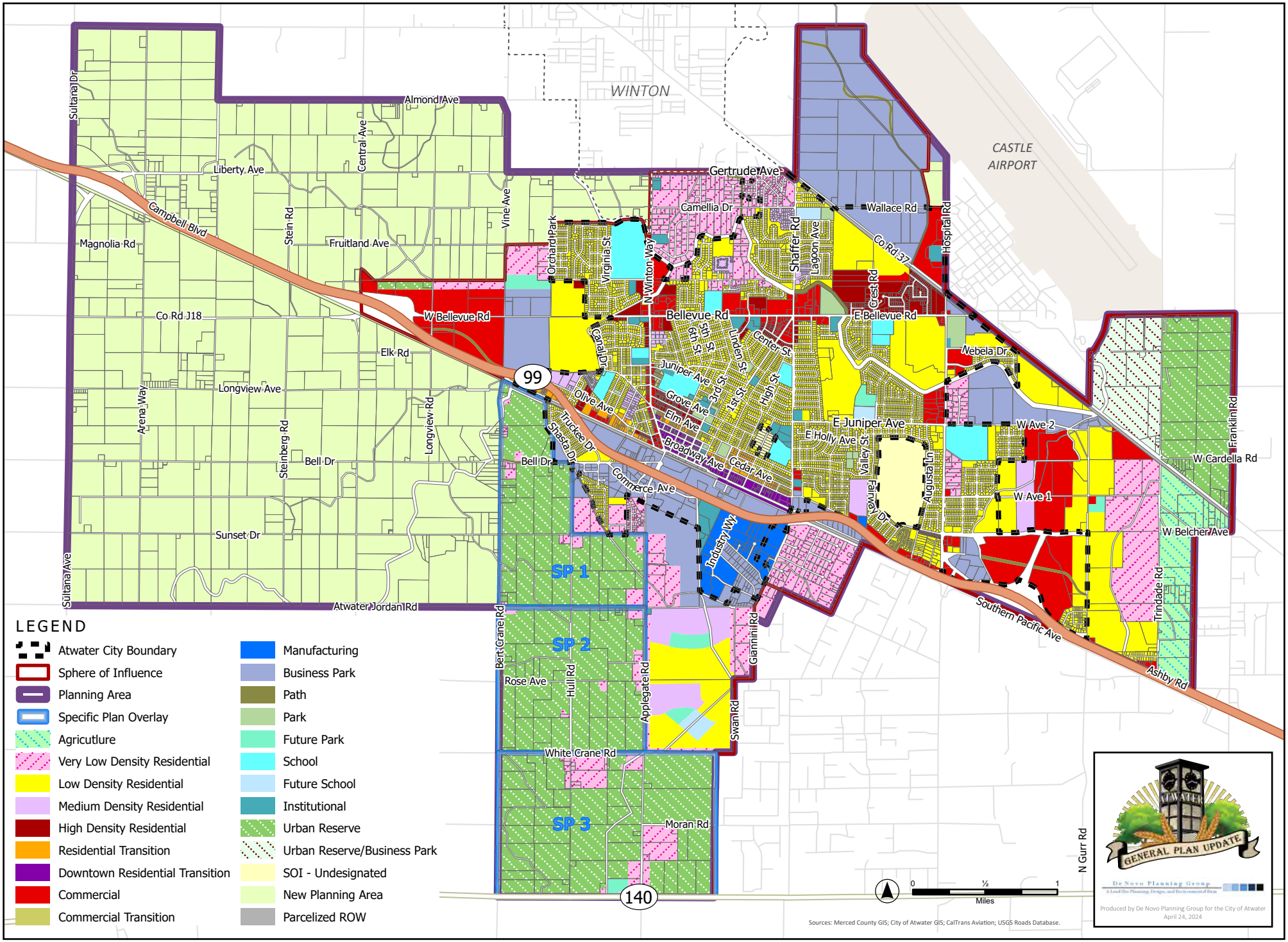
PATH (P)

This designation is indicated in locations considered desirable for development of a comprehensive system of linear parks and pathways. These facilities shall be required as appropriate within new residential developments. Utilization of the existing canal system shall serve as the backbone of this open space network

SPECIFIC PLAN AREAS 1, 2 AND 3 (SP 1, SP 2, AND SP 3)

This overlay has been applied within the southwest portion of the City's 2000 proposed Sphere of Influence to indicate those locations where Specific Plans will be prepared to guide future growth and development. Lands within these areas will continue to be under the jurisdiction of the County of Merced until the Specific Plans are adopted and future annexation is completed. Incorporation of these areas within the City's proposed Sphere of Influence will allow the City to review and comment on any development applications that are considered by Merced County in the interim, and provide opportunities for the establishment of uniform development standards and coordinated facilities planning

Figure 1.1-3. Current General Plan Land Use Designations



Merced County General Plan

The County's General Plan establishes land uses for lands within all unincorporated areas of the County, including the City of Atwater's SOI and planning area. The County's land use designations for areas within the SOI and planning area are summarized in Table 1.1-3 and the County's land use designations for the unincorporated area around the City are shown on Figure 1.1-4.

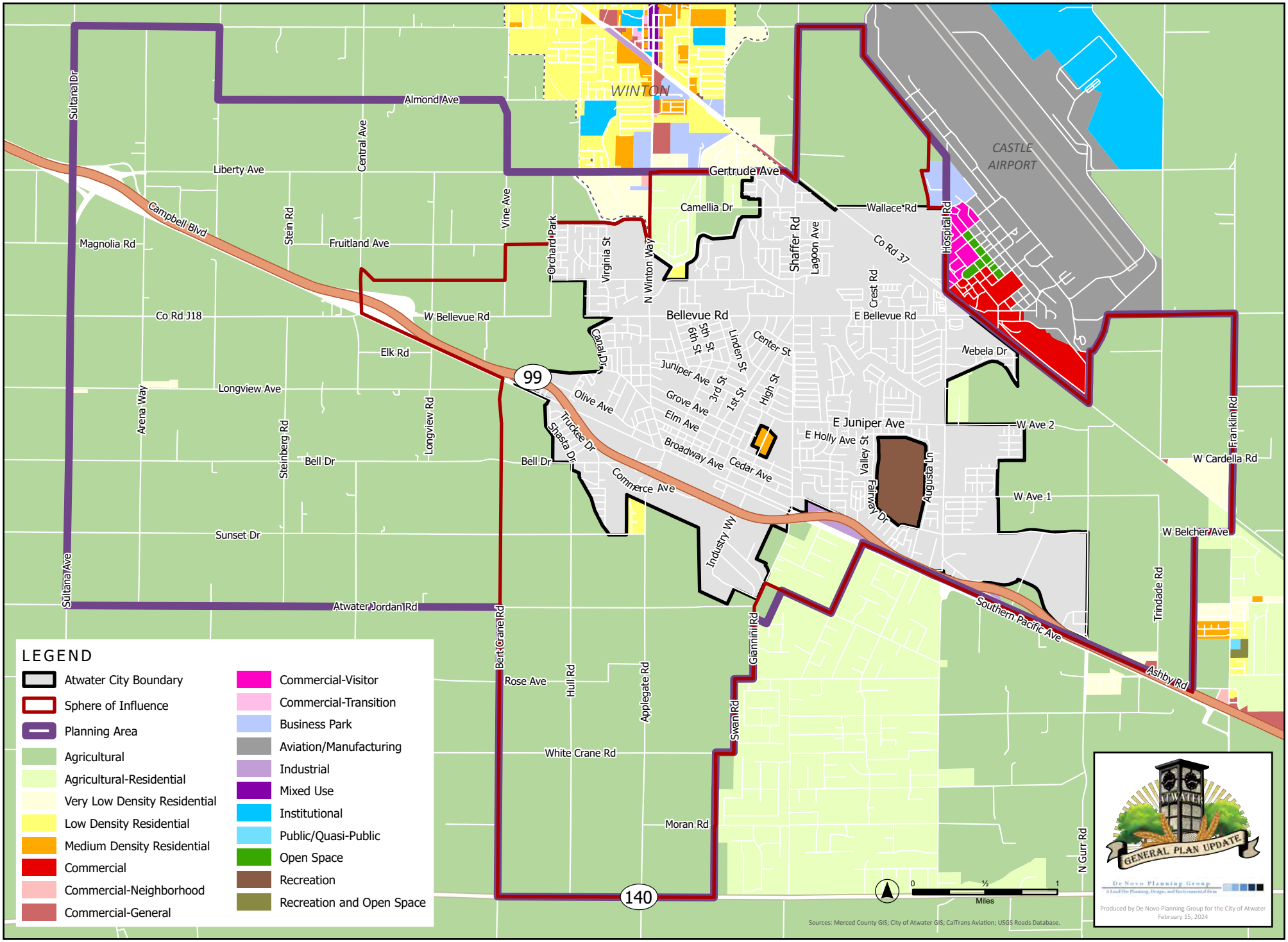
As shown on Figure 1.1-4, the City of Atwater is primarily surrounded by Agricultural, Agricultural Residential, land uses in the west and southern portion of the city with some developed uses including Residential, Commercial, Business Park and Aviation/Manufacturing uses within the northeast and northwest portion of the planning area near the Winton and the Castle Airport unincorporated areas.

TABLE 1.1-3: SURROUNDING LAND USES (MERCED COUNTY GENERAL PLAN LAND USE DESIGNATIONS)

Land Use	Planning Area	SOI	Total
	Acreage	Acreage	Acreage
A- Agricultural	6,766.31	5,798.20	12,564.51
AM- Aviation/Manufacturing	0.00	1.63	1.63
AR- Agricultural-Residential	0.27	333.53	333.80
BP- Business Park	30.99	0.11	31.11
C- Commercial	0.01	0.02	0.03
GC- Commercial-General	0.00	5.72	5.72
IND- Industrial	0.00	24.68	24.68
LD- Low Density Residential	0.00	23.50	23.50
MD- Medium Density Residential	0.00	11.67	11.67
NC- Commercial-Neighborhood	3.62	0.00	3.62
REC- Recreation	0.00	117.13	117.13
VC- Commercial-Visitor	1.34	0.00	1.34
VLDR- Very Low Density Residential	85.09	76.27	161.36
ROW/Null	0.00	2.07	2.07
Total	6,887.62	6,394.53	13,282.16

SOURCES: GIS LAND USE DATA FILE 2023; DE NOVO PLANNING GROUP, 2024.

Figure 1.1-4. Merced County General Plan Land Use



1.2 HOUSING

This section provides a brief summary of the city's housing profile. For perspective, this includes comparisons with Merced County as a whole. The analysis primarily utilizes data from Esri Business Analyst (a private economic and demographic data vendor) and the U.S. Census Bureau, five-year American Community Survey (ACS) estimates. Where appropriate, data are also provided from a variety of other data sources, including the California Employment Development Department (EDD), California Department of Finance (DoF), and the Merced County Association of Governments (MCAG), among others.

LOCAL REGULATORY FRAMEWORK

The regulatory framework discussion describes laws and regulations that guide land use decisions. Adopted plans that pertain to the City are also described.

Regional Housing Needs Plan (Adopted RHNA 2014-2023)

California General Plan law requires each city and county to have land zoned to accommodate a fair share of the regional housing need. The share is known as the Regional Housing Needs Allocation (RHNA) and is based on a Regional Housing Needs Plan (RHNP) developed by councils of government. The Merced County Association of Governments (MCAG) is the lead agency for developing the RHNP for the Merced County area. Atwater's fair share of the adopted RHNA for 2014-2023 is summarized in Table 1.2-1.

The City is not required to ensure that adequate development to accommodate the RHNA occurs; however, the City must facilitate housing production by ensuring that land is available and that unnecessary development constraints have been removed. The City's Housing Element, adopted in 2016, provides for the accommodation of the 2014-2023 RHNA that has been assigned to the City of Atwater.

TABLE 1.2-1: REGIONAL HOUSING NEEDS ALLOCATION 2014-2023

	Extremely Low Income	Very Low Income	Low Income	Moderate Income	Above Moderate Income	Total
Current RHNA	214	213	304	281	748	1,760
Unaccommodated Need	10	9	0	16	0	35
Built since January 1, 2014	--	--	--	--	(95)	(95)
Total Housing Need	224	222	304	297	653	1,700
Sites Available	249	249	391	404	919	2,212
Surplus	25	27	87	107	266	--

SOURCE: MERCED COUNTY ASSOCIATION OF GOVERNMENTS 2014.

Regional Housing Needs Plan (RHNA 2024)

The Final Regional Housing Needs Allocation (RHNA) Plan for the 6th cycle (June 30th, 2023 - January 31st, 2032) was adopted by the Merced County Association of Governments' (MCAG) (Resolution 2022/11-17-02) on November 17, 2022. The Atwater General Plan Housing Element Update for the 2024-2033 cycle has not been adopted at the time of this publication, but is anticipated to be adopted in 2024.

The total RHNA for all income levels was allocated among MCAG's 7 jurisdictions using each jurisdiction's share of forecasted 2015 - 2035 household growth from the 2018 RTP/ SCS preferred land use scenario. Then, the regional average split for moderate and above-moderate income housing need (58.6 percent) and low and very low-income housing need (41.4 percent) was applied to each jurisdiction's total allocation. Table 1.2-2 below includes the RHNA countywide and for each of the 7 jurisdictions within the MCAG planning area. As shown in Table 1.2-2 Atwater's Regional Housing Needs Allocation has increased substantially from the previous cycle (1,760 total units) to 3,017 units during the current cycle under various income levels as detailed below.

TABLE 1.2-2: REGIONAL HOUSING NEEDS ALLOCATION 2024-2032 CYCLE RHNA

Jurisdiction	Lower Income Units			Higher Income Units			Total RHNA
	Very Low	Low	Very Low + Low	% of Total RHNA (VL + L)	Moderate	Above	
Atwater	**768**	**526**	**1,294**	**42.9%**	**508**	**1,215**	**3,017**
Dos Palos	56	39	95	36.4%	49	117	261
Gustine	77	53	130	37.5%	64	152	346
Livingston	311	213	524	47.8%	169	404	1,097
Los Banos	719	493	1,212	38.7%	566	1,354	3,132
Merced	2,543	1,742	4,285	40.7%	1,838	4,394	10,517
Unincorporated County	1,042	714	1,756	41.3%	736	1,758	4,250
Total	**5,516**	**3,780**	**9,296**	**41.1%**	**3,930**	**9,394**	**22,620**

SOURCE: MERCED COUNTY ASSOCIATION OF GOVERNMENTS 2014.

City of Atwater's Existing Housing Element

The City's Housing Element, one of the seven mandated General Plan elements, was adopted May 22, 2017. The Atwater General Plan Housing Element is designed to provide the City with a coordinated and comprehensive strategy for promoting the production of safe, decent, and affordable housing within the community. A priority of both State and local governments, Government Code Section 65580 states the intent of creating housing elements:

The availability of housing is of vital statewide importance, and the early attainment of decent housing and a suitable living environment for every Californian, including farmworkers, is a priority of the highest order.

The Housing Element has two main purposes:

1. To provide an assessment of both current and future housing needs and constraints to meeting those needs; and

2. To provide housing goals, policies, and programs that establish a strategy for attaining adequate housing for a range of people.

Atwater has areas of special priority that focus the purpose of its Housing Element, such as the growing proportion of families with children, increasing rates of overcrowding, limited availability of rental housing (especially affordable rentals) and constraints to accommodating additional housing within existing city limits.

The Housing Element serves as an integrated part of the General Plan, but is updated more frequently, as required by State law, to ensure its relevancy and accuracy. The Housing Element identifies strategies and programs that focus on:

- Matching housing supply with need;
- Maximizing housing choice throughout the community; Assisting in the provision of affordable housing;
- Removing governmental and other constraints to housing investment; and
- Promoting fair and equal housing opportunities.

EXISTING SETTING

Housing Units

As shown in Table 1.2-3, the number of housing units in Atwater has increased at rates similar to the population with significant increases since 1990. In 2023, there were an estimated 10,468 housing units in the city.

TABLE 1.2-3: HOUSING UNITS

	1990	2000	2010	2023	1990-2000 %Change	2000-2010 %Change	2010-2017 %Change
Atwater	7,422	8,114	9,529	10,468	9%	17%	10%
Merced County	38,373	58,410	85,215	91,465	52%	46%	7%

SOURCE: U.S. CENSUS, 1990, 2000, 2010; ATWATER HOUSING ELEMENT 2016-2023, CALIFORNIA DEPARTMENT OF FINANCE, 2023.

In Merced County, housing units have increased at a much more rapid pace, with a 52% increase from 1990 to 2000 and a 46% increase from 2000 to 2010. Due to the recent economic incline, growth in both the population and housing stock over the next few years is anticipated to remain relatively high, compared to historic averages.

Housing Stock Characteristics

The housing stock in Atwater and Merced County is characterized by a preponderance of single family detached homes. Almost two-thirds of housing units in the city are in this category, and nearly three-fourths are countywide, in contrast to only 57 percent statewide (see Table 1.2-4). Conversely, the city and the county' housing unit mix includes small proportions of larger multifamily (e.g., apartment) units, with units in buildings of five or more units making up less than 10 percent of housing, compared to almost 25 percent statewide.

TABLE 1.2-4 UNITS IN STRUCTURE (UNIT TYPES), 2023

	City of Atwater		Merced County		California	
Units in Structure	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Detached Single-Family	6,947	66.4%	67,630	73.9%	8,420,792	57.3%
Attached Single-Family	637	6.1%	2,872	3.1%	1,056,780	7.2%
2 to 4 Units	1,594	15.2%	7,485	8.2%	1,146,148	7.8%
5 or more	583	5.6%	8,104	8.9%	3,545,018	24.1%
Mobile Homes	707	6.8%	5,374	5.9%	538,960	3.7%
Total, All Units	**10,468**	**100.0%**	**91,465**	**100.0%**	**14,707,698**	**100.0%**
% Single Family	**72.4%**		**77.1%**		**64.4%**	
% Multifamily	**20.8%**		**17.0%**		**31.9%**	

SOURCES: DEPARTMENT OF FINANCE, TABLE E-5, 2023; BAE, 2023.

Housing Tenure

Despite housing being oriented toward single-family detached homes in Atwater and Merced County, neither area shows a higher level of owner-occupancy than the state, perhaps indicating that the lower income levels in the county are limiting the ability of local households to purchase their own homes. In 2020, all three geographies showed between 54 and 56 percent owner-occupancy. These levels are almost unchanged from 2010.

TABLE 1.2-5 OCCUPIED HOUSING UNITS BY TENURE, 2010 AND 2020

	2010		2020		Change, 2010-2020	
City of Atwater	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Owner-Occupied	4,905	55.5%	5,576	55.9%	671	13.7%
Renter-Occupied	3,933	44.5%	4,394	44.1%	461	11.7%
Total Occupied Units	**8,838**	**100.0%**	**9,970**	**100.0%**	**1,132**	**12.8%**

	2010		2020		Change, 2010-2020	
Merced County	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Owner-Occupied	41,196	54.5%	45,639	54.7%	4,443	10.8%
Renter-Occupied	34,446	45.5%	37,825	45.3%	3,379	9.8%
Total Occupied Units	**75,642**	**100.0%**	**83,464**	**100.0%**	**7,822**	**10.3%**

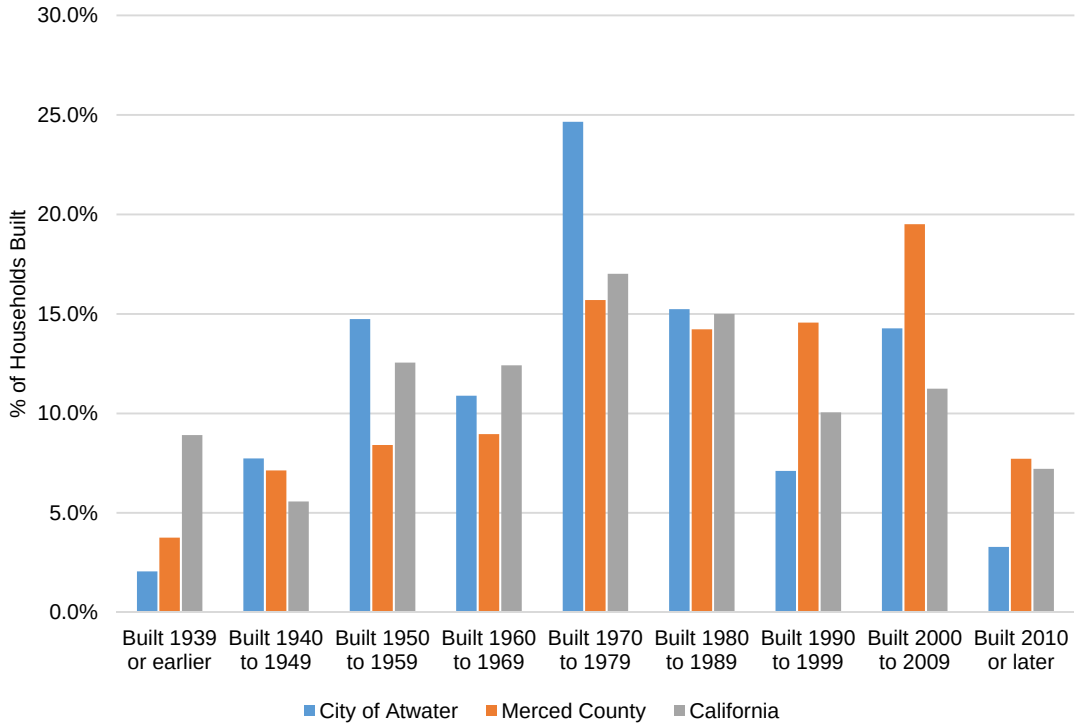
	2010		2020		Change, 2010-2020	
California	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Owner-Occupied	7,035,371	55.9%	7,348,329	54.5%	312,958	4.4%
Renter-Occupied	5,542,127	44.1%	6,127,294	45.5%	585,167	10.6%
Total Occupied Units	**12,577,498**	**100.0%**	**13,475,623**	**100.0%**	**898,125**	**7.1%**

SOURCES: U.S. CENSUS, DECENNIAL CENSUS 2010, TABLE H16 AND DECENNIAL CENSUS 2020, TABLE H4; BAE, 2023.

Year Built

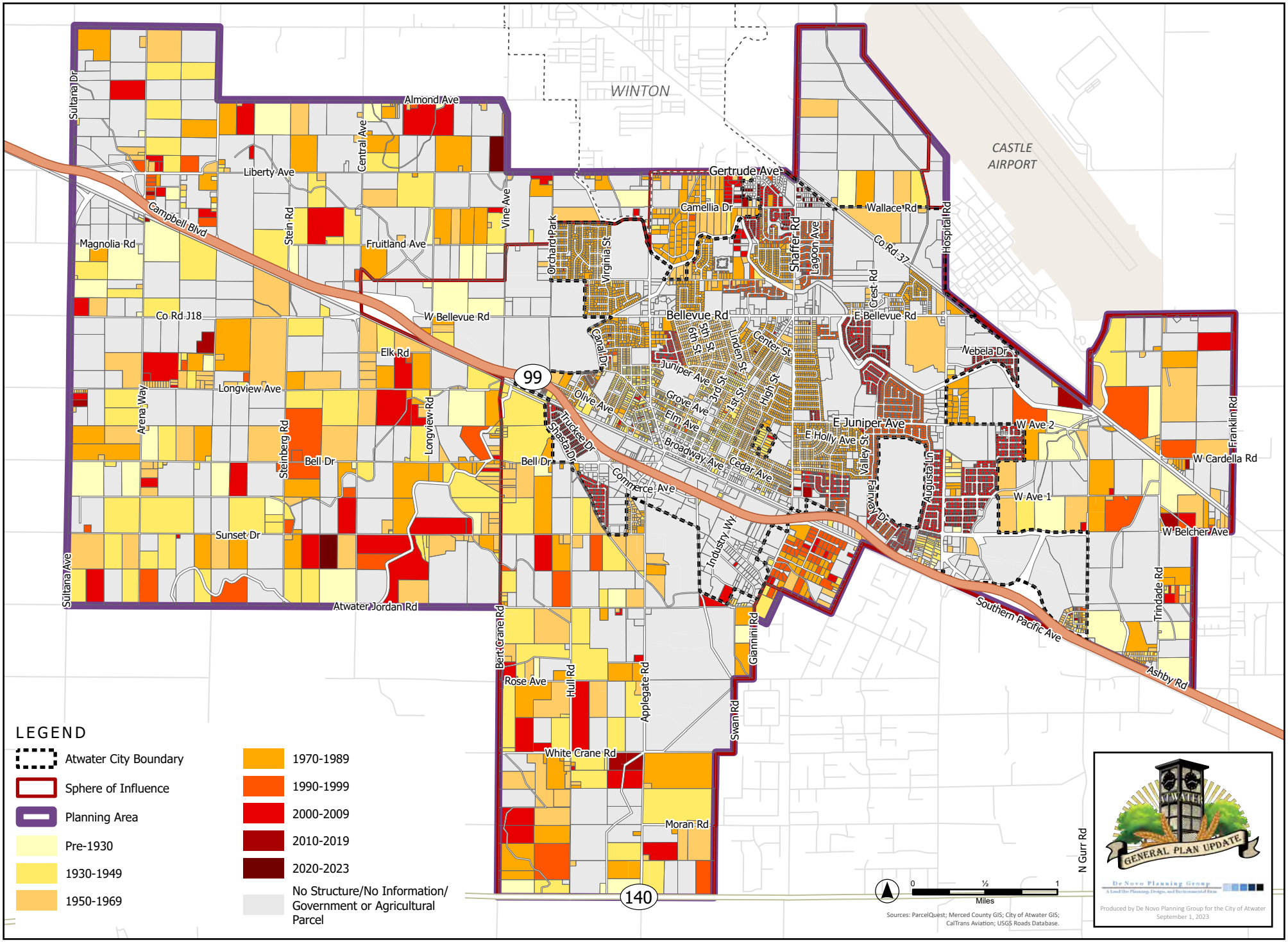
Housing construction in Atwater peaked in the 1970s, with nearly one-fourth of all housing in the city constructed during that decade (see Chart 1.2-1, and Figure 1.2-1). Less than five percent of housing units have been built since 2010. More recent development has shifted to other areas of the county; the busiest decade for construction countywide was from 2000 through 2009, accounting for slightly less than one-fifth of the county housing inventory. While decades since the 1970s have seen a slower pace of construction in Atwater, new home construction continued at a healthy pace until the recession and housing market meltdown in 2010.

CHART 1.2-1: HOUSING UNITS BY YEAR BUILT, 2017-2021 FIVE-YEAR SAMPLE DATA



SOURCES: U.S. CENSUS, DECENNIAL CENSUS 2010, TABLE H16 AND DECENNIAL CENSUS 2020, TABLE H4; BAE, 2023.

Figure 1.2-1. Year Structures Built



Housing Occupancy Status

Vacancy rates help demonstrate the relationship between housing supply and demand and can indicate whether a jurisdiction has an adequate housing supply to accommodate demand. The following section examines the published vacancy data from the U.S. Decennial Census. Since this data is collected on a regular and consistent basis every ten years, it allows an analysis of any changes in the local housing market over that time period. Vacancy trends may be linked to other changes in the housing market including increasing affordability problems.

As of 2020, Atwater shows a relatively low overall housing vacancy rate of 3.2 percent, lower than the 4.9 percent countywide and 6.4 percent statewide (see Error! Reference source not found.). These rates represent a steep decline from conditions in 2010 during the Great Recession and associated housing market and financial market crisis. Even though the overall housing inventory grew between 2010 and 2020 in the three geographies, there were less units vacant in 2020 than 2010. The low vacancy rate in Atwater may indicate that the local housing market is struggling to meet demand as new households and existing households seeking different housing face a lack of choices.

TABLE 1.2-6: HOUSING OCCUPANCY AND VACANCY STATUS, 2010 AND 2020

	2010		2020		Change, 2010-2020	
Occupancy/Vacancy	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
City of Atwater						
Occupied Housing Units	8,838	90.5%	9,970	96.8%	1,132	12.8%
Vacant Housing Units	933	9.5%	326	3.2%	(607)	-65.1%
Total, Housing Units	**9,771**	**100.0%**	**10,296**	**100.0%**	**525**	**5.4%**
Merced County						
Occupied Housing Units	75,642	90.4%	83,464	95.1%	7,822	10.3%
Vacant Housing Units	8,056	9.6%	4,319	4.9%	(3,737)	-46.4%
Total, Housing Units	**83,698**	**100.0%**	**87,783**	**100.0%**	**4,085**	**4.9%**
California						
Occupied Housing Units	12,577,498	91.9%	13,475,623	93.6%	898,125	7.1%
Vacant Housing Units	1,102,583	8.1%	916,517	6.4%	(186,066)	-16.9%
Total, Housing Units	**13,680,081**	**100.0%**	**14,392,140**	**100.0%**	**712,059**	**5.2%**

SOURCES: U.S. CENSUS BUREAU, DECENNIAL CENSUS 2010, TABLES H4 AND H5; DECENNIAL CENSUS 2020, TABLES H4 AND H5; BAE, 2023.

Vacant housing units are not always available for occupancy in the regular housing market, with some units held for seasonal or occasional use, for use by migrant workers, or simply held off the market for other reasons (e.g., awaiting settlement of an estate, foreclosure, storage, needing repairs, or other personal reasons of the owner). Measuring vacancy rates by tenure, excluding units that are not occupied and not available for rent or sale, provides a more refined measure of market conditions relevant to those seeking a primary residence. Economists typically consider a healthy vacancy rate to be between approximately one and two percent in the ownership market, and approximately five percent for rental housing market. The rental vacancy rate is generally higher than the ownership vacancy rate as renters switch residences more frequently, such that at any given time a higher proportion of units are between occupants.

The low 2020 vacancy rates for renters in Atwater and Merced County indicate a constrained rental market, where demand may be greater than the overall supply, where one result could be increasing affordability issues as rents increase. In Atwater, the for-sale market also shows low vacancy rates that may also indicate a limited supply relative to demand. Merced County's rate is also at the low end of the range for a balanced market, as is statewide also.

TABLE 1.2-7: VACANCY RATE BY TENURE, 2010 AND 2020

Atwater	2010	2020
Homeowner Vacancy Rate	3.3%	0.6%
Rental Vacancy Rate	10.9%	3.1%
Merced County	**2010**	**2020**
Homeowner Vacancy Rate	3.2%	1.1%
Rental Vacancy Rate	8.1%	3.9%
California	**2010**	**2020**
Homeowner Vacancy Rate	1.0%	1.0%
Rental Vacancy Rate	6.3%	4.6%

SOURCES: U.S. CENSUS BUREAU, DECENNIAL CENSUS 2010, TABLES H4 AND H5; DECENNIAL CENSUS 2020, TABLES H4 AND H5; BAE, 2023.

1.3 POPULATION & DEMOGRAPHICS

The following section presents population, and household characteristics and trends for Atwater, Merced County, and the State of California, providing demographic context for the Existing Conditions Report.

EXISTING SETTING

Population and households, and changes over time in their numbers, are key factors in assessing conditions for a locale, driving local trends in housing, labor force and employment, real estate (both residential and commercial), and consumer, business and government expenditures.

Population Trends

By population, Atwater is the third largest of the six incorporated cities in Merced County, ranking behind Merced and Los Banos. Merced County is the 23rd most populous of California's 58 counties. These rankings have been relatively unchanged since 2000, as the city, the county, and the state have all shown population growth.

Since 2010, Atwater's population has increased at a faster rate than for Merced County overall, which in turn has grown faster than California's (see Table 1.3-1). However, that growth occurred between 2010 and 2020, with little change in population since 2020. The California Department of Finance (DOF) estimates the 2023 Atwater population at 31,418 and the county population at 285,337.

Household Trends

The number of households in Atwater also grew faster than in the county or California, at about the same rate as population growth. However, the number of households continued to grow after 2020 in Atwater, Merced County, and California even where population did not in Atwater and the state. For 2023, DOF estimates the city has 10,136 households, with the county at 86,906 households. Due to the growth in the number of households after 2020 while population showed declines or limited growth, all three geographies showed a decrease in average household size to levels below those in 2010. Even as the average sizes have declined, Atwater and Merced County still both have larger households on average than the state; larger households are likely to seek larger housing units than smaller households. The discussion of the housing market below will examine whether the city and county housing stock characteristics reflect this demographic differentiation from the state overall.

TABLE 1.3-1: POPULATION AND HOUSEHOLD TRENDS, 2010, 2020, AND 2023

Population	2010 (a)	2020 (b)	2023 (b)	% Change 2010-2020	% Change 2020-2023
City of Atwater	28,168	31,751	31,418	12.7%	-1.0%
Merced County	255,793	281,202	285,337	9.9%	1.5%
California	37,253,956	39,538,223	38,940,231	6.1%	-1.5%
Households					
City of Atwater	8,838	9,970	10,136	12.8%	1.7%
Merced County	75,642	83,464	86,906	10.3%	4.1%
California	12,568,167	13,475,623	13,739,470	7.2%	2.0%
Average Household Size					
City of Atwater	3.18	3.18	3.09	0.0%	-2.7%
Merced County	3.32	3.29	3.20	-0.8%	-2.7%
California	2.90	2.86	2.77	-1.2%	-3.4%

SOURCE: CALIFORNIA DEPARTMENT OF FINANCE 2010, 2020 AND 2023, TABLE E5; BAE, 2023.

Age Characteristics

Atwater and Merced County have a young population relative to California overall (see Table 1.3-2), with the 2020 median age at 33.2 years in Atwater and 32.0 in the county, compared to 37.5 statewide. These lower median ages are largely due to the presence of more non-adult children; 29.4 percent of the Atwater population and 28.8 percent of the county population is under 18 years of age, in contrast to only 22.0 percent for California. Each of the age categories displayed in Table 1.3-2 shows at least some growth in Atwater and the county over the 2010 to 2020 decade, while the state has actually lost population for the under 25 group. All three geographies show an increasing percentage and number of 65 and older persons, as the "baby boom" generation ages, but the proportions are lower in the city and county than in the state. Nevertheless, the growth in the population for all age groups may indicate demand for increased services targeting different age groups, especially children and the elderly.

TABLE 1.3-2: AGE DISTRIBUTION, 2010 AND 2020

	2010		2020		Change, 2010-2020	
City of Atwater	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Under 18	9,016	32.0%	9,409	29.4%	393	4.4%
18-24	2,968	10.5%	3,015	9.4%	47	1.6%
25-34	4,004	14.2%	4,374	13.7%	370	9.2%
35-44	3,488	12.4%	4,173	13.1%	685	19.6%
45-54	3,314	11.8%	3,493	10.9%	179	5.4%
55-64	2,446	8.7%	3,409	10.7%	963	39.4%
65 or older	2,932	10.4%	4,097	12.8%	1,165	39.7%
Total Population (a)	**28,168**	**100.0%**	**31,970**	**100.0%**	**3,802**	**13.5%**
Median Age	**30**		**33.2**			

	2010		2020		Change, 2010-2020	
Merced County	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Under 18	80,698	31.5%	80,979	28.8%	281	0.3%
18-24	30,456	11.9%	32,004	11.4%	1,548	5.1%
25-34	35,060	13.7%	38,711	13.8%	3,651	10.4%
35-44	31,967	12.5%	35,409	12.6%	3,442	10.8%
45-54	31,007	12.1%	31,107	11.1%	100	0.3%
55-64	22,645	8.9%	29,511	10.5%	6,866	30.3%
65 or older	23,960	9.4%	33,481	11.9%	9,521	39.7%
Total Population	**255,793**	**100.0%**	**281,202**	**100.0%**	**25,409**	**9.9%**
Median Age	**29.6**		**32.0**			

	2010		2020		Change, 2010-2020	
California	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Under 18	9,295,040	25.0%	8,711,118	22.0%	(583,922)	-6.3%
18-24	3,922,951	10.5%	3,809,055	9.6%	(113,896)	-2.9%
25-34	5,317,877	14.3%	5,826,832	14.7%	508,955	9.6%
35-44	5,182,710	13.9%	5,326,009	13.5%	143,299	2.8%
45-54	5,252,371	14.1%	4,977,255	12.6%	(275,116)	-5.2%
55-64	4,036,493	10.8%	4,870,790	12.3%	834,297	20.7%
65 or older	4,246,514	11.4%	6,017,164	15.2%	1,770,650	41.7%
Total Population	**37,253,956**	**100.0%**	**39,538,223**	**100.0%**	**2,284,267**	**6.1%**
Median Age	**35.2**		**37.5**			

NOTE: (A) TOTALS MAY NOT MATCH OTHER TABLES DUE TO INDEPENDENT ROUNDING OR DIFFERENT SOURCE DATA.

SOURCES: U.S. CENSUS, DECENNIAL CENSUS 2010, TABLES P12 AND P13; U.S. CENSUS, DECENNIAL CENSUS 2020, TABLES P12 AND P13; BAE, 2023.

Race and Ethnicity

Atwater and Merced County are "minority majority" areas. The city and county ethnic profiles are dominated by large and increasing Latino populations. The city's population was approximately 60 percent Latino in 2020, up from 53 percent in 2010, and the county was approximately 62 percent, an increase from 55 percent in 2010 (see Table 1.3-3). While California also has an increasing Latino share of the total population, in 2020 the proportion was still slightly below 40 percent. The city, county, and state are all undergoing an absolute decline in the white and Black non-Hispanic populations, with increases for other smaller racial categories.

TABLE 1.3-3: RACE AND ETHNICITY, 2010 AND 2020

	2010		2020		Change, 2010-2020	
City of Atwater	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Hispanic/Latino (a)	**14,808**	**52.6%**	**19,042**	**59.6%**	**4,234**	**28.6%**
Not Hispanic/Latino	**13,360**	**47.4%**	**12,928**	**40.4%**	**(432)**	**-3.2%**
White	10,085	35.8%	8,788	27.5%	(1,297)	-12.9%
Black/African American	1,087	3.9%	1,001	3.1%	(86)	-7.9%
Native American	132	0.5%	133	0.4%	1	0.8%
Asian	1,347	4.8%	1,684	5.3%	337	25.0%
Native Hawaiian/Pacific Islander	66	0.2%	60	0.2%	(6)	-9.1%
Other	61	0.2%	144	0.5%	83	136.1%
Two or More Races	795	2.8%	5,014	15.7%	4,219	530.7%
Total Population	**28,168**	**100.0%**	**31,970**	**100.0%**	**3,802**	**13.5%**

	2010		2020		Change, 2010-2020	
Merced County	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Hispanic/Latino (a)	**140,485**	**54.9%**	**173,857**	**61.8%**	**33,372**	**23.8%**
Not Hispanic/Latino	**115,308**	**45.1%**	**107,345**	**38.2%**	**(7,963)**	**-6.9%**
White	81,599	31.9%	68,729	24.4%	(12,870)	-15.8%
Black/African American	8,785	3.4%	8,191	2.9%	(594)	-6.8%
Native American	1,126	0.4%	1,164	0.4%	38	3.4%
Asian	18,183	7.1%	19,824	7.0%	1,641	9.0%
Native Hawaiian/Pacific Islander	476	0.2%	617	0.2%	141	29.6%
Other	439	0.2%	1,242	0.4%	803	182.9%
Two or More Races	62,226	24.3%	87,873	31.2%	25,647	41.2%
Total Population	**255,793**	**100.0%**	**281,202**	**100.0%**	**25,409**	**9.9%**

	2010		2020		Change, 2010-2020	
California	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Hispanic/Latino (a)	**14,013,719**	**37.6%**	**15,579,652**	**39.4%**	**1,565,933**	11.2%
Not Hispanic/Latino	**23,240,237**	**62.4%**	**23,958,571**	**60.6%**	**718,334**	3.1%
White	14,956,253	40.1%	13,714,587	34.7%	(1,241,666)	-8.3%
Black/African American	2,163,804	5.8%	2,119,286	5.4%	(44,518)	-2.1%
Native American	162,250	0.4%	156,085	0.4%	(6,165)	-3.8%
Asian	4,775,070	12.8%	5,978,795	15.1%	1,203,725	25.2%
Native Hawaiian/Pacific Islander	128,577	0.3%	138,167	0.3%	9,590	7.5%
Other	85,587	0.2%	223,929	0.6%	138,342	161.6%
Two or More Races	846,688	2.3%	4,132,513	10.5%	3,285,825	388.1%
Total Population	**37,253,956**	**100.0%**	**39,538,223**	**100.0%**	**2,284,267**	**6.1%**

NOTE: (A) TOTALS MAY NOT MATCH OTHER TABLES DUE TO INDEPENDENT ROUNDING OR DIFFERENT SOURCE DATA.

SOURCES: U.S. CENSUS, DECENNIAL CENSUS 2010, TABLES P12 AND P13; U.S. CENSUS, DECENNIAL CENSUS 2020, TABLES P12 AND P13; BAE, 2023.

Educational Attainment

The educational levels of an area's residents are a key driver of local economic potential; a more educated populace is likely to be associated with stronger economic conditions including higher resident incomes and a more fully employable labor force. As shown in Table 1.3-4, Atwater and Merced County show lower level of educational achievement than California overall, with lower proportions of high school graduates and less than half the percentage of adults with bachelor's degrees or higher. Nearly 30 percent of the city and county adults 25 or older have not completed high school, almost twice the statewide proportion. Improving educational outcomes for local students would likely provide more employment opportunities and an improved quality of life for those students as well as improving the City's attractiveness to the types of businesses that prioritize the educational attainment of the local workforce.

TABLE 1.3-4: EDUCATIONAL ATTAINMENT, 2021 FIVE-YEAR SAMPLE DATA

	City of Atwater		Merced County		California	
Educational Attainment	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Less than 9th Grade	3,061	15.6%	30,984	18.1%	2,380,657	8.8%
9th to 12th Grade, No Diploma	2,672	13.6%	17,822	10.4%	1,804,222	6.7%
High School Graduate (incl. Equivalency)	4,703	23.9%	50,217	29.4%	5,578,997	20.7%
Some College, No Degree	4,892	24.9%	34,479	20.2%	5,287,901	19.7%
Associate Degree	1,740	8.8%	12,854	7.5%	2,120,275	7.9%
Bachelor's Degree	2,024	10.3%	16,472	9.6%	5,958,030	22.1%
Graduate/Professional Degree	590	3.0%	8,166	4.8%	3,779,787	14.0%
Total Population 25+ (a)	**19,682**	**100.0%**	**170,994**	**100.0%**	**26,909,869**	**100.0%**
Population 25+ No High School Diploma	**29.1%**		**28.5%**		**15.6%**	
Population 25+ High School Graduate (incl. Equivalency) or Higher (%)	**70.9%**		**71.5%**		**84.4%**	
Population 25+ with Bachelor's Degree or Higher (%)	**13.3%**		**14.4%**		**36.2%**	

NOTE: (A) TOTALS MAY NOT MATCH OTHER TABLES DUE TO INDEPENDENT ROUNDING OR DIFFERENT SOURCE DATA.

SOURCES: U.S. CENSUS, DECENNIAL CENSUS 2010, TABLES P12 AND P13; U.S. CENSUS, DECENNIAL CENSUS 2020, TABLES P12 AND P13; BAE, 2023.

Household Composition

Atwater and the county have somewhat higher proportions of family households than California. Over three-fourths of their households are family households, compared to slightly less than 70 percent statewide (see Error! Reference source not found.). A family household is a household with at least two related individuals in it. The higher proportions of family households is linked to the high proportion of children as discussed above.

TABLE 1.3-5: HOUSEHOLD TYPE, 2010 AND 2020

	2010		2020		Change, 2010-2020	
City of Atwater	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Family Households	6,823	77.2%	7,676	77.0%	853	12.5%
Non-Family Households	2,015	22.8%	2,294	23.0%	279	13.8%
Total Households	**8,838**	**100.0%**	**9,970**	**100.0%**	**1,132**	**12.8%**

	2010		2020		Change, 2010-2020	
Merced County	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Family Households	58,767	77.7%	64,458	77.2%	5,691	9.7%
Non-Family Households	16,875	22.3%	19,006	22.8%	2131	12.6%
Total Households	**75,642**	**100.0%**	**83,464**	**100.0%**	**7,822**	**10.3%**

	2010		2020		Change, 2010-2020	
California	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Family Households	8,642,473	68.7%	9,296,271	69.0%	653,798	72.8%
Non-Family Households	3,935,025	31.3%	4,179,352	31.0%	244,327	27.2%
Total Households	**12,577,498**	**100.0%**	**13,475,623**	**100.0%**	**898,125**	**7.1%**

NOTE: (A) TOTALS MAY NOT MATCH OTHER TABLES DUE TO INDEPENDENT ROUNDING OR DIFFERENT SOURCE DATA.

SOURCES: U.S. CENSUS, DECENNIAL CENSUS 2010, TABLES P12 AND P13; U.S. CENSUS, DECENNIAL CENSUS 2020, TABLES P12 AND P13; BAE, 2023.

Household and Per Capita Income

Resident incomes are an indicator of local economic conditions. Local spending is largely dependent on these income levels, with greater spending supporting more jobs and importantly to the local jurisdictions such as Atwater, those expenditures generate tax dollars to support city services. As displayed in Error! Reference source not found., Atwater and the County have similar income characteristics, with median annual household incomes between $50,000 and $60,000 and annual per capita incomes between $23,000 and $25,000. These are well below the income levels statewide, where the median household income per the 2021 American Community Survey is almost $85,000 and the per capita income is approximately $42,000 annually. As discussed elsewhere in this analysis, these income levels are likely associated with the lower educational attainment levels in the city and county, and result in the lower per capita gross domestic product and retail sales in comparison to the state, as shown in Error! Reference source not found..

TABLE 1.3-6: HOUSEHOLD AND PER CAPITA INCOME, 2021

	City of Atwater		Merced County		California	
Income Category	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Less than $15,000	963	9.3%	12,234	14.4%	1,185,540	8.8%
$15,000-$24,999	909	8.8%	8,909	10.5%	808,568	6.0%
$25,000-$34,999	871	8.4%	8,111	9.5%	829,411	6.2%
$35,000-$49,999	1,603	15.5%	9,130	10.7%	1,206,545	9.0%
$50,000-$74,999	2,095	20.3%	17,211	20.3%	1,974,452	14.7%
$75,000-$99,999	1,329	12.9%	9,352	11.0%	1,639,647	12.2%
$100,000-$149,999	1,792	17.4%	12,203	14.4%	2,359,723	17.6%
$150,000-$199,999	495	4.8%	4,753	5.6%	1,343,134	10.0%
$200,000 or more	252	2.4%	3,064	3.6%	2,082,043	15.5%
Total Households (a)	**10,309**	**100.0%**	**84,967**	**100.0%**	**13,429,063**	**100.0%**
Median HH Income	**$59,436**		**$53,992**		**$84,907**	
Per Capita Income	**$24,576**		**$23,118**		**$42,396**	

NOTE: (A) TOTALS MAY NOT MATCH OTHER TABLES DUE TO INDEPENDENT ROUNDING OR DIFFERENT SOURCE DATA.

SOURCES: U.S. CENSUS, AMERICAN COMMUNITY SURVEY 2017-2021 FIVE-YEAR SAMPLE PERIOD, TABLES B19001, B19013 AND B19301; BAE, 2023.

PROJECTED POPULATION AND EMPLOYMENT GROWTH

This section provides a discussion of future population and employment growth in Atwater and Merced County. The discussion reviews the following population and employment projections:

- California Department of Finance's (DOF's) Demographic Research Unit's Interim Projections
- Long-Term Socio-Economics Forecasts by County from Caltrans
- Merced County Association of Governments (MCAG) 2022 Regional Transportation Plan

DOF's projections were released in July 2023 and incorporate 2020 Census data and more current estimates from DOF. These are county- and state-level population projections only and go out to 2060. Statewide estimates show California population stagnating long-term, with some decades showing population declines, a reversal of long term historic growth trends.

The Caltrans estimates were released in March 2023, and also incorporate 2020 Census data. Numerous variables are covered, including population, employment, households, net migration, income, and employment by major industry group. Projections are available out to 2050.

The MCAG projections for the 2022 Regional Transportation Plan (RTP) were developed prior to the release of 2020 Census data and provide estimates of population and total employment through 2040.

Future Population Growth

Overall and as discussed above, Atwater and Merced County have shown population and household growth in recent years. However, since 2020, estimates indicate that growth has stalled for Atwater, while the county continues to see population growth. The projections series considered here vary considerably regarding future growth; DOF shows population increasing to 329,168 in 2040 (despite statewide trends of no estimated growth), with Caltrans projecting a 2040 population of 334,620, and MCAG projecting 346,085 by 2040 (see Error! Reference source not found.). Given that Caltrans and DOF have provided more recent updates and incorporate the 2020 Census, their projections may more accurately reflect long-term patterns. Assuming Atwater mirrors county trends and maintains a constant percentage of the countywide population as estimated by DOF, Atwater is projected to grow gradually from 31,751 in 2020 to approximately 37,000 persons in 2050. This would roughly translate to a 16 percent increase in population, households, and housing unit demand.

TABLE 1.3-7: HOUSEHOLD AND POPULATION AND HOUSEHOLD GROWTH

County Population	2020	2030	2040	2050	% Change 2020-2030	% Change 2030-2040	% Change 2040-2050
Merced County							
DOF	280,909	311,578	329,168	336,170	10.9%	5.6%	2.1%
Caltrans	280,873	309,756	334,620	352,891	10.3%	8.0%	5.5%
MCAG RTP	284,761	314,690	346,085	na	10.5%	10.0%	na
Atwater (a)	31,751	34,300	36,200	37,000			
County Employment							
Caltrans	81,120	91,804	93,622	95,589	13.2%	2.0%	2.1%
MCAG RTP	80,882	95494	105,544	na	18.1%	10.5%	na
Atwater (b)	7,600	8,600	8,700	8,900			

NOTE: NOTES:

(A) ATWATER 2020 POPULATION FROM TABLE 1. FUTURE POPULATION ESTIMATES BASED ON CITY SHARE OF DOF-PROJECTED COUNTY POPULATION AT 11 PERCENT, WHICH IS APPROXIMATELY THE RATIO IN 2023; THIS RATIO HAS BEEN RELATIVELY CONSTANT OVER THE 2010 THROUGH 2023 PERIOD. FUTURE ESTIMATES FOR ATWATER ROUNDED TO NEAREST 100.

(B) 2020 AND FUTURE EMPLOYMENT ESTIMATES BASED ON CITY SHARE OF JOBS BASED ON RATIO OF JOBS IN CITY TO JOBS IN COUNTY IN 2022 AS SHOWN IN TABLE 1.3-9. ESTIMATES ROUNDED TO NEAREST 100.

SOURCES: CALIFORNIA DEPARTMENT OF FINANCE (DOF) REPORT P-2A; MERCED COUNTY ASSOCIATION OF GOVERNMENTS 2022 REGIONAL TRANSPORTATION PLAN; CALTRANS LONG-TERM SOCIO-ECONOMIC FORECASTS BY COUNTY, 2022; QUARTERLY CENSUS OF EMPLOYMENT AND WAGES (QCEW), US BUREAU OF LABOR STATISTICS, 2023; BAE, 20233.

Chapter 2
Transportation and Circulation



The Transportation and Circulation chapter describes the existing transportation conditions in Atwater. A discussion of pertinent local regulations and plans is presented. This chapter also describes transportation facilities in Atwater that accommodate pedestrians, bicycles, transit, freight, and automobiles, plus an description of commute trip patterns, and roadway operations.

This Chapter includes the following topics:

2.1 Pedestrian Facilities
2.2 Bicycle Facilities
2.3 Transit Facilities
2.4 Roadway System
2.5 Freight Rail, Goods Movement and Aviation

2.0 TRANSPORTATION AND CIRCULATION

The following chapter describes the existing physical and operational characteristics affecting the transportation system in the City of Atwater. Sections in this chapter are divided by mode and include a review of the regulatory setting and followed by an overview of modal infrastructure. This chapter includes the following sections:

2.1 Pedestrian Facilities

2.2 Bicycle Facilities

2.3 Transit Facilities

2.4 Roadway System

2.5 Freight Rail, Goods Movement and Aviation

FINDINGS, ISSUES AND OPPORTUNITIES

The City of Atwater follows a typical suburban pattern, with distinct areas of residential, commercial, and retail areas.

Commercial uses serve the City of Atwater, as well as the community of Winton to the north of the city. The city also serves as a major commercial destination for the City of Merced and City of Livingston. For example, the city is served by nine supermarkets – about as many as the City of Merced – despite being about one-third of the population of Merced.

Castle Commerce Center (at Castle Airport) has recently received funding to implement the Inland Port vision. This includes upgraded rail connections for future uses that will better connect with ports in Oakland, Long Beach and Los Angeles. Castle Commerce Center also has access to the sixth longest runway in California at Castle Airport.

Levels of Service (LOS): The current daily traffic volume on all of the study roadway segments operate at LOS C or D, indicating that these roadways operate within the requirements of current Atwater General Plan policy. The current peak hour intersection operations at the study intersections is LOS D or better, indicating that these roadways operate within the requirements of current Atwater General Plan policy.

Transportation Safety: Data from the UC Berkeley Transportation Injury Mapping System for the January 2020 through December 2022 period indicated that a total of 299 crashes were reported within the City of Atwater limits, resulting in 31 reported serious injuries and six fatalities. Hotspot mapping indicates that the Applegate Road, Bellevue Avenue, Juniper Avenue, Winton Way and Buhach Road corridors are the primary locations with collisions.

Complete Streets and Safe Systems. The transportation network in Atwater is mainly catered towards driving, with a grid system of multilane arterials serving as the backbone of travel. The roadway system is complemented by a nearly complete pedestrian system and a partially complete bicycle facility network. However, some gaps remain, particularly in the downtown area (e.g. First Street) and other older areas of the city. Reconfiguring the street system to incorporate Safe Systems principles, including more bicycle and pedestrian facilities, may help lower the crash rate in Atwater, where six people were killed and 31 people were injured over the last three years of available data (2020-2022).

Vehicle Miles Traveled (VMT): The VMT data indicates that residents in the city of Atwater generally drive 17 percent less than the average Merced County resident. Similarly, the average worker in the City of Atwater has a two-way commute that is 16 percent shorter than the average Merced County worker.

Transit Usage. The City of Atwater is served by multiple local and regional bus routes that operate at 60-minute intervals during the weekday. Increasing the use of public transit by increasing frequencies could help address the high drive-alone mode share for the city, which may help it qualify for additional transportation funding dollars in the future.

Unlocking Castle Commerce Center. The Castle Commerce Center area is expected to undergo a major transformation in the coming decades as Castle Airport becomes an Inland Port. Employment at the Castle Commerce Center will likely increase, which provides an opportunity for more Atwater residents to also work in Atwater. These jobs could be accessed by public transposition given the current status of the network for these modes.

Opportunities for Infill Development. There are multiple opportunities for infill development in Atwater, including several large parcels of land in the downtown area. Parcels next to the Union Pacific Railroad may also be considered for the planned future Altamont Corridor Express station envisioned as part of the Merced extension.

2.1 Pedestrian Facilities

This section describes the pedestrian circulation system in the City of Atwater. The existing sidewalk system, trail system, and connectivity between areas of residential, commercial, employment and schools are described.

Local Regulatory Framework

The regulatory framework discussion describes local regulations that guide land use decisions. Adopted and upcoming plans that pertain to the City are also described.

City of Atwater General Plan Circulation Element

The purpose of the Circulation Element is to provide the policy framework for regulation and development of the circulation system in the City of Atwater. The existing General Plan includes policies related to providing a safe and efficient pedestrian circulation system connecting all destinations in the city. The existing General Plan also notes new public and private developments should install sidewalks and other pedestrian features on the periphery of sites as well as internal parking areas.

Merced County Regional Transportation Plan

The 2022 Merced County Regional Transportation Plan (RTP) is intended to guide pedestrian mobility investments throughout Merced County. The RTP considers greenhouse gas reductions per Senate Bill 375 and other state requirements. The RTP is one of many steps being taken to provide for alternative modes of travel and to address traffic congestion in the region by developing an efficient and coordinated multi-modal transportation system. A number of active transportation projects are planned for implementation in the core of the City of Atwater.

Merced County Regional Active Transportation Plan (Upcoming, 2024)

The Merced County Regional Active Transportation Plan (to be finalized in the first half of 2024) will build upon the RTP with specific recommendations for local and regional multimodal transportation investments. The Regional Active Transportation Plan will also include further project prioritization for pedestrian-related improvements in and around the City of Atwater.

Existing Setting

The existing pedestrian system in the City of Atwater is generally comprised of sidewalks along roadways that have been built over the course of the buildout of the city. The vast majority of roadways include sidewalks along both sides of the street, providing pedestrian access to the residential, commercial, employment and school areas of the city. However, some gaps remain, particularly in the downtown area (e.g. First Street) and other older areas of the city. The Merced County Regional Active Transportation Plan outreach effort noted several locations of community concern regarding critical gaps in the sidewalk network. Many of these gaps are located immediately adjacent to the City limits or along City roadways where the fronting land is undeveloped (e.g. Broadway Avenue east of Almador Terrace). Notably, a sidewalk is only provided along one side of the Applegate Road State Route 99 overcrossing, and no sidewalks are provided under SR 99 at either Atwater Boulevard undercrossing.

Many sidewalks are located at the immediate curb face (i.e. little separation from travel lanes), which may increase pedestrian discomfort. Most signalized intersections include a full set of signalized crosswalks; marked pedestrian crossings of arterial roadways are typically confined to signalized intersections, which may limit pedestrian mobility across the city's north-south and east-west arterials. Figure 2.1-1 identifies the locations of critical gaps in the sidewalk system.

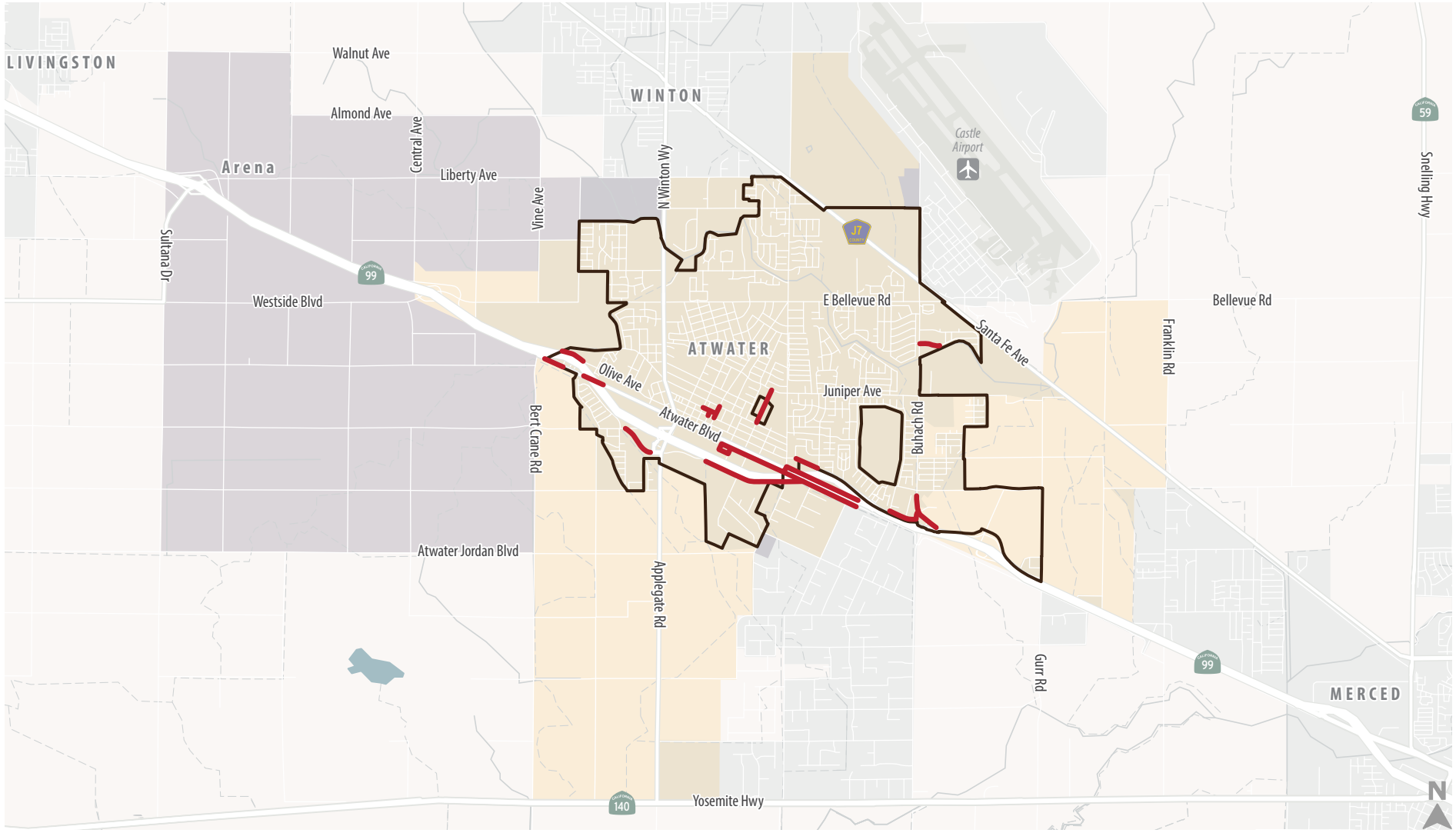


Figure 2.1–1

Critical Gaps in Sidewalk System

2.2 Bicycle Facilities

This section describes the bicycle circulation system in the City of Atwater. The existing bicycle system, trail system, and connectivity between areas of residential, commercial, employment and schools are described.

Local Regulatory Framework

The regulatory framework discussion describes local regulations that guide land use decisions. Adopted plans that pertain to the City are also described.

City of Atwater General Plan Circulation Element

The purpose of the Circulation Element is to provide the policy framework for regulation and development of the circulation system in the City of Atwater. The existing General Plan includes policies related to development of an interconnected system of bikeways and trails connecting all destinations in the city. The existing General Plan also includes consideration of bicycle circulation in the review of private and public projects, including requiring that the cost of bicycle lanes be paid by developments.

Merced County Regional Transportation Plan

The 2022 Merced County Regional Transportation Plan (RTP) is intended to guide bicycle mobility investments throughout Merced County. The RTP considers greenhouse gas reductions per Senate Bill 375 and other state requirements. The RTP is one of many steps being taken to provide for alternative modes of travel and to address traffic congestion in the region by developing an efficient and coordinated multi-modal transportation system. A number of active transportation projects are planned for implementation in the core of the City of Atwater. The RTP quotes the 2008 Regional Bikeway Plan as the current bikeway planning document for the City of Atwater.

Merced County Regional Active Transportation Plan (Upcoming, 2024)

The Merced County Regional Active Transportation Plan (to be finalized in the first half of 2024) will build upon the RTP with specific recommendations for local and regional multimodal transportation investments. The Regional Active Transportation Plan will also include further project prioritization for bicycle-related improvements in and around the City of Atwater. This Plan will supersede the 2008 Regional Bikeway Plan.

Existing Setting

Bicycle facilities are classified according to a typology established by Caltrans as documented in its Highway Design Manual, Chapter 1000, Topic 1002. The Caltrans standards provide for distinct types of bikeway facilities, as described below:

(1) Shared Roadway (No Bikeway Designation). Most bicycle travel occurs on streets and highways without bikeway designations. In some instances, entire street systems may be fully adequate for safe and efficient bicycle travel, where signing and pavement marking for bicycle use may be unnecessary. In other cases, prior to designation as a bikeway, routes may need improvements for bicycle travel. Many rural highways are used by touring bicyclists for intercity and recreational travel. It might be inappropriate to designate the highways as bikeways because of the limited use and the lack of continuity with other bike routes. However, the development and maintenance of 4-foot paved roadway shoulders with a standard four-inch edge line can significantly improve the safety and convenience for bicyclists and motorists along such routes.

(2) Class I Bikeway (Bike Path). Generally, bike paths should be used to serve corridors not served by streets and highways or where wide right of way exists, permitting such facilities to be constructed away from the

influence of parallel streets. Bike paths should offer opportunities not provided by the road system. They can either provide a recreational opportunity, or in some instances, can serve as direct high-speed commute routes if cross flow by motor vehicles and pedestrian conflicts can be minimized. The most common applications are along rivers, ocean fronts, canals, utility right of way, abandoned railroad right of way, within school campuses, or within and between parks. There may also be situations where such facilities can be provided as part of planned developments. Another common application of Class I facilities is to close gaps to bicycle travel caused by construction of freeways or because of the existence of natural barriers (rivers, mountains, etc.).

(3) Class II Bikeway (Bike Lane). Bike lanes are established along streets in corridors where there is significant bicycle demand, and where there are distinct needs that can be served by them. The purpose should be to improve conditions for bicyclists in the corridors. Bike lanes are intended to delineate the right of way assigned to bicyclists and motorists and to provide for more predictable movements by each. But a more important reason for constructing bike lanes is to better accommodate bicyclists through corridors where insufficient room exists for side-by-side sharing of existing streets by motorists and bicyclists. This can be accomplished by reducing the number of lanes, reducing lane width, or prohibiting or reconfiguring parking on given streets in order to delineate bike lanes. In addition, other things can be done on bike lane streets to improve the situation for bicyclists that might not be possible on all streets (e.g., improvements to the surface, augmented sweeping programs, special signal facilities, etc.). Generally, pavement markings alone will not measurably enhance bicycling. If bicycle travel is to be provided by delineation, attention should be made to assure that high levels of service are provided with these lanes. It is important to meet bicyclist expectations and increase bicyclist perception of service quality, where capacity analysis demonstrates service quality measures are improved from the bicyclist's point of view.

(4) Class III Bikeway (Bike Route). Bike routes are shared facilities which serve either to: (a) Provide continuity to other bicycle facilities (usually Class II bikeways); or (b) Designate preferred routes through high demand corridors. As with bike lanes, the designation of bike routes should indicate to bicyclists that there are particular advantages to using these routes as compared with alternative routes. This means that responsible agencies have taken actions to assure that these routes are suitable as shared routes and will be maintained in a manner consistent with the needs of bicyclists. Normally, bike routes are shared with motor vehicles. The use of sidewalks as Class III bikeways is strongly discouraged.

(5) CLASS IV BIKEWAYS (SEPARATED BIKEWAYS). A Class IV bikeway (separated bikeway) is a bikeway for the exclusive use of bicycles and includes a separation required between the separated bikeway and the through vehicular traffic. The separation may include, but is not limited to, grade separation, flexible posts, inflexible posts, inflexible barriers, or on-street parking.

Figure 2.2-1 presents current and proposed bicycle facilities in Atwater identified in the 2008 Regional Bikeways Plan. Class I bikeways are provided along Buhach Road, Shaffer Road, and Juniper Avenue. Class II bikeways are provided along several streets, notably along Winton Way north of Bellevue Avenue, Atwater Boulevard west of Winton Way. Class I, II or III bikeways are proposed along most arterial roadways in the city, and a Class I path is envisioned for the Merced Irrigation District/Livingston Canal corridor.

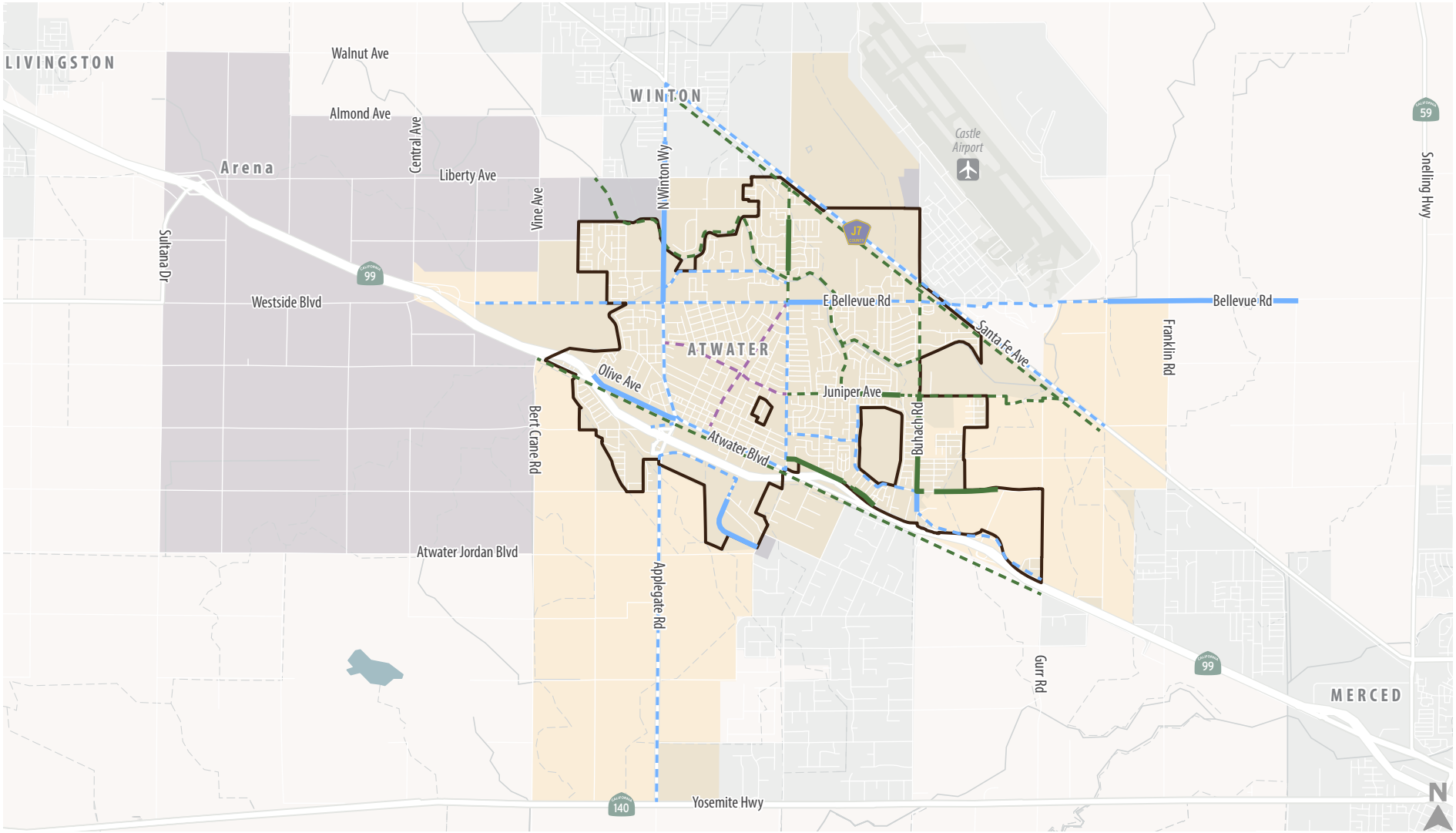


Figure 2.2–1

Current and Proposed Bicycle Facilities

2.3 TRANSIT FACILITIES

This section summarizes current and proposed public transit services that connect destinations within the City of Atwater as well as around the region. This section includes a review of bus and passenger rail transit facilities.

LOCAL REGULATORY FRAMEWORK

The regulatory framework discussion describes local regulations that guide land use decisions. Adopted plans that pertain to the City are also described.

City of Atwater General Plan Circulation Element

The purpose of the Circulation Element is to provide the policy framework for regulation and development of the circulation system in the City of Atwater. The existing General Plan includes policies related to promoting local and regional transit usage for residents, employees and visitors in the city. The existing General Plan also includes consideration of connections to UC Merced, coordination with Merced County Transit (also known as "The Bus"), and a desire to provide high-quality bus stops for residents within one mile of their residence (with a distance of no more than one-half mile preferred).

Merced County Regional Transportation Plan

The 2022 Merced County Regional Transportation Plan (RTP) is intended to guide transit investments throughout Merced County. The RTP considers greenhouse gas reductions per Senate Bill 375 and other state requirements. The RTP is one of many steps being taken to provide for alternative modes of travel and to address traffic congestion in the region by developing an efficient and coordinated multi-modal transportation system. A number of transit projects are planned for the City of Atwater.

Merced County Short Range Transit Plan (2022-2027)

The Merced County Short Range Transit Plan provides information on current and planned bus transit service for a five-year period. The document is prepared by the Merced County Association of Governments and considers the City of Atwater and community of Winton in tandem.

EXISTING SETTING

Public Bus Transit

Public bus transit in the Atwater area is provided by Merced County Transit, providing service under the name "The Bus." The City of Atwater "Transpo Center" local and regional transit hub is located at Atwater Boulevard/Second Street. The Bus provides local and regional transit service in Atwater, which are summarized below.

LOCAL TRANSIT SERVICE

Local transit services include the following routes in Atwater:

- The Bus Route A1 "Atwater Cross Town" – A loop route serving Winton Way, Bellevue Road, Castle Airport, Buhach Road, Juniper Avenue, Shaffer Road, downtown Atwater, the Atwater Transpo Center, and the Atwater Target store. Weekday service is provided at 60-minute intervals from 6:22 a.m. to 6:30 p.m., with weekend service at 60-minute intervals from 8:49 a.m. to 6:05 p.m.
- The Bus Route A2 "Winton Way" - A generally north-south aligned route serving the Winton Way corridor from Winton in the north to the Atwater Target store in the south; a deviation to the Atwater Transpo Center is provided for both directions of the route. Weekday service is provided

at 60-minute intervals from 6:18 a.m. to 7:04 p.m., with weekend service at 60-minute intervals from 8:32 a.m. to 5:34 p.m.

REGIONAL TRANSIT SERVICE

Regional transit services include the following routes in Atwater; it is noted that many of these routes include several stops within the City of Atwater and by doing so supplement the local transit service routes noted previously.

- The Bus Route W1 "Winton Commuter" – This route serves local streets paralleling SR 99 between the Merced Transpo Center and the community of Winton. Within Atwater, the route serves the Green Sands Avenue corridor, Buhach Road corridor, Castle Airport, the Bellevue Road corridor, and the Winton Way corridor; this route does not serve the Atwater Transpo Center. Weekday service is generally provided at 60-minute intervals from 5:23 a.m. to 8:47 p.m., with weekend service at 120- to 150-minute intervals from 7:21 a.m. to 6:25 p.m.
- The Bus Route T "Turlock Commuter" – This route serves Atwater and the communities of Turlock, Delhi, Livingston, and Merced via the Atwater Transpo Center; the route largely uses SR 99, and the only Atwater stop is at the Atwater Transpo Center. Weekday service is provided at 60-minute intervals from 5:30 a.m. to 8:50 p.m., with weekend service at 150- to 180-minute intervals from 9:00 a.m. to 6:45 p.m.
- The Bus Route L "Livingston Commuter" – This route serves local streets paralleling SR 99 between the Merced Transpo Center and the community of Livingston via northern Atwater and Winton. Within Atwater, the route serves Castle Airport, the Bellevue Road corridor, and the Winton Way corridor; this route does not serve the Atwater Transpo Center. Weekday service is provided at 90-minute intervals from 6:14 a.m. to 8:14 p.m., with weekend service at 60- to 120-minute intervals from 6:36 a.m. to 7:51 p.m.

Figure 2.3-1 presents current public bus transit services and routings in the City of Atwater. It is noted that the Short Range Transit Plan proposes a new Atwater Commuter service between Castle Airport, the Atwater Transpo Center, and the Merced Transpo Center.

Passenger Rail Service

Passenger rail service for Atwater is provided by the Merced Amtrak station, which is served by the Amtrak *San Joaquins* service between Bakersfield and Oakland. An Amtrak Thruway motorcoach connection in Bakersfield provides service to the Los Angeles metro region. The City of Merced is also a proposed station along the California High Speed Rail system.

The downtown Atwater area is also proposed to be a potential station location for the proposed extension of the Altamont Corridor Express (ACE) passenger rail route between Merced and San Jose.

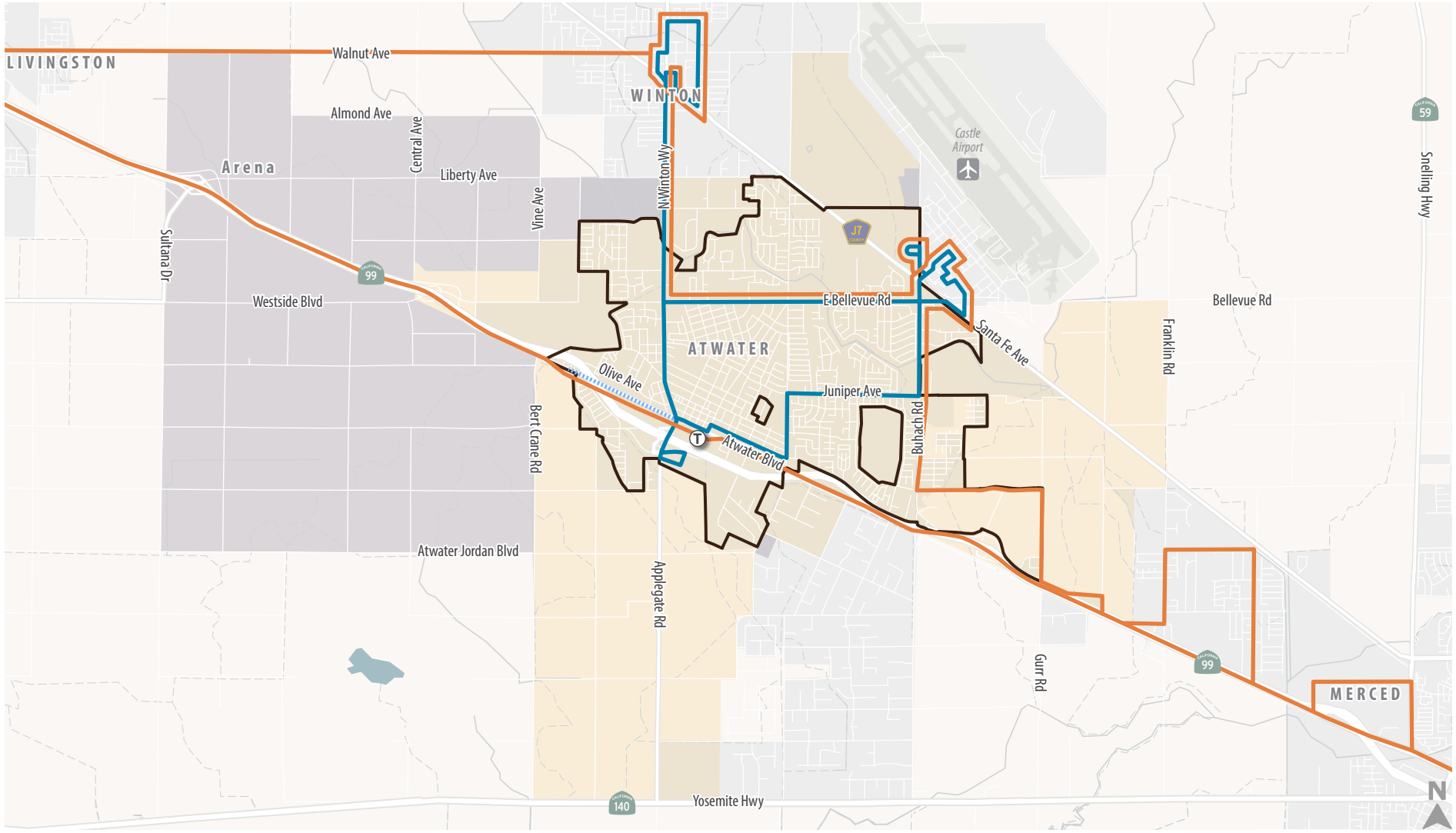


Figure 2.3–1

Existing Public Bus Transit Services

2.4 ROADWAY SYSTEM

This section summarizes the roadway system, travel demand and modal choice within the City of Atwater. Roadway system classifications, proposed roadway network improvements, vehicle miles traveled (VMT), traffic operations, and safety data are discussed.

LOCAL REGULATORY FRAMEWORK

The regulatory framework discussion describes local regulations that guide land use decisions. Adopted plans that pertain to the City are also described.

City of Atwater General Plan Circulation Element

The purpose of the Circulation Element is to provide the policy framework for regulation and development of the circulation system in the City of Atwater. The existing General Plan includes policies related to current and future automobile access and mobility for residents, employees and visitors in the city. The existing General Plan indicates support for the following regional and local roadway improvements in and around the City of Atwater.

LOCAL ROADWAY IMPROVEMENTS

- Atwater Boulevard: Widen to four lanes from Wedel Street to Winton Way
- Atwater Boulevard: Widen to four lanes from Winton Way to Shaffer Road

REGIONAL ROADWAY IMPROVEMENTS

- Expansion of SR 99 from four lanes to eight lanes
- Upgrade of Castle Parkway to four lanes from SR 99 to Santa Fe Avenue (Note: This is the Atwater-Merced Expressway project)
- Improvements at SR 99/Applegate Road and SR 99/Shaffer Road interchanges
- Extension of Bellevue Road to SR 99/Westside Boulevard interchange

Merced County Regional Transportation Plan

The 2022 Merced County Regional Transportation Plan (RTP) is intended to guide roadway system investments throughout Merced County. The RTP considers greenhouse gas reductions per Senate Bill 375 and other state requirements. A number of regionally-focused roadway projects have been adopted that will change and improve circulation in and around the Atwater area.

Senate Bill 743

On September 27, 2013, California Governor Jerry Brown signed Senate Bill (SB) 743 into law. SB 743 changed transportation impact analysis as part of CEQA compliance. These changes included elimination of auto delay, level of service (LOS), and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts in many or all parts of California. The CEQA Guidelines developed by the Governor's Office of Planning and Research utilize vehicle miles traveled (VMT) as the primary means of measuring transportation impacts.

Furthermore, parking impacts will not be considered significant impacts on the environment for select development projects within infill areas with nearby frequent transit service. According to the legislative intent contained in SB 743, these changes to current practice were necessary to more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions.

State of California (AB 1358) and Caltrans Regarding Complete Streets

On September 30, 2008, the California Complete Streets Act of 2008 was signed into law. As of January 2011, AB 1358 requires any substantive revision of the circulation/mobility element of a city or county's general plan to identify how they will safely accommodate the circulation of all users of the roadway including pedestrians, bicyclists, children, seniors, individuals with disabilities, and transit riders, as well as motorists.

Caltrans Deputy Directive 64-R1: Complete Streets – Integrating the Transportation System

In 2001, Caltrans adopted Deputy Directive 64; a policy directive related to non-motorized travel throughout the State. In October 2008, Deputy Directive 64 was strengthened to reflect changing priorities and challenges. Deputy Directive 64-R1 states:

> The Department views all transportation improvements as opportunities to improve safety, access, and mobility for all travelers in California and recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system. Providing safe mobility for all users, including motorists, bicyclists, pedestrians and transit riders, contributes to the Department's mission/vision: "Improving Mobility across California."

Successful long-term implementation of this directive is intended to result in more options for people to go from one place to another, less traffic congestion and greenhouse gas emissions, more walkable communities (with healthier, more active people), and fewer barriers for older adults, children, and people with disabilities.

Director's Policy 22: Director's Policy on Context Sensitive Solutions

Director's Policy 22, a policy regarding the use of "Context Sensitive Solutions" on all State highways, was adopted by Caltrans in November of 2001. The policy reads:

> The Department uses "Context Sensitive Solutions" as an approach to plan, design, construct, maintain, and operate its transportation system. These solutions use innovative and inclusive approaches that integrate and balance community, aesthetic, historic, and environmental values with transportation safety, maintenance, and performance goals. Context sensitive solutions are reached through a collaborative, interdisciplinary approach involving all stakeholders.

The context of all projects and activities is a key factor in reaching decisions. It is considered for all State transportation and support facilities when defining, developing, and evaluating options. When considering the context, issues such as funding feasibility, maintenance feasibility, traffic demand, impact on alternate routes, impact on safety, and relevant laws, rules, and regulations must be addressed.

The policy recognizes that "in towns and cities across California, the State highway may be the only through street or may function as a local street," that "these communities desire that their main street be an economic, social, and cultural asset as well as provide for the safe and efficient movement of people and goods," and that "communities want transportation projects to provide opportunities for enhanced non-motorized travel and visual quality." The policy acknowledges that addressing these needs will assure that transportation solutions meet more than just traffic and operational objectives.

EXISTING SETTING

Vehicle Miles Traveled & Community Travel Characteristics

A common indicator used to quantify the amount of motor vehicle use in a specified area is Vehicle Miles Traveled (VMT). One VMT is defined as any type of motor vehicle being driven one mile. Many factors affect VMT, including the average distance residents commute to work, school, and shopping, as well as the proportion of trips that are made by non-automobile modes. Areas that have a diverse land use mix and ample facilities for non-automobile modes, including transit, tend to generate lower VMT than auto-oriented rural and suburban areas where residents live at a distance from work, school, and other amenities.

An important consideration related to transportation is that Senate Bill (SB) 743 has changed the metric used to identify potential significant transportation impacts in CEQA analysis. SB 743 directed the California Governor's Office of Planning and Research (OPR) to identify a new metric and to recommend analysis methodology and thresholds. OPR selected VMT as the preferred metric and has finalized guidance material that went into effect in 2020. However, SB 743 does not prevent a city or county from continuing to analyze delay or LOS as part of other plans (i.e., the general plan), studies, or on-going network monitoring. However, LOS metrics may no longer constitute the sole basis for CEQA impacts. SB 743 did not change the discretion that lead agencies have to select methodology or define their own significance thresholds, but the guidance being developed by OPR should be carefully considered by lead agencies when they ultimately finalize their own recommended practices. A key factor should be how the lead agency / community values VMT reduction, especially with regards to its influence on reducing greenhouse gases, promoting active transportation, and encouraging infill development, all of which, are identified as objectives in the legislative intent of SB 743. Absent a locally established VMT threshold, the current OPR threshold guidance as contained in *Technical Advisory on Evaluating Transportation Impacts in CEQA*, OPR, December 2018, should be used. OPR recommends that for land use projects, VMT thresholds are set at fifteen percent (15%) below baseline VMT/capita for the city or region in suburban areas. The City of Atwater has not adopted guidelines relating to VMT; the Merced County Association of Governments has provided supplemental guidance for member agencies to consider in adoption of VMT-related thresholds.

Year 2019 data from the VMT+ database of VMT information for the City of Atwater is presented below. VMT+ is based on the StreetLight Data location-based services "Big Data" database of mobile device-based travel patterns.

- Average City of Atwater Home-Based Residential VMT per Resident: 22.0 vehicle-miles per day
- Average City of Atwater Home-Based Work "Commute" VMT per Employee: 12.7 vehicle-miles per day
- Average Merced County Home-Based Residential VMT per Resident: 25.9 vehicle-miles per day
- Average Merced County Home-Based Work "Commute" VMT per Employee: 15.2 vehicle-miles per day

The VMT+ data indicates that residents in the City of Atwater generally drive 17 percent less than the average Merced County resident. Similarly, the average worker in the city of Atwater has a two-way commute that is 16 percent shorter than the average Merced County worker.

Data from the latest American Community Survey indicate that over 98 percent of employed residents in Atwater have access to at least one automobile. Over all employed residents in Atwater, the American Community Survey indicates the following mode split:

- Drive alone: 82.2%
- Carpool: 8.9%
- Public Transit: 0.3%
- Walking: 1.1%
- Bicycle: 0.3%
- Taxicab, motorcycle, other: 3.6%
- Work from home: 3.6%

Roadway System & Complete Streets

The network of roadways in and around Atwater consists of arterials, connectors and local streets. The State Route 99 freeway passes through southern Atwater near the downtown area; SR 99 runs from Red Bluff in the north to Wheeler Ridge via Sacramento, Stockton, Fresno and Bakersfield. Interchanges connecting SR 99 with the Atwater roadway system are provided at Westside Boulevard (future Bellevue Avenue extension), Atwater Boulevard, Applegate Road, Shaffer Road, and Atwater-Merced Expressway.

The roadway system in Atwater serves a variety of modes through designs that were typical in the mid to late-20th century. Many arterial streets (described below) allow for travel speeds at or beyond 35 miles-per-hour, which can cause friction between the pedestrian, bicycle and automobile modes, even when sidewalks and bicycle facilities are present. The federal Safe Systems approach now allows communities to re-envision their street network to provide for more complete modal balance on the street network.

The following provides an overview of the existing roadway system, along with an analysis of how well it is able to carry current traffic loads. Many of Atwater's streets have existed since the mid-20th Century. Figure 2.4-1 presents the current General Plan Circulation Diagram.

ARTERIALS

Atwater's arterial streets are the primary movers of traffic and provide the primary routes within and through the city, and they also carry traffic to and from the regional highways and other communities. The city arterial system is generally laid out on a grid pattern, although a section of the grid in the downtown area (generally bound by Juniper Avenue, Atwater Boulevard, Shaffer Road and Winton Way) is offset about 45 degrees from the remainder of the grid.

North-South Arterials

- Winton Way/Applegate Road
- First Street
- Shaffer Road
- Buhach Road
- Atwater-Merced Expressway

East-West Arterials

- Bellevue Avenue
- Santa Fe Road (diagonal)
- Broadway Avenue
- Atwater Boulevard

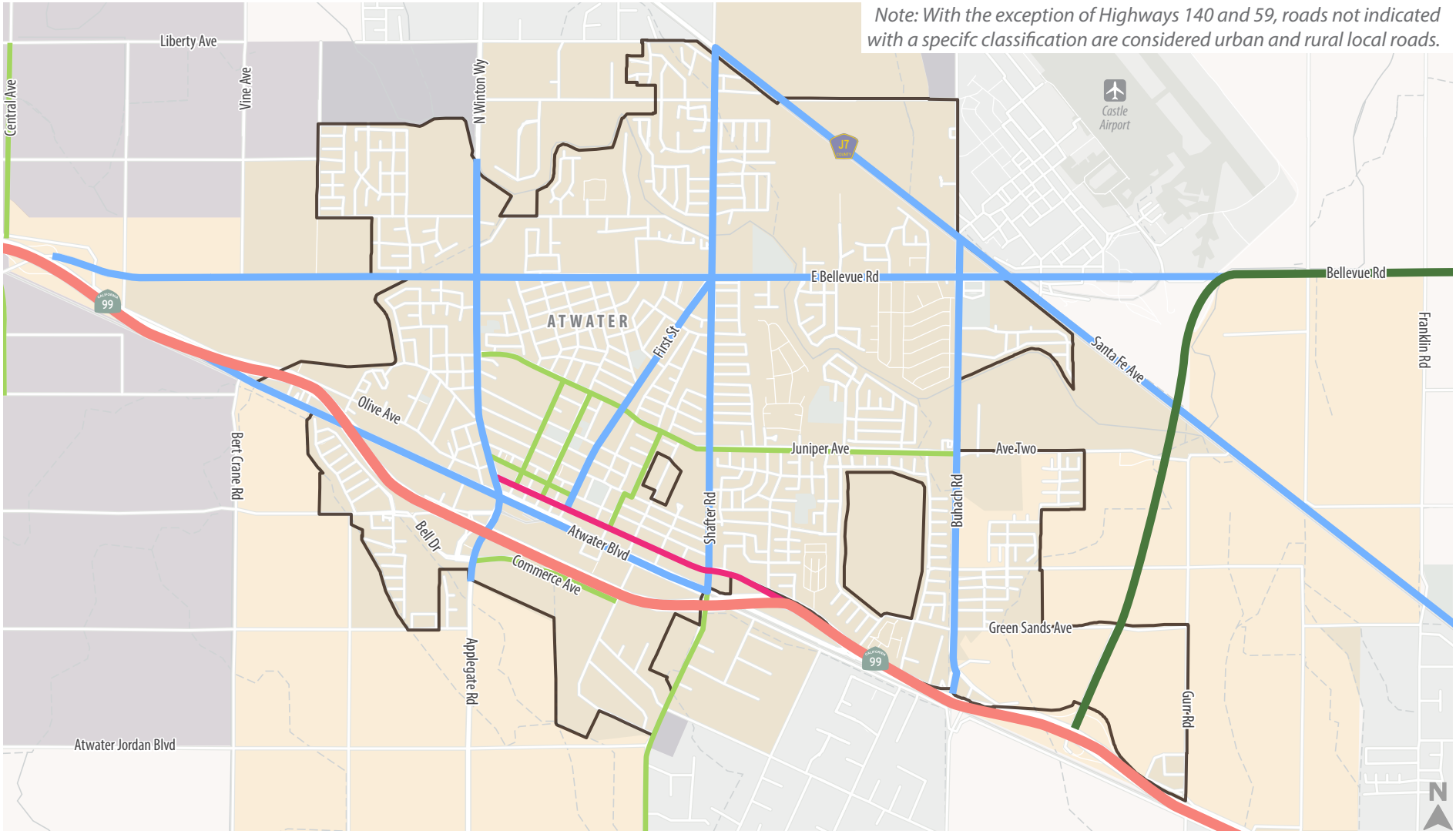


Figure 2.4–1

2020 General Plan Circulation Diagram

CONNECTORS

Connectors provide additional connections between local streets and arterial roadways and serve to balance access and mobility. Travel speeds are generally lower on these roadways than on arterials, but speeds are higher than on local streets. These routes are also found in a grid pattern, similar to the arterial system.

North-South Connectors

- Central Avenue
- Fifth Street
- Third Street
- High Street
- Giannini Road

East-West Connectors

- Juniper Avenue
- Cedar Avenue
- Commerce Avenue

LOCAL STREETS

The remainder of Atwater's roadways are considered local streets that serve to connect vehicles from individual neighborhoods to the collector system. The older portions of the City of Atwater are generally along a grid pattern, so local streets offer relatively continuous connectivity. Local streets in newer residential subdivisions are generally oriented around cul-de-sacs and non-direct through streets that lack the connectivity of Atwater's older neighborhoods.

KEY INTERSECTIONS

In urban areas the quality of traffic flow is often governed by the flow of traffic through signalized intersections. The following intersections in Atwater are key arterial-arterial and arterial-connector intersections that govern city-wide flows:

- Winton Way/Bellevue Road
- Winton Way/Juniper Avenue
- Applegate Road-Winton Way/Atwater Boulevard
- Applegate Road/Bell Drive-Commerce Avenue
- Shaffer Road/Atwater Boulevard
- Shaffer Road/Juniper Avenue
- First Street/Shaffer Road/Bellevue Road
- Buhach Road/Bellevue Road
- Buhach Road/Juniper Avenue-West Avenue Two
- Buhach Road/Green Sands Avenue

The above list is not intended to be an exhaustive list of signalized intersections; rather, the list includes key intersections that could become bottlenecks under General Plan Buildout if not analyzed.

Roadway Segment Level of Service

Local agencies adopt their goals for the operation of the circulation system based on Level of Service (LOS). Level of Service is a qualitative measure of traffic operating conditions and can be applied to individual roadway segments and intersections. Under LOS analysis a letter grade, "A" through "F," corresponds to progressively worsening traffic service at a facility.

While not a CEQA significance criteria, this setting document makes use of LOS to describe general traffic conditions on roadway segments, and presents the methods currently used to evaluate the operation of intersections. The criteria identified for each are described below.

ROADWAY LEVEL OF SERVICE STANDARDS

Roadway LOS is based upon a comparison of the traffic volume along the roadway with the capacity of that roadway. The City of Atwater has established LOS D as the threshold below which roadways are considered to be operating unacceptably. Table 2.4-1 shows the daily traffic volumes thresholds used in the current General Plan for assessing traffic conditions on collector and arterial roadways that would correspond with LOS C, D and E.

TABLE 2.4-1: GENERAL LEVEL OF SERVICE THRESHOLDS BASED ON DAILY TRAFFIC VOLUMES

STREET CLASSIFICATION	LANES	CONTROL	MAXIMUM DAILY TRAFFIC VOLUME AT LOS		
			C	D	E
Rural Arterial Roadway	2	Undivided	<6,800	14,100	17,400
Arterial	2	undivided	<9,700	17,600	18,700
	4	undivided	<17,500	27,400	28,900
	4	divided	<19,200	35,400	37,400

SOURCES: FEHR & PEERS, 2023.

INTERSECTION LEVEL OF SERVICE STANDARDS

While LOS is not a CEQA significance criterion, like other roadway facilities, intersections can be evaluated using a LOS approach. While current conditions are not addressed herein, the applicable methodologies are provided in the Highway Capacity Manual, 6th Edition (HCM). At signalized intersections, the LOS rating is based on the weighted average control delay measured in seconds per vehicle. The relationship between the control delay and LOS for signalized intersections is summarized in Table 2.4-2. The City of Atwater utilizes Level of Service D as the acceptable operating threshold for individual intersections.

TABLE 2.4-2: SIGNALIZED INTERSECTION LEVEL OF SERVICE CRITERIA

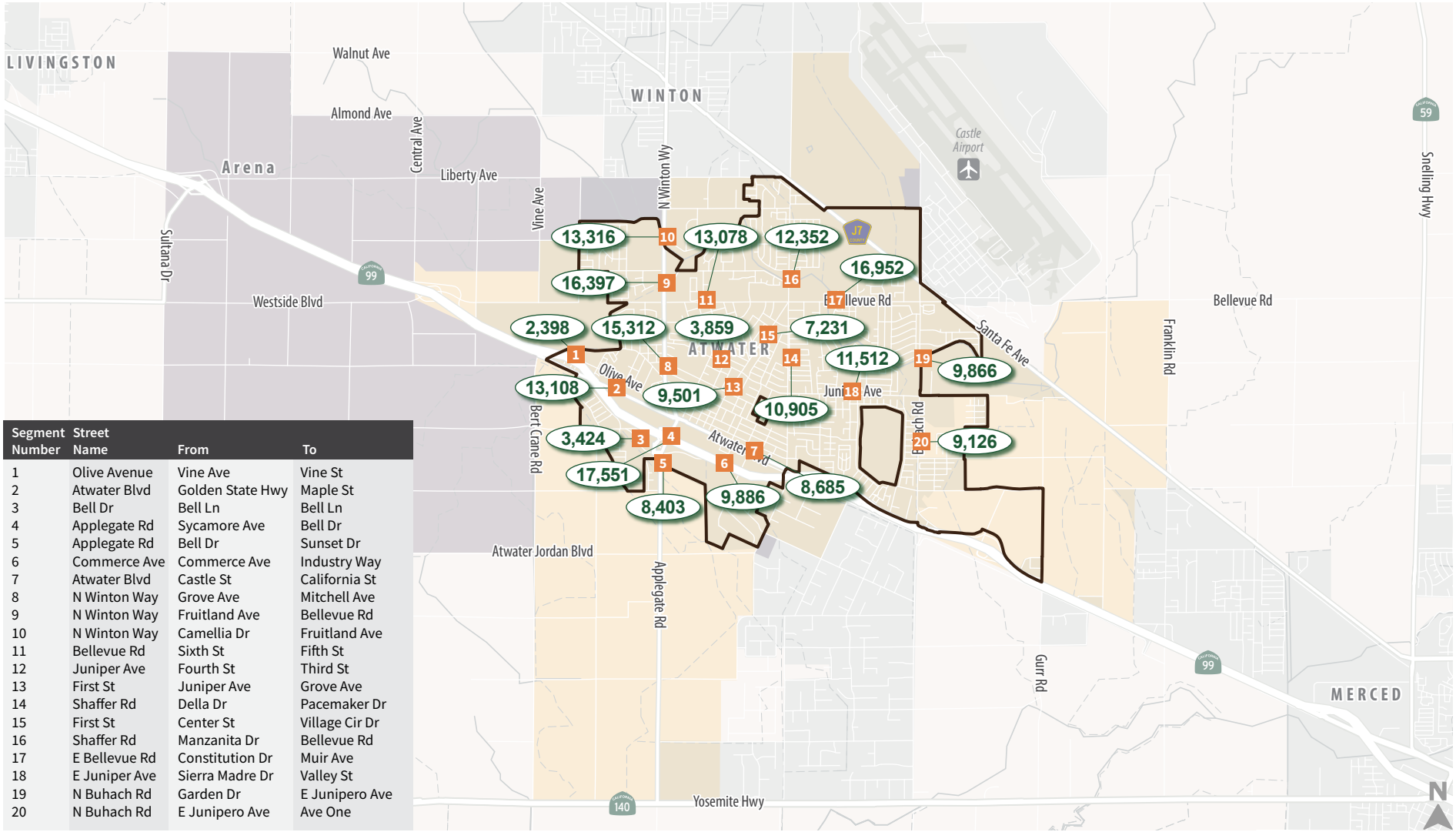
LEVEL OF SERVICE	*DESCRIPTION*	*AVERAGE CONTROL DELAY (SECONDS/VEH)*
A	Free flow/non-congested operation. Turning movements are easily made and all queues clear in a single signal cycle.	≤ 10.0
B	Stable operation/minimal delays. An occasional approach phase is fully utilized. Drivers begin to feel somewhat restricted within platoons of vehicles.	> 10.0 to 20.0
C	Stable operation/acceptable delays. Major approach phases fully utilized. Backups may develop behind turning vehicles.	> 20.0 to 35.0
D	Approaching unstable operation/tolerable delays. Drivers may have to wait through more than one red signal indication. Queues may develop but dissipate rapidly, without excessive delays.	> 35.0 to 55.0
E	Unstable operation/significant delays. Volumes at or near capacity. Vehicles may wait through several signal cycles. Long queues form upstream of intersection.	> 55.0 to 80.0
F	Forced flow/excessive delays. Represents jammed conditions. Traffic demand exceeds capacity. Queues may block upstream intersection.	> 80.0

SOURCE: HIGHWAY CAPACITY MANUAL, TRANSPORTATION RESEARCH BOARD, 6TH EDITION

ROADWAY SEGMENT TRAFFIC OPERATIONS

Existing roadway segment traffic operations were analyzed based on traffic counts made at locations on major roads in Atwater. This sample of current traffic volumes was intended to look at those roads which already carry major traffic volumes, and which are expected to carry high traffic volumes in the future. Traffic counts were conducted in October and November 2023 during mid-week days when local schools were in session.

Figure 2.4-2 illustrates the locations of daily traffic counts reported for this analysis, and Table 2.4-3 summarizes daily traffic volumes and resulting levels of service along major roadways in Hughson. As shown in the table, based on these volumes and the thresholds described in Table 2.4-1, the current daily traffic volume on all of the study roadway segments operate at LOS C or D, indicating that these roadways operate within the requirements of current Atwater General Plan policy.



Segment Number	Street Name	From	To
1	Olive Avenue	Vine Ave	Vine St
2	Atwater Blvd	Golden State Hwy	Maple St
3	Bell Dr	Bell Ln	Bell Ln
4	Applegate Rd	Sycamore Ave	Bell Dr
5	Applegate Rd	Bell Dr	Sunset Dr
6	Commerce Ave	Commerce Ave	Industry Way
7	Atwater Blvd	Castle St	California St
8	N Winton Way	Grove Ave	Mitchell Ave
9	N Winton Way	Fruitland Ave	Bellevue Rd
10	N Winton Way	Camellia Dr	Fruitland Ave
11	Bellevue Rd	Sixth St	Fifth St
12	Juniper Ave	Fourth St	Third St
13	First St	Juniper Ave	Grove Ave
14	Shaffer Rd	Della Dr	Pacemaker Dr
15	First St	Center St	Village Cir Dr
16	Shaffer Rd	Manzanita Dr	Bellevue Rd
17	E Bellevue Rd	Constitution Dr	Muir Ave
18	E Juniper Ave	Sierra Madre Dr	Valley St
19	N Buhach Rd	Garden Dr	E Junipero Ave
20	N Buhach Rd	E Junipero Ave	Ave One

City Limit

ADT Location

X,XXX ADT Volume

Sphere of Influence Area

Planning Area

Figure 2.4–2

Average Daily Traffic (ADT) Volumes

2.4-3: Daily Traffic Volume Counts and LOS on Atwater Area Streets

Road	Location From	Location To	Classification[1]	Current	
				Volume	LOS
Olive Avenue	Vine Avenue	Vine Street	2 Lane Rural Arterial	2,398	C
Atwater Blvd	SR 99	Maple Street	2 Lane Arterial	13,108	D
Bell Drive	Bell Lane	Bell Lane	2 Lane Arterial	3,424	C
Applegate Road	Sycamore Avenue	Bell Drive	2 Lane Arterial	17,551	D
Applegate Road	Bell Drive	Sunset Drive	2 Lane Arterial	8,403	C
Commerce Avenue	Commerce Avenue	Industry Way	2 Lane Arterial	9,886	D
Atwater Blvd	Castle Street	California Street	4 Lane Undivided Arterial	8,685	C
North Winton Way	Grove Avenue	Mitchell Avenue	4 Lane Undivided Arterial	15,312	C
North Winton Way	Fruitland Avenue	Bellevue Road	4 Lane Undivided Arterial	16,397	C
North Winton Way	Camellia Drive	Fruitland Avenue	4 Lane Undivided Arterial	13,316	C
Bellevue Road	Sixth Street	Fifth Street	4 Lane Undivided Arterial	13,078	C
Juniper Avenue	Fourth Street	Third Street	2 Lane Arterial	3,859	C
First Street	Juniper Avenue	Grove Avenue	2 Lane Arterial	9,501	C
Shaffer Road	Della Drive	Pacemaker Drive	4 Lane Undivided Arterial	10,905	C
First Street	Center Street	Village Circle Drive	4 Lane Undivided Arterial	7,231	C
Shaffer Road	Manzanita Drive	Bellevue Road	4 Lane Undivided Arterial	12,352	C
East Bellevue Road	Constitution Drive	Muir Avenue	4 Lane Undivided Arterial	16,952	C
East Juniper Avenue	Sierra Madre Drive	Valley Street	4 Lane Undivided Arterial	11,512	C
North Buhach Road	Garden Drive	East Junipero Avenue	4 Lane Undivided Arterial	9,866	C
North Buhach Road	East Junipero Avenue	Avenue One	4 Lane Divided Arterial	9,126	C

Notes:

1. Classification for Capacity Selection Only, Classification Does not Necessarily Match General Plan Roadway Designation

Source: Fehr & Peers, 2023

INTERSECTION TRAFFIC OPERATIONS

Existing intersection traffic operations were analyzed based on traffic counts made at locations on major roads in Atwater. This sample of current traffic volumes was intended to look at those roads which already carry major traffic volumes, and which are expected to carry high traffic volumes in the future. Traffic counts were conducted in October and November 2023 during mid-week days when local schools were in session. Traffic counts were taken between 7:00 a.m. and 9:00 a.m. as well as 4:00 p.m. to 6:00 p.m. to establish the peak one-hour morning and peak one-hour evening traffic volumes at intersections.

Figure 2.4-3 illustrates the locations of peak period intersection traffic counts and resulting morning and afternoon peak hour volumes. Table 2.4-4 presents current morning and afternoon peak hour intersection Levels of Service. As shown in the table, based on these volumes and the thresholds described in Table 2.4-2, the current peak hour intersection operations at the intersections is LOS D or better, indicating that these roadways operate within the requirements of current Atwater General Plan policy.

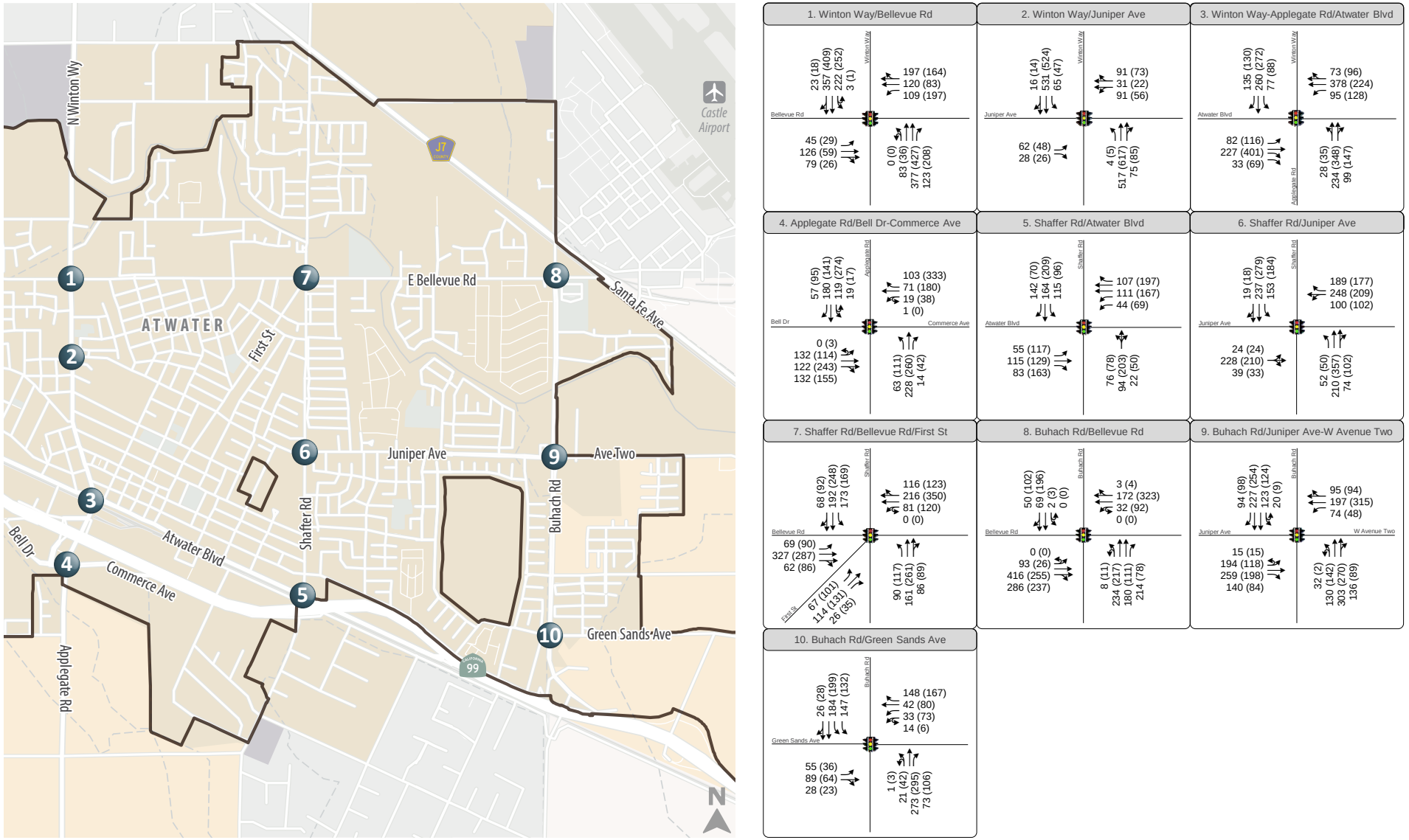
TABLE 2.4-4: CURRENT PEAK HOUR INTERSECTION LEVELS OF SERVICE

INTERSECTION	PEAK HOUR	CURRENT	
		DELAY	LOS
1. Winton Way/Bellevue Road	AM	17.5	B
	PM	16.9	B
2. Winton Way/Juniper Avenue	AM	18.2	B
	PM	16.6	B
3. Applegate Road-Winton Way/Atwater Boulevard	AM	19.1	B
	PM	24.4	C
4. Applegate Road/Bell Drive-Commerce Avenue	AM	18.9	B
	PM	27.6	C
5. Shaffer Road/Atwater Boulevard	AM	32.4	C
	PM	35.9	D
6. Shaffer Road/Juniper Avenue	AM	13.3	B
	PM	15.3	B
7. First Street/Shaffer Road/Bellevue Road	AM	42.1	D
	PM	45.3	D
8. Buhach Road/Bellevue Road	AM	16.6	B
	PM	17.0	B
9. Buhach Road/Juniper Avenue-West Avenue Two	AM	39.8	D
	PM	25.0	C
10. Buhach Road/Green Sands Avenue	AM	18.1	B
	PM	19.7	B

SOURCE: FEHR & PEERS, 2023

ROADWAY SAFETY DATA

Federal and state policies related to the design and funding of the transportation system are shifting towards a "safe systems" approach that recognizes that safety improvements do not have to wait for a history of recorded crashes, and that certain roadway characteristics lend themselves to worse safety outcomes. Collision data remains a key part of this aspect of Circulation Element planning as it can be extrapolated to the larger roadway network. Data from the UC Berkeley Transportation Injury Mapping System for the January 2020 through December 2022 period indicated that a total of 299 crashes were reported within the City of Atwater limits, resulting in 31 reported serious injuries and six fatalities. Hotspot mapping indicates that the Applegate Road, Bellevue Avenue, Juniper Avenue, Winton Way and Buhach Road corridors are the primary locations with collisions.



XX (YY) AM (PM) Peak Hour Traffic Volumes

Signalized Intersection

Study Intersection

City Limit

Sphere of Influence Area

Planning Area

Figure 2.4–3

Peak Hour Intersection Turning Movement Counts

2.5 Freight Rail, Goods Movement and Aviation

This section describes freight rail, goods movement, and airports in the City of Atwater's planning area. Freight rail providers, truck routes, freight nodes, and airport activities are discussed in this section. While airports are typically separate from freight rail modes, the Castle Commerce Center project (and Inland Port concept) links these modes together.

Local Regulatory Framework

The regulatory framework discussion describes local regulations that guide land use decisions. Adopted plans that pertain to the City are also described.

City of Atwater General Plan Circulation Element

The purpose of the Circulation Element is to provide the policy framework for regulation and development of the circulation system in the City of Atwater. The existing General Plan includes policies related to promoting goods movement in the city. The existing General Plan notes that goods movement, specifically trucking, is anticipated to remain stable in the future. However, given the shift to e-commerce and the proposed Inland Port at the Castle Commerce Center, the nature of goods movement has shifted since the current General Plan was adopted.

Merced County Regional Transportation Plan

The 2022 Merced County Regional Transportation Plan (RTP) is intended to guide bicycle mobility investments throughout Merced County. The RTP considers greenhouse gas reductions per Senate Bill 375 and other state requirements. The RTP is one of many steps being taken to provide for goods movement in the region by developing an efficient and coordinated multi-modal transportation system.

Existing Setting

Freight Rail

Both the Burlington Northern/Santa Fe (BNSF) Railroad and Union Pacific rail service pass through Atwater, utilizing railroad corridors that parallel Santa Fe Avenue and Atwater Boulevard, respectively. Rail spurs have historically served businesses in the downtown Atwater area, where the BNSF corridor only includes mainline trackage.

Truck Routes

Most freight, mainly consisting of retail and agricultural goods, travels to and from Atwater ultimately by truck, but often connects during transport with the regional rail corridor in other locations. Currently the City has not defined truck routes, so truck traffic travels along the major roadways throughout Atwater, including all arterial roadways. Agricultural production generates high amounts of truck traffic, especially during the summer months when there is a peak in agricultural activities. Slower moving trucks, or trucks entering and exiting industrial and agricultural facilities along major roadways, can result in congestion and traffic hazards for smaller vehicles.

Freight Nodes

Freight nodes include major retail centers and agricultural manufacturing locations. In Atwater, these locations include the Bellevue Road commercial corridor, the Dole Packaged Foods plant to the west of the city, downtown Atwater, and the Commerce Avenue commercial corridor. Future freight nodes may include the proposed Inland Port at the Castle Airport.

Aviation

Since the closure of Atwater Municipal Airport and transfer of general aviation operations to the former Castle Air Force Base (now Castle Airport), Castle Airport has become the busiest General Aviation (GA) airport in the Merced County region. Castle Airport is served by 11,800 feet long and 150 feet wide runway (sixth longest in California), and is open 24-hours per day.

The proposed Inland Port at the Castle Commerce Center was awarded $50,000,000 in mid-2023 to expand rail access for further connections to major ports in Oakland, Long Beach and Los Angeles. The combination of rail access and airport facilities will increase employment in the Castle Commerce Center area, along with increases in commuter and truck traffic.

Chapter 3
Economic, Real Estate Market, and Fiscal Conditions



The Economic, Real Estate Market, and Fiscal Conditions chapter examines the market and fiscal conditions and trends in Atwater. The information and analysis is intended to inform the General Plan Update process by providing both historical context and a baseline of existing economic and fiscal information.

This Chapter includes the following topics:

3.1 Economic Conditions

3.2 Real Estate Market Conditions

3.3 Fiscal Conditions and Trends

3.0 ECONOMIC, REAL ESTATE MARKET, AND FISCAL CONDITIONS

This chapter examines the city's economic, real estate, and fiscal conditions. This includes an overview of existing conditions and trends for the city's local and regional economy, the local real estate market for housing and other major uses, and the City of Atwater's fiscal status as indicated by its General Fund. This section also summarizes the key issues & opportunities regarding economic, real estate, and fiscal conditions.

This chapter includes the following sections:

3.1 Economic Conditions

3.2 Real Estate Market Conditions

3.3 Fiscal Conditions and Trends

FINDINGS AND KEY ISSUES & OPPORTUNITIES IN ATWATER

ECONOMIC CONDITIONS

Unemployment Trends. The unemployment rate is an indicator of local and regional economic strength; lower unemployment is generally linked to a healthy economy that is providing adequate job opportunities to area residents. Areas with large agriculture sectors typically have higher rates of unemployment and more seasonal variation in employment.

Between 2010 and 2022, Atwater and Merced County experienced consistently higher unemployment rates than California, with unemployment rates from three to six percent above the statewide rate. In 2022, the city's unemployment rate averaged 7.5 percent, with the county rate at 7.7 percent, compared to a state rate of only 4.2 percent.

Jobs by Industry. Employment by major industry sector shows the strong focus on agriculture and food product manufacturing in Merced County. For Atwater, in descending rank order, natural resources and mining (which includes agricultural employment), retail trade, and the government sector (which includes public schools) provide over half of the city's employment.

Between 2017 and 2022, Atwater showed rapid employment growth compared to the county and the state, with that growth concentrated in agriculture, construction, retail trade, and accommodation and food services. However, the limited growth, and even loss of jobs, in "white collar" sectors such as professional services, indicates that Atwater and Merced County have so far had limited success in diversifying their economies to provide more of these types of jobs, which tend to provide higher earnings and more full-time work than many of the current agriculture and service-related jobs. This information suggests that further economic diversification should be an economic development priority.

Future Job Growth. Based on Caltrans projections, Merced County will experience 17.8 percent growth in employment between 2020 and 2050, to a total of approximately 96,000 jobs, with most of this growth occurring by 2030.

Worker Earnings. As noted above, Atwater residents and households have incomes below statewide levels. This results in large part from the pay levels associated with the jobs available in the city. Average annual pay for jobs in Atwater is below that of the county, and well below the average for California, further highlighting the need for diversification of the local economy into new industry sectors.

Jobs/Employed Residents Balance and Commute Flows. Atwater and Merced County both show an imbalance between workers and jobs, with more working residents than jobs. This is an indicator of net out-commuting from the city and the county, with only approximately one job in Atwater for every two working residents. This information highlights the importance of local economic development, to create a better balance between the size of the local working population and the number of local employment opportunities.

Castle Commerce Center. Located adjacent to Atwater, the former Castle Air Force Base, now the Castle Airport and Castle Commerce Center, offers a key asset serving the local economic base. This facility includes a general aviation airport and a developing multi-modal freight facility with rail service for local agricultural producers and industries. While the Airport and Commerce Center are outside city limits, the current and future facilities will provide jobs for city residents and generate economic activity within Atwater itself. The development of improved rail-related facilities will also provide environmental benefits by replacing multiple truck trips with fewer train trips, resulting in reduced emissions and improved local air quality.

REAL ESTATE MARKET CONDITIONS

Residential Real Estate Market. The housing stock in Atwater consists of a preponderance of single-family detached homes. Conversely, the city's housing unit mix includes limited proportions of apartment-style multifamily housing units.

Despite housing being oriented toward single-family detached homes in Atwater and Merced County, neither area shows a higher level of owner-occupancy than the state, perhaps indicating that the lower income levels in the county are limiting the ability of local households to purchase their own homes.

Housing construction in Atwater peaked in the 1970s, with nearly one-fourth of all housing in the city constructed during that decade. Less than five percent of housing units have been built since 2010, with more recent development shifting to other areas of Merced County.

Between June 2022 and April 2023, larger single-family residential units with three or more bedrooms were the most commonly sold unit type. The median home sale price for single-family units was $360,000

Retail Real Estate Market. Retail properties in Atwater are primarily concentrated in three nodes: adjacent to State Highway 99 near the Applegate Road exit, along or near Bellevue Road, and Downtown along or near Broadway. The largest shopping center (by a large margin) in Atwater is the Applegate Ranch Shopping Center at Applegate Road and State Route 99, containing both a Walmart Supercenter and a Super Target, along with numerous other retailers. Bellevue Road is home to several older centers anchored by supermarkets or second-generation replacement stores. Downtown Atwater is home to a mix of small independent retailers and service businesses along Broadway and nearby streets. The City has undertaken efforts to enhance "Old Town Atwater," including the 2009 Atwater Downtown Revitalization Strategy, with work on this strategy ongoing.

Overall, CoStar reports approximately 1.7 million square feet of retail space in Atwater, out of a total of 12 million square feet countywide, or about 14 percent of the countywide retail inventory. Considering that Atwater's resident population is about 11 percent of the countywide population, the City has a disproportionate share of the inventory and may be a net attractor of shoppers from other areas.

Office Real Estate Market. The data on employment by major industry indicates limited demand for office space in Atwater. CoStar data confirms this, with a total reported inventory of only approximately 340,000 square feet, out of a total of 3.6 million square feet in Merced County. In

Atwater, office uses are scattered throughout the city. Office vacancies are extremely low, at less than one percent.

Industrial Real Estate Market. Industrial development in Atwater is concentrated in the southern portions of the city, with a large cluster of properties to the south of Highway 99 and east of the Applegate Ranch Shopping Center. Other industrial uses, including the Teasdale Latin Foods facility, are found between the Union Pacific rail line and Highway 99. Much of the city south of Highway 99 is zoned for manufacturing, industrial, and business park uses, along with some areas near the airport and in the westernmost areas of the city north of Highway 99. CoStar reports approximately 1.2 million square feet of existing industrial space in Atwater, and 12.0 million in Merced County overall. Vacancies for industrial space are extremely low, at 1.0 percent for Atwater and 2.3 percent for the county.

The low vacancy rates in not only the industrial sector but also the retail and office sectors indicate that new businesses or existing businesses seeking to expand within the City would have little choice of space offered for sale or for lease. The lack of vacancies may hinder efforts to attract new and/or retain existing businesses as a means of diversifying the local economy. Land use and economic development-related policies should encourage and facilitate developers to expand the local supply of non-residential real estate.

Fiscal Conditions. The City of Atwater General Fund receives the City's discretionary revenues and funds its basic municipal services. Atwater's General Fund revenues and expenditures vary annually based on the changing conditions in the city. The majority of revenue generated within Atwater is attributed to property and sales taxes, while General Fund expenditures are primarily associated with police and fire services.

With the exception of the proposed budget for the current fiscal year, Atwater's General Fund has maintained a positive annual balance, allowing the City to build a reserve that, even with this year's imbalance, remains at 25 percent. The substantial reserve could assist the City during any future periods of declining revenues and/or increasing expenses. With the State of California projected to experience a substantial budget deficit for the 2024/2025 Fiscal Year, the local budget reserve could give the City flexibility to adapt to cutbacks in State subventions to local governments that sometimes occur during State budget crises.

Property taxes are a critical source of revenue for the City. Based on the current master property tax revenue sharing agreement with the County, Atwater's share of property taxes from any future annexations would likely be similar to that from other recently incorporated areas covered by the lower rate of 17 to 18 percent. This means that the City generally receives a lower share of property tax revenue to help fund services for new development than it had historically, which could make the City more dependent upon other sources of revenue, such as sales tax and transient occupancy tax, to ensure long-term fiscal sustainability as the City continues to grow.

The City should carefully assess the fiscal impacts of any annexation to ensure that the cost to provide services to the new areas does not exceed the revenue generated by the annexation.

3.1 ECONOMIC CONDITIONS

This section summarizes the city's economic conditions. For perspective, this includes comparisons with Merced County as a whole. The analysis primarily utilizes data from Esri Business Analyst (a private economic and demographic data vendor) and the U.S. Census Bureau, American Community Survey (ACS) estimates. Where appropriate, data are also provided from a variety of other data sources, including the California Employment Development Department (EDD), California Department of Finance (DoF), and the Merced County Association of Governments (MCAG), among others.

More detailed information regarding population and housing, including population and household characteristics and housing needs, is provided in Chapter 1.0 (Land Use, Population and Housing) of this Existing Conditions Report.

ECONOMIC CHARACTERISTICS

Gross Domestic Product

One measure of an area's economy is gross domestic product (GDP), which is a measure of the annual value of all goods and services within that area. The BEA provides estimates by major industry sectors for US counties and states, thus highlighting key economic sectors for a given county or region. As shown in Table 3.1-1, in 2021 (most recent year available) the total GDP for Merced County was approximately $10.5 billion; this amounts to only about 0.3 percent of California's overall GDP of $3.4 trillion. In the county, the government and agriculture sectors are over-represented relative to the state, accounting for 18.6 percent and 16.8 percent of GDP, respectively. Nondurable goods manufacturing (e.g., food processing) is also a strong contributor to GDP for Merced County. Finance and real estate, professional and related services, and especially information are relatively small sectors in Merced County, indicating that the county's participation in California's tech and related services sector is limited. For the Atwater Zip Code, 95301, which also encompasses areas beyond city limits, the area's GDP constitutes 14 percent of the county-wide GDP.

Overall, GDP data indicates that the county's economy is growing at only about half the rate for the state overall; in constant 2012 dollars, Merced County's GDP grew by 20 percent between 2011 and 2021; statewide GDP growth was 39 percent. The county GDP also lags on a per capita basis, at only $37,280, less than half the statewide figure of $85,863.

TABLE 3.1-1: GROSS DOMESTIC PRODUCT BY INDUSTRY IN 2021, MERCED COUNTY & CALIFORNIA

GDP in thousands of 2021 dollars

	Merced County		Cailfornia	
Industry Sector	Number	Percent	Number	Percent
Government & government enterprises	$1,947,378	18.6%	$373,598,430	11.1%
Private industries				
Agriculture, forestry, fishing & hunting	$1,762,513	16.8%	$38,294,632	1.1%
Finance, insurance, real estate, rental, & leasing	$1,455,538	13.9%	$617,020,764	18.3%
Nondurable goods manufacturing	$1,087,716	10.4%	$152,636,729	4.5%
Educational services, health care& social assistance	$776,060	7.4%	$256,456,541	7.6%
Retail trade	$761,052	7.3%	$178,861,745	5.3%
Professional & business services	$507,037	4.8%	$492,172,731	14.6%
Transportation & warehousing	$450,599	4.3%	$93,492,570	2.8%
Construction	$395,654	3.8%	$124,564,467	3.7%
Arts, entertainment, recreation, accommodation & food services	$274,837	2.6%	$137,809,403	4.1%
Durable goods manufacturing	$223,149	2.1%	$242,190,990	7.2%
Other services (except government & government enterprises)	$216,899	2.1%	$57,713,613	1.7%
Information	$48,225	0.5%	$362,001,669	10.7%
Mining, quarrying,& oil & gas extraction	(a)	na	$12,014,817	0.4%
Utilities	(a)	na	$45,687,406	1.4%
Wholesale trade	(a)	na	$188,724,156	5.6%
All industry total	$10,465,518	100.0%	$3,373,240,664	100.0%
Gross Domestic Product per Capita in 2021 Dollarts $ (b)	$37,280		$85,863	

NOTES: GROSS DOMESTIC PRODUCT (GDP) IS IN THOUSANDS OF CURRENT DOLLARS (NOT ADJUSTED FOR INFLATION). INDUSTRY DETAIL IS BASED ON THE 2012 NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS).
LAST UPDATED: DECEMBER 8, 2022
(A) NOT SHOWN TO AVOID DISCLOSURE OF CONFIDENTIAL INFORMATION; ESTIMATES ARE INCLUDED IN HIGHER-LEVEL TOTALS.
TOTALS MAY NOT SUM EXACTLY FROM PARTS DUE TO INDEPENDENT ROUNDING.
(B) BASED ON DOF POPULATION ESTIMATES FOR 2021 FROM 2023 E-5 REPORT.

SOURCES: BUREAU OF ECONOMIC ANALYSIS TABLE CAGDP2, GROSS DOMESTIC PRODUCT BY COUNTY& METROPOLITAN AREA; CALIFORNIA DEPARTMENT OF FINANCE (DOF); BAE.

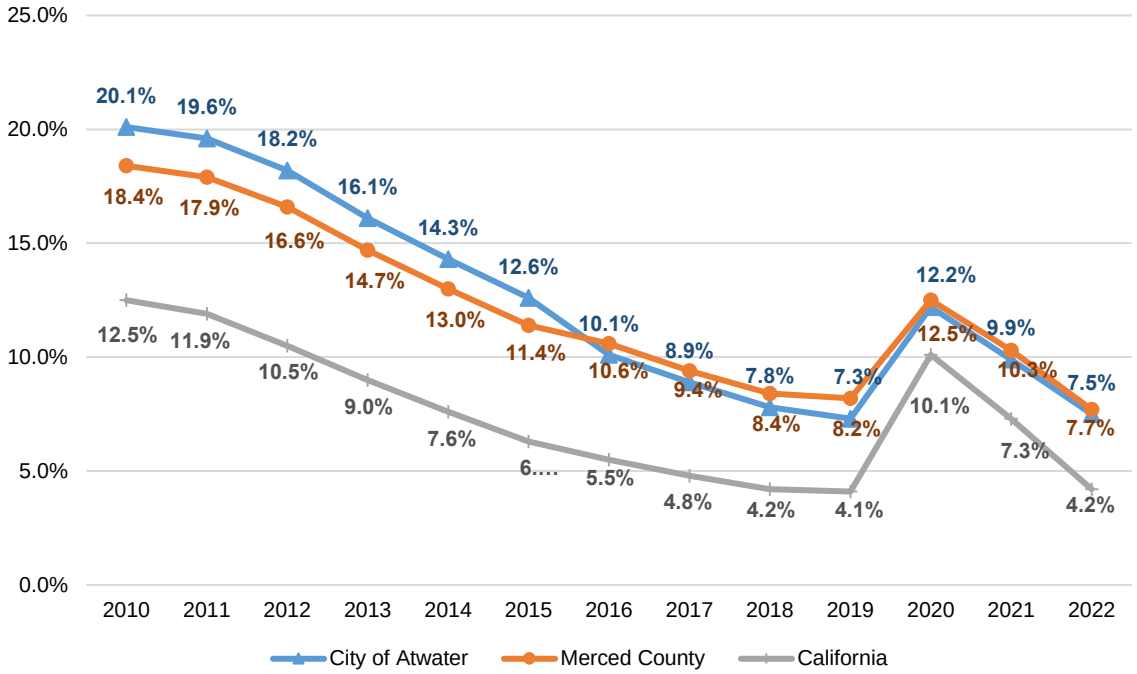
Unemployment Trends

Another indicator of local and regional economic strength and trends is the unemployment rate; lower unemployment is generally linked to a healthy economy that is providing adequate job opportunities to area residents. As a "rule of thumb," a rate of five percent is considered to represent full employment, high enough to allow workers to move between jobs and to limit upward inflationary wage pressures due to employers having difficulty filling open positions.

As presented in Chart 3.1-1, between 2010 and 2022, Atwater and Merced Monterey County experienced consistently higher unemployment rates than California. For the 12-year period, the city and county unemployment rates have remained from three to six percent above the statewide rate. Areas with large agriculture sectors typically have higher rates of unemployment and more seasonal variation in employment.

Unemployment decreased and the gap between the local and county rates and the California rate narrowed between 2010 and 2019; unemployment rates spiked in 2020 due to the negative impacts of the COVID-19 pandemic, but by 2022 were again below or near the 2019 rates. The lower proportional decline for Atwater and Merced County may be in part due to larger proportions of essential workers in agriculture who continued to work throughout the pandemic period. For 2022, the city's unemployment rate averaged 7.5 percent, with the county rate at 7.7 percent, compared to a state rate of 4.2 percent.

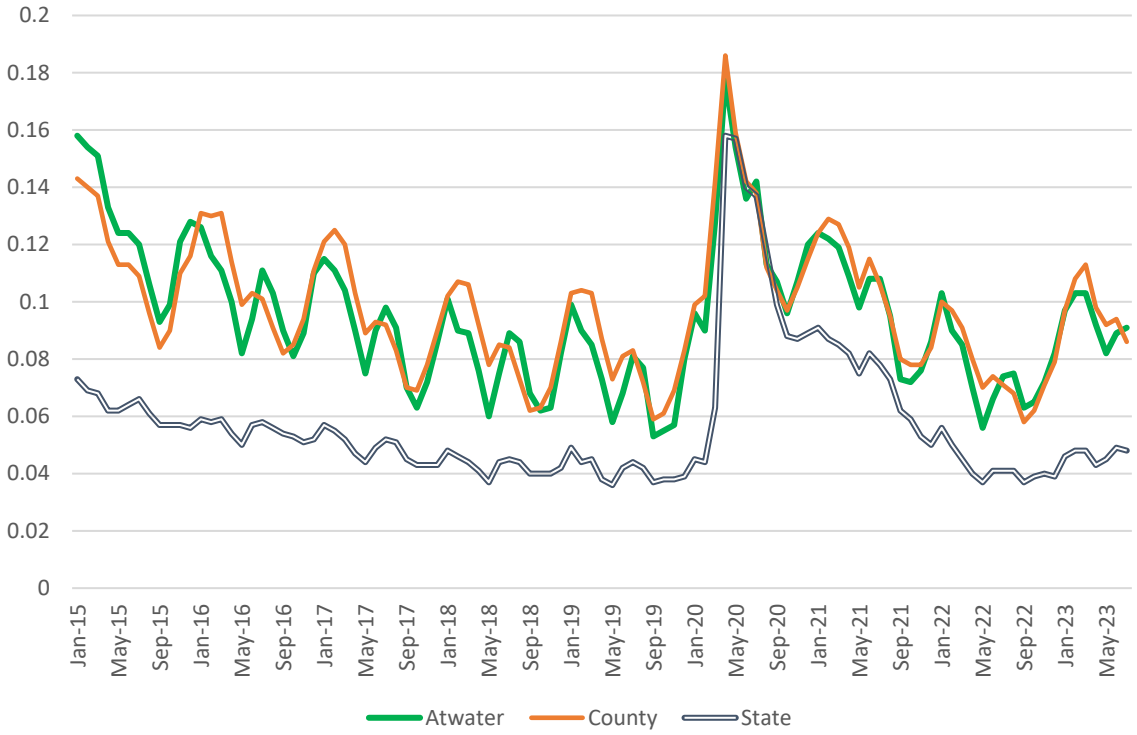
CHART 3.1-1: AVERAGE ANNUAL UNEMPLOYMENT RATE, 2010-2022



SOURCES: CALIFORNIA EMPLOYMENT DEVELOPMENT DEPARTMENT (EDD), LOCAL AREA UNEMPLOYMENT STATISTICS, 2023; BAE, 2023.

In addition to having high unemployment relative to the state, Atwater and Merced County have substantial seasonal swings in employment tied to the region's agricultural economy (see Chart 3.1-2). For example, the unemployment rate for Atwater in 2022 peaked in January, at 10.3 percent, with the lowest rate for the year at 5.6 percent in May. In contrast, the unemployment rate in California in 2022 only fluctuated between 3.7 percent and 5.6 percent. The creation of additional year-round jobs would likely benefit the local labor force and reduce the reliance on seasonal employment.

CHART 3.1-2: MONTHLY UNEMPLOYMENT RATES, 2015- JULY 2023



SOURCES: CALIFORNIA EMPLOYMENT DEVELOPMENT DEPARTMENT (EDD), LOCAL AREA UNEMPLOYMENT STATISTICS, 2023; BAE, 2023.

Jobs by Industry

Employment by major industry sector shows the strong focus on agriculture and food product manufacturing in Merced County, as shown in Table 3.1-2, which presents industry job trends from 2017 through 2022 for wage and salary workers employed in Atwater, Merced County and California. For Atwater, in descending rank order, natural resources and mining (which includes agricultural employment), retail trade, and the government sector provide over half of the city's employment. Countywide, government provides the most jobs, followed by natural resources and mining, and manufacturing (which consists largely of food manufacturing) provide over half of total employment. In comparison, "white collar" employment (in a set of several combined sectors as shown in Table 3.1-2), government, and health care and social assistance are the top three employment sectors in California, providing slightly less than half of all wage and salary employment. Natural Resources and Mining account for only 2.4 percent of jobs statewide.

Atwater shows rapid employment growth compared to the county and the state, with growth concentrated in agriculture, construction, retail trade, and accommodation and food services. However, the limited growth, and even loss of jobs, in "white collar" jobs such as professional services, indicates that Atwater and Merced County have so far had limited success in diversifying their economies to provide more of these types of jobs, which tend to provide higher earnings and more full-time work than many of the current agriculture and service-related jobs.

TABLE 3.1-2: JOBS BY INDUSTRY, ATWATER, MERCED CALIFORNIA, AND CALIFORNIA, 2017-2022

	2017		2022		Change 2017-2022	
City of Atwater	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Private Sector						
Natural Resources and Mining	733	12.7%	1,710	22.0%	977	133.3%
Construction	367	6.3%	857	11.0%	490	133.4%
Manufacturing	551	9.5%	615	7.9%	64	11.6%
Wholesade Trade	66	1.1%	50	0.6%	(16)	-24.2%
Retail Trade	1,176	20.3%	1,405	18.1%	229	19.5%
Transporation, Warehousing, and Utilities	3	0.1%	39	0.5%	36	1202.8%
Information; Professional, Scientific, & Technical Services: Management of Companies & Enterprises; Administrative & Waste Services; Educational Services	233	4.0%	203	2.6%	(30)	-12.9%
Finance and Insurance	108	1.9%	62	0.8%	(47)	-43.1%
Real Estate and Rental and Leasing	28	0.5%	36	0.5%	8	27.1%
Healthcare and Social Assistance (a)	647	11.2%	712	9.2%	65	10.0%
Arts, Entertainment, and Recreation	56	1.0%	55	0.7%	(1)	-2.2%
Accommodation and Food Services	649	11.2%	808	10.4%	159	24.5%
Other Services (except Public Administration) (b)	109	1.9%	129	1.7%	20	18.7%
Unclassified	12	0.2%	n.a.	n.a.	n.a.	n.a.
Government	1,052	18.2%	1,086	14.0%	34	3.3%
Total Employment (c)	**5,790**	**100.0%**	**7,766**	**100.0%**	**1,988**	**34.1%**

	2017		2022		Change 2017-2022	
Merced County	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Private Sector						
Natural Resources and Mining	14,050	17.7%	14,078	16.9%	28	n.a.
Construction	2,359	3.0%	3,279	3.9%	920	39.0%
Manufacturing	9,504	12.0%	9,832	11.8%	328	3.5%
Wholesale Trade	na	na	na	na	na	na
Retail Trade	8,304	10.5%	8,805	10.6%	501	6.0%
Transporation, Warehousing, and Utilities	2,802	3.5%	2,966	3.6%	164	5.9%
Information; Professional, Scientific, & Technical Services: Management of Companies & Enterprises; Administrative & Waste Services; Educational Services	4,363	5.5%	4,322	5.2%	(41)	-0.9%
Finance and Insurance	1,304	1.6%	1,245	1.5%	(59)	-4.5%
Real Estate and Rental and Leasing	547	0.7%	622	0.7%	75	13.7%
Healthcare and Social Assistance (a)	6,428	8.1%	6,456	7.8%	28	0.4%
Arts, Entertainment, and Recreation	498	0.6%	585	0.7%	87	17.5%
Accommodation and Food Services	5,078	6.4%	6,341	7.6%	1,263	24.9%
Other Services (except Public Administration) (b)	1,173	1.5%	1,532	1.8%	359	30.6%
Unclassified or Excluded	5,141	6.5%	6,067	7.3%	926	18.0%
Government	17,823	22.5%	17,126	21.6%	(697)	-3.9%
Total Employment (c)	**79,373**	**100.0%**	**83,257**	**104.9%**	**3,884**	**4.9%**

	2017		2022		Change 2017-2022	
California	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Private Sector						
Natural Resources and Mining	441,460	2.6%	436,751	2.4%	(4,709)	-1.1%
Construction	805,942	4.7%	911,750	5.1%	105,808	13.1%
Manufacturing	1,303,550	7.7%	1,335,625	7.5%	32,075	2.5%
Wholesale Trade	720,304	4.2%	668,518	3.7%	(51,786)	
Retail Trade	1,680,913	9.9%	1,616,028	9.0%	(64,885)	-3.9%
Transporation, Warehousing, and Utilities	609,765	3.6%	837,196	4.7%	227,431	
Information; Professional, Scientific, & Technical Services: Management of Companies & Enterprises; Administrative & Waste Services; Educational Services	3,377,250	19.8%	3,803,496	21.2%	426,246	12.6%
Finance and Insurance	544,087	3.2%	535,890	3.0%	(8,197)	-1.5%
Real Estate and Rental and Leasing	283,407	1.7%	305,110	1.7%	21,703	7.7%
Healthcare and Social Assistance (a)	1,686,165	9.9%	1,846,465	10.3%	160,300	9.5%
Arts, Entertainment, and Recreation	305,110	1.8%	307,399	1.7%	2,289	0.8%
Accommodation and Food Services	1,630,870	9.6%	1,621,370	9.1%	(9,500)	-0.6%
Other Services (except Public Administration) (b)	495,632	2.9%	505,685	2.8%	10,053	2.0%
Unclassified or Excluded	674,197	4.0%	718,047	4.0%	43,850	6.5%
Government	2,461,050	14.5%	2,464,630	13.8%	3,580	0.1%
Total Employment (c)	**17,019,702**	**100.0%**	**17,913,958**	**100.0%**	**894,256**	**5.3%**

NOTES:

UNIVERSE CONSISTS OF ALL WAGE AND SALARY EMPLOYMENT BY PLACE OF WORK ON AN ANNUAL AVERAGE BASIS. EXCLUDES SELF-EMPLOYED PERSONS NOT ON PAYROLL.

SOME CATEGORIES HAVE BEEN COMBINED FOR THE CITY DUE TO DISCLOSURE RULES. NAICS 51, 55, 56 AND 61 ARE ROLLED UP WITH NAICS 54, AND GOVERNMENT IS ROLLED UP INTO ONE CATEGORY. NAICS 62412 AND 814 ARE DELETED. TO BE CONSISTENT, THE COUNTY AND STATE DATA HAS BEEN PRESENTED SIMILARLY.

(A) NAICS 62412 EXCLUDED. INCLUDED IN TOTAL EMPLOYMENT, AND IN UNCLASSIFIED FOR COUNTY AND STATE. MERCED COUNTY EMPLOYMENT IN 62412 ESTIMATED USING THE RATIO OF JOBS TO ESTABLISHMENTS FROM STATEWIDE DATA.

(B) NAICS 814 EXCLUDED. INCLUDED IN TOTAL EMPLOYMENT, AND IN UNCLASSIFIED FOR COUNTY AND STATE.

(C) TOTALS MAY NOT MATCH SUM OF PARTS DUE TO INDEPENDENT ROUNDING AND DATA CONFIDENTIALITY.

SOURCES: QUARTERLY CENSUS OF EMPLOYMENT AND WAGES (QCEW), US BUREAU OF LABOR STATISTICS, 2023; BAE, 2023.

Worker Earnings

As shown in Table 3.1-3 below, Atwater residents have incomes below statewide levels. This results in large part from the pay levels associated with the jobs available in the city. Average annual pay for jobs in Atwater, at $42,733, is below that of the county ($50,912), and well below the average for California overall ($84,376).

TABLE 3.1-3: AVERAGE ANNUAL PAY FOR WAGE AND SALARY WORKERS, 2022

Location	Average Pay
Atwater	$42,733
Merced County	$50,912
California	$84,376

NOTE: WAGE AND SALARY EMPLOYMENT; EXCLUDES SOLE PROPRIETORS AND OTHER SELF-EMPLOYED PERSONS.

SOURCES: QCEW; BLS; EDD.

Resident Employment by Industry

Table 3.1-4 provides the industry distribution of workers for workers residing in Atwater, Merced County, and California, i.e., for the labor force. While the time period is different, the industry categorization varies, and the data is from a different source and should only be compared to the above data provided in Table 3.1-2 with caution, it appears that Atwater and Merced County both show an imbalance between workers and jobs, with more working residents than jobs. This is an indicator of net out-commuting from the city and the county. Commute flows are discussed in more detail below.

Similar to the jobs by industry in the city and county, the number of local residents employed in information, professional services and related "white collar" jobs is limited. Overall, the labor force appears relatively matched with the current local jobs, but the educational attainment and the particular skill sets of local residents may limit the ability of the city to attract industries such as professional services or life sciences that require higher education levels or specific training.

TABLE 3.1-4: EMPLOYED RESIDENTS BY INDUSTRY

NAICS Industry Sector		City of Atwater		Merced County		California	
		Number	Percent	Number	Percent	Number	Percent
11, 21	Agriculture, Forestry, & Mining	1,231	9.3%	12,326	11.4%	394,881	2.1%
23	Construction	1,064	8.1%	8,623	8.0%	1,235,586	6.6%
22, 31-33, 42, 48-49	Manufacturing, Utilities, Transportation & Warehousing, & Wholesale Trade	3,101	23.5%	23,440	21.7%	3,249,274	17.4%
44-45	Retail Trade	1,455	11.0%	11,804	10.9%	1,919,513	10.3%
52	Finance & Insurance	354	2.7%	1,836	1.7%	702,567	3.8%
53	Real Estate & Rental & Leasing	160	1.2%	1239	1.1%	405394	2.2%
51, 54, 55	Information, Professional Services, & Business Management	340	2.6%	3,923	3.6%	2,296,302	12.3%
56	Administrative & Support & Waste Management & Remediation Services	524	4.0%	4,191	3.9%	856,240	4.6%
61, 62	Education, Health Care, & Social Assistance	3,352	25.4%	23,797	22.0%	3,990,094	21.4%
71, 72	Arts, Entertainment, Accommodation, & Food Services	698	5.3%	7,682	7.1%	1,835,141	9.8%
81	Other Services	409	3.1%	4,275	4.0%	927,253	5.0%
92	Public Administration	502	3.8%	5,058	4.7%	864,476	4.6%
	Total, All Industries (a)	**13,190**	**100%**	**108,194**	**100%**	**18,676,721**	**100%**

NOTE:
(A) UNIVERSE CONSISTS OF ALL WORKERS BY PLACE OF RESIDENCE. PREVIOUS TABLE PROVIDES GOVERNMENT WORKERS REGARDLESS OF INDUSTRY; THIS TABLE DOES NOT SEPARATE OUT GOVERNMENT WORKERS EXCEPT THOSE IN PUBLIC ADMINISTRATION (E.G., PUBLIC SCHOOL STAFF WOULD BE IN THE EDUCATION, ETC. CATEGORY, NOT PUBLIC ADMINISTRATION IN THIS TABLE). AS A RESULT, COMPARISONS BETWEEN THESE TWO TABLES SHOULD BE MADE WITH CAUTION.
SOURCES: US. CENSUS BUREAU, AMERICAN COMMUNITY SURVEY 2017-2021 FIVE-YEAR SAMPLE PERIOD, TABLE S2403; BAE, 2023.

Resident Employment by Occupation

Resident occupations in Atwater and Merced County also reflect the local economy, with an orientation toward production and manufacturing jobs rather than professional services and information as shown in Table 3.1-5. Compared to California, Atwater and Merced County show high proportions of residents in "blue collar" occupations including production, transportation, and material moving occupations and natural resources, construction, and maintenance occupations. The city and county exhibit low concentrations of "white collar" jobs in computer, engineering, and science and in management, business, and financial occupations.

TABLE 3.1-5: EMPLOYED RESIDENTS BY OCCUPATION, 2017-2021

Occupational Category	City of Atwater		Merced County		California	
	Number	Percent	Number	Percent	Number	Percent
Computer, Engineering, & Science	1,086	8.2%	10,426	10.0%	3,138,038	17.3%
Management, Business, & Financial	597	4.5%	4,952	4.7%	1,848,659	10.2%
Sales & Office	2,538	19.2%	16,583	15.9%	3,545,812	19.5%
Production, Transportation, & Material Moving	2,637	20.0%	20,078	19.2%	2,190,054	12.1%
Health Practitioners & Technicians	1,235	9.4%	9,207	8.8%	1,709,679	9.4%
Service	1,549	11.7%	12,383	11.9%	2,344,883	12.9%
Education, Legal, & Arts	954	7.2%	10,732	10.3%	1,788,448	9.9%
Natural Resources, Construction, & Maintenance	2,594	19.7%	20,048	19.2%	1,590,478	8.8%
Total Employed Labor Force (a)	**13,190**	**100.0%**	**104,409**	**100.0%**	**18,156,051**	**100.0%**

NOTE:

(A) TOTALS MAY NOT MATCH OTHER TABLES DUE TO INDEPENDENT ROUNDING AND USE OF DIFFERENT SOURCES FOR THE ESTIMATES.
SOURCES: US. CENSUS BUREAU, AMERICAN COMMUNITY SURVEY 2017-2021 FIVE-YEAR SAMPLE PERIOD, TABLE C24010; BAE, 2023

Major Employers

As discussed above in Table 3.1-2, government establishments provide a large share of the jobs in Merced County, and account for a large share of the county's GDP, and accordingly, represent six of the top seven largest employers reported for Merced County. Mercy Medical Center is ranked fourth, and food processing businesses round out the list of top ten employers (see Table 3.1-6). Combined, these employers provide over 14,000 jobs in the county, approximately 12 percent of total wage and salary employment.

TABLE 3.1-6: MAJOR EMPLOYERS, MERCED COUNTY, 2022

Major Employers in Merced County	Location	Industry	Employees	Percentage of Total County Employment
UC Merced	Merced	Schools-Universities & Colleges Academic	2,811	2.41%
County of Merced	Merced	Government Offices-County	2,157	1.85%
Merced County Office of Education	Merced	Government Offices-County	2,015	1.73%
Mercy Medical Center	Merced	Hospitals	1,371	1.18%
Merced City School District	Merced	School Districts	1,364	1.17%
Merced Union High School District	Merced	School Districts	1,334	1.15%
Merced College	Merced	Schools-Universities & Colleges Academic	1,012	0.87%
Dole Packaged Foods LLC	Atwater	Food Processors	834	0.72%
Liberty Packing Company LLC	Los Banos	Packing & Crating Service	650	0.56%
Hilmar Cheese Company Inc.	Hilmar	Food Processors	650	0.56%
Total County Employment			**14,198**	**12.20%**

SOURCES: COUNTY OF MERCED, ANNUAL COMPREHENSIVE FINANCIAL REPORT, 2022, BASED ON DATA FROM EDD; BAE, 2023

Major Employers

As indicated above, the jobs-employed residents' ratio in Atwater is heavily weighted toward employed residents, indicating many of those residents commute elsewhere for work. Using a single consistent source of commute data for Atwater, as shown in Table 3.1-7, shows that there is only approximately one job in Atwater for every two working residents. Additionally, there is substantial cross-commuting, such that only 38 percent of the jobs within the city are held by local residents, and only approximately 20 percent of employed residents work in the city. Slightly greater than half of the remainder work within Merced County, with about one-quarter commuting outside the county.

Jobs/Employed Residents Balance and Commute Flows

As indicated above, the jobs-employed residents ratio in Atwater is heavily weighted toward employed residents, indicating many of those residents commute elsewhere for work. Using a single consistent source of commute data for Atwater, as shown in Table 3.1-7, shows that there is only approximately one job in Atwater for every two working residents. Additionally, there is substantial cross-commuting, such that only 38 percent of the jobs within the city are held by local residents, and only approximately 20 percent of employed residents work in the city. Slightly greater than half of the remainder work within Merced County, with about one-quarter commuting outside the county.

TABLE 3.1-7: COMMUTE FLOWS, 2017-2021

	Workers			Employed Residents	
Place of Residence	**Number**	**Percent**	**Place of Work**	**Number**	**Percent**
Atwater	**2,517**	**38.1%**	**Merced County**	**9,486**	**73.5%**
All Other Locations	**4,081**	**61.9%**	Atwater	2,517	19.5%
Total Working in City	**6,598**	**100.0%**	All Other Merced County	6,969	54.0%
			All Other Locations	**3,420**	**26.5%**
			Total Employed Residents	**12,906**	**100.0%**

SOURCES: U.S. CENSUS BUREAU, AMERICAN COMMUNITY SURVEY 2017-2021 FIVE-YEAR SAMPLE PERIOD, TABLES B08007, B08008, AND B08624; BAE, 2023.

Taxable Sales Trends

The relative level of purchases by households, businesses, and government provides another measure of the strength of a local economy. In California, taxable sales reports provide a way to assess local buying power; comparing sales on a per capita basis with other locales and larger regions can highlight an area's strengths and weaknesses. With the exception of most food for offsite consumption and prescription drugs, most end-user purchases of tangible goods in California are taxable, with data on the level of sales published by the state on a quarterly and annual basis. The sales and use taxes collected also provide a source of revenue for government entities to provide services to a community, thus enhancing the community's quality of life.

In 2022, Atwater had local taxable sales of approximately $392 million, 11 percent of the countywide total of $3.57 billion; statewide taxable sales were $782 billion. On a per capita basis, Atwater and Merced County had similar sales levels, at $12,419 and $12,551, respectively. (Note that in order to provide an appropriate comparison, county sales that are unallocated by city are excluded). This includes online sales and sales related to construction projects.

In contrast, statewide per capita sales were $20,019. The lower sales in Atwater and the county reflect the lower incomes and spending power of city and county residents with per capita income in Atwater and the county at less than 60 percent of the state level.

Detail by type of business type highlights strengths and weaknesses of particular retail and related sectors in Atwater. Atwater lags the county and state for motor vehicle-related retail, home furnishings and appliances stores, and building materials outlets. These types of retail are dominated by auto malls and "big box" stores, and sales to Atwater residents are being captured in other larger nearby cities, especially in the auto center and Home Depot and Lowe's stores in Merced city. Attracting a large building materials outlet to the city may represent a potential opportunity to capture additional taxable retail sales. On the other hand, Atwater has strong general merchandise store sales, due to the presence of large Walmart and Target stores which likely attract customers from nearby unincorporated areas such as Winton and McSwain. It should be noted, however, that the growth of online shopping has adversely affected the viability of local "brick and mortar" retail outlets, especially for certain types of goods such as electronics, books, and clothing, Nevertheless, as discussed below, Atwater and Merced County show extremely limited retail vacancies and continued demand for space according to CoStar, a service providing data on the retail, office, and industrial real estate inventory nationwide (see discussion and Table 3.1-8 below).

TABLE 3.1-8: TAXABLE SALES BY CATEGORY, 2022

	City of Atwater		
Category	Number	Percent	Per Capita
Motor Vehicle and Parts Dealers	$12,985,938	3.3%	$411
Home Furnishings and Appliance Stores	$5,103,456	1.3%	$161
Bldg. Matrl. and Garden Equipment	$7,314,452	1.9%	$231
Food and Beverage Stores	$34,629,202	8.8%	$1,095
Gasoline Stations	$54,011,056	13.8%	$1,708
Clothing and Clothing Accessories Stores	$27,693,037	7.1%	$876
General Merchandise Stores	$83,472,161	21.3%	$2,639
Food Services and Drinking Places	$61,097,926	15.6%	$1,932
Other Retail Group	$32,119,360	8.2%	$1,016
Subtotal, All Retail and Food	**$318,426,588**	**81.1%**	**$10,068**
All Other Outlets	**$74,378,366**	**18.9%**	**$2,352**
Total, All Outlets	**$392,804,954**	**100.0%**	**$12,419**

	Merced County		
Category	Number	Percent	Per Capita
Motor Vehicle and Parts Dealers	$412,670,490	11.6%	$1,452
Home Furnishings and Appliance Stores	$53,040,170	1.5%	$187
Bldg. Matrl. and Garden Equipment	$207,260,383	5.8%	$729
Food and Beverage Stores	$204,926,156	5.7%	$721
Gasoline Stations	$755,294,810	21.2%	$2,658
Clothing and Clothing Accessories Stores	$100,778,637	2.8%	$355
General Merchandise Stores	$450,826,994	12.6%	$1,587
Food Services and Drinking Places	$404,520,705	11.3%	$1,424
Other Retail Group	$202,273,007	5.7%	$712
Subtotal, All Retail and Food	**$2,791,591,352**	**78.3%**	**$9,825**
All Other Outlets	**$774,577,022**	**21.7%**	**$2,726**
Total, All Outlets	**$3,566,168,374**	**100.0%**	**$12,551**

	California		
Category	Number	Percent	Per Capita
Motor Vehicle and Parts Dealers	$107,327,993,599	13.7%	$2,746
Home Furnishings and Appliance Stores	$28,123,859,305	3.6%	$720
Bldg. Matrl. and Garden Equipment	$47,782,134,266	6.1%	$1,223
Food and Beverage Stores	$34,280,182,642	4.4%	$877
Gasoline Stations	$70,636,801,148	9.0%	$1,808
Clothing and Clothing Accessories Stores	$40,072,459,084	5.1%	$1,025
General Merchandise Stores	$63,997,398,244	8.2%	$1,638
Food Services and Drinking Places	$101,686,416,493	13.0%	$2,602
Other Retail Group	$75,396,667,543	9.6%	$1,929
Subtotal, All Retail and Food	**$569,303,912,324**	**72.8%**	**$14,568**
All Other Outlets	**$213,004,255,626**	**27.2%**	**$5,451**
Total, All Outlets	**$782,308,167,950**	**100.0%**	**$20,019**

NOTES:
EXCLUDES UNALLOCATED SALES AT THE CITY, COUNTY, AND STATE LEVEL, IN ORDER TO PROVIDE BETTER COMPARISON OF CITY WITH LARGER AREAS.
(A) BASED ON 2022 POPULATION ESTIMATES PUBLISHED BY THE DEPARTMENT OF FINANCE.

SOURCES: CALIFORNIA DEPARTMENT OF TAX AND FEE ADMINISTRATION (CDTFA); CALIFORNIA DEPARTMENT OF FINANCE; BAE, 2023.

Castle Commerce Center

Located adjacent to Atwater, the former Castle Air Force Base, now the Castle Airport and Castle Commerce Center, offers a key asset serving the local economic base. This facility includes a general aviation airport with an 11,800 foot runway, over 100,000 annual aircraft operations, and a developing multi-modal freight facility with rail service for local agricultural producers and industries, providing access to the neighboring BNSF line. The Airport is within a Foreign Trade Zone, and the Commerce Center includes office, warehouse, and R& D facilities and acreage, as well as aviation support and training facilities.

One of the activities taking place at the former air base is research on and testing of autonomous vehicles, including by Waymo. Merced County has provided funding to support this activity, including $2.1 million in 2021 to expand the 2.2-mile oval test track and other related facilities. These facilities are part of the TRC California Test Center, a branch of Ohio-based Transportation Research, Inc. More recently, in July 2023, the California State Transportation Agency awarded a Port and Freight Infrastructure Project grant of $49.6 million toward a $115.7 million project to build out an inland port at the Castle Commerce Center, providing multiple transportation modes for the shipment and transfer of goods, particularly agricultural products.

While the Airport and Commerce Center are outside city limits, the current and future facilities will provide jobs for city residents and generate economic activity within Atwater itself. The development of improved rail-related facilities will also provide environmental benefits by replacing multiple truck trips with fewer train trips, resulting in reduced emissions and better local air quality.

Future Job Growth

As shown in Table 1.3-10, Caltrans projects 17.8 percent growth in employment between 2020 and 2050, to a total of approximately 96,000 jobs, with most of this growth occurring by 2030. Assuming that Atwater maintains a constant share of Merced County jobs, employment in the city would reach 8,900 jobs in 2050, or about a 13 percent increase in jobs and non-residential real estate demand. It should be noted that this estimate for Atwater is based on a model trending out current conditions, and while macroeconomic conditions strongly influence regional trends, City actions with respect to economic development, land use, and other factors could influence the future of job creation in Atwater.

In addition to providing estimates of overall county employment, Caltrans projections allocate these jobs by major industry groups, as shown in Table 3.1-9. Caltrans projects that overall, employment growth in Merced County will lag California overall, with county job growth at 17.8 percent and statewide job growth at 24.1 percent between 2020 and 2050. County employment will continue to be dominated by jobs in the government, farm, and health and education employment sectors, with the top three sectors statewide being health and education, professional services, and government. The county proportion of jobs will continue to be particularly low relative to the state in the professional services sector as well as financial activities and information. In absolute numbers the largest employment gains in the county between 2020 and 2050 are projected to be in health and education, government, and leisure (which includes arts, recreation, and hospitality). These projections indicate that the overall economic base of Merced County will remain similar over time, with agriculture and related industries continuing to be a key component of the economy.

TABLE 3.1-9: EMPLOYMENT BY INDUSTRY PROJECTIONS

	Merced County					
	2020		2050		Change 2020-2050	
Major Industry Sector	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Private Sector						
Farm	14,210	17.5%	15,282	16.0%	1,072	7.5%
Construction	3,060	3.8%	3,696	3.9%	636	20.8%
Manufacturing	9,700	12.0%	9,589	10.0%	(111)	-1.1%
Transportation, Utilities	3,610	4.5%	4,770	5.0%	1,160	32.1%
Wholesale & Retail Trade	9,360	11.5%	9,802	10.3%	442	4.7%
Financial Activities	1,830	2.3%	1,884	2.0%	54	3.0%
Professional Services	3,740	4.6%	4,651	4.9%	911	24.4%
Information	230	0.3%	109	0.1%	(121)	-52.4%
Health & Education	10,320	12.7%	14,417	15.1%	4,097	39.7%
Leisure	5,330	6.6%	7,666	8.0%	2,336	43.8%
Government	18,400	22.7%	21,775	22.8%	3,375	18.3%
Unclassified	1,330	1.6%	1,947	2.0%	617	46.4%
Total Employment (c)	**81,120**	**100.0%**	**95,589**	**100.0%**	**13,852**	**17.8%**

	California					
	2020		2050		Change 2020-2050	
Major Industry Sector	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Private Sector						
Farm	407,000	2.5%	425,499	2.1%	18,499	4.5%
Construction	857,000	5.2%	963,681	4.7%	106,681	12.4%
Manufacturing	1,264,000	7.6%	1,293,873	6.3%	29,873	2.4%
Transportation, Utilities	732,000	4.4%	1,139,190	5.5%	407,190	55.6%
Wholesale & Retail Trade	2,170,000	13.1%	2,340,120	11.4%	170,120	7.8%
Financial Activities	818,000	4.9%	849,182	4.1%	31,182	3.8%
Professional Services	2,600,000	15.7%	3,206,576	15.6%	606,576	23.3%
Information	536,000	3.2%	651,323	3.2%	115,323	21.5%
Health & Education	2,737,000	16.5%	3,786,644	18.4%	1,049,644	38.4%
Leisure	1,484,000	8.9%	2,432,950	11.8%	948,950	63.9%
Government	2,493,000	15.0%	2,817,898	13.7%	324,898	13.0%
Unclassified	497,000	3.0%	691,054	3.4%	194,054	39.0%
Total Employment (c)	**16,595,000**	**100.0%**	**20,597,990**	**100.0%**	**3,808,936**	**24.1%**

NOTES: UNIVERSE CONSISTS OF ALL WAGE AND SALARY EMPLOYMENT BY PLACE OF WORK ON AN ANNUAL AVERAGE BASIS. DOES NOT INCLUDE SELF-EMPLOYED PERSONS NOT ON PAYROLL

SOURCE: CALTRANS LONG-TERM SOCIO-ECONOMIC FORECASTS BY COUNTY, 2022; BAE, 2023.

3.2 REAL ESTATE CONDITIONS

For-Sale Residential Market Conditions

Between June 2022 and April 2023, 176 full and verified home sales were recorded in Atwater, consisting almost entirely of single-family residences, as displayed in Table 3.2-1. Larger single-family residential units with three or more bedrooms were the most commonly sold unit type during this period. The median home sale price for single-family units was $360,000 and the median sale price for condominiums (based on a very limited number of sales) was $335,000.

TABLE 3.2-1: CHARACTERISTICS OF HOME SALES BY TYPE, CITY OF ATWATER, JUNE 2022 THROUGH APRIL 2023

Single-Family Residences						
Sale Price Range	**1 BD**	**2 BD**	**3 BD**	**4+ BD**	**Total**	**% Total**
Less than $550,000	1	8	110	48	167	97.7%
$550,000-$599,999	0	0	3	1	4	2.3%
$600,000-$649,999	0	0	0	0	0	0.0%
$650,000 or more	0	0	0	0	0	0.0%
Total, SFR Sales	**1**	**8**	**113**	**49**	**171**	**100.0%**
% of Total	*0.6%*	*4.7%*	*66.1%*	*28.7%*	*100.0%*	
Median Sale Price	**n.a.**	**$261,000**	**$350,000**	**$381,000**	**$360,000**	
Average Sale Price	**n.a.**	**$258,625**	**$354,239**	**$398,255**	**$361,711**	
Average Living Area (sq. ft.)	**n.a.**	**1,154**	**1,498**	**1,961**	**1,608**	
Average Lot Size (sq. ft.)	**n.a.**	**7,656**	**12,746**	**7,609**	**11,004**	
Average Price per Living sq. ft.	**n.a.**	**$226**	**$242**	**$210**	**$234**	

Condominium						
Sale Price Range	**1 BD**	**2 BD**	**3 BD**	**4+ BD**	**Total**	**% Total**
Less than $400,000	0	0	4	1	5	100.0%
$400,000-$499,999	0	0	0	0	0	0.0%
$500,000 or more	0	0	0	0	0	0.0%
Total, Condominium Sales	**0**	**0**	**4**	**1**	**5**	**100.0%**
% of Total	*0.0%*	*0.0%*	*80.0%*	*20.0%*	*100.0%*	
Median Sale Price	**n.a.**	**n.a.**	**$325,000**	**$350,000**	**$335,000**	
Average Sale Price	**n.a.**	**n.a.**	**$333,750**	**$350,000**	**$337,000**	
Average Living Area (sq. ft.)	**n.a.**	**n.a.**	**1,453**	**2,247**	**1,611**	
Average Lot Size (sq. ft.)	**n.a.**	**n.a.**	**4,986**	**2,945**	**4,578**	
Average Price per Living sq. ft.	**n.a.**	**n.a.**	**$239**	**$156**	**$222**	

NOTE: DATA REFLECTS SINGLE-FAMILY AND CONDOMINIUMS SOLD FROM JUNE 2022 THROUGH APRIL 2023 (MOST RECENT DATA AVAILABLE AT TIME OF RESEARCH).
SOURCES: LISTSOURCE; BAE, 2023.

Rental Residential Market Conditions

While the Census data provides insights into long-term trends regarding housing market conditions in Atwater, data from CoStar, a private data vendor tracking the real estate inventory across residential, industrial, retail, and commercial properties, reports more recent information on rents, vacancies, absorption, and new construction. CoStar multifamily data captures only a sample of the residential rental market and is not an exhaustive survey of the city or the county rental inventory; for instance, the total rental inventory includes single-family homes not counted by CoStar.

Table 3.2-2 provides a summary of recent multifamily rental residential market conditions for Atwater and Merced County. As presented below, CoStar reports approximately 2,700 market-rate multifamily units in Atwater, with a vacancy rate of only 1.7 percent. The citywide average apartment rental rate is $1,153, as of the second quarter of 2023, is a 2.9 percent rent increase from Q2 2022. The city's Q3 2023 average rent is slightly above the countywide average of $1,066, and the vacancy rate is below the county rate of 3.1 percent; nevertheless, this 3.1 percent rate is indicative of a strong apartment rental market in Merced County. CoStar reports no new multifamily rental units completed since Q2 2022, and none currently under construction. Unit absorption in Atwater has been modest since 2013. Countywide, CoStar reports 119 new units delivered from Q3 2022 through Q2 2023, with an additional 238 units under construction.

TABLE 3.2-2: COSTAR MULTIFAMILY RESIDENTIAL OVERVIEW, 2Q 2023

Multifamily Summary	City of Atwater	Merced County
Inventory, Q2 2023 (all unit sizes) (a)	2,712	13,642
% of Units	19.9%	100.0%
Average Unit Size (sq. ft.)	1,037	890
Vacant Units	45	424
Vacancy Rate	1.7%	3.1%
Average Rents, Q2 2022 - Q2 2023 (per unit)		
Average Rent, Q2 2022	$1,120	$1,066
Average Rent, Q2 2023	$1,153	$1,084
% Change Q2 2022 - Q2 2023	2.9%	1.7%
Net Absorption		
Ten-Year Net Absorption (units), Q3 2013 - Q2 2023	104	648
One-Year Net Absorption (units), Q3 2022 - Q2 2023	(9)	21
New Deliveries (units), Q3 2022 - Q2 2023	0	119
Under Construction (units), Q2 2023	0	238

SOURCES: COSTAR GROUP, 2023; BAE, 2023.

Retail Market Overview

Retail in Atwater is primarily concentrated in three nodes: adjacent to State Highway 99 near the Applegate Road exit, along or near Bellevue Road, and Downtown along or near Broadway.

The largest shopping center (by far) in Atwater is the Applegate Ranch Shopping Center at Applegate Road and Route 99, containing both a Walmart Supercenter and a Super Target, along with numerous other retailers in a power center configuration totaling approximately 470,000 square feet. Also at this retail node is the nearby Atwater Gateway Center, anchored by Tractor Supply.

Bellevue Road is home to several older centers anchored by supermarkets or second-generation replacement stores. Centers include the Atwater Plaza Shopping Center, Five Corners Crossings, Atwater Marketplace, Atwater Town Center, and the Atwater Shopping Center. Anchor tenants include Food 4 Less and Walgreens, Sams Foods Supermarket and Rite-Aid, Big Lots (in a former Kmart space), SaveMart and CVS, and a 99 Cents Only store.

Downtown Atwater is home to a mix of small independent retailers and service businesses along Broadway and nearby streets. The City has undertaken efforts to enhance "Old Town Atwater," including the 2009 Atwater Downtown Revitalization Strategy; work on this strategy is ongoing.

Overall, CoStar reports approximately 1.7 million square feet of retail space in Atwater, out of a total of 12 million square feet countywide (see Table 3.2-3). Vacancies are limited, at only 1.6 percent of the inventory in Atwater and 3.1 percent in Merced County. Average triple net asking rents in Atwater have increased 40 percent since 2013, from $12.17 to $17.06 per square foot in 2Q 2023. Asking rents for the county run slightly higher, reaching an average of $17.28 per square foot triple net in 2Q 2023. Both the city and the county exhibit net positive absorption of space in the last year and the last decade. CoStar shows very limited recent retail construction activity in Atwater, and approximately 100,000 square feet of retail space either completed or under construction in the last year countywide

TABLE 3.2-3: COSTAR RETAIL MARKET OVERVIEW, Q2 2023

Retail Summary	City of Atwater	Merced County
Total Inventory (sq. ft.), Q2 2023	**1,690,357**	**12,028,975**
Vacant Stock (sq. ft.)	26,584	387,102
Vacancy Rate	1.6%	3.1%
Avg. Asking NNN Rents		
Avg. Asking NNN Rent per sq. ft., Q2 2013	$12.17	$13.08
Avg. Asking NNN Rent per sq. ft., Q2 2023	$17.06	$17.28
% Change, Q2 2013 - Q2 2023	40.2%	32.1%
Net Absorption		
Net Absorption (sq. ft.), Q3 2013 - Q2 2023	107,315	686,692
Net Absorption (sq. ft.), Q3 2022 - Q2 2023	26,067	39,530
New Deliveries (sq. ft.), Q3 2022 - Q2 2023	**1,794**	**35,310**
Under Construction (sq. ft.), Q2 2023	**0**	**65,425**

SOURCES: COSTAR GROUP, 2023; BAE, 2023.

Retail Market Overview

Echoing the data on employment by major industry, CoStar data indicates that the office market in Atwater is somewhat limited, with a total reported inventory of about 340,000 square feet, out of a total of 3.6 million square feet in Merced County.

In Atwater, office uses are scattered throughout the city, and the city's zoning allows office uses for properties in the following categories:

- Office Commercial
- Central Commercial District
- Downtown Business District
- General Commercial District
- Business Park District Overlay (Mixed Use District)

The business park district designation provides zoning focused on encouraging more concentrated office uses on a larger scale than other areas, such downtown.

Office vacancies are extremely low at less than one percent, and the lack of available space results in no reported average asking gross rent for the city, although historically it appears that average rents are below those for the county. Office space in Atwater and Merced County has shown limited absorption and no inventory growth in the last year; the county has actually seen net negative absorption of office space for the most recent four quarters reported.

TABLE 3.2-4: COSTAR OFFICE MARKET OVERVIEW, Q4 2022

Office Summary	City of Atwater	Merced County
Total Inventory (sq. ft.), Q2 2023	**337,762**	**3,588,724**
Vacant Stock (sq. ft.)	2,250	97,098
Vacancy Rate	0.7%	2.7%
Avg. Asking Gross Rents		
Avg. Asking Gross Rent per sq. ft., Q2 2013	$9.83	$12.06
Avg. Asking Gross Rent per sq. ft., Q2 2023	n.a	$21.05
% Change, Q2 2013 - Q2 2023	n.a	74.5%
Net Absorption		
Net Absorption (sq. ft.), Q3 2013 - Q2 2023	14,566	295,665
Net Absorption (sq. ft.), Q3 2022 - Q2 2023	6,092	(31,720)
New Deliveries (sq. ft.), Q3 2022 - Q2 2023	**0**	**0**
Under Construction (sq. ft.), Q2 2023	**0**	**0**

SOURCES: COSTAR GROUP, 2023; BAE, 2023.

Industrial Real Estate Market Overview

Industrial development in Atwater is concentrated in the southern portions of the city, with a large cluster of properties to the south of Highway 99 and east of the Applegate Ranch Shopping Center. Other industrial uses, including the Teasdale Latin Foods facility, are found between the Union Pacific rail line and Highway 99. Much of the city south of Highway 99 is zoned for manufacturing, industrial and business park uses, along with some areas near the airport and in the westernmost areas of the city north of Highway 99. The city has three zones where industrial development is allowed:

- Business Park Overlay
- Light Industrial
- Heavy Industrial

CoStar reports approximately 1.2 million square feet of existing industrial space in Atwater, and 12.0 million in Merced County overall, as shown in Table 3.2-5. Vacancies for industrial space are extremely low, at 1.0 percent for Atwater and 2.3 percent for the county. The strong local market in Atwater is also shown through the relatively high average asking rents, at $12.00 per square foot, or twice the countywide average. The low Atwater vacancy rate and high rent levels may be due in part to a constrained supply, with little increase in the inventory and limited absorption since 2013. Over the same period, the county has seen absorption of almost 700,000 square feet. The county has shown very little new industrial space developed or under development since mid-2022; Atwater shows no additions to the industrial space inventory over the same period. The net absorption since 2013 as a percent of total industrial space is of the same order of magnitude as the limited gains in manufacturing employment.

TABLE 3.2-5: INDUSTRIAL MARKET OVERVIEW, Q3 2023

Industrial Summary	City of Atwater	Merced County
Total Inventory (sq. ft.), Q2 2023	**1,174,741**	**12,010,172**
Vacant Stock (sq. ft.)	11,372	281,264
Vacancy Rate	1.0%	2.3%
Avg. Asking NNN Rents		
Avg. Asking NNN Rent per sq. ft., Q2 2013	$3.00	$3.14
Avg. Asking NNN Rent per sq. ft., Q2 2023	$12.00	$5.99
% Change, Q2 2013 - Q2 2023	300.0%	90.8%
Net Absorption		
Net Absorption (sq. ft.), Q3 2013 - Q2 2023	1,728	699,806
Net Absorption (sq. ft.), Q3 2022 - Q2 2023	(6,372)	34,835
New Deliveries (sq. ft.), Q3 2022 - Q2 2023	**0**	**0**
Under Construction (sq. ft.), Q2 2023	**0**	**15,000**

SOURCES: COSTAR GROUP, 2023; BAE, 2023.

3.3 Fiscal Conditions

The following section provides an overview of the City's fiscal condition, including a summary of general fund revenue and expenditure trends. This also includes an assessment of the property tax generated within various locations throughout the City of Atwater, including potential annexation areas that may accommodate the projected residential and non-residential growth.

Existing Setting

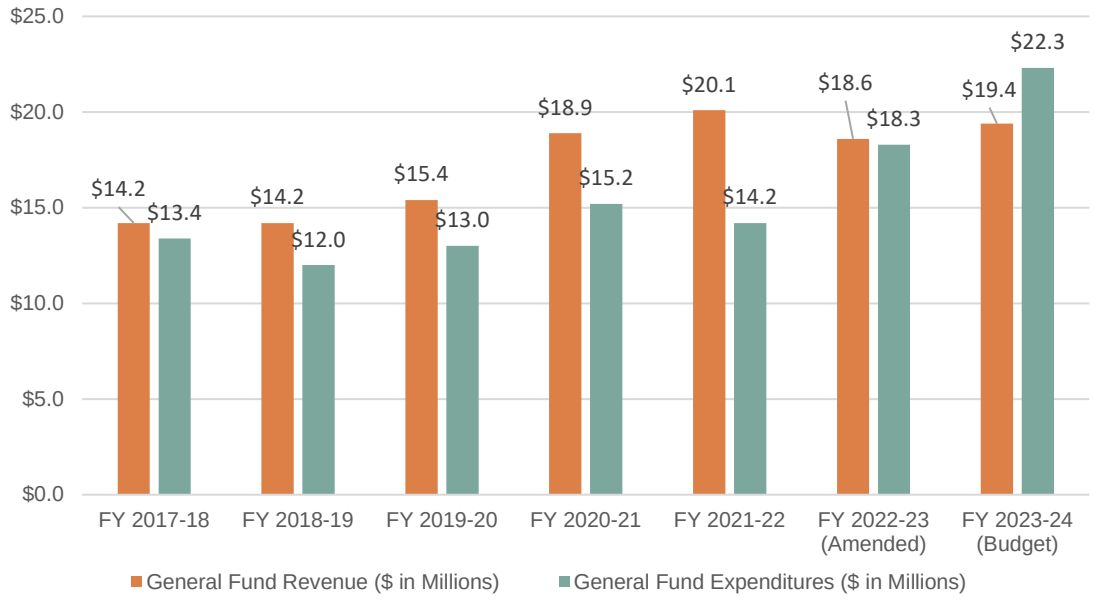
General Fund Balance

General Fund revenues and expenditures vary annually based on the changing conditions in the city. The majority of revenue generated within Atwater is attributed to property and sales taxes, while General Fund expenditures are primarily associated with police and fire services. Chart 3.3-1, below, shows City of Atwater General Fund revenues and expenditures from Fiscal Year (FY) 2017-18 through FY 2023-24.

Historically, General Fund revenues have exceeded expenditures, resulting in fiscal surpluses. As seen in Chart 3.3-1 annual General Fund revenues in Atwater have fluctuated between $14.2 and $19.4 million over the past several years. From FY 17-18 through FY 2021-22 revenues increased, and since then revenues have declined slightly or are projected to decline slightly, to $19.4 million in FY 2023-24.

Over the same seven-year period, General Fund expenditures have also fluctuated, with expenditures declining from $13.4 million in FY 201718 to $12.0 million in FY 2018-19, and then increasing each year and projected to reach $22.3 million in FY 2023-24.

Chart 3.3-1 General Fund Revenue & Expenditure Trends, FY 2017-18 to FY 2023-24

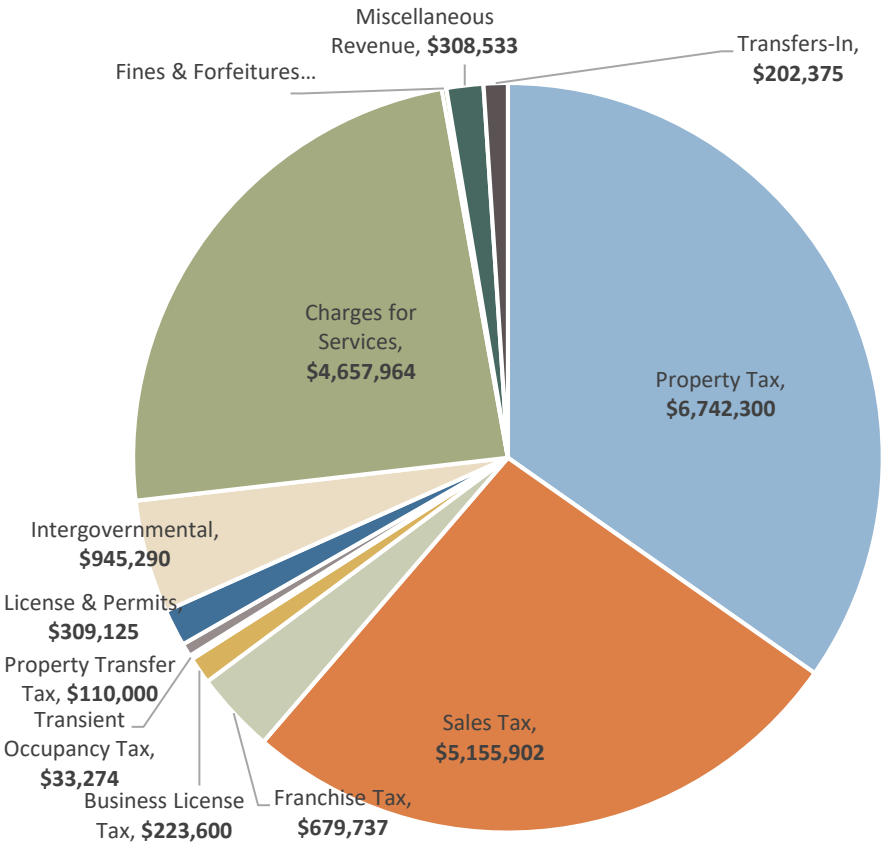


Sources: City of Atwater Finance Department, City Budgets, 2023; BAE, 2023

General Fund Revenue by Type

The City of Atwater relies on a mix of revenue sources to support its General Fund. As illustrated in Chart 3.3-2, the primary revenues assumed in the FY 2023-24 budget are taxes, with property tax and sales tax together providing over half of General Fund revenues. The other significant source of revenue is charges for services, which provide more than one-fourth of the General Fund revenue. The remaining revenues include but are not limited to other taxes, intergovernmental transfers, and miscellaneous revenues.

CHART 3.3-2 GENERAL FUND REVENUE SOURCES, FY 2023-24



SOURCES: CITY OF ATWATER FINANCE DEPARTMENT, CITY BUDGETS, 2023; BAE, 2023.

Tax Revenue

Taxes are the primary source of funding for Atwater's General Fund, projected to account for nearly two-thirds of the total revenue in FY 2023-24 (see Table 3.3-1). Of the taxes that the City anticipates accruing, sales and use taxes are the largest source of revenue ($3,932,988), while motor vehicle in-lieu tax ($3,315,123) and secured-roll property tax ($2,480,100) represent the second and third largest share of revenue. Transient occupancy tax, collected from overnight visitors by lodging places, is a relatively small source of General Fund revenue. Given Atwater's location along State Route 99, additional lodging development may represent an opportunity for further revenue diversification.

TABLE 3.3-1: GENERAL FUND REVENUE – TAXES, FY 2023-24

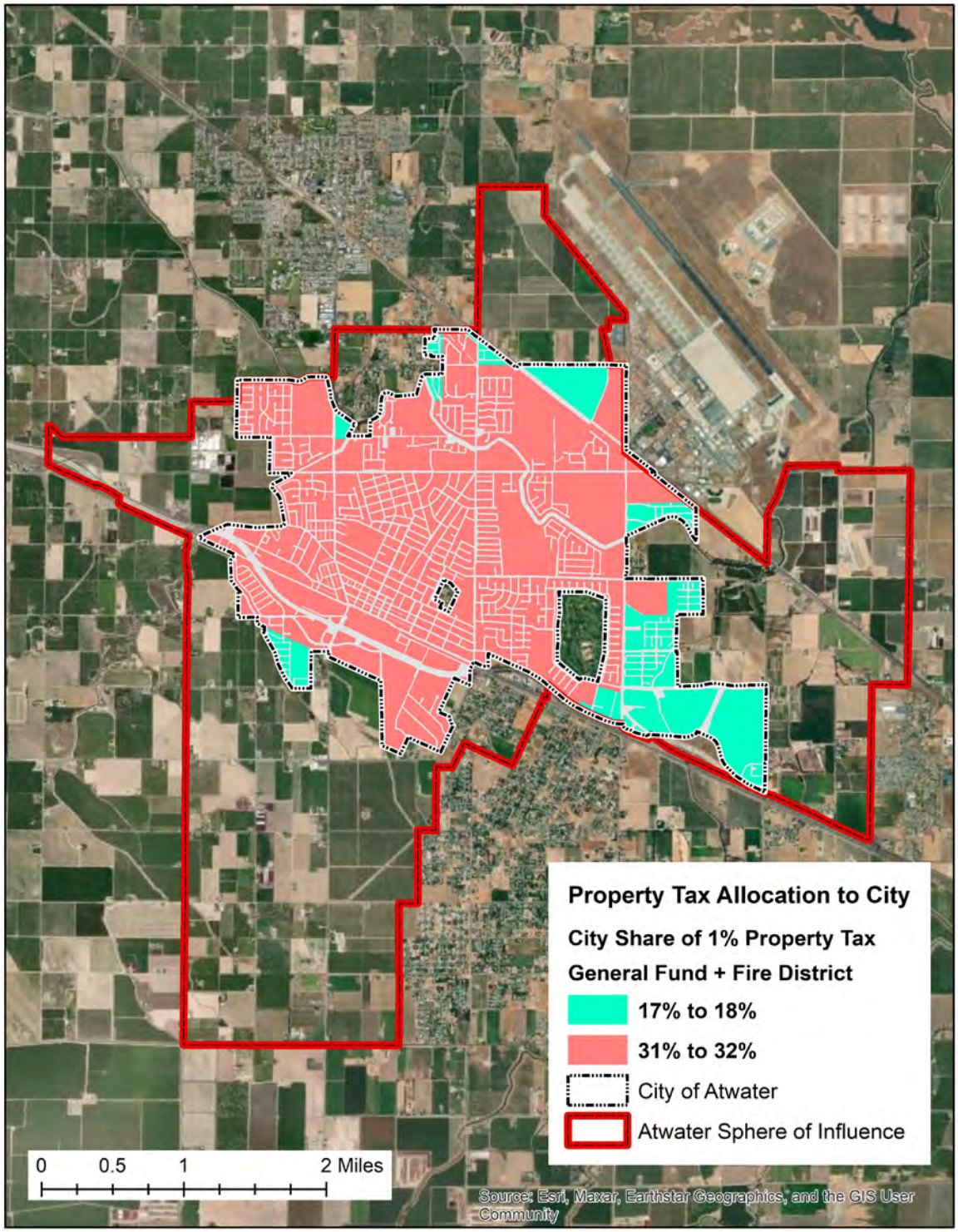
	General Fund Revenue - Taxes	
Category	**Number**	**Percent**
Sales & Use Tax	$4,426,700	35.7%
Sales & Use Tax-Public Safety	$199,202	1.6%
Business License Tax	$220,000	1.8%
Franchise Tax	$679,737	5.5%
Property Tax In Lieu Vehicle License Tax	$3,690,000	29.7%
Property Tax , Current Secure	$2,800,000	22.6%
Property Tax, Current Unsecure	$175,000	1.4%
Property Tax, Prior Secured	$300	0.002%
Property Tax, Prior Unsecure	$2,000	0.02%
Property Tax, Supplemental	$50,000	0.4%
Property Tax, Miscellaneous	$3,000	0.02%
Property Tax, Homeowner Exempt	$18,000	0.1%
Transient Occupancy Tax	$33,274	0.3%
Document Stamp Tax	$110,000	0.9%
Total Revenue, All Taxes	**$12,407,213**	**100.0%**

SOURCES: CITY OF ATWATER, CITY FINANCE DEPARTMENT; BAE, 2023

Property Tax Allocation Factors by TRA

Property taxes are a critical source of revenue for the City. Figure 3.3-1 shows the proportion of the one percent ad valorem property tax that flows to either the City General Fund or the Fire District for different tax rate areas (TRAs) in Atwater. The TRA tax share for Atwater properties falls in two ranges. As shown, TRAs covering most of the city provide between 31 percent and 32 percent of the total one percent tax rate to the city, but some peripheral areas, representing more recent annexations, only provide between 17 percent and 18 percent based on revenue sharing agreements with Merced County. For a given type of development, it will generally be more fiscally beneficial for the City to focus that development in areas where the City receives the highest share of the new property tax revenue. BAE also considered the potential property tax revenue that would flow to the City for parcels within the Sphere of Influence (SOI) that could potentially annex to the City for future development. Based on the City-County master revenue sharing agreement from 2017, the City would receive 25 percent of the General Fund property tax increment that would otherwise be allocated to the Merced County General Fund in these areas, while the County would continue to receive 100 percent of the share from the property tax base as of the date of annexation. The County Fire District would also continue to receive 100 percent of its base allocation, while the Atwater Fire District would receive 100 percent of the increment. These allocations of property tax would provide the City with a share of the tax increment roughly equivalent or marginally above the 17 percent to 18 percent from recent annexations, depending on the particular TRA in question. Much of the unincorporated area in the SOI is currently in agricultural uses, and the tax increment as the area is developed is likely to end up providing the majority of the overall property value and tax generation. In any case, the ability of the City's share of property taxes from potential annexations along with other funding sources to support the services required in that area should be evaluated carefully for any annexations under consideration.

Figure 3.3-1 Property Tax Allocation to City

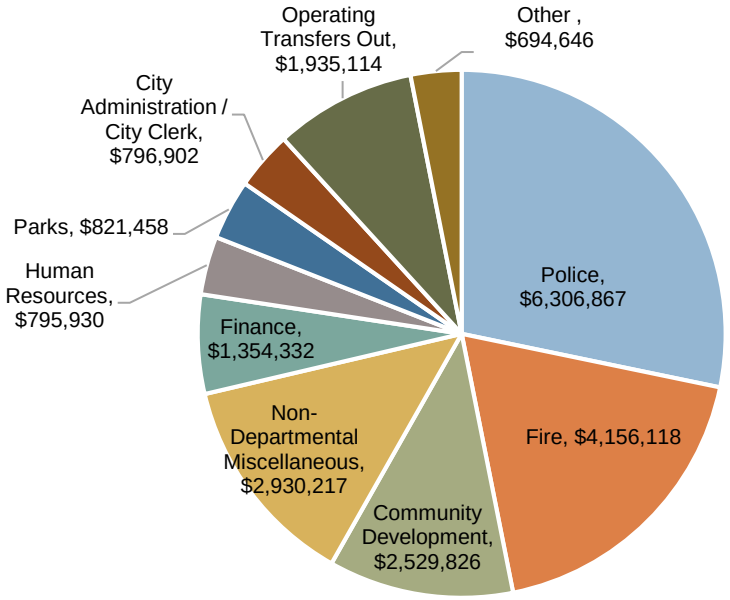


Sources: Esri; County of Merced

General Fund Expenditures

General Fund expenditures in Fiscal Year 2023-2024 are anticipated to be $22.3 million, of which Police and Fire constitute the largest shares, as shown in Chart 1.3-4 Police account for 28 percent, or $6.3 million of the total expenses, with Fire services at 19 percent, or $4.2 million. Community Development expenditures are budgeted at 11 percent ($2.5 million) of the General Fund total, miscellaneous non-department expenses at $2.9 million and the Finance department at $1.4 million. In descending order, the remaining expenses are Operating Transfers Out, Parks, City Administration/City Clerk, Human Resources, Recreation & Community Events, City Council, and City Treasurer.

Chart 3.3-3 General Fund Expenditure Sources, FY 2023-24



SOURCES: CITY OF ATWATER FINANCE DEPARTMENT, CITY BUDGETS, 2023; BAE, 2023

Fiscal Considerations

With the exception of the proposed budget for the current fiscal year, Atwater's General Fund has maintained a positive annual balance, allowing the City to build a reserve that even with this year's imbalance remains at 25 percent. Revenues and expenses have both increased gradually over the last several years. The substantial reserve could assist the City during any future periods of declining revenues and/or increasing expenses. The City should carefully assess the fiscal impacts of any annexation to ensure that the cost to provide services to the new areas does not exceed the revenue generated by the annexation. Given that Police and Fire services consume more than half of the City General Fund revenues, particular attention should be paid to the needs for expansion of these services in areas that the updated General Plan Land Use Element would plan for growth. Typically, providing services to infill development is more efficient than for newly annexed properties. Considering the more limited property tax allocated to the City from annexed properties this suggests the City could benefit from focusing new development as much as possible within infill areas where the City receives more robust property tax shares.

Chapter 4
Community Services, Recreation, & Facilities



The Community Services, Recreation, & Facilities chapter addresses community services within Atwater. Community services include fire protection, law enforcement, parks and recreation, schools, libraries, and other public facilities.

This Chapter includes the following topics:

4.1 Fire Protection

4.2 Law Enforcement

4.3 Parks and Recreation

4.4 Schools, Libraries, and Other Community Facilities

4.0 COMMUNITY SERVICES, RECREATION, AND FACILITIES

This chapter addresses community services and facilities within the City of Atwater. Community services and facilities include fire protection, law enforcement, parks and recreation, schools, libraries, and other public facilities. The information and analysis is intended to inform the General Plan Update process by providing both historical context and a baseline of existing community services and physical facilities. The location of the community services, recreation and facilities are shown on Figure 4.0-1. This chapter includes the following sections:

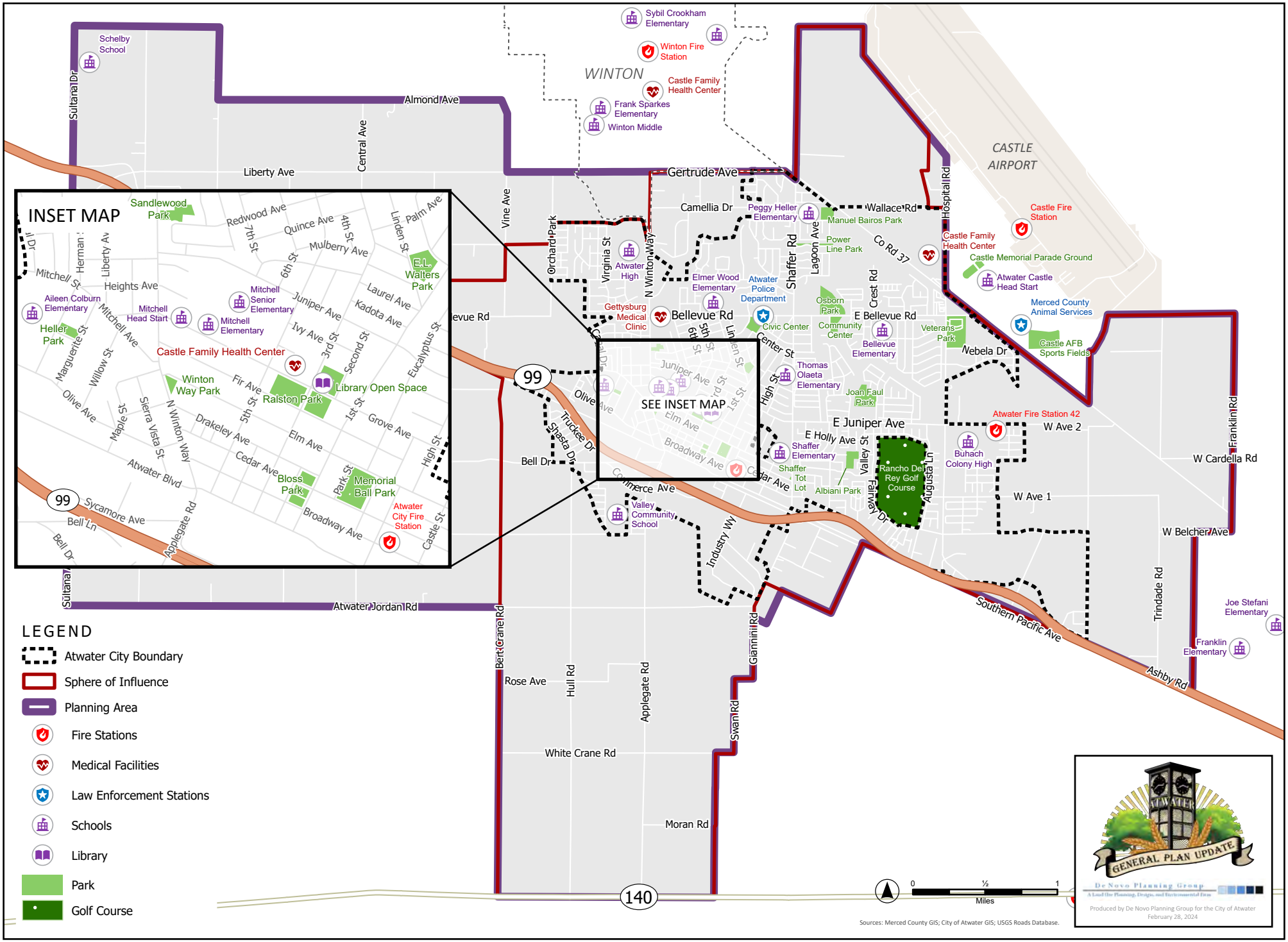
4.1 Fire Protection

4.2 Law Enforcement

4.3 Parks and Recreation

4.4 Schools, Libraries, and Other Community Facilities

Figure 4.0-1. Community and Recreation Facilities



FINDINGS, ISSUES AND OPPORTUNITIES

Parkland. The Existing General Plan Policy LU-23 strives to maintain or exceed a minimum standard of 3.0 acres of public parkland per 1,000 population. The current distribution of park acreage per 1,000 residents is approximately 2.52 acres.

Access to Recreational Facilities. Many residents may not have direct or ease of access to recreational facilities and programs within the city, limiting their opportunities for use of existing recreational facilities.

Accessibility. Existing community facilities and recreational areas may not be accessible or updated to address accessibility.

Accessibility Improvement Programs. The City of Atwater has undertaken a comprehensive evaluation of its policies, programs, and facilities to determine the extent to which individuals with disabilities may be restricted in their access to City services and activities.

Funding Constraints. Limited budgets and funding sources may hinder the development and maintenance of community services and facilities. This may include Insufficient funding for maintenance and upgrades.

Police Services. The ratio of funded sworn personnel to population is 0.90 officers per one thousand residents. This is less than the nationwide rate of 1.7 officers per thousand population for Group IV cities in the Western United States (25,000 to 49,999 population).

Police Department Attrition Rates. As described in the Department's 2022 Annual Report, the status of personnel is always a concern facing the Atwater Police Department. The Atwater Police Department's attrition rate during the year was 25% for sworn positions and 10% for non-sworn positions.

Fire Protection. As of October 2008, the City of Atwater contracts with the State of California – Cal Fire for fire protection services.

4.1 FIRE PROTECTION

Fire protection services within the City of Atwater is provided by the Atwater City Fire Department (through a service contract with the State of California – Cal Fire) at two station locations (Stations 41 and 42). The location of fire stations within Atwater is shown on Figure 4.0-1.

LOCAL REGULATORY FRAMEWORK

City of Atwater Municipal Code Chapter 15.28, California Fire Code

Chapter 15.28, adopts and establishes the California Fire Code as adopted by the California Building Standards Commission in the California Building Standards Code Title 24 of the California Code of Regulations.

EXISTING SETTING

ATWATER FIRE DEPARTMENT

The City of Atwater's Fire Department provides fire protection and emergency medical response services within the City limits. The Fire Chief reports to the City Manager and to the elected City Council. The Fire Department operated on an estimated budget of $4.2 million during the FY 23-24. The City Council approves the Fire Department's budget annually.

The City of Atwater reorganized their Fire Department and entered into a contract with the California Department of Forestry and Fire Protection (CAL FIRE) for the provision of fire protection services in 2008. The CAL FIRE contract provides daily staffing at fire stations, dispatch, management, incident command, training, investigation and fire prevention activities. CAL FIRE will provide services to the City and associated Fire District to fulfill the operational policies and direction of the City Council and District Board. The provision of these services will be through a contractual agreement and CAL FIRE will manage that service delivery within the budget and applicable policies approved by the Atwater City Council/Board of Directors and CAL FIRE policies. Budgeted funds are expended directly by the City and Fire District or by CAL FIRE, and CAL FIRE is reimbursed for their actual direct and in direct expenses for those services which are associated with the contract.

There are two stations that provide fire protection to the City of Atwater, these include Station 41 and Station 42. Station 41 primarily services 3.6 square miles North West part of Atwater, and responded to 3,228 total incidents in the year 2022. It has assigned apparatuses including Egnine-41, Engine-241 (Reserve Rig), Battalion command vehicles, Utility-41, Air Supply Fill Station Trailer, Rehab Supply Trailer. The daily staffing of station 41 includes 1 Fire Captain, 1 Fire Apparatus Engineer.

Station 42 primarily services 3 square miles in the southeast part of Atwater, and responded to 1,542 total incidents in the year 2022. It has assigned apparatuses including ladder Truck-42, Engine-42, Utility-42. The accommodations of Station 42 include training grounds and classroom for Atwater City Fire, Firefighter Reserve Program, SCBA Testing and Service Station, PPE Supply/Decontamination and Service Station, Substation for Atwater Police Department. The daily staffing of station 42 includes 1 Fire Captain, 1 Fire Apparatus Engineer.

The City of Atwater and the City of Merced have a mutual aid agreement from 1993 to assist each other during fire emergencies. Additionally, the City of Atwater's Fire Department has a First Responder Provider Agreement, established in 1993, with the County of Merced's Department of Public Health.

RIGGS AMBULANCE SERVICE

Merced County contracts with RIGGS Ambulance Service to provide 24/7 Advanced Life Support services to all of Merced County under an exclusive provider agreement. This agreement outlines the minimum standards and response times that are closely monitored by the Merced County EMS Agency. RIGGS Ambulance Service also provide Basic Life Support services for standby events and long-distance transfers.

4.2 LAW ENFORCEMENT

Provided below is a discussion of the law enforcement services in the City of Atwater. The Department's station is located at City Hall. The location of the Atwater Police Department is presented in Figure 4.0-1.

EXISTING SETTING

ATWATER POLICE DEPARTMENT

The Atwater Police Department is a full-service law enforcement agency conducting operations 24 hours per day, 365 days per year. The Department has units providing service in animal control, code enforcement, records, investigations, and general law enforcement. The Police Department provides primary 911 communications responsibilities for the City of Atwater. The Police Department is located within City Hall at 750 Bellevue Road, and there is a detective's station in Fire Station 42.

The Atwater Police Department employs 25 full time sworn officers (as of 2022). FY 2022-2023 budget currently funds 28 sworn officers including the Chief. The ratio of funded sworn personnel to population is .90 officers per one thousand residents. This is less than the nationwide rate of 1.7 officers per thousand population for Group IV cities in the Western United States (25,000 to 49,999 population). The status of personnel is always a concern facing the Department. The Department's attrition rate during the year was 25% for sworn positions. The Department lost three officers to failing to complete primary training and one to failing to make the probationary period.

To support sworn operations, the Department employs a mixture of part time and full-time civilian positions. The non-sworn positions provide Dispatch, Clerical, Evidence and Animal Control services.

The City has a mutual aid agreement with the Merced County Sheriff's Department. The County Sheriff's Department provides law enforcement to unincorporated areas in the County and maintains a countywide response time of 20 minutes. As development occurs within the SOI and land is annexed to the City, the City has historically used a Community Facilities District as a funding tool to meet staffing, equipment, and other operating needs. More recently, Measure H was implemented to help support public safety funding.

BUDGET

The Police Department is a General Fund Department. Due to the nature of Law Enforcement, it is a resource consumer not a self-sufficient activity. The adopted FY 22-23 budget of the Police Department in the General Fund is 5.2 million dollars. This constitutes 30% of the City's General Fund Budget. The total Police Department budget is 8.3 million dollars.

Revenues to support law enforcement activities come from a variety of sources. In 2013, the residents of Atwater passed "Measure H" a ½ cent Sales Tax Measure to enhance public safety. The Police Department was allocated two million dollars of the proceeds of this dedicated sales tax in FY 2023. The Department also receives approx. $650,000 in resources from a Community Facilities District, various grant programs, and the Merced County abandoned vehicle program. The Department lost its supplemental funding for two police officer positions that were deployed to the Merced Union High School District. To offset the loss, the Department reestablished its partnership with the Atwater Elementary School District and deployed an officer to service the District with partial offsetting revenue from the district. The Department participates in several grant programs to provide needed equipment. Justice Assistance Grants and Body Armor funding from the Federal Government are used on a yearly basis.

Recently, the community passed Measure B, a 1-cent sales tax to benefit public safety in the City of Atwater. This no sun-setting measure ensures funding for the Police Department going forward and allows for an

expansion of capabilities and infrastructure. This important resource takes effect with the FY23/24 fiscal year. The Department continues to emphasize budget management looking for any cost savings available to provide diverse service to the community.

FACILITIES

The Police Department is located at 750 Bellevue Road in a wing of City Hall. This facility was constructed in 1966 and houses the 911 communications center, records, patrol operations, animal control, administration, and code enforcement. The Police Department has two satellite locations that supports its mission. The investigations unit operates from a police substation that is a wing of fire station 42 adjacent to Buhach Colony High School. The Police Department also continues to utilize a secure fenced area and Conex box at the Public Works Yard as an evidence storage facility.

FLEET

The Police Department uses a mixture of unmarked and marked vehicles to accomplish its various missions. At the beginning of the year there were 23 vehicles in the Department's fleet. The average age of fleet assets was six years. The Department continued the fleet replacement program, the Department was able to purchase a patrol vehicle using surplus budget authority near the end of FY 22. Due to the shortages in police vehicles and supply chain issues, it was not placed in service until October of 2022.

The replacement of fleet assets will continue to be a challenge for the Department going forward. The supply chain issues caused by the pandemic still plague the acquisition of police vehicles and their equipment.

OTHER EQUIPMENT

The Police Department possesses a wide range of equipment to fulfill its mission. It has an enough variety of equipment to accomplish any task needed. The department added a new capability over the past year. The Department received a donation of a 24-foot mobile command post vehicle and equipment from the City of Grover Beach. This piece of equipment has been deployed several times during the year to major community events and incidents. It allows for the remote deployment of resources and communications gear to support Department operations away from headquarters.

There are deficiencies in spare equipment to allow for continuity of operations if a piece of equipment is out of service for repair. With the passage of the new revenue the department will continue to assess needs and ensure that budget resources are applied properly to address them. The Department has perfected the process of inventory control to track the purchase, depreciation, and replacement of Department Equipment. This process has allowed for the Department to purchase needed equipment on time to further the Department's mission.

CALLS FOR SERVICE STATISTICS

In 2020 the Department handled 23,175 calls for service. In 2021 the Department handled 24,437 calls for service. In 2022 the Department handled 25,499 calls for service. The 2022 calls for service numbers represents a 4% percent increase over 2021. The continued growth in the community and the addition of a School Resource officer at AESD contributed to the increase. Officer initiated calls for service also increased by 18% from 7,488 contacts in 2021 to 8,854 in 2022. This increase is attributed to the addition of a new code enforcement officer, increased abandoned vehicle abatement, and the increase in contacts with the unhoused population. Table 4.2-1 breaks down the comparison by year and by priority. Priority

one calls are considered emergencies and should be dispatched within a 3-minute period. Priority two calls are where most citizen-initiated activity is found. Priority three calls are mostly officer initiated.

TABLE 4.2-1: CALLS FOR SERVICE STATISTICS (2020 - 2022)

Category	2020	2021	2022
Priority 1	1,642	648	741
Priority 2	8,591	5,883	5,878
Priority 3	12,942	17,907	18,880
Non-Classified	226	0	0
Total	**23,401**	**24,438**	**25,499**

SOURCE: ATWATER POLICE DEPARTMENT, 2022 ANNUAL REPORT

CRIMES BY CATEGORY IN ATWATER

Statistics on the number of crimes by category of crime in Atwater during 2021 and 2022, as reported by the City of Atwater Police Department, are shown in Table 4.2-2 below.

TABLE 4.2-2: ATWATER CRIME STATISTICS (2021 - 2022)

Category/Crime	2021	2022
Total Violent Crimes	**446**	**624**
Homicide	2	5
Manslaughter by Negligence	0	2
Rape	23	16
Robbery	27	36
Assault	394	565
Total Property Crimes	**1,025**	**728**
Burglary	134	84
Larceny	704	574
Motor Vehicle Theft	187	70
Arson	0	0

SOURCE: ATWATER POLICE DEPARTMENT, 2022 ANNUAL REPORT

As shown in the table, the majority of crimes committed in Atwater consist of property crimes, primarily larceny. The total number of violent crimes in the city are up 39% over 2021 from 446 to 624 reports. However, crimes against property are down 29% over the last year. Additionally, in 2022, there have been 5 homicides reported in Atwater.

The Atwater Police Department has taken an aggressive stance to attempt to reduce the numbers of crimes in the city. Besides proactive patrol and apprehension activities, the Atwater Police Department has conducted operations that have targeted gang members, persons on probation and persons on parole. The Department has also supported neighborhood watches throughout the city to provide information and help to residents to protect themselves.

TRAFFIC ACCIDENT STATISTICS

The Atwater Police Department is responsible for traffic enforcement for the City of Atwater. Besides the common writing of citations for traffic violations, the Department responds to and investigates all the traffic accidents that occur in the city. The city continues to average roughly one traffic accident per day during a calendar year. In 2022, the total number of traffic accidents investigated was 390. This was a decrease of

approximately 12.3% from 2021 to 2022. The number of vehicle accidents resulting in injury decreased by 46.3% from 54 in 2021 to 29 in 2022.

The major cause of accidents are inattention and failure to follow posted traffic signs. Reasons for the continued decline in traffic accidents may be attributed to the effects of increased public awareness and traffic enforcement in the form of a part time motor officer and effective directed patrols.

Additional crash statistics and information is included in Chapter 2.0 (Circulation) of this Existing Conditions Report.

Animal Control Statistics

The Atwater Police Department is responsible for the animal control function for the city. Captured animals are housed at an animal control facility owned by the Merced County Sheriff's Office. By contract, the County shelters captured animals and collects fees fines and forfeitures for the Police Department

Regarding calls for service: The Unit handled 748 animal control calls for service for 2022. That averages to 2.04 calls per day. Sixty percent of calls for service on the average ended in some sort of enforcement action by Animal Control Officers. The other 40% of the calls received by the Department were either cancelled by the caller, the animal was unable to be located, or we were returning animals to their owners.

School Resource Officer Program

The Department renewed a partnership with the Atwater Elementary School District to provide law enforcement services to all the Elementary School Sites for the 22/23 school year. Some of the services provided to the district were:

1. Criminal Investigations
2. Outreach to Students
3. School Safety Presentations
4. Traffic and Patrol functions around the schools

School Resource Officer's (SRO) Statistics by category in Atwater during 2022 and 2023 school year is shown in Table 4.2-3 below.

TABLE 4.2-3: SRO STATISTICS (2022-2023)

Category/Crime	2023
Calls for Service	404
Traffic Stops	119
Reports Taken	120
Citations Issued	92
Arrests Made	**33**

SOURCE: ATWATER POLICE DEPARTMENT, 2022 ANNUAL REPORT

MISCELLANEOUS PUBLIC SAFETY

Multi-Jurisdictional Local Government Emergency Response

The Merced County Office of Emergency Services (OES) is the single coordinating center for major emergency activities. In cooperation with others, OES maintains and oversees the Multi-Jurisdiction Hazard Mitigation Plan, which is the Countywide disaster preparedness program. OES also provides training for first responders, businesses, and other governmental agencies.

4.3 PARKS AND RECREATION

This section addresses the provision of parks and recreation amenities in the City of Atwater. Parks and recreational facilities in the City of Atwater are maintained by the Public Works Department. The Recreation and Community Events Division plans, promotes and supervises sports programs, recreational activities, and special events.

Figure 4.0-1 identifies parks within the city.

LOCAL REGULATORY FRAMEWORK

The regulatory framework discussion describes local regulations that guide land use decisions. Adopted plans that pertain to the City are also described.

City of Atwater Municipal Code Chapter 12.08, City Parks

The purpose of Chapter 12.08 is to regulate the use of the parks and recreation in the city in order to provide maximum enjoyment in the use of such parks and buildings and minimum disturbance or interference with the use of surrounding areas. The chapter also includes standards for prohibited hours, injuring plants and wildlife, driving motor vehicles on grass plots, riding or driving animals or vehicles upon areas other than roadways, and establishes passive parks within the city.

TYPES OF PARKS

Parks are categorized into eight Park Classifications based upon the National Recreation and Park Association (NRPA) guidelines. Each classification serves a specific need in the community.

Mini Park. The mini park is used to address limited, isolated, or unique recreation needs of concentrated populations. The size of a mini-park ranges between 2,500 square feet and one acre in size. These parks may be either active or passive, but address a specific recreational need.

Neighborhood Park. Neighborhood parks serve a variety of age groups within a limited area or neighborhood. They range in size from 1 to 15 acres. The neighborhood park includes areas for active recreation activities such as field games, court games, playgrounds, etc. Passive recreation activities may include walking, viewing, sitting, and picnicking.

Community Park. Community parks are larger than neighborhood parks and serve several neighborhoods. They range in size generally from 15 to 25 acres. The community park may include areas for intense recreation activities such as competitive sports, swimming, tennis, playgrounds, volleyball, etc. There may also be passive recreation opportunities such as walking, viewing, sitting, and picnicking.

Regional Park. Regional parks are large multi-use parks that serve several communities within a particular region. The regional park generally provides both active and passive recreation opportunities, with a wide selection of facilities for all age groups. They may also include areas of nature preservation for activities such as sightseeing, nature study area, wildlife habitat, and conservation.

Special Use Area. Special use areas and parks are for specialized or single-purpose recreation activities. NRPA defines these parks as historical areas, nature centers, marinas, golf courses, zoos, conservatories, arboretums, arenas, amphitheaters, plazas, or community squares. There are no specific standards for size or acreage since each site will vary.

Linear Park / Linkages. Linear parks and linkages are built connections or natural corridors that link parks together. Typically, the linear park is developed for one or more modes of recreational travels such as walking, jogging, biking, in-line skating, hiking, and horseback riding. Linear parks may include active exercise and play areas.

Conservancy. Conservancies include areas for protection and management of the natural / cultural environment with recreation use as a secondary objective. Recreation use might include passive recreation such as viewing and studying nature and wildlife habitat.

EXISTING SETTING

The Atwater Public Works and Recreation Department manages park and recreational facilities and programming in the city, including the Atwater Community Center. Facilities within the city include developed parkland, several open space areas that serve outdoor and recreational needs, and regional facilities that serve Atwater. Table 4.3-1 lists all of the City parks, nearby recreational facilities, and other special use spaces along with the acreages.

TABLE 4.3-1: SUMMARY OF PARKS

Park Name	Facility Location	Acres
Local Facilities		
Power Line Park	City	1.73
Osborn Park	City	14.22
Veterans Park	City	18.06
Joan Faul Park	City	10.02
Albiani Park	City	5.01
Shaffer Tot Lot	City	0.10
Sandlewood Park	City	1.75
Heller Park	City	0.74
Winton Way Park	City	0.46
E.L. Walters Park	City	2.27
Ralston Park	City	4.67
Library Open Space	City	1.25
Bloss Park	City	1.69
Memorial Ball Park	City	3.93
Civic Center Grounds	City	4.93
Community Center Grounds	City	3.69
Manue Bairos Park	City	4.77
Total Area		**79.29**
Parkland Ratio (ac/k)		**2.52**
Nearby Facilities		
Castle AFB Sports Fields	Regional	16.77
Castle Memorial Parade Ground	Regional	5.51
Regional Acres		**22.27**
Parkland Ratio (Local+Regional)		**3.23**
Other Special Use and Semi-Public Facilities		
Rancho Del Rey Golf Course	City/SOI	118.29

As noted on Table 4.3-1 above, within the Atwater City limits there are 79.29 park acres of parks and public open space facilities. Therefore, with a 2023 population of approximately 31,418 the current distribution of park acreage per 1,000 residents is 2.52 acres.

In addition to parks, other facilities in the city are used for recreational activities. The Atwater Community Center, located at 760 East Bellevue Road, contains a multi-use room and a senior citizens' room, along with kitchen and restroom facilities. The Youth Center located at Veterans Park has an indoor basketball court and several activity rooms. The facility hosts a Boys and Girls Club. Another specialized recreational facility is the Rancho Del Rey golf course, a semi- private facility located within the southeastern section of the city, but under the jurisdiction of Merced County.

The parks and recreational facilities & improvements are funded through a Parks & Recreation Impact Fee, which is imposed on all new residential development in the city. The Parks & Recreation Impact Fee is a fee of $2,382 per detached Single-family residential dwelling unit and $1,998 per medium/high density residential that is imposed on all new residences.

On a regional scale beyond the Atwater City limits, a county park is located in Winton. Another county park, outside the Study Area, is Lake Yosemite northeast of Merced. This park offers boating, swimming, fishing, waterskiing, windsurfing, and picnic areas. The Merced Irrigation District manages the Lake McClure-McSwain Recreation area 27 miles northeast of Merced. There are campsites available, along with picnic areas, boating, waterskiing, fishing, swimming, and hiking activities. Approximately 75 miles northeast of Atwater is Yosemite National Park, a highly popular attraction offering numerous scenic vistas and recreational opportunities.

The Atwater Recreation Department plans, promotes and supervises a selection of sports programs and recreational activities for all ages which include leagues, special interest classes, specific sports clinics, toy drive, and other special events.

4.4 SCHOOLS, LIBRARIES, AND OTHER COMMUNITY FACILITIES

This section addresses the provision of schools, libraries, and other community facilities in the City of Atwater. Figure 4.0-1 provides the location of the public schools and library facilities within Atwater.

EXISTING SETTING

SCHOOL FACILITIES

The Atwater Elementary School District (AESD) provides public school services for elementary and middle school services(K-8) and the Merced Union High School District (MUHSD) provides high school services (grades 9-12) throughout the planning area. Table 4.4-1 lists schools in Atwater and the most recent enrollment for each school. As shown in Table 4.4-1, the schools in the city had a total enrollment of approximately 8,771 students, of which 4,930 were enrolled in elementary and middle school (grades K – 8) and 3,841 were enrolled in high school (grades 9 – 12). Table 4.4-2 and 4.4-3 provides a summary of the public school enrollment by grade within the entirety of the AESD and MUHSD.

TABLE 4.4-1: PUBLIC SCHOOLS SERVING ATWATER

School	Grades Served	Address	Enrollment 2022-2023 School Year
Elementary Schools			
Aileen Colburn Elementary	K-6	2201 Heller Ave, Atwater, CA 95301	412
Bellevue Elementary	K-6	1020 E Bellevue Rd, Atwater, CA 95301	680
District Office	K-8	1401 Broadway Ave, Atwater, CA 95301	1
Elmer Wood Elementary	K-6	1271 Bellevue Rd, Atwater, CA 95301	537
Mitchell Elementary	K-6	1761 Grove Ave, Atwater, CA 95301	553
Peggy Heller Elementary	K-8	201 Lake View Dr, Atwater, CA 95301	707
Shaffer Elementary	K-6	1434 California St, Atwater, CA 95301	534
Thomas Olaeta Elementary	K-6	2266 High St, Atwater, CA 95301	564
Intermediate Schools			
Atwater Senior Academy	7-8	1401 Broadway Ave, Atwater, CA 95301	8
Bellevue Senior Elementary	7-8	1020 E Bellevue Rd, Atwater, CA 95301	195
Mitchell Intermediate	7-8	1753 Fifth St, Atwater, CA 95301	739
AESD Total			**4,930**
High Schools			
Atwater High School	9-12	2201 Fruitland Ave, Atwater, CA 95301	2,095
Buhach Colony High School	9-12	1800 N Buhach Rd #1800, Atwater, CA 95301	1,746
MUHSD Total			**3,841**

SOURCES: CALIFORNIA DEPARTMENT OF EDUCATION EDUCATIONAL DEMOGRAPHICS UNIT ENROLLMENT FOR 2022-2023

TABLE 4.4-2: ENROLLMENT BY GRADE, AESD (2022-2023)

AESD	Grade Level													
	K	1	2	3	4	5	6	7	8	9	10	11	12	Total 2022-2023
Total	651	503	503	532	528	562	542	577	532	0	0	0	0	**4,930**

SOURCE: CALIFORNIA DEPARTMENT OF EDUCATION EDUCATIONAL DEMOGRAPHICS UNIT ENROLLMENT FOR 2022-2023, AESD

TABLE 4.4-3: ENROLLMENT BY GRADE, MUHSD (2022-2023)

MUHSD	Grade Level													
	K	1	2	3	4	5	6	7	8	9	10	11	12	Total 2022-2023
Total	0	0	0	0	0	0	0	0	0	979	982	943	938	**3,841**

SOURCE: CALIFORNIA DEPARTMENT OF EDUCATION EDUCATIONAL DEMOGRAPHICS UNIT ENROLLMENT FOR 2022-2023, MUHSD

LIBRARY SERVICES

The Atwater Public Library, is located in Atwater at 1600 3rd Street. The Library provides information and reading material in print and electronic formats. It also provides special programs for children and teens, designed to enhance learning and encourage a lifelong love of reading. Items include books, magazines, audiobooks, large print books, DVDs, music CDs, and language learning materials.

HEALTH CARE FACILITIES

Health care facilities within Atwater encompass medical clinics, specialty care, residential care facilities as well as private physicians and other medical practitioners. Local healthcare providers include Castle Family Health Centers, Inc. (CFHC), that includes three locations that Serve Atwater, Winton, and the surrounding county.

- The Castle Family Health Center at the Castle facility is located in the former Castle Air Force Base Hospital in Atwater and is the largest clinic providing primary care (53 exam rooms, including pediatrics), urgent care, specialty health care services (including but not limited to optometry, cardiology, orthopedics, nephrology, ENT, infectious diseases, pulmonology, chiropractic, acupuncture and urology), radiology, laboratory, pharmacy and health education.

- The CFHC at the Bloss facility is located in the former hospital of the Bloss Memorial Healthcare District in the City of Atwater. This facility houses nine exam rooms, as well as Women's Health (seven dedicated exam rooms), and Behavioral Health (three dedicated rooms).

- The CFHC at the Winton clinic is located in the unincorporated community of Winton and is the newest facility with eighteen exam rooms, three behavioral health offices and five dental operatories.

- Dignity Health - Mercy Medical Center provides regional medical service for Atwater and the surrounding community. The hospital is located at 333 Mercy Ave in the City of Merced. Dignity Health - Mercy Medical Center Hospital offers 24-hour emergency care, outpatient care, and general surgical care.

The Merced County Department of Public Health provides maternal and child health care programming, California Children's Services, child health and disability programs, vaccinations and general public health nursing to the community. Alcohol & drug programs are also organized under the Merced County Department of Public Health and provide residential treatment, out-patient counseling, perinatal programs and community education and information. Mental Health programs offered by the Merced County Department of Public Health provide services to citizens of all ages who have a demonstrated mental disorder or affective disorder. Services include but are not limited to in-patient services, residential services, out-patient counseling, medication monitoring and community education and referral.

CRITICAL FACILITIES

The existing General Plan defines "critical facilities" as those "which either (1) provide emergency services or (2) house or serve many people who would be injured or killed in case of disaster damage to the facility. Examples include hospitals, fire stations, police and emergency services, utility facilities, and communications facilities." Although identification of critical facilities is not required by codes pertinent to the safety element, it serves a useful purpose. It singles out those facilities for which special maintenance plans and actions are necessary to ensure their ability to function during emergencies or to reduce the impairment of services provided by these facilities. Within the Atwater planning area, the following are considered critical facilities:

- Atwater Fire Department stations (41&42).
- Atwater Police Department building.
- Atwater City Hall (collocated with Police Department).
- Merced County Fire Department Stations 82 (Atwater) and 88 (Winton).
- Water supply lines and wells.
- Wastewater treatment plant, pumping stations, and trunk lines.
- Major electrical transmission lines and substations.
- Major communication lines and microwave transmission facilities.

Critical facilities also include major roadways which may serve as principal evacuation routes.

Chapter 5
Utilities



The Utilities chapter addresses utilities within the Planning Area of the City of Atwater and surrounding areas. Utilities include the provision of water, wastewater, stormwater and drainage, solid waste services, electricity, and natural gas.

This Chapter includes the following topics:

5.1 Water
5.2 Wastewater
5.3 Stormwater and Drainage
5.4 Solid Waste
5.5 Electricity, Natural Gas, and Telecommunications

5.0 UTILITIES

This chapter addresses utilities within the City of Atwater. Utility services include the provision of water services, wastewater (sewer) services, stormwater and drainage, solid waste disposal, electricity, and natural gas. Utilities within the city and surrounding areas are an important part to ensuring a community's health, safety and quality of life. In an effort to identify and understand the key utility services, this chapter includes the following sections:

5.1 Water

5.2 Wastewater

5.3 Stormwater and Drainage

5.4 Solid Waste

5.5 Electricity, Natural Gas, and Telecommunications

FINDINGS, ISSUES AND OPPORTUNITIES

Water

Water Supply Source. The City relies solely on groundwater from multiple wells as its water supply source. The groundwater supply has declined over the last 80 years, requiring new, deeper wells and lowering of pumps in existing wells. A constraint is the limited depth of numerous municipal water wells. If the declining groundwater trend is not reversed, it may cause a reduction in pumping capacity of the City's water system. Considering the persistent groundwater overdraft issues spanning several decades, there is a growing need for a comprehensive contingency plan to address potential water supply shortages. The City did establish an initial Water Shortage Contingency Plan (WSCP) alongside the 2015 UWMP. This WSCP is comprised of four stages, enabling the City to progressively reduce its water demand to a level that aligns with the available water supplies, with the maximum reduction being 50 percent. It is recommended to revisit and update this plan every few years to align it with the current conditions and challenges faced by the City as needed.

Water Quality. With the exception of Well 21, all of the wells currently used to supply water to the public currently exceed the maximum contaminant level (MCL) for Trichloropropane (TCP). The City has added treatment equipment to achieve compliance with California water quality standards. Continual monitoring of the water quality is recommended along with possible opportunities to provide treatment at future storage reservoirs and wells.

Water Scarcity. California frequently faces drought conditions, which can put pressure on existing water resources. Ensuring a sustainable and reliable water supply is a significant challenge for all central California communities.

Aging Infrastructure: Many utility systems in Atwater may have aging infrastructure, which can lead to breakdowns, leaks, and service disruptions. Sometimes these systems continue to operate past their intended life span, and sometimes they are inadequate altogether to meet the needs of a growing community. Ensuring utility capacity to accommodate existing and future development will ensure adequate services and quality of life

Limited City Resources. Despite steady economic growth over the long term, without intervention, the City's expenditures could grow faster than revenues. The growth rate in revenues from taxes and fees tend to lag the growth rate of personnel, utility, fuel, and other costs. Simultaneously, the City will require significant new investments in capital and services to maintain current infrastructure and quality of life. These trends, when coupled with limitations on the ability of local governments in California to generate new sources of revenue, create continual pressure to reduce government services or continue deferring capital investments. In times of economic downturn, these limitations can lead to dramatic reductions in government services at precisely when those services are most needed by residents.

Opportunities for adding more capacity and resiliency to the City's water supply include the additional storage and new wells. Recommendations have been made within the Water Master Plan to add an additional 2.2 MG of storage (and associated pumping facilities). This will help mitigate existing storage deficiencies identified under existing demand conditions. Construction of Well 22 (and then Well 23) will also help mitigate the existing storage capacity deficiency and will increase the City's groundwater supply capacity to meet the existing maximum day demand.

To improve the distribution system, it has been recommended in the Water Master Plan to replace the small 4-inch piping with larger 8-inch pipelines, which will improve fire flow to residential areas. Strategic pipe alignments are also being considered to connect affected areas to larger diameter

pipelines. This plan includes replacing approximately 75,600 linear feet of 4-inch pipe, primarily in central Atwater. Additionally, proper looping is recommended to reduce pressure losses and supply fluctuations, ensuring a more reliable water supply.

To adequately meet future demands the City will need to expand its water infrastructure. Based on the findings of the 2019 Water Master Plan, the City anticipates needing to:

- Construct up to 10 new groundwater wells.
- Construct between 4 to 6 MG of additional storage (beyond the 2.2 MG that is currently planned) and associated booster pumping capacity, depending on the capacity of the new groundwater wells.
- Continue to replace existing pipelines and construct new pipelines to growth areas.

Wastewater

The optimal functioning of the sewer collection system and Wastewater Treatment Plant (WWTP) are crucial. Recent measures and observations have identified issues and opportunities for improvement. Addressing identified issues and opportunities within the sewer collection system and WWTP is essential for an efficient wastewater management system.

In recent years, the City has proactively addressed challenges in the sewer collection system and WWTP. The rehabilitation of the Applegate Lift Station, on the northeast corner of 1501 Sycamore, marked a milestone, involving above-ground relocation of pumps and motors to enhance maintenance access and operational reliability. The station's capacity remained unchanged, but the addition of a standby pump improved operational resilience.

The City is actively upgrading the Castle Sewer Lift Station to above ground relocation of pumps and motors, similar to what was done at the Applegate Lift Station.

Collection System. The sewer distribution piping requires comprehensive repair and replacement to address deficiencies and provide capacity for future development. Conducting a Pipeline Rehabilitation and Replacement (R&R) study is an opportunity to create a tool for project planning, identifying areas needing improvements and ensuring long-term collection system efficiency.

WWTP Capacity Expansion. The WWTP is critical, and to meet future growth demands, its capacity should be expanded from 6 mgd to 8 mgd over the next ten years to support future affordable housing developments. This expansion is essential for the WWTP to remain at the forefront of wastewater treatment and promote community sustainability.

5.1 WATER SERVICES

The City of Atwater provides water services to its businesses and residents. The City's most recent Water Master Plan Update was completed in 2019 and the 2020 Urban Water Management Plan (2020 UWMP) was finalized in March 2022. The purpose of the UWMP is to maintain efficient use of urban water supplies, continue to promote conservation programs and policies, ensure that sufficient water supplies are available for future beneficial use, and provide a mechanism for response during water drought conditions. Figure 5.1-1. Shows the City's existing water facilities.

The City's water supply primarily relies on groundwater from the Merced Subbasin (Figure 5.1-2)

LOCAL REGULATORY FRAMEWORK

The regulatory framework discussion describes local regulations that guide land use decisions. Adopted plans that pertain to the City are also described.

Merced Irrigation District (MID)

The Merced Irrigation District (MID) was formed on December 8, 1919. It is comprised of a service area spanning more than 164,000 gross acres Figure 5.1-3). Of that, approximately 132,000 are irrigable acres with 100,000 of them receiving MID water. The total distribution system of MID spans 862 miles. It is comprised of natural waterways, unlined and lined canals, sloughs and pipelines.

MID holds some of the most senior water rights in the state, owning and operating Lake McClure in the foothills of the western Sierra Nevada. The reservoir has a capacity of approximately 1,025,000 acre feet.

MID operates it for water storage, flood control, recreation, and hydroelectric generation, among other things. In addition to benefitting local agriculture and groundwater resources, the reservoir provides incalculable environmental benefits, including for migrating salmon.

Water is diverted below New Exchequer Dam from two locations along the Merced River: MID's Main Canal and its Northside Canal. MID's water conveyance system spans more than 860 miles and serves approximately 2,200 growers. The vast majority of them represent generational family farms spanning fewer than 50 acres. MID also maintains 215 wells in support of its conjunctive management activities for groundwater and surface water.

Merced Sustainable Groundwater Management Act (SGMA)

The Sustainable Groundwater Management Act (SGMA), passed in 2014, requires the formation of local Groundwater Sustainability Agencies (GSAs) to oversee the development and implementation of Groundwater Sustainability Plans (GSPs), with the ultimate goal of achieving sustainable management of California's groundwater basins. The purpose of the GSP is to bring the Merced Groundwater Basin, a critically overdrafted basin located within the San Joaquin Valley, into sustainable groundwater management by 2040. The Subbasin is heavily reliant on groundwater, and users recognize the basin has been in overdraft for a long period of time.

The County of Merced and water districts and cities within the Merced Subbasin formed three GSAs in accordance with SGMA: Merced Irrigation-Urban Groundwater Sustainability Agency (MIUGSA), Merced Subbasin Groundwater Sustainability Agency (MSGSA), and Turner Island Water District Groundwater Sustainability Agency #1 (TIWD GSA-1). The three GSAs coordinated efforts to develop the GSP for the Subbasin. With the adoption of this GSP, the GSAs will adopt the following sustainability goal for the Merced Subbasin:

"Achieve sustainable groundwater management on a long-term average basis by increasing recharge and/or reducing groundwater pumping, while avoiding undesirable results."

This goal will be achieved by allocating a portion of the estimated Subbasin sustainable yield to each of the three GSAs and coordinating the implementation of programs and projects to increase both direct and in-lieu groundwater recharge, which will in turn increase the groundwater and / or surface water available in the Subbasin.

EXISTING SETTING

DOMESTIC WATER SYSTEMS

The City provides water service to areas within Atwater's City limits. The water system delivers water to residences, commercial establishments, manufacturing plants, institutional facilities, and local parkland. In addition, Atwater sells water to the Castle Commerce Center and Airport, the former Castle Air Force Base, and existing airport-related businesses. The Public Works Department maintains the City's water collection and distribution system.

The City's water supply primarily relies on groundwater from the Merced Subbasin. The City owns and operates eight groundwater wells. Wells 13, 14, 15, 16, 17, 18, 19, and 21, are active and have a total current available pumping capacity of approximately 13,900 gallons per minute (gpm). Well 21 is intended to directly serve a federal prison. The total capacity without Well 21 is 12,200 gpm. The largest threat to the City's drinking water is water quality.

All wells except Well 21 currently exceed the maximum contaminant level (MCL) for 1,2,3-Trichloropropane (TCP). Treatment has been included at all wells that exceed MCL for TCP using granular active carbon. Well 15 also has had historic elevated levels of dibromochloropropane (DBCP). Treatment equipment for Well 15 was installed near the site to address these concerns. Well 13 was previously on standby due to elevated levels of ethylene dibromide (EDB) but is currently active and supplies water to the system on an as-needed basis. Well 20 historically had overheating problems during the summer and occasionally had to be shut down. It also previously had water quality problems, including elevated iron and manganese levels. Well 20 is currently being rehabilitated to include treatment equipment at the site and is projected to be active by the end of 2023. Additionally, the detection of per- and polyfluoroalkyl substances known as PFAS at Well 16 and 18 through U.S. Air Force sampling. All active wells are disinfected with sodium hypochlorite for maintaining chlorine residual in the distribution system.

The City maintains a centrally located elevated steel reservoir with a 1.0 million-gallon (MG) capacity which holds operational and fire flow storage. The City, in collaboration with the United States Bureau of Prisons, constructed Well 21, with a pumping capacity of approximately 1,700 gpm. This facility includes two 0.5-MG ground-level reservoirs that provide storage to both the prison and the City's distribution system, a hydropneumatic tank system, and a booster pump station to serve the prison. The booster pump station consists of three 40-horsepower parallel booster pumps, along with a fire pump capable of meeting the prison's fire flow demands. To provide an emergency water supply to the prison in the event of a loss to of Well 21, a one-mile-long, 12-inch pipeline connects the prison to the City's main system.

The prison's current water demand is approximately 900 gpm, and any surplus water from Well 21 (up to about 800 gpm) can be conveyed back to the City's main distribution system via the 12-inch diameter pipeline, provided that all three 450-gpm booster pumps are operational. This surplus capacity can be used by the City by manually adjusting the flow control valve at the pump station.

The City is currently developing a new well to supplement the City's groundwater supplies. The new well (designated as Well 22) is estimated to have a capacity of approximately 1,500 gpm and is located in north Atwater, as shown in Figure 5.1-1.

POTABLE WATER EXISTING DISTRIBUTION INFRASTRUCTURE

The City's distribution system primarily consists of ductile iron pipe, supplemented by asbestos cement, cast-iron, and polyvinylchloride (PVC) pipe segments with line sizes ranging from 4 to 14 inches in diameter. There is only one pressure zone throughout the City's main system, which is generally maintained between

45 and 65 pounds per square inch (psi) per the 2019 Water Master Plan. The City currently maintains a program for flushing the entire distribution system once per year. Figure 5.1-1. Shows the City's existing water facilities.

Figure 5.1-1. Existing Water Facilities

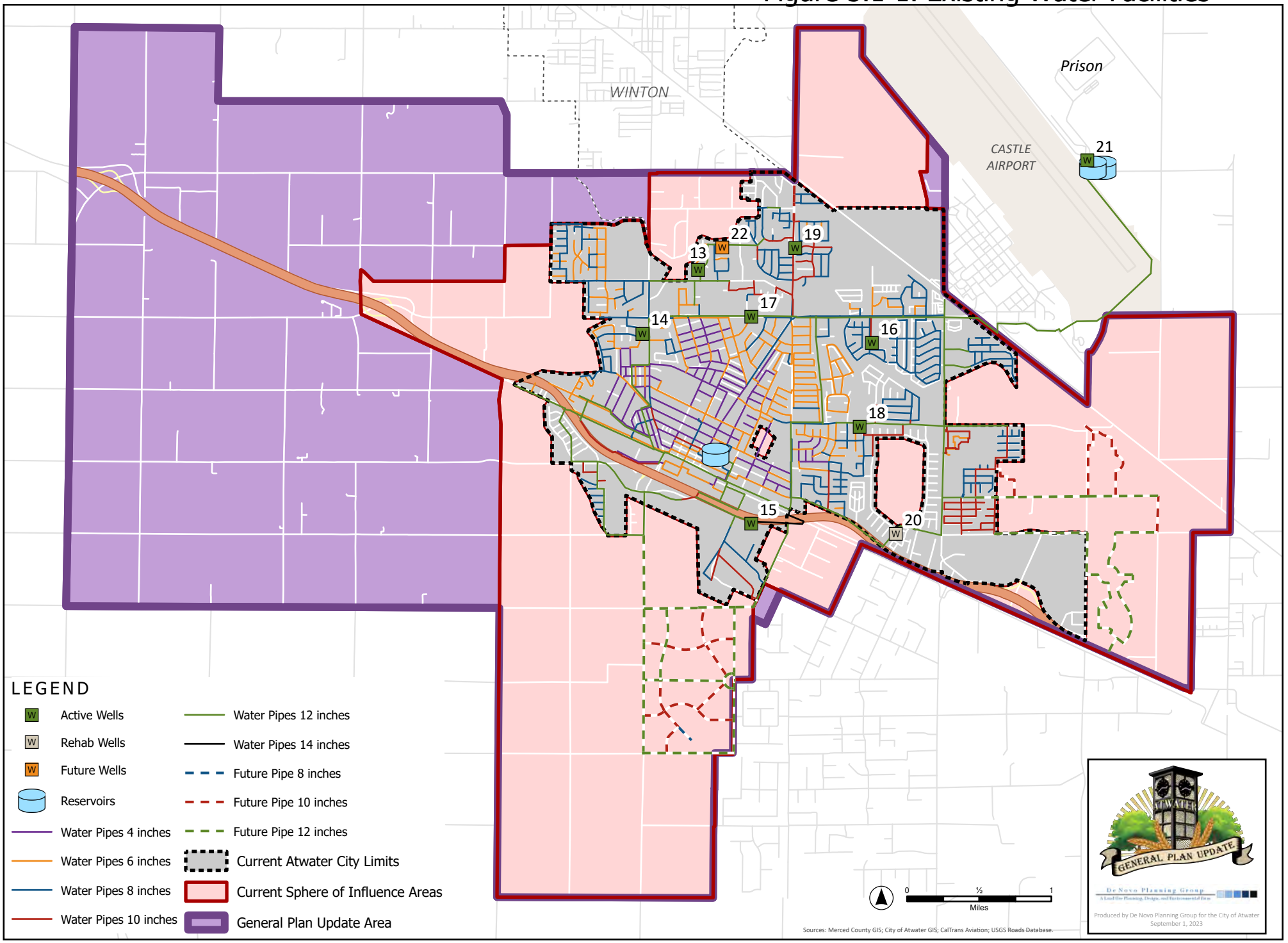


Figure 5.1-2. Groundwater Basins

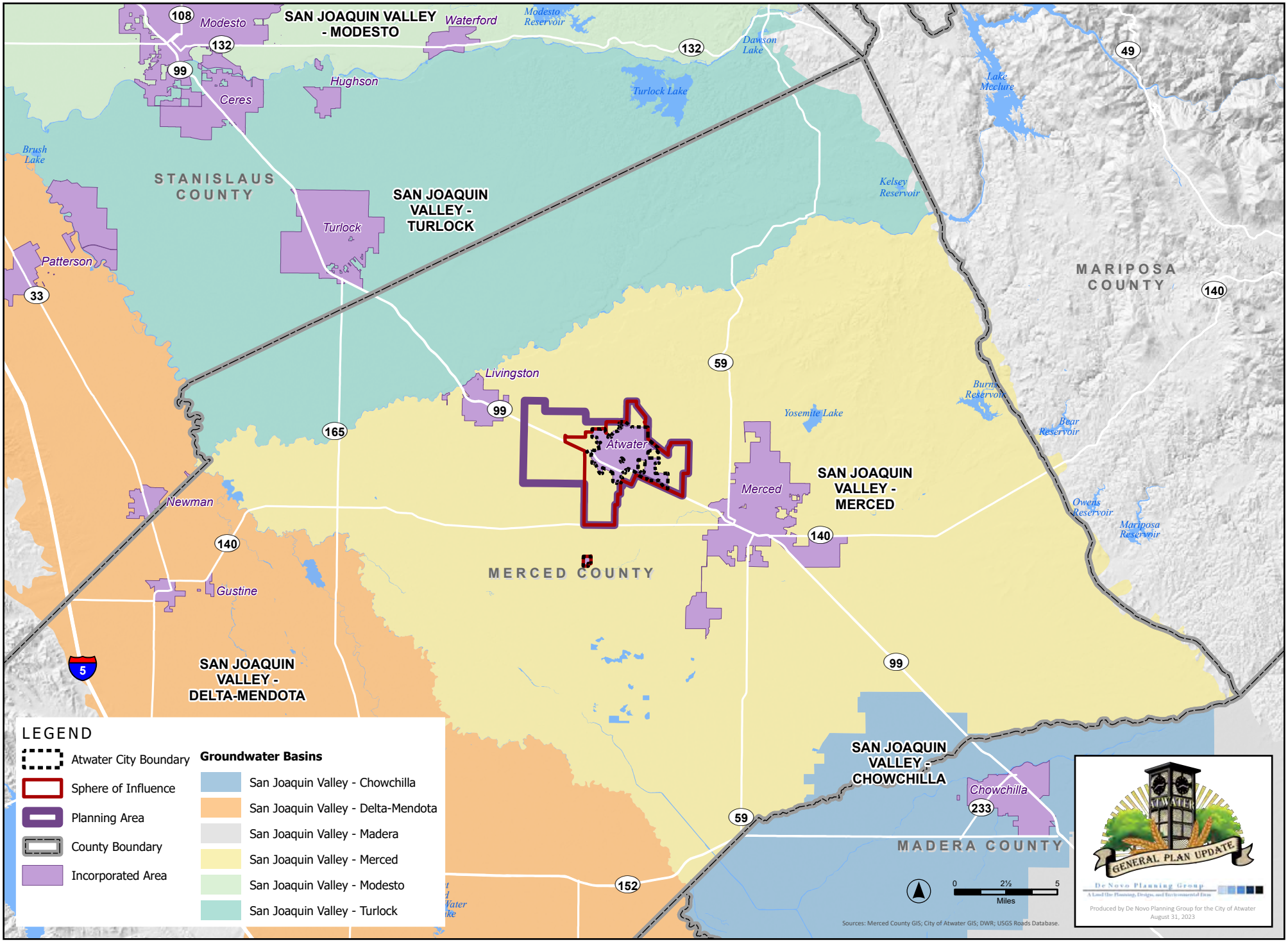
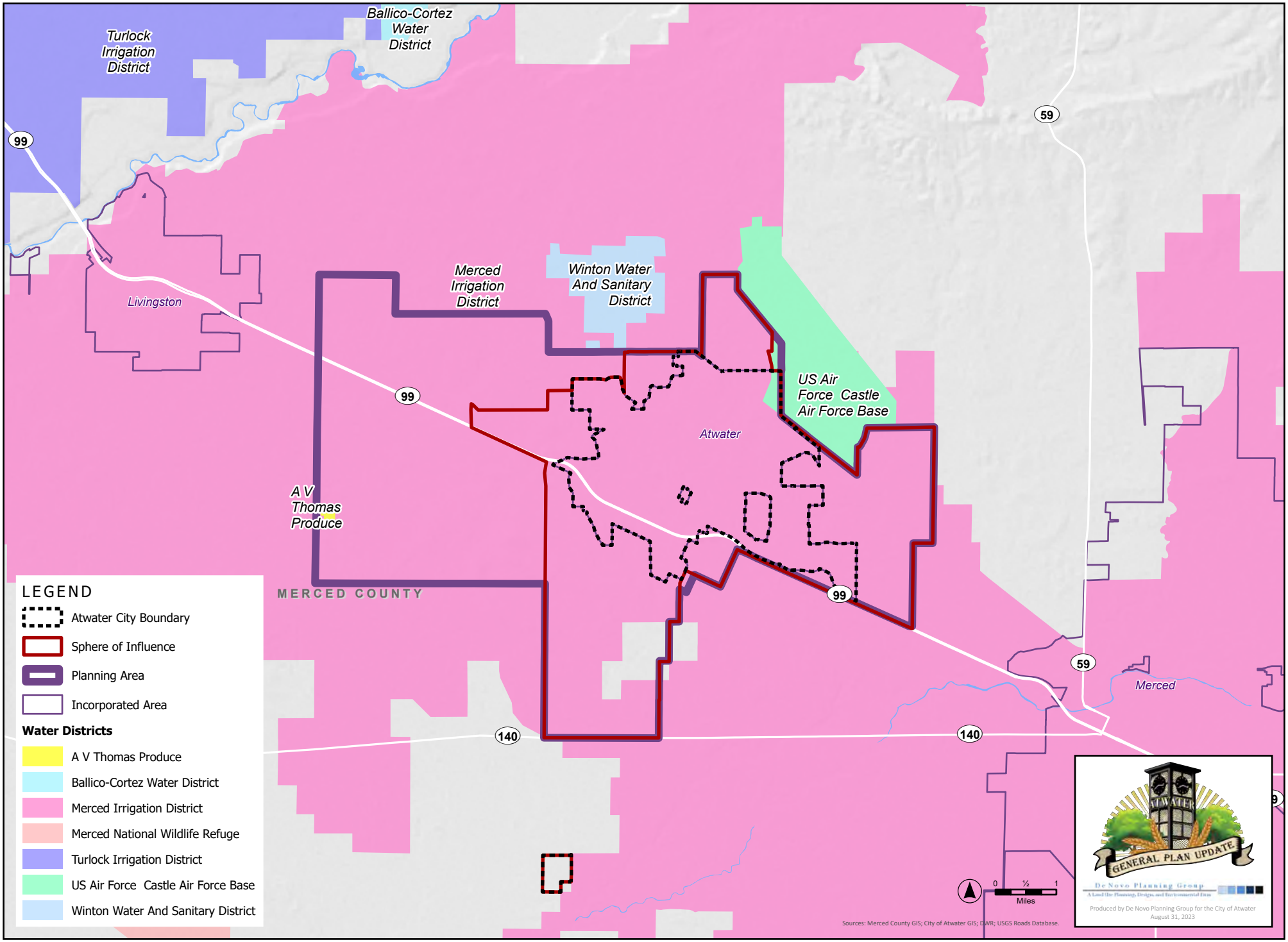


Figure 5.1-3. Water Districts



POTABLE WATER EXISTING SUPPLY AND DEMAND

Current water supply is groundwater from the Merced Subbasin, Basin Number 5-22-04, located in the San Joaquin River Hydrologic Region (groundwater basin). The groundwater aquifer from which the City obtains its water is not adjudicated. An adjudication consists of a groundwater basin in which all rights to water could be defined by a court. As a non-adjudicated basin, there are no defined legal pumping rights for the City and there are no legal constraints on groundwater pumping.

The availability of the City's water supplies in normal years are described in Chapter 6 of the 2020 UWMP and summarized in Table 5.1-1. The City's normal year supplies are adequate to meet projected normal year demands. Because the City relies solely on groundwater, the demand and supply are set equal as long as the demand is less than the capacity of the wells in the City's water system.

TABLE 5.1-1: NORMAL YEAR SUPPLY AND DEMAND COMPARISON

Annual Water Supply	2020	2025	2030	2035	2040
Supply Totals (acre-feet)	8,559	9,642	10,324	11,056	11,838
Demand Totals (acre-feet)	8,559	9,642	10,324	11,056	11,838
Difference	0	0	0	0	0

NOTES: VOLUMES FOR SINGLE FAMILY, MULTI-FAMILY, AND COMMERCIAL WERE ESTIMATED BECAUSE THESE USE TYPES ARE ONLY PARTIALLY METERED. VOLUMES WERE INCREASED BASED ON THE RATIO OF TOTAL SERVICE CONNECTIONS AND THE NUMBER OF METERED SERVICE CONNECTIONS FOR EACH USE TYPE.
UNITS FROM THE 2020 UWMP PER TABLE 2-3.
SOURCE: WEST YOST, 2023

In the 2020 UWMP, the City accounted for a 20 percent reduction in water supply and demand compared to typical years, specifically for the purpose of planning. This reduction was applied to the projected single dry year from 2020 to 2040. The analysis of this reduced supply and demand showed that the City's resources would be sufficient to meet the demands during a single dry year. The analysis extended to a more severe scenario, considering a five-consecutive-year drought condition, examining the driest five-year historical sequence for the supplier. In this case as well, the City's water supply and demand were found to be adequate to meet the projected demands according to the 2020 UWMP analysis.

Groundwater Basin Description

Current water supply is groundwater from the Merced Subbasin, Basin Number 5-22-04, located in the San Joaquin River Hydrologic Region (groundwater basin). The groundwater aquifer from which the City obtains its water is not adjudicated. An adjudication consists of a groundwater basin in which all rights to water could be defined by a court. As a non-adjudicated basin, there are no current defined legal pumping rights for the City and there are no legal constraints on groundwater pumping.

The Merced Subbasin is considered a high-priority basin facing critical overdraft conditions. The City, along with other members of the Merced Irrigation-Urban Groundwater Sustainability Agency (MIUGSA), is actively implementing measures outlined in the recently adopted Groundwater Sustainability Plan (GSP). These actions are aimed at achieving sustainable management of the groundwater basin, including the equitable allocation of the estimated sustainable yield among the Groundwater Sustainability Agencies (GSAs).

Portions of the San Joaquin River Groundwater Basin have been in a state of overdraft for many years, including the Merced Subbasin. The California Water Plan Update – Bulletin 160-98 estimated the average overdraft in the San Joaquin River Groundwater Basin to be 239,000 AF in 1995. The historical volume of groundwater pumped by the City over the past five years is provided in Table 5.1-2.

Table 5.1-2: Groundwater Volume Pumped

Location or Basin Name	2016*	2017*	2018*	2019*	2020*
San Joaquin River	6,664	7,164	7,970	8,157	8,559

*Notes: * Units of measure (AF, CCF, MG).*
Source: City of Atwater 2020 Urban Water Management Plan

According to the Water Master Plan, groundwater data spanning over the past 80 years reveals a net decline in the basin water levels. Despite this decline, recent demand trends indicate a stable situation where the basin can adequately meet existing water demands. While the basin is currently in overdraft, the stability observed in recent years is contingent upon maintaining current pumping levels. City water use efficiencies have improved in recent years, but future well rehabilitation and deepening may be necessary to address declining water levels because of increased population.

Surface Water Supplies

The City does not receive any water supply from surface water.

Recycled Water Supplies

No recycled water is currently being used in the City's service area.

5.2 WASTEWATER

The following provides a description of wastewater service in Atwater, including applicable local regulatory programs, existing wastewater services and infrastructure, and supply and demand conditions within the city. The wastewater generated by the City of Atwater is treated and disposed of at the City of Atwater Wastewater Treatment Plant (WWTP). The wastewater collection and treatment evaluation is presented below. The sewer collection system infrastructure that serves the City is shown on Figure 5.2-1.

KEY TERMS

Effluent: Effluent is an outflowing of water from a natural body of water, or from a man-made structure. Effluent in the man-made sense is generally considered to be water pollution, such as the outflow from a sewage treatment facility or the wastewater discharge from industrial facilities. In the context of waste water treatment plants, effluent that has been treated is sometimes called secondary effluent, or treated effluent.

NPDES: Water pollution degrades surface waters making them unsafe for drinking, fishing, swimming, and other activities. As authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters.

WWTP: Wastewater treatment plant. Treatment of wastewater may include the following processes: screening to remove large waste items; grit removal to allow sand, gravel, and sediment to settle out; primary sedimentation where sludge can settle out of the wastewater; secondary treatment to substantially degrade the biological content of the sewage; tertiary treatment to raise the quality of the effluent before it is discharged; and, discharge.

Septic Systems: On-site systems, commonly referred to as septic systems, are useful for handling the wastewater disposal needs of individual dwellings or commercial establishments for which connection to community facilities is not feasible. An on-site system consists of a septic tank that receives wastewater, allows the heavier solids to settle in the tank, and releases the remainder to an attached leach field. The leach field consists of underground perforated parallel lines through which water can seep into the surrounding soil. The solids which settled out of the wastewater in the septic tank must be periodically removed. Septic tanks work well in areas of low-density development where there is sufficient room to separate leach lines from potable water wells and lines. On-site systems are relatively inexpensive, easy to maintain, and contribute to water recharge in the area. However, on-site systems require certain soil conditions, topography, and water table conditions in order to work. If the proper conditions are not present, the leach field can become saturated and groundwater may become contaminated.

LOCAL REGULATORY FRAMEWORK

The regulatory framework discussion describes laws and regulations that guide land use decisions. Adopted plans that pertain to the City are also described.

City of Atwater Municipal Code Chapter 13.08, Sewer Service

Chapter 13.08, Sewer Services, provides for the maximum possible beneficial public use of the City's sewage collection and treatment facilities through adequate regulation of sewer construction, sewer use and industrial wastewater discharges; to provide for equitable distribution of the cost associated with such facilities; and to provide procedures for complying with requirements placed upon the City by other regulatory agencies.

EXISTING SETTING

WASTEWATER COLLECTION

The City's existing sewer system consists of about 69 miles of pipelines ranging from 4 inches to 36 inches in diameter. Residential, commercial, and industrial developments are served by the City's sewer system. The system is primarily gravity flow, but lift stations are used throughout the City due to flat topography. There are 21 lift stations in the City's sewer network (AECOM, 2018). The City's sewer network flows from the north to the former Wastewater Treatment Plant (WWTP) site at Commerce Avenue and the Atwater Drain, south of Highway 99. From there, it is pumped 6 miles south through a force main (a pressurized pipeline) to the newly constructed WWTP on Bert Crane Road.

The City's sewer collection system is not subject to measurable dry weather infiltration, as the City does not experience high groundwater levels. This characteristic contributes to the overall efficiency and reliability of the wastewater infrastructure.

At the discharge point of the former WWTP, a complex sewer collection system comprised of maintenance holes, pipes, and force mains from multiple sources converges south of Highway 99, directing flow to the new WWTP. This collection system includes:

- 24-inch and 21-inch sewer mains from the City collection system
- A 12-inch force main from Winton
- An 18-inch gravity main serving the industrial area north of Highway 99
- A 12-inch gravity main along Commerce Avenue
- A 33-inch Castle Airport sewer interceptor

These sources combine in maintenance holes linked by 36-inch pipes, flowing into the influent pump station wet well, which maintains a steady sewage level, resulting in a 2-foot tailwater condition within the sewer pipes. This complex collection system may have been simplified by the construction of a new influent pump station, discharging into two 24-inch force mains leading to the new WWTP.

OTHER EXISTING COLLECTION SYSTEMS

The Castle Airport area, northeast of the City, is serviced by a dedicated lift station and a 33-inch diameter interceptor sewer. Castle Airport encompasses the former Castle Air Force Base, which now houses the Castle Airport, the federal prison, Castle Gardens, and what was previously Air Force off-base housing (now repurposed for single-family residential land use). The sewage from this region bypasses the City's sewer network entirely. The ultimate contractual flow obligation for this area is 1.95 million gallons per day (mgd), although current flows are in the range of 0.3 to 0.4 mgd. Even when conveying the full 1.95 mgd, the

interceptor pipeline would only be approximately 35 percent full, leaving ample capacity within the interceptor for potential future increases (AECOM, 2010). Sewage from the old Castle Air Force Base off-base housing area is pumped to the Castle Airport pumping station. This area will eventually transition to a low-density residential development

The Winton Water and Sanitary District (WWSD) service area is northwest of the City. WWSD operates independently of the City's collection system, conveying sewage via a 12-inch force main to the collection system mentioned above, and routed to the new WWTP. The flow is within the range of 0.6 to 0.7 mgd, well below the ultimate contractual flow obligation of 2.0 mgd (AECOM, 2010). Initial estimates suggest a velocity of around 4 feet per second within the force main at a full 2.0 mgd. For optimal system performance, it is recommended to assess the impact on pressure junctions and pipes if flows from Winton exceed 2.0 mgd in the future.

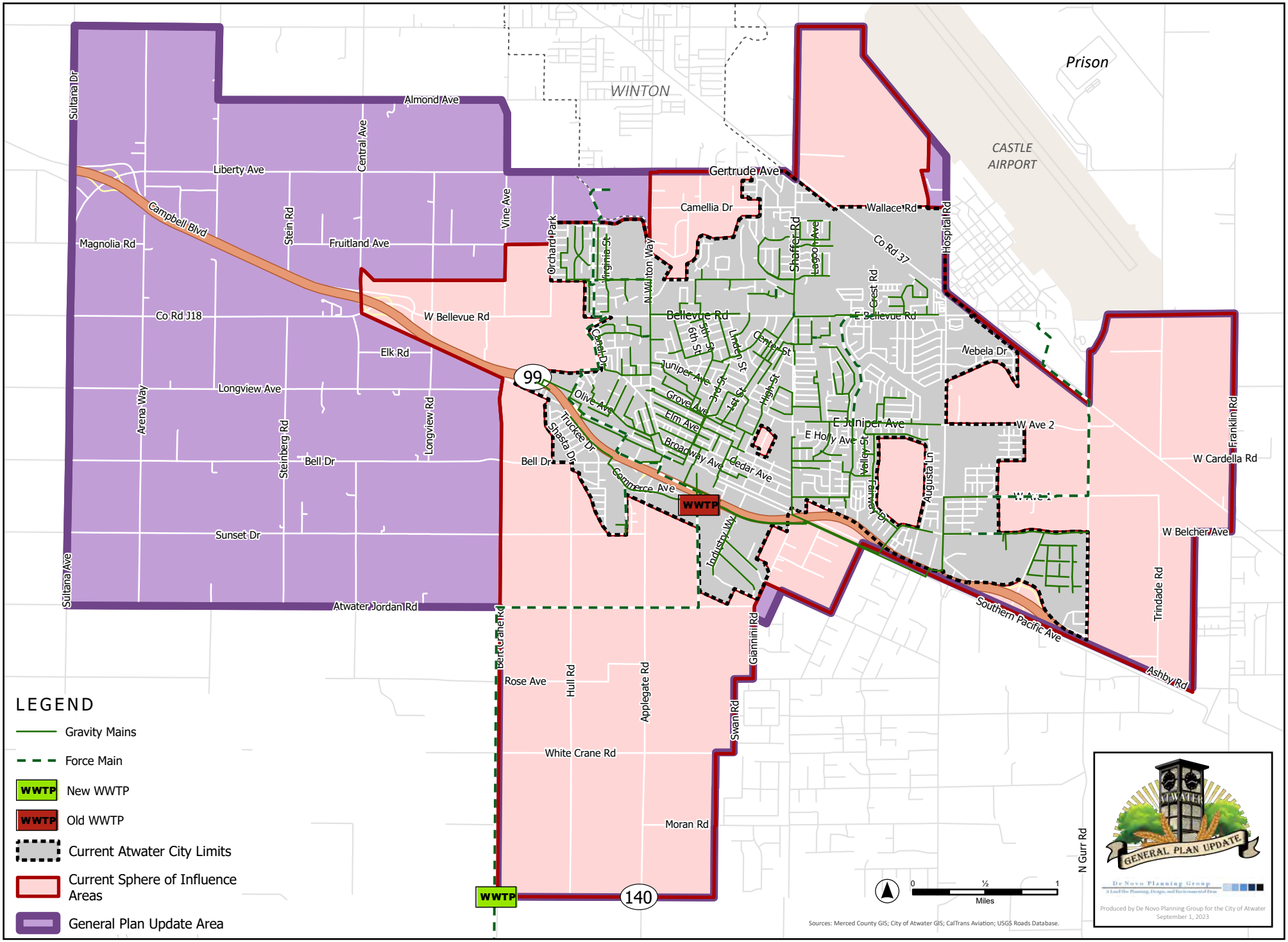
EXISTING TREATMENT PLANT

In 2012, a new WWTP with a capacity of 6 mgd was successfully constructed. The project encompassed all wastewater treatment processes, spanning from the headworks to ultraviolet disinfection. Solids management is efficiently handled through aerobic digesters and screw presses. The project also involved construction of several new buildings, including a 3,200 square-foot administration building that houses a laboratory, electrical power facilities, instrumentation, and support spaces. Additionally, two pre-engineered metal buildings were erected as part of the project. The first is a maintenance building, designed to serve as both a vehicle and equipment service area, complete with office space. The second is dedicated to equipment cleaning and storage. The site work included the installation of over 500 precast piles and comprehensive site grading to provide protection against 100-year floods. Notably, this project received recognition as the recipient of the American Society of Civil Engineers (ASCE) Sacramento Section's Wastewater Project of the Year award.

The WWTP is equipped with advanced treatment capabilities to meet the stringent discharge requirements set by the California Regional Water Quality Control Board to discharge to a drain/canal considered as waters of the United States. The treatment plant has been designed with future expansion in mind to accommodate increased flow up to 12 mgd resulting from ongoing development.

The ultimate discharge point for the WWTP remains the same as the previous WWTP. In 1978, Joseph Gallo and the City of Atwater made an agreement for Gallo Farms to utilize up to 6 mgd of treated wastewater from the WWTP. Presently, roughly 90 percent of this treated wastewater is discharged into the Atwater Drain, where it undergoes land application or disposal. The water then travels about 5 miles downstream to the Joseph Gallo Ranch. During the irrigation season, all the treated water from the Atwater Drain is used for crop irrigation on the Gallo Ranch. Any surplus water continues through the Gallo Ranch to the Bert Crane Sunshine Ranch, now owned by the U.S. Fish and Wildlife Service (USFWS), which has been restored to wetland habitat. During the winter months, most of the treated water reaching the Gallo Ranch is redirected to the USFWS wetland habitat.

Figure 5.2-1. Existing Sewer Facilities



Wastewater Flows and Treatment Capacity

The WWTP is owned by the City but operated by a private contractor, Veolia Water North America, West. The WWTP is responsible for receiving and processing wastewater originating from the City, the WWSD, and Castle Airport. The WWTP has a capacity of 6 mgd but is also designed to allow for expansion. This expansion, when needed, will allow the WWTP to handle flows from future development in all service areas.

The 2020 average daily flow was 3.24 mgd (City of Atwater, 2023). This value corresponds to approximately 54 percent of the current average daily permitted treatment plant capacity. In 2022, the average daily flow into the facility went down to 3.08 mgd (City of Atwater, 2023), representing approximately 50 percent of the permitted flow capacity. Examining historical influent flow data from 1997 to 2016, the average daily influent flow during this period was 3.23 mgd, with the highest recorded flow observed at 3.5 mgd in 2007, coinciding with a real estate market boom (AECOM, 2018). Historical population and wastewater flow rates are summarized in Table 5.2-1.

Table 5.2-1: Historical Population and Wastewater Flow Rates

Year	Population	Average Annual Daily Flow, (mgd)
2010	28,258	3.35
2015	29,086	2.97
2020	31,970	3.24
2022	32,372	3.08

Notes: Populations reported by the U.S. Census Bureau: 2020 population recorded in April of 2020 and 2022 is a population estimate value from July 2022. All other populations listed above are recorded in the 2018 Atwater Sewer Master Plan..
Source: West Yost, 2023

The City's wastewater is comprised of two main components: 1) base wastewater flow (BWF) from residential, commercial, and industrial sources and 2) infiltration/inflow (I/I) from extraneous groundwater and stormwater. I/I enters the sewers through defects or storm drain cross connections. BWF follows a consistent daily pattern, with peak flow in the early to mid-morning. I/I varies with groundwater levels and rainfall, peaking during heavy rainstorms based on the storm intensity and duration. Groundwater infiltration is most prevalent in late winter and early spring. Dry weather groundwater infiltration combined with BWF, is termed 'average dry weather flow' (ADWF). Peak dry weather flow (PDWF) is the highest hourly dry weather flow, and peak wet weather flow (PWWF) includes I/I during major storms. In Atwater, minimal dry weather infiltration occurs due to low groundwater.

Future Loading

Since the sewer flow rate fluctuates during the day, sewer pipe sizes are not designed for the average flow but instead for peak flows. To properly estimate the sewer capacity required to carry flow from various tributary areas, it is necessary to establish the relationship between the average daily flow generated and the maximum or PWWF experienced. The PWWF is then used to determine the necessary hydraulic capacity and, therefore, the size of the sewer.

The analysis performed with the 2018 Sewer Master Plan also concluded that there is no immediate need to expand the treatment plant. While the system was assessed using the 'historic' flow rates, which represent the average flows from Winton and Castle Airport in 2009, the final analysis results are based on the 'contract' flow rates to capture the complete sewer load potential. These projects go through buildout of the City's General Plan (not yet complete). Table 4-3 from the 2018 Sewer Master plan is shown below in Table 5.2-2. This table summarizes the predicted wastewater flow rates.

TABLE 5.2-2: PREDICTED WASTEWATER FLOW RATES FROM 2018 SEWER MASTER PLAN

Planning Year	Winton, Present Flows	Winton, Contract Amount	Castle Airport, Present Flow)	Castle Airport, Contract Amount	City of Atwater	Total with Contract Amounts
Average Day Flows, mgd						
2009	0.73(b)	1.00(c)	0.42(b)	0.95(c)	3.05	5.00
2017 (existing)	0.73(b)	1.00(c)	0.42(b)	0.95(c)	3.07	5.00
Midterm	--	2.00(d)	--	1.95(d)	4.05	8.00
Buildout (2020)	--	2.00(d)	--	1.95(d)	6.52	10.47
Peak Day Flows, mgd						
2009	0.73(b)	1.00(c)	0.42(b)	0.95(c)	3.80	7.28
2017 (existing)	0.73(b)	1.00(c)	0.42(b)	0.95(c)	3.45	7.28
Midterm	--	2.00(d)	--	1.95(d)	4.55	10.19
Buildout (2020)	--	2.00(d)	--	1.95(d)	7.33	14.50

NOTES:

a) CASTLE AIRPORT CONSISTS OF THE ENTIRE OLD AIRFORCE BASE, THE FEDERAL PRISON (0.2 MGD), CASTLE GARDENS AND THE OLD AIR FORCE OFF-BASE HOUSING REDEVELOPED FOR SINGLE RESIDENTIALS HOUSING.

b) FLOW VALUES REFLECT THE ACTUAL FLOWS FROM WINTON OR CASTLE AIRPORT AS OF 2009 RECORDS. THE SAME NUMBER WAS USED FOR THE PURPOSE OF THE 2017 REPORT UPDATE.

c) FLOW VALUES REFLECT THE CONTRACTUAL AMOUNT THE CITY'S WWTP IS OBLIGATED TO ACCEPT FROM WINTON AND CASTLE AIRPORT. AS OF 2009 WINTON HAS A CONTRACTUAL AMOUNT OF 1 MGD AND CASTLE AIRPORT HAS A CONTRACTUAL AMOUNT OF 0.95 MGD. THE OLD OFF-BASE HOUSING IS ACCOUNTED FOR IN THE CITY OF ATWATER FLOWS (0.105 MGD) AND NOT ACCOUNTED FOR IN THE 0.95 MGD.

d) FOR THE MIDTERM AND BUILDOUT FUTURE SYSTEM, A PREDICTED 2.0 MGD SEWER LOADING FROM WINTON AND A 1.95 MGD SEWER LOADING FROM CASTLE AIRPORT ARE ASSUMED. A PREDICTED 0.71 MGD SEWER LOADING FROM THE OFF-BASE HOUSING WAS ALSO ASSUMED FOR BUILDOUT ONLY (0.105 MGD FOR MIDTERM). THE OFF-BASE HOUSING FLOWS WERE ACCOUNTED FOR IN THE CITY OF ATWATER FLOWS, NOT THE 0.95 OR 1.95 CASTLE AIRPORT FLOWS.

e) THESE VALUES REPRESENT THE CITY SEWER LOADS PEAKED BY THE AVERAGE PEAK FLOW FROM THAT YEAR. FUTURE PEAK FLOWS ARE CALCULATED BASED ON THE SAME PEAKING RATIO FROM CURRENT PLANNING YEAR.

SOURCE: WEST YOST, 2023

5.3 STORMWATER AND DRAINAGE

The City of Atwater and the Merced Irrigation District (MID) are the two responsible agencies for stormwater collection, and drainage in Atwater. Key areas of responsibility include the maintaining and improvements to streets, sewer, and storm drains. For additional information related to flooding see Chapter 6.0 (Hazards and Safety) Section 6.1 (Flooding Hazards).

LOCAL REGULATORY FRAMEWORK

The regulatory framework discussion describes local laws and regulations that guide land use decisions. Adopted plans that pertain to the City are also described.

Merced Stormwater Resources Plan

The Merced Integrated Regional Water Management Authority (MIRWMA), a Joint Powers Authority (JPA) composed of MID, Merced County, and the cities of Merced, Atwater, and Livingston, has prepared the Merced Storm Water Resources Plan (SWRP) for and in coordination with the Merced Integrated Regional Water Management (IRWM) Region. The purpose of MIRWMA is to implement the concept of integrated water projects in the Merced Region and in collaboration with adjacent regions under the California Department of Water Resources (DWR) IRWM program, and to coordinate obtaining project funding through grants offered under the DWR IRWM program and the State Water Resources Control Board (SWRCB) Storm Water Resources Program. The Region Advisory Committee (RAC) was formed for the purposes of these two efforts and represents a broad cross-section of stakeholders in the area that MIRWMA intends to coordinate with as part of achieving best water management in the region. MRIWMA is currently engaged in pursuing grant funding for flood control, water supply, recharge and other water monitoring projects in addition to its effort under the Merced Storm Water Resources Plan.

City of Atwater, Post-Construction Standards Plan

This Post-Construction Standards Plan was prepared for the City of Atwater to guide project proponents and municipal plan checkers through the various site design requirements of the Phase II Municipal Separate Storm Water Sewer System (MS4) Permit. The purpose of the plan is to incorporate Federal and State regulations, regional collaborative approach taken by many Central Valley municipalities, post-construction site design requirements, and the roles and responsibilities of the plan checker and project proponent.

EXISTING SETTING

STORMWATER

The City's storm drainage system primarily consists of man-made irrigation canals that carry storm runoff and two drainage MID canals that provide drainage from the City. The canals transport stormwater from the City, and the stormwater eventually drains to the San Joaquin River. The City drains a major portion of its storm drain water through the Atwater Drain, south of the City. The Atwater Drain has a fixed discharge rate; thus, the City has to meter the flows through the small channel.

The City has an agreement with MID for storm water discharge that includes a fee for maintenance of the canal system. MID has a limited amount of storm water to be disposed of through its irrigation system, due to the canal system having less capacity as it moves downstream. MID sets a maximum rate of discharge for each development, and the water from the development is metered into the canal system. MID requires that discharge into their facilities must cease whenever the facility at the point of discharge cannot carry

any additional flow. It also requires that the interface between the collection and disposal systems must have a detention basin, which collects any runoff that cannot be discharged into the MID facility until capacity within the facility becomes available.

In addition, the system consists of catch basins that collect runoff water from the street, pump stations that are used to remove stormwater from sections of road that cannot be drained by gravity, pipes of various sizes, as well as a detention basin to prevent flooding. Atwater covers all costs of maintaining drainage facilities and infrastructure except in the case of the MID facilities used by the City. Discharge from within the City flows to MID facilities. The maintenance costs of these shared facilities are borne by Atwater and the MID based on percentage of usage. At the time of the 2010 MSR Review, Atwater provided 60 percent of maintenance costs and the MID supplies 40 percent.

For approval, new development projects must provide acceptable on-and off-site storm drainage infrastructure at the proponent's sole expense and comply with State storm drainage policies, the City of Atwater Municipal Code guidelines and Post-Construction Standards Plan. Applicants must submit a grading and drainage plan for review as part of the development approval process.

5.4 SOLID WASTE

EXISTING SETTING

WASTE COLLECTION SERVICES

Solid waste, recycling and organics are collected in Atwater through contracts with private solid waste service provider Mid Valley Disposal. Mid Valley Disposal provides businesses, multi-family, and single-family homes with a broad range of trash, recycling, and organics cart services. Mid Valley Disposal provides weekly service to customers with a 2-3-cart container package. Customers receive separate 96-gallon carts for trash, mixed recyclables, and organic waste. Mid Valley Disposal also provides 1-cubic yard through 6-cubic yard front load containers. Mid Valley Disposal uses a combination of pickup trucks equipped with large rear-mounted bins and regular front loader garbage trucks to collect waste within the service area.

The collection of industrial wastes, including construction and demolition debris, is not bound to the exclusivity agreement and may be collected by any service provider that holds both a City of Atwater Business License and a current and valid Industrial Waste Collection Permit. Funding for Mid Valley Disposal solid waste collection services are generated from collection fees imposed on all residential, commercial, and industrial customers. Collection occurs on a weekly basis. The rates are based on Mid Valley Disposal's contract with the City of Atwater and are increased according to the Consumer Price Index.

WASTE DISPOSAL FACILITIES

All solid waste generated within the city would be collected and transported to the Merced County Landfill (Highway 59 Landfill), located in eastern Merced County. At present, the Merced County Landfill is the only landfill within the jurisdiction of Merced County that is permitted to accept solid waste for disposal. The maximum tons per day (tpd) allowed at the Merced County Landfill is 1,500. The landfill has a total capacity of 30 million cubic yards. The Merced County Landfill is classified as a Class III landfill (a facility at which protection is provided to water quality from municipal, industrial and agricultural wastes) with a maximum permitted capacity of 30,012,352 cubic yards.

Table 5.4-1 details the landfills existing daily capacity of the Highway 59 Landfill. As shown below, the Highway 59 Landfill has a maximum Daily Throughput of 1,500 tons per day and a remaining capacity of 28,025,334 cubic yards of solid waste.

TABLE 5.4-1: LANDFILLS EXISTING DAILY CAPACITY AND ESTIMATES CLOSURE DATE

Landfill	Location	Maximum Daily Throughput (Tons/Day)	Remaining Capacity (Cubic Yards)	Anticipated Closure Date
Highway 59 Landfill (24-AA-0001)	7040 N State Highway 59, Merced, CA 95348	1,500	28,025,334	1/1/2030

SOURCE: CAL RECYCLE. ACCESSED 2023.

SOLID WASTE GENERATION RATES AND VOLUMES

The California Department of Resources Recycling and Recovery (CalRecycle) tracks and monitors solid waste generation rates on a per capita basis. Per capita solid waste generation rates and total annual solid waste disposal volumes for the Merced County between 2017 and 2021 are shown in Table 5.4-2 below.

TABLE 5.4-2: SOLID WASTE GENERATION RATES IN MERCED COUNTY

Year	Waste Generation Rates (pounds/person/day)		Total Disposal Tonnage (tons/year)
	Per Resident	Per Employee	
2021	6.9	24.6	360,018.15
2020	6.0	21.0	313,670.45
2019	5.4	18.6	282,484.30
2018	5.2	18.0	264,644.86
2017	5.4	18.7	268,667.98

SOURCE: HTTPS://WWW2.CALRECYCLE.CA.GOV/LGCENTRAL/ANNUALREPORTING/DIVERSIONDISPOSAL ACCESSED JULY 2023.

As shown in the Table 5.4-2 above, the per capita per resident waste generation rate increased from 5.4 to 6.9lbs/person/day over the 5-year (2017-2021) period, and the total annual disposal tonnage in Merced County increased by 91,350.17 tons over the 2017 to 2021 time span. With the passage of SB 1016, per capita disposal rate is used to determine the diversion progress of a county and not the jurisdictional diversion rates. Therefore, a population increase resulting in the generation of more overall county waste does not affect the jurisdiction's ability to meet its waste goals.

As shown in the above table, for the years 2017 through 2021, the per capita waste generation rate in Merced County was at the lowest level in 2018; and the total annual disposal tonnage in Merced County was at their lowest level (during this period) in 2018. Merced County achieved the County's per capita disposal target rates for 2021 of 10.7 and 38.8 pounds per person per day for residents and employees, respectively, as established by CalRecycle.

5.5 Electricity, Natural Gas, and Telecommunications

The following discussion describes the electricity and natural gas services that are available to the City of Atwater.

Existing Setting

Electricity and Natural Gas

Electrical power is provided within the City of Atwater by either Pacific Gas & Electric (PG&E) or the Merced Irrigation Company (MID).

Major electrical transmission lines run through the planning area. One goes along Applegate Road Winton Way, extending from a line south of the City to a substation northeast of Cressey. Another line runs south of the City near Rose and Mulberry Avenues. Two lines run between Bellevue Road and Santa Fe Avenue before converging at a substation at the intersection of Shaffer Road and Santa Fe Avenue.

At the CAADC site, electrical service, including maintenance, is provided by the Merced Irrigation District (MID). Electricity from MID is generated by the McSwain and New Exchequer Dams in Mariposa County. MID has prepared an Electric Utility Development Plan to extend electrical service to Livingston, Atwater, and Merced. The plan calls for the expansion of the Pioneer Substation to provide service to other Livingston customers and to serve as a base for a 115 kilovolt line extension to Atwater and Merced. Line extensions are proposed to eastern and western Atwater and Castle Airport, among other places. Proposed substations in Atwater and Castle will be built as required. Highway 99 corridor contains a major natural gas main and crude oil pipelines. The gas main pipeline has an offshoot line running directly north through town, beginning approximately at the intersection of Atwater Boulevard and First Street. A "product pipeline" ran diagonally across the southwestern City limits to the intersection of Buhach Road and Highway 99, where two fuel storage tanks held jet fuel for use at Castle Air Force Base. The line subsequently ran north to the base.

Pacific Gas and Electric Company (PG&E) provides primary electrical and natural gas services to residences and businesses throughout the City of Atwater. PG&E's service area is over 70,000 square miles, located throughout northern and central California. PG&E maintains approximately 42,000 miles of natural gas distribution pipelines, 6,700 miles of gas transmission pipelines, and provides approximately 970 billion cubic feet of natural gas to its customers per year.

PG&E generates electric power from many sources, including renewable, coal, hydroelectric powerhouses, natural gas, and nuclear energy sources. The electricity power mix for PG&E in 2021 is shown in the second column of Table 5.5-1. In 2021, approximately 91 percent of the electricity PG&E delivered to its customers came from greenhouse gas-free energy sources, which includes eligible renewable, large hydroelectric, and nuclear energy sources. The third column of Table 5.5-1 shows the electricity power mix for the State of California as a whole. Approximately 52.1 percent of the electricity power mix for the State of California as a whole in 2021 was represented by eligible renewable energy sources and/or energy sources that do not directly generate greenhouse gases. As shown, PG&E generates a larger proportion of eligible renewable and greenhouse gas-free energy sources than the State of California as a whole.

TABLE 5.5-1: PACIFIC GAS AND ELECTRIC – 2021 POWER CONTENT LABEL

Energy Sources	PG&E Power Mix	Total California Power Mix**
Eligible Renewable	**47.7%**	**33.6%**
Biomass & biowaste	4.2%	2.3%
Geothermal	5.2%	4.8%
Eligible hydroelectric	1.8%	1.0%
Solar	25.7%	14.2%
Wind	10.9%	11.4%
Coal	**0.0%**	**3.0%**
Large Hydroelectric	**4.0%**	**9.2%**
Natural Gas	**8.9%**	**37.9%**
Nuclear	**39.3%**	**9.3%**
Other	**0.0%**	**0.2%**
Unspecified Power*	**0.0%**	**6.8%**
TOTAL	**100%**	**100%**

SOURCE: HTTPS://WWW.ENERGY.CA.GOV/FILEBROWSER/DOWNLOAD/3882 "UNSPECIFIED SOURCES OF POWER" UNSPECIFIED POWER IS ELECTRICITY THAT HAS BEEN PURCHASED THROUGH OPEN MARKET TRANSACTIONS AND IS NOT TRACEABLE TO A SPECIFIC GENERATION SOURCE.*

*** PERCENTAGES ARE ESTIMATED ANNUALLY BY THE CALIFORNIA ENERGY COMMISSION BASED ON THE ELECTRICITY SOLD TO CALIFORNIA CONSUMERS DURING THE IDENTIFIED YEAR.*

Infrastructure to deliver electricity and natural gas throughout the City of Atwater is currently in place. PG&E can generally can provide these services to new development on request.

TELECOMMUNICATIONS

Local phone and internet services are provided through a range of carriers that can accommodate future demand for their services in the Atwater planning area.

Chapter 6
Hazards & Safety



The Hazards & Safety chapter addresses Issues and topics related to hazards, safety and emergency preparedness within the city. Some of these hazards may be the result of natural hazards, which are exacerbated by human activity, such as development in areas prone to flooding or wildfire. Additional hazards are entirely human-made, including airport crash hazards, and exposure to hazardous materials.

This Chapter includes the following topics:

6.1 Flooding Hazards
6.2 Wildfire Hazards
6.3 Hazardous Materials
6.4 Aircraft Hazards
6.5 Emergency Preparedness

6.0 HAZARDS AND SAFETY

Issues and topics related to hazards and safety within the city and planning area are addressed in this chapter. Some of these hazards may be the result of natural hazards, or hazards are which are exacerbated by human activity, such as development in areas prone to flooding. Additional hazards are entirely human-made, including airport hazards and exposure to hazardous materials. This chapter includes the following sections:

6.1 Flooding Hazards

6.2 Wildfire Hazards

6.3 Hazardous Materials

6.4 Aircraft Hazards

6.5 Emergency Preparedness

Information related to geological, soils and seismicity hazards, climate change, and air quality is included within the Conservation and Natural Resource Chapter (Chapter 8.0) of this Existing Conditions Report. Information related to water quality is included within Chapter 5.0 (Utilities), and information related to traffic hazards and crash statistics is included in Chapter 2.0 (Circulation).

FINDINGS, ISSUES AND OPPORTUNITIES

Opportunities for Regional Collaboration. Collaborate with neighboring communities and Merced County agencies to address shared safety concerns within Atwater and regionally.

Natural Disaster Response. Atwater is susceptible to flooding from natural events and dam failure. Ensuring preparedness and disaster response plans are in place is crucial to protecting life and property within Atwater.

Flood. The Easternmost portions of Atwater are vulnerable to flooding from 100 year flood events. The City has adopted regulations required by FEMA for participation in the National Flood Program (NFIP) and currently participates in the NFIP program.

Dam Inundation. Many areas of Atwater are vulnerable to flooding from inundation in the event of a dam failure associated with the Castle Dam, New Exchequer Dam, and the Lake Yosemite Dam.

6.1 Flooding Hazards

This section addresses the hazards associated with flooding in the planning area. Additional discussions of storm drainage are located in Chapter 5.0 (Utilities) of this Existing Conditions Report.

Local Regulatory Framework

Merced County Multi-Hazard Mitigation Plan

The Merced County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) provides guidance on hazard mitigation planning to protect the people and property of the County from the effects of hazard events. This plan was also developed to make Merced County and the participating jurisdictions eligible for certain federal disaster assistance, specifically, the Federal Emergency Management Agency's (FEMA) Hazard Mitigation Assistance (HMA) grants including the Hazard Mitigation Grant Program (HMGP), Flood Mitigation Assistance (FMA) and Building resilient Infrastructure and Communities program, as well as to make the County and jurisdictions more disaster resistant.

City of Atwater Municipal Code Chapter 16.14, Flood Plain Management

The purpose of Chapter 16.14, Flood Plain Management of the City's Municipal Code is to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

a) Protect human life and health;

b) Minimize expenditure of public money for costly flood control projects;

c) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

d) Minimize prolonged business interruptions;

e) Minimize damage to public facilities and utilities such as water and gas mains; electric, telephone and sewer lines; and streets and bridges located in areas of special flood hazard;

f) Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future blighted areas caused by flood damage;

g) Ensure that potential buyers are notified that property is in an area of special flood hazard; and

h) Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

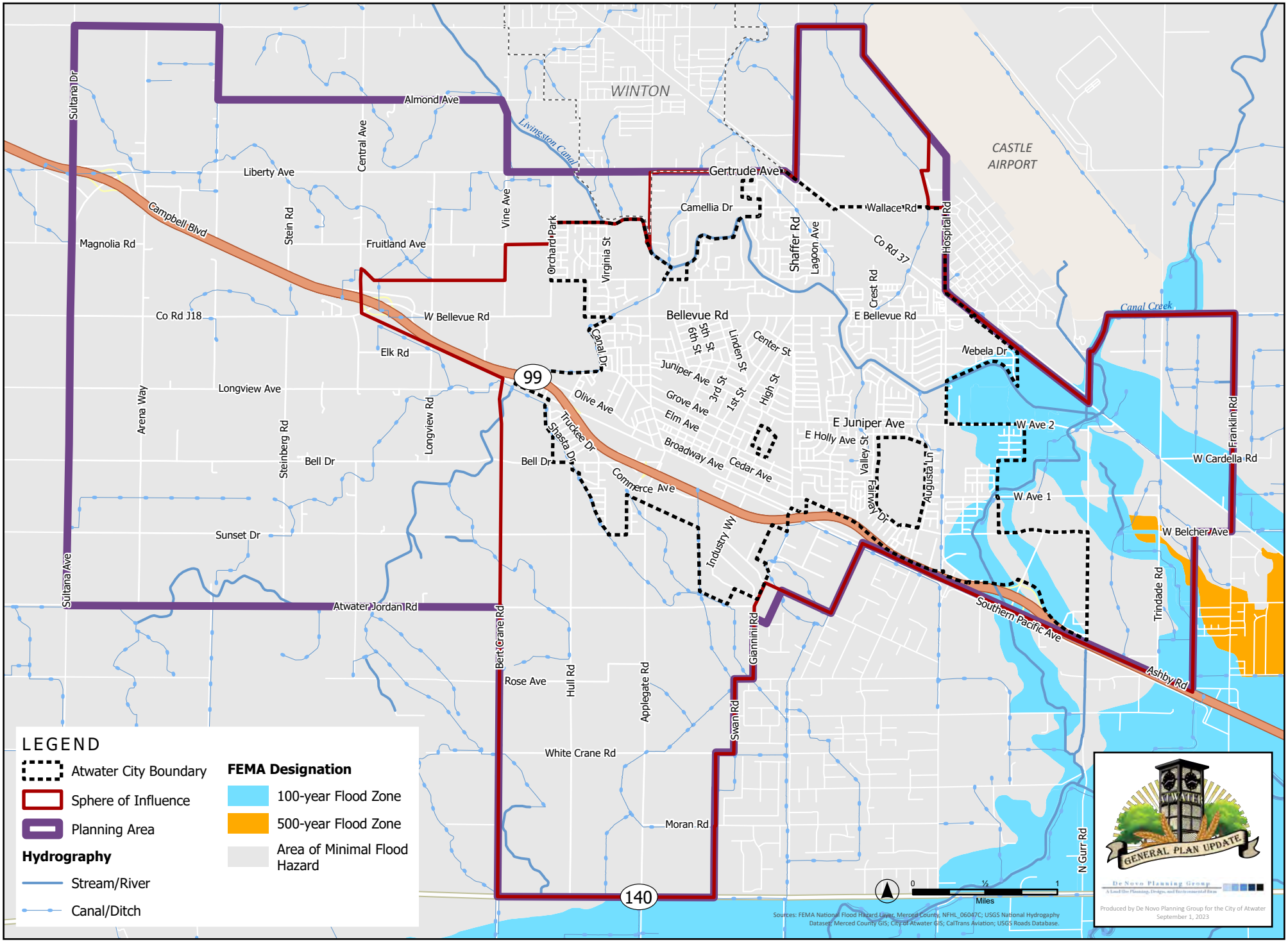
EXISTING SETTING

FEMA Flood Zones

Federal Emergency Management Agency (FEMA) mapping provides important guidance for cities and counties planning for flooding events and regulating development within identified flood hazard areas. FEMA's National Flood Insurance Program (NFIP) is intended to encourage State and local governments to adopt responsible floodplain management programs and flood measures. Floodplain zones are determined by FEMA and used to create Flood Insurance Rate Maps (FIRMs) designating these areas. These tools assist cities in mitigating flooding hazards through land use planning and building permit requirements. To address the need for insurance to cover flooding issues, FEMA administers the National Flood Insurance Administration (NFIA) program. The NFIA program provides federal flood insurance and federally financed loans for property owners in flood prone areas.

Figure 5.1-1 shows FEMA flood designation for the planning area. Most of the city and the planning area lies outside of the 100-year and 500-year floodplains designated by the Federal Emergency Management Agency (FEMA). However, several areas in the eastern portion of the planning area do fall within the 100-year and 500-year floodplain. The City has adopted regulations required by FEMA for participation in the National Flood Program (NFIP) and currently participates in the NFIP program.

Figure 6.1-1. FEMA Flood Designations



SB 5 (200-year Flood Protection)

Both State policy and recently enacted State legislation (Senate Bill 5) call for 200-year (0.5% annual chance) flood protection to be the minimum level of protection for urban and urbanizing areas in the Central Valley. Senate Bill 5 (SB5) requires that the 200-year protection be consistent with criteria used or developed by the Department of Water Resources. SB 5 requires all urban and urbanizing areas in the Sacramento and San Joaquin Valleys to achieve 200-year Urban Level of flood protection (or a finding of adequate progress toward 200-year flood protection) in order to approve development. According to the USACE Comprehensive Study, there are no areas within the planning area that are delineated within a 200-year floodplain.

Dam Inundation

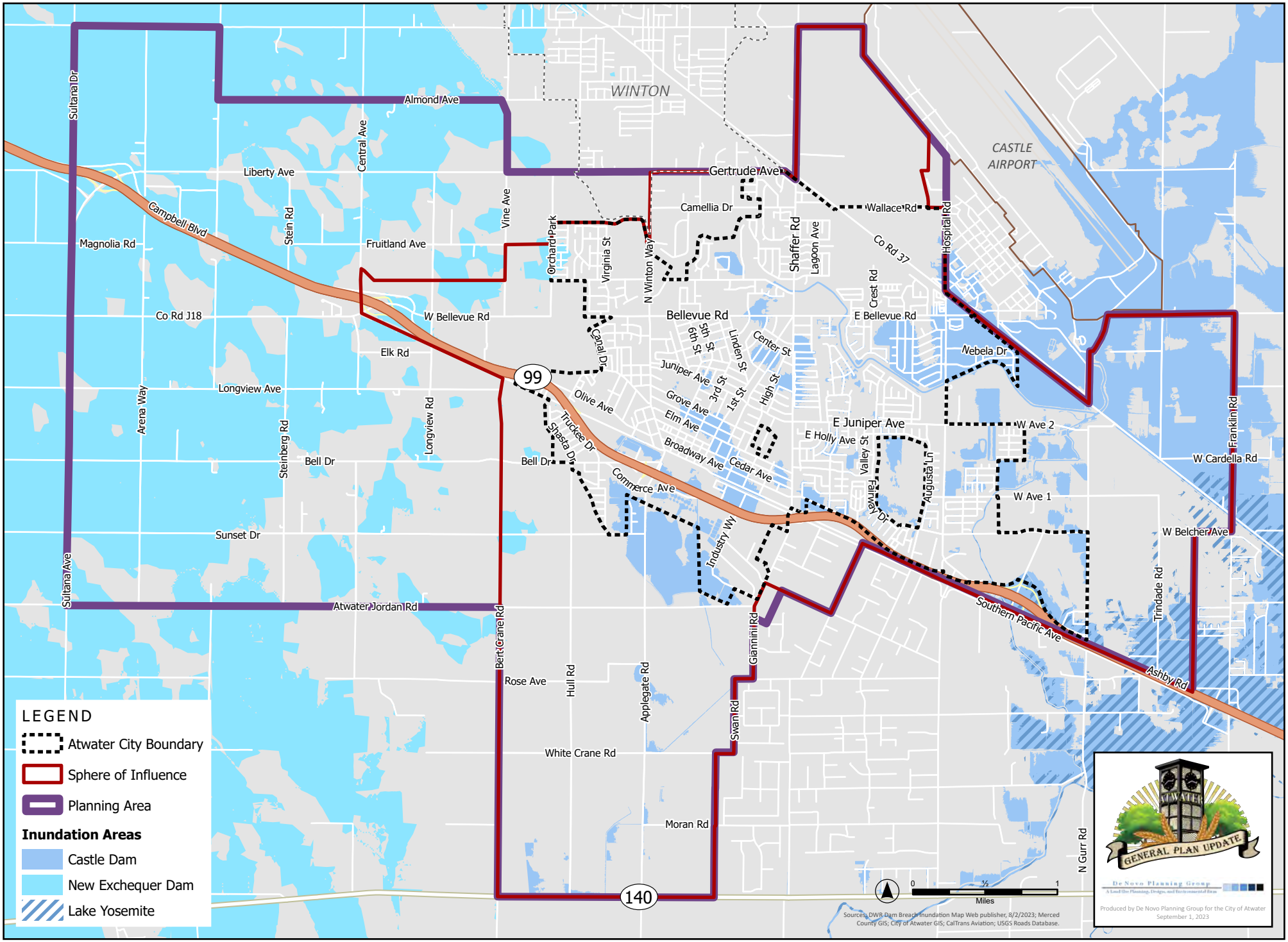
Earthquakes centered close to a dam are typically the most likely cause of dam failure. Dam Inundation maps have been required in California since 1972, following the 1971 San Fernando Earthquake and near failure of the Lower Van Norman Dam. A major dam failure event has not occurred in the Atwater planning area or within Merced County. A catastrophic failure of various dams in the region would have a significant impact on Merced County and the City of Atwater.

Protection from flood hazards created by dam failures is critical to the safety and wellbeing of Atwater residents. Dam failures can result from a number of natural or manmade causes, such as earthquakes, erosion, improper siting, improper maintenance, rapidly rising flood waters and structural/design flaws. The ability to provide warning for potential victims of flooding from dam failure is influenced by the type of dam constructed, the frequency of inspections for structural integrity, the flood wave arrival time, the ability to notify persons downstream and their ability to evacuate. Aside from loss of life, damage to property and displacement of people, hydroelectric facilities on dams that fail would suffer damage. This could have an impact on life support systems in communities outside the immediate hazard inundation areas.

Figure 6.1-2 depicts potential dam failure inundation areas within the planning area. Failure of the Lake Yosemite dam, northeast of Merced, would inundate eastern portions of the city. Failure of the Castle Dam would inundate areas in the eastern and central portions of the city, while failure of Castle Dam would inundate the western portions of the city and planning area.

Section 8589.5 of the California Government Code requires local jurisdictions to adopt emergency procedures for the evacuation of populated inundation areas identified by dam owners. The County Multi-Hazard Mitigation Plan includes emergency procedures related to dam failure.

Figure 6.1-2. Dam Inundation Areas



6.2 WILDFIRE HAZARDS

This section addresses the hazards associated with wildfires in the planning area. The discussion of fire suppression resources is located in the Section 4.0 (Community Services, Recreation, and Facilities) of this report.

LOCAL REGULATORY FRAMEWORK

The regulatory framework discussion describes local regulations that guide land use decisions. Adopted plans that pertain to the City are also described.

City of Atwater Municipal Code Chapter 15.28, California Fire Code

Chapter 15.28, adopts and establishes the California Fire Code as adopted by the California Building Standards Commission in the California Building Standards Code Title 24 of the California Code of Regulations.

EXISTING SETTING

Fire Hazard Severity Zones

The state has charged CalFire with the identification of Fire Hazard Severity Zones (FHSZ) within State Responsibility Areas. In addition, CalFire must recommend Very High Fire Hazard Severity Zones (VHFHSZ) identified within any Local Responsibility Areas. The FHSZ maps are used by the State Fire Marshall as a basis for the adoption of applicable building code standards.

Figure 6.2-1 shows Fire Hazard Severity Zones for Local, State, and Federal Responsibility Areas Countywide. As shown on the figure, Merced County contains areas with “moderate” “High” and “Very High” Fire Hazard Severity Zones. Generally, the valley areas have no FHSZs mapped, or areas mapped as moderate.

Local Responsibility Areas

The Atwater planning area is located within a Local Responsibility Area (LRA). CalFire has determined that the City of Atwater does not contain Very High Fire Hazard Severity Zones (VHFHSZ) within Local Responsibility Areas. Figure 6.2-2 shows Fire Hazard Severity Zones within the city and planning area of Atwater. As shown on the figure, there are limited areas of designated as moderate fire hazard severity zones within the planning area, along State Route 99 at the center of the planning area and the corner of West Belcher Avenue and Trindade Road along the eastern boundary.

State Responsibility Areas

There are no State Responsibility Areas within the Atwater Planning Area. State Responsibility Areas (SRAs) within the County generally are located on the western and eastern boundaries of Merced County. FHSZ within the SRAs range from “Moderate” to “Very High.”

Federal Responsibility Areas

There are no Federal Responsibility Areas within the Atwater Planning Area. The majority of Federal Responsibility Areas (FRA) are located on the western side of Merced County, San Luis National Wildlife Refuge, and the eastern portions of the Merced-Castle Airport.

Fire Threat to the City of Atwater

Wildland fires are a common hazard in California. The combination of dry summers, widespread vegetation, and the proximity of urban development to vegetated areas has led to many devastating fires. In Merced County, grass and brush lands are the most likely places for wildland fires. Since Atwater lies outside these areas, the risk of wildland fire is low. Because the surrounding areas are cultivated agricultural lands and orchards, the risk of wildland fire that threatens much of California is very low. The major fire threat within the city is urban fires associated with residences and businesses.

Figure 6.2-1. Fire Hazard Severity Zone (FHSZ) Countywide

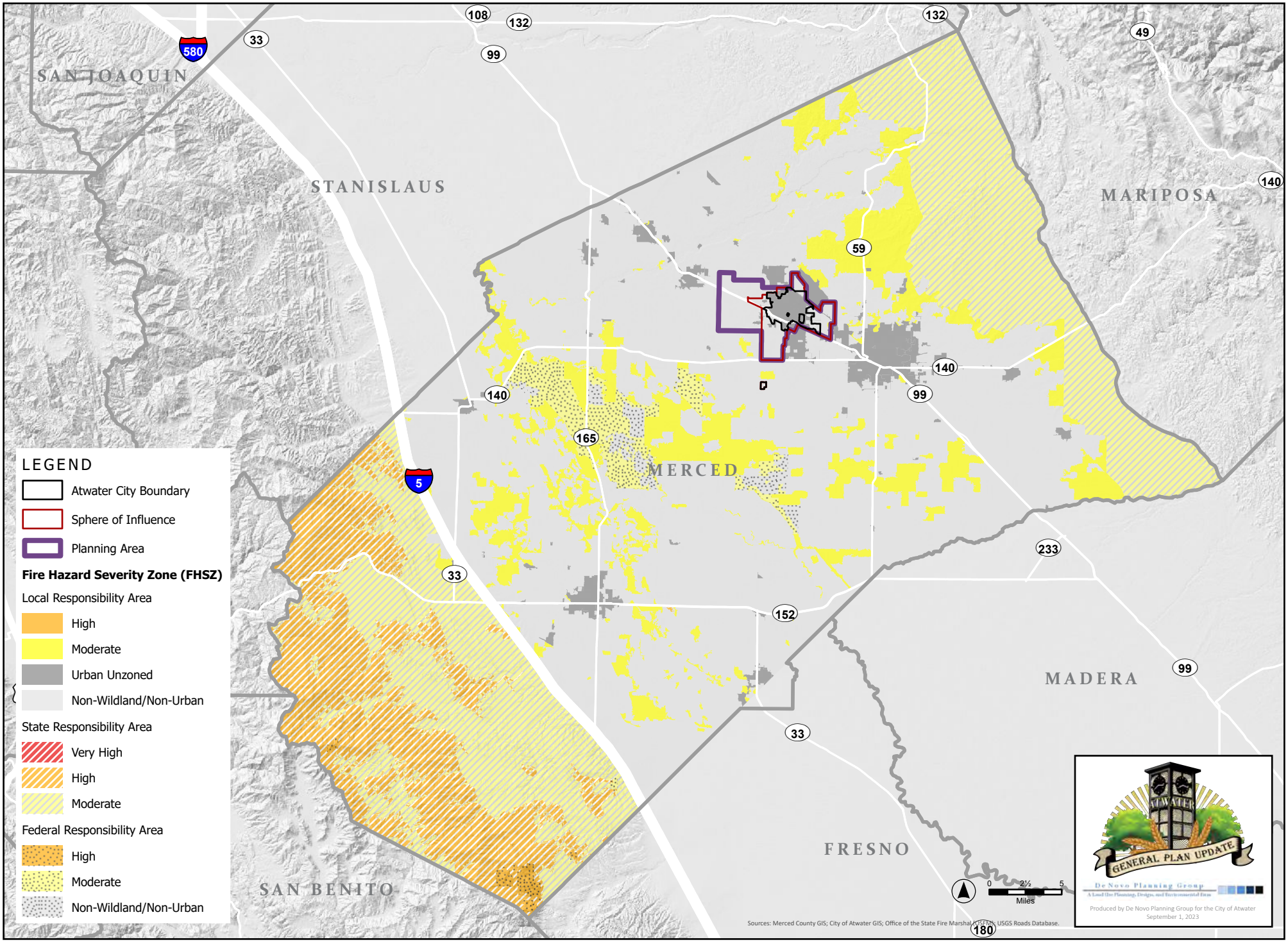
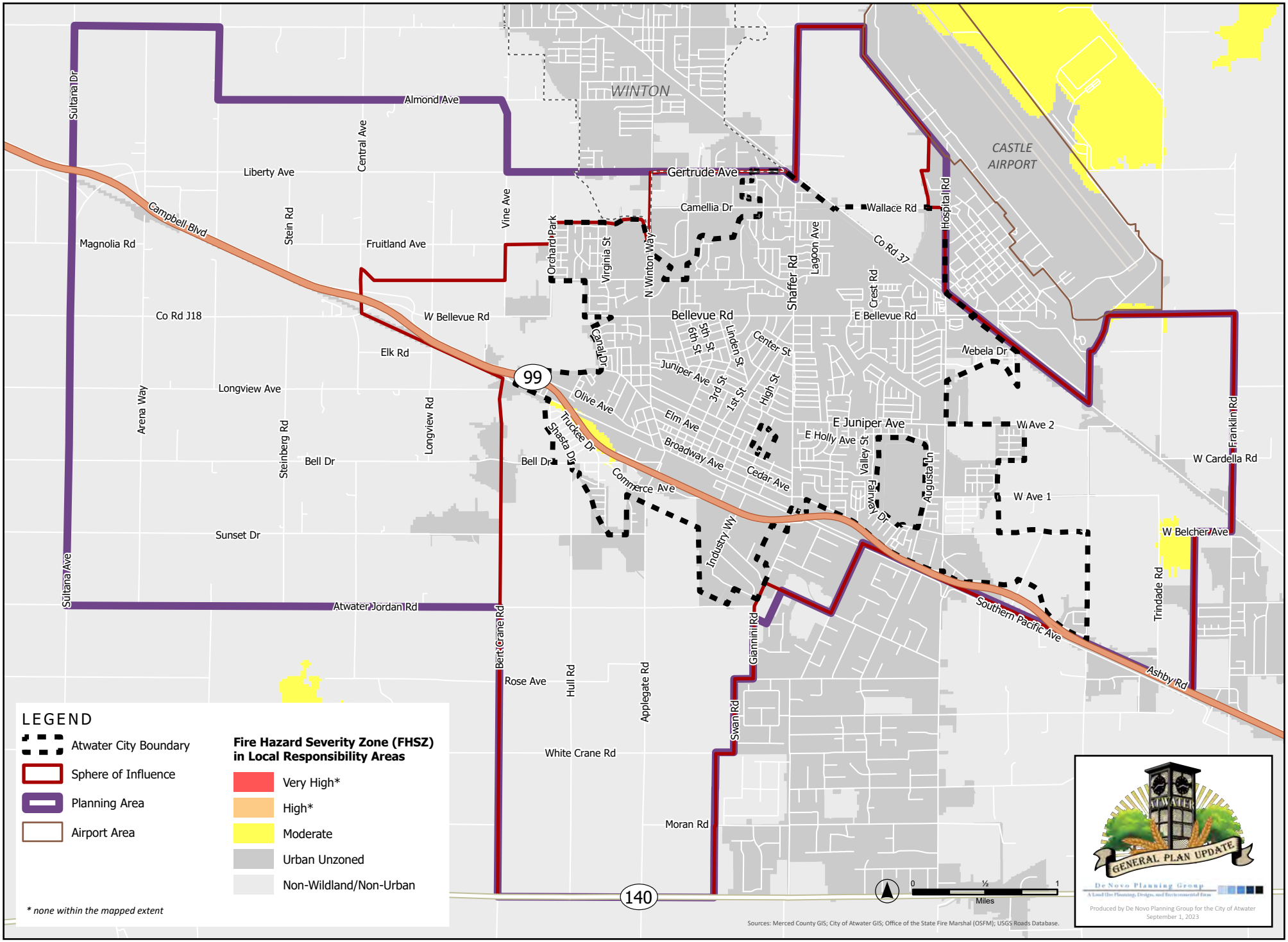


Figure 6.2-2. Fire Hazard Severity Zone (FHSZ) City of Atwater



6.3 HAZARDOUS MATERIALS

A hazardous material is a substance or combination of substances which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either (1) cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating irreversible illness; or (2) pose a substantial present or potential hazard to human health and safety or the environment when improperly treated, stored, transported, or disposed of. Hazardous materials are mainly present because of industries involving chemical byproducts from manufacturing, petrochemicals, and hazardous building materials.

Hazardous waste is the subset of hazardous materials that has been abandoned, discarded, or recycled and is not properly contained, including contaminated soil or groundwater with concentrations of chemicals, infectious agents, or toxic elements sufficiently high to increase human mortality or to destroy the ecological environment. If a hazardous material is spilled and cannot be effectively picked up and used as a product, it is considered to be hazardous waste. If a hazardous material site is unused, and it is obvious there is no realistic intent to use the material, it is also considered to be a hazardous waste. Examples of hazardous materials include flammable and combustible materials, corrosives, explosives, oxidizers, poisons, materials that react violently with water, radioactive materials, and chemicals.

EXISTING SETTING

Envirostar Data Management System

The Department of Toxic Substances Control (DTSC) maintains the *Envirostor Data Management System*, which provides information on hazardous waste facilities (both permitted and corrective action) as well as any available site cleanup information. This site cleanup information includes: Federal Superfund Sites (NPL), State Response Sites, Voluntary Cleanup Sites, School Cleanup Sites, Corrective Action Sites, Tiered Permit Sites, and Evaluation / Investigation Sites. The hazardous waste facilities include: Permitted–Operating, Post-Closure Permitted, and Historical Non-Operating.

There are 17 locations listed within a 3 mile radius of Atwater. Ten (10) of these sites are listed within the City of Atwater.

Of the 17 sites within the vicinity of Atwater, one (1) site is listed as Certified / Land use Restriction only, one (1) site is listed as Certified / Operation & Maintenance - Land use Restriction, one (1) site is listed as active, one (1) site is listed as closed, three (3) sites are listed as inactive, and six (6) are listed with no further action required. Table 6.3-1 lists the Envirostor sites within the City of Atwater and nearby areas.

TABLE 6.3-1: ATWATER SITE CLEANUP AND HAZARDOUS FACILITIES LIST (ENVIROSTOR)

NAME	*STATUS*	*PROJECT TYPE*	*LISTED CITY /AREA*
Castle AFB/County of Merced Parcels	Certified - Land Use Restrictions Only	Federal Superfund	Atwater
Castle Air Force Base	Certified / Operation & Maintenance	Federal Superfund	Atwater
AIR FORCE REAL PROPERTY AGENCY/CASTLE	CLOSED	Non-Operating	Atwater
ATWATER IRON & METAL	Inactive - Needs Evaluation	Corrective Action	Atwater
Valley New School	Inactive - Needs Evaluation	School Investigation	Atwater

Name	*Status*	*Project Type*	*Listed City /Area*
Peggy Heller School Expansion	Inactive - Withdrawn	School Investigation	Atwater
Proposed Atwater Elementary School	Inactive - Withdrawn	School Investigation	Merced
Proposed Atwater Elementary School	Inactive - Withdrawn	School Investigation	Atwater
ATWATER ELEMENTARY SCHOOL	No Action Required	School Investigation	Atwater
J.R. SIMPLOT CO - WINTON	No Action Required	Corrective Action	Winton
BUHACH HIGH SCHOOL ADDITION	No Further Action	School Investigation	Atwater
Juniper and Bridgewater Proposed Elementary School	No Further Action	School Investigation	Atwater
K-5 SCHOOL SITE	No Further Action	School Investigation	Winton
Merced Army Airfield (J09CA0869)	No Further Action	Military Evaluation	Merced
Valley Community School in Atwater	No Further Action	School Investigation	Atwater
J.R. SIMPLOT CO - WINTON	PROTECTIVE FILER	Non-Operating	Winton
AIR FORCE REAL PROPERTY AGENCY DIV	Refer: SMBRP	Corrective Action	Merced

Source: California Department of Toxic Substances Control, Envirostor Database, 2023.

Cortese List

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies, and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites. Government Code Section 65962.5 requires the California Environmental Protection Agency to develop at least annually an updated Cortese List. California Department of Toxic Substances Control (DTSC) is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material release information for the Cortese List.

There no locations listed within Atwater are included on the Cortese list.

GeoTracker

GeoTracker is the California Water Resource Control Board's data management system for managing sites that impact groundwater, especially those that require groundwater cleanup (Underground Storage Tanks, Department of Defense, Site Cleanup Program) as well as permitted facilities such as operating USTs and land disposal sites.

Leaking Underground Storage Tanks (LUST)

There are 23 locations identified with a City of Atwater address that are listed in the GeoTracker database for Leaking Underground Storage Tanks (LUST). Twenty-one (21) of these locations have undergone LUST cleanup and the State has closed the cases. Two (2) sites remain open cases with one (1) being eligible for

closure, and the other being an open site assessment. Table 6.3-2 lists the location of open and closed cases for LUSTs in Atwater.

TABLE 6.3-2: ATWATER LUST CLEANUP SITES

NAME	ACTIVITY	ADDRESS
CLOSED CASES (CLEANUP COMPLETED)		
7-11 #14120 (FORMER)	COMPLETED - CASE CLOSED	2679 BUHACH RD
7-11 #19541	COMPLETED - CASE CLOSED	1605 BELLEVUE RD E
APPLEGATE EXXON MINIMART	COMPLETED - CASE CLOSED	1619 SYCAMORE AVENUE
APPLEGATE MINIMART	COMPLETED - CASE CLOSED	1619 SYCAMORE
APPLEGATE#9-0715	COMPLETED - CASE CLOSED	1500 SYCAMORE
ATWATER SCHOOL DISTRICT	COMPLETED - CASE CLOSED	1601 GROVE STREET
BEACON #517	COMPLETED - CASE CLOSED	100 BELLEVUE RD E
CIRCLE K STORE NO. 5018	COMPLETED - CASE CLOSED	1021 SHAFFER ROAD
FERRERIA'S UNOCAL SERVICE	COMPLETED - CASE CLOSED	1401 ATWATER BLVD
FORMER TEXACO SERVICE STATION	COMPLETED - CASE CLOSED	2698 FIRST STREET
GAS-N-SAVE MART	COMPLETED - CASE CLOSED	1370 ATWATER BLVD.
J R WOOD INC	COMPLETED - CASE CLOSED	8114 OLIVE AVE W
MITCHELL ELEMENTARY SCHOOL	COMPLETED - CASE CLOSED	1850 JUNIPER AVE
ROYAL CROWN MINI MART	COMPLETED - CASE CLOSED	2689 BUHACH RD N
SANTECO STATION	COMPLETED - CASE CLOSED	5150 BROADWAY AVE. E.
SHELL (ATWATER)	COMPLETED - CASE CLOSED	1198 WINTON WAY
SILVEIRA PETROLEUM INC	COMPLETED - CASE CLOSED	2249 ATWATER BLVD
SILVEIRA PETROLEUM, INC.	COMPLETED - CASE CLOSED	2249 ATWATER BOULEVARD
SILVIERA PETROLEUM, INC.	COMPLETED - CASE CLOSED	2145 ATWATER BLVD
SURE STOP MARKET	COMPLETED - CASE CLOSED	972 BROADWAY
ULTRAMAR BEACON #517 (2ND LEAK)	COMPLETED - CASE CLOSED	100 BELLEVUE E
OPEN CASES		
SAVE CENTER NO. 1	OPEN - ELIGIBLE FOR CLOSURE	715 ATWATER BLVD.
SAVE CENTER NO. 2	OPEN - SITE ASSESSMENT	1039 ATWATER BLVD.

SOURCE: CALIFORNIA WATER RESOURCES CONTROL BOARD GEOTRACKER DATABASE, 2023.

PERMITTED UNDERGROUND STORAGE TANK (UST)

There are 17 locations with a listed Atwater address that have permitted Underground Storage Tanks (UST) that are permitted through the California Water Resources Control Board. Table 6.3-3 lists the location of the permitted USTs listed with an Atwater address.

TABLE 6.3-3: ATWATER PERMITTED UST SITES

NAME	ADDRESS	CITY/AREA
7-ELEVEN INC. #37970	100 E BELLEVUE RD	Atwater
APPLEGATE CHEVRON FOOD MART	1500 SYCAMORE AVE.	Atwater
APPLEGATE STOP N SHOP	1619 SYCAMORE AVE	Atwater
ARCO AM/PM	1615 BELL DR.	Atwater
ATWATER CIRCLE-K	1619 SYCAMORE AVE	Atwater
ATWATER MINI MART	1198 WINTON WAY	Atwater
BROTHERS ROYAL CROWN	2689 N BUHACH ROAD	Atwater
BUHACH AMPM #83843	1901 BUHACH RD	Atwater

NAME	ADDRESS	CITY/AREA
C&F MART	1401 ATWATER BLVD	Atwater
CA HIGHWAY PATROL MERCED	1500 BELL DRIVE	Atwater
CIRCLE K STORE #2705018	1021 SHAFFER RD	Atwater
FAST N ESY #12	2775 WINTON WAY	Atwater
HUNT & SONS INC. ATWATER	2249 ATWATER BLVD	Atwater
MAXI-MART FOOD & LIQUOR	1911 ATWATER BLVD	Atwater
NEW OLIVE MARKET	1101 WINTON WAY	Atwater
SURE STOP MARKET	972 BROADWAY AVE	Atwater
XTREME POWER GAS FOOD AND LIQUOR LLC	1385 WINTON WAY	Atwater

SOURCE: CALIFORNIA WATER RESOURCES CONTROL BOARD GEOTRACKER DATABASE, 2023.

Solid Waste Information System (SWIS)

FACILITY/SITE LISTING

The Solid Waste Information System (SWIS) is a database of solid waste facilities that is maintained by the California Integrated Waste Management Board (CIWMB). The SWIS database contains information on solid waste facilities, operations, and disposal sites throughout the State of California. The types of facilities found in this database include landfills, transfer stations, material recovery facilities, composting sites, transformation facilities, waste tire sites, and closed disposal sites. For each facility, the database contains information about location, owner, operator, facility type, regulatory and operational status, authorized waste types, local enforcement agency and inspection and enforcement records.

There are no solid waste facilities listed in the database within the City of Atwater. There are two facilities near Atwater, including the Merced County Regional Waste Landfill, located approximately 7.2 miles northwest of Atwater, and the Billy Wright Landfill, located approximately 20 miles southwest of Atwater. SWIS facility/site search details for all sites within Merced County are listed in Table 6.3-4 below.

TABLE 6.3-4: SWIS FACILITY/SITE – MERCED COUNTY

SWIS NUMBER	SITE NAME	SITE REGULATORY STATUS	SITE OPERATIONAL STATUS
24-AA-0001	Highway 59 Landfill	Permitted	Active
24-AA-0002	Billy Wright Disposal Site	Permitted	Active
24-AA-0007	City of Los Banos Disposal Site	Pre-regulation	Closed
24-AA-0008	Calaveras Materials Inc.Western Stone DS	Pre-regulation	Closed
24-AA-0009	Bert Crane Landfill	Pre-regulation	Closed
24-AA-0010	Merced City Municipal Dump	Pre-regulation	Closed
24-AA-0011	El Nido Composting Facility-Synagro West	Permitted	Active
24-AA-0017	Foster Farms Manure Storage Facility	Notification	Active
24-AA-0019	Stone Family El Nido Composting Facility	Notification	Active
24-AA-0020	Highway 59 Compost Facility	Notification	Active
24-AA-0029	Billy Wright Composting Facility	Notification	Active
24-AA-0031	Nakashima Farms Composting #1	Notification	Active
24-AA-0033	Greenway	Notification	Active
24-AA-0038	Green Forrest Recycling and Chipping	Notification	Active

SWIS Number	Site Name	Site Regulatory Status	Site Operational Status
24-AA-0039	D.A.T.T.	Notification	Active
24-AA-0042	Agromin-Bowles Green Material Composting	Notification	Active
24-AA-0043	City of Merced Transfer Site	Permitted	Active
24-AA-0044	Stone Family Paul`s 25 Compost Facility	Excluded	Active
24-AA-0045	Seth Rossow	Notification	Closed
24-AA-0046	Foster Farms Manure Storage Facility	Notification	Active
24-AA-0047	Merced County Public Works C&G	Notification	Active
24-CR-0001	Shaffer Road LF #1	Pre-regulation	Closed
24-CR-0002	Shaffer Road LF #2	Pre-regulation	Closed
24-CR-0003	Shaffer Road LF #3	Pre-regulation	Closed
24-CR-0004	Snelling Disposal Site	Pre-regulation	Closed
24-CR-0005	Stevinson Disposal Site	Pre-regulation	Closed
24-CR-0006	East Avenue Disposal Site	Pre-regulation	Closed
24-CR-0007	El Nido Disposal Site	Pre-regulation	Closed
24-CR-0008	Gustine City Disposal Site	Pre-regulation	Closed
24-CR-0009	Gustine Ingomar Disposal Site	Pre-regulation	Closed
24-CR-0010	Hilmar Disposal Site	Pre-regulation	Closed
24-CR-0011	Le Grand Disposal Site	Pre-regulation	Closed
24-CR-0012	Livingston City Disposal Site	Pre-regulation	Closed
24-CR-0013	Los Banos County Disposal Site	Pre-regulation	Closed
24-CR-0014	Planada Disposal Site	Pre-regulation	Closed
24-CR-0018	Castle AFB LF #2	Pre-regulation	Clean Closed
24-CR-0020	Castle AFB LF #4	Pre-regulation	Closed
24-CR-0021	Castle AFB LF #5	Pre-regulation	Closed
24-CR-0022	Castle Vista Landfill A	Pre-regulation	Clean Closed
24-CR-0023	Castle Vista Landfill B	Pre-regulation	Clean Closed
24-CR-0026	Hartley Slough DS	Unpermitted	Closed
24-CR-0027	Dos Palos Disposal Site	Pre-regulation	Closed

Source: California Department of Resources Recycling and Recovery, 2023.

6.4 AIRCRAFT HAZARDS

The State Division of Aeronautics has compiled extensive data regarding aircraft accidents around airports in California. According to the California Airport Land Use Planning Handbook (2002), prepared by the State Division of Aeronautics, 18.2% of general aviation accidents occur during takeoff and initial climb, and 44.2% of general aviation accidents occur during approach and landing. The State Division of Aeronautics has plotted accidents during these phases at airports across the country and has determined certain theoretical areas of high accident probability.

Approach and Landing Accidents

As nearly half of all general aviation accidents occur in the approach and landing phases of flight, considerable work has been done to determine the approximate probability of such accidents. Nearly 77% of accidents during this phase of flight occur during touchdown onto the runway or during the roll-out. These accidents typically consist of hard or long landings, ground loops (where the aircraft spins out on the ground), departures from the runway surface, etc. These types of accidents are rarely fatal and often do not involve other aircraft or structures. Commonly these accidents occur due to loss of control on the part of the pilot and, to some extent, weather conditions. (California Division of Aeronautics, 2002).

The remaining 23% of accidents during the approach and landing phase of flight occur as the aircraft is maneuvered towards the runway for landing, in a portion of the airspace around the airport commonly called the traffic pattern. Common causes of approach accidents include the pilot's misjudging of the rate of descent, poor visibility, unexpected downdrafts, or tall objects beneath the final approach course. Improper use of rudder on an aircraft during the last turn toward the runway can sometimes result in a stall (a cross-control stall) and resultant spin, causing the aircraft to strike the ground directly below the aircraft. The types of events that lead to approach accidents tend to place the accident site fairly close to the extended runway centerline. The probability of accidents increases as the flight path nears the approach end of the runway. (California Division of Aeronautics, 2002).

According to aircraft accident plotting provided by the State Division of Aeronautics, most accidents that occur during the approach and landing phase of flight occur on the airport surface itself. The remainder of accidents that occur during this phase of flight are generally clustered along the extended centerline of the runway, where the aircraft is flying closest to the ground and with the lowest airspeed. (California Division of Aeronautics, 2002).

Takeoff and Departure Accidents

According to data collected by the State Division of Aeronautics, nearly 65% of all accidents during the takeoff and departure phase of flight occur during the initial climb phase, immediately after takeoff. This data is correlated by two physical constraints of general aviation aircraft:

- The takeoff and initial climb phase are times when the aircraft engine(s) is under maximum stress and is thus more susceptible to mechanical problems than at other phases of flight; and
- Average general aviation runways are not typically long enough to allow an aircraft that experiences a loss of power shortly after takeoff to land again and stop before the end of the runway.

While the majority of approach and landing accidents occur on or near to the centerline of the runway, accidents that occur during initial climb are more dispersed in their location as pilots are not attempting to get to any one specific point (such as a runway). Additionally, aircraft vary widely in payload, engine power,

glide ratio, and several other factors that affect glide distance, handling characteristics after engine loss, and general response to engine failure. This further disperses the accident pattern. However, while the pattern is more dispersed than that seen for approach and landing accidents, the departure pattern is still generally localized in the direction of departure and within proximity of the centerline. This is partially due to the fact that pilots are trained to fly straight ahead and avoid turns when experiencing a loss of power or engine failure. Turning flight causes the aircraft to sink faster and flying straight allows for more time to attempt to fix the problem. (California Division of Aeronautics, 2002.

Local Regulatory Framework

The regulatory framework discussion describes laws and regulations that guide land use decisions. Adopted plans that pertain to the City are also described.

Merced County Airport Land Use Compatibility Plan (Adopted June 21, 2012)

Airport Land Use Commission Law (Public Utilities Code §21670 et seq.) passed in 1967, authorized the creation of Airport Land Use Commissions (ALUC) in California. Per the Public Utilities Code, the purpose of an ALUC is to protect public health, safety, and welfare by encouraging orderly expansion of airports and the adoption of land use measures that minimizes exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses (§21670). Furthermore, each ALUC must prepare an Airport Land Use Compatibility Plan (ALUCP). Each ALUCP, which must be based on a twenty-year planning horizon, should focus on broadly defined noise and safety impacts.

On June 21, 2012, the Merced County ALUC adopted the Merced County Airport Land Use Compatibility Plan. The Plan included the individual compatibility plan for each of the five public-use airports in Merced County: Castle Airport, Gustine Municipal Airport, Los Banos Municipal Airport, Merced Regional Airport, and Turlock Municipal Airport. As adopted by the Merced County Airport Land Use Commission (ALUC), the basic function of the compatibility plan is to promote compatibility between each airport and the land uses which surround them to the extent that these areas have not already been devoted to incompatible uses. The plan accomplishes this function through establishment of a set of compatibility criteria applicable to new development around the airport. The compatibility plan serves as a tool for use by the ALUC in fulfilling its duty to review airport and adjacent land use development proposals. Neither this compatibility plan nor the ALUC have authority over existing land uses or over operation of the airport. Except for Castle Airport and Merced Regional Airport, the influence area for each of the airports, as defined herein, extends roughly 2 miles from the airport runways. For Castle Airport and Merced Regional Airport, the influence area stretches approximately 4 miles from the runway ends in recognition of the airports' runway lengths, instrument approach procedures, and heavy aircraft which the airports are capable of accommodating.

Airport Safety Map and Land Use Compatibility Guidelines for Safety, contained within the Airport Master Plan, regulate land uses and structure heights that may constitute a hazard to air navigation. Any proposed object or structure that would penetrate any of these imaginary surfaces as they apply to the Castle Airport is considered by the Federal Aviation Administration (FAA) to be an obstruction to air navigation.

Existing Setting

Local Airport Facilities

The Merced-Castle Airport is located directly adjacent to the City of Atwater in the northeast, outside the Atwater Planning Area. The airport is owned by the County of Merced and operated by the County's

Department of Commerce, Aviation and Economic Development. Prior to October 1995, Castle Airport operated for more than 50 years as a military airfield and was known for most of that period as Castle Air Force Base. Castle Airport has a single 11,802-foot long runway aligned with the prevailing wind direction in a northwest/southeast alignment.

Operations at Merced-Castle Castle Airport could pose a potential hazard to future development within the Planning Area. Prior to October 1995, Castle Airport operated as Castle Air Force Base. Its primary mission was to serve as a base for long-range bombers, but it was also a site for training of bomber and air refueling crews. The potential hazards associated with military aircraft operations were obvious, particularly since the long-range bombers carried nuclear weapons. However, for most of its years of operation, the approach and departure zones from Castle Air Force Base were over agricultural land. Thus, the most significant safety hazard was a possible accident involving an aircraft carrying nuclear weapons. During the years of the base's operation, there were no accidents that threatened the safety of people or property within the city.

Airfield Configuration: Castle Airport has a single 11,802-foot long runway (Runway 13-31) aligned in a northwest/southeast direction. Runway 31 is equipped with straight-in precision instrument approach capabilities and Runway 13 has a GPS nonprecision approach procedure. The principal change proposed for the airfield is to reestablish a precision instrument approach to Runway 13, upgrading the approach reference code (ARC) to D-VI and widen the runway by 50 feet to accommodate a larger class of aircraft.

Airport Activity: The Compatibility Plan for Castle Airport anticipates that the airport activity level will reach approximately 265,207 annual operations by 2035 or beyond. The majority of this activity is assumed to be generated by general aviation aircraft (94%). The forecast also assumes that air cargo and airline activity will initiate in the near term and will comprise approximately 4% of the 2035 forecast.

Airport Influence Area: The airport influence area boundary is defined by the outer edge of the FAR Part 77, Subpart B, height notification surface and portions of the precision instrument approach surface south of the airport. The boundary west of the airport is truncated to reflect few overflights of the City of Atwater.

The Castle Airport Land Use Compatibility Zones Map is shown on Figures 6.4.1. As shown on Figure 6.4-1, portions of the Atwater Planning Area are included within Zones B1, B2, and D. For all restricted zones, and land use compatibility standards see Appendix C: [1] The majority of the lands located within airport contours are included within Zone D (Overflight Areas).

Zone D includes the following Restrictions:

Incompatible - Use should not be permitted under any circumstances:

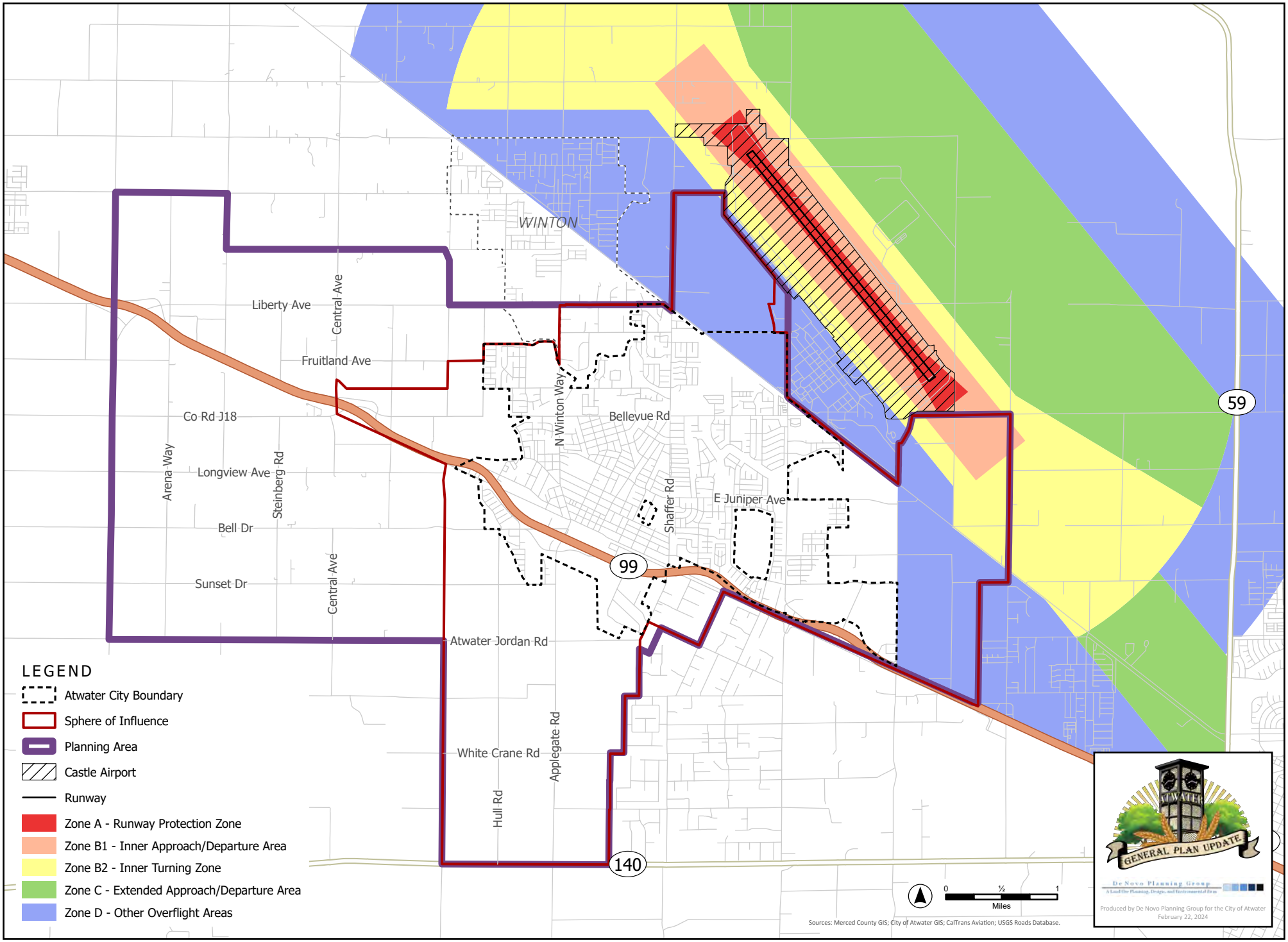
- Solid Waste Disposal Facilities: landfill, incineration
- Hazardous Materials Production: oil refineries, chemical plants
- Any use creating visual or electronic hazards to flight

Conditional - Use is compatible if indicated usage intensity, lot coverage, and other listed conditions are met. For the purposes of these criteria, "avoid" is intended as cautionary guidance, not a prohibition of the use:

- Any use having structures or trees more than 100 feet in height
- Any use having the potential to cause an increase in the attraction of birds or other wildlife
- Water: flood plains, wetlands, lakes, reservoirs
- Agriculture (except residences and livestock): crops, orchards, vineyards, pasture, range land
- Outdoor Major Assembly Facilities (capacity ≥1,000 people): spectator-oriented outdoor stadiums, amphitheaters, fairgrounds, zoos
- Heavy Industrial
- Power Plants
- Solid Waste Transfer Facilities, Recycle Centers

[1] https://web2.co.merced.ca.us/pdfs/planning/aluc/Maps_and_Tables/castle_basic_map_and_compatibility_table.pdf

Figure 6.4-1. Castle Airport Land Use Compatibility Zones



Other Local airport facilities near Atwater

- 9.5 miles: Turlock, CA (015) Turlock Municipal Airport
- 22 miles: Gustine, CA (301) Gustine Municipal Airport
- 25 miles: Los Banos, CA (LSN) Los Banos Municipal Airport
- 26 Miles: Chowchilla, CA (206) Chowchilla Municipal Airport
- 30 miles: Oakdale, CA (027) Oakdale Airport

Major Regional Airport Facilities

Stockton Metropolitan Airport: The Stockton Metropolitan Airport is a full-service airport which provides commercial airline passenger service, rental car, parking, and transportation services, as well as aviation-related services and aircraft hangar facilities.

Modesto City-County Airport: The Modesto City-County Airport (MOD) serves the central California city Modesto and is also a gateway to the California Sierras, particularly Sequoia National Forest and Kings Canyon National Park. MOD Airport is located at 617 Airport Way (cross-streets Mitchell Road & Tenaya Drive), in the City of Modesto, California, and accessible via State Hwy 99 and Interstate Hwy 5. MOD is currently not served by any commercial airline. MOD is served by an airport traffic control tower and two runways: 10L/28R: 5,904 x 150 ft asphalt; and 10R/28L: 3,464 x 100 ft (1,056 x 30 m) asphalt, the runway is not available when the tower is closed.

Merced Regional Airport: In addition to local and regional air commutes, the Merced Yosemite Regional Airport (MCE) operates facilities for general aviation aircraft, Gateway Air Center for private aircraft, offices for government agencies, and corporate hangars. The Merced Regional Airport covers 766 acres at an elevation of 155 feet and has one runway: 12/30: 5,914 by 150 feet asphalt.

Fresno Yosemite International Airport (FAT): Fresno Yosemite International Airport is a joint military–public airport in Fresno (approximately 63-mile southeast of Atwater). It is the primary commercial airport for the San Joaquin Valley and three national parks: Yosemite, Sequoia and Kings Canyon. It offers scheduled passenger flights to several major airline hubs in the United States and international service to Mexico. The airport is owned and operated by the city of Fresno and operates two runways on a property spanning 1,728 acres.

National Transportation Safety Board Aviation Accident Database

The National Transportation Safety Board Aviation Accident Database identifies 8 aircraft within the vicinity of Atwater associated within the Merced-Castle Airport since January 1, 1999. (National Transportation Safety Board, 2023). Table 6.4-1 below details each identified aircraft incidents listed by the database within Atwater.

TABLE 6.4-1: NATIONAL TRANSPORTATION SAFETY BOARD AVIATION ACCIDENTS WITHIN MERCED COUNTY

EVENT DATE	AIRPORT	MAKE/MODEL	EVENT SEVERITY
09/05/2017	Merced-Castle Airport (MER)	Cobalt Co50 Valkyrie	Nonfatal
01/26/2013	Merced-Castle Airport (MER)	Cessna 152	Nonfatal
11/15/2008	Merced-Castle Airport (MER)	Cessna 152	Fatal
11/17/2007	Merced-Castle Airport (MER)	Cessna 172N	Minor
06/01/2007	McCready-Merced Airport (KMCE)	Dutton Air Camper	Nonfatal
01/13/2001	Merced-Castle Airport (MER)	Piper PA-22-150	Nonfatal
03/23/1999	Merced-Castle Airport (MER)	Beech 58	Nonfatal

SOURCE: NATIONAL TRANSPORTATION SAFETY BOARD ACCIDENT DATABASE 2019

.

6.5 EMERGENCY PREPAREDNESS

The Merced Office of Emergency Services (OES) provides preparedness before, and coordination direction during, large-scale emergencies and disasters. OES coordinates with partner agencies including the six incorporated cities within the county, special districts, and key private agencies in providing planning, response, recovery, and mitigation activities as a result of disaster related incidents.

Multi-Jurisdictional Hazard Mitigation Plan

Merced County including the participating jurisdictions of the have prepared this multi-jurisdictional hazard mitigation plan (MJHMP) to guide hazard mitigation planning to better protect the people and property of the County from the effects of hazard events. This plan demonstrates the community's commitment to reducing risks from hazards and serves as a tool to help decision makers direct mitigation activities and resources. This plan was also developed to make Merced County and the participating jurisdictions eligible for certain federal disaster assistance, specifically, the Federal Emergency Management Agency's (FEMA) Hazard Mitigation Assistance (HMA) grants including the Hazard Mitigation Grant Program (HMGP), Flood Mitigation Assistance (FMA) and Building resilient Infrastructure and Communities program, as well as to make the County and jurisdictions more disaster resistant. This plan demonstrates the County's commitment to reducing risks from hazards and serves as a tool to help decision makers direct mitigation activities and resources.

MJHMP Critical Facilities and Infrastructure

For the purposes of this MJHMP plan, a critical facility is defined as one that is essential in providing utility or direction either during the response to an emergency or during the recovery operation. FEMA sorts critical facilities into seven lifeline categories as shown in Figure 4.0-1 in the Base Plan.

Within the City of Atwater, the following are considered critical facilities:

- Atwater Fire Department Stations (Stations #41 & 42)
- Atwater Police Department building
- Atwater City Hall (co-located with Police Department)
- Merced County Fire Department Stations 82 (Atwater) and 88 (Winton)
- Water supply lines and wells
- Wastewater treatment plant, pumping stations, and trunk lines
- Major electrical transmission lines and substations
- Major communication lines and microwave transmission facilities
- Federal Prison and major railways
- Castle Airport Aviation and Development Center (CAADC)
    - Academy
    - Airport
    - Aviation
    - EOC
    - Fire
    - Fuel
    - Sheriff
    - Water Facilities/Utilities/Sewer/Communications/Lightning
- Castle Air Museum
- Veteran's Memorial, Veterans Services
- Animal shelter
- Public Library
- Atwater CLEO
- Laboratories (Bess Test Labs, Castle Analytical Lab)
- Critical facilities also include major roadways which may serve as principal evacuation routes.
- There several designated shelters in Atwater for use in an emergency event including the Veterans Memorial Building, recreation centers/parks, high school gyms and school cafeterias.

Chapter 7
Community Noise



The Community Noise chapter provides background information relating to noise in and around the City of Atwater. The characteristics of sound and noise are described, and transportation, stationary, and other noise sources within the Planning Area are defined. Additionally, the existing ambient noise environment within the Planning Area is quantified through noise level measurements and through application of accepted noise prediction methodologies.

This Chapter includes the following topics:

7.0 Community Noise

7.0 COMMUNITY NOISE

This chapter provides background information relating to noise in and around the planning area. The characteristics of sound and noise are described, and transportation, stationary, and construction noise sources within the planning area are defined. Additionally, the existing ambient noise environment within the planning area is quantified through continuous and short-term noise level measurements and through application of accepted noise prediction methodologies.

FINDINGS: ISSUES AND OPPORTUNITIES

The following summarizes some important topics relating to community noise within the City of Atwater:

Existing traffic noise levels at nearby receptors within the planning area range from 65.3db along Atwater Blvd from Golden State Hwy to Maple St, to 38.3db along Commerce Ave from Commerce Ave to Industry Way.

Aviation noise contours associated with the Castle-Merced County Airport fall outside the City Limits of Atwater, but are located within the City's Sphere of Influence.

Fixed noise sources in the City typically include parking lots, loading docks, parks, schools, and other commercial/retail use noise sources (HVAC, exhaust fans, etc.).

The results of the **community noise survey** indicate that existing transportation noise sources were the major contributor of noise observed during daytime hours, especially during vehicle passbys and R&R operations.

Railroad noise measurement results show noise volumes of up to 107 dBA at a 60 foot centerline distance.

KEY TERMS

ACOUSTICS The science of sound.

AMBIENT NOISE The distinctive acoustical characteristics of a given area consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.

ATTENUATION The reduction of noise.

A-WEIGHTING A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.

CNEL Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 p.m. - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.

DECIBEL OR DB Fundamental unit of sound, defined as ten times the logarithm of the ratio of the sound pressure squared over the reference pressure squared.

FREQUENCY The measure of the rapidity of alterations of a periodic acoustic signal, expressed in cycles per second or Hertz.

IMPULSIVE Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.

L_{DN} Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.

L_{EQ} Equivalent or energy-averaged sound level.

L_{MAX} The highest root-mean-square (RMS) sound level measured over a given period of time.

$L_{(N)}$ The sound level exceeded as a described percentile over a measurement period. For instance, an hourly L_{50} is the sound level exceeded 50 percent of the time during the one-hour period.

LOUDNESS A subjective term for the sensation of the magnitude of sound.

NOISE Unwanted sound.

SEL A rating, in decibels, of a discrete event, such as an aircraft flyover or train passby, that compresses the total sound energy into a one-second event

FUNDAMENTALS OF ACOUSTICS

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected, or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals) as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in

pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels, but are expressed as dB, unless otherwise noted.

The decibel scale is logarithmic, not linear. In other words, two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70 dBA sound is half as loud as an 80 dBA sound, and twice as loud as a 60 dBA sound.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state A-weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The L_{eq} is the foundation of the composite noise descriptor, L_{dn}, and shows very good correlation with community response to noise.

The day/night average level (L_{dn}) is based upon the average noise level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment. CNEL is similar to L_{dn}, but includes a +3 dB penalty for evening noise. Table 7.0-1 lists several examples of the noise levels associated with common situations.

TABLE 7.0-1: TYPICAL NOISE LEVELS

COMMON OUTDOOR ACTIVITIES	NOISE LEVEL (DBA)	COMMON INDOOR ACTIVITIES
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft)	--100--	
Gas Lawn Mower at 1 m (3 ft)	--90--	
Diesel Truck at 15 m (50 ft), at 80 km/hr (50 mph)	--80--	Food Blender at 1 m (3 ft) Garbage Disposal at 1 m (3 ft)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft)	--70--	Vacuum Cleaner at 3 m (10 ft)
Commercial Area Heavy Traffic at 90 m (300 ft)	--60--	Normal Speech at 1 m (3 ft)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

SOURCE: CALTRANS, TECHNICAL NOISE SUPPLEMENT, TRAFFIC NOISE ANALYSIS PROTOCOL. NOVEMBER 2009.

EFFECTS OF NOISE ON PEOPLE

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction;
- Interference with activities such as speech, sleep, and learning; and
- Physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it.

With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived;
- Outside of the laboratory, a 3 dBA change is considered a just-perceivable difference;
- A change in level of at least 5 dBA is required before any noticeable change in human response would be expected; and

- A 10 dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6 dB per doubling of distance from the source, depending on environmental conditions (i.e., atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

LOCAL REGULATORY FRAMEWORK

Existing City Noise Thresholds

The City of Atwater General Plan Noise Element establishes goals and policies, as well as criteria for evaluating the compatibility of individual land uses with respect to noise exposure.

City of Atwater Noise Element:

GOAL NO-1. Protect residents from the harmful and annoying effects of exposure to excessive noise.

Policy NO-1.1. Monitor and update data regarding the community's ambient and fixed noise levels.

Policy NO-1.2. Require that an acoustical analysis be submitted for new development in locations where exterior and/or interior noise levels will likely exceed the City's noise standards, so that appropriate mitigation measures can be determined. The analysis must comply with the guidelines identified in Table 6-1 below.

TABLE 6-1: GUIDELINES FOR ACOUSTICAL ANALYSIS

1. The analysis shall be the financial responsibility of the applicant.
2. The analysis shall be prepared by a qualified person experienced in the fields of environmental noise assessment and architectural acoustics.
3. Noise levels shall be documented with sufficient sampling periods and locations to adequately describe noise conditions and noise sources.
4. Existing and projected (20 years) noise levels shall be estimated in terms of Ldn or CNEL and levels shall be compared to policies of the Noise Element.
5. Mitigation shall be recommended to comply with the standards of the Noise Element, giving preference to site planning and design rather than noise barriers.
6. Noise exposure after the prescribed mitigation measures have been implemented shall be estimated.
7. A post-project assessment program to evaluate the success of mitigation measures shall be described.

Policy NO-1.3. Encourage the use of site planning and building materials/design as primary methods of noise attenuation.

Implementation Program NO-1.a. Periodically update existing local noise maps as new information about the community's noise environment becomes available to ensure accuracy in land use compatibility planning and appropriate mitigation of noise impacts.

Implementation Program NO-1.b. Adopt and enforce a Noise Ordinance that complies with the State's Noise Insulation Standards. Said ordinance shall contain policies and regulations addressing both ambient and fixed source noise impacts, including but not limited to:

- Permitted days and hours for nonemergency construction (AM starting time to PM cease of operations).
- Permitted days and hours of operation for noise-generating commercial and industrial outdoor equipment (leaf blowers, parking lot sweepers, etc.) on sites located adjacent to residential areas.
- Standards geared primarily toward commercial and industrial land uses, limiting peak noise emissions measured from the property line of the noise generating use.
- Guidelines for noise measurement/monitoring activities and enforcement.

GOAL NO-2. Protect residents from exposure to excessive transportation related noise.

Policy NO-2.1. Periodically update existing and projected noise contours for all transportation noise sources.

Policy NO-2.2. Utilize Table 6-5 as a general guide when considering the feasibility of new development with respect to existing and future transportation noise levels. Noise levels should be measured from the outdoor activity area of each specified use.

Policy NO-2.3. Prevent new development of noise-sensitive land uses in areas exposed to existing or projected levels of noise from transportation sources which exceed the levels specified in Table 6-6, unless the project design includes effective mitigation measures to reduce interior and exterior volumes to the levels specified in that table.

Policy NO-2.4. Mitigate noise created by new transportation noise sources consistent with the levels specified in Table 6-6 in outdoor activity areas or interior spaces of existing noise-sensitive land uses.

Policy NO-2.5. Consider the significance of noise level increases associated with major roadway improvement projects prior to construction. In instances where mitigation will not reduce noise volumes to the levels recommended in Table 6-6, the following criteria should be used as a test of significance for roadway improvement projects:

a. Where existing traffic noise levels are less than 60 dB L_{dn}, in the outdoor activity areas of noise-sensitive uses, roadway improvement projects which increase noise levels to 60 dB L_{dn} will not be considered significant.

b. Where existing traffic noise levels range between 60 and 65 dB L_{dn} in the outdoor activity areas of noise-sensitive land uses, a +3 dB L_{dn} increase in noise levels due to a roadway improvement project will be considered significant.

c. Where existing traffic noise levels are greater than 65 dB L_{dn} in the outdoor activity areas on noise-sensitive uses, a +1.5 dB L_{dn} increase in noise levels due to a roadway improvement project will be considered significant.

Policy NO-2.6. Prevent the introduction of new incompatible land uses in areas impacted by existing and projected operations at Castle Airport.

Policy NO-2.7. Require an acoustical analysis when noise-sensitive land uses are proposed in areas exposed to existing or projected exterior noise levels exceeding the levels specified in Table 6-6 so that noise mitigation may be included in the project design.

Implementation Program NO-2.a. Require development within the Area of Influence for Castle Airport to comply with the noise standards and recommendations contained within the Merced County Airport Land Use Compatibility Plan for that facility.

Table 6-5
Land Use Compatibility Guidelines for Development

Land Use Category		Community Noise Exposure L_{dn} or CNEL, dB						
		55	60	65	70	75	80	
Residential, Theaters, Meeting Halls, Churches, Auditoriums	A.	■	■					
	C.A.			■	■			
	U.					■	■	■
Transient Lodging, Motels, Hotels	A.	■	■					
	C.A.			■	■	■		
	U.						■	■
Schools, Libraries, Hospitals, Child Care, Museums	A.	■	■					
	C.A.			■	■	■		
	U.						■	■
Playgrounds, Neighborhood Parks, Amphitheaters	A.	■	■	■	■			
	C.A.					■		
	U.						■	■
Office Buildings, Businesses, Commercial and Professional	A.	■	■	■				
	C.A.				■	■		
	U.						■	■
Industrial, Utilities, Manufacturing, Agriculture	A.	■	■	■	■			
	C.A.					■	■	■
	U.							
Golf Courses, Riding Stables, Outdoor Spectator Sports	A.	■	■	■	■			
	C.A.					■	■	
	U.							■

A. Generally Acceptable - No noise mitigation measures are required.
C.A. Conditionally Acceptable - Use should be permitted only after careful study and inclusion of mitigation measures as needed to satisfy the policies of the Noise Element.
U. Generally Unacceptable - Development is usually not acceptable.
Source: 1990 California General Plan Guidelines (Appendix A)

GP TABLE 6-6 MAXIMUM ALLOWABLE NOISE EXPOSURE TRANSPORTATION NOISE SOURCES

Land Use	Outdoor Activity Area[1] L_{dn}/CNEL, dBA	Interior Spaces	
		L_{dn}/CNEL, dBA	L_{eq}, dBA[2]
Residential	60[3]	45	--
Transient Lodging	60[3]	45	--
Hospitals, Nursing Homes	60[3]	45	--
Theaters, Auditoriums, Music Halls	--	--	*35*
Churches, Meeting Halls	60[3]	--	40
Office Buildings	--	--	45
Schools, Libraries, Museums	60[3]	--	45
Playgrounds, Neighborhood Parks	70	--	--

[1] The exterior noise-level standard shall be applied to the outdoor activity area of the receiving land use. Outdoor activity areas are normally located near or adjacent to the main structure and often occupied by porches, patios, balconies, etc.

[2] As determined for a typical worst-case scenario hour during periods of use.

[3] Where it is not possible to reduce the noise in outdoor activity areas to 60 dBA, L_{dn}/CNEL or less using a practical application area of the best available noise reduction measures, an exterior noise level of up to 65 dBA, L_{dn}/CNEL may be allowed, provided that practical exterior noise level reduction measures have been implemented and that interior noise levels are in compliance with this table.

GOAL NO-3. Protect the economic base of the City of Atwater by preventing incompatible land uses from encroaching upon existing or planned noise producing uses.

Policy NO-3.1. Avoid development of new noise-sensitive uses where the noise levels generated by existing or anticipated non-transportation sources exceeds the noise level standards of Table 6-8 as measured immediately within the property line of the new development unless effective noise mitigation measures have been incorporated.

Noise Level Descriptor	Daytime (7 am – 10pm)	Nighttime (10pm – 7am)
Hourly L_{eq}	55 dB	45 dB
Maximum Level	75 dB	65 dB
Each of the noise levels specified shall be lowered by five dB for simple tone noises, noises consisting primarily of speech, or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).		

Note: For the purposes of the Noise Element, transportation noise sources are defined as traffic on public roadways, railroad line operations, and aircraft in flight. Control of noise from these sources is preempted by Federal and State regulations. Other noise sources are subject to local regulations, such as a noise control ordinance. Non-transportation noise sources may include industrial operations, outdoor recreation facilities, HVAC units, loading docks, etc.

GOAL NO-4. Prevent the introduction of new fixed noise sources in noise-sensitive areas.

Policy NO-4.1. Mitigate noise created by new proposed non-transportation sources consistent with the noise level standards of Table 6-8 as measured immediately within the property line of lands designated for noise sensitive land uses.

Policy NO-4.2. Require an acoustical analysis when proposed new nonresidential land uses or the expansion of existing nonresidential land uses is likely to produce noise level exceeding the performance standards of Table 6-8 immediately within the property line of existing or planned noise sensitive uses.

Implementation Program NO-4.a. Use the development review process to ensure that noise impacts are adequately addressed and sufficiently mitigated in accordance with the State's Noise Insulation Standards and the policies set forth in the General Plan.

EXISTING NOISE LEVELS

Traffic Noise Levels

The FHWA Highway Traffic Noise Prediction Model (FHWA-RD 77-108) was used to develop L_{dn} (24-hour average) noise contours for highways and major roadways in the planning area. The model is based upon the CALVENO noise emission factors for automobiles, medium trucks, and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver and the acoustical characteristics of the site. The FHWA Model predicts hourly L_{eq} values for free-flowing traffic conditions, and is generally considered to be accurate within 1.5 dB. To predict L_{dn} values, it is necessary to determine the hourly distribution of traffic for a typical 24-hour period.

Existing traffic volumes were obtained from the traffic modeling performed for the city. Day/night traffic distributions were based upon continuous hourly noise measurement data and Saxelby Acoustics file data for similar roadways. Using these data sources and the FHWA traffic noise prediction methodology, traffic noise levels were calculated for existing conditions. Table 7.0-2 shows the results of this analysis.

TABLE 7.0-2: PREDICTED EXISTING TRAFFIC NOISE LEVELS

ROADWAY	SEGMENT	NOISE LEVEL AT CLOSEST RECEPTORS (DB, LDN)[1]	DISTANCES TO TRAFFIC NOISE CONTOURS, LDN (FEET)		
			70 DB	65 DB	60 DB
Olive Avenue	From Vine Ave to Vine St	59.0	12	26	55
Atwater Blvd	From Golden State Hwy to Maple St	65.3	66	141	304
Bell Dr	Bell Ln to Bell Ln	47.0	11	23	49
Applegate Rd	Sycamore Ave to Bell Dr.	48.3	57	122	263
Applegate Rd	Bell Dr. to Sunset Dr.	55.9	35	75	161
Commerce Ave	Commerce Ave to Industry Way	38.3	26	55	119
Atwater Blvd	Castle St. to California St	56.3	50	107	231
N Winton Way	Grove Ave to Mitchell Ave	54.4	34	73	157
N Winton Way	Fruitland Ave to Bellevue Rd	50.4	35	76	164
N Winton Way	Camellia Dr to Fruitland Ave	63.4	31	66	143
Bellevue Rd	Sixth St to Fifth St	62.6	30	66	141
Juniper Ave	Fourth St to Third St	56.8	9	20	43
First St	Juniper Ave to Grove Ave	63.2	26	57	122
Shaffer Rd	Manzanita Dr to Bellevue Rd	63.2	23	49	107
First St	Center St to Village Cir Dr	53.4	22	47	102
E Bellevue Rd	**Consittution Dr to Muir Ave.**	**61.6**	**25**	**53**	**115**
E Juniper Ave	**Sierra Madre Dr to Valley St**	**60.3**	**19**	**41**	**89**
N Buhach Rd	**Garden Dr to E Junipero Ave**	**62.8**	**27**	**57**	**123**

Roadway	Segment	Noise Level at Closest Receptors (dB, Ldn)[1]	Distances to Traffic Noise Contours, Ldn (feet)		
			70 dB	65 dB	60 dB
N Buhach Rd	E Junipero Ave to Ave One	59.0	12	26	55

Notes: Distances to traffic noise contours are measured in feet from the centerlines of the roadways.
1 Traffic noise levels are predicted at the closest sensitive receptors or at a distance of 100 feet in commercial/retail areas.
Source: Fehr & Peers, Caltrans, Saxelby Acoustics., 2024.

Traffic noise levels are predicted at the sensitive receptors located at the closest typical setback distance along each planning area roadway segment. In some locations, sensitive receptors may be located at distances which vary from the assumed calculation distance and may experience shielding from intervening barriers or sound walls. However, the traffic noise analysis is believed to be representative of the majority of sensitive receptors located closest to the planning area roadway segments analyzed in this report.

The actual distances to noise level contours may vary from the distances predicted by the FHWA model due to roadway curvature, grade, shielding from local topography or structures, elevated roadways, or elevated receivers. The distances reported in Table 7.0-2 are generally considered to be conservative estimates of noise exposure along roadways in the City of Atwater.

Railroad Noise Levels

Railroad activity in the City of Atwater occurs along the Burlington Northern Santa Fe (BNSF) line and the Union Pacific Railroad (UPRR) line. In order to quantify noise exposure from existing train operations, continuous (24-hour) noise level measurement surveys were conducted along the BNSF and UPRR railroad lines.

The purpose of the noise level measurements was to determine typical sound exposure levels (SEL) for railroad line operations, while accounting for the effects of travel speed, warning horns and other factors which may affect noise generation. In addition, the noise measurement equipment was programmed to identify individual train events so that the typical number of train operations could be determined.

Table 7.0-3 shows a summary of the continuous noise measurement results for railroad activity within the city.

TABLE 7.0-3: RAILROAD NOISE MEASUREMENT RESULTS

MEASUREMENT LOCATION	RAILROAD TRACK	GRADE CROSSING /WARNING HORN	TRAIN EVENTS PER 24-HR PERIOD	DISTANCE TO CL	AVERAGE SEL
LT-2	BNSF	Yes	36	60’	107 dBA
LT-4	UP	No	9	110’	106 dBA

SOURCE: SAXELBY ACOUSTICS – 2023.

Noise measurement equipment consisted of Larson Davis Laboratories (LDL) model 820 precision integrating sound level meters equipped with a GRAS ½" microphone. The measurement system was calibrated using a CAL 200 acoustical calibrator before and after testing. Audio recordings of events were captured along with sound measurement data to help with source identification of events. The measurement equipment meets all of the pertinent requirements of the American National Standards Institute (ANSI) for Type 1 (precision) sound level meters.

To determine the distances to the day/night average (L_{dn}) railroad contours, it is necessary to calculate the L_{dn} for typical train operations. This was done using the SEL values and above-described number and distribution of daily train operations. The L_{dn} may be calculated as follows:

$$L_{dn} = SEL + 10 \log N_{eq} - 49.4 \text{ dB, where:}$$

SEL is the mean Sound Exposure Level of the event, N_{eq} is the sum of the number of daytime (7 a.m. to 7 p.m.) events plus 10 times the number of nighttime (10 p.m. to 7 a.m.) events per day, and 49.4 is ten times the logarithm of the number of seconds per day. Based upon the above-described noise level data, number of operations and methods of calculation, the L_{dn} value for railroad line operations have been calculated, and the distances to the L_{dn} noise level contours are shown in Table 7.0-4.

TABLE 7.0-4: APPROXIMATE DISTANCES TO THE RAILROAD NOISE CONTOURS

MEASUREMENT LOCATION	EXTERIOR NOISE LEVEL AT 100 FEET, L_{DN}	DISTANCE TO EXTERIOR NOISE LEVEL CONTOURS, FEET		
		60 DB L_{DN}	65 DB L_{DN}	70 DB L_{DN}
BURLINGTON NORTHERN SANTA FE				
LT-2	77 dB	1270’	590’	270’
UNION PACIFIC				
LT-4	75 dB	210’	450’	210’

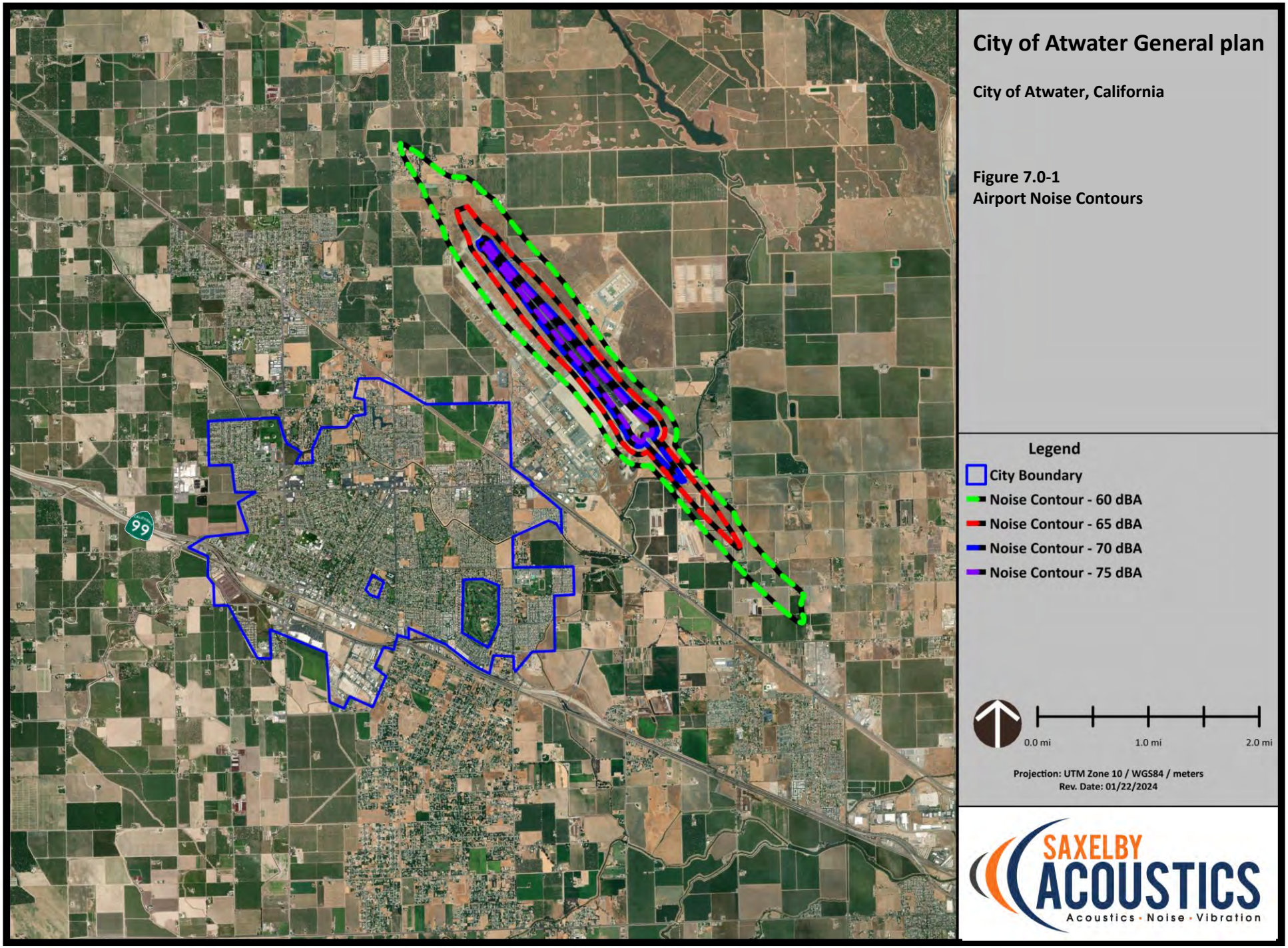
SOURCE: SAXELBY ACOUSTICS - 2023.

Aviation Noise Levels

Castle-Merced County Airport is the main aviation facilities in the proximity of the city, located northeast of Atwater. The airport is owned and operated by Merced County.

In 1995 Castle Airport transitioned from Castle Air Force Base, the conversion of the airfield from military to civilian use has resulted in a significant change in the characteristics of the noise generated at Castle. However, since the airfield has only recently been converted, the potential future character and volume of aircraft activity at Castle Airport remains uncertain.

Noise impacts and contours for Castle-Merced County Airport are addressed in *Merced County Airport Land Use Compatibility Plan*, adopted by the Merced County Airport Land Use Commission on June 21, 2012. Figure 7.0-1 shows the most recent noise contours developed for the airport.


City of Atwater General plan
City of Atwater, California
Figure 7.0-1
Airport Noise Contours
Legend
City Boundary
Noise Contour - 60 dBA
Noise Contour - 65 dBA
Noise Contour - 70 dBA
Noise Contour - 75 dBA
99
0.0 mi
1.0 mi
2.0 mi
Projection: UTM Zone 10 / WGS84 / meters
Rev. Date: 01/22/2024
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Fixed Noise Sources

The production of noise is a result of many industrial processes, even when the best available noise control technology is applied. Noise exposures within industrial facilities are controlled by Federal and State employee health and safety regulations (OSHA and Cal-OSHA), but exterior noise levels may exceed locally acceptable standards. Commercial, recreational, and public service facility activities can also produce noise which affects adjacent sensitive land uses. These noise sources can be continuous and may contain tonal components which have a potential to annoy individuals who live nearby. In addition, noise generation from fixed noise sources may vary based upon climatic conditions, time of day, and existing ambient noise levels.

In Atwater, fixed noise sources typically include parking lots, loading docks, parks, schools, and other commercial/retail use noise sources (HVAC, exhaust fans, etc.)

From a land use planning perspective, fixed-source noise control issues focus upon two goals:

1. To prevent the introduction of new noise-producing uses in noise-sensitive areas, and
2. To prevent encroachment of noise sensitive uses upon existing noise-producing facilities.

The first goal can be achieved by applying noise level performance standards to proposed new noise-producing uses. The second goal can be met by requiring that new noise-sensitive uses in near proximity to noise-producing facilities include mitigation measures that would ensure compliance with noise performance standards.

Fixed noise sources which are typically of concern include but are not limited to the following:

- HVAC Systems
- Pump Stations
- Steam Valves
- Generators
- Air Compressors
- Conveyor Systems
- Pile Drivers
- Drill Rigs
- Welders
- Outdoor Speakers
- Chippers
- Loading Docks
- Cooling Towers/Evaporative Condensers
- Lift Stations
- Steam Turbines
- Fans
- Heavy Equipment
- Transformers
- Grinders
- Gas or Diesel Motors
- Cutting Equipment
- Blowers
- Cutting Equipment
- Amplified Music and Voice

The types of uses which may typically produce the noise sources described above include, but are not limited to: wood processing facilities, pump stations, industrial/agricultural facilities, trucking operations, tire shops, auto maintenance shops, metal fabricating shops, shopping centers, drive-up windows, car washes, loading docks, public works projects, batch plants, bottling and canning plants, recycling centers, electric generating stations, race tracks, landfills, sand and gravel operations, and special events such as concerts and athletic fields. Typical noise levels associated with various types of stationary noise sources are shown in Table 7.0-5.

TABLE 7.0-5: TYPICAL STATIONARY SOURCE NOISE LEVELS

USE	NOISE LEVEL AT 100 FEET, LEQ[1]	DISTANCE TO NOISE CONTOURS, FEET			
		50 DB LEQ (NO SHIELDING)	45 DB LEQ (NO SHIELDING)	50 DB LEQ (WITH 5 DB SHIELDING)	45 DB LEQ (WITH 5 DB SHIELDING)
Auto Body Shop	56 dB	200	355	112	200
Auto Repair (Light)	53 dB	141	251	79	141
Busy Parking Lot	54 dB	158	281	89	158
Cabinet Shop	62 dB	398	708	224	398
Car Wash	63 dB	446	792	251	446
Cooling Tower	69 dB	889	1,581	500	889
Loading Dock	66 dB	596	1,059	335	596
Lumber Yard	68 dB	794	1,413	447	794
Maintenance Yard	68 dB	794	1,413	447	794
Outdoor Music Venue	90 dB	10,000	17,783	5,623	10,000
Paint Booth Exhaust	61 dB	355	631	200	355
School Playground / Neighborhood Park	54 dB	158	281	89	158
Skate Park	60 dB	316	562	178	316
Truck Circulation	48 dB	84	149	47	84
Vendor Deliveries	58 dB	251	446	141	251

[1] *ANALYSIS ASSUMES A SOURCE-RECEIVER DISTANCE OF APPROXIMATELY 100 FEET, NO SHIELDING, AND FLAT TOPOGRAPHY. ACTUAL NOISE LEVELS WILL VARY DEPENDING ON SITE CONDITIONS AND INTENSITY OF THE USE. THIS INFORMATION IS INTENDED AS A GENERAL RULE ONLY, AND IS NOT SUITABLE FOR FINAL SITE-SPECIFIC NOISE STUDIES.*
SOURCE: J.C. BRENNAN & ASSOCIATES, INC. 2017.

COMMUNITY NOISE SURVEY

A community noise survey was conducted to document ambient noise levels at various locations throughout the city. Short-term noise measurements were conducted at seven locations throughout the city on August 22nd, 2023. In addition, five continuous 24-hour noise monitoring sites were also conducted to record day-night statistical noise level trends from December 23rd, 2023. The data collected included the hourly average (L_{eq}), median (L_{50}), and the maximum level (L_{max}) during the measurement period. Noise monitoring sites and the measured noise levels at each site are summarized in Table 7.0-6 and Table 7.0-7. Figure 7.0-2 shows the locations of the noise monitoring sites.

TABLE 7.0-6: EXISTING CONTINUOUS 24-HOUR AMBIENT NOISE MONITORING RESULTS

SITE	LOCATION	LDN (DBA)	MEASURED HOURLY NOISE LEVELS, DBA LOW-HIGH (AVERAGE)					
			DAYTIME (7:00 AM - 10:00 PM)			NIGHTTIME (10:00 PM – 7:00 AM)		
			L_{EQ}	L_{50}	L_{MAX}	L_{EQ}	L_{50}	L_{MAX}
LT-1	Intersection of Sierra Madre Dr. and Juniper Ave.	61	59	56	76	54	50	72
LT-2	South of BNSF Railroad	77	71	61	94	71	53	88
LT-3	E.L Walters Park	55	50	47	66	48	46	63
LT-4	North of Atwater Blvd. and UP Railroad	77	69	65	90	71	58	90
LT-5	North of CA 99 and UP Railroad	78	74	72	91	72	68	87

SOURCE: SAXELBY ACOUSTICS, 2023.

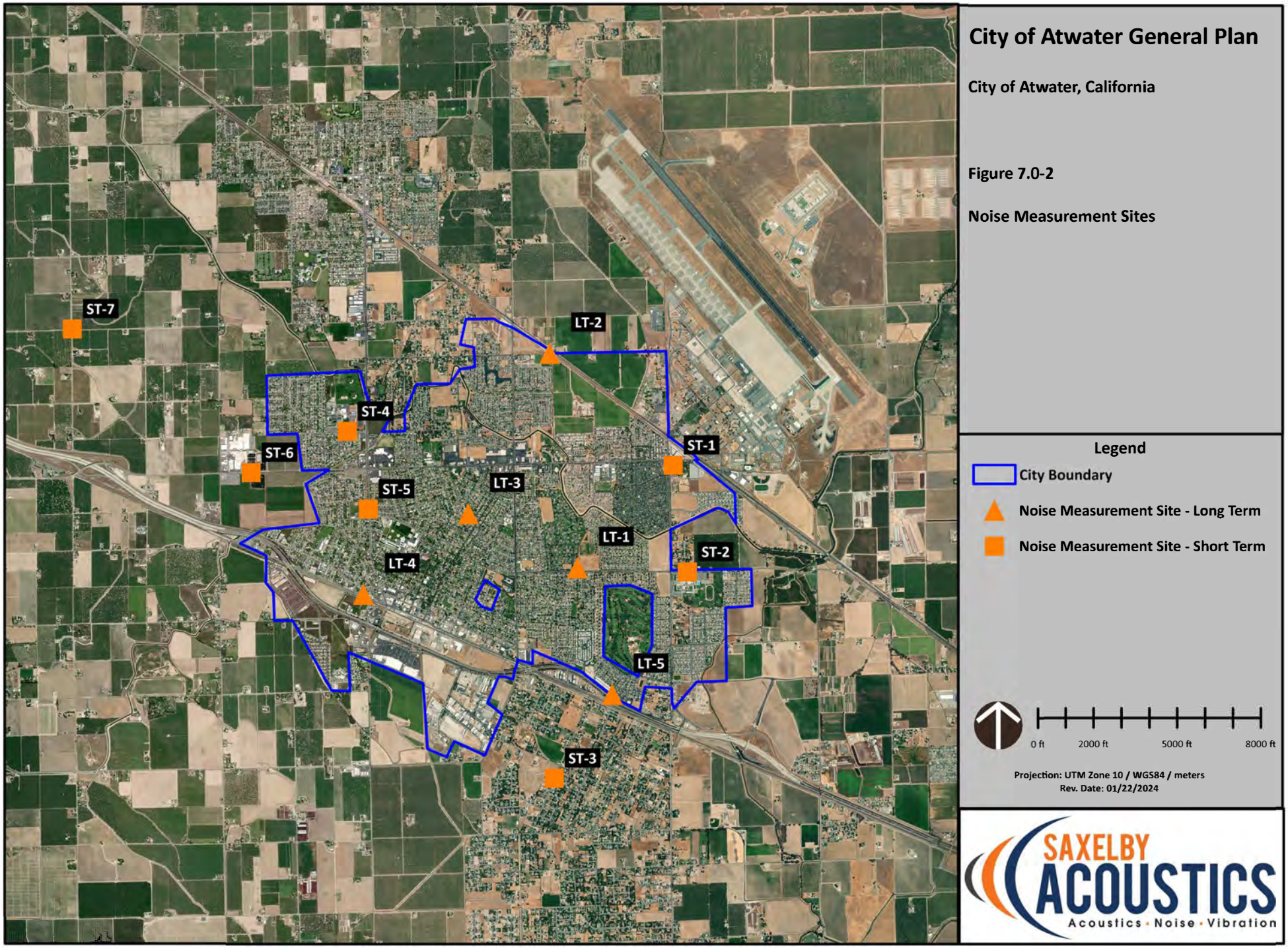
TABLE 7.0-7: EXISTING SHORT-TERM COMMUNITY NOISE MONITORING RESULTS

SITE	LOCATION	TIME[1]	MEASURED SOUND LEVEL, DB			NOTES
			L_{EQ}	L_{50}	L_{MAX}	
ST-1	Veteran's Memorial Park	1:07 p.m.	62	50	72	Secondary noise sources from ambient nature, vehicle traffic and neighborhood construction sounds.
ST-2	Intersection at Buckeye Ln and Ave Two	11:28 a.m.	77	67	98	Primary noise source is traffic on Tiburon Blvd and secondary noise source is traffic on Beach Rd and some construction noises.
ST-3	Intersection of Herrod Ave and Violet Ct	12:51 p.m.	58	38	79	Primary noise source is vehicle traffic on Mar W St. Secondary noise source is light construction noises.
ST-4	Atwater Highschool at Fruitland Ave.	1:23 p.m.	65	61	76	Primary noise source is vehicle traffic on Lyford Dr. Secondary noise source is from Reed Elementary School.
ST-5	St Anthony's Catholic Church	2:24 p.m.	67	64	81	Primary noise source is Highway 131/Tiburon Blvd. Secondary noise source is from traffic on Rock Hill Drive.
ST-6	Dole Packaged Foods LLC	1:41 p.m.	51	49	70	Primary noise source is traffic on Avenida Miraflores. Secondary noise source is from Del Mar Middle School.
ST-7	Intersection at Liberty Ave. and Central Ave.	2:59 p.m.	51	41	68	Primary noise source is traffic on Trestle Glan Blvd. Secondary noise source is from traffic on Turtle Rocks Court.

1 - ALL COMMUNITY NOISE MEASUREMENT SITES HAVE TEST DURATIONS OF 10:00 MINUTES.
SOURCE: SAXELBY ACOUSTICS, 2023.

Community noise monitoring equipment included Larson Davis Laboratories (LDL) Model 820 and 831 precision integrating sound level meters equipped with LDL ½" microphones. The measurement systems were calibrated using a LDL Model CAL200 acoustical calibrator before and after testing. The measurement equipment meets all of the pertinent requirements of the American National Standards Institute (ANSI) for Type 1 (precision) sound level meters.

The results of the community noise survey shown in Tables 7.0-6 and 7.0-7 indicate that existing transportation noise sources were the major contributor of noise observed during daytime hours, especially during vehicle passbys.



City of Atwater General Plan

City of Atwater, California

Figure 7.0-2

Noise Measurement Sites

Legend

- City Boundary
- Noise Measurement Site - Long Term
- Noise Measurement Site - Short Term

0 ft 2000 ft 5000 ft 8000 ft

Projection: UTM Zone 10 / WGS84 / meters
Rev. Date: 01/22/2024

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Chapter 8
Conservation and Natural Resources



The Conservation and Natural Resources chapter recognizes and describes the city's natural resources. Natural resources form an important part of the unique character and quality of life within Atwater. These resources can include the city's biological resources, geology and soils, mineral resources, hydrology and water quality, visual resources, and cultural resources.

This Chapter includes the following topics:

8.1 Biological Resources
8.2 Air Quality
8.3 Greenhouse Gases and Climate Change
8.4 Geology, Soils and Seismicity
8.5 Mineral and Energy Resources
8.6 Hydrology and Water Quality
8.7 Scenic Resources
8.8 Agricultural Resources
8.9 Cultural and Historic Resources

8.0 CONSERVATION AND NATURAL RESOURCES

The natural resources within the city and surrounding areas are an important part of the city's unique character, health, and quality of life. In an effort to identify and understand the key natural resources of the city, this chapter is divided into the following sections:

8.1 Biological Resources

8.2 Air Quality

8.3 Greenhouse Gases and Climate Change

8.4 Geology, Soils and Seismicity

8.5 Mineral and Energy Resources

8.6 Hydrology and Water Quality

8.7 Scenic Resources

8.8 Agricultural Resources

8.9 Cultural and Historic Resources

FINDINGS ISSUES AND OPPORTUNITIES

Biological Resources: The planning area includes special status plans and animal species. Preservation of biological resources habitat, such as foraging lands and waterways, will continue to promote a naturally diverse place for species.

Air Quality: Merced County has a State designation of Nonattainment for O3, PM10, and PM2.5 and is either Unclassified or Attainment for all other criteria pollutants. The County has a national designation of Nonattainment for O3 and PM2.5. The County is designated either attainment or unclassified for the remaining national standards.

Air Quality and Greenhouse Gases: Emissions of greenhouse gases contribute to global climate change. Working to meet state and local climate adaptation goals in order to reduce the effects of climate change should be a priority. For example, there are multiple opportunities for infill development. Development standards can be created to spark development in a pattern that is more walkable and contains a wider diversity of uses.

Geology, Soils and Seismicity: Potentially substantial (though infrequent) geological risks exist in the City from seismic and soil hazards.

Hydrology and Water Quality: Preserving water resources and promoting sustainable water management practices will help meet climate change goals as established by the State of California.

Scenic Resources: Protecting Scenic corridors and views of open spaces and other areas that provide visual relief will make major contributions to the quality of life enjoyed by the residents of Atwater.

Agricultural Resources: Approximately 4,267.04 acres of Prime Farmland and 754.24 acres of Farmland of Statewide Importance is located within the Panning Area.

Conservation Easements: 3.4 acres of land within the planning area is designated as Williamson Act-Non-Prime lands.

Cultural and Historic Resources: The City of Atwater's General Plan planning area lies within the northern portion of the ethnographic territory of the Yokuts people.

Historic Resources are found within the planning area. Opportunities exist for protecting the architectural heritage of Atwater by identifying and preserving significant historic resources, and promoting compatibility in design.

8.1 BIOLOGICAL RESOURCES

This section describes biological resources in the City of Atwater from both a qualitative and quantitative perspective. The results of this assessment may be used in planning and management decisions that may affect biological resources in the planning area.

KEY TERMS

The following key terms are used throughout this section to describe biological resources and the framework that regulates them:

Hydric Soils. One of the three wetland identification parameters, according to the Federal definition of a wetland, hydric soils have characteristics that indicate they were developed in conditions where soil oxygen is limited by the presence of saturated soil for long periods during the growing season. There are approximately 2,000 named soils in the United States that may occur in wetlands.

Hydrophytic Vegetation. Plant types that typically occur in wetland areas. Nearly 5,000 plant types in the United States may occur in wetlands. Plants are listed in regional publications of the U.S. Fish and Wildlife Service (USFWS) and include such species as cattails, bulrushes, cordgrass, sphagnum moss, bald cypress, willows, mangroves, sedges, rushes, arrowheads, and water plantains.

Sensitive Natural Community. A sensitive natural community is a biological community that is regionally rare, provides important habitat opportunities for wildlife, is structurally complex, or is in other ways of special concern to local, State, or Federal agencies. CEQA identifies the elimination or substantial degradation of such communities as a significant impact. The California Department of Fish and Wildlife (CDFW) tracks sensitive natural communities in the California Natural Diversity Database (CNDDB).

Special-Status Species. Special-status species are those plants and animals that, because of their recognized rarity or vulnerability to various causes of habitat loss or population decline, are recognized by Federal, State, or other agencies. Some of these species receive specific protection that is defined by Federal or State endangered species legislation. Others have been designated as "sensitive" on the basis of adopted policies and expertise of State resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. These species are referred to collectively as "special status species" in this report, following a convention that has developed in practice but has no official sanction. For the purposes of this assessment, the term “special status” includes those species that are:

- Federally listed or proposed for listing under the Federal Endangered Species Act (50 CFR 17.11-17.12);
- Candidates for listing under the Federal Endangered Species Act (61 FR 7596-7613);
- State listed or proposed for listing under the California Endangered Species Act (14 CCR 670.5);
- Species listed by the U.S. Fish and Wildlife Service (USFWS) or the CDFW as a species of concern (USFWS), rare (CDFW), or of special concern (CDFW);
- Fully protected animals, as defined by the State of California (California Fish and Game Code Section 3511, 4700, and 5050);
- Species that meet the definition of threatened, endangered, or rare under CEQA (CEQA Guidelines Section 15380);

- Plants listed as rare or endangered under the California Native Plant Protection Act (California Fish and Game Code Section 1900 et seq.); and
- Plants listed by the California Native Plant Society (CNPS) as rare, threatened, or endangered (List 1A and List 2 status plants in Skinner and Pavlik 1994).

Waters of the U.S. The Federal government defines waters of the U.S. as "lakes, rivers, streams, intermittent drainages, mudflats, sandflats, wetlands, sloughs, and wet meadows" [33 C.F.R. §328.3(a)]. Waters of the U.S. exhibit a defined bed and bank and ordinary high water mark (OHWM). The OHWM is defined by the USACE as "that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" [33 C.F.R. §328.3(e)].

Wetlands. Wetlands are ecologically complex habitats that support a variety of both plant and animal life. The Federal government defines wetlands as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" [33 C.F.R. §328.3(b)]. Wetlands require wetland hydrology, hydric soils, and hydrophytic vegetation. Examples of wetlands include freshwater marsh, seasonal wetlands, and vernal pool complexes that have a hydrologic link to waters of the U.S.

REGULATORY FRAMEWORK

There are a number of regulatory agencies whose responsibility includes the oversight of the natural resources of the State and nation including the California Department of Fish and Wildlife (CDFW), the U.S. Fish and Wildlife Service (USFWS), the U.S. Army Corps of Engineers (USACE), and the National Marine Fisheries Service (NMFS). These agencies often respond to declines in the quantity of a particular habitat or plant or animal species by developing protective measures for those species or habitat type. Additional information related to the State and Federal Regulatory framework is included in Appendix A of this report. The following is an overview local regulations that are applicable to implementing the General Plan.

LOCAL

2030 Merced County General Plan

The 2030 Merced County General Plan contains goals, policies and implementation measures related to biological resources which pertain to the Atwater SOI and planning area.

City of Atwater General Plan

The City of Atwater General Plan contains the following goals, policies and implementation measures related to biological resources.

Goal CO-5: Minimize impacts of future development on sensitive habitats.

Policy CO-5.1 Where feasible, avoid development in areas identified as sensitive habitat. Where avoidance is not feasible, apply mitigation measures to development projects to minimize impacts to sensitive habitats.

Implementation Program CO-5.a. Require a mitigation program as a condition for any project that proposes the alteration or loss of any sensitive habitat, if avoidance is not a feasible alternative. The program shall include specifications on replacement of sensitive habitat, including ratios for the creation or enhancement

of sensitive habitat. The program shall also include monitoring requirements and contingency measures should the proposed program inadequately replaces the loss of sensitive habitat.

Goal CO-6. Minimize impacts of development on wildlife and wildlife habitat, particularly special status species.

Policy CO-6.1. Consider opportunities for habitat preservation and enhancement in conjunction with public facility projects, particularly parks and storm drainage facilities.

Policy CO-6.2. Encourage the preservation of corridors between natural habitat areas to allow for the movement of wildlife and to prevent the creation of "biological islands."

Implementation Program CO-6.a. When new development or redevelopment activities are proposed in locations with the potential for special status species to occur, require the project applicant to submit a report by a qualified biologist addressing the presence or absence of any special status species on the development site. The report shall include recommendations for avoiding or minimizing impacts on any special status species or habitat found to be present.

ENVIRONMENTAL SETTING

Geomorphic Provinces/Bioregion

The planning area is located within the San Joaquin Valley Bioregion, which is comprised of Kings County, most of Fresno, Kern, Merced, and Stanislaus counties, and portions of Madera, San Luis Obispo, and Tulare counties. The San Joaquin Valley Bioregion is the third most populous out of ten bioregions in the state, with an estimated 2 million people. The largest cities are Fresno, Bakersfield, Modesto, and Stockton. Interstate 5 and State Route 99 are the major north-south roads that run the entire length of the bioregion. The City of Atwater is located on State Route 99.

The bioregion is bordered on the west by the coastal mountain ranges. Its eastern boundary joins the southern two-thirds of the Sierra bioregion, which features Yosemite, Kings Canyon, and Sequoia National Parks. At its northern end, the San Joaquin Valley bioregion borders the southern end of the Sacramento Valley bioregion. To the west, south, and east, the bioregion extends to the edges of the valley floor.

Habitat in the bioregion includes vernal pools, valley sink scrub and saltbush, freshwater marsh, grasslands, arid plains, orchards, and oak savannah. Historically, millions of acres of wetlands flourished in the bioregion, but stream diversions for irrigation dried all but about five percent. Remnants of the wetland habitats are protected in this bioregion in publicly owned parks, reserves, and wildlife areas. The bioregion is considered the state's top agricultural producing region with the abundance of fertile soil.

Vegetation

Vegetation occurring within the planning area primarily consists of agricultural, ruderal, riparian, and landscaping vegetation. Because of urban nature of the developed areas within the city and the active agricultural uses in surrounding lands, there is limited undisturbed natural vegetation. Common plant species observed in the planning area include: alkali-sink goldfields (*Lasthenia chrysantha)*, Wright's trichocoronis (*Trichocoronis wright var. wrightii),* prostate vernal pool navarreti (*Navarretia prostrata)*, vernal pool smallscale (*Atriplex persistens),* beaked clarkia (*Clarkia rostrata),* subtle orache (*Atriplex subtilis)* among others.

Wildlife

Agricultural, riparian vegetation along the San Joaquin River, and ruderal vegetation found in the planning area provides habitat for both common and special-status wildlife populations. For example, some commonly observed wildlife species in the region include:

American bumble bee (*Bombus pensylvanicus*), tricolored blackbird (*Agelaius tricolor*), San Joaquin kit fox (*vulpes macrotis mutica*), California tiger salamander (*Ambystoma californiense*), burrowing owl (*Athene cunicularia*), ferruginous hawk (*Buteo regalis*), Swainson's hawk (*Buteo swainsoni*), western pond turtle (*Emys marmorata*), vernal pool fairy shrimp (*Branchinecta lynchi*), Sanford's arrowhead (*Sagittaria sandordii*).

Locally common and abundant wildlife species are important components of the ecosystem. Due to habitat loss, many of these species must continually adapt to using agricultural, ruderal, and ornamental vegetation for cover, foraging, dispersal, and nesting.

Plant Communities

Agricultural and natural plant communities provide habitat for a variety of biological resources in the region. Sensitive habitats include those that are of special concern to resource agencies or those that are protected under a Habitat Conservation Plan, Natural Community Conservation Plan, the California Environmental Quality Act (CEQA), the Fish and Game Code, or the Clean Water Act (CWA). Additionally, sensitive habitats are usually protected under specific policies from local agencies. Figure 8.1-1 illustrates the plant communities (land cover types) in the planning area.

California Wildlife Habitat Relationship System

The California Wildlife Habitat Relationship (CWHR) habitat classification scheme has been developed to support the CWHR System, a wildlife information system and predictive model for California's regularly occurring birds, mammals, reptiles and amphibians. When first published in 1988, the classification scheme had 53 habitats. At present, there are 59 wildlife habitats in the CWHR System: 27 tree, 12 shrub, 6 herbaceous, 4 aquatic, 8 agricultural, 1 developed, and 1 non-vegetated.

According to the California Wildlife Habitat Relationship System there are 19 cover types (wildlife habitat classifications) in the planning area out of 59 found in the State. These include: Annual Grassland, Barren Land, Coastal Scrub, Cropland, Deciduous Orchard, Dryland Grain Crops, Eucalyptus, Evergreen Orchard, Fresh Emergent Wetland, Irrigated Grain Crops, Irrigated Hayfield, Irrigated Row and Field Crops, Lacustrine, Pasture, Rice, Riverine, Urban Land, Valley Foothill Riparian, and Vineyard.

Table 8.1-1 identifies the area by acreage for each cover type (classification) found in Atwater (City limits and SOI). Figure 8.1-1 illustrates the location of each cover type (classification) within Atwater. A brief description of each cover type follows.

TABLE 8.1-1: COVER TYPES - CALIFORNIA WILDLIFE HABITAT RELATIONSHIP SYSTEM

COVER TYPE	*CITY (ACRES)*	*SOI (ACRES)*	*PLANNING AREA (ACRES)*
Annual Grassland	24.02	11.02	12.01
Barren	3.56	--	17.35
Coastal Scrub	--	0.44	--
Cropland	--	2.22	21.57
Deciduous Orchard	221.26	2,761.09	5,308.13
Dryland Grain Crops	143.39	638.10	254.51
Eucalyptus	--	0.89	--
Evergreen Orchard	1.58	27.03	76.66
Fresh Emergent Wetland	4.36	4.92	--
Irrigated Grain Crops	0.89	201.65	53.37
Irrigated Hayfield	54.50	526.87	163.66
Irrigated Row and Field Crops	62.69	816.29	580.90
Lacustrine	12.45	4.45	2.89
Pasture	540.18	939.11	341.31
Rice	--	--	1.11
Riverine	17.69	25.39	17.61
Urban	3,102.42	594.13	129.91
Valley Foothill Riparian	--	0.78	--
Vineyard	5.44	68.55	96.37
Total	**4,194.43**	**6,622.94**	**7,077.36**

SOURCE: SOURCE: CASIL GIS DATA, CALIFORNIA WILDLIFE HABITAT RELATIONSHIP SYSTEM, 2023

DEVELOPED COVER TYPES

Cropland includes a variety of sizes, shapes, and growing patterns. Field corn can reach ten feet while strawberries are only a few inches high. Although most crops are planted in rows, alfalfa hay and small grains (barley and wheat) form dense stands with up to 100 percent canopy closure. Most croplands support annuals, planted in spring and harvested during summer or fall. In many areas, second crops are commonly planted after harvesting the first. Wheat is planted in fall and harvested in late spring or early summer. Overwintering of sugar beets occurs in the Sacramento Valley, with harvesting in spring after the soil dries. Croplands are located on flat to gently rolling terrain. When flat terrain is put into crop production, it usually is leveled to facilitate irrigation. Rolling terrain is either dry farmed or irrigated by sprinklers. Soils often dictate the crops grown. Climate influences the type of crops grown. Within the planning area, there are 21.57 acres of cropland habitat.

Deciduous orchards are typically open single species tree dominated habitats. Depending on the tree type and pruning methods they are usually low, bushy trees with an open understory to facilitate harvest. Trees range in height at maturity for many species from 15 to 30 ft, but may be 10 ft or less depending on the species. Crowns usually touch, and are usually in a linear pattern. Spacing between trees is uniform depending on desired spread of mature trees. The understory is usually composed of low-growing grasses, legumes, and other herbaceous plants, but may be managed to prevent understory growth totally or partially, such as along tree rows. Deciduous orchards can be found on flat alluvial soils in the valley floors,

in rolling foothill areas, or on relatively steep slopes. Though some deciduous orchards are non-irrigated, most are irrigated. Some flat soils are flood irrigated, but many deciduous orchards are sprinkler irrigated. Large numbers of orchards are irrigated by drip or trickle irrigation systems. Most deciduous orchards are in valley or foothill areas, with a few, such as, apples and pears, up to 3,000 feet elevation. Within the planning area, there are 5,308.13 acres of deciduous orchard habitat.

Evergreen orchards are typically open single species tree dominated habitats. Depending on the tree type and pruning methods they are usually low, bushy trees with an open understory to facilitate harvest. Trees range in height at maturity for many species from 15 to 30 ft, but may be 10 ft or less depending on the species. Crowns often do not touch, and are usually in a linear pattern. Spacing between trees is uniform depending on desired spread of mature trees. The understory is usually composed of low-growing grasses, legumes, and other herbaceous plants, but may be managed to prevent understory growth totally or partially, such as along tree rows. Evergreen orchards can be found on flat alluvial soils in the valley floors, in rolling foothill areas, or on relatively steep slopes. All are irrigated. Some flat soils are flood irrigated, but most evergreen orchards are sprinkler irrigated. Large numbers of orchards are irrigated by drip or trickle irrigation systems. Most evergreen orchards are in valley or foothill areas. Except for olive, most evergreen orchard trees are not very frost tolerant. Within the planning area, there are 76.66 acres of evergreen orchard habitat.

Dryland Grain Crops are composed of vegetation in the dryland (nonirrigated) grain and seed crops habitat includes seed producing grasses, primarily barley, cereal rye, oats, and wheat. These seed and grain crops are annuals. They are usually planted by drilling in rows which produce solid stands, forming 100 percent canopy at maturity in good stands. They are normally planted in fall and harvested in spring. However, they may be planted in rotation with other irrigated crops and winter wheat or barley may be planted after harvest of a previous crop in the fall, dry farmed (during the wet winter and early spring months), and then harvested in late spring. Within the planning area, there are 254.51 acres of dryland grain crop habitat.

Irrigated Grain Crops include a variety of sizes, shapes and growing patterns. Field corn can reach ten feet tall while dry beans are only several inches tall. Most irrigated grain and seed crops are grown in rows. Some may form 100 percent canopy while others may have significant bare areas between rows. All seed and grain crops are annuals. They are usually planted in spring and harvested in summer or fall. However, they may be planted in rotation with other irrigated crops and sometimes winter wheat or barley may be planted after harvest of a previous crop in the fall, dry farmed (during the wet winter and early spring months) or they may be irrigated, and then harvested in the late spring. Within the Planning Area, there are 53.37 acres of irrigated grain crop habitat.

Irrigated Hayfield normally has a 2 to 6 months initial growing period, depending on climate, and soil, this habitat is dense, with nearly 100 percent cover. Average height is about 0.46 m. (1.5 feet) tall. Planted fields generally are monocultures (the same species or mixtures or a few species with similar structural properties). Structure changes to a lower stature following each harvest, grows up again and reverts to bare ground following plowing or discing. Plowing may occur annually, but is usually less often. Layering generally does not occur in this habitat. Unplanted "native" hay fields may contain short and tall patches. If not harvested for a year, they may develop a dense thatch of dead leaves between the canopy and the ground. Within the planning area, there are 163.66 acres of irrigated hayfield habitat.

Irrigated Row and Field Crops include a variety of sizes, shapes and growing patterns. Cotton and asparagus can be three or four feet tall while others may be a foot or less high. Most irrigated row and field crops are grown in rows. Some may form 100 percent canopy while others may have significant bare areas between rows. Most are annuals, while others, such as asparagus and strawberries are perennial. The annuals are

usually planted in spring and harvested in summer or fall. However, they may be planted in rotation with other irrigated crops and sometimes winter wheat or barley may be planted after harvest of a previous crop in the fall, dry farmed (during the wet winter and early spring months), and then harvested in the late spring. In some areas of southern California three crops may be grown in a year. Within the planning area, there are 580.90 acres of irrigated row and field crop habitat.

Rice and wild rice are flood irrigated crops that are seed producing annual grasses. Commercial rice generally is only a couple of feet tall, whereas, commercially grown wild rice may be six feet tall or taller. They are usually grown in leveed fields that are flooded much of the growing period, and dried out to mature and to facilitate harvesting. They usually produce 100 percent canopy closure as they mature. They are usually planted in spring and harvested in fall. Within the planning area, there are 1.11 acre of rice habitat.

Vineyards are composed of single species planted in rows, usually supported on wood and wire trellises. Vines are normally intertwined in the rows but open between rows. Rows under the vines are usually sprayed with herbicides to prevent growth of herbaceous plants. Between rows of vines, grasses and other herbaceous plants may be planted or allowed to grow as a cover crop to control erosion. Vineyards can be found on flat alluvial soils in the valley floors, in rolling foothill areas, or on relatively steep slopes. All are irrigated. Most vineyards are sprinkler irrigated. Large numbers of vineyards are irrigated by drip or trickle irrigation systems. Most vineyards are in valley or foothill areas. Within the planning area, there are 96.37 acres of vineyard habitat.

Urban habitats are not limited to any particular physical setting. Three urban categories relevant to wildlife are distinguished: downtown, urban residential, and suburbia. The heavily-developed downtown is usually at the center, followed by concentric zones of urban residential and suburbs. There is a progression outward of decreasing development and increasing vegetative cover. Species richness and diversity is extremely low in the inner cover. The structure of urban vegetation varies, with five types of vegetative structure defined: tree grove, street strip, shade tree/lawn, lawn, and shrub cover. A distinguishing feature of the urban wildlife habitat is the mixture of native and exotic species. Within the planning area, there are 129.91 acres of urban habitat.

Shrub Cover Types

Coastal Scrub occurs discontinuously in a narrow strip throughout the length of California, usually occurs within about 45 km (20 mi) of the ocean. Coastal Scrub is typified by low to moderate-sized shrubs with mesophytic leaves, flexible branches, semi-woody stems growing from a woody base, and a shallow root system. Coastal Scrub appears to support numbers of vertebrate species roughly equivalent to those in surrounding habitats. The Federal and State listed endangered peregrine falcon, Morro Bay kangaroo rat and the Santa Cruz long-toed salamander all occur in Coastal Scrub, though not exclusively. A subspecies of the black-tailed gnatcatcher, a California Department of Fish and Game Species of Special Concern, is found exclusively in southern sage scrub. Within the SOI, there are 0.44 acres of Coastal Scrub habitat.

Herbaceous Cover Types

Annual Grassland habitat occurs mostly on flat plains to gently rolling foothills. Climatic conditions are typically Mediterranean, with cool, wet winters and dry, hot summers. The length of the frost-free season averages 250 to 300 days. Annual precipitation is highest in northern California. Within the planning area, there are 12.01 acres of annual grassland habitat.

Fresh emergent wetland habitats occur on virtually all exposures and slopes, provided a basin or depression is saturated or at least periodically flooded. They are most common on level to gently rolling topography. They are found in various depressions or at the edge of rivers or lakes. Soils are predominantly silt and clay, although coarser sediments and organic material may be intermixed. In some areas organic soils (peat) may constitute the primary growth medium. Climatic conditions are highly variable and range from the extreme summer heat to winter temperatures well below freezing. Within the SOI, there are 4.92 acres of fresh emergent wetland habitat.

Pasture vegetation is a mix of perennial grasses and legumes that normally provide 100 percent canopy closure. Height of vegetation varies, according to season and livestock stocking levels, from a few inches to two or more feet on fertile soils before grazing. Old or poorly drained pastures may have patches of weeds in excess of two feet in height. Within the planning area, there are 341.31 acres of pasture habitat.

Tree Dominated Cover Types

Valley-foothill riparian habitats are found in valleys bordered by sloping alluvial fans, slightly dissected terraces, lower foothills, and coastal plains. They are generally associated with low velocity flows, flood plains, and gentle topography. Valleys provide deep alluvial soils and a high water table. The substrate is coarse, gravelly, or rocky soils more or less permanently moist, but probably well aerated. Frost and short periods of freezing occur in winter (200 to 350 frost-free days). This habitat is characterized by hot, dry summers and mild and wet winters. Temperatures range from 75 to 102 F in the summer to 29 to 44 F in the winter. Average precipitation ranges from 6-30 inches, with little or no snow. The growing season is 7 to 11 months. Within the planning area, there are 0.78 acres of valley-foothill riparian habitat.

Eucalyptus habitats range from single-species thickets with little or no shrubby understory to scattered trees over a well-developed herbaceous and shrubby understory. In most cases, eucalyptus forms a dense stand with a closed canopy. Stand structure for this habitat may vary considerably because most eucalyptus have been planted into either rows for wind protection or dense groves for hardwood production and harvesting. Eucalyptus is often found in monotypic stands. The genus is composed of over 150 species with high morphological diversity. Thus, habitat structure may be affected if more than two or three species coexist. Tree size may vary considerably depending on spacing and species. Typically, trees may range in height from 26 to 40 m (87 to 133 ft) and have diameters (dbh) of 21.8 to 38.4 cm (8.6 to 15.1 in) (Walters 1980), with most growth occurring in the first 15 years. Trees in excess of 46 to 80 m (152 to 264 ft) are not uncommon. Within the SOI, there are 0.89 acres of eucalyptus habitat.

Other Habitats

Barren habitat is defined by the absence of vegetation. Any habitat with <2% total vegetation cover by herbaceous, desert, or non-wildland species and <10% cover by tree or shrub species is defined this way. The physical settings for permanently barren habitat represent extreme environments for vegetation. An extremely hot or cold climate, a near-vertical slope, an impermeable substrate, constant disturbance by either human or natural forces, or a soil either lacking in organic matter or excessively saline can each contribute to a habitat being inhospitable to plants. Within the planning area, there are 20.91 acres of barren habitat.

Riverine habitats can occur in association with many terrestrial habitats. Riverine habitats are found adjacent to many rivers and streams. Riverine habitats are also found contiguous to lacustrine and fresh emergent wetland habitats. This habitat requires intermittent or continually running water generally originating at some elevated source, such as a spring or lake, and flows downward at a rate relative to slope or gradient and the volume of surface runoff or discharge. Velocity generally declines at progressively lower

altitudes, and the volume of water increases until the enlarged stream finally becomes sluggish. Over this transition from a rapid, surging stream to a slow, sluggish river, water temperature and turbidity will tend to increase, dissolved oxygen will decrease, and the bottom will change from rocky to muddy. Within the planning area, there are 17.61 acres of riverine habitat.

Lacustrine habitats are inland depressions or dammed riverine channels containing standing water. They may vary from small ponds less than one hectare to large areas covering several square kilometers. Depth can vary from a few centimeters to hundreds of meters. Typical lacustrine habitats include permanently flooded lakes and reservoirs (e.g., Lake Tahoe and Shasta Lake), intermittent lakes (e.g., playa lakes) and ponds (including vernal pools) so shallow that rooted plants can grow over the bottom. Most permanent lacustrine systems support fish life; intermittent types usually do not. Within the planning Area, there are 2.89 acres of lacustrine habitat.

SPECIAL-STATUS SPECIES

The following discussion is based on a background search of special-status species that are documented in the California Natural Diversity Database (CNDDB), the background search was regional in scope and focused on the documented occurrences within 1 mile and within a 9 Quad search area of Atwater.

Special Status Plants

The search revealed documented occurrences of 1 special status plant species within one mile of the Atwater planning area. The search revealed documented occurrences of 32 special status plant species within a Nine-Quad search of the Atwater planning area.

There was 1 occurrences of special-status plant species located within a 1-mile search of the planning area. Figure 8.1-2 illustrates the special status species located within a 1-mile search of the planning area. Figure 8.1-3 illustrates the special status species located within a 9-Quad search of the planning area.

TABLE 8.1-2: SPECIAL STATUS PLANTS PRESENT OR POTENTIALLY PRESENT (1 MILE)

PLANTS SPECIES	*COMMON NAME*	*FEDERAL STATUS*	*CALIFORNIA STATUS*
Sagittaria sanfordii	Sanford's arrowhead	None	None

SOURCE: CDFW CNDDB 2024

TABLE 8.1-3: SPECIAL STATUS PLANTS PRESENT OR POTENTIALLY PRESENT (9 QUAD)

PLANTS SPECIES	*COMMON NAME*	*FEDERAL STATUS*	*CALIFORNIA STATUS*
Astragalus tener var. tener	Alkali-milk-vetch	None	None
Lasthenia chrysantha	Alkali-sink goldfields	None	None
Clarkia rostrata	Beaked clarkia	None	None
Puccinellia simplex	California alkali grass	None	None
Neostapfia colusana	Colusa grass	Threatened	Endangered
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	None	None
Eryngium racemosum	Delta button-celery	None	Endangered
Downingia pusilla	Dwarf downingia	None	None
Tuctoria greenei	Greene's tuctoria	Endangered	Rare
Orcuttia pilosa	Hairy Orcutt grass	Endangered	Endangered
Psuedobahia bahiifolia	Hartweg's golden sunburst	Endangered	Endangered
Artiplex cordulata var. cordulata	heartscale	None	None
Lepidium latipes var. heckardii	Heckard's pepper-grass	None	None
Agrostis hendersonii	Henderson's bent grass	None	None
Cholorpyron molle ssp. hispidum	Hispid salty bird's-beak	None	None
Calycadenia hooveri	Hoover's calycadenia	None	None
Euphorbia hooveri	Hoover's spurge	Threatened	None
Sidalcea keckii	Keck's checkerbloom	Endangered	None
Atriplex minuscula	Lesser saltscale	None	None
Monardella leucocephala	Merced monardella	None	None
Phacelia ciliate var. opaca	Merced phacelia	None	None
Cuscuta obtusiflora var. glandulosa	Peruvian doder	None	None
Navarretia prostata	Prostrate vernal pool navarretia	None	None
Delphinium recurvatum	Recurved larkspur	None	None
Orcuttia inaequalis	San Joaquin Valley Orcutt grass	Threatened	Endangered
Sagittaria sandfordii	Sanford's arrowhead	None	None
Navarretia nigelliformis ssp. radians	Shining navarretia	None	None
Ernygium sinosepalum	Spiny-sealed button-celery	None	None
Valley Sacaton Grassland	Valley Sacaton Grassland	None	None
Atriplex persistens	Vernal pool smallscale	None	None
Brasenia schreberi	watershield	None	None
Trichocoronis wrightii var. wrightii	Wright's trichocoronis	None	None

SOURCE: CDFW CNDDB 2024

Special Status Animals

The search revealed documented occurrences of 26 special status animal species within a 9-Quad search of the planning area. Of these species, 7 are documented within one mile of the city. Tables 8.1-4, and 8.1-5 provide a list of the special-status animal species that are documented within one mile and 9-Quad of the planning area, and current protective status, respectively.

TABLE 8.1-4: SPECIAL STATUS ANIMALS PRESENT OR POTENTIALLY PRESENT (ONE MILE)

ANIMAL SPECIES	COMMON NAME	FEDERAL STATUS	CALIFORNIA STATUS
Ambystoma californiense pop. 1	California tiger salamander	Threatened	Threatened
Anthene cunicularia	Burrowing owl	None	None
Buteo regalis	Ferruginous hawk	None	None
Buteo swainsoni	Swainson's hawk	None	Threatened
Agelaius tricolor	Tricolored blackbird	None	Threatened
Vulpes macrotis	San Joaquin kit fox	Endangered	Threatened
Emys marmorata	Western pond turtle	None	None

SOURCE: CDFW CNDDB 2024

TABLE 8.1-5: SPECIAL STATUS ANIMALS PRESENT OR POTENTIALLY PRESENT (9 QUAD)

ANIMAL SPECIES	*COMMON NAME*	*FEDERAL STATUS*	*CALIFORNIA STATUS*
Ambystoma californiense pop. 1	California tiger salamander	Threatened	Threatened
Lithobates pipiens	Northern leopard frog	None	None
Spea hammondii	Western spadefoot	None	None
Haliaeetus leucocephalus	Bald eagle	Delisted	Endangered
Athene cunicularia	Burrowing owl	None	None
Buteo regalis	Ferruginous hawk	None	None
Buteo swainsoni	Swainson's hawk	None	Threatened
Agelaius tricolor	Tricolored bird	None	Threatened
Icteria virens	Yellow-breasted chat	None	None
Acipenser medirostris pop. 1	Green sturgeon-southern DPS	Threatened	None
Mylopharodon conocephalus	hardhead	None	None
Oncorphynchus mykiss irideus pop.11	Steelhead-Central Valley DPS	Threatened	None
Taxidea taxus	American badger	None	None
Lasiurus cinereus	Hoary bat	None	None
Dipodomys heermanni dixoni	Merced kangaroo rat	None	None
Antrozous pallidus	Pallid bat	None	None
Vulpes macrotis mutica	San Joaquin kit fox	Endangered	Threatened
Perognathus inornatus	San Joaquin pocket mouse	None	None
Eumops perotis californicus	Western mastiff bat	None	None
Lasiurus frantzii	Yuma myotis	None	None
Gambelia sila	Blunt-nosed leopard lizard	Endangered	Endangered
Phrynosoma blainvillii	Coast horned lizard	None	None
Thamnophis gigas	Giant garter snake	Threatened	Threatened
Anniella pulchra	Northern California legless lizard	None	None
Emys marmorata	Western pond turtle	None	None

SOURCE: CDFW CNDDB 2024

Special Status Invertebrate Animals

The search revealed documented occurrences of 11 special status invertebrate animals including insect species within a 9-quad search area. Of these species, two (California linderiella and vernal pool fairy shrimp) are documented within one mile of the planning area. Tables 8.1-6, provides a list of the special-status Invertebrate Animal species that are documented within 9-Quad of the planning area, and their current protective status.

TABLE 8.1-6: SPECIAL STATUS INVERTEBRATE ANIMALS PRESENT OR POTENTIALLY PRESENT (9 QUAD)

ANIMAL SPECIES	*COMMON NAME*	*FEDERAL STATUS*	*CALIFORNIA STATUS*
Branchinecta conservatio	Conservancy fairy shrimp	Endangered	None
Branchinecta lynchi	Vernal pool fairy shrimp	Threatened	None
Linderiella occidentalis	California linderiella	None	None
Branchinecta mesovallensis	Midvalley fairy shrimp	None	None
Branchinecta longiantenna	Longhorn fairy shrimp	Endangered	None
Lepidurus packardi	vernal pool tadpole shrimp	Endangered	None
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Threatened	None
Bombus pensylvanicus	American bumble bee	None	None
Myrmosula pacifica	Antioch multilid wasp	None	None
Bombus crotchii	Crotch bumble bee	None	Candidate Endangered
Lytta molesta	Molestan blister beetle	None	None

SOURCE: CDFW CNDDB 2024

Figure 8.1-1. Landcover Types

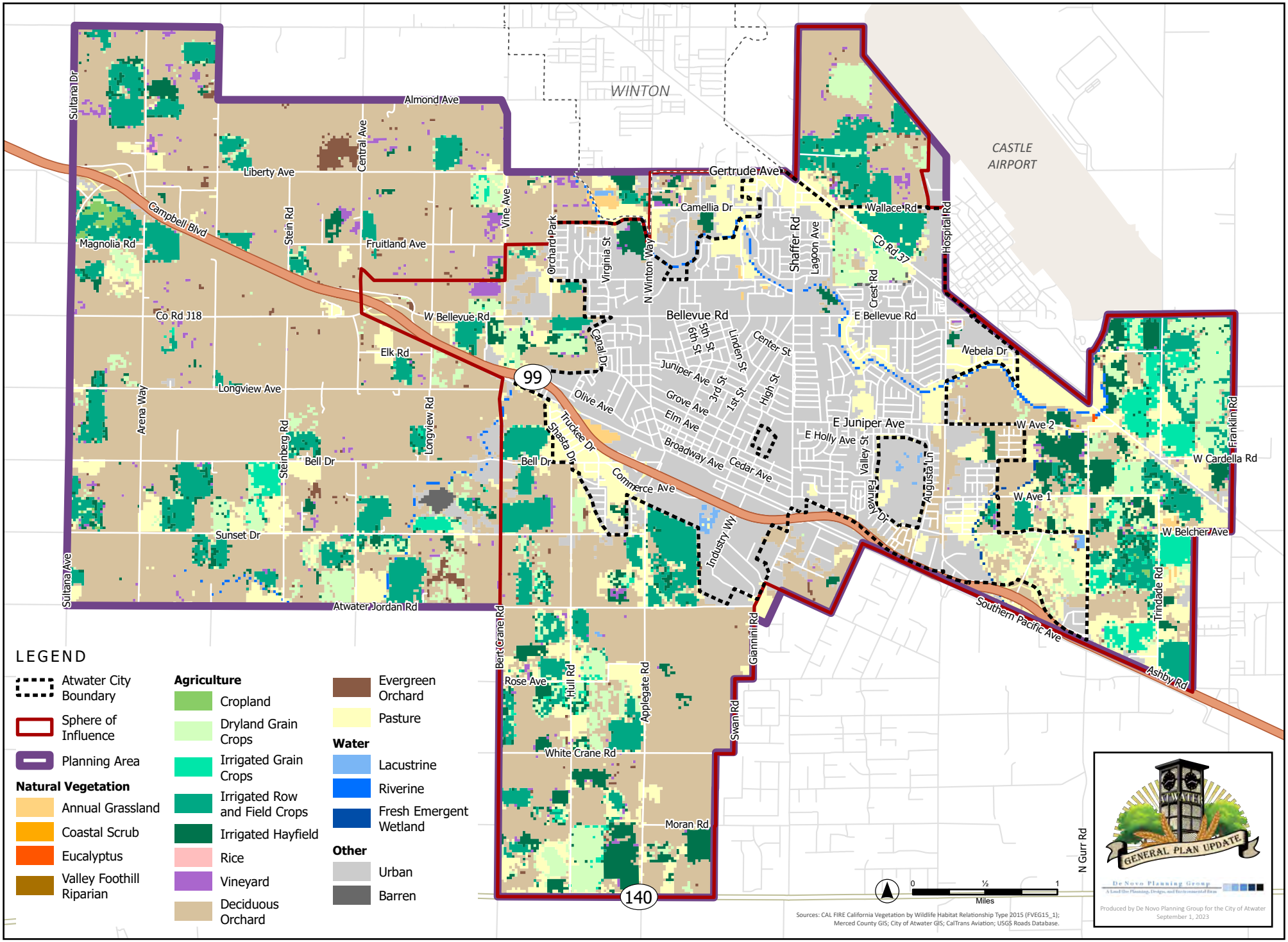


Figure 8.1-2. California Natural Diversity Database 1-mile Search

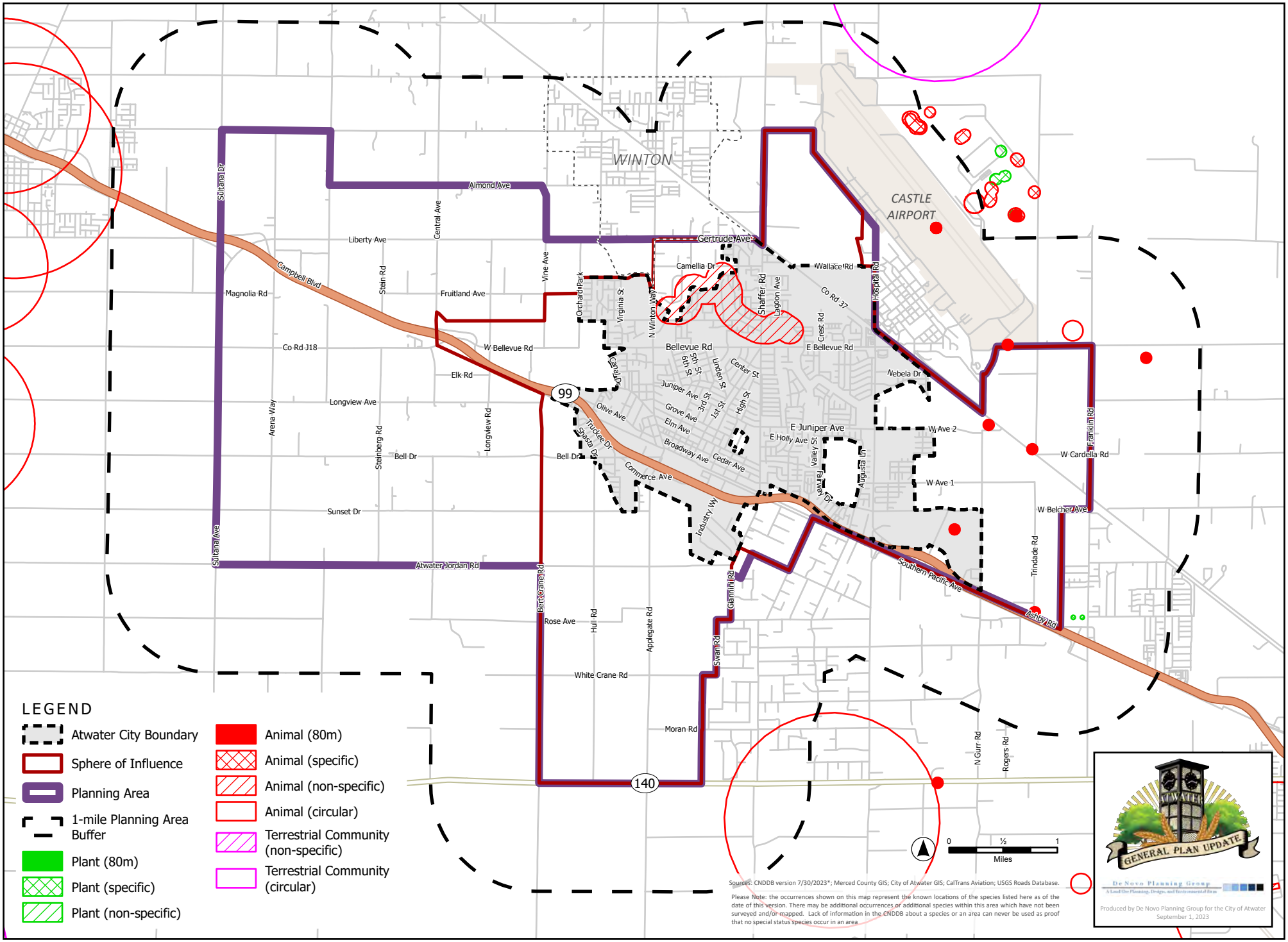
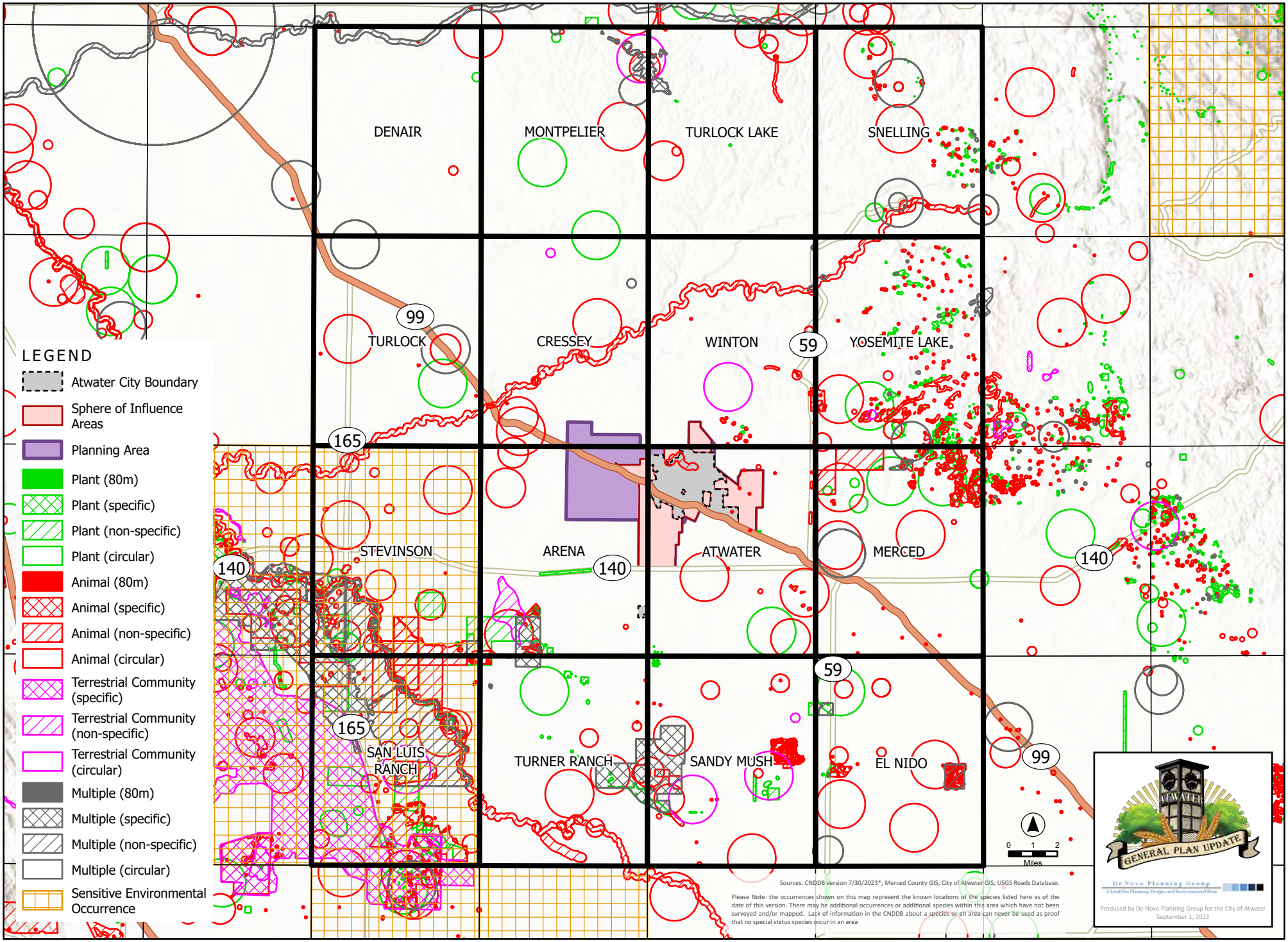


Figure 8.1-3. California Natural Diversity Database Quad-based Search



8.2 AIR QUALITY

This section provides an overview of air quality within the planning area and the vicinity.

REGULATORY FRAMEWORK

LOCAL

San Joaquin Valley Air Pollution Control District

The San Joaquin Valley Air Pollution Control District (SJVAPCD) is the local agency with primary responsibility for compliance with both the federal and state standards and for ensuring that air quality conditions are maintained. They do this through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The eight counties that comprise the SJVAPCD are divided into three regions. These include:

- Northern Region: Merced, San Joaquin, and Stanislaus Counties
- Central Region: Madera, Fresno, and Kings Counties
- Southern Region: Tulare and Valley portion of Kern Counties

Activities of the SJVAPCD include the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, issuance of permits for stationary sources of air pollution, inspection of stationary sources of air pollution and response to citizen complaints, monitoring of ambient air quality and meteorological conditions, and implementation of programs and regulations required by the FCAA and CCAA.

SJVAPCD RULES AND REGULATIONS

The SJVAPCD has adopted numerous rules and regulations to implement its air quality plans. Following, are significant rules that will apply to development under the General Plan.

Regulation VIII – Fugitive PM10 Prohibitions

Regulation VIII is comprised of District Rules 8011 through 8081 which are designed to reduce PM10 emissions (predominantly dust/dirt) generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and track out, landfill operations, etc.

Rule 4002 – National Emission Standards for Hazardous Air Pollutants

Rule 4002 applies in the event an existing building will be renovated, partially demolished or removed (National Emission Standards for Hazardous Air Pollutants); this rule applies to all sources of Hazardous Air Pollutants.

Rule 4102 – Nuisance

Rule 4102 dictates that if a source operation emits or may emit air contaminants or other materials such that the emissions create a public nuisance, the owner/operator may be subject to APCD enforcement action.

Rule 4103 – Open Burning

Rule 4103 prohibits the burning of agricultural material when the land is converting from agriculture to non-agricultural (i.e. urban) purposes.

Rule 4601 – Architectural Coatings

Rule 4601 limits emissions of volatile organic compounds from architectural coatings by specifying storage, cleanup and labeling requirements.

Rule 4641 – Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations

If asphalt paving will be used, then paving operations of the proposed Project will be subject to Rule 4641. This rule applies to the manufacture and use of cutback asphalt, slow cure asphalt and emulsified asphalt for paving and maintenance operations.

Rule 8021 – Construction, Demolition, Excavation, and Other Earthmoving Activities

District Rule 8021 requires owners or operators of construction projects to submit a Dust Control Plan to the District if at any time the project involves non-residential developments of five or more acres of disturbed surface area or moving, depositing, or relocating of more than 2,500 cubic yards per day of bulk materials on at least three days of the project.

Rule 9510 – Indirect Source Review

Rule 9510 indirectly limits the vehicular emissions contribution of new development to regional air pollution. Through an application and review process, the developer may incorporate emission-reduction features in the project or may pay the fee prescribed in the rule. Fees collected by the APCD are indexed to the cost of providing offsetting mitigation and are used for that purpose.

City of Atwater General Plan

The existing Atwater General Plan includes the following goals, policies, and implementation programs related to air quality:

Goal CO-3: Strive to reduce air emissions and obtain goals set in local and regional air quality attainment plans.

Policy CO-3.1. Cooperate with the San Joaquin Valley Unified Air Pollution Control District (APCD) in implementing air quality improvement plans prepared by the District.

Policy CO-3.2. Encourage land use development projects that would result in fewer adverse air quality impacts, such as mixed use and pedestrian-oriented projects.

Policy CO-3.3. Encourage the use of modes of transportation other than automobiles.

Implementation Program CO-3.a. In cooperation with the APCD, adopt thresholds of significance for air quality impacts that the City can apply in the evaluation of development projects for which the City has received an application, and for use in developing mitigation measures that may be necessary.

Implementation Program CO-3.b. Implement the sections of the Circulation Element of the City's General Plan that encourage the use of alternative modes of transportation, such as the development of the bikeway system.

Implementation Program CO-3.c. Incorporate as a condition of approval for projects that include significant grading or other earth moving activities measures that control emissions of dust.

ENVIRONMENTAL SETTING

San Joaquin Valley Air Basin (SJVAB)

The San Joaquin Valley Air Basin (SJVAB) consists of eight counties, stretching from Kern County in the south to San Joaquin County in the north. The SJVAB is bounded by the Sierra Nevada in the east, the Coast Ranges in the west, and the Tehachapi mountains in the south.

The surrounding topographic features restrict air movement through and out of the basin and, as a result, impede the dispersion of pollutants from the basin. Inversion layers are formed in the SJVAB throughout the year. (An inversion layer is created when a mass of warm dry air sits over cooler air near the ground, preventing vertical dispersion of pollutants from the air mass below). During the summer, the San Joaquin Valley experiences daytime temperature inversions at elevations from 2,000 to 2,500 feet above the valley floor. During the winter months, inversions occur from 500 to 1,000 feet above the valley floor (SJVAPCD, 2002).

The pollution potential of the San Joaquin Valley is very high. Surrounding elevated terrain in conjunction with temperature inversions frequently restrict lateral and vertical dilution of pollutants. Abundant sunshine and warm temperatures in summer are ideal conditions for the formation of photochemical oxidant, and the Valley is a frequent scene of photochemical pollution.

Climate

The SJVAB has an inland Mediterranean climate with warm, dry summers and cooler winters. The average daily maximum temperature in the Basin is 65 degrees Fahrenheit (°F), with average temperature highs of 95 °F in July. Average daily minimum temperature is 48 °F, with average temperature lows of 45 °F in January. Normal rainfall level is approximately 9 inches per year, and occurs mainly in the winter months from November to April. Thunderstorms occur on approximately three to four days in the spring, on average.

Merced County has warm, dry days and relatively cool nights, with clear skies and limited rainfall. Winters are mild with light rains and frequent heavy fog from December to January.

In summer, high temperatures often exceed 100 degrees, with averages in the low 90's in the northern valley and the high 90's in the southern valley. Summer low temperatures average in the high 50's in the northern valley and the upper 60's in the southern valley. The northern end of the Valley (Lathrop, Manteca, and Stockton area) receives approximately 20 inches of rain per year. The central portion of the Valley (Fresno area) receives approximately 10 inches of rain per year. The southern end of the Valley (Bakersfield area) receives less than 6 inches of rain per year.

Air Movement

Marine air comes into the basin from the Sacramento River–San Joaquin River Delta, although most air movement is restricted by the surrounding mountains. Winds from the Bay Area flow northeasterly into the Sacramento Valley and southward into San Joaquin County. This results in weak winds from the north and northeast, with an average speed of seven miles per hour.

Wind speed and direction determine the dispersion of air pollutants. During the summer, wind from the north flows south and southeasterly through the Valley, through the Tehachapi Pass and into the Southeast Desert Air Basin. Thus, emissions from the San Francisco Bay Area and the Broader Sacramento air basins

are transported into San Joaquin County and the Valley. Emissions in the San Joaquin Valley are then transported to the Southeast Desert and Great Basin Valley Air Basins. In late fall and winter, cold air from the mountains flows into the Valley. This results in winds from the south that flow north and northwesterly. Some emissions from San Joaquin County are transported to the Broader Sacramento air basin during these times. But the winds are relatively light, limiting the dispersion of CO and other pollutants. Thus, high concentrations of CO remain in the Valley.

Seasonal Pollution Variations

Carbon monoxide, oxides of nitrogen, particulate matter, and lead particulate concentrations are highest in the late fall and winter when there is little interchange of air between the valley and the coast and when humidity is high following winter rains. This type of weather is associated with radiation fog, known as tule fog, when temperature inversions at ground level persist over the entire valley for several weeks and air movement is virtually absent.

Pollution potential in the San Joaquin County area is relatively high due to the combination of air pollutant emissions sources, transport of pollutants into the area and meteorological conditions that are conducive to high levels of air pollution. Elevated levels of particulate matter (primarily very small particulates or PM_{10}) and ground-level ozone are of most concern to regional air quality officials.

Local carbon monoxide "hot spots" are important to a lesser extent. Ground-level ozone, the principal component of smog, is not directly emitted into the atmosphere but is formed by the reaction of reactive organic gases (ROG) and nitrogen oxides (NOx) (known as ozone precursor pollutants) in the presence of strong sunlight. Ozone levels are highest in San Joaquin County during late spring through early fall, when weather conditions are conducive and emissions of the precursor pollutants are highest.

Surface-based inversions that form during late fall and winter nights cause localized air pollution problems (PM_{10} and carbon monoxide) near the emission sources because of poor dispersion conditions. Emission sources are primarily from automobiles. Conditions are exacerbated during drought-year winters.

Sunlight

The presence and intensity of sunlight are necessary prerequisites for the formation of photochemical smog. Under the influence of the ultraviolet radiation of sunlight, certain original or "primary" pollutants (mainly reactive hydrocarbons and oxides of nitrogen) react to form "secondary" pollutants (primarily oxidants). Since this process is time dependent, secondary pollutants can be formed many miles downwind from the emission sources. Because of the prevailing daytime winds and time delayed nature of photochemical smog, oxidant concentrations are highest in the inland areas of the San Joaquin Valley.

Temperature Inversions

A temperature inversion is a reversal in the normal decrease of temperature as altitude increases. In most parts of the country, air near ground level is warmer than the air above it. Semi-permanent systems of high barometric pressure fronts establish themselves over the basin, deflecting low-pressure systems that might otherwise bring cleansing rain and winds. The height of the base of the inversion is known as the "mixing height" and controls the volume of air available for the mixing and dispersion of air pollutants.

The interrelationship of air pollutants and climatic factors are most critical on days of greatly reduced atmospheric ventilation. On days such as these, air pollutants accumulate because of the simultaneous occurrence of three favorable factors: low inversions, low maximum mixing heights and low wind speeds.

Although these conditions may occur throughout the year, the months of July, August and September generally account for more than 40 percent of these occurrences.

The potential for high contaminant levels varies seasonally for many contaminants. During late spring, summer, and early fall, light winds, low mixing heights, and sunshine combine to produce conditions favorable for the maximum production of oxidants, mainly ozone. When strong surface inversions are formed on winter nights, especially during the hours before sunrise, coupled with near-calm winds, carbon monoxide from automobile exhausts becomes highly concentrated. The highest yearly concentrations of carbon monoxide and oxides of nitrogen and measured during November, December and January.

CRITERIA AIR POLLUTANTS AND EXISTING AMBIENT AIR QUALITY

Criteria Pollutants

The U.S. Environmental Protection Agency (U.S. EPA) uses six "criteria pollutants" as indicators of air quality, and has established for each of them a maximum concentration above which adverse effects on human health may occur. These threshold concentrations are called National Ambient Air Quality Standards (NAAQS). Each criteria pollutant is described below.

Ozone (O_3) is a photochemical oxidant and the major component of smog. While ozone in the upper atmosphere is beneficial to life by shielding the earth from harmful ultraviolet radiation from the sun, high concentrations of ozone at ground level are a major health and environmental concern. ozone is not emitted directly into the air but is formed through complex chemical reactions between precursor emissions of volatile organic compounds (VOC) and oxides of nitrogen (NOx) in the presence of sunlight. These reactions are stimulated by sunlight and temperature so that peak ozone levels occur typically during the warmer times of the year. Both VOCs and NOx are emitted by transportation and industrial sources. VOCs are emitted from sources as diverse as autos, chemical manufacturing, dry cleaners, paint shops and other sources using solvents.

The reactivity of ozone causes health problems because it damages lung tissue, reduces lung function and sensitizes the lungs to other irritants. Scientific evidence indicates that ambient levels of ozone not only affect people with impaired respiratory systems, such as asthmatics, but healthy adults and children as well. Exposure to ozone for several hours at relatively low concentrations has been found to significantly reduce lung function and induce respiratory inflammation in normal, healthy people during exercise. This decrease in lung function generally is accompanied by symptoms including chest pain, coughing, sneezing and pulmonary congestion.

Carbon monoxide (CO) is a colorless, odorless and poisonous gas produced by incomplete burning of carbon in fuels. When CO enters the bloodstream, it reduces the delivery of oxygen to the body's organs and tissues. Health threats are most serious for those who suffer from cardiovascular disease, particularly those with angina or peripheral vascular disease. Exposure to elevated CO levels can cause impairment of visual perception, manual dexterity, learning ability and performance of complex tasks.

Nitrogen dioxide (NO_2) is a brownish, highly reactive gas that is present in all urban atmospheres. NO_2 can irritate the lungs, cause bronchitis and pneumonia, and lower resistance to respiratory infections. Nitrogen oxides are an important precursor both to ozone (O_3) and acid rain, and may affect both terrestrial and aquatic ecosystems. The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary air pollutant nitric oxide. NOx plays a major role, together with VOCs, in the atmospheric reactions that produce ozone. NOx forms when fuel is burned at high temperatures. The two major

emission sources are transportation and stationary fuel combustion sources such as electric utility and industrial boilers.

Sulfur dioxide (SO_2) affects breathing and may aggravate existing respiratory and cardiovascular disease in high doses. Sensitive populations include asthmatics, individuals with bronchitis or emphysema, children and the elderly. SO_2 is also a primary contributor to acid deposition, or acid rain, which causes acidification of lakes and streams and can damage trees, crops, historic buildings and statues. In addition, sulfur compounds in the air contribute to visibility impairment in large parts of the country. Ambient SO_2 results largely from stationary sources such as coal and oil combustion, steel mills, refineries, pulp and paper mills and from nonferrous smelters.

Particulate matter (PM) includes dust, dirt, soot, smoke and liquid droplets directly emitted into the air by sources such as factories, power plants, cars, construction activity, fires and natural windblown dust. Particles formed in the atmosphere by condensation or the transformation of emitted gases such as SO_2 and VOCs are also considered particulate matter.

Based on studies of human populations exposed to high concentrations of particles (sometimes in the presence of SO_2) and laboratory studies of animals and humans, there are major effects of concern for human health. These include effects on breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular disease, alterations in the body's defense systems against foreign materials, damage to lung tissue, carcinogenesis and premature death.

Respirable particulate matter (PM_{10}) consists of small particles, less than 10 microns in diameter, of dust, smoke, or droplets of liquid which penetrate the human respiratory system and cause irritation by themselves, or in combination with other gases. Particulate matter is caused primarily by dust from grading and excavation activities, from agricultural activities (as created by soil preparation activities, fertilizer and pesticide spraying, weed burning and animal husbandry), and from motor vehicles, particularly diesel-powered vehicles. PM_{10} causes a greater health risk than larger particles, since these fine particles can more easily penetrate the defenses of the human respiratory system.

Fine particulate matter ($PM_{2.5}$) consists of fine particles, which are less than 2.5 microns in size. Similar to PM_{10}, these particles are primarily the result of combustion in motor vehicles, particularly diesel engines, as well as from industrial sources and residential/agricultural activities such as burning. It is also formed through the reaction of other pollutants. As with PM_{10}, these particulates can increase the chance of respiratory disease, and cause lung damage and cancer. In 1997, the EPA created new Federal air quality standards for $PM_{2.5}$.

The major subgroups of the population that appear to be most sensitive to the effects of particulate matter include individuals with chronic obstructive pulmonary or cardiovascular disease or influenza, asthmatics, the elderly and children. Particulate matter also impacts soils and damages materials, and is a major cause of visibility impairment.

Lead (Pb) exposure can occur through multiple pathways, including inhalation of air and ingestion of Pb in food, water, soil or dust. Excessive Pb exposure can cause seizures, mental retardation and/or behavioral disorders. Low doses of Pb can lead to central nervous system damage. Recent studies have also shown that Pb may be a factor in high blood pressure and subsequent heart disease.

Odors

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another.

It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air.

When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

Sensitive Receptors

A sensitive receptor is a location where human populations, especially children, seniors, and sick persons, are present and where there is a reasonable expectation of continuous human exposure to pollutants. Examples of sensitive receptors include residences, hospitals, schools, daycare facilities, elderly housing, and convalescent facilities.

Ambient Air Quality

Both the U.S. Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (CARB) have established ambient air quality standards for common pollutants. These ambient air quality standards represent safe levels of contaminants that avoid specific adverse health effects associated with each pollutant.

The federal and California state ambient air quality standards are summarized in Table 5.3-1 for important pollutants. The federal and state ambient standards were developed independently, although both processes attempted to avoid health-related effects. As a result, the federal and state standards differ in some cases. In general, the California state standards are more stringent. This is particularly true for ozone and particulate matter between 2.5 and 10 microns in diameter (PM_{10}).

The U.S. Environmental Protection Agency established new national air quality standards for ground-level ozone and for fine particulate matter in 1997. The 1-hour ozone standard was phased out and replaced by

an 8-hour standard of 0.075 PPM. Implementation of the 8-hour standard was delayed by litigation, but was determined to be valid and enforceable by the U.S. Supreme Court in a decision issued in February of 2001. In April 2005, the Air Resources Board approved a new eight-hour standard of 0.070 ppm and retained the one-hour ozone standard of 0.09 after an extensive review of the scientific literature. The U.S. EPA signed a final rule for the Federal ozone eight-hour standard of 0.070 ppm on October 1, 2015, and was effective as of December 28, 2015.

TABLE 8.2-1: FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

POLLUTANT	*AVERAGING TIME*	*FEDERAL PRIMARY STANDARD*	*STATE STANDARD*
Ozone	1-Hour 8-Hour	-- 0.070 ppm	0.09 ppm 0.070 ppm
Carbon Monoxide	8-Hour 1-Hour	9.0 ppm 35.0 ppm	9.0 ppm 20.0 ppm
Nitrogen Dioxide	Annual 1-Hour	0.053 ppm 0.100 ppm	0.03 ppm 0.18 ppm
Sulfur Dioxide	Annual 24-Hour 1-Hour	0.03 ppm 0.14 ppm 0.075 ppm	-- 0.04 ppm 0.25 ppm
PM_{10}	Annual 24-Hour	-- 150 ug/m^3	20 ug/m^3 50 ug/m^3
$PM_{2.5}$	Annual 24-Hour	12 ug/m^3 35 ug/m^3	12 ug/m^3 --
Lead	30-Day Avg. 3-Month Avg.	-- 0.15 ug/m^3	1.5 ug/m^3 --

NOTES: PPM = PARTS PER MILLION, µG/M^3 = MICROGRAMS PER CUBIC METER
SOURCES: CALIFORNIA AIR RESOURCES BOARD, 2024.

In 1997, new national standards for fine particulate matter diameter 2.5 microns or less ($PM_{2.5}$) were adopted for 24-hour and annual averaging periods. The current PM_{10} standards were to be retained, but the method and form for determining compliance with the standards were revised.

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TACs) are another group of pollutants of concern. TACs are injurious in small quantities and are regulated despite the absence of criteria documents. The identification, regulation and monitoring of TACs is relatively recent compared to that for criteria pollutants. Unlike criteria pollutants, TACs are regulated on the basis of risk rather than specification of safe levels of contamination.

Existing air quality concerns within the project area is related to increases of regional criteria air pollutants (e.g., ozone and particulate matter), exposure to toxic air contaminants, odors, and increases in greenhouse gas emissions contributing to climate change. The primary source of ozone (smog) pollution is motor vehicles which account for 70 percent of the ozone in the region. Particulate matter is caused by dust, primarily dust generated from construction and grading activities, and smoke which is emitted from fireplaces, wood-burning stoves, and agricultural burning.

Attainment Status

In accordance with the California Clean Air Act (CCAA), the CARB is required to designate areas of the state as attainment, nonattainment, or unclassified with respect to applicable standards. An "attainment" designation for an area signifies that pollutant concentrations did not violate the applicable standard in that area. A "nonattainment" designation indicates that a pollutant concentration violated the applicable standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria.

Depending on the frequency and severity of pollutants exceeding applicable standards, the nonattainment designation can be further classified as serious nonattainment, severe nonattainment, or extreme nonattainment, with extreme nonattainment being the most severe of the classifications. An "unclassified" designation signifies that the data do not support either an attainment or nonattainment status. The CCAA divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The U.S. EPA designates areas for ozone, CO, and NO_2 as "does not meet the primary standards," "cannot be classified," or "better than national standards." For SO_2, areas are designated as "does not meet the primary standards," "does not meet the secondary standards," "cannot be classified," or "better than national standards." However, the CARB terminology of attainment, nonattainment, and unclassified is more frequently used.

Merced County has a State designation of Nonattainment for O_3, PM_{10}, and $PM_{2.5}$ and is either Unclassified or Attainment for all other criteria pollutants. The County has a national designation of Nonattainment for O_3 and $PM_{2.5}$. The County is designated either attainment or unclassified for the remaining national standards. Table 8.2-2 presents the State and national attainment status for Merced County.

TABLE 8.2-2: STATE AND NATIONAL ATTAINMENT STATUS

CRITERIA POLLUTANTS	*STATE DESIGNATIONS*	*NATIONAL DESIGNATIONS*
Ozone	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon Monoxide	Attainment	Unclassified/Attainment
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Unclassified/Attainment
Sulfates	Attainment	
Lead	Attainment	Unclassified/Attainment
Hydrogen Sulfide	Unclassified	
Visibility Reducing Particles	Unclassified	

SOURCE: CALIFORNIA AIR RESOURCES BOARD (AREA DESIGNATIONS MAPS / STATE AND NATIONAL), 2024.

Air Quality Monitoring

SJVAPCD and CARB maintains air quality monitoring sites in Merced County that collect data for O_3, PM_{10}, and $PM_{2.5}$. The closest air quality monitoring site to Atwater is the Merced-2334 M Street monitoring site, although ozone data was not available for this location. Therefore, data from the next closest monitoring site, the Merced-S Coffee Avenue monitoring site, was used for ozone. The Federal ozone 1-hour standard was revoked by the EPA in 2005, but subsequent litigation reinstated portions of implementation requirements under the revoked standard. As a result, the SJVAPCD adopted the 2013 Plan for the Revoked 1-Hour Ozone Standard in September 2013 to address the reinstated requirements for this standard. Data obtained from the monitoring sites between 2020 through 2022 is shown in Table 8.2-3.

*TABLE 8.2-3: AMBIENT AIR QUALITY MONITORING DATA (MERCED-2334 M STREET)**

Pollutant	*Cal.*	*Fed.*	*Year*	*Max Concentration*	*Days Exceeded State/Fed Standard*
	Primary Standard				
Ozone (O_3) (1-hour)	0.09 ppm for 1 hour	NA	2022 2021 2020	0.096 0.099 0.100	2 / (N/A) 2 / (N/A) 2 / (N/A)
Ozone (O_3) (8-hour)	0.07 ppm for 8 hour	0.07 ppm for 8 hour	2022 2021 2020	0.083 0.090 0.088	10 / 0 24 / 2 21 / 2
Particulate Matter (PM_{10})	50 ug/m^3 for 24 hours	150 ug/m^3 for 24 hours	2022 2021 2020	100.5 85.8 209.9	(N/A) / (N/A) (N/A)/ (N/A) (N/A) / 5.8
Fine Particulate Matter ($PM_{2.5}$)	No 24 hour State Standard	35 ug/m^3 for 24 hours	2022 2021 2020	43.7 72.9 86.0	(N/A) / 4.1 (N/A) / 14.3 (N/A) / 27.7

NOTE: DATA FOR THE MERCED-S COFFEE AVENUE MONITORING SITE WAS AVAILABLE FOR $PM_{2.5}$ AND PM_{10} (THOUGH NOT FOR OZONE); SINCE IT IS A CLOSER LOCATION TO PLANNING AREA THAN THE MERCED-2334 M STREET MONITORING SITE, DATA FOR $PM_{2.5}$ AND PM_{10} FOR THIS LOCATION IS PROVIDED IN THIS TABLE.

SOURCE: CALIFORNIA AIR RESOURCES BOARD (AEROMETRIC DATA ANALYSIS AND MANAGEMENT SYSTEM OR (ADAM) AIR POLLUTION SUMMARIES.

8.3 GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

This section provides an overview of sources of greenhouse gases within the planning area and the vicinity.

REGULATORY FRAMEWORK

REGIONAL

PG&E Integrated Resource Plan PG&E adopted the 2020 Integrated Resource Plan (IRP) on September 1, 2020, to provide guidance for serving the electricity and natural gas needs of residents and businesses within its service area while fulfilling regulatory requirements. The IRP contains the following objectives that are relevant to the Project:

- Clean Energy: In 2021, PG&E delivered nearly 50 percent of its electricity from RPS-eligible renewable resources, such as solar, wind, geothermal, biomass, and small hydropower. In addition, PG&E's GHG-free energy production, which encompasses renewable resources, large hydropower, and nuclear, satisfied all of PG&E's bundled retail sales in 2021.

- Reliability: PG&E's IRP analysis includes PG&E's contribution to system and local reliability, in compliance with the CPUC's resource adequacy requirements, especially as California transitions toward higher shares of GHG-free generation resources.

- Affordability: PG&E's IRP analysis selects resources to meet the state's clean energy and reliability goals and provides a system average rate forecast in compliance with the CPUC' s requirements for investor-owned utilities.

LOCAL

City of Atwater General Plan

The existing Atwater General Plan includes the following goals, policies, and implementation programs related to air quality:

Goal CO-3: Strive to reduce air emissions and obtain goals set in local and regional air quality attainment plans.

Policy CO-3.1. Cooperate with the San Joaquin Valley Unified Air Pollution Control District (APCD) in implementing air quality improvement plans prepared by the District.

Policy CO-3.2. Encourage land use development projects that would result in fewer adverse air quality impacts, such as mixed use and pedestrian-oriented projects.

Policy CO-3.3. Encourage the use of modes of transportation other than automobiles.

Implementation Program CO-3.a. In cooperation with the APCD, adopt thresholds of significance for air quality impacts that the City can apply in the evaluation of development projects for which the City has received an application, and for use in developing mitigation measures that may be necessary.

Implementation Program CO-3.b. Implement the sections of the Circulation Element of the City's General Plan that encourage the use of alternative modes of transportation, such as the development of the bikeway system.

Implementation Program CO-3.c. Incorporate as a condition of approval for projects that include significant grading or other earth moving activities measures that control emissions of dust.

San Joaquin Valley Air Pollution Control District Climate Change Action Plan

In August 2008, the SJVAPCD adopted its Climate Change Action Plan. The Climate Change Action Plan directed the SJVAPCD's Air Pollution Control Officer to develop guidance to assist APCD staff, Valley businesses, land use agencies and other permitting agencies in addressing GHG emissions as part of the CEQA process. Regarding CEQA guidance, some of the goals of the Climate Change Action Plan are to assist local land use agencies, developers and the public by identifying and quantifying GHG emission reduction measures for development projects and by providing tools to streamline evaluation of project-specific GHG effects, and to assist Valley businesses in complying with State law related to GHG emissions.

A product of this direction to provide CEQA guidance is the Final Staff Report – Climate Change Action Plan: Addressing GHG Emissions Impacts, presented to the APCD Board in December 2009. A central component of the Final Staff Report is the establishment of Best Performance Standards, which are specifications or project design elements that identify effective, feasible GHG emission reduction measures. Emission reductions achieved through Best Performance Standards implementation would be pre-quantified, thus negating the need for project-specific quantification of GHG emissions.

For projects not implementing Best Performance Standards, demonstration of a 29% reduction in GHG emissions from business-as-usual conditions is required to determine that a project would have a less than cumulatively significant impact. Appendix J of the Final Staff Report provides a table of GHG emission reduction measures for development projects, along with a point value that corresponds to a percentage decrease in GHG emissions when available.

Merced County Regional Transportation Plan/Sustainable Communities Strategy (SCS/RTP)

The 2022 Regional Transportation Plan (RTP) / Sustainable Community Strategy (SCS) is a long range planning document that provides the framework for investments in roads, freeways, public transit, bikeways and other ways people move around our County for the next 25 years. It also helps us comply with State-mandated efforts to reduce greenhouse gases (SB375).

The eight counties of the San Joaquin Valley are coordinating on some aspects of these planning efforts to maximize resources, with each area's Metropolitan Planning Organization (MPO) developing a separate plan. MPOs are responsible for setting transportation policy and priorities for a region and documenting how transportation funds will be spent in a Regional Transportation Plan.

The policies contained in the 2022 Merced County RTP/SCS for Sustainable Communities are as follows:

- Prioritize infill and growth in existing communities.
- Prioritize funding for complete street projects on existing corridors.
- Explore funding sources to incentivize jurisdictions.
- Re-evaluate project selection criteria to better harmonize with sustainability goals.
- Prioritize vanpools and ridesharing.
- Emphasize and explain "co-benefits" of implementing SB 375 in addition to meeting GHG reduction targets

- Enhance the existing public participation process.
- Enhance existing transit services.

The Greenhouse Gas Reduction Targets included in the 2022 Merced County RTP/SCS are as follows:

- GHG reduction target compliance (2035 meets 14 percent reduction of 2005 baseline conditions)

ENVIRONMENTAL SETTING

Greenhouse Gases and Climate Change Linkages

Various gases in the Earth's atmosphere, classified as atmospheric GHGs, play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere from space, and a portion of the radiation is absorbed by the Earth's surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation.

Naturally occurring GHGs include water vapor (H_2O), carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3). Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also GHGs, but they are, for the most part, solely a product of industrial activities. Although the direct GHGs CO_2, CH_4, and N_2O occur naturally in the atmosphere, human activities have changed their atmospheric concentrations. From the pre-industrial era (i.e., ending about 1750) to 2011, concentrations of these three GHGs have increased globally by 40, 150, and 20 percent, respectively (IPCC, 2013).

GHGs, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), ozone (O_3), water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs).

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. In California, the transportation sector is the largest emitter of GHGs, followed by the industrial and electricity generation sectors (California Energy Commission, 2023).

As the name implies, global climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern, respectively. California produced 369 million gross metric tons of carbon dioxide equivalents ($MMTCO_2e$) in 2022 (California Air Resources Board, 2023).

Carbon dioxide equivalents are a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential of a GHG, is also dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

Consumption of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2022, accounting for 38% of total GHG emissions in the State. This category was followed by the industrial sector (23%), the electricity generation sector (including both in-state and out of-state sources) (16%), the agriculture and forestry sector (9%), the residential energy consumption sector (8%), and the commercial energy consumption sector (6%) (California Air Resources Board, 2023).

Effects of Global Climate Change

The effects of increasing global temperature are far-reaching and extremely difficult to quantify. The scientific community continues to study the effects of global climate change. In general, increases in the ambient global temperature as a result of increased GHGs are anticipated to result in rising sea levels, which could threaten coastal areas through accelerated coastal erosion, threats to levees and inland water systems and disruption to coastal wetlands and habitat.

If the temperature of the ocean warms, it is anticipated that the winter snow season would be shortened. Snowpack in the Sierra Nevada provides both water supply (runoff) and storage (within the snowpack before melting), which is a major source of supply for the State. The snowpack portion of the supply could potentially decline by 50% to 75% by the end of the 21st century (National Resources Defense Council, 2014). This phenomenon could lead to significant challenges securing an adequate water supply for a growing state population. Further, the increased ocean temperature could result in increased moisture flux into the State; however, since this would likely increasingly come in the form of rain rather than snow in the high elevations, increased precipitation could lead to increased potential and severity of flood events, placing more pressure on California's levee/flood control system.

Sea level has risen approximately seven inches during the last century and it is predicted to rise an additional 22 to 35 inches by 2100, depending on the future GHG emissions levels (California Environmental Protection Agency, 2010). If this occurs, resultant effects could include increased coastal flooding, saltwater intrusion and disruption of wetlands. As the existing climate throughout California changes over time, mass migration of species, or failure of species to migrate in time to adapt to the perturbations in climate, could also result. Under the emissions scenarios of the Climate Scenarios report (California Environmental Protection Agency, 2010), the impacts of global warming in California are anticipated to include, but are not limited to, the following.

Public Health

Higher temperatures are expected to increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation are projected to increase from 25% to 35% under the lower warming range and to 75% to 85% under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances depending on wind conditions. The Climate Scenarios report indicates that large wildfires could become up to 55% more frequent if GHG emissions are not significantly reduced.

In addition, under the higher warming scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a large increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures will increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

WATER RESOURCES

A vast network of man-made reservoirs and aqueducts capture and transport water throughout the State from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snow pack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snow pack, increasing the risk of summer water shortages.

The State's water supplies are also at risk from rising sea levels. An influx of saltwater would degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta, a major State fresh water supply. Global warming is also projected to seriously affect agricultural areas, with California farmers projected to lose as much as 25% of the water supply they need; decrease the potential for hydropower production within the State (although the effects on hydropower are uncertain); and seriously harm winter tourism. Under the lower warming range, the snow dependent winter recreational season at lower elevations could be reduced by as much as one month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing, snowboarding, and other snow dependent recreational activities.

If GHG emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snow pack by as much as 70% to 90%. Under the lower warming scenario, snow pack losses are expected to be only half as large as those expected if temperatures were to rise to the higher warming range. How much snow pack will be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snow pack would pose challenges to water managers, hamper hydropower generation, and nearly eliminate all skiing and other snow-related recreational activities.

AGRICULTURE

Increased GHG emissions are expected to cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. Although higher carbon dioxide levels can stimulate plant production and increase plant water-use efficiency, California's farmers will face greater water demand for crops and a less reliable water supply as temperatures rise.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures are likely to worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits and nuts, and milk.

Crop growth and development will be affected, as will the intensity and frequency of pest and disease outbreaks. Rising temperatures will likely aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

In addition, continued global warming will likely shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion is expected in many species while range contractions are less likely in rapidly evolving species with significant populations already established. Should range contractions occur, it is likely that new or different weed species will fill the emerging gaps. Continued global warming is also likely to alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

Forests and Landscapes

Global warming is expected to alter the distribution and character of natural vegetation thereby resulting in a possible increased risk of large wildfires. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55%, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the State. For example, if precipitation increases as temperatures rise, wildfires in southern California are expected to increase by approximately 30% toward the end of the century. In contrast, precipitation decreases could increase wildfires in northern California by up to 90%.

Moreover, continued global warming will alter natural ecosystems and biological diversity within the State. For example, alpine and sub-alpine ecosystems are expected to decline by as much as 60% to 80% by the end of the century as a result of increasing temperatures. The productivity of the State's forests is also expected to decrease as a result of global warming.

Rising Sea Levels

Rising sea levels, more intense coastal storms, and warmer water temperatures will increasingly threaten the State's coastal regions. Under the higher warming scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.

Energy Production and Consumption

Energy in California is consumed from a wide variety of sources. Fossil fuels (including gasoline and diesel fuel, natural gas, and energy used to generate electricity) are most widely used form of energy in the State. However, renewable sources of energy (such as solar and wind) are growing in proportion to California's overall energy mix. A large driver of renewable sources of energy in California is the State's current Renewable Portfolio Standard (RPS), which requires the State to derive at least 33% of electricity generated from renewable resources by 2020, 60 percent by 2030, and to achieve zero-carbon emissions by 2045 (as passed in September 2018, under AB 100).

Overall, in 2018, California's per capita energy usage was ranked fourth-lowest in the nation (U.S. EIA, 2024a). California's per capita rate of energy usage has remained relatively constant since the 1970's. Many State regulations since the 1970's, including new building energy efficiency standards, vehicle fleet efficiency measures, as well as growing public awareness, have helped to keep per capita energy usage in the State in check.

The consumption of non-renewable energy (i.e. fossil fuels) associated with the operation of passenger, public transit, and commercial vehicles, results in GHG emissions that contribute to global climate change. Alternative fuels such as natural gas, ethanol, and electricity (unless derived from solar, wind, nuclear, or other energy sources that do not produce carbon emissions) also result in GHG emissions and contribute to global climate change.

Electricity Consumption

California relies on a regional power system composed of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. In 2016, more than one-fourth of the electricity supply comes from facilities outside of the State. Much of the power delivered to California from states in the

Pacific Northwest was generated by wind. States in the Southwest delivered power generated at coal-fired power plants, at natural gas-fired power plants, and from nuclear generating stations (U.S. EIA, 2024a). In 2022, approximately 42 percent of California's utility-scale net electricity generation was fueled by natural gas. In addition, about 42 percent of the State's utility-scale net electricity generation came from non-hydroelectric renewable technologies, such as solar, wind, geothermal, and biomass. Another 8 percent of the State's utility-scale net electricity generation came from hydroelectric generation, and nuclear energy powered an additional 88 percent. The amount of electricity generated from coal is negligible (U.S. EIA, 2024a). The percentage of renewable resources as a proportion of California's overall energy portfolio is increasing over time, as directed by the State's Renewable Portfolio Standard (RPS).

According to the California Energy Commission (CEC), total statewide electricity consumption increased from 166,979 gigawatt-hours (GWh) in 1980 to 228,038 GWh in 1990, which is an estimated annual growth rate of 3.66 percent. The statewide electricity consumption in 1997 was 246,225 GWh, reflecting an annual growth rate of 1.14 percent between 1990 and 1997 (U.S. EIA, 2024a). Statewide consumption was 274,985 GWh in 2010, an annual growth rate of 0.9 percent between 1997 and 2010.

PG&E is a publicly traded utility company that, under contract with the California Public Utilities Commission (CPUC), generates, purchases, and distributes energy. PG&E's service area covers 70,000 square miles, roughly extending north to south from Eureka to Bakersfield and east to west from the Sierra Nevada to the Pacific Ocean. PG&E's electricity distribution system consists of 106,681 circuit miles of electric distribution lines and 18,466 circuit miles of interconnected transmission lines.

PG&E's, electricity is generated from a combination of traditional sources, such as coal-fired plants, nuclear power plants, and hydroelectric dams, as well as newer sources of energy, such as wind turbines and photovoltaic plants, or "solar farms." "The grid," or bulk electric grid, is a network of high-voltage transmission lines that link power plants to the PG&E system. The distribution system, comprising lower-voltage secondary lines, is at the street and neighborhood level. It consists of overhead or underground distribution lines, transformers, and individual service "drops" that connect to individual customers.

In addition to its base plan, PG&E has three plan options, known as Solar Choice options and Green Saver, which give customers the option of purchasing energy from solar resources. The first Solar Choice option provides up to 50 percent of a customer's energy from solar resources, while the other option provides up to 100 percent of a customer's energy from solar resources, and the Green Saver option provides up to 90 percent of a customer's energy from solar resources.

Table 8.3-1 outlines PG&E's power mix in 2021, compared to the power mix for the state. The table identifies the renewable and non-renewable energy sources for PG&E. It should be noted that some GHG free sources are not considered renewable (e.g., nuclear is GHG free but not renewable).

TABLE 8.3-1: PG&E AND THE STATE OF CALIFORNIA POWER MIX IN 2021

Energy Resources	PG&E Option: Base	PG&E Option: 50% Solar Choice	PG&E Option: 100% Solar	PG&E Option: Green Saver	California Power Mix 2021
Eligible Renewable	47.7%	70.9%	93.9%	89.9%	33.6%
Biomass and waste	4.2%	2.1%	0.0%	0.0%	2.3%
Geothermal	5.2%	2.6%	0.0%	0.0%	4.8%
Small hydroelectric	1.8%	0.9%	0.0%	0.0%	1.0%
Solar	25.7%	59.8%	93.9%	89.9%	14.2%
Wind	10.9%	5.5%	0.0%	0.0%	11.4%
Coal	0.0%	0.0%	0.0%	0.0%	3.0%
Large Hydroelectric	4.0%	2.0%	0.0%	0.0%	9.2%
Natural Gas	8.9%	7.4%	0.0%	0.0%	37.9%
Nuclear	39.3%	19.7%	0.0%	0.0%	9.3%
Other	0.0%	0.0%	0.0%	0.0%	0.2%
Unspecified	0.0%	0.0%	6.1%	10.1%	6.8%

SOURCE: PG&E. 2021. BUILDING A CLEANER, SAFER ENERGY FUTURE. AVAILABLE: HTTPS://WWW.PGE.COM/PGE_GLOBAL/COMMON/PDFS/YOUR-ACCOUNT/YOUR-BILL/UNDERSTAND-YOUR-BILL/BILL-INSERTS/2022/1022-POWER-CONTENT-LABEL.PDF. ACCESSED: FEBRUARY 28, 2024.

[A] ELECTRICITY FROM TRANSACTIONS THAT ARE NOT TRACEABLE TO SPECIFIC GENERATION SOURCES ARE CLASSIFIED AS UNSPECIFIED SOURCES OF POWER.

Oil

The primary energy source for the United States is oil, which is refined to produce fuels like gasoline, diesel, and jet fuel. Oil is a finite, nonrenewable energy source. World consumption of petroleum products has grown steadily in the last several decades. As of 2016, world consumption of oil had reached 96 million barrels per day. The United States, with approximately five percent of the world's population, accounts for approximately 19 percent of world oil consumption, or approximately 18.6 million barrels per day (U.S. EIA, 2024b). The transportation sector relies heavily on oil. In California, petroleum-based fuels currently provide approximately 96 percent of the State's transportation energy needs.

Natural Gas/Propane

The State produces approximately 12 percent of its natural gas, while obtaining 22 percent from Canada and 65 percent from the Rockies and the Southwest. In 2006, California produced 325.6 billion cubic feet of natural gas.

PG&E is the largest publicly-traded utility in California and provides natural gas for residential, industrial, and agency consumers within the Merced County area. PG&E's natural gas (i.e., methane) delivery system includes 42,000 miles of natural gas distribution pipelines and 6,700 miles of transmission pipelines. PG&E's gas transmission system serves approximately 15 million energy customers in California. The system is operated under an inspection and monitoring program in real time on a 24-hour basis, with leak inspections, surveys, and patrols continuously taking place along the pipelines. Gas delivered by PG&E originates in gas fields in California, the Southwest, the Rocky Mountains, and Canada. Transmission pipelines send natural gas from the fields and storage facilities. The smaller distribution pipelines deliver gas to individual businesses or residences.

8.4 GEOLOGY, SOILS, AND SEISMICITY

This section addresses seismic and geologic hazards in the City of Atwater. For hazards relating to flooding, wildfire, and hazardous materials see Section 6.0 (Hazards and Safety)

REGULATORY FRAMEWORK

LOCAL

City of Atwater General Plan

The existing Atwater General Plan includes the following policies and implementation measures related to geology and soils in Chapter 5 Seismic and Public Safety Chapter:

Policy SF-1.1. Require all new development and rehabilitation of existing development to be in compliance with all Seismic Zone 3 requirements of the Uniform Building Code.

Policy SF-2.1. Require a geotechnical study for all projects located in areas that are subject to high groundwater tables, as noted in Figure 5-2, to assess the probability of liquefaction occurrence on project site. The geotechnical study shall identify any required design or construction mitigation to reduce potential impacts.

Policy SF-3.1. Require all project applications that propose extraction of groundwater to include a report evaluating the potential for subsidence. The report shall discuss appropriate mitigation measures to reduce the potential for subsidence.

GEOLOGIC SETTING

Regional Geology

The planning area lies in the San Joaquin Valley in central California. The San Joaquin Valley is located in the southern portion of the Great Valley Geomorphic Province. The Great Valley, also known as the Central Valley, is a topographically flat, northwest-trending, structural trough (or basin) about 50 miles wide and 450 miles long. It is bordered by the Tehachapi Mountains on the south, the Klamath Mountains on the north, the Sierra Nevada on the east, and the Coast Ranges on the west.

The San Joaquin Valley is filled with thick sedimentary rock sequences that were deposited as much as 130 million years ago. Large alluvial fans have developed on each side of the Valley. The larger and more gently sloping fans are on the east side of the San Joaquin Valley, and overlie metamorphic and igneous basement rocks. These basement rocks are exposed in the Sierra Nevada foothills and consist of meta-sedimentary, volcanic, and granitic rocks.

Local Setting

TOPOGRAPHY

The planning area is relatively flat. The City of Atwater is at an elevation of 151 feet. Figure 8.4-1 shows the USGS Atwater Quadrangle Topographic view.

SOILS

A Custom Soil Survey was completed for the planning area using the NRCS Web Soil Survey program. The NRCS Soils Map is provided in Figure 8.4-2. Table 8.4-1 below identifies the type and range of soils found in the planning area.

TABLE 8.4-1: PLANNING AREA SOILS

NAME	ACRES
AaA- Alamo clay (0-1%)	38.26
AdA- Atwater loamy sand, deep hardpan, poorly drained (0%)	465.01
AfA- Atwater loamy sand (0-3%)	2,112.34
AfB- Atwater loamy sand (3-8%)	38.82
AgA- Atwater loamy sand, deep over hardpan (0-3%)	3,737.46
AgB- Atwater loamy sand, deep over hardpan (3-8%)	71.32
AkA- Atwater loamy sand, imperfectly drained (0-3%)	255.97
AnA- Atwater sand (0-3%)	8,432.43
AnB- Atwater sand (3-8%)	801.48
DcA- Delhi loamy fine sand, silty substratum (0-3%)	80.38
DeA-Delhi loamy sand, silty substratum (0-3%)	46.67
DfA- Delhi sand (0-3%) MLRA 17	687.85
DfB-Delhi sand (3-8%) MLRA 17	10.02
DkA- Dello sand (0-1%)	61.20
DpA- Dinuba sandy loam (0-1%)	7.99
DrA- Dinuba sandy loam, slightly saline-alkali (0-1%)	315.60
GeA- Greenfield sandy loam, deep over hardpan, poorly drained (0-1%)	142.71
GfA- Greenfield sandy loam, deep over hardpan (0-3%)	208.87
HgA- Hilmar loamy sand (0-3%)	1.72
HhA- Hilmar loamy sand loam, saline-alkali (0-3%)	75.79
SbA- San Joaquin loam (0-3%)	86.07
SbB- San Joaquin loam (3-8%)	3.16
SmA- Snelling sandy loam, imperfectly drained (0-1%)	127.76
SnA- Snelly sandy loam (0-3%)	39.38
FmA- Typic Duraqualfs, strongly saline-sodic (0-1%)	2.08
W- Water	44.40
Grand Total	**17,894.73**

SOURCE: NRCS CUSTOM SOIL SURVEY

As shown in Table 8.4-1, the majority of soils within the planning area consist of course and fine sands and sandy loams. Below is a brief description of the most prominent soils within the planning area.

Alamo Series. The Alamo series consists of moderately deep to hardpan, poorly drained soils that formed in alluvium from mixed sources. Alamo soils are in basins and drainageways on floodplains and fan remnants. Slope ranges from 0 to 2 percent.

Atwater Series. The Atwater series consists of very deep, well drained soils formed in granitic alluvium.

Delhi Series. The Delhi series consists of very deep, somewhat excessively drained soils. They formed in wind modified material weathered from granitic rock sources. Delhi soils are on floodplains, alluvial fans and terraces. Slopes are 0 to 15 percent.

Dello Series. The Dello series consists of very deep, very poorly drained soils that formed in alluvium from granitic rock sources. Dello soils are in small depressions and have slopes of 0 to 2 percent.

Dinuba Series. The Dinuba series consists of moderately well drained (minimal) Noncalcic Brown soils developed from moderately coarse textured dominantly granitic alluvium. They occur on nearly level to gently sloping alluvial fans and valley plains under grass-herb vegetation.

Greenfield Series. The Greenfield series consists of deep, well drained soils that formed in moderately coarse and coarse textured alluvium derived from granitic and mixed rock sources. Greenfield soils are on alluvial fans and terraces and have slopes of 0 to 3 percent.

Hilmar loamy sands. The Hilmar series is a member of the sandy over loamy, mixed, active, calcareous, thermic family of Aeric Halaquepts. Typically, Hilmar soils have pale brown, mildly alkaline, loamy sand A horizons, very pale brown, very strongly alkaline, loamy sand upper C horizons over light gray and light olive gray, very strongly alkaline, stratified, silt loam lower C horizons.

San Joaquin loams. The San Joaquin series consists of moderately deep to a duripan, well and moderately well drained soils that formed in alluvium derived from mixed but dominantly granitic rock sources. They are on undulating low terraces with slopes of 0 to 9 percent. The mean annual precipitation is about 15 inches and the mean annual temperature is about 61 degrees F.

Snelling sandy loams. The Snelling series consists of very deep, well drained soils formed in alluvium from predominantly granitic rock sources. They are typically on terraces and have slopes of 0 to 15 percent.

FAULTS AND SEISMICITY

Faults

A fault is a fracture in the crust of the earth. A fault trace is the line on the earth's surface defining the fault. Displacement of the earth's crust along faults releases energy in the form of earthquakes and in some cases in fault creep. Most faults are the result of repeated displacements over a long period of time.

Surface rupture occurs when movement on a fault deep within the earth breaks through to the surface. Surface ruptures have been known to extend up to 50 miles with displacements of an inch to 20 feet. Fault rupture almost always follows preexisting faults, which are zones of weakness. Rupture may occur suddenly during an earthquake or slowly in the form of fault creep. Sudden displacements are more damaging to structures because they are accompanied by shaking.

The State of California designates faults as active, potentially active, and inactive depending on how recent the movement that can be substantiated for a fault. Table 8.4-2 presents the California fault activity rating system.

TABLE 8.4-2: FAULT ACTIVITY RATING

FAULT ACTIVITY RATING	GEOLOGIC PERIOD OF LAST RUPTURE	TIME INTERVAL (YEARS)
Active (A)	Holocene	Within last 11,000 years
Potentially Active (PA)	Quaternary	11,000-1.6 Million Years
Inactive (I)	Pre-Quaternary	Greater than 1.6 Million

SOURCE: CALIFORNIA GEOLOGICAL SURVEY

The Fault Activity Map provided by the California Department of Conservation identified potential seismic sources within 100 kilometers (62 miles) of the planning area. The closest known faults classified as active by the California Geological Survey are the San Joaquin fault, located approximately 26 miles to the west. The Great Valley thrust fault system is located approximately 27 miles to the southwest. Other faults that are located nearby include the O'Neill fault system, the Ortigalita fault zone and the Quien Sabe fault. Figure 8.4-3 provides a map of known area faults.

Seismicity

The amount of energy available to a fault is determined by considering the slip-rate of the fault, its area (fault length multiplied by down-dip width), maximum magnitude, and the rigidity of the displaced rocks. These factors are combined to calculate the moment (energy) release on a fault. The total seismic energy release for a fault source is sometimes partitioned between two different recurrence models, the characteristic and truncated Gutenberg-Richter (G-R) magnitude-frequency distributions. These models incorporate our knowledge of the range of magnitudes and relative frequency of different magnitudes for a particular fault. The partition of moment and the weights for multiple models are given in the following summary.

Earthquakes are generally expressed in terms of intensity and magnitude. Intensity is based on the observed effects of ground shaking on people, buildings, and natural features. By comparison, magnitude is based on the amplitude of the earthquake waves recorded on instruments, which have a common calibration. The Richter scale, a logarithmic scale ranging from 0.1 to 9.0, with 9.0 being the strongest, measures the magnitude of an earthquake relative to ground shaking. Table 8.4-3 provides a description and a comparison of intensity and magnitude.

TABLE 8.4-3: RICHTER MAGNITUDES AND EFFECTS

MAGNITUDE	EFFECTS
< 3.5	Typically not felt
3.5 – 5.4	Often felt but damage is rare
5.5 – < 6	Damage is slight for well-built buildings
6.1 – 6.9	Destructive potential over ±60 miles of occupied area
7.0 – 7.9	"Major Earthquake" with the ability to cause damage over larger areas
≥ 8	"Great Earthquake" can cause damage over several hundred miles

SOURCE: ASSOCIATION OF BAY AREA GOVERNMENTS, 2011.

Table 8.4-4 below presents Modified Mercalli intensity effects at each level.

TABLE 8.4-4: MODIFIED MERCALLI INTENSITY SCALE FOR EARTHQUAKES

RICHTER MAGNITUDE	*MODIFIED MERCALLI*	*EFFECTS OF INTENSITY*
0.1 – 0.9	I	Earthquake shaking not felt
1.0 – 2.9	II	Shaking felt by those at rest.
3.0 – 3.9	III	Felt by most people indoors, some can estimate duration of shaking.
4.0 – 4.5	IV	Felt by most people indoors. Hanging objects rattle, wooden walls and frames creak.
4.6 – 4.9	V	Felt by everyone indoors, many can estimate duration of shaking. Standing autos rock. Crockery clashes, dishes rattle and glasses clink. Doors open, close and swing.
5.0 – 5.5	VI	Felt by all who estimate duration of shaking. Sleepers awaken, liquids spill, objects are displaced, and weak materials crack.
5.6 – 6.4	VII	People frightened and walls unsteady. Pictures and books thrown, dishes and glass are broken. Weak chimneys break. Plaster, loose bricks and parapets fall.
6.5 – 6.9	VIII	Difficult to stand. Waves on ponds, cohesionless soils slump. Stucco and masonry walls fall. Chimneys, stacks, towers, and elevated tanks twist and fall.
7.0 – 7.4	IX	General fright as people are thrown down, hard to drive. Trees broken, damage to foundations and frames. Reservoirs damaged, underground pipes broken.
7.5 – 7.9	X	General panic. Ground cracks, masonry and frame buildings destroyed. Bridges destroyed, railroads bent slightly. Dams, dikes and embankments damaged.
8.0 – 8.4	XI	Large landslides, water thrown, general destruction of buildings. Pipelines destroyed, railroads bent.
8.5 +	XII	Total nearby damage, rock masses displaced. Lines of sight/level distorted. Objects thrown into air.

SOURCE: UNITED STATES GEOLOGICAL SURVEY

The Significant United States Earthquake data published by the USGS in the National Atlas identifies earthquakes that caused deaths, property damage, and geologic effects or were felt by populations near the epicenter. No significant earthquakes are identified within the planning area; however, significant earthquakes are documented in the region. The following table presents the significant earthquakes in the region.

TABLE 8.4-5: SIGNIFICANT EARTHQUAKES IN THE REGION

MAGNITUDE	INTENSITY	LOCATION	YEAR
6.0	VIII	South Napa	2014
5.6	VI	San Jose	2007
5.0	VII	Napa	2000
6.9	IX	Loma Prieta (San Andreas)	1989
5.4	N/A	Santa Cruz County	1989
6.2	N/A	Morgan Hill	1984
5.8, 5.8	VII	Livermore	1980
5.7	N/A	Coyote Lake	1979
5.7, 5.6	N/A	Santa Rosa	1969
5.3, 4.2	N/A	Daly City	1957
5.4	N/A	Concord	1954
6.5	N/A	Calaveras fault	1911
7.9	IX	San Francisco	1906
6.8	N/A	Mendocino	1898
6.2	N/A	Mare Island	1898
6.3	N/A	Calaveras fault	1893
6.2	VIII	Winters	1892
6.4	N/A	Vacaville	1892
6.8	VII	Hayward	1868
6.5	VIII	Santa Cruz Mountains	1865
6.8	N/A	San Francisco Peninsula	1838

SOURCE: UNITED STATE GEOLOGICAL SURVEY.

Alquist-Priolo Special Study Zone

The California legislature passed the Alquist-Priolo Special Studies Zone Act in 1972 to address seismic hazards associated with faults and to establish criteria for developments for areas with identified seismic hazard zones. The California Geologic Survey (CGS) evaluates faults with available geologic and seismologic data and determines if a fault should be zoned as active, potentially active, or inactive. If CGS determines a fault to be active, then it is typically incorporated into a Special Studies Zone in accordance with the Alquist-Priolo Earthquake Hazard Act. Alquist-Priolo Special Study Zones are usually one-quarter mile or less in width and require site-specific evaluation of fault location and require a structure setback if the fault is found traversing a project site. The planning area is not within an Alquist-Priolo Special Study Zone. The nearest Alquist-Priolo fault zone, the San Joaquin fault zone and the Great Valley thrust fault system are located approximately 23 miles southwest of Atwater.

SEISMIC HAZARDS

Seismic Ground Shaking

The potential for seismic ground shaking in California is expected. As a result of the foreseeable seismicity in California, the State requires special design considerations for all structural improvements in accordance with the seismic design provisions in the California Building Code. These seismic design provisions require enhanced structural integrity based on several risk parameters.

Fault Rupture

A fault rupture occurs when the surface of the earth breaks as a result of an earthquake, although this does not happen with all earthquakes. These ruptures generally occur in a weak area of an existing fault. Ruptures can be sudden (i.e. earthquake) or slow (i.e. fault creep). The Alquist-Priolo Fault Zoning Act requires active earthquake fault zones to be mapped and it provides special development considerations within these zones. Atwater does not have surface expression of active faults and fault rupture is not anticipated. Figure 8.4-3 shown regional faults in relation to Atwater.

Liquefaction

Liquefaction typically requires a significant sudden decrease of shearing resistance in cohesion-less soils and a sudden increase in water pressure, which is typically associated with an earthquake of high magnitude. The potential for liquefaction is highest when groundwater levels are high, and loose, fine, sandy soils occur at depths of less than 50 feet. Soil data from the NRCS Web Soil Survey (NRCS 2023) suggests that the potential for liquefaction ranges from low to high within the planning area, given that many soils are high in sand.

Lateral Spreading

Lateral spreading typically results when ground shaking moves soil toward an area where the soil integrity is weak or unsupported, and it typically occurs on the surface of a slope, although it does not occur strictly on steep slopes. Oftentimes, lateral spreading is directly associated with areas of liquefaction. The potential for liquefaction is moderate to high in many areas of the city, however because the planning area is essentially flat lateral spreading of soils has not been observed within the planning area.

Landslides

Landslides include rockfalls, deep slope failure, and shallow slope failure. Factors such as the geological conditions, drainage, slope, vegetation, and others directly affect the potential for landslides. One of the most common causes of landslides is construction activity that is associated with road building (i.e. cut and fill). The planning area is essentially flat; therefore, the potential for a landslide is generally low.

NON-SEISMIC HAZARDS

Expansive Soils

Expansive soils can undergo significant volume change with changes in moisture content. They shrink and harden when dried and expand and soften when wet. If structures are underlain by expansive soils, it is important that foundation systems be capable of tolerating or resisting any potentially damaging soil movements. In addition, it is important to limit moisture changes in the surficial soils by using positive drainage away from buildings as well as limiting landscaping watering. Figure 8.4-4 provides a map of the shrink-swell potential of the soils within the planning area. As shown in Figure 8.4-4, the shrink-swell potential of the planning area is primarily low, except in the eastern portion of the planning area, where there exists some small areas of moderate and high shrink-swell potential.

Erosion

Erosion naturally occurs on the surface of the earth as surface materials (i.e. rock, soil, debris, etc.) is loosened, dissolved, or worn away, and transported from one place to another by gravity. Two common types of soil erosion include wind erosion and water erosion. The steepness of a slope is an important factor that affects soil erosion. Erosion potential in soils is influenced primarily by loose soil texture and steep slopes. Loose soil can be eroded by water or wind forces, whereas soils with high clay content are generally susceptible only to water erosion. The potential for erosion generally increases as a result of human activity, primarily through the development of facilities and impervious surfaces and the removal of vegetative cover.

Collapsible Soils

Collapsible soils undergo a rearrangement of their grains and a loss of cementation, resulting in substantial and rapid settlement under relatively low loads. Collapsible soils occur predominantly at the base of mountain ranges, where Holocene-age alluvial fan and wash sediments have been deposited during rapid run-off events. Soils prone to collapse are commonly associated with manmade fill, wind-laid sands and silts, and alluvial fan and mudflow sediments deposited during flash floods. During an earthquake, even slight settlement of fill materials can lead to a differentially settled structure and significant repair costs. Differential settlement of structures typically occurs when heavily irrigated landscape areas are near a building foundation. Examples of common problems associated with collapsible soils include tilting floors, cracking or separation in structures, sagging floors, and nonfunctional windows and doors. Collapsible soils have not been identified in the planning area as an issue. However, in areas subject to potential liquefaction, the potential for liquefaction induced settlement is present.

Subsidence

Land subsidence is the gradual settling or sinking of an area with little or no horizontal motion due to changes taking place underground. It is a natural process, although it can also occur (and is greatly accelerated) as a result of human activities. Common causes of land subsidence from human activity include: pumping water, oil, and gas from underground reservoirs; dissolution of limestone aquifers (sinkholes); collapse of underground mines; drainage of organic soils; and initial wetting of dry soils. Subsidence has not been identified as an issue in the planning area.

Naturally Occurring Asbestos

The term "asbestos" is used to describe a variety of fibrous minerals that, when airborne, can result in serious human health effects. Naturally occurring asbestos is commonly associated with ultramafic rocks and serpentinite. Ultramafic rocks, such as dunite, peridotite, and pyroxenite are igneous rocks comprised largely of iron-magnesium minerals. As they are intrusive in nature, these rocks often undergo metamorphosis, prior to their being exposed on the Earth's surface. The metamorphic rock serpentinite is a common product of the alteration process. Naturally occurring asbestos is not identified within Merced County. There is no naturally occurring asbestos mapped within Atwater.

Figure 8.4-1. USGS Topographic Map

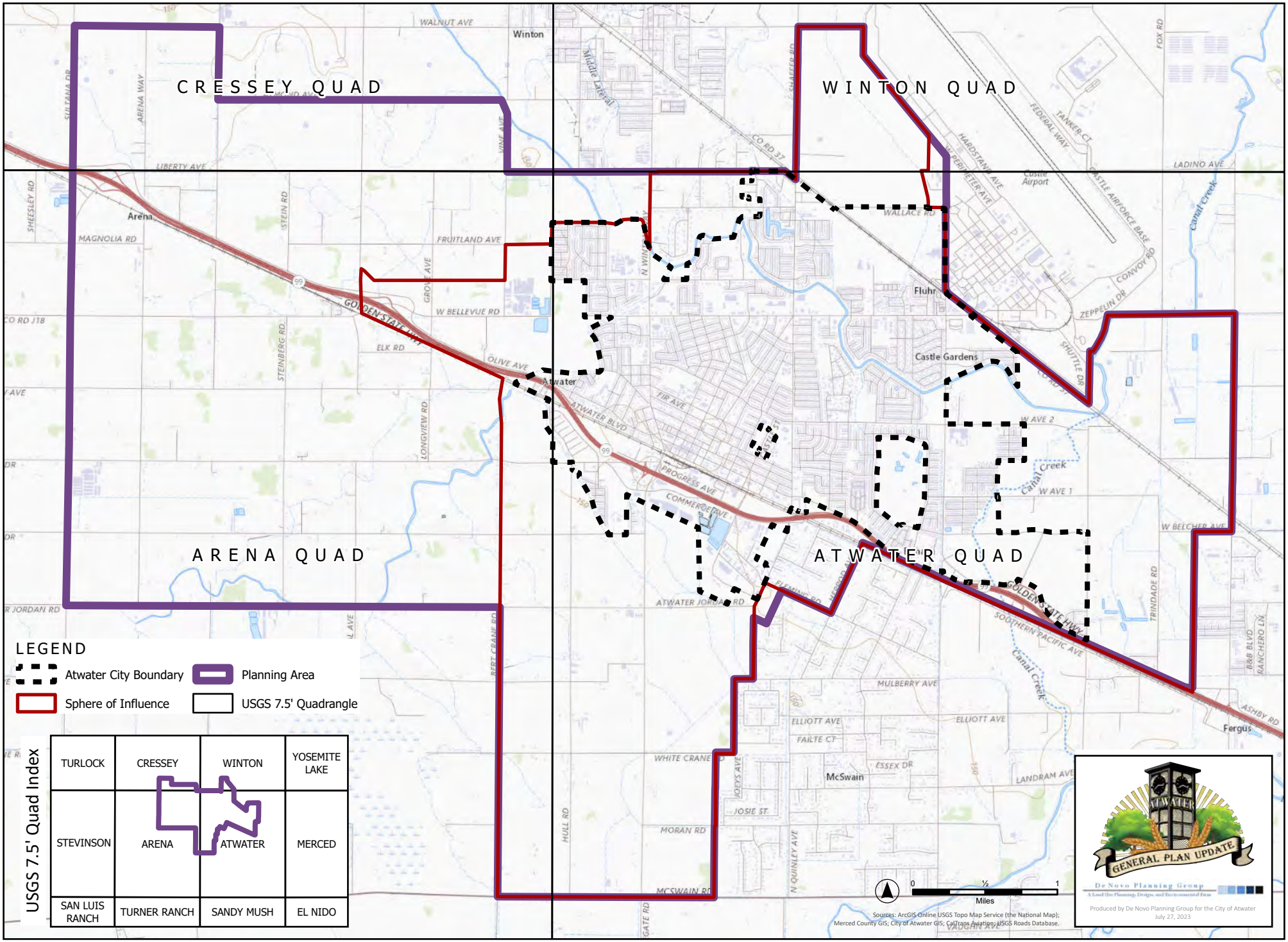


Figure 8.4-2. Soil Types

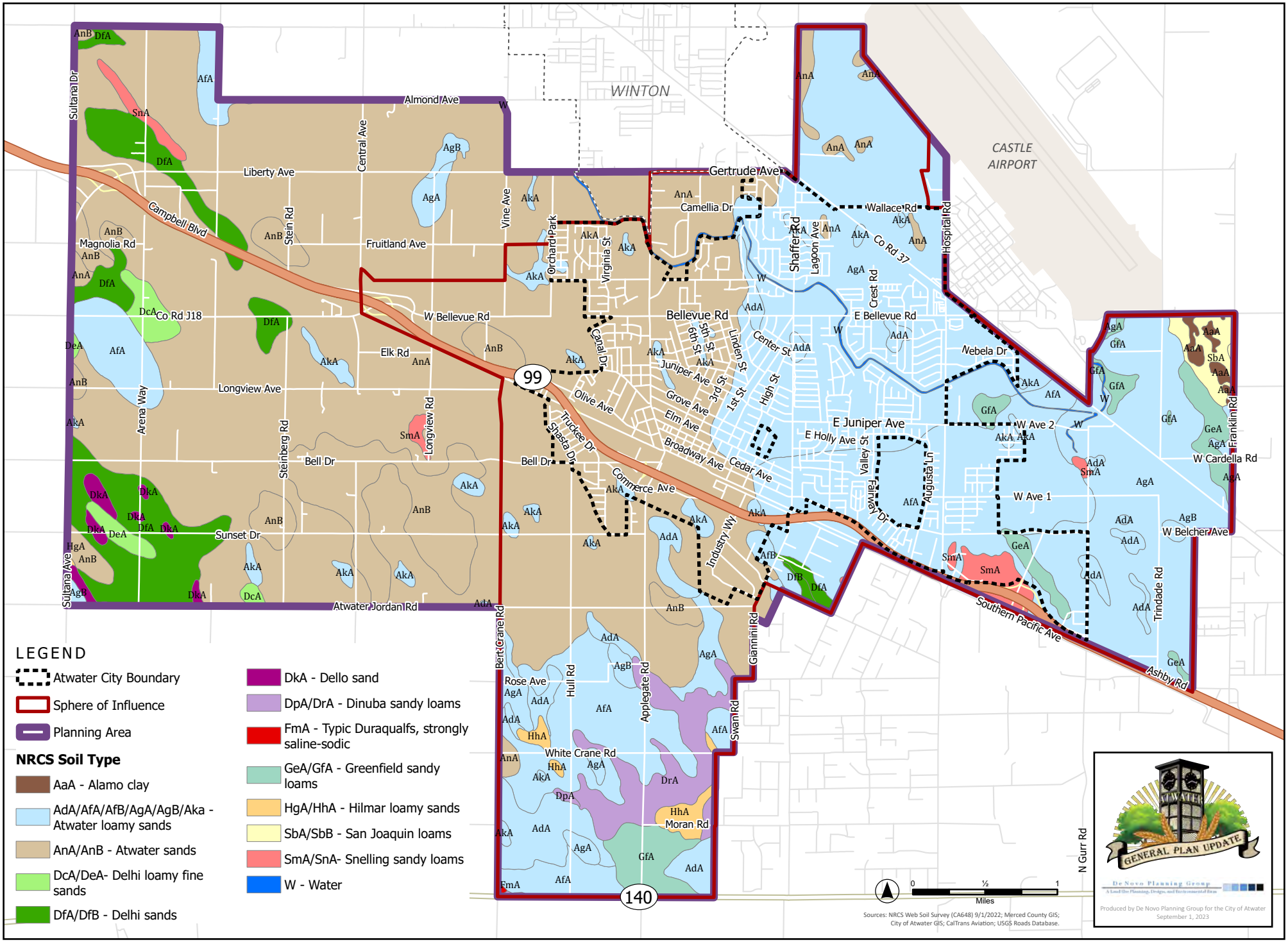


Figure 8.4-3. Earthquake Faults and Alquist-Priolo Zones

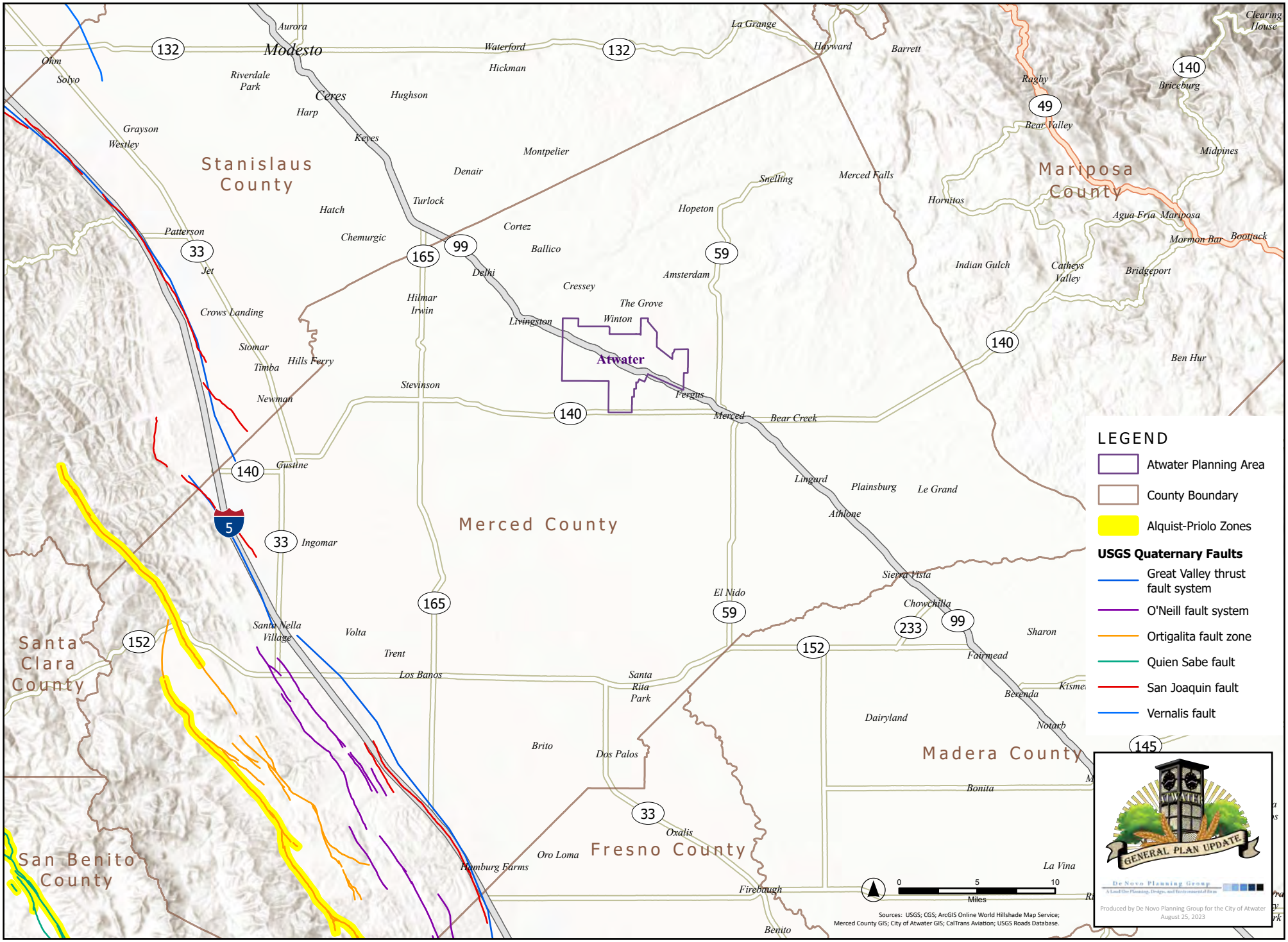
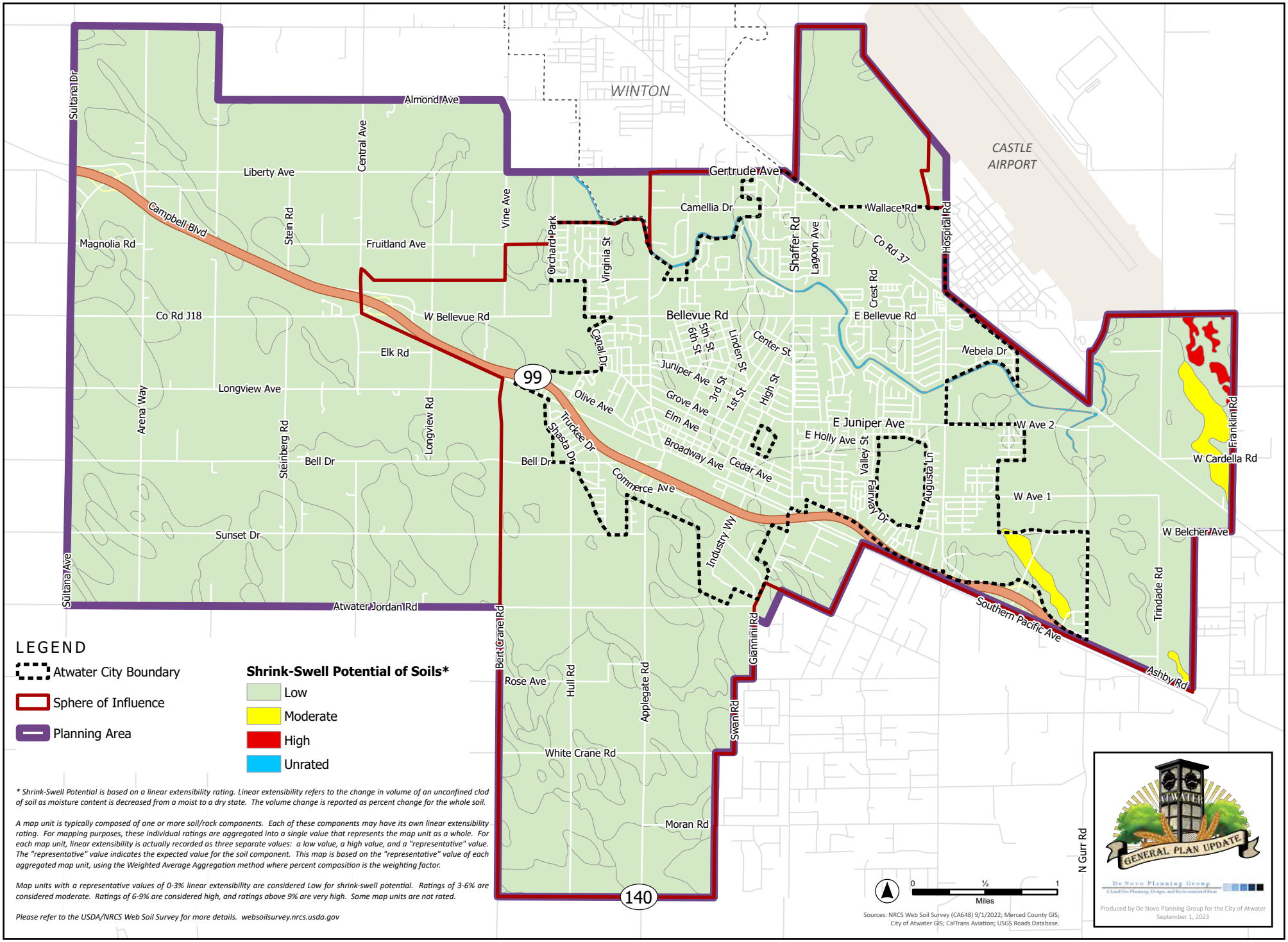


Figure 8.4-4. Shrink-Swell Potential of Soils



** Shrink-Swell Potential is based on a linear extensibility rating. Linear extensibility refers to the change in volume of an unconfined clod of soil as moisture content is decreased from a moist to a dry state. The volume change is reported as percent change for the whole soil.*

A map unit is typically composed of one or more soil/rock components. Each of these components may have its own linear extensibility rating. For mapping purposes, these individual ratings are aggregated into a single value that represents the map unit as a whole. For each map unit, linear extensibility is actually recorded as three separate values: a low value, a high value, and a "representative" value. The "representative" value indicates the expected value for the soil component. This map is based on the "representative" value of each aggregated map unit, using the Weighted Average Aggregation method where percent composition is the weighting factor.

Map units with a representative values of 0-3% linear extensibility are considered Low for shrink-swell potential. Ratings of 3-6% are considered moderate. Ratings of 6-9% are considered high, and ratings above 9% are very high. Some map units are not rated.

Please refer to the USDA/NRCS Web Soil Survey for more details. websoilsurvey.nrcs.usda.gov

8.5 Mineral and Energy Resources

This section describes mineral and energy resources in the planning area from both a qualitative and quantitative perspective. The results of this assessment may be used in planning and management decisions that may affect mineral and energy resources in the planning area.

Regulatory Framework

Local

Merced County General Plan

Policy NR-3.4: New Development Compatibility (RDR)

Ensure that new development is compatible with existing and potential surface mining areas and operations as identified on the Mineral Resource Zone Maps prepared by the State Division of Mines and Geology and other mineral resource areas identified by the County. The County shall:

a) Require development applicants near identified mineral resources to prepare a statement that specifies why the County should permit the proposed land use and describe how the benefits of the proposed use would clearly outweigh the impacts that may limit the potential to extract mineral resources in that area.
b) Require new incompatible land uses adjacent to existing mining operations to provide a buffer between the development and adjacent mining operations adequate to mitigate significant impacts to mineral land uses. The buffer distance shall be based on an evaluation of noise, aesthetics, drainage, operation conditions, biological resources, topography, lighting, traffic, operating hours, and air quality.
c) Require written notification to be sent to mining operators and subject landowners of land use entitlement applications for potentially incompatible land uses in areas where mining operations are currently taking place.

ENVIRONMENTAL SETTING

Statewide Resources

In 2012, the California Geological Survey identified that approximately 4 billion tons of permitted aggregate reserves lie within the 31 aggregate study areas in California. These permitted aggregate reserves have been determined to be acceptable for commercial use, exist within properties owned or leased by aggregate producing companies, and have permits allowing mining of aggregate material. Sand, gravel, and crushed stones are construction materials that are collectively referred to as construction aggregate. These materials provide the bulk and strength to Portland cement concrete (PCC), asphaltic concrete (AC), plaster, and stucco. Other uses include road base, subbase, railroad ballast, and fill.

From 1981 to 2010, California consumed an average of about 180 million tons of construction aggregate (all grades) per year. (CGS, 2012)

Mineral Resource Classification

Pursuant to the Surface Mining and Reclamation Act of 1975 (SMARA), the California State Mining and Geology Board oversees the Mineral Resource Zone (MRZ) classification system. The MRZ system characterizes both the location and known/presumed economic value of underlying mineral resources. The mineral resource classification system uses four main MRZs based on the degree of available geologic information, the likelihood of significant mineral resource occurrence, and the known or inferred quantity of significant mineral resources. The four classifications are described in Table 8.5-1 below.

TABLE 8.5-1: MINERAL RESOURCE CLASSIFICATION SYSTEM

CLASSIFICATION	*DESCRIPTIONS*
MRZ-1	Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
MRZ-2	Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.
MRZ-3	Areas containing mineral deposits, the significance of which cannot be evaluated.
MRZ-4	Areas where available information is inadequate for assignment to any other MRZ classification.

SOURCE: CALIFORNIA DEPARTMENT OF CONSERVATION DIVISION OF MINES AND GEOLOGY, ACCESSED AUGUST 2023

Local Resources

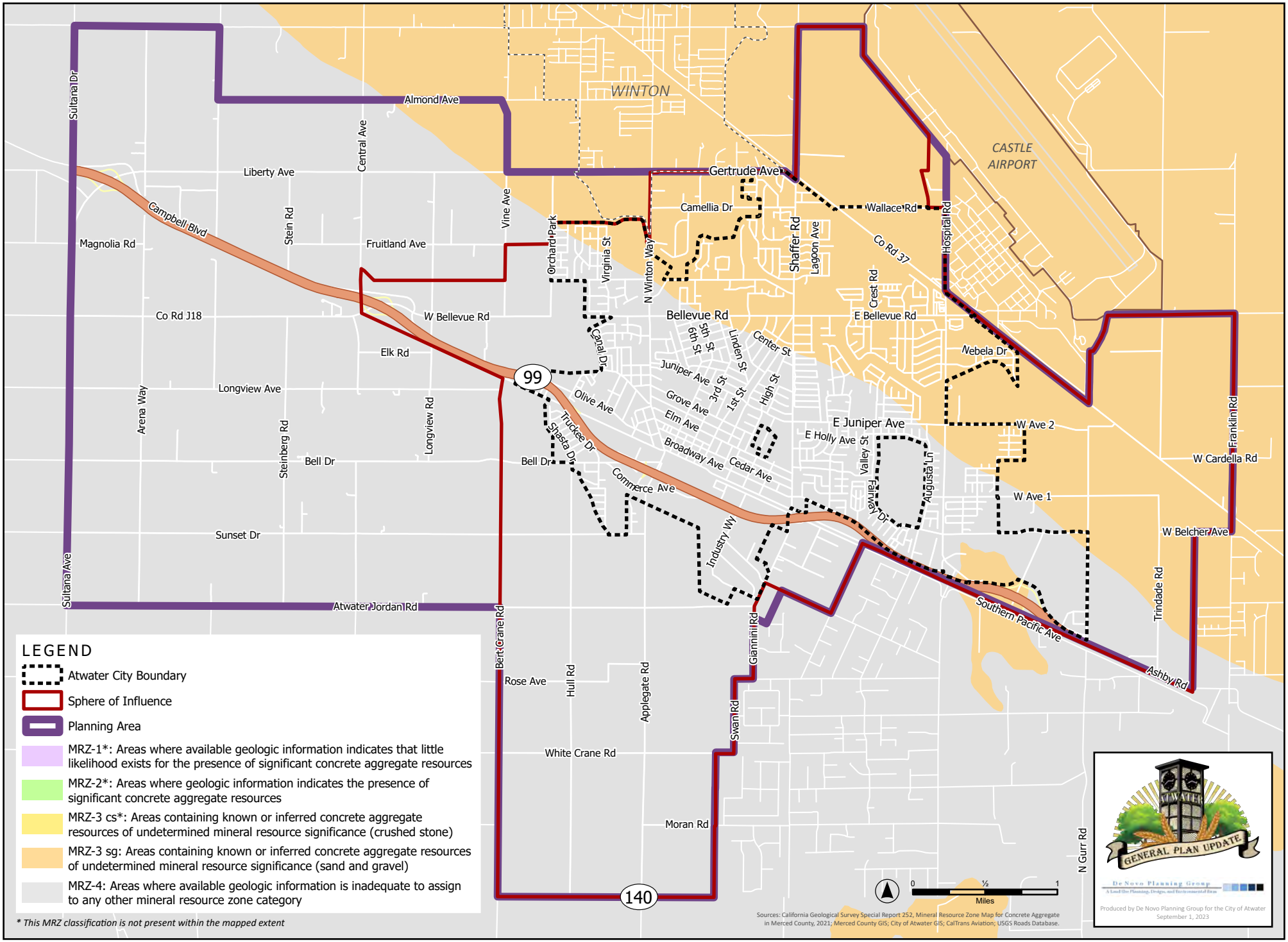
Figure 8.5-1: Mineral Resource Zones shows mineral resources within and near the planning area. The planning area contains areas that are designated as MRZ-3 and MRZ-4, which reflect “areas containing mineral deposits the significance of which cannot be evaluated from available data”, and “areas where available geologic information is inadequate to assign to any other mineral resource zone category, respectively. Table 8.5-2 identifies significant mineral resources within the city, and planning area.

TABLE 8.5-2: MINERAL RESOURCES WITHIN THE PLANNING AREA

CLASSIFICATION	DESCRIPTIONS	CITY LIMITS (AC)	SPHERE OF INFLUENCE (AC)
MRZ-3	Areas containing mineral deposits, the significance of which cannot be evaluated.	1,633.56	2,453.17
MRZ-4	Areas where available information is inadequate for assignment to any other MRZ classification.	2,560.87	4,169.77
Totals		4,194.43	6,622.94

SOURCE: CALIFORNIA DEPARTMENT OF CONSERVATION DIVISION OF MINES AND GEOLOGY, ACCESSED AUGUST 2023.

Figure 8.5-1. Mineral Resource Zones



8.6 HYDROLOGY AND WATER QUALITY

This section provides an overview of hydrology and water quality within the planning area and the vicinity.

LOCAL REGULATORY FRAMEWORK

City of Atwater General Plan

Goal CO-1. Support efforts to monitor and remediate existing groundwater contamination within the Planning Area.

Policy CO-1.1 Encourage responsible agencies to continue monitoring and remediation of contamination of the aquifer underneath the CAADC site.

Policy CO-1.2. Encourage the County of Merced to pursue remediation of groundwater contamination in the unincorporated portions of the Planning Area.

Goal CO-2. Prevent the creation of new groundwater contamination or the spread of contamination.

Policy CO-2.1. Work with the Regional Water Quality Control Board (RWQCB) to protect, improve, and enhance groundwater quality in the region.

Atwater Municipal Code

Chapter 17.08.120 - Water conservation

It shall be the responsibility of the permittee to utilize devices such as automatic shut off valves, buckets, and hoses attached to a public water source with the intent of limiting water runoff and to conserve the overall use of water. Excessive runoff or water use may also be grounds for revocation of an issued permit.

Chapter 16.32.060 - Water facilities.

A. The subdivider shall provide adequately sized water distribution lines, valves, fire hydrants, water services, and related accessories, for water supply and fire protection to each lot in the subdivision. These facilities shall be in conformance with construction specifications and standards as approved by the City Council.

B. All water facilities required in this section shall be shown on improvement plans which are sufficient to show all of the proposed facilities to be constructed. Detailed quantity amounts shall be tabulated for construction items. Such improvement plans must be approved by the City Engineer in writing before work is commenced on such facilities.

Chapter 3.22.120 - Reduction of pollutants in storm water.

Any person engaged in activities that may result in pollutants entering the storm water conveyance system shall, to the maximum extent practicable, undertake the measures set forth below to reduce the risk of non-storm water discharge and/or pollutant discharge.

A. Business-Related Activities.
    1. Storm Water Pollution Prevention Plan. The enforcement official may require any business in the City engaged in activities that may result in pollutant discharges to develop and implement a storm water pollution prevention plan, which shall include an employee training program. An employee training program is a documented employee training program that may be required to be implemented by a business pursuant to a storm water pollution prevention plan, for the purpose of educating its employees on methods of reducing discharge of pollutants to the storm water conveyance system. Business activities that may require a storm water pollution prevention plan include, but are not limited to, maintenance, storage, manufacturing, assembly, equipment operations, vehicle loading or fueling, or cleanup procedures carried out partially or wholly out of doors.
    2. Coordination with Hazardous Materials Release Response Plans and Inventory. Any business requiring a hazardous materials release response and inventory plan, under Chapter 6.95 (commencing with Section 25500) of Division 20 of the California Health and Safety Code, shall include in that plan provisions for compliance with this chapter, including the provisions prohibiting non-storm water discharges and illegal discharges, and requiring the release of pollutants to be reduced to the maximum extent practicable.
    3. Coordination with Hazardous Waste Generator Contingency Plan and Emergency Procedures. Any business requiring a hazardous waste generator contingency plan and emergency procedures, pursuant to California Code of Regulations, Title 22, Sections 66265.51 to 66265.56, shall include in that plan provisions for compliance with this chapter, including the provisions prohibiting non-storm water discharge and illegal discharges, and requiring the release of pollutants to be reduced to the maximum extent practicable.
B. Construction.
    1. Any person performing construction activities in the City shall prevent pollutants from entering the storm water conveyance system and comply with all applicable Federal, State and local laws, ordinances or regulations, including but not limited to, the current California NPDES general permit for storm water discharges associated with construction activity (construction general permit) and the City Storm Water Management and Discharge Control Ordinance. All construction projects, regardless of size, having soil disturbance or activities exposed to storm water must, at a minimum, implement BMPs for erosion and sediment controls, soil stabilization, dewatering, source controls, pollution prevention measures, and prohibited discharges.
    2. Any person subject to a construction activity NPDES storm water discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the enforcement official prior to, or as a condition of, a subdivision map, site plan, building permit, grading permit, or development or improvement plan, upon inspection of the facility, during any enforcement proceeding or action, or for any other reasonable cause. Prior to issuance of a construction permit or approval of the proposed improvement plans, for projects subject to the State's current construction NPDES general permit, the WDID number and the SWPPP shall be submitted

to the City. For projects with less than an acre of soil disturbance or not subject to the construction general permit, an erosion and sediment control plan (ESCP) and the ESCP worksheet must be submitted to the City.

3. As required by its Phase II MS4 NPDES permit, the City will conduct storm water compliance inspections at applicable construction sites that have areas of soil disturbance exposed to storm water. The inspection will be conducted by a City inspector or agent working for the City who is a qualified SWPPP practitioner (QSP) or is supervised by a QSP. The inspection will evaluate the construction site's compliance to the City's storm water ordinances. Inspections will be billed by the City to the project owner. The following is the risk rating system and inspection frequency the City will use, which is analogous to the risk rating used by the California construction general permit.
    a. Projects not subject to the CGP or that have an erosivity waiver will have a pre-soil disturbance inspection and a project completion inspection.
    b. Projects that are Risk 1/LUP Type 1 or Risk 2/LUP Type 2 will have a pre-soil disturbance inspection, monthly inspections, and a project completion inspection.
    c. Projects that are Risk 3/LUP Type 3 will have a pre-soil disturbance inspection, bi-monthly (twice per month) inspections, and a project completion inspection.

    If a project has been issued two consecutive notices of violation or does not correct a previously issued notice of violation by the due date set by the inspector, the project's "threat to water quality" will be elevated by the City to the next highest category. This elevation of risk will not affect the risk rating for the construction general permit.

C. Development. The enforcement official may require controls as appropriate to minimize the long-term, post-construction activity discharge of storm water pollutants from new development(s) or modifications to existing development(s). Controls may include source control measures to prevent pollution of storm water, treatment controls designed to remove pollutants from storm water, low impact development measures, and/or hydro-modification measures to offset the difference between the pre and post-construction peak flow runoff rates and volumes. Proponents of all applicable development and redevelopment projects will be required to meet the requirements and design standards specified in the current State of California Phase II MS4 NPDES permit and as described in further detail in the City's Storm Water Design Standards Manual for New Development and Redevelopment.

    At the earliest planning stages, project proponents shall assess and evaluate how site conditions, such as soils, vegetation, and flow paths will influence the placement of buildings and paved surfaces. The evaluation will be used to optimize the site layout to meet the goals of capturing and treating runoff. Each project proponent will submit a map of the project dividing the site into discrete drainage management areas to show in each how runoff will be managed using site design measures, source controls, treatment controls, and hydro-modification measures as defined by the current MS4 permit. All site design measures, source controls, treatment controls, and hydro-modification measures must be selected, sized, and situated in accordance with the guidance provided in the current MS4 permit and the City's Storm Water Design Standards Manual for New Development and Redevelopment. Documentation of the site's post-construction storm water design measures must be submitted to the City's Planning Department for review and approval prior to the commencement of the project.

Project proponents must sign an operation and maintenance agreement in which they legally bind themselves to maintain the installed post-construction design measures in an effective and good operational condition until the property ownership is transferred. A written operation and maintenance plan for the proposed storm water design measures is required to be submitted to and approved by the City with the signed agreement. The agreement will be recorded with the deed by the County Clerk making it transferrable to the new owner; or, when there are multiple property owners responsible for the maintenance of the control measures, the agreement will consist of a legally binding covenant between the City and the homeowners association or maintenance district. The owner or association responsible for the maintenance of the control measures may be required by the City to submit an annual self-certification that the storm water control measures are effective and are being maintained in accordance with the submitted and approved operation and maintenance plan.

D. Compliance with Industrial or Construction Activity Storm Water Permit.1.Any person subject to the State's current industrial NPDES general permit for storm water discharge shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the enforcement official upon inspection of the facility; during any enforcement proceeding or action; or for any other reasonable cause.2.Any person subject to the State's current construction NPDES general permit for storm water discharge shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the enforcement official prior to or as a condition of a subdivision map, site plan, building permit, and development or improvement plan; upon inspection of the facility; during any enforcement proceeding or action; or for any other reasonable cause.
E. Compliance with Best Management Practices. Every person or entity, including the above-listed categories, undertaking any activity or use of premises that may cause or contribute to storm water pollution or contamination or illicit discharges shall comply with best management practices (BMPs) consistent with the California Storm Water Quality Association (CASQA) Best Management Practice Handbooks or equivalent guidelines.

ENVIRONMENTAL SETTING

Regional Hydrology

The City of Atwater is located within Merced County in the San Joaquin Valley of Central California. The City of Atwater is located approximately 8 miles northwest of Merced, 105 miles south of Sacramento, and 65 miles north of Fresno. The City of Atwater is in the San Joaquin River Hydrologic Region and extracts its groundwater from the Merced Subbasin, Basin Number 5-22.04.

The San Joaquin River originates in the high-elevation Eastern Sierra Nevada Mountain range, flowing southwest to the San Joaquin Valley floor, before turning northwest to its confluence with the Sacramento River at the Sacramento-San Joaquin Delta (Delta). The San Joaquin River has three major tributaries: the Merced, Tuolumne, and Stanislaus rivers. The Cosumnes (a tributary to Mokelumne River), Mokelumne, and Calaveras rivers also flow into the San Joaquin River where the river joins the tidally influenced Delta (NOAA, 2023).

Climate

Atwater's climate consists of dry, mild winters and hot summers. Up to 90 percent of the city's annual precipitation occurs from November to April; therefore, rainfall during the summer is rare and very light.

Additionally, snow is also a very rare occurrence. More than 80 percent of days in Atwater are sunny except for during the winter (November-February). During the winter, there are fewer sunny days due to fog and short storm events.

Watersheds

A watershed is a region that is bound by a divide that drains to a common watercourse or body of water. Watersheds serve an important biological function, oftentimes supporting an abundance of aquatic and terrestrial wildlife including special-status species and anadromous and native local fisheries. Watersheds provide conditions necessary for riparian habitat.

The State of California uses a hierarchical naming and numbering convention to define watershed areas for management purposes. This means that boundaries are defined according to size and topography, with multiple sub-watersheds within larger watersheds. Table 8.6-1 shows the primary watershed classification levels used by the State of California. The second column indicates the approximate size that a watershed area may be within a particular classification level, although variation in size is common.

TABLE 8.6-1. STATE OF CALIFORNIA WATERSHED HIERARCHY NAMING CONVENTION

WATERSHED LEVEL	*APPROXIMATE SQUARE MILES (ACRES)*	*DESCRIPTION*
Hydrologic Region (HR)	12,735 (8,150,000)	Defined by large-scale topographic and geologic considerations. The State of California is divided into ten HRs.
Hydrologic Unit (HU)	672 (430,000)	Defined by surface drainage; may include a major river watershed, groundwater basin, or closed drainage, among others.
Hydrologic Area (HA)	244 (156,000)	Major subdivisions of hydrologic units, such as by major tributaries, groundwater attributes, or stream components.
Hydrologic Sub-Area (HSA)	195 (125,000)	A major segment of an HA with significant geographical characteristics or hydrological homogeneity.

SOURCE: CALIFORNIA DEPARTMENT OF WATER RESOURCES, 2012.

Hydrologic Region

Merced County is located in the San Joaquin River Hydrological Region. The San Joaquin River is the principal river of the region, and all other streams of the region are tributary to it. The Mokelumne River and its tributary the Cosumnes River originate in the central Sierra Nevada, along with the more southerly Stanislaus and Tuolumne rivers. The Merced River flows from the south central Sierra Nevada and enters the San Joaquin near the City of Newman. The Chowchilla and Fresno rivers also originate in the Sierra south of the Merced River and trend westward toward the San Joaquin River. Creeks originating in the Coast Range and draining eastward into the San Joaquin River include Del Puerto Creek, Orestimba Creek, and Panoche Creek. Del Puerto Creek enters the San Joaquin near the City of Patterson, and Orestimba Creek enters north of the City of Newman. During flood years, Panoche Creek may enter the San Joaquin River or the Fresno Slough near the town of Mendota. The Kings River is a stream of the Tulare Lake Hydrologic Region, but in flood years it may contribute to the San Joaquin River, flowing northward through the James Bypass and Fresno Slough to enter near the City of Mendota. The Mud, Salt, Berrenda, and Ash Sloughs also add to the San Joaquin River, and numerous lesser streams and creeks also enter the system, originating in both the Sierra Nevada and the Coast Range. The entire San Joaquin River system drains northwesterly through the Delta to Suisun Bay (DWR 2013, pg. SJR-5).

Local Watersheds (Hydrologic Sub-Areas)

The City of Atwater is located within the Black Rascal Creek-Bear Creek, Canal Creek, City of Winton-Bear Creek watersheds, as shown in Figure 8.6-1.

Groundwater Basin

The Merced Subbasin contains three principal aquifers that are defined by their relationship to the Corcoran Clay aquitard, a laterally-extensive silt and clay layer that underlies approximately the western half of the subbasin and acts as a significant confining layer. The Above Corcoran Principal Aquifer includes all aquifer units that exist above the Corcoran Clay aquitard and generally contains moderate to large hydraulic conductivities and yields for domestic and irrigation uses.

The groundwater aquifer from which the City of Atwater obtains its water is not adjudicated. An adjudication consists of a groundwater basin in which all rights to water could be defined by a court. As a non-adjudicated basin, there are no defined legal pumping rights for the City and there are no legal constraints on groundwater pumping.

The Merced Subbasin is a high priority basin and is critically over drafted. The City of Atwater and other members of the Merced Irrigation-Urban Groundwater Sustainability Agency are in the process of implementing measures from the recently adopted GSP to sustainably manage the groundwater basin, including the allocation of the estimated sustainable yield of the basin to the GSAs.

The San Joaquin River Groundwater Basin is not adjudicated. Therefore, no limitations are placed on groundwater pumpage volumes. Portions of the San Joaquin River Groundwater Basin have been in a state of overdraft for many years, including the Merced Subbasin. The California Water Plan Update- Bulletin 160-98 estimated the average overdraft in the San Joaquin River Groundwater Basin to be 239,000 AF in 1995 (City of Atwater Urban Water Management Plan, 2020).

Groundwater supplies the domestic water needs of the City. The groundwater comes from the San Joaquin-Tulare Valley Storage Basin, an aquifer that serves the entire Central Valley. Static groundwater levels in the Atwater area are generally between 55 and 89 feet below ground level (Atwater General Plan, 2000).

Local Drainage

The City's storm drainage system primarily consists of man-made irrigation canals that carry storm runoff and two drainage canals that provide drainage from the city. The canals transport stormwater from the city, and the stormwater eventually drains to the San Joaquin River. In addition, the system consists of catch basins that collect runoff water from the street, pump stations that are used to remove stormwater from sections of road that cannot be drained by gravity, pipes of various sizes, as well as a detention basin to prevent flooding (City of Atwater Urban Water Management Plan, 2020).

Stormwater Quality

Potential hazards to surface water quality include the following nonpoint pollution problems: high turbidity from sediment resulting from erosion of improperly graded construction projects, concentration of nitrates and dissolved solids from agriculture or surfacing septic tank failures, contaminated street and lawn run-off from urban areas, and warm water drainage discharges into cold water streams.

The most critical period for surface water quality is following a rainstorm which produces significant amounts of drainage runoff into streams at low flow, resulting in poor dilution of contaminates in the low flowing stream. Such conditions are most frequent during the fall at the beginning of the rainy season when

stream flows are near their lowest annual levels. Besides the greases, oils, pesticides, litter, and organic matter associated with such runoff, heavy metals such as copper, zinc, and cadmium can cause considerable harm to aquatic organisms when introduced to streams in low flow conditions.

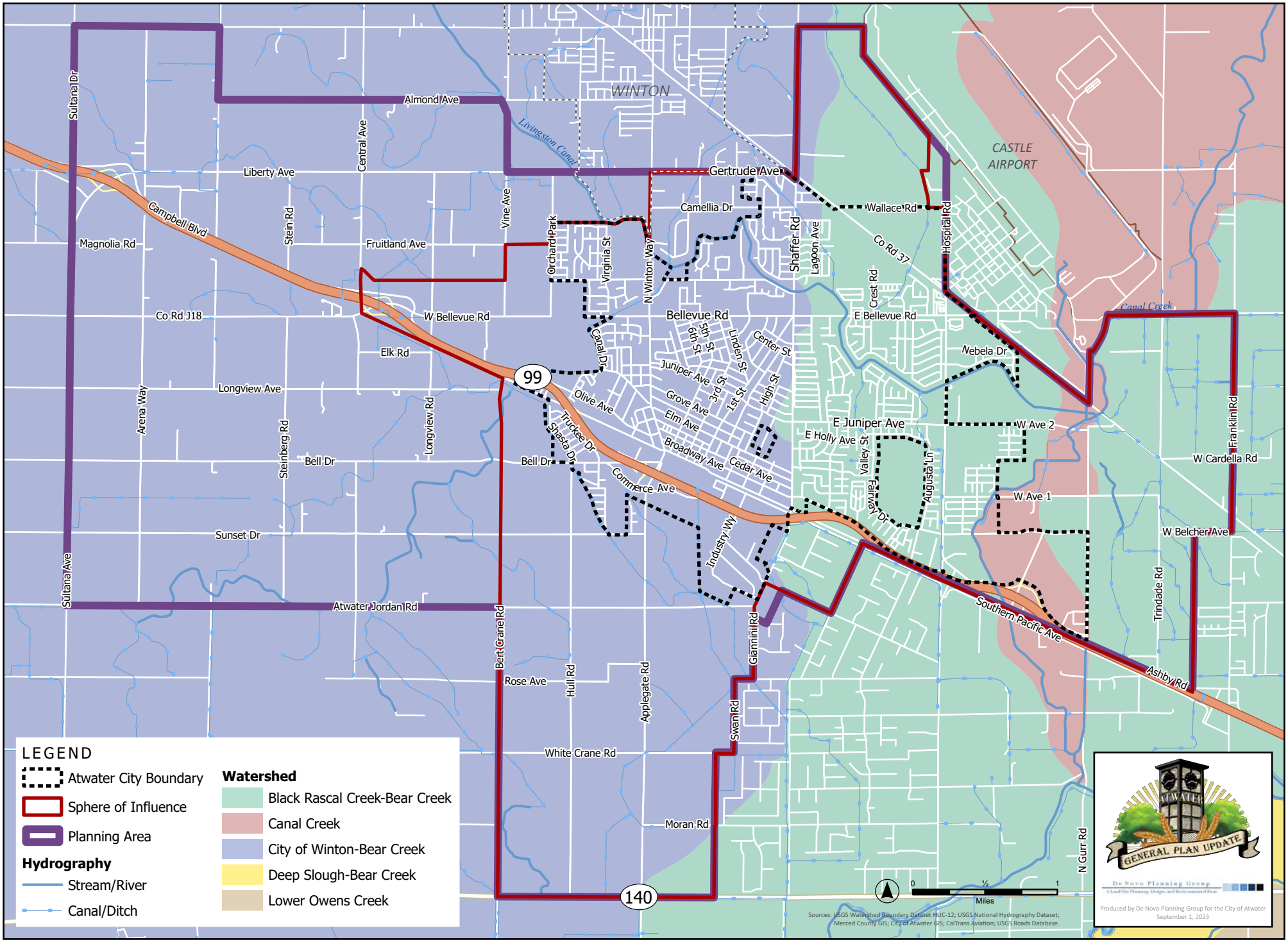
Urban stormwater runoff was managed as a non-point discharge (a source not readily identifiable) under the Federal Water Pollution Control Amendments of 1972 (PL 92-500, Section 208) until the mid-1980's. However, since then, the Federal Environmental Protection Agency has continued to develop implementing rules which categorize urban runoff as a point source (an identifiable source) subject to National Pollution Discharge Elimination System (NPDES) permits. Rules now affect medium and large urban areas, and further rulemaking is expected as programs are developed to meet requirements of Federal water pollution control laws.

Surface water pollution is also caused by erosion. Excessive and improperly managed grading, vegetation removal, quarrying, logging, and agricultural practices all lead to increased erosion of exposed earth and sedimentation of watercourses during rainy periods. In slower moving water bodies these same factors often cause a buildup of siltation, which ultimately reduces the capacity of the water system to percolate and recharge groundwater basins, as well as adversely affecting both aquatic resources and flood control efforts.

303(d) Impaired Water Bodies: Section 303(d) of the federal Clean Water Act requires States to identify waters that do not meet water quality standards or objectives and thus, are considered "impaired." Once listed, Section 303(d) mandates prioritization and development of a Total Maximum Daily Load (TMDL). The TMDL is a tool that establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby the basis for the States to establish water quality-based controls. The purpose of TMDLs is to ensure that beneficial uses are restored and that water quality objectives are achieved.

According to the California Water Quality Control Monitoring Council, which is part of California Environmental Protection Agency, Natural Resources, there are many areas within Merced County which are considered Section 303(d) impaired waterbodies. However, there are no areas with the City of Atwater or the planning area that contain Section 303(d) water bodies.

Figure 8.6-1. Watershed Map



8.7 SCENIC RESOURCES

This section provides an overview of the visual character, scenic resources, views, and scenic highways that are encountered within the planning area and the regional vicinity.

KEY TERMS

Scenic Highway Corridor. The area outside of a highway right-of-way that is generally visible to persons traveling on the highway.

Scenic Highway/Scenic Route. A highway, road, drive, or street that, in addition to its transportation function, provides opportunities for the enjoyment of natural and human-made scenic resources and access or direct views to areas or scenes of exceptional beauty (including those of historic or cultural interest). The aesthetic values of scenic routes often are protected and enhanced by regulations governing the development of property or the placement of outdoor advertising. Until the mid-1980's, General Plans in California were required to include a Scenic Highways Element.

View Corridor. A view corridor is a highway, road, trail, or other linear feature that offers travelers a vista of scenic areas within a city or county.

REGULATORY FRAMEWORK

LOCAL

City of Atwater General Plan

The following City of Atwater General Plan policies, which are intended to achieve visual and scenic quality in new developments, apply to the proposed project.

The City of Atwater aims to protect and beautify these streets with specific policies regulating signs, utility lines, land use, and other activities which would detract from the aesthetic value of these corridors. Also, the City encourages actions that enhance the scenic value of these corridors, such as landscaping, maintenance and architectural design.

Policy CO-10.1. Utilize landscaping and other features to enhance and beautify major streets and gateways into and through the City.

Policy CO-10.2. Avoid excessive signage and other features which could detract from the scenic quality of prominent circulation routes.

City of Atwater Municipal Code

Chapter 17.69.160 - Scenic corridors.

Freestanding signs erected along scenic corridors are subject to the following setback, landscaping, and design requirements:

A. No closer than ten feet to property line or 18 feet to curb face. Areas along Atwater Boulevard shall conform to established building setbacks.
B. Signs shall be of a monument style, mounted on a solid base, and not to exceed eight feet in height measured from the finished grade to the top of the sign.
C. The sign shall be placed in a landscaped area equipped with a seven-day automatic irrigation system.

D. The design and construction materials of monument signs shall be reviewed and approved by the Planning Department.

ENVIRONMENTAL SETTING

Regional Scenic Resources

Visual resources are generally classified into two categories: scenic views and scenic resources. Scenic views are elements of the broader viewshed such as mountain ranges, valleys, waterways, and ridgelines. They are usually mid-ground or background elements of a viewshed that can be seen from a range of viewpoints, often along a roadway or other corridor. Scenic resources are specific features of a viewing area (or viewshed) such as trees, rock outcroppings, and historic buildings. They are specific features that act as the focal point of a viewshed and are usually foreground elements.

Aesthetically significant features occur in a diverse array of environments within the region, ranging in character from urban centers to rural agricultural lands to natural water bodies. Features of the built environment that may also have visual significance include individual or groups of structures that are distinctive due to their aesthetic, historical, social, or cultural significance or characteristics. Examples of the visually significant built environment may include bridges or overpasses, architecturally appealing buildings or groups of buildings, landscaped freeways, and a location where a historic event occurred.

Scenic Highways and Corridors

Scenic highways and corridors make major contributions to the quality of life enjoyed by the residents of a region. The development of community pride, the enhancement of property values, and the protection of aesthetically-pleasing open spaces reflecting a preference for the local lifestyle are all ways in which scenic corridors are valuable to residents.

Scenic highways and corridors can also strengthen the tourist industry. For many visitors, highway corridors will provide their only experience of the region. Enhancement and protection of these corridors ensures that the tourist experience continues to be a positive one and, consequently, provides support for the tourist-related activities of the region's economy.

Scenic Highways: A scenic highway is generally defined by Caltrans as a public highway that traverses an area of outstanding scenic quality, containing striking views, flora, geology, or other unique natural attributes. A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view.

There are no Designated Scenic Highways in Merced County according to the Caltrans Scenic Highway Mapping System. The nearest Designated Scenic Highway is California State Route 5 in Stanislaus County. This is not visible from the City of Atwater.

Scenic Corridors: A scenic corridor is the view from the road that may include a distant panorama and/or the immediate roadside area. A scenic corridor encompasses the outstanding natural features and landscapes that are considered scenic. It is the visual quality of the man-made or natural environments within a scenic corridor that are responsible for its scenic value. Commonly, the physical limits of a scenic corridor are broken down into foreground views (zero to one quarter mile) and distant views (over one quarter mile). In addition to distinct foreground and distant views, the visual quality of a scenic corridor is defined by special features, which include:

- Focal points - prominent natural or man-made features which immediately catch the eye.
- Transition areas - locations where the visual environment changes dramatically.
- Gateways - locations which mark the entrance to a community or geographic area.

The City of Atwater General Plan designated the following as scenic corridors:

- Atwater Boulevard
- First Street
- Bellevue Road
- Shaffer Road
- Winton Way
- Broadway from Winton Way to First Street
- Buhach Road
- Third Street
- Part of Grove Avenue
- All entrances to the City

8.8 AGRICULTURAL RESOURCES

This section provides an overview of the agricultural crops in Merced County and the City of Atwater. Information in this section is derived primarily from the California Important Farmlands Map (California Department of Conservation, 2023), the California Land Conservation (Williamson) Act Status Report (California Department of Conservation, 2023) and the Natural Resources Conservation Service (NRCS) Web Soil Survey (NRCS, 2023).

REGULATORY FRAMEWORK

LOCAL

City of Atwater General Plan

The existing City of Atwater General Plan provides a policy framework for the preservation and conservation of agricultural resources.

Goal CO-4. Ensure the continued viability of agriculture in the area surrounding the City's proposed Sphere of Influence.

Policy CO-4.1. Comply with all agricultural preservation policies and implementation programs developed jointly by the City and Merced County.

Implementation Program CO-4.a. Continue to work with the County of Merced to develop mutually acceptable policies and implementation programs designed to avoid and/or mitigate the conversion of Agricultural land outside of the City's proposed Sphere of Influence.

City of Atwater Municipal Code-Chapter 17.10 Agricultural Districts

17.10.010 To preserve lands best suited for agricultural use from the premature encroachment of urban development, but to permit agricultural and recreational uses which may appropriately be located. To preserve in agricultural use land suited to eventual development in other uses, pending proper timing for the economical provision of utilities, major streets and other facilities, so that compact, orderly development will occur.

Central Valley Farmland Trust

The Central Valley Farmland Trust is a private, non-profit, regional land trust working in Sacramento, San Joaquin, Stanislaus and Merced Counties of California. The organization works to preserve farmland through the purchase of agricultural conservation easements from willing landowners.

ENVIRONMENTAL SETTING

Merced County Agriculture

Merced County occupies a central location in California's vast agricultural heartland, the San Joaquin Valley. The County's Agricultural Commissioner's most recently published Agricultural Report (2021) contains the following information relating to agriculture in the county.

The total acreage of crop land in Merced County is approximately 77,806.39. The gross value of agricultural production in Merced County for 2021 was $3,441,029,000. Table 8.8-1 lists the top commodities in Merced County in 2020 and 2021

TABLE 8.8-1: SUMMARY COMPARISON OF CROP VALUES

PRODUCT TYPE	*2021 VALUE IN DOLLARS*	*2020 VALUE IN DOLLARS*
Milk	$1,093,632,000	$1,050,940,000
Almonds	$485,858,000	$470,603,000
Sweet Potatoes	$317,789,000	$269,895,000
Chickens	$276,215,000	$318,522,000
Cattle & Calves	$258,246,000	$262,187,000
Tomatoes	$139,765,000	$145,056,000
Corn	$128,919,000	$104,347,000
All Nursery Products	$107,514,000	$75,109,000
Grapes (Wine)	$80,090,000	$63,419,000
Pistachio	$78,191,000	--
Misc. Fruit & Nut	$77,675,000	--
Misc. Vegetables	$77,425,000	$95,011,000
Eggs (Chicken)	$69,404,000	$72,120,000
Hay (Alfalfa)	$68,462,000	--
Cotton (PIMA)	$61,517,000	$43,482,000
Silage (Other)	$47,602,000	$32,264,000
Pollination	$44,596,000	$31,542,000
Turkeys	$28,129,000	$29,552,000
Total	**$3,441,029,000**	**$3,129,166,000**

SOURCE: MERCED COUNTY AGRICULTURAL REPORT, 2020, 2021

Agricultural Capability

The California Department of Conservation Farmland Mapping and Monitoring Program identifies lands that have agriculture value and maintains a statewide map of these lands called the Important Farmlands Inventory (IFI). IFI classifies land based upon the productive capabilities of the land, rather than the mere presence of ideal soil conditions.

The suitability of soils for agricultural use is just one factor for determining the productive capabilities of land. Suitability is determined based on many characteristics, including fertility, slope, texture, drainage, depth, and salt content. A variety of classification systems have been devised by the state to categorize soil capabilities. The two most widely used systems are the Capability Classification System and the Storie Index. The Capability Classification System classifies soils from Class I to Class VIII based on their ability to support agriculture with Class I being the highest quality soil. The Storie Index considers other factors such as slope and texture to arrive at a rating. The IFI is in part based upon both of these two classification systems.

Soil Capability Classification

The Soil Capability Classification System takes into consideration soil limitations, the risk of damage when soils are used, and the way in which soils respond to treatment. Capability classes range from Class 1 soils, which have few limitations for agriculture, to Class 8 soils that are unsuitable for agriculture. Generally, as the rating of the capability classification increases, yields and profits are more difficult to obtain. A general description of soil classifications, as defined by the Natural Resources Conservation Service (NRCS) is provided in Table 8.8-2 below.

A Custom Soil Survey was completed for the planning area using the NRCS Web Soil Survey program. Table 8.8-3 identifies the soils and soil classifications found in the planning area. The NRCS Soils Map is provided on Figure 8.4-2.

TABLE 8.8-2: SOIL CAPABILITY CLASSIFICATION

CLASS	DEFINITION
1	Soils have slight limitations that restrict their use.
2	Soils have moderate limitations that restrict choice plants or that require moderate conservation practices.
3	Soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.
4	Soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.
5	Soils are not likely to erode but have other limitations; impractical to remove that limits their use largely to pasture or range, woodland, or wildlife habitat.
6	Soils have severe limitations that make them generally unsuited to cultivation and limit their use largely to pasture or range, woodland, or wildlife habitat.
7	Soils have very severe limitations that make them unsuited to cultivation and that restrict their use largely to pasture or range, woodland, or wildlife habitat.
8	Soils and landforms have limitations that preclude their use for commercial plans and restrict their use to recreation, wildlife habitat, water supply, or aesthetic purposes.

SOURCE: USDA SOIL CONSERVATION SERVICE.

TABLE 8.8-3: SOIL CLASSIFICATION

NAME	ACRES IN SOI	PERCENT OF SOI
Alamo Clay, 0 to 1 percent	38.26	0.2%
Atwater loamy sand, deep hardpan, poorly drained 0 percent	465.01	2.6%
Atwater loamy sand, 0 to 3 percent	2,112.34	11.8%
Atwater loamy sand, 3 to 8 percent	38.82	0.2%
Atwater loamy sand, deep over hardpan, 0 to 3 percent	3,737.46	20.9%
Atwater loamy sand, deep over hardpan, 3 to 8 percent	71.32	0.4%
Atwater loamy sand, imperfectly drained, 0 to 3 percent	255.97	1.4%
Atwater sand, 0 to 3 percent	8,432.43	47.1%
Atwater sand, 3 to 8 percent	801.48	4.5%
DcA - Delhi loamy fine sand, silty substratum (0-3%)	80.38	0.4%
DeA - Delhi loamy sand, silty substratum (0-3%)	46.67	0.3%
Delhi sand, 0 to 3 percent	687.85	3.8%
Delhi sand, 3 to 8 percent	10.02	0.1%
DkA - Dello sand (0-1%)	61.20	0.3%
Dinuba sandy loam, 0 to 1 percent	7.99	0.0%
Dinuba sandy loam, slightly saline-alkali, 0 to 1 percent	315.60	1.8%
Greenfield sandy loam, deep over hardpan, poorly drained, 0 to 1 percent	142.71	0.8%
Greenfield sandy loam, deep over hardpan, 0 to 3 percent	208.87	1.2%
HgA - Hilmar loamy sand (0-3%)	1.72	0.0%
HhA - Hilmar loamy sand, saline-alkali (0-3%)	75.79	0.4%
San Joaquin loam, 0 to 3 percent	86.07	0.5%
San Joaquin loam, 3 to 8 percent	3.16	0.0%
Snelling sandy loam, imperfectly drained, 0 to 1 percent	127.76	0.7%
SnA - Snelly sandy loam (0-3%)	39.38	0.2%
Typic Duraqualfs, strongly saline-sodic, 0 to 1 percent	2.08	0.0%
Water	44.40	0.2%
Total	**17,894.73**	**100.0%**

** DEPICTS IRRIGATED VS NON IRRIGATED CAPABILITY RATING*

SOURCE: NRCS CUSTOM WEB SOIL SURVEY, 2023.

Important Farmlands

The Farmland Mapping and Monitoring Program (FMMP) is a farmland classification system administered by the California Department of Conservation. Important farmland maps are based on the Land Inventory and Monitoring criteria, which classify a land's suitability for agricultural production based on both the physical and chemical characteristics of soils, and the actual land use. The system maps five categories of agricultural land, which include important farmlands (prime farmland, farmland of statewide importance, unique farmland, and farmland of local importance) and grazing land, as well as three categories of non-agricultural land, which include urban and built-up land, other land, and water area.

The State of California Department of Conservation Farmland Mapping and Monitoring Program and Merced County GIS data were used to illustrate the farmland characteristics for the planning area. Farmlands in the planning area are identified in Table 8.8-4 and are shown on Figure 8.8-1. The farmland classifications for the site and surrounding area are described below.

TABLE 8.8-4: FARMLAND CLASSIFICATION

LAND CLASSIFICATION	CITY	SOI	PLANNING AREA	GRAND TOTAL
P- Prime Farmland	220.58	4,046.46	5,498.21	9,765.25
S- Farmland of Statewide Importance	0.58	753.66	641.38	1,395.62
L-Farmland of Local Importance	351.25	269.71	180.63	801.59
U-Unique Farmland	--	78.83	11.38	90.21
sAC- Semi-agricultural and Rural Commercial Land	32.91	17.35	4.39	54.65
CI- Confined Animal Agriculture	0.08	208.22	40.58	248.88
G- Grazing Land	10.93	12.62	3.87	27.42
R-Rural Residential Land	0.01	230.83	293.02	523.86
D- Urban and Built-Up Land	3,382.10	969.90	359.04	4,711.05
V- Vacant or Disturbed Land	195.99	35.35	44.84	276.19
Grand Total	**4,194.43**	**6,622.94**	**7,077.36**	**17,894.73**

SOURCE: CALIFORNIA DEPARTMENT OF CONSERVATION; NRCS CUSTOM WEB SOIL SURVEY, 2023.

Prime Farmland is farmland with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date. Approximately 4,267.04 acres of Prime Farmland is located within the Panning Area.

Farmland of Statewide Importance is farmland with characteristics similar to those of prime farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date. Approximately 754.24 acres of Farmland of Statewide Importance is located within the Panning Area.

Unique Farmland is land which does not meet the criteria for Prime Farmland or Farmland of Statewide Importance, that has been used for the production of specific high economic value crops at some time during the two update cycles prior to the mapping date. It has the special combination of soil quality, location, growing season, and moisture supply needed to produce sustained high quality and/or high yields of a specific crop when treated and managed according to current farming methods. Examples of such

crops may include oranges, olives, avocados, rice, grapes, and cut flowers. It does not include publicly owned lands for which there is an adopted policy preventing agricultural use. Approximately 78.83 acres of Unique Farmland is located within the Panning Area.

Farmland of Local Importance is land of importance to the local agricultural economy, as determined by each county's board of supervisors and a local advisory committee. Approximately 620.96 acres of Farmland of Local Importance is located within the Panning Area.

Urban and Built-up Land includes Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes. Approximately 4,352 acres of Urban and Built-Up Land is located within the Panning Area.

Rural Residential Land has a building density of less than 1 structure per 1.5 acres, but with at least one structure per 10 acres. Approximately 230.84acres of Rural Residential Land is located within the Panning Area.

Vacant or Disturbed Land consists of open field areas that do not qualify for an agricultural category, mineral and oil extraction areas, and rural freeway interchanges. Approximately 231.34 acres of Vacant or Disturbed Land is located within the Panning Area.

Semi-Agricultural and Rural Commercial Land includes farmsteads, agricultural storage and packing sheds, unpaved parking areas, composting facilities, equine facilities, firewood lots, and campgrounds. Approximately 50.26 acres of Semi-Agricultural and Rural Commercial Land is located within the Panning Area.

Confided Animal Agriculture Land include dairies, feedlots, poultry facilities, and aquaculture (fish farms).

Grazing Land is land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities.

Farmland Conversion in Merced County

Data from the Department of Conservation indicates that approximately 6,625 acres of Prime Farmland in the County was developed for other uses between 2016 and 2018. The types and acreages of farmland in 2016 and 2018 are shown below in Table 8.8-5.

TABLE 8.8-5: MERCED COUNTY FARMLANDS SUMMARY AND CHANGE BY LAND USE CATEGORY

LAND USE CATEGORY	2016-2018 ACREAGE CHANGES							
	TOTAL ACREAGE INVENTORIED				ACRES LOST	ACRES GAINED	TOTAL ACREAGE CHANGED	NET ACREAGE CHANGED
	2016		2018		(-)	(+)		
	Acres	Percent	Acres	Percent				
Prime Farmland	269,243	21.3%	263,722	20.8%	6,625	1,104	7,729	-5,521
Farmland of Statewide Importance	154,208	12.2%	153,134	12.1%	3,122	2,048	5,170	-1,074
Unique Farmland	115,234	9.1%	114,430	9.0%	3,102	2,298	5,400	-804
Farmland of Local Importance	61,668	4.9%	57,904	4.6%	16,400	12,636	29,036	-3,764
IMPORTANT FARMLAND SUBTOTAL	600,353	47.4%	589,190	46.6%	29,249	18,086	47,335	-11,163
Grazing Land	552,631	43.7%	557,711	44.1%	8,689	13,769	22,458	5,080
AGRICULTURAL LAND SUBTOTAL	1,152,984	91.1%	1,146,901	90.6%	37,938	31,855	69,793	-6,083
Urban and Built-up Land	40,340	3.2%	40,783	3.2%	1,322	1,765	3,087	443
Other Land	55,770	4.4%	61,434	4.9%	1,864	7,528	9,392	5,664
Water Area	16,532	1.3%	16,508	1.3%	105	81	186	-24
TOTAL AREA INVENTORIED	**1,265,626**	**100.0%**	**1,265,626**	**100.0%**	**41,229**	**41,229**	**82,458**	**0**

SOURCE: CA DEPARTMENT OF CONSERVATION, LAND USE CONVERSION TABLE A-18, 2018.

Farmland Conservation

The Williamson Act authorizes each County to establish an agricultural preserve. Land that is within the agricultural preserve is eligible to be placed under a contract between the property owner and County that would restrict the use of the land to agriculture in exchange for a tax assessment that is based on the yearly production yield. The contracts have a 10-year term that is automatically renewed each year, unless the property owner requests a non-renewal or the contract is cancelled. If the contract is cancelled the property owner is assessed a fee of up to 12.5 percent of the property value.

Table 8.8-6 shows lands within the city and SOI that are under a Williamson Act contract and the status of the contract. Figure 8.8-2 shows Williamson Act Contracts within the city and planning area.

TABLE 8.8-6: SUMMARY OF WILLIAMSON ACT CONTRACTS

CONTRACT LOCATION AND TYPE	TOTAL ACRES
WA-Non-Prime	3.4
Total	3.4

FARMLAND MAPPING AND MONITORING PROGRAM, MERCED COUNTY, 2023.

Figure 8.8-1. Important Farmlands

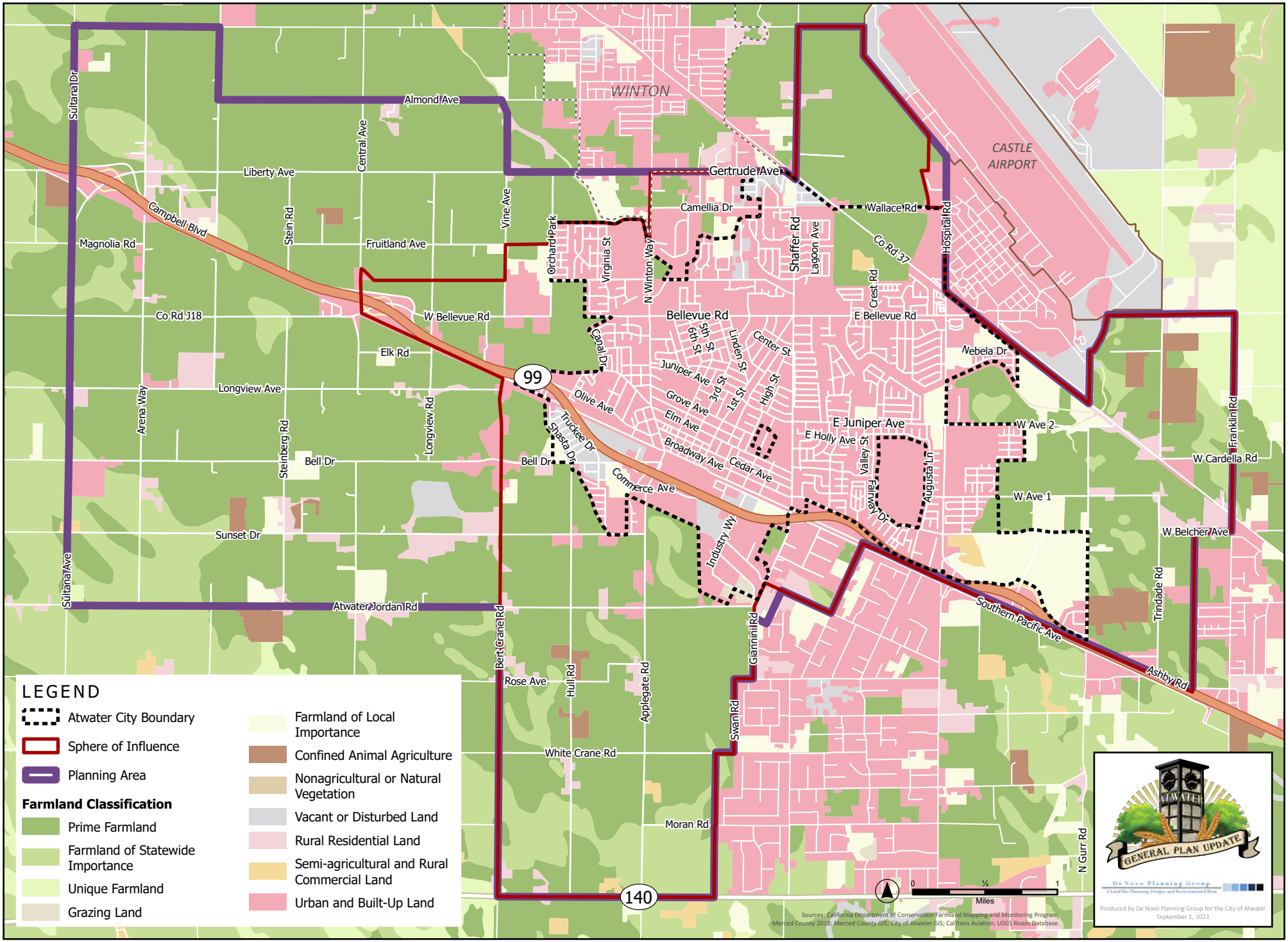
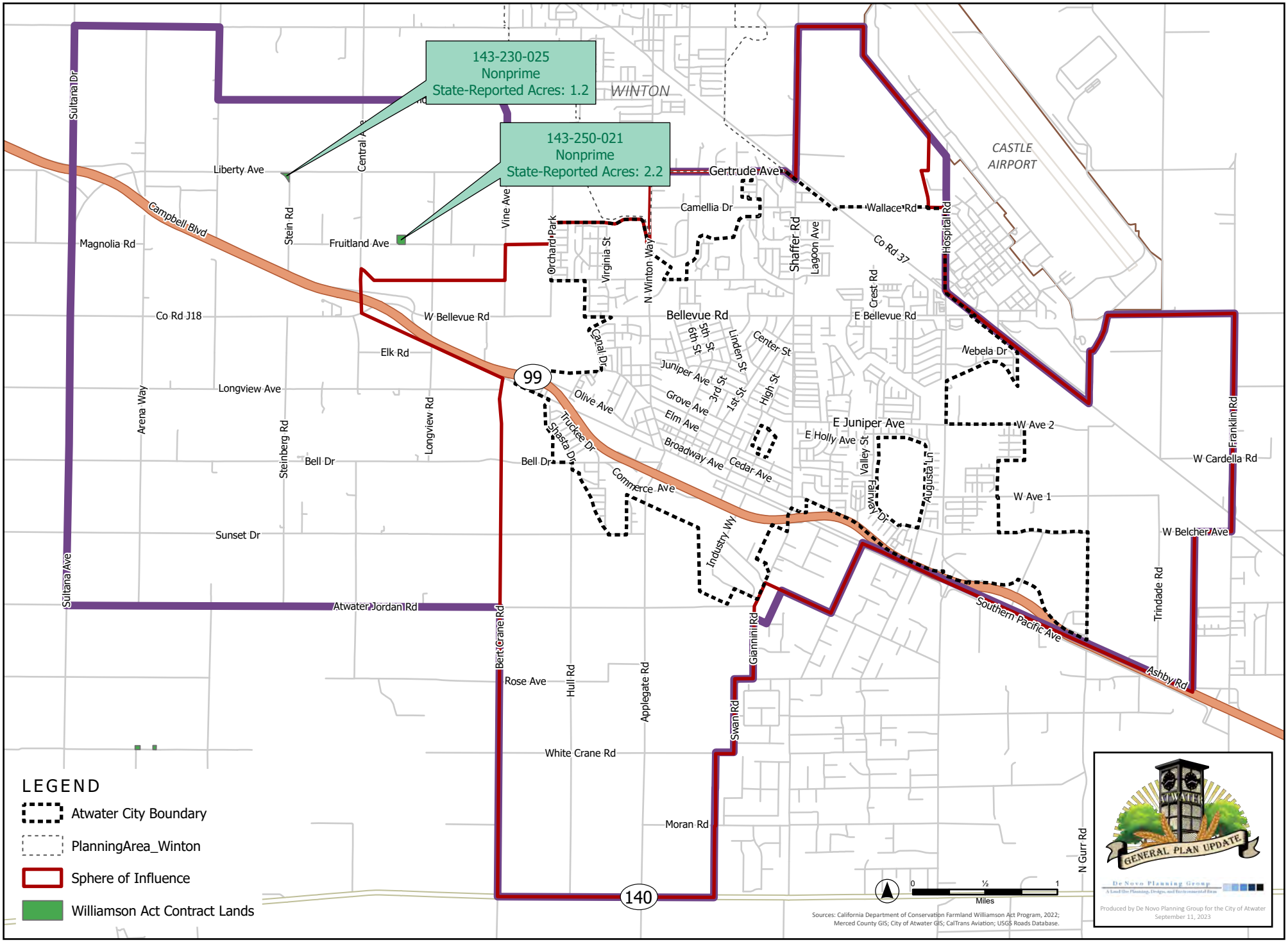


Figure 8.8-2. Williamson Act Lands



8.9 CULTURAL AND HISTORIC RESOURCES

These resources are defined as buildings, sites, structures, or objects that may have historical, architectural, archaeological, cultural, or scientific importance. Preservation of the City of Atwater planning area's cultural heritage should be considered when planning for the future of the region.

KEY TERMS

Archaeology. The study of historic or prehistoric peoples and their cultures by analysis of their artifacts and monuments.

Complex. A patterned grouping of similar artifact assemblages from two or more sites, presumed to represent an archaeological culture.

Ethnography. The study of contemporary human cultures.

Midden. A deposit marking a former habitation site and containing such materials as discarded artifacts, bone and shell fragments, food refuse, charcoal, ash, rock, human remains, structural remnants, and other cultural leavings.

Paleontology. The science of the forms of life existing in former geologic periods, as represented by their fossils.

REGULATORY SETTING

LOCAL

City of Atwater General Plan

The existing General Plan has no mention of archaeological and cultural resource policies.

ENVIRONMENTAL SETTING

Cultural resources are defined as buildings, sites, structures, or objects that may have historical, architectural, archaeological, cultural, or scientific importance. Preservation of the city's cultural heritage should be considered when planning for the future.

Prehistory

The Central Valley region was among the first in the state to attract intensive fieldwork, and research has continued to the present day. This has resulted in a substantial accumulation of data.

In the early decades of the 1900s, E.J. Dawson explored numerous sites near Stockton and Lodi, later collaborating with W.E. Schenck (Schenck and Dawson 1929). By 1933, the focus of work was directed to the Cosumnes locality, where survey and excavation studies were conducted by the Sacramento Junior College (Lillard and Purves 1936). Excavation data, in particular from the stratified Windmiller site (CA-Sac-107), suggested two temporally distinct cultural traditions. Later work at other mounds by Sacramento Junior College and the University of California, Berkeley, enabled the investigators to identify a third cultural tradition, intermediate between the previously postulated Early and Late Horizons. The three-horizon sequence, based on discrete changes in ornamental artifacts and mortuary practices, as well as on observed differences in soils within sites (Lillard, Heizer and Fenenga 1939), was later refined by Beardsley (1954). An expanded definition of artifacts diagnostic of each time period was developed, and its application

extended to parts of the central California coast. Traits held in common allow the application of this system within certain limits of time and space to other areas of prehistoric central California.

The Windmiller Culture (Early Horizon) is characterized by ventrally-extended burials (some dorsal extensions are known), with westerly orientation of heads; a high percentage of burials with grave goods; frequent presence of red ocher in graves; large projectile points, of which 60 percent are of materials other than obsidian; rectangular *Haliotis* beads; *Olivella* shell beads (types A1a and L); rare use of bone; some use of baked clay objects; and well-fashioned charmstones, usually perforated.

The Cosumnes Culture (Middle Horizon) displays considerable changes from the preceding cultural expression. The burial mode is predominately flexed, with variable cardinal orientation and some cremations present. There are a lower percentage of burials with grave goods, and ocher staining is common in graves. *Olivella* beads of types C1, F and G predominate, and there is abundant use of green *Haliotis* sp. rather than red *Haliotis* sp. Other characteristic artifacts include perforated and canid teeth; asymmetrical and "fishtail" charmstones, usually unperforated; cobble mortars and evidence of wooden mortars; extensive use of bone for tools and ornaments; large projectile points, with considerable use of rock other than obsidian; and use of baked clay.

Hotchkiss Culture (Late Horizon) -- The burial pattern retains the use of the flexed mode, and there is wide spread evidence of cremation, lesser use of red ocher, heavy sue of baked clay, *Olivella* beads of Types E and M, extensive use of *Haliotis* ornaments of many elaborate shapes and forms, shaped mortars and cylindrical pestles, bird-bone tubes with elaborate geometric designs, clam shell disc beads, small projectile points indicative of the introduction of the bow and arrow, flanged tubular pipes of steatite and schist, and use of magnesite (Moratto 1984:181-183). The characteristics noted are not all-inclusive, but cover the more important traits.

Schulz (1981), in an extensive examination of the central California evidence for the use of acorns, used the terms Early, Middle and Late Complexes, but the traits attributed to them remain generally the same. While it is not altogether clear, Schulz seemingly uses the term “Complex” to refer to the particular archeological entities (above called “Horizons”) as defined in this region. Ragir's (1972) cultures are the same as Schulz's complexes.

Bennyhoff and Hughes (1984) have presented alternative dating schemes for the Central California Archeological Sequence. The primary emphasis is a more elaborate division of the horizons to reflect what is seen as cultural/temporal changes within the three horizons and a compression of the temporal span.

There have been other chronologies proposed, including Fredrickson (1973), and since it is correlated with Bennyhoff's (1977) work, it does merit discussion. The particular archeological cultural entities Fredrickson has defined, based upon the work of Bennyhoff, are patterns, phases and aspects. Bennyhoff's (1977) work in the Plains Miwok area is the best definition of the Cosumnes District, which likely conforms to Fredrickson's pattern. Fredrickson also proposed periods of time associated heavily with economic modes, which provides a temporal term for comparing contemporary cultural entities. It corresponds with Willey and Phillips' (1958) earlier “tradition”, although it is tied more specifically to the archeological record in California.

Ethnology

The City of Atwater's General Plan planning area lies within the northern portion of the ethnographic territory of the Yokuts people. The Yokuts were members of the Penutian language family which held all of the Central Valley, San Francisco Bay Area, and the Pacific Coast from Marin County to near Point Sur. The Yokuts differed from other ethnographic groups in California as they had true tribal divisions with group names (Kroeber 1925; Latta 1949). Each tribe spoke a particular dialect, common to its members, but similar enough to other Yokuts that they were mutually intelligible (Kroeber 1925).

The Yokuts held portions of the San Joaquin Valley from the Tehachapi range in the south to Stockton in the north. On the north they were bordered by the Plains Miwok, and on the west by the Saclan or Bay Miwok and Costonoan peoples. Although neighbors were often from distinct language families, differences between the people appear to have been more influenced by environmental factors as opposed to linguistic affinities. Thus, the Plains Miwok were more similar to the nearby Yokuts than to foothill members of their own language group. Similarities in cultural inventory co-varied with distance from other groups and proximity to culturally diverse people. The material culture of the southern San Joaquin Yokuts was therefore more closely related to that of their non-Yokuts neighbors than to that of Delta members of their own language group.

Trade was well developed, with mutually beneficial interchange of needed or desired goods. Obsidian, rare in the San Joaquin Valley, was obtained by trade with Paiute and Shoshoni groups on the eastern side of the Sierra Nevada, where numerous sources of this material are located, and to some extent from the Napa Valley to the north. Shell beads, obtained by the Yokuts from coastal people, and acorns, rare in the Great Basin, were among many items exported to the east by Yokuts traders (Davis 1961).

Economic subsistence was based on the acorn, with substantial dependency on gathering and processing of wild seeds and other vegetable foods. The rivers, streams, and sloughs that formed a maze within the valley provided abundant food resources such as fish, shellfish, and turtles. Game, wild fowl, and small mammals were trapped and hunted to provide protein augmentation of the diet. In general, the eastern portion of the San Joaquin Valley provided a lush environment of varied food resources, with the estimated large population centers reflecting this abundance (Cook 1955; Baumhoff 1963).

The 1833 malaria epidemic that decimated the Indians in the Central Valley played a major role in defining the post-Contact land use pattern of the Indians of the region, as well as impacting Euro-American economic development. The introduction of malaria to central California circa 1831 occurred as a result of expeditions of several fur brigades of the Hudson's Bay Company with infected individuals. The introduction of the disease led to the tremendous epidemic of 1833, resulting in the decimation of the Indian population of the region. An estimated three-quarter of the total Indian population of the region died from the disease in that year.

The Atwater area, north of the Merced River was occupied by the Northern Valley Yokuts, specifically the Coconoon tribelet. Settlements were oriented along the water ways, with their village sites normally placed adjacent to these features for their nearby water and food resources. House structures varied in size and shape (Latta 1949; Kroeber 1925), with most constructed from the readily available tules found in the extensive marshes of the low-lying valley areas. The housepit depressions for the structures ranged in diameter from 3 meters to 18 meters (Wallace 1978:470).

Historic Period Background

Active exploration began to help control Indian riads on coastal settlements as well as to find suitable locations for missions for Indian conversion. There were several minor explorations, followed by a full-scale effort by Gabriel Morage with 26 men, leaving Mission San Juan Bautista in 1806, likely entering the valley by way of San Luis Creek in Merced County. The group proceeded across the San Joaquin River, and reached a slough that Morage named Las Mariposas for the number of butterflies they observed. The party travelled north and northwest, eventually reaching and naming the Merced River. Moraga again explored the Merced River's lower course in 1808, and again in 1810. The mission fathers though the exploration was a failure since they failed to find suitable sites for an inland chain of missions.

The first American to pass though the San Joaquin Valley was Jedidiah Smith. He may not have travelled within the boundaries of Merce County. Following Smith were other adventurers, man of whom came to California to trap beaver. John C. Fremont, proceeded southward from Sutter's Fort, passing through what is now Merced County, and reached the Merced River. The party built a raft and crossed the river near its junction with the San Joaquin River. Several days later, they stopped on the north bank of Bear Creek, five miles above the mouth of the creek.

The Atwater planning area does not lie on any portion of the 1840s Mexican land grants present in the County.

Atwater began as a station on the line of the Central Pacific, as they built their line south and east down the valley. The station was placed on the ranch of Marshall D. Atwater, a leading wheat farmer in the area. Six years later, a town with the same name was established by the Merced Land and Fruit Company. Atwater, John Mitchell and George Bloss, all made substantial contributions to the towns of Atwater and other cities in the Merced region. The Bloss home is the headquarters of the Atwater Historical Society, and is a house museum. The family endowed many other local Atwater institutions.

The Merced Army Air Field south of town was one of many small fields established in World War II for training flight personnel. It later became Castle Air Force Base, re-named for Frederick Castle, a Medal of Honor award winner after he was shot down in late 1944. In 1981, the Castle Air Museum opened next to the base. The base closed in 1995.

Cultural Resources

There are 68 cultural resources have been identified within the planning area, according to files maintained by the Central California Information Center (CCIC) of the California Historical Resources Information System (CHRIS). The 68 recorded cultural resources span both the prehistoric and historic periods, with one area with prehistoric period artifacts, and 67 historic period resources. The sites range from a collection of Native American artifacts to historic period commercial buildings and residences, irrigation ditches and systems, and the buildings of the former Castle Air Force Base (see Table 8.9-1).

TABLE 8.9-1: RECORDED RESOURCES WITHIN THE ATWATER GENERAL PLAN UPDATE PLANNING AREA

PRIMARY #	*OTHER IDENTIFIER*	*TYPE*	*AGE*
P-24-000086	Other - LG-16;	Unknown	Unknown
	Resource Name - Hartley Lateral	Structure	Historic
P-24-000088	Other - LG-18;	Unknown	Unknown
P-24-000090	Resource Name - Main Ashe Lateral/Inverted Siphon	Unknown	Unknown
	Structure	Unknown	Unknown
P-24-000092	Historic	Unknown	Unknown
P-24-000093	Other - LG-20;	Unknown	Unknown
P-24-000479	Resource Name - Canal Creek	Structure, Site	Historic
P-24-000480	Other - DG-35;	Unknown	Unknown
P-24-000484	Resource Name - Atwater Canal	Unknown	Unknown
P-24-000485	Structure, Site	Unknown	Unknown
P-24-000486	Historic	Unknown	Unknown
P-24-000491	Other - LG-21;	Unknown	Unknown
P-24-000492	Resource Name - Arena Canal	Structure	Historic
P-24-000493	OHP Property Number - PROP# 091891; Other - DOE-24-94-0039-0000;	Unknown	Unknown
P-24-000494	Resource Name - Building 618 Castle Air Force Base	Building	Historic
P-24-000526	OHP Property Number - PROP# 091892; Other - DOE-24-94-0040-0000;	Unknown	Unknown
P-24-000552	Resource Name - Building 653 Castle Air Force Base	Building	Historic
P-24-000659	Resource Name - Castle AFB Bldg 175, weapon system training	Building	Historic
P-24-000697	Resource Name - Yamato Colony, SR 99; OHP PRN - 5334-0002-0000	Site	Historic
P-24-001657	Resource Name - John Anderson Property	Other	Historic

PRIMARY #	*OTHER IDENTIFIER*	*TYPE*	*AGE*
P-24-001665	Resource Name - 11159 Peach Avenue	Building	Historic
P-24-001666	Resource Name - 5771 Arena Way	Building	Historic
P-24-001667	Resource Name - 10480 Liberty Road	Building	Historic
P-24-001668	Resource Name - 5732 Arena Way	Building	Historic
P-24-001669	Resource Name - 5610 Highway 99, Shady Nook Hotel	Building	Historic
P-24-001670	Resource Name - 5511 N. Steinberg Road	Building	Historic
P-24-001671	Resource Name - 5171 N. Central Ave.	Building	Historic
P-24-001672	Resource Name - 5071 N. Central Ave.	Building	Historic
P-24-001673	Resource Name - 9258 Westside Blvd.	Building	Historic
P-24-001674	Resource Name - Farm on Central Ave. at Hwy 99	Building	Historic
P-24-001675	Resource Name - 5014 Highway 99	Building	Historic
P-24-001682	Resource Name - Freitas Dairy	Building	Unknown
P-24-001684	Resource Name - Atwater Drain	Structure, Site	Historic
P-24-001783	Resource Name - Henderson Lateral	Structure	Historic
P-24-001833	Resource Name - Unnamed Canal #1	Structure	Historic, Unknown
P-24-001834	Resource Name - Parcel 1; Resource Name - MR3-7	Building, Structure, Site	Historic
P-24-001835	Resource Name - Parcel 2a; Resource Name - MR3-8	Building, Structure, Site	Historic
P-24-001836	Resource Name - Parcel 3	Building, Structure, Site	Historic
P-24-001837	Resource Name - Parcel 6	Building, Structure, Site	Historic
P-24-001838	Resource Name - Parcel 8a; Resource Name - MR3-4	Building, Structure	Historic
P-24-001839	Resource Name - Parcel 8b	Building	Historic
P-24-001840	Resource Name - Parcel 11; Resource Name - MR3-1	Building, Structure	Historic

PRIMARY #	*OTHER IDENTIFIER*	*TYPE*	*AGE*
P-24-001841	Resource Name - Parcel 14	Building, Structure	Historic
P-24-001842	Resource Name - Parcel 18; Resource Name - MR3-10	Building, Structure	Historic
P-24-001843	Resource Name - Parcel 19; Resource Name - MR3-9	Building, Structure	Historic
P-24-001844	Resource Name - Parcel 20	Building,	Unknown
P-24-001845	Structure	Historic	Unknown
P-24-001846	Resource Name - Parcel 25	Building	Historic
P-24-001847	Resource Name - Parcel 26	Building	Historic
P-24-001862	Resource Name - Parcel 30; Resource Name - MR3-6	Building, Structure	Historic
P-24-001881	Resource Name - Luthey Isolates	Other	Prehistoric
P-24-001909	Resource Name - Burlington Northern Santa Fe Railroad; Resource Name - Atchison, Topeka & Santa Fe Railroad; OHP Property Number - 130531; OHP PRN - FHWA050324D	Structure	Historic
P-24-002010	Resource Name - Merced Irrigation District (proposed historic district)	District	Historic
P-24-002011	Resource Name - MR3-5	Building	Historic
P-24-002012	Resource Name - MR2-6	Building	Historic
P-24-002013	Resource Name - MR3-3;	Building	Historic
P-24-002031	Resource Name - MR3-2	Building	
P-24-002032	Resource Name - MR2-3	Building	Historic
P-24-002033	Resource Name - MR2-4	Building	Historic
P-24-002038	Resource Name - MR2-5	Building	Historic
P-24-002039	Resource Name - MR3-15	Building	Historic
P-24-002040	Resource Name - MR3-16	Building	Historic
P-24-002049	Resource Name - MR3-17	Building	Historic
P-24-002050	Resource Name - T-Mobile West LC SC07705A/Castle LTE Project; Other - Pacific Gas and Electric	Structure	Historic

Primary #	*Other Identifier*	*Type*	*Age*
	#013/089/Atwater-El Capitan		
P-24-002139	Resource Name - East Ashe Lateral	Structure	Historic
P-24-002142	Resource Name - Bloss Library	Building	Historic
P-24-002236	Resource Name - Atwater Water Tank; T-Mobile West LLC Candidate SC90287M (Atwater)	Structure	Historic

Source: Central California Information Center (CCIC) of the California Historical Resources Information System (CHRIS)

There are no properties or districts currently listed on the National Register of Historic Places or California Register of Historic Places for Atwater General Plan Update planning area (www.nationalregisterofhistoricplaces.com), except for the Bloss Mansion property located at 1020 Cedar Avenue, Atwater, CA.

Consultation

Letters were sent to: The Native American Heritage Commission; Mr. Robert Ledger, Dumna Wo-Wah Tribal Government; Fred Beihn, North Fork Rancheria of Mono Indians; Mary Stalter, North Fork Rancheria of Mono Indians; Timothy Perez, North Valley Yokuts Tribe; Katherine Perez, North Valley Yokuts Tribe; Michael Wynn, Picayune Rancheria of the Chukchansi Indians; Sandra Chapman, Southern Sierra Miwuk Nation; Bob Pennell, Table Mountain Rancheria; Neil Peyron, Tule River Indian Tribe; Kenneth Woodrow, Wuksachi Indian Tribe/Eshom Valley Band; Valentin Lopez, Amah Mutsun Tribal Band. The Native American Heritage Commission responded with a letter dated November 3, 2023.

Paleontological Resources

Among the natural resources deserving conservation and preservation, and existing within the planning area, are the often-unseen records of past life buried in the sediments and rocks below the pavement, buildings, soils, and vegetation which now cover most of the area. Fossils constitute a non-renewable resource: Once lost or destroyed, the exact information they contained can never be reproduced.

Paleontology is the science that attempts to unravel the meaning of these fossils in terms of the organisms they represent, the ages and geographic distribution of those organisms, how they interacted in ancient ecosystems and responded to past climatic changes, and the changes through time of all of these aspects.

The sensitivity of a given area or body of sediment with respect to paleontological resources is a function of both the potential for the existence of fossils and the predicted significance of any fossils which may be found there. The primary consideration in the determination of paleontological sensitivity of a given area, body of sediment, or rock formation is its potential to include fossils. Information that can contribute to assessment of this potential includes: 1) direct observation of fossils within the project area; 2) the existence of known fossil localities or documented absence of fossils in the same geologic unit (e.g., "Formation" or one of its subunits); 3) descriptive nature of sedimentary deposits (such as size of included particles or clasts, color, and bedding type) in the area of interest compared with those of similar deposits known elsewhere to favor or disfavor inclusion of fossils; and 4) interpretation of sediment details and known geologic history of the sedimentary body of interest in terms of the ancient environments in which they were deposited, followed by assessment of the favorability of those environments for the preservation of fossils.

The most general paleontological information can be obtained from geologic maps, but geologic cross sections (slices of the layer cake to view the third dimension) must be reviewed for each area in question. These usually accompany geologic maps or technical reports. Once it can be determined which formations may be present in the subsurface, the question of paleontological resources must be addressed. Even though a formation is known to contain fossils, they are not usually distributed uniformly throughout the many square miles the formation may cover. If the fossils were part of a bay environment when they died, perhaps a scattered layer of shells will be preserved over large areas. If on the other hand, a whale died in this bay, you might expect to find fossil whalebone only in one small area of less than a few hundred square feet. Other resources to be considered in the determination of paleontological potential are regional geologic reports, site records on file with paleontological repositories and site-specific field surveys.

Paleontologists consider all vertebrate fossils to be of significance. Fossils of other types are considered significant if they represent a new record, new species, an oldest occurring species, the most complete specimen of its kind, a rare species worldwide, or a species helpful in the dating of formations. However, even a previously designated low potential site may yield significant fossils.

Chapter 9
Environmental Justice



The Environmental Justice chapter addresses a wide range of topics related to the health and well-being of Atwater residents and workers. The negative effects of environmental degradation and pollution are well-documented and include severe impacts to human health and longevity, depending on the level of exposure. Within the United States, certain communities have historically been disproportionately disadvantaged by environmental threats and the negative health impacts of environmental degradation. Increased exposure to environmental pollutants, unsafe drinking water, and contaminated facilities/structures have contributed to poorer health outcomes for disadvantaged communities. The field of environmental justice is focused on addressing these disproportionate impacts and improving the wellness of all communities by bolstering community agency and promoting the fair treatment of all people.

This Chapter includes the following topics:

9.1 Environmental Justice- Background and Overview

9.2 Environmental Justice Determinants in Atwater

9.0 ENVIRONMENTAL JUSTICE

This chapter addresses environmental justice in the City of Atwater. The chapter provides an overview of existing environmental conditions for the general population in the planning area and describes components of the built environment that may impact human health disproportionately. This chapter discusses existing health, socioeconomic, and environmental indicators, as well as public facility access, food access, housing conditions, physical activity and fitness, and community engagement.

9.1 Environmental Justice- Background and Overview

9.2 Environmental Justice Determinants in Atwater

FINDINGS, ISSUES AND OPPORTUNITIES

The following summarizes important topics relating to environmental justice within the City of Atwater:

Environmental Justice. The existing General Plan does not included an Environmental Justice Element or policies specific to environmental justice or disadvantaged communities.

Disadvantaged Communities. Based on a screening of existing census tracts within the City of Atwater, most census tracts defined by City Boundaries are considered CalEnviroScreen-designated "Disadvantaged Communities" (DACs).

Pollution Indicators There are many pollution indicators identified by CalEnviroScreen present within DAC tracts. The most common being: pesticide use, air quality and pm 2.5, and drinking water contaminants.

Air Quality. Elevated levels of particulate matter (primarily very small particulates or PM2.5 /PM10) and ground-level ozone are of most concern to regional air quality.

Food Deserts. The USDA Food Access Research Atlas identifies "Food deserts" within Atwater census tracts.

Age of housing stock. Many of the housing units in Atwater were developed during a housing construction boom following World War II and lasting into the 1980s.

Housing Conditions. In 2017, the City updated their Housing Element and included an updated review of housing conditions that focused on the condition of the roof, siding, windows, and doors. About 44% of the assessed 5,409 housing units were found to be sound, defined as units in good condition with no signs of deferred maintenance. 32% of the housing units needed minor repairs and 23% of the housing units needed substantial repairs.

9.1 BACKGROUND AND OVERVIEW

The negative effects of environmental degradation and pollution are well-documented and include severe impacts to human health and longevity, depending on the level of exposure. Within the United States, certain communities have historically been disproportionately affected by environmental threats and the negative health impacts of environmental degradation. These communities include, but are not limited to, low-income communities, communities of color, communities comprising members of tribal nations, and immigrant communities. Increased exposure to environmental pollutants, unsafe drinking water, and contaminated facilities/structures have contributed to poorer health outcomes for these communities. Structural inequalities that disadvantage certain individuals and groups, local and regional policies, zoning, code enforcement deficiencies, and lack of community engagement and advocacy are related to disproportionate environmental and social effects. The field of environmental justice is focused on addressing these disproportionate impacts and improving the wellness of all communities by bolstering community planning efforts, considering exposure to adverse environmental effects, increasing access to amenities and services, and promoting the fair treatment of all people regardless of their race, ethnicity, national origin, or income.

Environmental Justice practices across the United States have worked to improve the status of disadvantaged communities, through effective planning and policy decisions. Effective planning and policy decisions at the federal, state and local levels can help ensure that equal protection from environmental hazards is prioritized for all people.

DISADVANTAGED COMMUNITIES

The term 'Disadvantaged Community' is a broad designation that may include any community that lacks appropriate resources or is confronted with any exceptional economic, health, or environmental burden. In relation to environmental justice, disadvantaged communities are typically those communities that disproportionately face the burdens of environmental hazards. The *Planning for Healthy Communities Act* establishes a set criterion for identifying a Disadvantaged Community (DAC). The definition of a DAC for the purposes of the bill is as follows:

"An area identified by the California Environmental Protection Agency (CalEPA) pursuant to Section 39711 of the Health and Safety Code or an area that is a low-income area that is disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation." (CalEPA)

Localities must make an environmental justice element of their General Plan when one or more disadvantaged communities is identified within their General Plan planning area. Using the CalEPA definition of a disadvantaged community, SB 1000 provides stakeholders with the CalEnviroScreen map to identify communities that are disproportionately disadvantaged by environmental hazards. The CalEnviroScreen map is a science-based tool developed by the Office of Environmental Health Hazards Assessment on behalf of CalEPA that uses existing environmental, health, and socioeconomic data to rank all census tracts in California with a CalEnivroScreen score. Based on this score, the map identifies where DACs are located within each city.

SB 1000

Senate Bill 1000, also known as *The Planning for Healthy Communities Act*, is a comprehensive state legislation that requires California cities to include an Environmental Justice element or a set of environmental justice policies into their General Plans. The Bill was established as a state regulation on September 24, 2016, with the goal of improving the health of California cities and addressing pertinent issues of environmental justice related to community wellness. SB 1000 outlines strategies to promote the protection of sensitive land uses within the state, and simultaneously mandates that cities address the needs of disadvantaged communities. Through this bill, environmental justice is a mandated consideration in all city's local land-use planning. SB 1000 was authored by Senator Connie Leyva and co-sponsored by the California Environmental Justice Alliance (CEJA) and the Center for Community Action and Environmental Justice (CCAEJ).

To aid city governments and planners in meeting the requirements of SB 1000, the California Environmental Justice Alliance (CEJA) and PlaceWorks Inc. collaborated to create a strategic toolkit. The SB 1000 Implementation Toolkit serves as a guide for key stakeholders by clarifying legislation requirements and providing tools, best practices, and resources to support these stakeholders as they begin to incorporate the law into local practice. To effectively meet the mandates of the bill, cities must formally identify disadvantaged communities (DACs) and work to reduce health risks specific to these communities by outlining methods and programs within their plan that address the needs of DACs. Each General Plan must address the following topics in order to meet the requirements of SB 1000:

- Pollution Exposure and Air Quality
- Public Facilities
- Food Access
- Safe and Sanitary Homes
- Physical Activity
- "Civil" or Community Engagement
- Improvement and Programs That Address the Needs of Disadvantaged Communities

LOCAL REGULATORY FRAMEWORK

The regulatory framework discussion describes key local regulations that guide land use decisions. Adopted plans that pertain to the City are also described.

Local General Plan Requirements - Senate Bill 1000

Senate Bill 1000, also known as The Planning for Healthy Communities Act, is a comprehensive state legislation that requires California cities to include an Environmental Justice element or a set of environmental justice policies into their General Plans.

Local Agency Formation Commission (LAFCo) Requirements - Senate Bill 244

The Merced LAFCO must consider whether local communities that may be underserved by public services and/or may be considered economically disadvantaged should be included in annexation proposals that include land adjacent to such communities. Approved in 2011, SB 244 requires cities and counties to address the infrastructure needs of unincorporated disadvantaged communities in city and county general plans and LAFCo Municipal Service Reviews (MSRs) and annexation decisions. SB 244 defines an unincorporated disadvantaged community as a place that: contains 10 or more dwelling units in close proximity to one another; is either within a city SOI, is an island within a city boundary, or is geographically isolated and has existed for more than 50 years; and has a median household income that is 80 percent or

less than the statewide median household income. For cities and counties, SB 244 requires that before the due date for adoption of the next housing element after January 1, 2012, the general plan land use element must be updated to: identify unincorporated disadvantaged communities; analyze for each identified community the water, wastewater, stormwater drainage, and structural fire protection needs; and identify financial funding alternatives for the extension of services to identified communities. For LAFCos, SB 244 generally prohibits approval of city annexations greater than 10 acres that are contiguous to a disadvantaged unincorporated community unless the city applies to annex the disadvantaged unincorporated community as well.

9.2 ENVIRONMENTAL JUSTICE DETERMINANTS IN ATWATER

The CalEnviroScreen 4.0 tool is a standard metric for determining the location and presence of designated disadvantaged communities within an area. Based on a screening of existing census tracts within the City of Atwater, there are designated Disadvantaged Communities within Atwater. As noted previously, there are seven primary environmental justice focus areas defined within The Planning for Healthy Communities Act (SB 1000) that must be used in addressing the unique or compounded health risks in disadvantaged communities:

- Pollution Exposure and Air Quality;
- Public Facilities;
- Food Access;
- Safe and Sanitary Homes;
- Physical Activity;
- Community Engagement; and
- Improvements and Programs

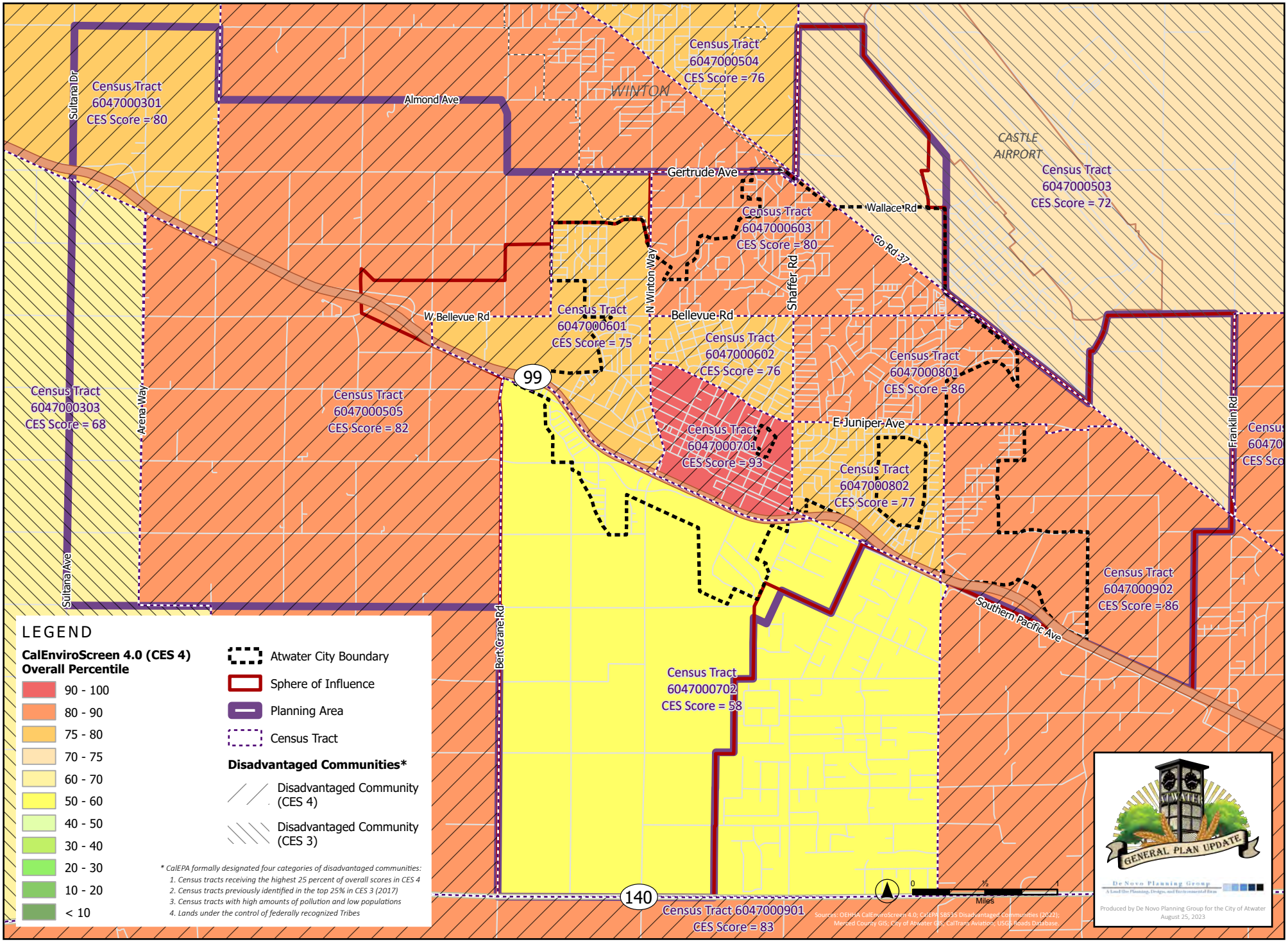
As shown in Figure 9.2-1, and Table 9.2-1, based on a screening of existing census tracts within the City of Atwater, most census tracts defined by City Boundaries are considered CalEnviroScreen-designated DACs (scores of 75 or higher). The southernmost portion of the City of Atwater, just south of SR-99 is not designated a Disadvantaged Community, this area has a CalEnviroScreen score of 58. Central Atwater, or Census Tract 6047000701 is the most affected as it has a CalEnviroScreen score of 93. As described previously, there are seven primary environmental justice focus areas defined within *The Planning For Healthy Communities Act* that must be used in addressing the unique or compounded health risks in disadvantaged communities (Pollution Exposure and Air Quality, Public Facilities, Food Access, Safe and Sanitary Homes, Physical Activity, Community Engagement, and Improvements and Programs). The existing conditions for these focus areas within the City of Atwater are assessed below.

TABLE 9.2-1: OVERALL CALENVIROSCREEN SCORE BY CENSUS TRACT (ATWATER)

CENSUS TRACTS	6047000702	6047000301	6047000801	6047000603	6047000602	6047000601
Indicator (%)	58	80	86	80	76	75
CENSUS TRACTS	6047000802	6047000303	6047000902	6047000505	6047000503	6047000701
Indicator (%)	77	68	86	82	72	93

SOURCE: CALENVIROSCREEN 4.0

Figure 9.2-1. CalEnviroScreen Disadvantaged Communities



HEALTH & SOCIOECONOMIC CHARACTERISTICS

To understand the existing health and socioeconomic conditions of each DAC in the city as a whole, Table 9.2-2 lists the percentiles for sensitive population and socioeconomic factor indicators in the planning area by census tract. The DAC census tracts within Atwater are shown with bold text boxes; other census tracts are also included for reference. The sensitive population indicators reflect the communities' health and the socioeconomic factor indicators describe educational attainment, income level, employment, and housing conditions and burden. These indicators are presented below on Table 9.2-2. In combination with the environmental/pollution data included in Table 9.2-3: Pollution Burden by Pollution Indicator, the data forms the basis of the CES scores. For each indicator, scores of 75% or higher represent a high burden on the population.

TABLE 9.2-2: POPULATION AND SOCIOECONOMIC FACTOR INDICATORS

Indicator (%)	CENSUS TRACTS											
	6047000702	6047000301	6047000801	6047000603	6047000602	6047000601	6047000802	6047000303	6047000902	6047000505	6047000503	6047000701
SENSITIVE POPULATION INDICATORS												
Asthma	76	61	76	76	76	69	76	54	86	78	45	76
Low Birth Weight	30	17	79	38	56	16	54	6	46	38	25	67
Cardiovascular	91	92	91	90	91	83	91	80	94	87	43	91
SOCIOECONOMIC FACTOR INDICATORS												
Education	56	94	75	65	79	83	74	93	74	89	83	84
Linguistic Isolation	39	83	53	41	61	76	69	43	61	79	80	53
Poverty	12	76	77	78	83	79	63	63	69	84	66	86
Unemployment	43	73	93	92	92	92	77	44	86	97	72	98
Housing Burden	8	30	29	32	73	28	6	18	38	33	34	47
TOTAL POPULATION CHARACTERISTICS SCORE PERCENTILE	48	71	85	73	88	71	74	49	81	83	54	88

High Burden: 75.0-100.0%

Medium Burden: 25.0 - 74.9%

Low Burden: 0.0 - 24.9%

POLLUTION EXPOSURE

The various forms and sources of air and water pollution and hazardous waste often disproportionately affect DACs. This is typically due to the existence and relative concentration of pollution-emitting sources within close proximity to the communities. Disproportionate exposure to pollutants is linked to variety of negative health impacts, including but not limited to, asthma, cardiovascular diseases, cancer, and other potentially fatal conditions. Based on CES data, Table 9.2-3 lists the percentile of pollution burden for the thirteen CES pollution indicators by census tract.

As described previously and shown on Figure 9.2-1, based on a screening of existing census tracts within the City of Atwater, most census tracts defined by City Boundaries are considered CalEnviroScreen-designated DACs. The southernmost portion of the City of Atwater, just south of SR-99 is not designated a Disadvantaged Community, this area has a CalEnviroScreen score of 58. Central Atwater, or Census Tract 6047000701 is the most affected as it has a CalEnviroScreen score of 93. As shown below in Table 9.2-3 there are many pollution indicators present within DAC tracts with the most common being: pesticide use, air quality and pm 2.5, and drinking water contaminants.

TABLE 9.2-3: ENVIRONMENTAL/POLLUTION BURDEN BY POLLUTION INDICATORS

Indicator (%)	CENSUS TRACTS											
	6047000702	6047000301	6047000801	6047000603	6047000602	6047000601	6047000802	6047000303	6047000902	6047000505	6047000503	6047000701
Air Quality: Ozone	74	75	74	74	74	75	73	75	73	74	74	74
Air Quality: PM2.5	69	67	77	76	85	79	79	64	75	65	62	87
Air Quality: Diesel PM	34	33	18	35	14	62	73	19	59	24	11	69
Pesticide Use	97	96	90	91	54	96	87	99	96	98	94	95
Tox Releases from Facilities	16	65	15	17	17	18	16	20	12	20	15	17
Traffic Density	36	32	7	10	9	55	53	12	34	33	2	49
Drinking Water Contaminants	94	98	98	98	96	95	96	99	72	84	79	96
Lead Contaminants	10	42	30	37	87	68	26	76	40	69	74	98
Cleanup Sites	0	0	69	69	0	0	0	31	46	0	84	0
Groundwater Threats	84	57	66	68	0	42	7	81	78	81	98	44
Hazardous Waste	7	7	45	54	50	17	17	36	10	0	22	19
Impaired Water Bodies	24	44	0	0	0	0	0	44	33	44	44	0
Solid Waste Sites	76	53	85	59	36	0	91	67	77	36	97	67
TOTAL POLLUTION BURDEN PERCENTILE	67	78	75	79	49	69	69	84	82	70	86	87

High Burden: 75.0-100.0%

Medium Burden: 25.0 - 74.9%

Low Burden: 0.0 - 24.9%

POLLUTION EXPOSURE FOCUS AREAS

As described previously, there are seven primary environmental justice focus areas defined within The Planning For Healthy Communities Act that must be used in addressing the unique or compounded health risks in disadvantaged communities (Pollution Exposure and Air Quality, Public Facilities, Food Access, Safe and Sanitary Homes, Physical Activity, Community Engagement, and Improvements and Programs). The existing conditions for these focus areas within the City of Atwater are discussed below.

Air Quality

As described in Chapter 8.0 (Conservation and Natural Resources) of this document, pollution potential in the Merced County area is relatively high due to the combination of air pollutant emissions sources, transport of pollutants into the area and meteorological conditions that are conducive to high levels of air pollution. Elevated levels of particulate matter (primarily very small particulates or $PM_{2.5}$/PM_{10}) and ground-level ozone are of most concern to regional air quality officials.

Table 9.2-4 depicts the State and national attainment status for Merced County. As evident in the table, Merced County has a State designation of Nonattainment for O_3, PM_{10}, and $PM_{2.5}$ and is either Unclassified or Attainment for all other criteria pollutants. In accordance with the California Clean Air Act (CCAA), areas of the state are designated as attainment, nonattainment, or unclassified with respect to applicable standards dependent upon the status of pollutant concentrations. "Attainment" refers to instances where pollutant concentrations did not violate the applicable standard in that area. A "nonattainment" designation indicates that a pollutant concentration violated the applicable standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. A detailed analysis of criteria pollutants within Merced County is available in Section 8.0 (Conservation and Natural Resource).

Table 9.2-4: State and National Attainment Status

Criteria Pollutants	*State Designations*	*National Designations*
Ozone	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon Monoxide	Unclassified	Unclassified/Attainment
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Unclassified/Attainment
Sulfates	Attainment	
Lead	Attainment	
Hydrogen Sulfide	Unclassified	
Visibility Reducing Particles	Unclassified	

SOURCE: CALIFORNIA AIR RESOURCES BOARD (AREA DESIGNATIONS MAPS / STATE AND NATIONAL), 2022. HTTPS://WW2.ARB.CA.GOV/RESOURCES/DOCUMENTS/MAPS-STATE-AND-FEDERAL-AREA-DESIGNATIONS ACCESSED, AUGUST 16, 2023

Asthma Rates

Table 9.2-5 includes data from California Health Interview Survey (CHIS) administered by the UCLA Center for Health Policy Research for asthma rates for the City of Atwater, Merced County and the state.

Table 9.2-5 Asthma Rates (2020)

Region	*Ever Diagnosed with ASTHMA (1-17)*	*Ever Diagnosed With Asthma (18+)*
City of Atwater	13.6%	23.5%
Merced County	11.0%	20.6%
California	12.3%	16.1%

SOURCE: CALIFORNIA HEALTH INTERVIEW SURVEY. CHIS 2020 ASTHMA SOURCE FILE. LOS ANGELES, CA: UCLA CENTER FOR HEALTH POLICY RESEARCH. HTTPS://ASKCHISNE.UCLA.EDU/ASK/ LAYOUTS/NE/DASHBOARD.ASPX#/ ACCESSED AUGUST 16, 2023

As shown in Table 9.2-5 above, 13.6 percent of Atwater residents aged 1-17 years old have been diagnosed with asthma at some point in their lives, this is higher than county and statewide rate. 23.5 percent of Atwater residents aged 18+ have been diagnosed with asthma at some point in their lives, this is higher than both the county rate of 20.6 percent and the statewide rate of 16.1 percent.

Water Quality

According to the State Water Resources Control Board, there are areas within Merced County that are considered Section 303(d) impaired waterbodies. This includes 177,449 acres listed as early as 1996 for Chlorpyrifos (Agriculture, Urban Runoff/Storm Sewers), DDT (Agriculture), Diazinon (Agriculture, Urban Runoff/Storm Sewers), Electrical Conductivity (Agriculture), Group A Pesticides (Agriculture), Mercury (Resource Extraction), and Unknown Toxicity (Source Unknown).

Drinking Water Quality Reporting

As described in detail in Chapter 5.0 (Utilities), the City's water supply primarily relies on groundwater from the Merced Subbasin. The City owns and operates eight groundwater wells. Wells 13, 14, 15, 16, 17, 18, 19, and 21, are active and have a total current available pumping capacity of approximately 13,900 gallons per minute (gpm). Well 21 is intended to directly serve a federal prison. The total capacity without Well 21 is 12,200 gpm. The largest threat to the City's drinking water is water quality.

All wells except Well 21 currently exceed the maximum contaminant level (MCL) for 1,2,3-Trichloropropane (TCP). Treatment has been included at all wells that exceed MCL for TCP using granular active carbon. Well 15 also has had historic elevated levels of dibromochloropropane (DBCP). Treatment equipment for Well 15 was installed near the site to address these concerns. Well 13 was previously on standby due to elevated levels of ethylene dibromide (EDB) but is currently active and supplies water to the system on an as-needed basis. Well 20 historically had overheating problems during the summer and occasionally had to be shut down. It also previously had water quality problems, including elevated iron and manganese levels. Well 20 is currently being rehabilitated to include treatment equipment at the site and is projected to be active by the end of 2023. Additionally, the detection of per- and polyfluoroalkyl substances known as PFAS at Well 16 and 18 through U.S. Air Force sampling. All active wells are disinfected with sodium hypochlorite for maintaining chlorine residual in the distribution system.

According to the City's Urban Water Management Plan (March 2022), on April 20, 2018, the State Water Board, through its Division of Drinking Water, issued to the City of Atwater Compliance Order No. 03-11-18R-014 for violation of CHSC, Section 116555(a)(1) and California Code of Regulations, Title 22, Section 64444 MCL-Organic Chemicals. Except for City Well 21, all City wells currently exceed the maximum contaminant level (MCL) for 1,2,3-Trichloropropane (TCP).

1,2,3-Trichloropropane (TCP) is a man-made chemical that was for many years contained in pesticide fumigants called nematicides, which farmers applied to soils to kill nematodes, a kind of tiny worm. TCP can pose a risk to public health and can contaminate drinking water.

To address these issues the City initiated the 1,2,3-TCP Remediation Project. The 1,2,3-TCP Remediation Project constructed a new groundwater treatment systems to remove TCP from the City's drinking water to below the Maximum Contaminant Level (MCL) of 5 parts per trillion (ppt) (0.000005 mg/l), an amount mandated by the State.

Water Supply

The City is located within the San Joaquin River Hydrological Region, and extracts its groundwater from the Merced Subbasin, Basin Number 5-22.04. The Merced Subbasin Groundwater Sustainability Plan was adopted by the Merced Irrigation-Urban GSA in December 2019 and was revised in July 2022. The purpose of the Merced Subbasin Groundwater Sustainability Plan is to bring the Merced Subbasin, a Department of Water Resources designated critically overdrafted basin into sustainable groundwater management by 2040. A detailed discussion of the Merced Subbasin is available in Section 8.0 (Conservation and Natural Resources).

The Merced Subbasin is considered a high-priority basin facing critical overdraft conditions. The City, along with other members of the Merced Irrigation-Urban Groundwater Sustainability Agency (MIUGSA), is actively implementing measures outlined in the recently adopted Groundwater Sustainability Plan (GSP). These actions are aimed at achieving sustainable management of the groundwater basin, including the equitable allocation of the estimated sustainable yield among the Groundwater Sustainability Agencies (GSAs). Portions of the San Joaquin River Groundwater Basin have been in a state of overdraft for many years, including the Merced Subbasin. The California Water Plan Update – Bulletin 160-98 estimated the average overdraft in the San Joaquin River Groundwater Basin to be 239,000 AF in 1995.

The historical volume of groundwater pumped by the City over the past five years, and the availability of the City's water supplies in normal years are described and summarized in Chapter 5.0 (Utilities) of this Report.

Hazardous Materials

As descried in greater detail in Chapter 6.0 (Hazards and Safety) the following hazardous materials sites have been identified.

- Site Cleanup and Hazardous Facilities List (Envirostor) database. There are 17 locations listed within the vicinity of Atwater that are listed in the Envirostor database. One (1) site is listed as Certified / Land use Restriction only, one (1) site is listed as Certified / Operation & Maintenance - Land use Restriction, one (1) site is listed as active, one (1) site is listed as closed, three (3) sites are listed as inactive, and six (6) are listed with no further action required. Table 6.3-1 in Chapter 6.0 lists the Envirostor sites within the City of Atwater.
- GeoTracker. There are 23 locations identified with a City of Atwater address that are listed in the GeoTracker database for Leaking Underground Storage Tanks (LUST). Twenty-one (21) of these locations have undergone LUST cleanup and the State has closed the cases. Two (2) sites remain open cases with one (1) being eligible for closure, and the other being an open site assessment. Table 6.3-2 lists the location of open and closed cases for LUSTs in Atwater.

PUBLIC FACILITIES

Access and availability of public facilities is an aspect of the built environment that may disproportionately limit the opportunities of DACs. If disadvantaged communities have unequal access to public facilities or if a city does not contain adequate facilities for public use, DACs may be limited in their ability to access necessary key resources. Adequate planning of parks, and transportation infrastructure can ensure that all communities within a city have equal access to resources. Limited access to resources as a result of inadequate public facilities can lead to reduced lifespan, poorer health outcomes, and diminished mental well-being.

As mentioned above, most census tracts within the boundaries of the City of Atwater are defined as CalEnviroScreen-designated DACS. This section serves to assess the adequacy of public facilities in the City of Atwater given the widespread presence of DACs across the City.

Figure 4.0-1 included in Chapter 4.0 (Community Services, Recreation, and Facilities) shows the locations of the public facilities within the planning area including the location fire stations, medical facilities, law enforcement stations, schools and parks.

Parks and Recreational Centers

Equitable access to public parks and recreational centers within a community is critical to the promotion of public health and well-being. Lack of recreational and open spaces may contribute to poor physical and mental health. Parks and public facilities provide opportunities for exercise, recreation, and community engagement that is necessary to bolster resident health.

Because a majority of the City of Atwater is designated as a Disadvantaged Community under the SB 1000 guidelines, the current distribution of park acreage per 1,000 residents for the entire City of Atwater is an appropriate indicator of park access. The current overall distribution of park acreage per 1,000 residents is 2.52. The California Statewide Park Program (Public Resources Code §5642) defines underserved communities as having a ratio of less than three (3.0) acres of parkland per 1,000 residents[1]. According to the California Department of Parks and Recreation's Park Access Tool, 53% of residents in Atwater live in areas with less than 3 acres of parks or open space per 1,000 residents.

Additionally, the following findings were identified in Chapter 4.0 (Community Services, Recreation, and Facilities) of this Report:

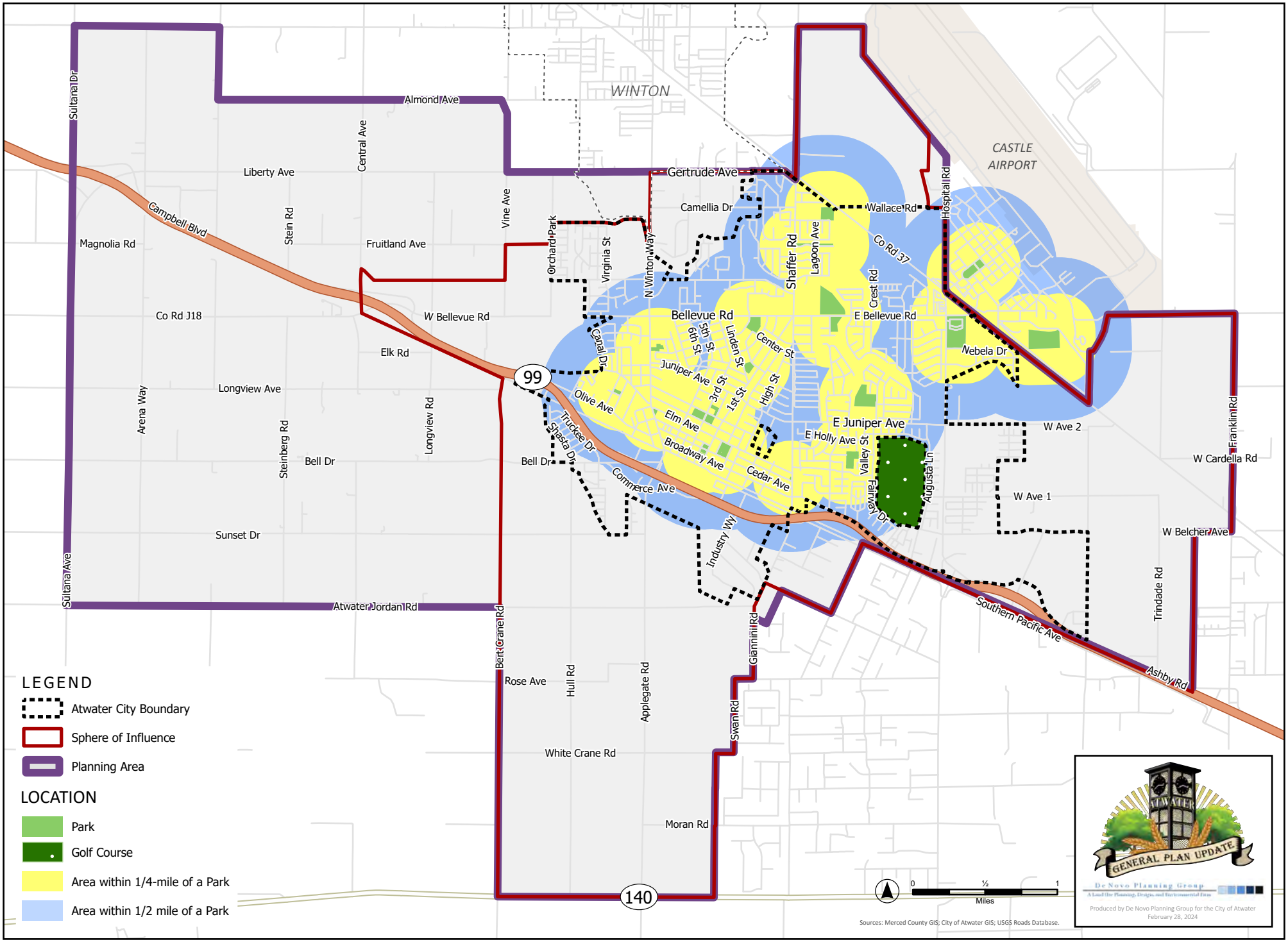
- Parkland. The Existing General Plan Policy LU-23.1 Strives to maintain or exceed a minimum standard of 3.0 acres of public parkland per 1,000 population. The current distribution of park acreage per 1,000 residents is 2.52 acres.
- Limited Access to Recreational Facilities. Many residents may not have direct or ease of access to recreational facilities and programs within the city, limiting their opportunities for use of existing recreational facilities.

An additional factor that determines the equitability and accessibility of parks and public facilities within an area is the distance between these public facilities and the home. If this distance to public facilities is perceived as "walkable", residents may be more likely and willing to walk to those amenities. According to the California Department of Parks and Recreation's Park Access Tool, 16% of residents of Atwater live

[1] *CALIFORNIA DEPARTMENT OF PARKS AND RECREATION. SCORP 2021. AVAILABLE AT: HTTPS://WWW.PARKSFORCALIFORNIA.ORG/SCORP/2021*

further than a half mile from a park. Generally, a distance of 1/4 mile is a commonly cited threshold for how far most people are willing to walk for neighborhood services, while many people are willing to walk up to 1/2 mile. Figure 9.2-2 shows areas within ¼-mile and ½ mile of a Park Area. As shown on Figure 9.2-2 the majority of the Atwater City Limits with within ½ mile of a park area.

Figure 9.2-2. Park Buffer Map



FOOD ACCESS

Ensuring adequate food access is challenging in many communities in California. Some communities within California cities have reduced access to adequate and/or healthy food. Often low-income areas may lack healthy food options or adequate supermarkets. An inability to access nutritious foods can lead to poor health outcomes in disadvantaged communities. Food-insecurity, or the uncertainty of having adequate food, is especially harmful for children and pregnant women who are most in need of nutrient-rich foods. Communities that are most often impacted by food insecurity include low-income communities and communities of color.[2]

Food Access is a mandated environmental justice focus area under SB 1000. As mentioned, most census tracts within the boundaries of the City of Atwater are defined as CalEnviroScreen-designated DACs. This section serves to assess the existing conditions of food accessibility in the City of Atwater given the presence of DACs across the city.

Food Insecurity

Food insecurity is the uncertainty about the availability or adequacy of nutritional and safe foods. Based on the USDA available food security data and data from the 2021 American Community Survey, Feeding America estimates the number of food insecure people within a given county. These estimates are located in the Feed America Map the Meal Gap Report[3]. Feeding America estimated that the number of food insecure individuals in Merced County was 38,590, with a food insecurity rate of 13.8% for the year 2021. The state local estimate for this same measure was 10.5%. Therefore, the measure rate of food insecurity within Merced County is higher than the rate of food insecurity within California as a whole.

Of the food insecure population within Merced County, 84% were from households which were below the Federal poverty threshold used for nutrition assistance programs and are therefore eligible for food assistance from the federal government. These residents who qualify for federal nutrition assistance programs can utilize assistance at any store that accepts WIC and SNAP purchases. At the local level, the UCLA Center for Health Policy Research and the California Health Interview Survey (CHIS) reported that 14.8% of adults in the City of Atwater are food insecure due to low income. In comparison, the same measure for the state of California is 5.0%. Based on the data from both the CHIS and Feeding America, it is evident that the City of Atwater food insecurity rate is significantly above the average for cities in California.

Food Access

The USDA developed a Food Access Research Atlas that identifies "food deserts" in the United States at the census tract level. The 2008 U.S. Department of Agriculture (USDA) Farm Bill defined a food desert as an "area in the United States with limited access to affordable and nutritious food, particularly such an area composed of predominantly lower income neighborhoods and communities." Based on this definition, the USDA data Figure 9.2-3 shows Low-income census tracts where a significant number or share of residents are more than 1/2 mile (urban) or 10 miles (rural) from the nearest supermarket. It should be noted many residents within these census tracts are within ½ mile of a supermarket, but the tract as a whole does contain areas that are also underserved. As shown in on Figure 9.2-3 the city is generally considered to have adequate food access in the central portions of the city. However, the central portion of Atwater and

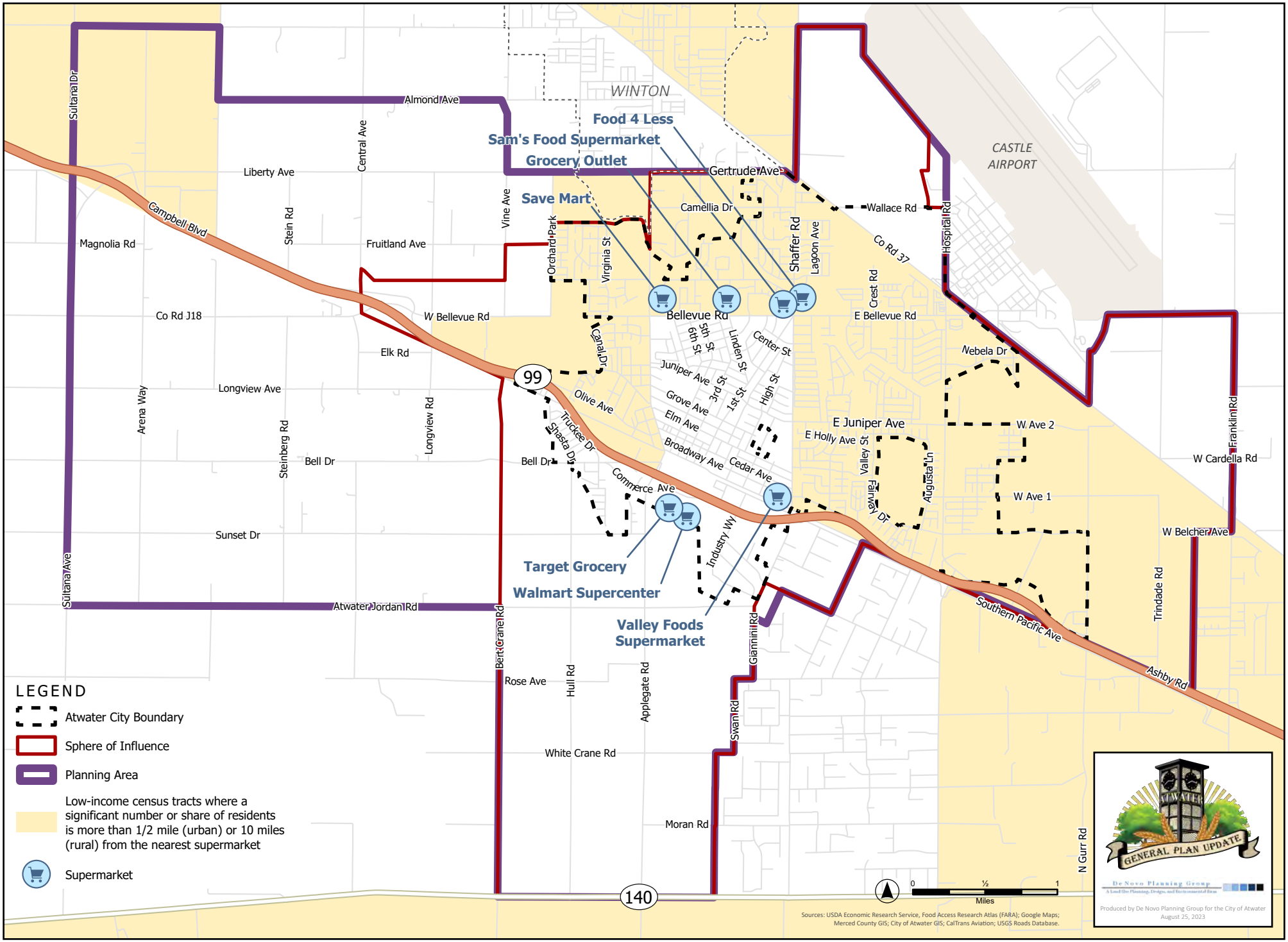
2ELSHEIKH, E.; BARHOUM,N. (2013). STRUCTURAL RACIALIZATION AND FOOD INSECURITY IN THE UNITED STATES. PREPARED FOR THE U.N. HUMAN RIGHTS COMMITTEE ON THE INTERNATIONAL COVENANT ON CIVIL AND POLITICAL RIGHTS. ACCESSED AUGUST 23, 2023

3 FEEDING AMERICA MAP THE MEAL GAP (2021) AVAILABLE: HTTPS://MAP.FEEDINGAMERICA.ORG/COUNTY/2021/OVERALL/CALIFORNIA ACCESSED AUGUST 23, 2023

the southernmost portion of Atwater, south of SR-99 are the only areas of Atwater that are not designated food deserts per the USDA.

In addition to the proximity of grocery and food sources within an area, the types of food sources available are important for determining adequacy of food access. The USDA Food Research Atlas data shows that there were 68 grocery stores in Merced County as of 2016 and approximately 229 stores total in Merced County were SNAP authorized. In addition, the same data set shows that the County had 143 fast food restaurants.

Figure 9.2-3. Food Access Map



SAFE AND SANITARY HOMES

The conditions of housing in a DACs may have negative impacts on the well-being of the community residents. Unsafe housing conditions can be a result of the age of the dwelling structure; which increases the likelihood of incorporation of dangerous materials like lead and asbestos, which can have significant negative health impacts.[4] Disadvantaged communities often have a larger amount of older units within their housing stock and therefore, residents of these communities are more likely to be exposed to the harmful health impacts that are associated with older housing. Other factors that can contribute to unsafe housing conditions include improper regulation and overcrowding. Ensuring the safety and sanitation of housing stock within a community ensures that there are proper living conditions for all residents, including DACs.

Safe and Sanitary Homes is a mandated environmental justice focus area under SB 1000. As mentioned, most census tracts within the boundaries of the City of Atwater are defined as CalEnviroScreen-designated DACs. This section serves to assess the existing conditions of home safety and home sanitation in the City of Atwater given the presence of DACs across the city.

Age of Housing Stock

The age of a housing unit is a primary factor in the building conditions of the dwelling unit; therefore, the age of a community's housing stock is a good indicator of the condition of the housing stock. According to the City of Atwater 2014-2023 5th Cycle Housing Element[5], about 62% of the housing stock in Atwater is 30 years old or older with about 40% of the units over 40 years old. According to the CDC, a substantial amount of existing United States housing regulation and bans related to the use of toxic materials were developed in the 1970s; including regulations on the use of lead paint and asbestos.[6] Additionally, older housing units are more likely to have structural and material damage. Many of the housing units in Atwater were developed during a housing construction boom following World War II and lasting into the 1980s.

Housing Conditions

In 2017, the City updated their Housing Element and included an updated review of housing conditions that focused on the condition of the roof, siding, windows, and doors. About 44% of the assessed 5,409 housing units were found to be sound, defined as units in good condition with no signs of deferred maintenance. 32% of the housing units needed minor repairs and 23% of the housing units needed substantial repairs.

Overcrowding

A housing unit is considered overcrowded if there is more than one person per room and severely overcrowded if there are more than 1.5 persons per room.

According to the Atwater Housing Element, approximately 5.5% of all homeowner-occupied housing units in Atwater are overcrowded and an additional 0.9% are severely overcrowded. Twice as many rental units are overcrowded with approximately 9.0% of rental units overcrowded and 1.8% severely overcrowded. Renters under the age of 35 had the highest rates of overcrowding at 16.3%.

[4] *California Environmental Justice Alliance SB 1000 Toolkit*

[5] *City of Atwater Housing Element (2017) Available: https://www.atwater.org/city-of-atwater-2014-2023-5th-cycle-housing-element/ Accessed August 23, 2023*

[6] *Centers for Disease Control and Prevention, National Center for Environmental Health, 2018. Retrieved from: https://www.cdc.gov/nceh*

Housing Affordability

As what is typically the most expensive component of a household's budget, housing cost (rent or mortgage, utilities, homeowner or renter insurance, and property taxes for homeowners only) is a preeminent factor in determining if the household is "cost burdened" or negatively impacted by its expenses. This consideration takes on even greater importance in California, a place where housing costs far exceed the national average.

A household is considered to be overpaying for housing (or cost burdened) if it spends more than 30% of its gross income on housing. Severe housing cost burden occurs when a household pays more than 50% of its income on housing. The prevalence of overpayment varies significantly by income, tenure, household type, and household size. In general, overpayment disproportionately affects lower income households; 63.8% of lower income households (0-80% of AMI) and 83.3% of extremely low income households (0-30% of AMI) - paid more than 30% of their income for housing.

As descried in the City's current Housing Element the percentage of households paying more than 30 percent of income towards housing has increased significantly, by approximately 50 percent since 1990. More renter households (53) percent than owner households (43) percent pay more than 30 percent of income for housing.

PHYSICAL ACTIVITY

Health Indicators in Atwater

Residents of DACs are often more likely to have negative health outcomes. Increased physical activity levels are associated with a decreased risk for numerous health conditions and chronic illnesses. The built environment in DACs can often be limited by land-use planning and lack of investment, leaving less opportunities for formal and informal physical activity. Increasing the opportunity for physical activity within a community can work to positively impact the health of DACs.

Physical activity is a mandated environmental justice focus area under SB 1000. As mentioned, most census tracts within the boundaries of the City of Atwater are defined as CalEnviroScreen-designated Disadvantaged Communities (DACS). This section serves to assess the existing conditions of physical activity in the City of Atwater given the presence of DACs across the city.

Obesity and Overweight Trends

Lack of physical activity is a major risk factor for many diseases and causes of death, including heart disease, obesity, mental-health conditions, diabetes, stroke, and Alzheimer's. The California Health Interview Survey (CHIS) is the nation's largest state health survey. A random-dial telephone survey conducted every two years on a wide range of health topics, CHIS data gives a detailed picture of the health and health care needs of California's large and diverse population. Adult obesity trends are shown in Table 9.2-6 and child and teen obesity trends are shown in Table 9.2-7.

TABLE 9.2-6: OBESITY TRENDS – ADULTS (18+)

Year/ Region	*Obese (BMI 30.0 or higher)*
2020/ Atwater	38.8%
2018/ Atwater	38.8%
2020/ Merced County	36.1%
2018/ Merced County	36.1%
2020/ California	28.2%
2018/ California	26.8%

SOURCE: CALIFORNIA HEALTH INTERVIEW SURVEY. ASK CHIS NEIGHBORHOOD EDITION. LOS ANGELES, CA: UCLA CENTER FOR HEALTH POLICY RESEARCH. AVAILABLE AT: HTTPS://ASKCHISNE.UCLA.EDU/ASK/_LAYOUTS/NE/DASHBOARD.ASPX#/

As shown in Table 9.2-6 above, obesity status in adults, or those with a body mass index (BMI) of 30.0 or higher, are higher in Atwater than in Merced County and the state when compared.

TABLE 9.2-7: OBESITY TRENDS- CHILDREN & TEENS (AGE 2-11; 12-17)

Year/ Region	*Overweight Children (Age 2-11) Weight ≥ 95th percentile)*	*Overweight Teens (Age 12-17) BMI ≥ 85th percentile)*
2020/ Atwater	14.8%	57.2%
2018/ Atwater	19.2%	43.7%
2020/ Merced County	15.4%	50.6%
2018/ Merced County	17.1%	36.7%
2020/ California	13.9%	31.2%
2018/ California	14.9%	33.4%

SOURCE: CALIFORNIA HEALTH INTERVIEW SURVEY. ASK CHIS NEIGHBORHOOD EDITION. LOS ANGELES, CA: UCLA CENTER FOR HEALTH POLICY RESEARCH. AVAILABLE AT: HTTPS://ASKCHISNE.UCLA.EDU/ASK/_LAYOUTS/NE/DASHBOARD.ASPX#/

As show in Table 9.2-7 above, the overweight status for teens was higher in Atwater than Merced County and state rates for the years 2018 and 2020.

Physical Fitness Testing

Another indicator of physical activity and fitness for children and teens is the California Department of Education's Physical Fitness Testing (PFT) Program, which is administered by local school districts to all fifth, seventh, and ninth graders annually.[7] The test assesses six major fitness areas, including aerobic capacity (cardiovascular endurance), body composition (percentage of body fat), abdominal strength and endurance, trunk strength and flexibility, upper body strength and endurance, and overall flexibility. The PFT Program provides a statewide snapshot of physical fitness. However, its data is collected at the local school district level by people who are not health professionals, and tests for each of the fitness areas are difficult to administer consistently. Consequently, its results are prone to some margin of error over time and from place to place.

California Physical Fitness Test PFT Results for the Atwater Elementary District, and statewide results for the 2018-19 academic year are shown in Table 9.2-8.

[7] California Department of Education. Physical Fitness Testing Results, Accessed on August 23, 2023. Accessible at: http://www.cde.ca.gov

TABLE 9.2-8 STUDENT PHYSICAL FITNESS TESTING (PFT) RESULTS (2018-2019)

# of Physical Areas Meeting the	*Atwater Elementary District % within Healthy Fitness Zone HFZ*			*Statewide % within Healthy Fitness Zone HFZ*		
	Gr. 5	Gr. 7	Gr. 9	Gr. 5	Gr. 7	Gr. 9
Aerobic Capacity	82.8%	56.9%	N/A	60.2%	61.0%	60.0%
Body Composition	50.1%	54.1%	N/A	58.7%	60.0%	62.2%
Abdominal Strength	86.9%	78.6%	N/A	69.1%	77.1%	81.2%
Trunk Extension Strength	82.8%	74.3%	N/A	83.8%	86.0%	89.3%
Upper Body Strength	68.7%	76.0%	N/A	60.8%	62.9%	68.5%
Flexibility	67.6%	78.6%	N/A	70.4%	78.5%	83.1%

SOURCE: CALIFORNIA DEPARTMENT OF EDUCATION, PHYSICAL FITNESS TESTING RESULTS (2018-2019).

As shown in Table 9.2-8 above, the PFT results for 5th 7th and 9th graders in the Atwater Elementary District between 2018-2019 show that generally local children are at generally similar percentages as the statewide averages.

TABLE 9.2-9 HEALTH INDICATORS MERCED COUNTY (2020)

Indicator	*Merced County*	*California*
Diabetes Prevalence (Age-adjusted)[8]	14.9%	10.1%
Adult Heart Disease Prevalence[9]	6.3%	6.9%
Poor Mental Health[10]	17.9%	21.2%
Adult Obesity Prevalence (BMI > 30)[11]	36.1%	28.2%
Child Obesity Prevalence (BMI>30)[12]	50.6%	31.2%

SOURCE: ADAPTED FROM THE MERCED COUNTY 2022 COMMUNITY HEALTH NEEDS ASSESSMENT [13]

As shown in Table 9.2-9, diabetes prevalence in Merced County is almost five percent higher than the state rate. Adult obesity prevalence is also significantly higher in Merced County than in the state overall. This is also seen in child obesity prevalence rates, in the year 2020 childhood obesity in Merced County was much higher than the statewide rate.

CIVIC AND COMMUNITY ENGAGEMENT

An important aspect of planning for environmental justice is the development of effective policies and programs that enable all residents to participate in local decision making. Disadvantaged communities can often be excluded from decision-making when officials and policies do not focus on involving these communities in a strategic manner. SB 1000 emphasizes that community engagement must be promoted in a local jurisdiction through the development of objectives and policies that seek to involve members of DACs specifically. By involving and engaging DACs in decision-making processes, policy-makers can effectively meet the needs of these community members. Disadvantaged communities often have culturally-specific needs that must be made a priority within local policy to ensure community success. These needs are often distinct from those of the general population. The US EPA Environmental Justice Policy requires the "… meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies." The establishment of appropriate opportunities for those who are low-income, minorities, and linguistically isolated to engage in local decision making will help ensure that environmental justice issues are identified and resolved. In addition, community programs that address the needs of disadvantaged communities are critical to ensuring environmental justice is achieved for these communities within a city.

As mentioned, most census tracts within the City of Atwater are defined as CalEnviroScreen-designated DACs. This section serves to assess the levels of civic engagement and existing community programs in the City of Atwater given the presence of DACs across the city.

[8] *MERCED COUNTY COMMUNITY HEALTH NEEDS ASSESSMENT. 2022*
[9] *CALIFORNIA HEALTH INTERVIEW SURVEY, 2020*
[10] *CALIFORNIA HEALTH INTERVIEW SURVEY, 2020*
[11] *CALIFORNIA HEALTH INTERVIEW SURVEY, 2020*
[12] *CALIFORNIA HEALTH INTERVIEW SURVEY, 2020*
[13] *MERCED COUNTY COMMUNITY HEALTH NEEDS ASSESSMENT. 2022 COMMUNITY AVAILABLE AT: HTTPS://WWW.DIGNITYHEALTH.ORG/CONTENT/DAM/DIGNITY-HEALTH/PDFS/CHNA/2022-CHNA/MERCED-MERCY-MEDICAL-CENTER-CHNA-22.PDF*

Civic Engagement- Voter Registration

At the local level, there were 124,659 total registered voters in Merced County 15 days before the General Election in 2022 according to California Secretary of State data from 2022. According to the Merced County Registrar of Voters, voter turnout in Merced County for the 2022 General Election was at 44.8%[14].

Language Access

Language is a critical signifier of a population's likely participation in civic activities. Non-native English speakers, and especially those individuals with limited English fluency, are less likely to participate in civic activities. Translation services are critical to reaching and actively communicating with these individuals. In addition, the metric of households who speak languages other than English can help identify the cultural diversity of a community. Civic activities, and the venues where they take place, can be tailored to accommodate the cultural preferences of individual racial, ethnic, and religious groups.

As identified by U.S Census American Community Survey (ACS) 46.7% of Atwater Residents age 5+ spoke a Language Other than English Spoken at Home. Atwater and Merced County are "minority majority" areas. The city and county ethnic profiles are dominated by large and increasing Latino populations. The city's population was approximately 60 percent Latino in 2020, up from 53 percent in 2010, and the county was approximately 62 percent, an increase from 55 percent in 2010.

Educational Attainment

As descried in Chapter 1.0 (Land Use, Population, and Housing) of this report, Atwater and Merced County show lower level of educational achievement than California overall, with lower proportions of high school graduates and less than half the percentage of adults with bachelor's degrees or higher. Nearly 30 percent of the city and county adults 25 or older have not completed high school, almost twice the statewide proportion. Improving educational outcomes for local students would likely provide more employment opportunities and an improved quality of life for those students as well as improving the city's attractiveness to the types of businesses that prioritize the educational attainment of the local workforce. Educational attainment is a strong signifier of a population's likely participation in civic activities. Higher educational attainment generally correlates with increased civic participation. This is reflective of individuals with less educational attainment experiencing underemployment circumstances, such as working for less than a living wage and/or on a part-time basis. This may require individuals to seek out additional employment, reducing the time that they can commit to civic activities. In addition, individuals with lower educational attainment generally make less money. Those individuals who cannot afford to own or otherwise have limited access to an automobile, may be unable to attend civic events. This may also be reflective of individuals with less educational attainment lacking the sufficient literacy level and/or a formal education in civics and government to feel comfortable participating in civic matters.

[14] California Secretary of State Voter Registration Statistics. Available at: https://www.sos.ca.gov/elections/voter-registration/voter-registration-statistics Accessed August 2023.

IMPROVEMENTS AND PROGRAMS

A critical aspect of planning to achieve environmental justice is prioritizing projects and policies that directly benefit disadvantaged communities. It is often the case that disadvantaged communities are not considered in regard to public investment decisions and new public programs. When disadvantaged communities are overlooked for public programs and investments, the specific needs of these communities are not met and the conditions in which they live often worsen. To promote environmentally just planning, cities should incorporate programs and policies that are specific to the needs of DACs.

City of Atwater's Existing Housing Element Programs

The City's Housing Element is designed to provide the City with a coordinated and comprehensive strategy for promoting the production of safe, decent, and affordable housing within the community. A priority of both State and local governments, Government Code Section 65580 states the intent of creating housing elements:

The Housing Element has two main purposes:

1. To provide an assessment of both current and future housing needs and constraints to meeting those needs; and

2. To provide housing goals, policies, and programs that establish a strategy for attaining adequate housing for a range of people.

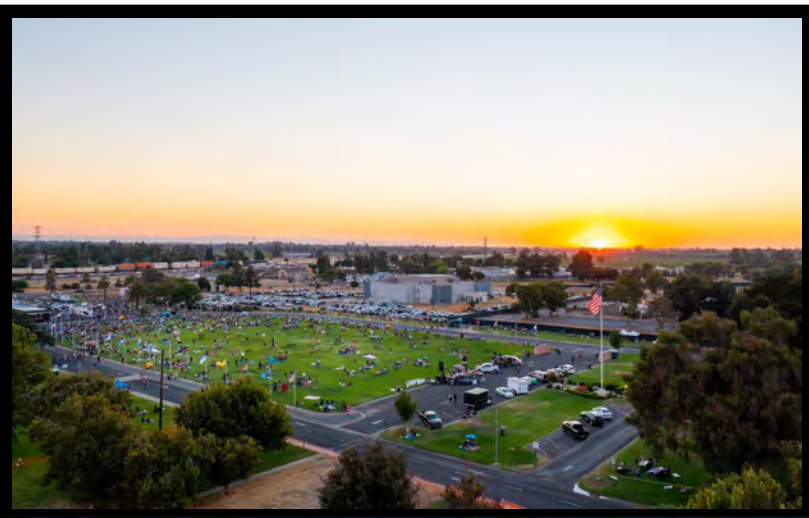
Atwater has areas of special priority that focus the purpose of its Housing Element, such as the growing proportion of families with children, increasing rates of overcrowding, limited availability of rental housing (especially affordable rentals) and constraints to accommodating additional housing within existing city limits.

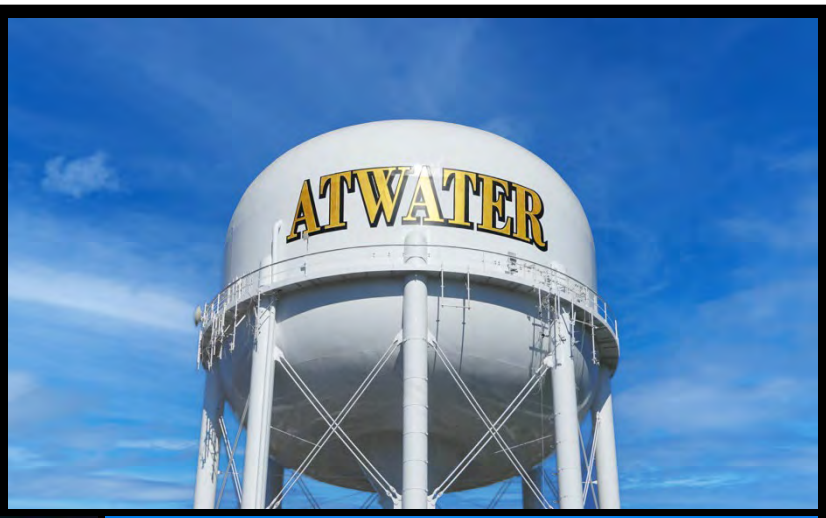
The Housing Element serves as an integrated part of the General Plan, but is updated more frequently, as required by State law, to ensure its relevancy and accuracy. The Housing Element identifies strategies and programs that focus on:

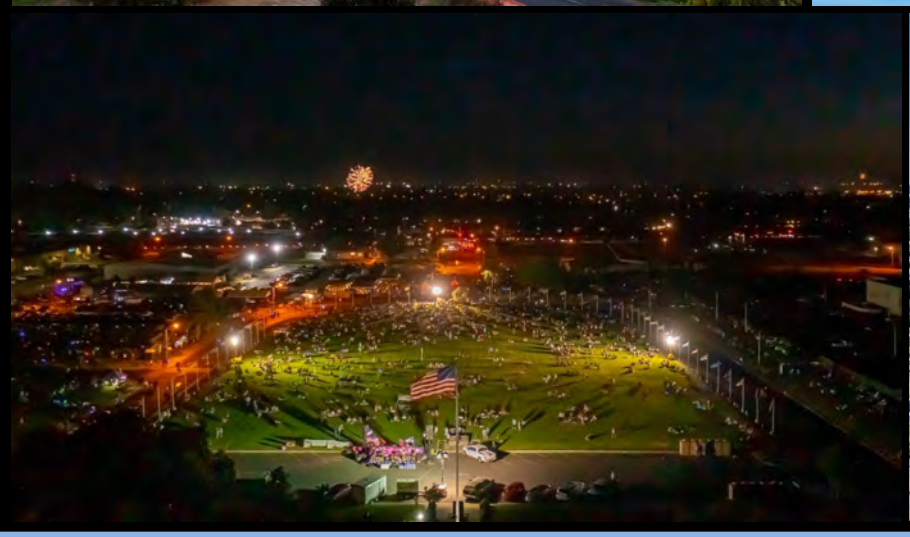
- Matching housing supply with need;
- Maximizing housing choice throughout the community; Assisting in the provision of affordable housing;
- Removing governmental and other constraints to housing investment; and
- Promoting fair and equal housing opportunities.

Infrastructure Improvement Programs

To address issues associated with water contaminates the City initiated the 1,2,3-TCP Remediation Project. The 1,2,3-TCP Remediation Project constructed a new groundwater treatment systems to remove TCP from the City's drinking water to below the Maximum Contaminant Level (MCL) of 5 parts per trillion (ppt) (0.000005 mg/l), an amount mandated by the State.









City of Atwater

Existing Conditions Report (Appendices)

April 2024

Appendices

Appendix A – Regulatory Setting

Appendix B – References

Appendix C – Airport Land Use Compatibility Table

De Novo Planning Group

A Land Use Planning, Design, and Environmental Firm

REGULATORY SETTING

1.0 LAND USE AND SOCIOECONOMICS

This section describes the federal, and state regulations pertaining to land use.

STATE

California General Plan Law

Government Code Section 65300 requires that each county and city adopt a General Plan "for the physical development of the county or city, and any land outside its boundaries which bears relation to its planning."

The General Plan is a comprehensive long-term plan for the physical development of the county or city and is considered a "blueprint" for development. The General Plan provides a statement of the community's development, economic, circulation, and environmental goals and includes diagrams and text setting forth objectives, standards, policies, and programs. The General Plan must contain seven State-mandated elements: Land Use, Open Space, Conservation, Housing, Circulation, Noise, and Safety. It may also contain any other elements that the city or county wishes to include. The land use element designates the general location and intensity of designated land uses to accommodate housing, business, industry, open space, education, public buildings and grounds, recreation areas, and other land uses.

The 2017 General Plan Guidelines, established by the Governor's Office of Planning and Research (OPR) to assist local agencies in the preparation of their general plans, further describe the mandatory land use element as a guide to planners, the general public, and decision makers prescribing the ultimate pattern of development for the city. The General Plan Guidelines include resources, data, tools, and model policies to help cities and counties update their general plans.

California Environmental Quality Act

The California Environmental Quality Act (CEQA) was developed to protect the quality of the environment and the health and safety of persons from adverse environmental effects. Discretionary projects are required to be reviewed consistent with the requirements of CEQA to determine if there is potential for the project to cause a significant adverse effect on the environment. Depending on the type of project and its potential effects, technical traffic, noise, air quality, biological resources, and geotechnical reports may be needed. If potential adverse effects can be mitigated, a mitigated negative declaration is required. If potentially adverse effects cannot be mitigated, an environmental impact report is required. These documents have mandated content requirements and public review times. Preparation of CEQA documents can be costly and, despite maximum time limits set forth in the Public Resources Code, can extend the processing time of a project by a year or longer.

Subdivision Code

A subdivision is any division of land for the purpose of sale, lease or finance. The State of California Subdivision Map Act (Government Code § 66410) regulates subdivisions throughout the state. The goals of the Subdivision Map Act are as follows:

- To encourage orderly community development by providing for the regulation and control of the design and improvement of a subdivision with proper consideration of its relationship to adjoining areas.
- To ensure that areas within the subdivision that are dedicated for public purposes will be properly improved by the subdivider so that they will not become an undue burden on the community.

- To protect the public and individual transferees from fraud and exploitation.

2.0 CIRCULATION

This section describes the federal, state, and local regulations pertaining to circulation.

STATE

SB 743 and Vehicle Miles Traveled

Historically, the transportation impacts associated with land development and transportation projects were evaluated based on a congestion-focused metric referred to as Level of Service (LOS), which is generally tied to the average delays that drivers experience. In 2013, Governor Brown signed SB 743, requiring amendments to the State CEQA Guidelines for analyzing transportation impacts. Through this action, Public Resources Code Section 21099 (b)(1) directed the California Governor's Office of Planning and Research (OPR) to prepare updated State CEQA Guidelines for adoption by the Natural Resources Agency, including revised transportation significance criteria. PRC Section 21099 (b)(2) specifies that upon certification of the updated CEQA guidelines, "automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, shall not be considered a significant impact on the environment." The use of a new measure referred to as Vehicle Miles Traveled (VMT) in CEQA assessments became mandatory on July 1, 2020.

State of California Complete Streets Act

Assembly Bill (AB) 1358, the California Complete Streets Act of 2008, requires any substantive revision of the circulation element of a city or county's general plan to identify how they will safely accommodate the circulation of all users of the roadway including pedestrians, bicyclists, children, seniors, individuals with disabilities, and transit riders, as well as motorists.

Caltrans Deputy Directive 64-R1: Complete Streets – Integrating the Transportation System

In 2001, Caltrans adopted Deputy Directive (DD) 64; a policy directive related to non-motorized travel throughout the state. In October 2008, DD 64 was strengthened to reflect changing priorities and challenges. DD 64-R1 states:

> *The Department views all transportation improvements as opportunities to improve safety, access, and mobility for all travelers in California and recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system.*
>
> *The Department develops integrated multimodal projects in balance with community goals, plans, and values. Addressing the safety and mobility needs of bicyclists, pedestrians, and transit users in all projects, regardless of funding, is implicit in these objectives. Bicycle, pedestrian, and transit travel is facilitated by creating "complete streets" beginning early in system planning and continuing through project delivery and maintenance and operations. Developing a network of "complete streets" requires collaboration among all Department functional units and stakeholders to establish effective partnerships.*
>
> *Providing safe mobility for all users, including motorists, bicyclists, pedestrians and transit contributes to the Department's vision: "Improving Mobility across California."*

Successful long-term implementation of this policy is intended to result in more options for people to go from one place to another, less traffic congestion and greenhouse gas emissions, more walkable

communities (with healthier, more active people), and fewer barriers for older adults, children, and people with disabilities.

Caltrans Director's Policy 22 (DP-22), "Director's Policy on Context Sensitive Solutions"

Director's Policy 22, a policy regarding the use of "Context Sensitive Solutions" on all state highways, was adopted by Caltrans in November of 2001. The policy reads:

> *The Department uses "Context Sensitive Solutions" as an approach to plan, design, construct, maintain, and operate its transportation system. These solutions use innovative and inclusive approaches that integrate and balance community, aesthetic, historic, and environmental values with transportation safety, maintenance, and performance goals. Context sensitive solutions are reached through a collaborative, interdisciplinary approach involving all stakeholders.*
>
> *The context of all projects and activities is a key factor in reaching decisions. It is considered for all State transportation and support facilities when defining, developing, and evaluating options. When considering the context, issues such as funding feasibility, maintenance feasibility, traffic demand, impact on alternate routes, impact on safety, and relevant laws, rules, and regulations must be addressed.*

The policy recognizes that "in towns and cities across California, the State highway may be the only through street or may function as a local street," that "these communities desire that their main street be an economic, social, and cultural asset as well as provide for the safe and efficient movement of people and goods," and that "communities want transportation projects to provide opportunities for enhanced non-motorized travel and visual quality." The policy acknowledges that addressing these needs will ensure that transportation solutions meet more than just traffic and operational objectives.

Caltrans Transportation Impact Study Guide

Caltrans, as a responsible agency under CEQA, reviews topics in environmental documents pertaining to State highway facilities. With respect to transportation analyses, the agency historically referred to measures of effectiveness identified in the *Guide for the Preparation of Traffic Impact Studies* (December 2002). In response to SB 743, Caltrans's Local Development-Intergovernmental Review (LD-IGR) team in 2016 shifted attention from LOS-based metrics to a focus on VMT, appropriate transportation demand measures (TDM), and determining how best to address multimodal operational issues.

Caltrans has not established formal VMT significance thresholds, though in May 2020 the *VMT-Focused Transportation Impact Study Guide* (TISG) was released. The guide reiterates that automobile delay is no longer considered a significant impact on the environment within CEQA transportation analysis and that Caltrans will now focus on VMT. With respect to VMT significance thresholds, Caltrans refers to guidance provided in the 2018 OPR Technical Advisory on Evaluating Transportation Impacts in CEQA, and also refers to OPR's guidance on the types of projects that can be presumed to have a less-than-significant transportation impact.

3.0 Economic, Real Estate Market, and Fiscal Conditions

There are no federal, state, or local regulations which pertain to economic and real estate conditions and trends.

4.0 COMMUNITY SERVICES AND FACILITIES

STATE

Fire Protection and Emergency Response

CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

In accordance with California Code of Regulations Title 8 Sections 1270 "Fire Prevention" and 6773 "Fire Protection and Fire Equipment" the California Occupational Safety and Health Administration (Cal/OSHA) has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all firefighting and emergency medical equipment.

The State of California passed legislation authorizing the Office of Emergency Services (OES) to prepare a Standard Emergency Management System (SEMS) program, which sets forth measures by which a jurisdiction should handle emergency disasters. Non-compliance with SEMS could result in the State withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster.

EMERGENCY RESPONSE/EVACUATION PLANS

The State of California passed legislation authorizing the Office of Emergency Services (OES) to prepare a Standard Emergency Management System (SEMS) program, which sets forth measures by which a jurisdiction should handle emergency disasters. Non-compliance with SEMS could result in the State withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster.

CALIFORNIA FIRE PROTECTION CODE

The California Fire Code contains regulations relating to construction and maintenance of buildings and the use of premises. Topics addressed in the Code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions to protect and assist first responders, industrial processes, and many other general and specialized fire safety requirements for new existing buildings and premises.

UNIFORM FIRE CODE

The Uniform Fire Code with the State of California Amendments contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the California Fire Code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The Fire Code contains specialized technical regulations related to fire and life safety.

CALIFORNIA HEALTH AND SAFETY CODE

State fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code. This includes regulations for building standards (as also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

NFPA 1710

The NFPA 1710 Standards are applicable to urban areas and where staffing is comprised of career Firefighters. According to these guidelines, a career fire department needs to respond within six minutes, 90 percent of the time with a response time measured from the 911 call to the time of arrival of the first responder.

The standards are divided as follows:

- Dispatch time of one (1) minute or less for at least 90 percent of the alarms
- Turnout time of one (1) minute or less for EMS calls (80 seconds for fire and special operations response)
- Fire response travel time of four (4) minutes or less for the arrival of the first arriving engine company at a fire incident and eight (8) minutes or less travel time for the deployment of an initial full alarm assignment at a fire incident
- Eight (8) minutes or less travel time for the arrival of an advanced life support (ALS) (4 minutes or less if provided by the fire department

Parks and Recreation

QUIMBY ACT

The Quimby Act (California Government Code Section 66477) states that "the legislative body of a city or county may, by ordinance, require the dedication of land or impose a requirement of the payment of fees in lieu thereof, or a combination of both, for park or recreational purposes as a condition to the approval of a tentative or parcel map." Requirements of the Quimby Act apply only to the acquisition of new parkland and do not apply to the physical development of new park facilities or associated operations and maintenance costs. The Quimby Act seeks to preserve open space needed to develop parkland and recreational facilities; however, the actual development of parks and other recreational facilities is subject to discretionary approval and is evaluated on a case-by-case basis with new residential development. The City has adopted park fees as allowed by the Quimby Act, as described in greater detail below.

Schools

CALIFORNIA CODE OF REGULATIONS

The California Code of Regulations, Title 5 Education Code, governs all aspects of education within the State.

LEROY F. GREENE SCHOOL FACILITIES ACT OF 1998 (SB 50)

The "Leroy F. Greene School Facilities Act of 1998," also known as Senate Bill No. 50 or SB 50 (Chapter 407, Statutes of 1998), governs a school district's authority to levy school impact fees. This comprehensive legislation, together with the $9.2 billion education bond act approved by the voters in November 1998 known as "Proposition 1A," reformed methods of school construction financing in California. SB 50 instituted a new school facility program by which school districts can apply for State construction and modernization funds. It imposed limitations on the power of cities and counties to require mitigation of school facilities impacts as a condition of approving new development and provided the authority for school districts to levy fees at three different levels:

- Level I fees are the current statutory fees allowed under Education Code 17620. This code section provides the basic authority for school districts to levy a fee against residential and commercial

construction for the purpose of funding school construction or reconstruction of facilities. These fees vary by district for residential construction and commercial construction and are increased biannually.

- Level II fees are outlined in Government Code Section 65995.5, allowing school districts to impose a higher fee on residential construction if certain conditions are met. These conditions include having a substantial percentage of students on multi-track year-round scheduling, having an assumed debt equal to 15–30% of the district's bonding capacity (percentage is based on revenue sources for repayment), having at least 20% of the district's teaching stations housed in relocatable classrooms, and having placed a local bond on the ballot in the past four years which received at least 50% plus one of the votes cast. A Facility Needs Assessment must demonstrate the need for new school facilities for unhoused pupils is attributable to projected enrollment growth from the construction of new residential units over the next five years.
- Level III fees are outlined in Government Code Section 65995.7. If State funding becomes unavailable, this code section authorizes a school district that has been approved to collect Level II fees to collect a higher fee on residential construction. This fee is equal to twice the amount of Level II fees. However, if a district eventually receives State funding, this excess fee may be reimbursed to the developers or subtracted from the amount of State funding.

THE KINDERGARTEN-UNIVERSITY PUBLIC EDUCATION FACILITIES BOND ACT OF 2002 (PROP 47)

This act was approved by California voters in November 2002 and provides for a bond issue of $13.05 billion to fund necessary education facilities to relieve overcrowding and to repair older schools. Funds will be targeted at areas of greatest need and must be spent according to strict accountability measures. Funds will also be used to upgrade and build new classrooms in the California Community Colleges, the California State University, and the University of California in order to provide adequate higher education facilities to accommodate growing student enrollment.

CALIFORNIA DEPARTMENT OF EDUCATION

The California Department of Education (CDE) School Facilities Planning Division (SFPD) prepared a School Site Selection and Approval Guide that provides criteria for locating appropriate school sites in the State of California. School site and size recommendations were changed by the CDE in 2000 to reflect various changes in educational conditions, such as lowering of class sizes and use of advanced technology. The expanded use of school buildings and grounds for community and agency joint use and concern for the safety of the students and staff members also influenced the modification of the CDE recommendations.

Specific recommendations for school size are provided in the School Site Analysis and Development Guide. This document suggests a ratio of 1:2 between buildings and land. CDE is aware that in a number of cases, primarily in urban settings, smaller sites cannot accommodate this ratio. In such cases, the SFPD may approve an amount of acreage less than the recommended gross site size and building-to-ground ratio.

Certain health and safety requirements for school site selection are governed by State regulations and the policies of the SFPD relating to:

- Proximity to airports, high-voltage power transmission lines, railroads, and major roadways;
- Presence of toxic and hazardous substances;
- Hazardous facilities and hazardous air emissions within one-quarter mile;
- Proximity to high-pressure natural gas lines, propane storage facilities, gasoline lines, pressurized sewer lines, or high-pressure water pipelines;
- Noise;

- Results of geological studies or soil analyses; and
- Traffic and school bus safety issues.

5.0 UTILITIES

This section describes the federal, state, and local regulations pertaining to land use and socioeconomics.

FEDERAL

Water Supplies

CLEAN WATER ACT / NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMITS

The Clean Water Act is the cornerstone of water quality protection in the United States. The statute employs a variety

SAFE DRINKING WATER ACT

The federal Safe Drinking Water Act as passed in 1974 and amended in 1986 and 1996. It is the Country's primary law regulating drinking water quality and in implemented by the U.S. Environmental Protection Agency. The Safe Drinking Water Act authorizes the U.S. Environmental Protection Agency to set national health-based standards for drinking water and requires actions to protect drinking water and its sources. Additionally, it provides for treatment, monitoring, sampling, analytical methods, reporting, and public information requirements. Implementation of the Act, in California, is under the jurisdiction of the California Department of Public Health, Division of Drinking Water and Environmental Management. Drinking Water regulations are set forth in the CCR, Titles 7 and 22.

Wastewater

CLEAN WATER ACT / NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMITS

The Clean Water Act is the cornerstone of water quality protection in the United States. The statute employs a variety of regulatory and non-regulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. These tools are employed to achieve the broader goal of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters so that they can support "the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water."

The Clean Water Act regulates discharges from "non-point source" and traditional "point source" facilities, such as municipal sewage plants and industrial facilities. Section 402 of the Act creates the NPDES regulatory program that makes it illegal to discharge pollutants from a point source to the waters of the United States without a permit. Point sources must obtain a discharge permit from the proper authority (usually a state, sometimes the U.S. Environmental Protection Agency, a tribe, or a territory). NPDES permits cover industrial and municipal discharges, discharges from storm sewer systems in larger cities, storm water associated with numerous kinds of industrial activity, runoff from construction sites disturbing more than one acre, mining operations, and animal feedlots and aquaculture facilities above certain thresholds.

Permit requirements for treatment are expressed as end-of-pipe conditions. This set of numbers reflects levels of three key parameters: (1) biochemical oxygen demand, (2) total suspended solids, and (3) pH acid/base balance. These levels can be achieved by well-operated sewage plants employing "secondary"

treatment. Primary treatment involves screening and settling, while secondary treatment uses biological treatment in the form of "activated sludge."

All so-called "indirect" dischargers are not required to obtain NPDES permits. An indirect discharger is one that sends its wastewater into a city sewer system, so it eventually goes to a sewage treatment plant. Although not regulated under NPDES, "indirect" discharges are covered by another Clean Water Act program called pretreatment. "Indirect" dischargers send their wastewater into a city sewer system, which carries it to the municipal sewage treatment plant, through which it passes before entering surface water.

PORTER-COLOGNE WATER QUALITY CONTROL ACT

The Porter-Cologne Water Quality Control Act is California's statutory authority for the protection of water quality. Under the Porter-Cologne Act, the State is required to adopt policies, plans, and objectives that will protect the State's waters for the use by and enjoyment of Californians. In California, the SWRCB has the authority and responsibility for establishing policy related to the State's water quality. Regional authority is delegated by the SWRCB to a RWQCB. The Porter-Cologne Act authorizes the SWRCB and RWQCB to issue NPDES permits.

ASSEMBLY BILL 885 (AB 885)

AB 885 was passed by the California Legislature in September 2000, and mandates the establishment of statewide standards to regulate the placement and use of on-site wastewater treatment systems (OWTS). The SWRCB has been charged with developing this critical set of uniform statewide standards for on-site sewage disposal systems that are required to be incorporated into all RWQCB Basin Plans in the near future. For the past several years the SWRCB has been in the process of developing statewide regulations for on-site wastewater treatment systems per AB 885. The key aspects of the proposed regulations include:

Site Evaluation Practices. The proposed regulations will mandate more thorough and consistent soil and site evaluation practices for all new and repair/replacement OWTS for verification of soil depth and groundwater levels. Current practices focus primarily on attaining minimum horizontal setbacks and determination of groundwater separation, not on determination of soil texture, structure or depth. Proposed definitions for soil (especially rock content and weathered bedrock) will require more thorough and extensive soil profile evaluations and stricter interpretations of suitability than under current practices.

Operation and Maintenance (O&M) Manuals. The proposed AB 885 regulations require the preparation of an O&M manual for all new and repair/replacement OWTS. This will require that the County adopt regulations or policies mandating the preparation and submission of an O&M manual for all new and repair/replacement OWTS. The County will also have responsibilities for reviewing and maintaining official copies of these documents.

Septic Tank Risers and Effluent Filters. Access risers to "near" grade and the use of effluent filters will be required under the proposed regulations. These requirements will apply to new standard systems as well as supplemental treatment systems, and for any tank replacements.

Supplemental Treatment Systems. The proposed regulations have minimum vertical separation requirements that will lead to increased use of supplemental treatment systems. Minimum vertical separation is the depth of continuous unsaturated, undisturbed earthen material between the bottom of the dispersal system and the top of the seasonal high groundwater level, impermeable strata, or bedrock.

Dispersal System Siting and Design Criteria. The proposed dispersal system siting and design requirements are generally consistent with and/or less restrictive than the current RWQCB Basin Plan. Many of the

requirements are structured to allow for more latitude in the use of supplemental treatment to overcome soil depth/suitability constraints for OWTS. Based on the soil definitions in the proposed regulations, there is likely to be an increased need to specify supplemental treatment systems and shallow dispersal designs (including mounds) for sites that may have been permitted for conventional trench designs under current practices.

Groundwater Quality and Septic Tank Monitoring. The proposed AB 885 regulations will mandate new groundwater sampling and septic tank inspections requirements for new and existing OWTS. The proposed regulations do not explicitly require the County to enforce this requirement or to collect and maintain any of the results from sampling that is performed. However, as the local agency responsible for implementing the regulations, at a minimum, the County would be obligated to provide some level of oversight for these activities, the details of which would likely have to be specified in the RWQCB MOU or the Conditional Waiver from the SWRCB.

Record Keeping. The proposed requirements specify only that system owners maintain copies of the Record Plan and the O&M Manual for the OWTS. The County, as the implementing authority will also be required to collect, review and maintain records of these same items.

COMMUNITY SYSTEMS REGULATION

The RWQCB has direct oversight and permitting responsibility for large-flow systems of greater than 2,500 GPD and community systems, unless the RWQCB chooses to waive that authority and delegate their oversight on a case-by-case basis.

INDIVIDUAL ON-SITE SEWAGE DISPOSAL SYSTEM REGULATIONS

Regulation of individual on-site sewage disposal systems occurs at a variety of levels, including by the SWRCB, through the Central Valley RWQCB, and locally the Atwater Municipal Code, and by the County Environmental Health Department.

Counties typically regulate onsite septic systems via their Environmental Health and/or Building or Planning Departments. In Merced County, septic systems are regulated by the Merced County Department of Environmental Health. Local septic system ordinances often incorporate portions of the Uniform Plumbing Code and other specific requirements.

Stormwater and Drainage

CLEAN WATER ACT

The CWA, initially passed in 1972, regulates the discharge of pollutants into watersheds throughout the nation. The SWRCB is responsible for implementing the CWA and does so through issuing NPDES permits to cities and counties through regional water quality control boards. Federal regulations allow two permitting options for stormwater discharges (individual permits and general permits). The SWRCB elected to adopt a statewide general permit (Water Quality Order No. 2013-0001-DWQ) for small MS4s covered under the CWA to efficiently regulate numerous stormwater discharges under a single permit. Permittees must comply with all requirements as specified under the general permit.

Permittees must meet the requirements in Provision D of the General Permit, which require the development and implementation of a Storm Water Management Plan with the goal of reducing the discharge of pollutants to the maximum extent practicable. The Storm Water Management Plan must include the following six minimum control measures:

1) Public Education and Outreach on Storm Water Impacts
2) Public Involvement/Participation
3) Illicit Discharge Detection and Elimination
4) Construction Site Storm Water Runoff Control
5) Post-Construction Storm Water Management in New Development
6) Redevelopment and Pollution Prevention/Good Housekeeping for Municipal Operations

The CWA, and its implementing regulations, requires that certain industrial facilities, construction sites, and MS4 obtain coverage for their stormwater discharges under an NPDES permit, develop a Stormwater Pollution Prevention Plan (SWPPP) or Stormwater Management Plan (SWMP) and put measures in place to prevent discharges of pollutants in stormwater runoff.

303(d) Impaired Water Bodies: Section 303(d) of the federal CWA requires States to identify waters that do not meet water quality standards or objectives and thus, are considered "impaired." Once listed, Section 303(d) mandates prioritization and development of a TMDL. The TMDL is a tool that establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby the basis for the States to establish water quality-based controls. The purpose of TMDLs is to ensure that beneficial uses are restored and that water quality objectives are achieved.

National Flood Insurance Program

The NFIP, born out of the National Flood Insurance Act of 1968, is a voluntary program that aims to reduce future flood damage by adopting and enforcing floodplain management programs. The NFIP is comprised of three components: FIRMs; flood insurance; and floodplain management. The FEMA FIRMs identify flood plain hazard areas prone to flooding during major storm events. The FIRMs are used by insurance companies to set flood insurance rates and by local municipalities for implementing flood-control ordinances which govern new development. FEMA operates the NFIP.

Participants in the NFIP must satisfy certain mandated floodplain management criteria. The National Flood Insurance Act of 1968 has adopted as a desired level of protection, an expectation that developments should be protected from floodwater damage of the Intermediate Regional Flood (IRF). The IRF is defined as a flood that has an average frequency of occurrence on the order of once in 100 years, although such a flood may occur in any given year. Communities are occasionally audited by the California Department of Water Resources to insure the proper implementation of FEMA floodplain management regulations. The County and all of the incorporated cities within the county are participants in the NFIP.

State

Water Supplies

California Department of Health Services

The Department of Health Services, Division of Drinking Water and Environmental Management, oversees the Drinking Water Program. The Drinking Water Program regulates public water systems and certifies drinking water treatment and distribution operators. It provides support for small water systems and for improving their technical, managerial, and financial capacity. It provides subsidized funding for water system improvements under the State Revolving Fund ("SRF") and Proposition 50 programs. The Drinking Water Program also oversees water recycling projects, permits water treatment devices, supports and promotes water system security, and oversees the Drinking Water Treatment and Research Fund for MTBE and other oxygenates.

Department of Water Resources

The Department of Water Resources' (DWR) major responsibilities include preparing and updating the California Water Plan to guide development and management of the State's water resources, planning, designing, constructing, operating, and maintaining the State Water Resources Development System, regulating dams, providing flood protection, assisting in emergency management to safeguard life and property, educating the public, and serving local water needs by providing technical assistance. In addition, the DWR cooperates with local agencies on water resources investigations; supports watershed and river restoration programs; encourages water conservation; explores conjunctive use of ground and surface water; facilitates voluntary water transfers; and, when needed, operates a State drought water bank.

California Code of Regulations

California Code of Regulations (CCR) Title 22, Chapter 15, Article 20 requires all public water systems to prepare a Consumer Confidence Report for distribution to its customers and to the Department of Health Services. The Consumer Confidence Report provides information regarding the quality of potable water provided by the water system. It includes information on the sources of the water, any detected contaminants in the water, the maximum contaminants levels set by regulation, violations and actions taken to correct them, and opportunities for public participation in decisions that may affect the quality of the water provided.

Urban Water Management Planning Act

The Urban Water Management Planning Act has as its objectives the management of urban water demands and the efficient use of urban water. Under its provisions, every urban water supplier is required to prepare and adopt an urban water management plan. An "urban water supplier" is a public or private water supplier that provides water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. The plan must identify and quantify the existing and planned sources of water available to the supplier, quantify the projected water use for a period of 20 years, and describe the supplier's water demand management measures. The urban water supplier should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years. The Department of Water Resources must receive a copy of an adopted urban water management plan. Urban Water Management Plans within the Planning Area include the California.

Sustainable Groundwater Management Act

The SGMA directs DWR to identify groundwater basins and subbasins that are in conditions of critical overdraft. This designation is determined based upon the presence of "undesirable impacts" such as seawater intrusion, land subsidence, groundwater depletion, and chronic lowering of groundwater levels.

Water Conservation Projects Act

California's requirements for water conservation are codified in the Water Conservation Projects Act of 1985 (California Water Code Sections 11950 – 11954). Consistent with California Water Code Sections 11950 – 11954, the District has implemented various water conservation efforts, as well as WSCP that identifies actions that can be taken to respond to catastrophic interruption of water supply.

California Water Code

Water Code Section 10910(f) states:

10910(f) If a water supply for a proposed project includes groundwater, the following additional information shall be included in the water supply assessment.

10910(f)(1) A review of any information contained in the urban water management plan relevant to the identified water supply for the proposed project.

10910(f)(2) A description of any groundwater basin or basins from which the proposed project will be supplied. For those basins for which a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), has the legal right to pump under the order or decree. For basins that have not been adjudicated, information as to whether the department has identified the basin or basins as overdrafted or has projected that the basin will become overdrafted if present management conditions continue, in the most current bulletin of the department that characterizes the condition of the groundwater basin, and a detailed description by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), of the efforts being undertaken in the basin or basins to eliminate the long term overdraft condition.

10910(f)(3) A detailed description and analysis of the amount and location of groundwater pumped by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), for the past five years from any groundwater basin from which the proposed project will be supplied. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historical use records.

A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), from any basin from which the proposed project will be supplied. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historical use records.

10910(f)(4) An analysis of the sufficiency of the groundwater from the basin or basins from which the proposed project will be supplied to meet the projected water demand associated with the proposed project.

A water assessment shall not be required to include the information required by this paragraph if the public water system determines, as part of the review required by paragraph (1), that the sufficiency of groundwater necessary to meet the initial and projected water demand associated with the project was addressed in the description and analysis required by paragraph (4) of subdivision (b) of Section 10631.

SENATE BILL 610

Senate Bill (SB) 610 was adopted in 2001 and reflected a growing awareness of the need to incorporate water supply and demand analysis at the earliest possible stage in the land use planning process. SB 610 amended the statutes of the Urban Water Management Planning Act, as well as the California Water Code Section 10910, et seq. The foundation document for compliance with SB 610 is the UWMP, which provides an important source of information for cities and counties as they update their general plans. Likewise, planning documents such as general plans and specific plans form the basis for the demand information contained in an UWMP, as well as a WSA required under SB 610.

SENATE BILL (SB) 221

SB 221 adds Government Code Section 66455.3, requiring that the local water agency be sent a copy of any proposed residential subdivision of more than 500 dwelling units within five days of the subdivision application being accepted as complete for processing by the city or county. It also adds Government Code Section 66473.7, establishing detailed requirements for establishing whether a "sufficient water supply" exists to support any proposed residential subdivisions of more than 500 dwellings, including any such subdivision involving a development agreement. When approving a qualifying subdivision tentative map, the city or county must include a condition requiring availability of a sufficient water supply. The applicable public water system must provide proof of availability. If there is no public water system, the city or county must undertake the analysis described in Government Code Section 66473.7. The analysis must include consideration of effects on other users of water and groundwater.

ASSEMBLY BILL 901

AB 901 requires an urban water management plan to include information, to the extent practicable, relating to the quality of existing sources of water available to an urban water supplier over given time periods. AB 901 also requires information on the manner in which water quality affects water management strategies and supply reliability. The bill requires a plan to describe plans to supplement a water source that may not be available at a consistent level of use, to the extent practicable. Additional findings and declarations relating to water quality are required.

Wastewater

CLEAN WATER ACT / NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMITS

The Clean Water Act is the cornerstone of water quality protection in the United States. The statute employs a variety of regulatory and non-regulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. These tools are employed to achieve the broader goal of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters so that they can support "the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water."

The Clean Water Act regulates discharges from "non-point source" and traditional "point source" facilities, such as municipal sewage plants and industrial facilities. Section 402 of the Act creates the NPDES regulatory program that makes it illegal to discharge pollutants from a point source to the waters of the United States without a permit. Point sources must obtain a discharge permit from the proper authority (usually a state, sometimes the U.S. Environmental Protection Agency, a tribe, or a territory). NPDES permits cover industrial and municipal discharges, discharges from storm sewer systems in larger cities, storm water associated with numerous kinds of industrial activity, runoff from construction sites disturbing more than one acre, mining operations, and animal feedlots and aquaculture facilities above certain thresholds.

Permit requirements for treatment are expressed as end-of-pipe conditions. This set of numbers reflects levels of three key parameters: (1) biochemical oxygen demand, (2) total suspended solids, and (3) pH acid/base balance. These levels can be achieved by well-operated sewage plants employing "secondary" treatment. Primary treatment involves screening and settling, while secondary treatment uses biological treatment in the form of "activated sludge."

All so-called "indirect" dischargers are not required to obtain NPDES permits. An indirect discharger is one that sends its wastewater into a city sewer system, so it eventually goes to a sewage treatment plant.

Although not regulated under NPDES, "indirect" discharges are covered by another Clean Water Act program called pretreatment. "Indirect" dischargers send their wastewater into a city sewer system, which carries it to the municipal sewage treatment plant, through which it passes before entering surface water.

Stormwater and Drainage

SUSTAINABLE GROUNDWATER MANAGEMENT ACT

A three-bill legislative package, composed of AB 1739, SB 1168, and SB 1319, collectively known as the Sustainable Groundwater Management Act (SGMA) was signed into state law in 2014. SGMA requires local governments and water agencies of high and medium priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, basins should reach sustainability within 20 years of implementing their sustainability plans.

STATE WATER RESOURCES CONTROL BOARD (STATE WATER BOARD) STORM WATER STRATEGY

The Storm Water Strategy is founded on the results of the Storm Water Strategic Initiative, which served to direct the State Water Board's role in storm water resources management and evolve the Storm Water Program by a) developing guiding principles to serve as the foundation of the storm water program, b) identifying issues that support or inhibit the program from aligning with the guiding principles, and c) proposing and prioritizing projects that the Water Boards could implement to address those issues. The State Water Board staff created a strategy-based document called the Strategy to Optimize Management of Storm Water (STORMS). STORMS includes a program vision, missions, goals, objectives, projects, timelines, and consideration of the most effective integration of project outcomes into the Water Board's Storm Water Program.

CALIFORNIA WATER CODE

The Federal CWA places the primary responsibility for the control of surface water pollution and for planning the development and use of water resources with the states, although this does establish certain guidelines for the states to follow in developing their programs and allows the Environmental Protection Agency to withdraw control from states with inadequate implementation mechanisms.

California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Division 7 of the California Water Code) (Porter-Cologne Act). The Porter-Cologne Act grants the SWRCB and each of the RWQCBs power to protect water quality, and is the primary vehicle for implementation of California's responsibilities under the Federal CWA. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

Each RWQCB must formulate and adopt a water quality control plan (Basin Plan) for its region. The regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State water policy. The Porter-Cologne Act also provides that a RWQCB may include within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste.

Solid Waste

California Integrated Waste Management Act (AB 939 and SB 1322)

The California Integrated Waste Management Act of 1989 (AB 939 and SB 1322) requires every city and county in the state to prepare a Source Reduction and Recycling Element to its Solid Waste Management Plan that identifies how each jurisdiction will meet the mandatory state waste diversion goals of 25% by 1995 and 50% by 2000. The purpose of AB 939 and SB 1322 is to "reduce, recycle, and re-use solid waste generated in the state to the maximum extent feasible." The term "integrated waste management" refers to the use of a variety of waste management practices to safely and effectively handle the municipal solid waste stream with the least adverse impact on human health and the environment. The Act has established a waste management hierarchy, as follows: Source Reduction; Recycling; Composting; Transformation; and Disposal.

California Integrated Waste Management Board Model Ordinance

Subsequent to the Integrated Waste Management Act, additional legislation was passed to assist local jurisdictions in accomplishing the goals of AB 939. The California Solid Waste Re-use and Recycling Access Act of 1991 (§42900-42911 of the Public Resources Code) directs the California Integrated Waste Management Board (CIWMB) to draft a "model ordinance" relating to adequate areas for collecting and loading recyclable materials in development projects. The model ordinance requires that any new development project, for which an application is submitted on or after September 1, 1994, include "adequate, accessible, and convenient areas for collecting and loading recyclable materials." For subdivisions of single family detached homes, recycling areas are required to serve only the needs of the homes within that subdivision.

California's Mandatory Commercial Recycling Law (AB 341)

Assembly Bill (AB) 341 directed CalRecycle to develop and adopt regulations for mandatory commercial recycling. CalRecycle initiated formal rulemaking with a 45-day comment period beginning Oct. 28, 2011. The final regulation was approved by the Office of Administrative Law on May 7, 2012. The purpose of AB 341 is to reduce GHG emissions by diverting commercial solid waste to recycling efforts and to expand the opportunity for additional recycling services and recycling manufacturing facilities in California.

Beginning on July 1, 2012, businesses have been required to recycle, and each jurisdiction has implemented programs that include education, outreach, and monitoring. Jurisdictions were required to start reporting on their 2012 Electronic Annual Report (due Aug. 1, 2013) on their initial education, outreach, and monitoring efforts, and, if applicable, on any enforcement activities or exemptions implemented by the jurisdiction.

In addition to Mandatory Commercial Recycling, AB 341 sets a *statewide* goal for 75 percent disposal reduction by the year 2020. This is not written as a 75 percent diversion mandate for each jurisdiction. The 50 percent disposal reduction mandate still stands for cities, counties, and State agencies (including community colleges) under AB 939. CalRecycle continues to evaluate program implementation as it has in the past through the Annual Report review process for entities subject to either AB 939.

AB 341 (75 Percent Solid Waste Diversion)

AB 341 requires CalRecycle to issue a report to the Legislature that includes strategies and recommendations that would enable the state to divert 75 percent of the solid waste generated in the

state from disposal by January 1, 2020, requires businesses that meet specified thresholds in the bill to arrange for recycling services by January 1, 2012, and also streamlines various regulatory processes.

SB 1374 (Construction and Demolition Waste Materials Diversion)

Senate Bill 1374 (SB 1374), Construction and Demolition Waste Materials Diversion Requirements, requires that jurisdictions summarize their progress realized in diverting construction and demolition waste from the waste stream in their annual AB 939 reports. SB 1374 required the California Integrated Waste Management Board to adopt a model construction and demolition ordinance for voluntary implementation by local jurisdictions.

California Green Building Standards Code (CALGreen)

CALGreen requires the diversion of at least 50 percent of the construction waste generated during most new construction projects (CALGreen Sections 4.408 and 5.408) and some additions and alterations to nonresidential building projects.

6.0 Hazards and Safety

This section describes the federal, state, and local regulations pertaining to land use and socioeconomics.

Federal

Comprehensive Environmental Response, Compensation & Liability Act (CERCLA)

This act, commonly associated with the term "Superfund," established:

- Regulations concerning closed and abandoned hazardous waste sites
- Liability of parties responsible for any releases of hazardous waste at these sites
- Funding for cleanup when responsible parties cannot be identified

Resource Conservation and Recovery Act (RCRA)

This act established EPA's "cradle to grave" control (generation, transportation, treatment, storage, and disposal) over hazardous materials and wastes. In California, the Department of Toxic Substances Control (DTSC) has RCRA authorization.

Clean Air Act

In according with the Clean Air Act, the EPA has established National Emissions Standards for Hazardous Air Pollutants. Exceeding the emissions standard for a given air pollutant may cause an increase in illnesses and/or fatalities.

Clean Water Act (CWA)

The CWA, which amended the WPCA of 1972, sets forth the Section 404 program to regulate the discharge of dredged and fill material into Waters of the U.S. and the Section 402 National Pollutant Discharge Elimination System (NPDES) to regulate the discharge of pollutants into Waters of the U.S. The Section 401 Water Quality Certification program establishes a framework of water quality protection for activities requiring a variety of Federal permits and approvals (including CWA Section 404, CWA Section 402, FERC Hydropower and Section 10 Rivers and Harbors).

Aviation Act of 1958

The Federal Aviation Act resulted in the creation of the Federal Aviation Administration (FAA). The FAA was charged with the creation and maintenance of a National Airspace System.

Federal Aviation Regulations (CFR, Title 14)

The Federal Aviation Regulations (FAR) establish regulations related to aircraft, aeronautics, and inspections and permitting.

FY 2001 Appropriations Act

Title IV of the Appropriations Act required the identification of "Urban Wildland Interface Communities in the Vicinity of Federal Lands that are at High Risk from Wildfire" by the U.S. Departments of the Interior and Agriculture.

Federal Emergency Management Agency (FEMA)

FEMA operates the National Flood Insurance Program (NFIP). Participants in the NFIP must satisfy certain mandated floodplain management criteria. The National Flood Insurance Act of 1968 has adopted as a desired level of protection, an expectation that developments should be protected from floodwater damage of the Intermediate Regional Flood (IRF). The IRF is defined as a flood that has an average frequency of occurrence on the order of once in 100 years, although such a flood may occur in any given year. Communities are occasionally audited by the California Department of Water Resources to insure the proper implementation of FEMA floodplain management regulations.

Rivers and Harbors Appropriation Act of 1899

One of the country's first environmental laws, this Act established a regulatory program to address activities that could affect navigation in Waters of the United States.

Water Pollution Control Act of 1972

The Water Pollution Control Act (WPCA) established a program to regulate activities that result in the discharge of pollutants to waters of the United States

Clean Water Act of 1977

The CWA, which amended the WPCA of 1972, sets forth the §404 program to regulate the discharge of dredged and fill material into Waters of the U.S. and the §402 National Pollutant Discharge Elimination System (NPDES) to regulate the discharge of pollutants into Waters of the U.S. The §401 Water Quality Certification program establishes a framework of water quality protection for activities requiring a variety of Federal permits and approvals (including CWA §404, CWA §402, FERC Hydropower and §10 Rivers and Harbors).

Flood Control Act

The Flood Control Act (1917) established survey and cost estimate requirements for flood hazards in the Sacramento Valley. All levees and structures constructed per the Act were to be maintained locally but controlled federally. All rights of way necessary for the construction of flood control infrastructure were to be provided to the Federal government at no cost.

Federal involvement in the construction of flood control infrastructure, primarily dams and levees, became more pronounced upon passage of the Flood Control Act of 1936.

National Flood Insurance Program (NFIP)

Per the National Flood Insurance Act of 1968, the NFIP has three fundamental purposes:

> *Better indemnify individuals for flood losses through insurance; Reduce future flood damages through State and community floodplain management regulations; and Reduce Federal expenditures for disaster assistance and flood control.*

While the Act provided for subsidized flood insurance for existing structures, the provision of flood insurance by FEMA became contingent on the adoption of floodplain regulations at the local level.

Flood Disaster Protection Act (FDPA)

The FDPA of 1973 was a response to the shortcomings of the NFIP, which were experienced during the flood season of 1972. The FDPA prohibited Federal assistance, including acquisition, construction, and financial assistance, within delineated floodplains in non-participating NFIP communities. Furthermore, all Federal agencies and/or federally insured and federally regulated lenders must require flood insurance for all acquisitions or developments in designated Special Flood Hazard Areas (SFHAs) in communities that participate in the NFIP.

Improvements, construction, and developments within SFHAs are generally subject to the following standards:

- All new construction and substantial improvements of residential buildings must have the lowest floor (including basement) elevated to or above the base flood elevation (BFE).
- All new construction and substantial improvements of non-residential buildings must either have the lowest floor (including basement) elevated to or above the BFE or dry-floodproofed to the BFE.
- Buildings can be elevated to or above the BFE using fill, or they can be elevated on extended foundation walls or other enclosure walls, on piles, or on columns.
- Extended foundation or other enclosure walls must be designed and constructed to withstand hydrostatic pressure and be constructed with flood-resistant materials and contain openings that will permit the automatic entry and exit of floodwaters. Any enclosed area below the BFE can only be used for the parking of vehicles, building access, or storage.

STATE

Assembly Bill 162

This bill requires a general plan's land use element to identify and annually review those areas covered by the general plan that are subject to flooding as identified by flood plain mapping prepared by the Federal Emergency Management Agency (FEMA) or the Department of Water Resources (DWR). The bill also requires, upon the next revision of the housing element, on or after January 1, 2009, the conservation element of the general plan to identify rivers, creeks, streams, flood corridors, riparian habitat, and land that may accommodate floodwater for purposes of groundwater recharge and stormwater management. By imposing new duties on local public officials, the bill creates a State-mandated local program.

This bill also requires, upon the next revision of the housing element, on or after January 1, 2009, the safety element to identify, among other things, information regarding flood hazards and to establish a set of comprehensive goals, policies, and objectives, based on specified information for the protection of the community from, among other things, the unreasonable risks of flooding.

Assembly Bill 70

This bill provides that a city or county may be required to contribute its fair and reasonable share of the property damage caused by a flood to the extent that it has increased the State's exposure to liability for property damage by unreasonably approving, as defined, new development in a previously undeveloped area, as defined, that is protected by a State flood control project, unless the city or county meets specified requirements.

Aeronautics Act (Public Utilities Code §21001)

The Caltrans Division of Aeronautics bases the majority of its aviation policies on the Aeronautics Act. Policies include permits and annual inspections for public airports and hospital heliports and recommendations for schools proposed within two miles of airport runways.

Airport Land Use Commission Law (Public Utilities Code §21670 et seq.)

The law, passed in 1967, authorized the creation of Airport Land Use Commissions (ALUC) in California. Per the Public Utilities Code, the purpose of an ALUC is to protect *public health, safety, and welfare by encouraging orderly expansion of airports and the adoption of land use measures that minimizes exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses* (§21670). Furthermore, each ALUC must prepare an Airport Land Use Compatibility Plan (ALUCP). Each ALUCP, which must be based on a twenty-year planning horizon, should focus on broadly defined noise and safety impacts.

California Health & Safety Code

Division 20 of the Health and Safety Code establishes Department of Toxic Substances Control (DTSC) authority and sets forth hazardous waste and underground storage tank regulations. In addition, the division creates a State superfund framework that mirrors the Federal program.

Division 26 of the Health and Safety Code establishes California Air Resources Board (CARB) authority. The division designates CARB as the air pollution control agency per Federal regulations and charges the Board with meeting Clean Air Act requirements.

CA Government Code

The Senate and Assembly bills identified above have resulted in various changes and additions to the California Government Code. Key sections related to the above referenced bills are identified below.

SECTION 65302

Revised safety elements must include maps of any 200-year flood plains and levee protection zones within the Planning Area.

SECTION 65584.04

Any land having inadequate flood protection, as determined by FEMA or DWR, must be excluded from land identified as suitable for urban development within the planning area.

SECTION 8589.4

California Government Code §8589.4, commonly referred to as the Potential Flooding-Dam Inundation Act, requires owners of dams to prepare maps showing potential inundation areas in the event of dam failure. A dam failure inundation zone is different from a flood hazard zone under the National Flood Insurance

Program (NFIP). NFIP flood zones are areas along streams or coasts where storm flooding is possible from a "100-year flood." In contrast, a dam failure inundation zone is the area downstream from a dam that could be flooded in the event of dam failure due to an earthquake or other catastrophe. Dam failure inundation maps are reviewed and approved by the California Office of Emergency Services (OES). Sellers of real estate within inundation zones are required to disclose this information to prospective buyers.

SECTION 8589.5

Section 8589.5 of the California Government Code requires local jurisdictions to adopt emergency procedures for the evacuation of populated inundation areas identified by dam owners. The County MJHMP includes emergency procedures related to dam failure.

SECTION 8609

The State Central Valley Flood Protection Board, under Section 8609 of the Water Code, has the authority to designate floodways in the Central Valley. California Code of Regulations, Title 23, Waters, provide further details of the Board's regulatory authority. Specifically, Title 23, Article 5, Section 107 regulates uses in Designated Floodways.

Food and Agriculture Code

Division 6 of the California Food and Agricultural Code (FAC) establishes pesticide application regulations. The division establishes training standards for pilots conducting aerial applications as well as permitting and certification requirements.

Water Code

Division 7 of the California Water Code, commonly referred to as the Porter-Cologne Water Quality Control Act, created the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCB). In addition, water quality responsibilities are established for the SWRCB and RWQCBs.

California Code of Regulations

Title 3 of the CCR pertains to the application of pesticides and related chemicals. Parties applying regulated substances must continuously evaluate application equipment, the weather, the treated lands and all surrounding properties. Title 3 prohibits any application that would:

- Contaminate persons not involved in the application
- Damage non-target crops or animals or any other public or private property
- Contaminate public or private property or create health hazards on said property

Title 8 of the CCR establishes California Occupational Safety and Health Administration (Cal OSHA) requirements related to public and worker protection. Topics addressed in Title 8 include materials exposure limits, equipment requirements, protective clothing, hazardous materials, and accident prevention. Construction safety and exposure standards for lead and asbestos are set forth in Title 8.

Title 14 of the CCR establishes minimum standards for solid waste handling and disposal.

Title 17 of the CCR establishes regulations relating to the use and disturbance of materials containing naturally occurring asbestos.

Title 22 of the CCR sets forth definitions of hazardous waste and special waste. The section also identifies hazardous waste criteria and establishes regulations pertaining to the storage, transport, and disposal of hazardous waste.

Title 26 of the CCR is a medley of State regulations pertaining to hazardous materials and waste that are presented in other regulatory sections. Title 26 mandates specific management criteria related to hazardous materials identification, packaging, and disposal. In addition, Title 26 establishes requirements for hazardous materials transport, containment, treatment, and disposal. Finally, staff training standards are set forth in Title 26.

Title 27 of the CCR sets forth a variety of regulations relating to the construction, operation and maintenance of the State's landfills. The title establishes a landfill classification system and categories of waste. Each class of landfill is constructed to contain specific types of waste (household, inert, special, and hazardous).

California Government Code Section 65302

This section, which establishes standards for developing and updating General Plans, includes fire hazard assessment and Safety Element content requirements.

Assembly Bill 337

Per AB 337, local fire prevention authorities and the California Department of Forestry and Fire Protection (CalFire) are required to identify "Very High Fire Hazard Severity Zones (VHFHSZ) in Local Responsibility Areas (LRA). Standards related to brush clearance and the use of fire resistant materials in fire hazard severity zones are also established.

California Public Resources Code

The State's Fire Safe Regulations are set forth in Public Resources Code §4290, which include the establishment of State Responsibility Areas (SRA).

Public Resources Code §4291 sets forth defensible space requirements, which are applicable to anyone that …*owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable material* (§4291(a)).

Uniform Fire Code

The Uniform Fire Code (UFC) establishes standards related to the design, construction, and maintenance of buildings. The standards set forth in the UFC range from designing for access by firefighters and equipment and minimum requirements for automatic sprinklers and fire hydrants to the appropriate storage and use of combustible materials.

CA Code of Regulations Title 8

In accordance with CCR, Title 8, §1270 and §6773 (*Fire Prevention* and *Fire Protection and Fire Equipment*), the Occupational Safety and Health Administration (Cal OSHA) establishes fire suppression service standards. The standards range from fire hose size requirements to the design of emergency access roads.

CA Code of Regulations Title 14 (Natural Resources)

Division 1.5 (Department of Forestry and Fire Protection), Title 14 of the CCR establishes a variety of wildfire preparedness, prevention, and response regulations.

CA Code of Regulations Title 19 (Public Safety)

Title 19 of the CCR establishes a variety of emergency fire response, fire prevention, and construction and construction materials standards.

CA Code of Regulations Title 24 (CA Building Standards Code)

The California Fire Code is set forth in Part 9 of the Building Standards Code. The CA Fire Code, which is pre-assembled with the International Fire Code by the ICC, contains fire-safety building standards referenced in other parts of Title 24.

CA Health and Safety Code and UBC Section 13000 et seq.

State fire regulations are set forth in §13000 *et seq*. of the California Health and Safety Code, which is divided into "Fires and Fire Protection" and "Buildings Used by the Public." The regulations provide for the enforcement of the UBC and mandate the abatement of fire hazards.

The code establishes broadly applicable regulations, such as standards for buildings and fire protection devices, in addition to regulations for specific land uses, such as childcare facilities and high-rise structures.

CA Health and Safety Code Division 11 (Explosives)

Division 11 of the Health and Safety Code establishes regulations related to a variety of explosive substances and devices, including high explosives and fireworks. Section 12000 et seq. establishes regulations related to explosives and explosive devices, including permitting, handling, storage, and transport (in quantities greater than 1,000 pounds).

CA Health and Safety Code Division 12.5 (Buildings Used by the Public)

This Division establishes requirements for buildings used by the public, including essential services buildings, earthquake hazard mitigation technologies, school buildings, and postsecondary buildings.

CA Vehicle Code §31600 (Transportation of Explosives)

Establishes requirements related to the transportation of explosives in quantities greater than 1,000 pounds, including licensing and route identification.

7.0 COMMUNITY NOISE

This section describes the federal, state, and local regulations pertaining to land use and socioeconomics.

FEDERAL

Federal Highway Administration

The FHWA has developed noise abatement criteria that are used for federally funded roadway projects or projects that require federal review. These criteria are discussed in detail in Title 23, Part 772 of the Federal Code of Regulations (23 CFR 772).

Department of Housing and Urban Development

The Department of Housing and Urban Development (HUD) noise standards are established at 24 Code of Federal Regulations Part 51, Subpart B. These requirements contain standards for exterior noise levels along with policies for approving HUD-supported or assisted housing projects in high noise areas. In general, these requirements established the following three zones:

- 65 dBA L_{DN} or less - an acceptable zone where all projects could be approved.
- Exceeding 65 dBA L_{DN} but not exceeding 75 dBA L_{DN} - a normally unacceptable zone where mitigation measures would be required and each project would have to be individually evaluated for approval or denial. These measures must provide 5 dBA of attenuation above the attenuation provided by standard construction required in a 65 to 70 dBA L_{DN} area and 10 dBA of attenuation in a 70 to 75 dBA L_{DN} area.
- Exceeding 75 dBA L_{DN} - an unacceptable zone in which projects would not, as a rule, be approved.

HUD's regulations do not include interior noise standards. Rather, a goal of 45 dBA L_{DN} is set forth and attenuation requirements are geared towards achieving that goal. HUD assumes that using standard construction techniques, any building will provide sufficient attenuation so that if the exterior level is 65 dBA L_{DN} or less, the interior level will be 45 dBA L_{DN} or less. Thus, structural attenuation is assumed at 20 dBA. However, HUD regulations were promulgated solely for residential development requiring government funding and are not related to the operation of schools or churches. These regulations do not apply directly to the Specific Plan, but would apply if subsequent residential projects sought federal funding.

The federal government regulates occupational noise exposure common in the workplace through the Occupational Health and Safety Administration (OSHA) under the Environmental Protection Agency. Noise exposure of this type is dependent on work conditions and is addressed through a facility's or construction contractor's health and safety plan. With the exception of construction workers involved in facility construction, occupational noise is irrelevant to this study and is not addressed further in this document.

STATE

California Department of Transportation

Caltrans has adopted policy and guidelines relating to traffic noise as outlined in its Traffic Noise Analysis Protocol (Caltrans, 2011). The noise abatement criteria specified in the protocol are the same as those specified by FHWA.

8.0 CONSERVATION

This section describes the federal, state, and local regulations pertaining to conservation.

FEDERAL

Biological Resources

FEDERAL ENDANGERED SPECIES ACT

The Federal Endangered Species Act, passed in 1973, defines an endangered species as any species or subspecies that is in danger of extinction throughout all or a significant portion of its range. A threatened species is defined as any species or subspecies that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Once a species is listed it is fully protected from a "take" unless a take permit is issued by the United States Fish and Wildlife Service. A take is defined as the harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct, including modification of its habitat (16 USC 1532, 50 CFR 17.3). Proposed endangered or threatened species are those species for which a proposed regulation, but not a final rule, has been published in the Federal Register.

MIGRATORY BIRD TREATY ACT

To kill, posses, or trade a migratory bird, bird part, nest, or egg is a violation of the Federal Migratory Bird Treaty Act (FMBTA: 16 U.S.C., §703, Supp. I, 1989), unless it is in accordance with the regulations that have been set forth by the Secretary of the Interior.

BALD AND GOLDEN EAGLE PROTECTION ACT

The Bald and Golden Eagle Protection Act (16 USC Section 668) protects these birds from direct take and prohibits the take or commerce of any part of these species. The USFWS administers the act, and reviews Federal agency actions that may affect these species.

CLEAN WATER ACT – SECTION 404

Section 404 of the Clean Water Act (CWA) regulates all discharges of dredged or fill material into waters of the U.S. Discharges of fill material includes the placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes and subaqueous utility lines [33 C.F.R. §323.2(f)].

Waters of the U.S. include lakes, rivers, streams, intermittent drainages, mudflats, sandflats, wetlands, sloughs, and wet meadows [33 C.F.R. §328.3(a)]. Wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" [33 C.F.R. §328.3(b)]. Waters of the U.S. exhibit a defined bed and bank and ordinary high water mark (OHWM). The OHWM is defined by the USACE as "that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" [33 C.F.R. §328.3(e)].

The USACE is the agency responsible for administering the permit process for activities that affect waters of the U.S. Executive Order 11990 is a Federal implementation policy, which is intended to result in no net loss of wetlands.

CLEAN WATER ACT – SECTION 401

Section 401 of the CWA (33 U.S.C. 1341) requires an applicant who is seeking a 404 permit to first obtain a water quality certification from the Regional Water Quality Control Board. To obtain the water quality certification, the Regional Water Quality Control Board must indicate that the proposed fill would be consistent with the standards set forth by the State.

DEPARTMENT OF TRANSPORTATION ACT - SECTION 4(F)

Section 4(f) has been part of Federal law since 1966. It was enacted as Section 4(f) of the Department of Transportation (DOT) Act of 1966 and set forth in Title 49 United States Code (U.S.C.), Section 1653(f). In January 1983, as part of an overall recodification of the DOT Act, Section 4(f) was amended and codified in 49 U.S.C. Section 303. This law established policy on Lands, Wildlife and Waterfowl Refuges, and Historic Sites as follows:

It is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites. The Secretary of Transportation shall cooperate and consult with the Secretaries of the Interior, Housing and Urban Development, and Agriculture, and with the States, in developing transportation plans and programs that include measures to maintain or enhance the natural beauty of lands crossed by transportation activities or facilities. The Secretary of Transportation may approve a transportation program or project (other than any project for a park road or parkway under section 204 of title 23) requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of a historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if: a) There is no prudent and feasible alternative to using that land; and b) The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

RIVERS AND HARBORS ACT OF 1899

The Rivers and Harbors Act prohibits the obstruction or alteration of any navigable water of the United States. The Act requires authorization from the USACE for any excavation or deposition of materials into these waters or for any work that could affect the course, location, condition, or capacity of rivers or harbors.

Air Quality and Greenhouse Gases

CLEAN AIR ACT

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: NAAQS for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The U.S. EPA (EPA) is responsible for administering the FCAA. The FCAA requires the EPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health, and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

The law recognizes the importance for each state to locally carry out the requirements of the FCAA, as special consideration of local industries, geography, housing patterns, etc. are needed to have full comprehension of the local pollution control problems. As a result, the EPA requires each state to develop a State Implementation Plan (SIP) that explains how each state will implement the FCAA within their jurisdiction. A SIP is a collection of rules and regulations that a particular state will implement to control air quality within their jurisdiction. CARB is the state agency that is responsible for preparing the California SIP.

ENERGY POLICY AND CONSERVATION ACT

The Energy Policy and Conservation Act of 1975 sought to ensure that all vehicles sold in the United States would meet certain fuel economy goals. Through this Act, Congress established the first fuel economy standards for on-road motor vehicles in the U.S. Pursuant to the Act, the National Highway Traffic and Safety Administration, which is part of the U.S. Department of Transportation (USDOT), is responsible for establishing additional vehicle standards and for revising existing standards.

Since 1990, the fuel economy standard for new passenger cars has been 27.5 mpg. Since 1996, the fuel economy standard for new light trucks (gross vehicle weight of 8,500 pounds or less) has been 20.7 mpg. Heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) are not currently subject to fuel economy standards. Compliance with federal fuel economy standards is determined on the basis of each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the U.S. The Corporate Average Fuel Economy (CAFE) program, which is administered by the EPA, was created to determine vehicle manufacturers' compliance with the fuel economy standards. The EPA calculates a CAFE value for each manufacturer based on city and highway fuel economy test results and vehicle sales. Based on the information generated under the CAFE program, the USDOT is authorized to assess penalties for noncompliance.

ENERGY POLICY ACT OF 1992 (EPACT)

The Energy Policy Act of 1992 (EPAct) was passed to reduce the country's dependence on foreign petroleum and improve air quality. EPAct includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. EPAct requires certain federal, state, and local government and private fleets to purchase a percentage of light duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are included in EPAct. Federal tax deductions will be allowed for businesses and individuals to cover the incremental cost of AFVs. States are also required by the act to consider a variety of incentive programs to help promote AFVs.

ENERGY POLICY ACT OF 2005

The Energy Policy Act of 2005 was signed into law on August 8, 2005. Generally, the act provides for renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for a clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

Intermodal Surface Transportation Efficiency Act (ISTEA)

ISTEA (49 U.S.C. § 101 et seq.) promoted the development of intermodal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that metropolitan planning organizations (MPOs), such as SACOG, were to address in developing transportation plans and programs, including some energy-related factors. To meet the ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values that were to guide transportation decisions in that metropolitan area. The planning process was then to address these policies. Another requirement was to consider the consistency of transportation planning with federal, state, and local energy goals. Through this requirement, energy consumption was expected to become a criterion, along with cost and other values that determine the best transportation solution.

Moving Ahead for Progress in the 21st Century (MAP-21)

MAP-21, the Moving Ahead for Progress in the 21st Century Act (P.L. 112-141), was signed into law on July 6, 2012. Funding surface transportation programs at over $105 billion for fiscal years (FY) 2013 and 2014, MAP-21 is the first long-term highway authorization enacted since 2005. MAP-21 creates a streamlined, performance-based, and multimodal program to address the many challenges facing the U.S. transportation system. These challenges include improving safety, maintaining infrastructure condition, reducing traffic congestion, improving efficiency of the system and freight movement, protecting the environment, and reducing delays in project delivery.

Federal Climate Change Policy

According to the EPA, "the United States government has established a comprehensive policy to address climate change" that includes slowing the growth of emissions; strengthening science, technology, and institutions; and enhancing international cooperation. To implement this policy, "the Federal government is using voluntary and incentive-based programs to reduce emissions and has established programs to promote climate technology and science." The EPA administers multiple programs that encourage voluntary GHG reductions, including "ENERGY STAR", "Climate Leaders", and Methane Voluntary Programs. However, as of this writing, there are no adopted federal plans, policies, regulations, or laws directly regulating GHG emissions.

Mandatory Greenhouse Gas Reporting Rule

On September 22, 2009, the U.S. EPA issued a final rule for mandatory reporting of GHGs from large GHG emissions sources in the United States. In general, this national reporting requirement was designed to provide the U.S. EPA with accurate and timely GHG emissions data from facilities that emit 25,000 metric tons or more of CO2 per year. This publicly available data allow the reporters to track their own emissions, compare them to similar facilities, and aid in identifying cost effective opportunities to reduce emissions in the future. Reporting is at the facility level, except that certain suppliers of fossil fuels and industrial greenhouse gases along with vehicle and engine manufacturers will report at the corporate level. An estimated 85% of the total U.S. GHG emissions, from approximately 10,000 facilities, are covered by this final rule.

Transportation Control Measures

One particular aspect of the SIP development process is the consideration of potential control measures as a part of making progress towards clean air goals. While most SIP control measures are aimed at reducing emissions from stationary sources, some are typically also created to address mobile or transportation

sources. These are known as transportation control measures (TCMs). TCM strategies are designed to reduce vehicle miles traveled and trips, or vehicle idling and associated air pollution. These goals are achieved by developing attractive and convenient alternatives to single-occupant vehicle use. Examples of TCMs include ridesharing programs, transportation infrastructure improvements such as adding bicycle and carpool lanes, and expansion of public transit.

Federal Hazardous Air Pollutant Program

Title III of the FCAA requires the EPA to promulgate national emissions standards for hazardous air pollutants (NESHAPs). The NESHAP may differ for major sources than for area sources of HAPs (major sources are defined as stationary sources with potential to emit more than 10 tons per year [TPY] of any HAP or more than 25 TPY of any combination of HAPs; all other sources are considered area sources). The emissions standards are to be promulgated in two phases. In the first phase (1992–2000), the EPA developed technology-based emission standards designed to produce the maximum emission reduction achievable. These standards are generally referred to as requiring maximum available control technology (MACT). These Federal rules are also commonly referred to as MACT standards, because they reflect the Maximum Achievable Control Technology. For area sources, the standards may be different, based on generally available control technology. In the second phase (2001–2008), the EPA is required to promulgate health risk–based emissions standards were deemed necessary to address risks remaining after implementation of the technology-based NESHAP standards. The FCAAA required the EPA to promulgate vehicle or fuel standards containing reasonable requirements that control toxic emissions, at a minimum to benzene and formaldehyde. Performance criteria were established to limit mobile-source emissions of toxics, including benzene, formaldehyde, and 1,3-butadiene. In addition, §219 required the use of reformulated gasoline in selected U.S. cities (those with the most severe ozone nonattainment conditions) to further reduce mobile-source emissions.

Geology, Soils and Seismicity

Earthquake Hazards Reduction Act

The Earthquake Hazards Reduction Act of 1977 (42 USC 7701, et seq.) requires the establishment and maintenance of an earthquake hazards reduction program by the Federal government.

Executive Order 12699

Signed in January 1990, this executive order of the President implements provisions of the Earthquake Hazards Reduction Act for "federal, federally assisted or federally regulated new building construction" and requires the development and implementation of seismic safety programs by Federal agencies.

International Building Code

The purpose of the International Building Code is to provide minimum standards to preserve the public peace, health, and safety by regulating the design, construction, quality of materials, certain equipment, location, grading, use, occupancy, and maintenance of all buildings and structures. The International Building Code standards address foundation design, shear wall strength, and other structurally related conditions.

Hydrology and Water Quality

CLEAN WATER ACT (CWA)

The CWA, initially passed in 1972, regulates the discharge of pollutants into watersheds throughout the nation. The SWRCB is responsible for implementing the CWA and does so through issuing NPDES permits to cities and counties through regional water quality control boards. Federal regulations allow two permitting options for stormwater discharges (individual permits and general permits). The SWRCB elected to adopt a statewide general permit (Water Quality Order No. 2013-0001-DWQ) for small MS4s covered under the CWA to efficiently regulate numerous stormwater discharges under a single permit. Permittees must comply with all requirements as specified under the general permit.

Permittees must meet the requirements in Provision D of the General Permit, which require the development and implementation of a Storm Water Management Plan with the goal of reducing the discharge of pollutants to the maximum extent practicable. The Storm Water Management Plan must include the following six minimum control measures:

1) Public Education and Outreach on Storm Water Impacts
2) Public Involvement/Participation
3) Illicit Discharge Detection and Elimination
4) Construction Site Storm Water Runoff Control
5) Post-Construction Storm Water Management in New Development
6) Redevelopment and Pollution Prevention/Good Housekeeping for Municipal Operations

The CWA, and its implementing regulations, requires that certain industrial facilities, construction sites, and MS4 obtain coverage for their stormwater discharges under an NPDES permit, develop a Stormwater Pollution Prevention Plan (SWPPP) or Stormwater Management Plan (SWMP) and put measures in place to prevent discharges of pollutants in stormwater runoff.

303(d) Impaired Water Bodies: Section 303(d) of the federal CWA requires States to identify waters that do not meet water quality standards or objectives and thus, are considered "impaired." Once listed, Section 303(d) mandates prioritization and development of a TMDL. The TMDL is a tool that establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby the basis for the States to establish water quality-based controls. The purpose of TMDLs is to ensure that beneficial uses are restored and that water quality objectives are achieved.

NATIONAL FLOOD INSURANCE PROGRAM

The NFIP, born out of the National Flood Insurance Act of 1968, is a voluntary program that aims to reduce future flood damage by adopting and enforcing floodplain management programs. The NFIP is comprised of three components: FIRMs; flood insurance; and floodplain management. The FEMA FIRMs identify flood plain hazard areas prone to flooding during major storm events. The FIRMs are used by insurance companies to set flood insurance rates and by local municipalities for implementing flood-control ordinances which govern new development. FEMA operates the NFIP.

Participants in the NFIP must satisfy certain mandated floodplain management criteria. The National Flood Insurance Act of 1968 has adopted as a desired level of protection, an expectation that developments should be protected from floodwater damage of the Intermediate Regional Flood (IRF). The IRF is defined as a flood that has an average frequency of occurrence on the order of once in 100 years, although such a flood may occur in any given year. Communities are occasionally audited by the California Department of

Water Resources to insure the proper implementation of FEMA floodplain management regulations. The County and all of the incorporated cities within the county are participants in the NFIP.

Agricultural Resources

FARMLAND PROTECTION POLICY ACT

The Farmland Protection Policy Act (FPPA) is intended to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses. It ensures that, to the extent practicable, federal programs are compatible with state and local units of government as well as private programs and policies to protect farmland. Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a federal agency or with assistance from a federal agency. For the purpose of the FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements does not have to be currently used for crop production. In fact, the land can be forest land, pastureland, cropland, or other land but does not include water bodies or land developed for urban land uses (i.e., residential, commercial, or industrial uses).

The Natural Resource Conservation Service (NRCS) administers the Farmland Protection Program. NRCS uses a land evaluation and site assessment (LESA) system to establish a farmland conversion impact rating score on proposed sites of federally funded and assisted projects. This score is used as an indicator for the project sponsor to consider alternative sites if the potential adverse impacts on the farmland exceed the recommended allowable level. The assessment is completed on form AD-1006, Farmland Conversion Impact Rating. The sponsoring agency completes the site assessment portion of the AD-1006, which assesses non-soil related criteria such as the potential for impact on the local agricultural economy if the land is converted to non-farm use and compatibility with existing agricultural use.

Cultural and Historic Resources

NATIONAL HISTORIC PRESERVATION ACT

Most regulations at the Federal level stem from the National Environmental Policy Act (NEPA) and historic preservation legislation such as the National Historic Preservation Act (NHPA) of 1966, as amended. NHPA established guidelines to "preserve important historic, cultural, and natural aspects of our national heritage, and to maintain, wherever possible, an environment that supports diversity and a variety of individual choice." The NHPA includes regulations specifically for Federal land-holding agencies, but also includes regulations (Section 106) which pertain to all projects that are funded, permitted, or approved by any Federal agency and which have the potential to affect cultural resources. All projects that are subject to NEPA are also subject to compliance with Section 106 of the NHPA and NEPA requirements concerning cultural resources. Provisions of NHPA establish a National Register of Historic Places (The National Register) maintained by the National Park Service, the Advisory Councils on Historic Preservation, State Historic Preservation Offices, and grants-in-aid programs.

AMERICAN INDIAN RELIGIOUS FREEDOM ACT AND NATIVE AMERICAN GRAVES AND REPATRIATION ACT

The American Indian Religious Freedom Act recognizes that Native American religious practices, sacred sites, and sacred objects have not been properly protected under other statutes. It establishes as national policy that traditional practices and beliefs, sites (including right of access), and the use of sacred objects shall be protected and preserved. Additionally, Native American remains are protected by the Native American Graves and Repatriation Act of 1990.

OTHER FEDERAL LEGISLATION

Historic preservation legislation was initiated by the Antiquities Act of 1966, which aimed to protect important historic and archaeological sites. It established a system of permits for conducting archaeological studies on Federal land, as well as setting penalties for noncompliance. This permit process controls the disturbance of archaeological sites on Federal land. New permits are currently issued under the Archeological Resources Protection Act (ARPA) of 1979. The purpose of ARPA is to enhance preservation and protection of archaeological resources on public and Native American lands. The Historic Sites Act of 1935 declared that it is national policy to "Preserve for public use historic sites, buildings, and objects of national significance."

STATE

Biological Resources

FISH AND GAME CODE §2050-2097 - CALIFORNIA ENDANGERED SPECIES ACT

The California Endangered Species Act (CESA) protects certain plant and animal species when they are of special ecological, educational, historical, recreational, aesthetic, economic, and scientific value to the people of the State. CESA established that it is State policy to conserve, protect, restore, and enhance endangered species and their habitats.

CESA was expanded upon the original Native Plant Protection Act and enhanced legal protection for plants. To be consistent with Federal regulations, CESA created the categories of "threatened" and "endangered" species. It converted all "rare" animals into the Act as threatened species, but did not do so for rare plants. Thus, there are three listing categories for plants in California: rare, threatened, and endangered. Under State law, plant and animal species may be formally designated by official listing by the California Fish and Game Commission.

FISH AND GAME CODE §1900-1913 CALIFORNIA NATIVE PLANT PROTECTION ACT

In 1977, the State Legislature passed the Native Plant Protection Act (NPPA) in recognition of rare and endangered plants of the State. The intent of the law was to preserve, protect, and enhance endangered plants. The NPPA gave the California Fish and Game Commission the power to designate native plants as endangered or rare, and to require permits for collecting, transporting, or selling such plants. The NPPA includes provisions that prohibit the taking of plants designated as "rare" from the wild, and a salvage mandate for landowners, which requires notification of the CDFW 10 days in advance of approving a building site.

FISH AND GAME CODE §3503, 3503.5, 3800 - PREDATORY BIRDS

Under the California Fish and Game Code, all predatory birds in the order Falconiformes or Strigiformes in California, generally called "raptors," are protected. The law indicates that it is unlawful to take, posses, or destroy the nest or eggs of any such bird unless it is in accordance with the code. Any activity that would cause a nest to be abandoned or cause a reduction or loss in a reproductive effort is considered a take. This generally includes construction activities.

FISH AND GAME CODE §1601-1603 – STREAMBED ALTERATION

Under the California Fish and Game Code, CDFW has jurisdiction over any proposed activities that would divert or obstruct the natural flow or change the bed, channel, or bank of any lake or stream. Private landowners or project proponents must obtain a "Streambed Alteration Agreement" from CDFW prior to

any alteration of a lake bed, stream channel, or their banks. Through this agreement, the CDFW may impose conditions to limit and fully mitigate impacts on fish and wildlife resources. These agreements are usually initiated through the local CDFW warden and will specify timing and construction conditions, including any mitigation necessary to protect fish and wildlife from impacts of the work.

PUBLIC RESOURCES CODE § 21000 - CALIFORNIA ENVIRONMENTAL QUALITY ACT

The California Environmental Quality Act (CEQA) identifies that a species that is not listed on the Federal or State endangered species list may be considered rare or endangered if the species meets certain criteria. Under CEQA public agencies must determine if a project would adversely affect a species that is not protected by FESA or CESA. Species that are not listed under FESA or CESA, but are otherwise eligible for listing (i.e., candidate or proposed) may be protected by the local government until the opportunity to list the species arises for the responsible agency.

Species that may be considered for review are included on a list of "Species of Special Concern," developed by the CDFW. Additionally, the California Native Plant Society (CNPS) maintains a list of plant species native to California that have low numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. List 1A contains plants that are believed to be extinct. List 1B contains plants that are rare, threatened, or endangered in California and elsewhere. List 2 contains plants that are rare, threatened, or endangered in California, but more numerous elsewhere. List 3 contains plants where additional information is needed. List 4 contains plants with a limited distribution.

PUBLIC RESOURCES CODE § 21083.4 - OAK WOODLANDS CONSERVATION

In 2004, the California legislature enacted SB 1334, which added oak woodland conservation regulations to the Public Resources Code. This new law requires a county to determine whether a project, within its jurisdiction, may result in a conversion of oak woodlands that will have a significant effect on the environment. If a county determines that there may be a significant effect to oak woodlands, the county must require oak woodland mitigation alternatives to mitigate the significant effect of the conversion of oak woodlands. Such mitigation alternatives include: conservation through the use of conservation easements; planting and maintaining an appropriate number of replacement trees; contribution of funds to the Oak Woodlands Conservation Fund for the purpose of purchasing oak woodlands conservation easements; and/or other mitigation measures developed by the county.

CALIFORNIA OAK WOODLAND CONSERVATION ACT

The California Legislature passed Assembly Bill 242, known as the California Oak Woodland Conservation Act, in 2001 as a result of widespread changes in land use patterns across the landscape that were fragmenting oak woodland character over extensive areas. The Act created the California Oak Woodland Conservation Program within the Wildlife Conservation Board. The legislation provides funding and incentives to ensure the future viability of California's oak woodland resources by maintaining large scale land holdings or smaller multiple holdings that are not divided into fragmented, nonfunctioning biological units. The Act acknowledged that the conservation of oak woodlands enhances the natural scenic beauty for residents and visitors, increases real property values, promotes ecological balance, provides habitat for over 300 wildlife species, moderates temperature extremes, reduces soil erosion, sustains water quality, and aids with nutrient cycling, all of which affect and improve the health, safety, and general welfare of the residents of the State.

CALIFORNIA WETLANDS CONSERVATION POLICY

In August 1993, the Governor announced the "California Wetlands Conservation Policy." The goals of the policy are to establish a framework and strategy that will:

- Ensure no overall net loss and to achieve a long-term net gain in the quantity, quality, and permanence of wetland acreage and values in California in a manner that fosters creativity, stewardship, and respect for private property.
- Reduce procedural complexity in the administration of State and Federal wetland conservation programs.
- Encourage partnerships to make landowner incentive programs and cooperative planning efforts the primary focus of wetland conservation and restoration.

The Governor also signed Executive Order W-59-93, which incorporates the goals and objectives contained in the new policy and directs the Resources Agency to establish an Interagency Task Force to direct and coordinate administration and implementation of the policy.

NATURAL COMMUNITY CONSERVATION PLANNING ACT

The Natural Community Conservation Planning Act provides long-term protection of species and habitats through regional, multi-species planning before the special measures of the CESA become necessary.

Air Quality and Greenhouse Gases

CARB MOBILE-SOURCE REGULATION

The State of California is responsible for controlling emissions from the operation of motor vehicles in the state. Rather than mandating the use of specific technology or the reliance on a specific fuel, the CARB's motor vehicle standards specify the allowable grams of pollution per mile driven. In other words, the regulations focus on the reductions needed rather than on the manner in which they are achieved. Towards this end, the CARB has adopted regulations which required auto manufacturers to phase in less polluting vehicles.

CALIFORNIA CLEAN AIR ACT

The California Clean Air Act (CCAA) was first signed into law in 1988. The CCAA provides a comprehensive framework for air quality planning and regulation, and spells out, in statute, the state's air quality goals, planning and regulatory strategies, and performance. CARB is the agency responsible for administering the CCAA. CARB established ambient air quality standards pursuant to the California Health and Safety Code (CH&SC) [§39606(b)], which are similar to the federal standards. T

AIR QUALITY STANDARDS

NAAQS are determined by the EPA. The standards include both primary and secondary ambient air quality standards. Primary standards are established with a safety margin. Secondary standards are more stringent than primary standards and are intended to protect public health and welfare. States have the ability to set standards that are more stringent than the federal standards. As such, California established more stringent ambient air quality standards.

Federal and state ambient air quality standards have been established for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, PM_{10}, and lead. In addition, California has created standards for pollutants

that are not covered by federal standards. The state and federal primary standards for major pollutants are shown in Table 5.3-1.

TANNER AIR TOXICS ACT

California regulates TACs primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Tanner Act sets forth a formal procedure for ARB to designate substances as TACs. This includes research, public participation, and scientific peer review before ARB can designate a substance as a TAC. To date, ARB has identified more than 21 TACs and has adopted EPA's list of HAPs as TACs. Most recently, diesel PM was added to the ARB list of TACs. Once a TAC is identified, ARB then adopts an Airborne Toxics Control Measure (ATCM) for sources that emit that particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate BACT to minimize emissions.

The AB 2588 requires that existing facilities that emit toxic substances above a specified level prepare a toxic-emission inventory, prepare a risk assessment if emissions are significant, notify the public of significant risk levels, and prepare and implement risk reduction measures. ARB has adopted diesel exhaust control measures and more stringent emission standards for various on-road mobile sources of emissions, including transit buses and off-road diesel equipment (e.g., tractors, generators). In February 2000, ARB adopted a new public-transit bus-fleet rule and emission standards for new urban buses. These rules and standards provide for (1) more stringent emission standards for some new urban bus engines, beginning with 2002 model year engines; (2) zero-emission bus demonstration and purchase requirements applicable to transit agencies; and (3) reporting requirements under which transit agencies must demonstrate compliance with the urban transit bus fleet rule. Upcoming milestones include the low-sulfur diesel-fuel requirement, and tighter emission standards for heavy-duty diesel trucks (2007) and off-road diesel equipment (2011) nationwide.

TRANSPORT OF POLLUTANTS

The California Clean Air Act, Section 39610 (a), directs the CARB to "identify each district in which transported air pollutants from upwind areas outside the district cause or contribute to a violation of the ozone standard and to identify the district of origin of transported pollutants." The information regarding the transport of air pollutants from one basin to another was to be quantified to assist interrelated basins in the preparation of plans for the attainment of State ambient air quality standards. Numerous studies conducted by the CARB have identified air basins that are impacted by pollutants transported from other air basins (as of 1993). Among the air basins affected by air pollution transport from the SFBAAB are the North Central Coast Air Basin, the Mountain Counties Air Basin, the San Joaquin Valley Air Basin, and the Sacramento Valley Air Basin. The SFBAAB was also identified as an area impacted by the transport of air pollutants from the Sacramento region.

ASSEMBLY BILL 1493

In 2002, the Legislature enacted Assembly Bill 1493 ("Pavley Bill") (Stats. 2002, ch. 200), which directed CARB to develop and adopt regulations that achieve the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty trucks beginning with model year 2009. (See Health and Safety Code Section 43018.5.) In September 2004, pursuant to this directive, CARB approved regulations to reduce GHG emissions from new motor vehicles beginning with the 2009 model year. These regulations created what are commonly known as the "Pavley standards." In September 2009, CARB adopted amendments to the Pavley standards to reduce GHG emissions from new motor vehicles through the 2016 model year. These

regulations created what are commonly known as the "Pavley II standards." (See California Code of Regulations, Title 13, Sections 1900, 1961, and 1961.1 et seq.)

In 2012, CARB adopted an Advanced Clean Cars (ACC) program aimed at reducing both smog-causing pollutants and GHG emissions for vehicles model years 2017-2025. This historic program, developed in coordination with the USEPA and NHTSA, combined the control of smog-causing (criteria) pollutants and GHG emissions into a single coordinated set of requirements for model years 2015 through 2025. The regulations focus on substantially increasing the number of plug-in hybrid cars and zero-emission vehicles in the vehicle fleet and on making fuels such as electricity and hydrogen readily available for these vehicle technologies. The components of the ACC program are the Low-Emission Vehicle (LEV) regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the Zero-Emission Vehicle (ZEV) regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles in the 2018 through 2025 model years. (See California Code of Regulations, Title 13, Sections 1900, 1961, 1961.1, 1961.2, 1961.3, 1965, 1968.2, 1968.5, 1976, 1978, 2037, 2038, 2062, 2112, 2139, 2140, 2145, 2147, 2235, and 2317 et seq.)

It is expected that the Pavley regulations will reduce GHG emissions from California passenger vehicles by about 34 percent below 2016 levels by 2025, all while improving fuel efficiency and reducing motorists' costs.

Assembly Bill 1007

AB 1007, (Pavley, Chapter 371, Statutes of 2005) directed the CEC to prepare a plan to increase the use of alternative fuels in California. As a result, the CEC prepared the State Alternative Fuels Plan in consultation with the state, federal, and local agencies. The plan presents strategies and actions California must take to increase the use of alternative non-petroleum fuels in a manner that minimizes costs to California and maximizes the economic benefits of in-state production. The Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce greenhouse gas emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Assembly Bill 32 (Global Warming Solutions Act)

In 2006, the California State Legislature enacted the California Global Warming Solutions Act of 2006 (Health & Safety Code Section 38500 et seq.), also known as Assembly Bill (AB) 32 (Stats. 2006, ch. 488). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 required that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction was accomplished through an enforceable statewide cap on GHG emissions that was phased in starting in 2012. To effectively implement the cap, AB 32 directed the California Air Resources Board (CARB) to develop and implement regulations to reduce statewide GHG emissions from stationary sources.

Senate Bill 32

SB 32 (Stats. 2016, ch. 249) added Section 38566 to the Health and Safety Code. It provides that "[i]n adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions authorized by [Division 25.5 of the Health and Safety Code], [CARB] shall ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the statewide greenhouse gas emissions limit no later than December 31, 2030." In other words, SB 32 requires

California, by 2030, to reduce its statewide GHG emissions so that they are 40 percent below those that occurred in 1990.

Executive Orders S-3-05, B-30-15, and B-55-18

The 2020 statewide GHG reduction target in AB 32 was consistent with the second of three statewide emissions reduction targets set forth in former Governor Arnold Schwarzenegger's 2005 Executive Order known as S-3-05, which is expressly mentioned in AB 32. (See Health & Safety Code Section 38501, subd. (i).) That Executive Branch document included the following GHG emission reduction targets: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; by 2050, reduce GHG emissions to 80 percent below 1990 levels. To meet the targets, the Governor directed several State agencies to cooperate in the development of a climate action plan. The Secretary of Cal-EPA leads the Climate Action Team, whose goal is to implement global warming emission reduction programs identified in the Climate Action Plan and to report on the progress made toward meeting the emission reduction targets established in the executive order.

In 2015, Governor Brown issued Executive Order, B-30-15, which created a "new interim statewide GHG emission reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030 is established in order to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050." SB 32 codified this target.

In 2018, the Governor issued Executive Order B-55-18, which established a statewide goal to "achieve carbon neutrality as soon as possible, and no later than 2045, and maintain and achieve negative emissions thereafter." The order directs the CARB to work with other State agencies to identify and recommend measures to achieve those goals. As discussed below, the 2022 Scoping Plan lays out a path towards achieving carbon neutrality by 2045.

SB 350

Senate Bill 350 (SB 350) (Stats. 2015, ch. 547) added to the Public Utilities Code language that puts into statute the 2050 GHG reduction target identified in Executive Order S-3-05, albeit in the limited context of new state policies (i) increasing the overall share of electricity that must be produced through renewable energy sources and (ii) directing certain State agencies to begin planning for the widespread electrification of the California vehicle fleet. Section 740.12(a)(1)(D) of the Public Utilities Code states that "[t]he Legislature finds and declares [that] … [r]educing emissions of [GHGs] to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050 will require widespread transportation electrification." Furthermore, Section 740.12(b) states that the California Public Utilities Commission (CPUC), in consultation with CARB and the California Energy Commission (CEC), must "direct electrical corporations to file applications for programs and investments to accelerate widespread transportation electrification to reduce dependence on petroleum, meet air quality standards, … and reduce emissions of greenhouse gases to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050."

AB 1279

In September 2022, the Legislature enacted AB 1279 (Stats. 2022, ch. 337). The bill declares the policy of the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter. Additionally, the bill requires that by 2045, statewide anthropogenic GHG emissions be reduced to at least 85% below 1990 levels.

CALIFORNIA RENEWABLES PORTFOLIO STANDARD

Senate Bill X1-2 (Stats. 2011, 1st Ex. Sess., ch. 1) set aggressive statutory targets for renewable electricity, culminating in the requirement that 33 percent of the State's electricity come from renewables by 2020. This legislation applies to all electricity retailers in the State, including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. All of these entities were required to meet renewable energy goals of 20 percent of retail sales from renewables by the end of 2013, 25 percent by the end of 2016, and 33 percent by the end of 2020. (See Pub. Utility Code, Section 399.11 et seq. [subsequently amended].) SB 350, discussed below, increases the Renewable Portfolio Standard to require 50 percent of electricity generated to be from renewables by 2030. (Pub. Utility Code, Section 399.11, subd (a); see also Section 399.30, subd. (c)(2).) In 2018, Senate Bill 100 (Stats. 2018, ch. 312) revised the above-described deadlines and targets so that the State will have to achieve a 50% renewable resources target by December 31, 2026 (instead of by 2030) and achieve a 60% target by December 31, 2030. The legislation also establishes a State policy that eligible renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers and 100% of electricity procured to serve all State agencies by December 31, 2045.

BIOENERGY ACTION PLAN – EXECUTIVE ORDER #S-06-06

Executive Order #S-06-06 establishes targets for the use and production of biofuels and biopower and directs state agencies to work together to advance biomass programs in California while providing environmental protection and mitigation. The executive order establishes the following target to increase the production and use of bioenergy, including ethanol and biodiesel fuels made from renewable resources: produce a minimum of 20 percent of its biofuels within California by 2010, 40 percent by 2020, and 75 percent by 2050. The executive order also calls for the state to meet a target for use of biomass electricity.

CALIFORNIA EXECUTIVE ORDERS S-3-05, S-20-06, AND B-30-15, ASSEMBLY BILL 32, AND SENATE BILL 32

On June 1, 2005, then Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California's GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80% below the 1990 levels by the year 2050.

In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that the CARB create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state's Climate Action Team.

In April 2015, Governor Jerry Brown signed Executive Order B-30-15, which requires that there be a reduction in GHG emissions to 40% below 1990 levels by 2030. This intermediate target was codified into law by Senate Bill 32 (SB 32), which was signed into law on September 8, 2016.

CLIMATE CHANGE SCOPING PLAN

In accordance with AB 32, the CARB developed the first Scoping Plan in 2008 to outline the State's strategy to achieve 1990 level emissions by year 2020. In May 2014, the CARB released and adopted the *First Update to the Climate Change Scoping Plan* to identify the next steps in reaching AB 32 goals and evaluate the progress that has been made between 2000 and 2012. A newer version of the Scoping Plan was then adopted by the CARB in December 2017 (entitled *California's 2017 Climate Change Scoping Plan*). Lastly,

the most recent version of the Scoping Plan was adopted by the CARB in November 2022 (entitled *Final 2022 Scoping Plan for Achieving Carbon Neutrality*) (2022 Scoping Plan), which was designed consistent with the long-term GHG reduction targets embedded in AB 1279. Since adoption of the 2008 Scoping Plan and the subsequent updates in 2014, 2017, and 2022, State agencies have adopted programs identified in the plan, and the Legislature has passed additional legislation to achieve the GHG reduction targets. Statewide strategies to reduce GHG emissions include the Low Carbon Fuel Standard, California Appliance Energy Efficiency regulations, California Building Standards (e.g., CALGreen and the 2022 Building and Energy Efficiency Standards), zero carbon electricity by 2045, and changes in the corporate average fuel economy standards (e.g., Pavley I and California Advanced Clean Cars)).

CALIFORNIA STRATEGY TO REDUCE PETROLEUM DEPENDENCE (AB 2076)

In response to the requirements of AB 2076 (Chapter 936, Statutes of 2000), the CEC and the CARB developed a strategy to reduce petroleum dependence in California. The strategy, *Reducing California's Petroleum Dependence*, was adopted by the CEC and CARB in 2003. The strategy recommends that California reduce on-road gasoline and diesel fuel demand to 15 percent below 2003 demand levels by 2020 and maintain that level for the foreseeable future; the Governor and Legislature work to establish national fuel economy standards that double the fuel efficiency of new cars, light trucks, and sport utility vehicles (SUVs); and increase the use of non- petroleum fuels to 20 percent of on-road fuel consumption by 2020 and 30 percent by 2030.

CLIMATE ACTION PROGRAM AT CALTRANS

The California Department of Transportation, Business, Transportation, and Housing Agency, prepared a Climate Action Program in response to new regulatory directives. The goal of the Climate Action Program is to promote clean and energy efficient transportation, and provide guidance for mainstreaming energy and climate change issues into business operations. The overall approach to lower fuel consumption and CO_2 from transportation is twofold: (1) reduce congestion and improve efficiency of transportation systems through smart land use, operational improvements, and Intelligent Transportation Systems; and (2) institutionalize energy efficiency and GHG emission reduction measures and technology into planning, project development, operations, and maintenance of transportation facilities, fleets, buildings, and equipment.

The reasoning underlying the Climate Action Program is the conclusion that "the most effective approach to addressing GHG reduction, in the short-to-medium term, is strong technology policy and market mechanisms to encourage innovations. Rapid development and availability of alternative fuels and vehicles, increased efficiency in new cars and trucks (light and heavy duty), and super clean fuels are the most direct approach to reducing GHG emissions from motor vehicles (emission performance standards and fuel or carbon performance standards)."

GOVERNOR'S LOW CARBON FUEL STANDARD (EXECUTIVE ORDER #S-01-07)

Executive Order #S-01-07 establishes a statewide goal to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020 through establishment of a Low Carbon Fuel Standard. The Low Carbon Fuel Standard is incorporated into the State Alternative Fuels Plan and is one of the proposed discrete early action GHG reduction measures identified by the CARB pursuant to AB 32.

ASSEMBLY BILL 1757

AB 1757 (September 2022) requires the California Natural Resources Agency (CNRA) to determine a range of targets for natural carbon sequestration, and for nature-based climate solutions that reduce GHG

emissions for future years 2030, 2038, and 2045. These targets are to be determined by no later than January 1, 2024, and are established to support the state's goals to achieve carbon neutrality and foster climate adaptation and resilience.

SENATE BILLS 605 AND 1383

SB 605 (2014) required CARB to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants in the state, and SB 1383 (2016) required CARB to approve and implement that strategy by January 1, 2018. SB 1383 also establishes specific targets for the reduction of short-lived climate pollutants (40% below 2013 levels by 2030 for methane and HFCs, and 50% below 2013 levels by 2030 for anthropogenic black carbon), and provides direction for reductions from dairy and livestock operations and landfills. Accordingly, CARB adopted its Short-Lived Climate Pollutant Reduction Strategy (Reduction Strategy) in March 2017. The Reduction Strategy establishes a framework for the statewide reduction of emissions of black carbon, methane, and fluorinated gases.

SENATE BILL 97

SB 97 (Chapter 185, 2007) required the Governor's Office of Planning and Research (OPR) to develop recommended amendments to the State CEQA Guidelines for addressing greenhouse gas emissions. OPR prepared its recommended amendments to the State CEQA Guidelines to provide guidance to public agencies regarding the analysis and mitigation of greenhouse gas emissions and the effects of greenhouse gas emissions in draft CEQA documents. The Amendments became effective on March 18, 2010.

SENATE BILL 375

SB 375 (Stats. 2008, ch. 728) (SB 375) was built on AB 32 (California's 2006 climate change law). SB 375's core provision is a requirement for regional transportation agencies to develop a Sustainable Communities Strategy (SCS) in order to reduce GHG emissions from passenger vehicles. The SCS is one component of the Regional Transportation Plan (RTP).

The SCS outlines the region's plan for combining transportation resources, such as roads and mass transit, with a realistic land use pattern, in order to meet a state target for reducing GHG emissions. The strategy must take into account the region's housing needs, transportation demands, and protection of resource and farmlands.

Additionally, SB 375 modified the state's Housing Element Law to achieve consistency between the land use pattern outlined in the SCS and the Regional Housing Needs Assessment allocation. The legislation also substantially improved cities' and counties' accountability for carrying out their housing element plans.

Finally, SB 375 amended the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) to ease the environmental review of developments that help reduce the growth of GHG emissions.

CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS

Title 24, Part 6 of the California Code of Regulations, known as the Building Energy Efficiency Standards, was established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. On January 1, 2010, the California Building Standards Commission adopted CALGreen and became the first state in the United States to adopt a statewide green building standards code. CALGreen requires new buildings to reduce water consumption by 20 percent, divert 50 percent of construction waste from landfills, and install low pollutant-emitting materials. The California

Building Energy Efficiency Standards are updated periodically. The standards were most recently updated in 2016, and have are effective as of January 1, 2017.

CALIFORNIA ENERGY CODE

The California Energy Code (CCR Title 24, Part 6), which is incorporated into the Building Energy Efficiency Standards, was first established in 1978 in response to a legislative mandate to reduce California's energy consumption. Although these standards were not originally intended to reduce GHG emissions, increased energy efficiency results in decreased GHG emissions because energy efficient buildings require less electricity and thus less consumption of fossil fuels, which emit GHGs. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods.

The most recent Title 24 standards are the 2022 Title 24 standards. Buildings permitted on or after January 1, 2023, must comply with the 2022 Standards. The California Energy Commission updates the standards every three years. The CEC estimates that the 2022 Title 24 standards will reduce 10 million metric tons of GHG over 30 years. When compared to the 2019 Title 24 standards, the 2022 update focuses on: encouraging electric heat pump technology and use; establishing electric-ready requirements when natural gas is installed; expanding solar photovoltaic (PV) system and battery storage standards; and strengthening ventilation standards to improve indoor air quality.

CALIFORNIA GREEN BUILDING STANDARDS CODE

The purpose of the California Green Building Standards Code (CalGreen) (CCR Title 24, Part 11) is to improve public health and safety and to promote the general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories: 1) planning and design; 2) energy efficiency; 3) water efficiency and conservation; 4) material conservation and resource efficiency; and 5) environmental quality. CalGreen, which became effective on January 1, 2011, instituted mandatory minimum environmental performance standards for all ground-up new construction of commercial, low-rise residential uses, and State-owned buildings, as well as schools and hospitals. The mandatory standards require the following:

- 20 percent mandatory reduction in indoor water use relative to baseline levels;
- 50 percent construction/demolition waste must be diverted from landfills;
- Mandatory inspections of energy systems to ensure optimal working efficiency; and
- Low-pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring, and particle boards.

The voluntary standards require the following:

- Tier I: 15 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 65 percent reduction in construction waste, 10 percent recycled content, 20 percent permeable paving, 20 percent cement reduction, and cool/solar reflective roof.
- Tier II: 30 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 75 percent reduction in construction waste, 15 percent recycled content, 30 percent permeable paving, 30 percent cement reduction, and cool/solar reflective roof.

The latest version of CalGreen is the 2022 CalGreen Code, which became effective on January 1, 2023. Between 2010 and 2022, continuous updates and additions have been made to CALGreen, including water conservation and recycling, electric vehicle infrastructure and charging, and changes intended to eliminate conflicts with the California Energy Code, which is Part 6 of Title 24.

Title 20

CCR Title 20 requires manufacturers of appliances to meet state and federal standards for energy and water efficiency. The CEC certifies an appliance based on a manufacturer's demonstration that the appliance meets the standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwaters; clothes washers and dryers; cooking products; electric motors; low-voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing each type of appliance covered under the regulations, and appliances must meet the standards for energy performance, energy design, water performance, and water design. Title 20 contains three types of standards for appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

Senate Bill 1

SB 1 (Murray) (August 2006) established a $3 billion rebate program to support the goal of the state to install rooftop solar energy systems with a generation capacity of 3,000 megawatts through 2016. SB 1 added sections to the Public Resources Code, including Chapter 8.8 (California Solar Initiative), that require building projects applying for ratepayer-funded incentives for photovoltaic systems to meet minimum energy efficiency levels and performance requirements. Section 25780 established that it is a goal of the state to establish a self-sufficient solar industry. The goals included establishing solar energy systems as a viable mainstream option for homes and businesses within 10 years of adoption and placing solar energy systems on 50% of new homes within 13 years of adoption. SB 1, also termed "Go Solar California," was previously titled "Million Solar Roofs."

Solid Waste

AB 939, AB 341, and AB 1826. In 1989, AB 939, known as the Integrated Waste Management Act (PRC Sections 40000 et seq.), was passed because of the increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25% by 1995 and 50% by 2000.

AB 341 (Chapter 476, Statutes of 2011 [Chesbro]) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75% of solid waste generated be source-reduced, recycled, or composted by 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the state's policy goal (CalRecycle, 2012).

AB 1826 (Chapter 727, Statutes of 2014, effective 2016) requires businesses to recycle their organic waste (i.e., food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled

paper waste that is mixed in with food waste) depending on the amount of waste they generate per week. This law also requires local jurisdictions across the state to implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. The minimum threshold of organic waste generation by businesses subject to the law decreases over time, which means an increasingly greater proportion of the commercial sector will be required to comply.

Geology, Soils and Seismicity

CALIFORNIA BUILDING STANDARDS CODE

Title 24 of the California Code of Regulations, known as the California Building Standards Code (CBSC) or simply "Title 24," contains the regulations that govern the construction of buildings in California. The CBSC includes 12 parts: California Building Standards Administrative Code, California Building Code, California Residential Building Code, California Electrical Code, California Mechanical Code, California Plumbing Code, California Energy Code, California Historical Building Code, California Fire Code, California Existing Building Code, California Green Building Standards Code (CALGreen Code), and the California Reference Standards Code. Through the CBSC, the State provides a minimum standard for building design and construction. The CBSC contains specific requirements for seismic safety, excavation, foundations, retaining walls, and site demolition. It also regulates grading activities, including drainage and erosion control.

The California Building Code, Title 24, Part 2, Chapter 16 addresses structural design, Chapter 17 addresses structural tests and special inspections, and Chapter 18 addresses soils and foundations. Section 1610 provides structural design standards for foundation walls and retaining walls to ensure resistance to lateral soil loads. Section 1613 provides structural design standards for earthquake loads. Section 1704.7 requires special inspections for existing site soil conditions, fill placement and load-bearing requirements during the construction as specified in Table 1704.7 of this section. Sections 1704.8 through 1704.16 provide inspection and testing requirements for various foundation types, and construction material types. Section 1803.1.1.1 requires each city and county enact an ordinance which requires a preliminary soil report and that the report be based upon adequate test borings or excavations, of every subdivision, where a tentative and final map is required pursuant to Section 66426 of the Government Code. Section 1803.5.3 defines expansive soils and specifies that in areas likely to have expansive soil, the building official shall require soil tests to determine where such soils do exist. Section 1803.5.4 specifies that a subsurface soil investigation must be performed to determine whether the existing ground-water table is above or within 5 feet (1524 mm) below the elevation of the lowest floor level where such floor is located below the finished ground level adjacent to the foundation. Section 1803.5.8 provides specific standards where shallow foundations will bear on compacted fill material more than 12 inches (305 mm) in depth. Sections 1803.5.11 and 1803.5.12 provide requirements for geotechnical investigations for structures assigned varying Seismic Design Categories in accordance with Section 1613. Section 1804 provides standards and requirements for excavation, grading, and fill. Sections 1808, 1809, and 1810 provide standards and requirements for the construction of varying foundations.

ALQUIST-PRIOLO EARTHQUAKE FAULT ZONING ACT

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 sets forth the policies and Criteria of the State Mining and Geology Board, which governs the exercise of governments' responsibilities to prohibit the location of developments and structures for human occupancy across the trace of active faults. The policies

and criteria are limited to potential hazards resulting from surface faulting or fault creep within Earthquake Fault Zones, as delineated on maps officially issued by the State Geologist. Working definitions include:

- Fault – a fracture or zone of closely associated fractures along which rocks on one side have been displaced with respect to those on the other side;
- Fault Zone – a zone of related faults, which commonly are braided and sub parallel, but may be branching and divergent. A fault zone has a significant width (with respect to the scale at which the fault is being considered, portrayed, or investigated), ranging from a few feet to several miles;
- Sufficiently Active Fault – a fault that has evidence of Holocene surface displacement along one or more of its segments or branches (last 11,000 years); and
- Well-Defined Fault – a fault whose trace is clearly detectable by a trained geologist as a physical feature at or just below the ground surface. The geologist should be able to locate the fault in the field with sufficient precision and confidence to indicate that the required site-specific investigations would meet with some success.

"Sufficiently Active" and "Well Defined" are the two criteria used by the State to determine if a fault should be zoned under the Alquist-Priolo Act.

SEISMIC HAZARDS MAPPING ACT

The Seismic Hazards Mapping Act, passed in 1990, addresses non-surface fault rupture earthquake hazards, including liquefaction and seismically-induced landslides. Under the Act, seismic hazard zones are to be mapped by the State Geologist to assist local governments in land use planning. The program and actions mandated by the Seismic Hazards Mapping Act closely resemble those of the Alquist-Priolo Earthquake Fault Zoning Act (which addresses only surface fault-rupture hazards) and are outlined below:

The State Geologist is required to delineate the various "seismic hazard zones."

- Cities and Counties, or other local permitting authority, must regulate certain development "projects" within the zones. They must withhold the development permits for a site within a zone until the geologic and soil conditions of the site are investigated and appropriate mitigation measures, if any, are incorporated into development plans.
- The State Mining and Geology Board provides additional regulations, policies, and criteria, to guide cities and counties in their implementation of the law. The Board also provides guidelines for preparation of the Seismic Hazard Zone Maps and for evaluating and mitigating seismic hazards.
- Sellers (and their agents) of real property within a mapped hazard zone must disclose that the property lies within such a zone at the time of sale.

CALTRANS SEISMIC DESIGN CRITERIA

The California Department of Transportation (Caltrans) has Seismic Design Criteria (SDC), which is an encyclopedia of new and currently practiced seismic design and analysis methodologies for the design of new bridges in California. The SDC adopts a performance-based approach specifying minimum levels of

structural system performance, component performance, analysis, and design practices for ordinary standard bridges. The SDC has been developed with input from the Caltrans Offices of Structure Design, Earthquake Engineering and Design Support, and Materials and Foundations. Memo 20-1 outlines the bridge category and classification, seismic performance criteria, seismic design philosophy and approach, seismic demands and capacities on structural components and seismic design practices that collectively make up Caltrans' seismic design methodology.

Mineral and Energy Resources

SURFACE MINING AND RECLAMATION ACT OF 1975

The California Department of Conservation Surface Mining and Reclamation Act of 1975 (§ 2710), also known as SMARA, provides a comprehensive surface mining and reclamation policy that permits the continued mining of minerals, as well as the protection and subsequent beneficial use of the mined and reclaimed land. The purpose of SMARA is to ensure that adverse environmental effects are prevented or minimized and that mined lands are reclaimed to a usable condition and readily adaptable for alternative land uses. The production and conservation of minerals are encouraged, while giving consideration to values relating to recreation, wildlife, range and forage, as well as aesthetic enjoyment. Residual hazards to public health and safety are eliminated. These goals are achieved through land use planning by allowing a jurisdiction to balance the economic benefits of resource reclamation with the need to provide other land uses.

If a use is proposed that might threaten the potential recovery of minerals from an area that has been classified mineral resource zone 2 (MRZ-2), SMARA would require the jurisdiction to prepare a statement specifying its reasons for permitting the proposed use, provide public notice of these reasons, and forward a copy of the statement to the State Geologist and the State Mining and Geology Board (Cal. Pub. Res. Code Section 2762). Lands classified MRZ-2 are areas that contain identified mineral resources.

DIVISION OF MINES AND GEOLOGY

The California Division of Mines and Geology (DMG) operates within the Department of Conservation. The DMG is responsible for assisting in the utilization of mineral deposits and the identification of geological hazards.

STATE GEOLOGICAL SURVEY

Similar to the DMG, the California Geological Survey is responsible for assisting in the identification and proper utilization of mineral deposits, as well as the identification of fault locations and other geological hazards.

PUBLIC RESOURCES CODE

PRC Section 2762(d) and 2763 requires a lead agency to prepare a statement specifying its reasons for permitting a use that would threaten the potential to extract mineral resources either 1) in an area that has been designated in its general plan as having important minerals to be protected, or 2) if the use is proposed in an area with significant resources pursuant to Section 2761(b)(2) and the lead agency has not yet acted on the State's designation. PRC Section 2763 requires that lead agency land use decisions involving areas designated as being of regional significance shall be in accordance with the lead agency's mineral resource management policies and shall also, in balancing mineral values against alternative land uses, consider the importance of these minerals to their market region as a whole and not just their importance to the lead agency's area of jurisdiction.

Hydrology and Water Quality

PORTER-COLOGNE WATER QUALITY CONTROL ACT

The Porter-Cologne Water Quality Control Act authorizes the SWRCB to regulate state water quality and protect beneficial uses.

The State of California has established a variety of regulations and requirements related to seismic safety and structural integrity, including the California Building Standards Code, the Alquist-Priolo Earthquake Fault Zoning Act, and the Seismic Hazards Mapping Act.

CLEAN WATER ACT (CWA)

The Clean Water Act (CWA), initially passed in 1972, regulates the discharge of pollutants into watersheds throughout the nation. Section 402(p) of the act establishes a framework for regulating municipal and industrial stormwater discharges under the National Pollutant Discharge Elimination System (NPDES) Program. Section 402(p) requires that stormwater associated with industrial activity that discharges either directly to surface waters or indirectly through municipal separate storm sewers must be regulated by an NPDES permit.

The State Water Resources Control Board (SWRCB) is responsible for implementing the Clean Water Act and does so through issuing NPDES permits to cities and counties through regional water quality control boards. Federal regulations allow two permitting options for stormwater discharges (individual permits and general permits). The SWRCB elected to adopt a Statewide General Permit (Water Quality Order No. 2013-001-DWQ-DWQ).

CALIFORNIA WATER CODE

The Clean Water Act places the primary responsibility for the control of surface water pollution and for planning the development and use of water resources with the states, although this does establish certain guidelines for the States to follow in developing their programs and allows the Environmental Protection Agency to withdraw control from states with inadequate implementation mechanisms.

California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Division 7 of the California Water Code) (Porter-Cologne Act). The Porter-Cologne Act grants the SWRCB and each of the Regional Water Quality Control Boards (RWQCBs) power to protect water quality, and is the primary vehicle for implementation of California's responsibilities under the Clean Water Act. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

Each RWQCB must formulate and adopt a water quality control plan (Basin Plan) for its region the regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State water policy. The Porter-Cologne Act also provides that a RWQCB may include within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste.

Water Code Section 13260 requires all dischargers of waste that may affect water quality in waters of the state to prepare and provide a water quality discharge report to the RWQCB. Section 13260a-c is as follows:

(a) Each of the following persons shall file with the appropriate regional board a report of the discharge, containing the information that may be required by the regional board:

(1) A person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state, other than into a community sewer system.

(2) A person who is a citizen, domiciliary, or political agency or entity of this state discharging waste, or proposing to discharge waste, outside the boundaries of the state in a manner that could affect the quality of the waters of the state within any region.

(3) A person operating, or proposing to construct, an injection well.

(b) No report of waste discharge need be filed pursuant to subdivision (a) if the requirement is waived pursuant to Section 13269.

(c) Each person subject to subdivision (a) shall file with the appropriate regional board a report of waste discharge relative to any material change or proposed change in the character, location, or volume of the discharge.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

National Pollutant Discharge Elimination System (NPDES) permits are required for discharges of pollutants to navigable waters of the United States, which includes any discharge to surface waters, including lakes, rivers, streams, bays, the ocean, dry stream beds, wetlands, and storm sewers that are tributary to any surface water body. NPDES permits are issued under the Federal Clean Water Act, Title IV, Permits and Licenses, Section 402 (33 USC 466 et seq.)

The RWQCB issues these permits in lieu of direct issuance by the Environmental Protection Agency, subject to review and approval by the Environmental Protection Agency Regional Administrator. The terms of these NPDES permits implement pertinent provisions of the Clean Water Act and the Act's implementing regulations, including pre-treatment, sludge management, effluent limitations for specific industries, and anti- degradation. In general, the discharge of pollutants is to be eliminated or reduced as much as practicable so as to achieve the Clean Water Act's goal of "fishable and swimmable" navigable (surface) waters. Technically, all NPDES permits issued by the RWQCB are also Waste Discharge Requirements issued under the authority of the Clean Water Act.

These NPDES permits regulate discharges from publicly owned treatment works, industrial discharges, stormwater runoff, dewatering operations, and groundwater cleanup discharges. NPDES permits are issued for five years or less, and are therefore to be updated regularly. The rapid and dramatic population and urban growth in the Central Valley Region has caused a significant increase in NPDES permit applications for new waste discharges. To expedite the permit issuance process, the SWRCB has adopted several general NPDES permits, each of which regulates numerous discharges of similar types of wastes. The SWRCB has issued general permits for stormwater runoff from industrial and construction sites statewide. Stormwater discharges from industrial and construction activities in the Central Valley Region can be covered under these general permits, which are administered jointly by the SWRCB and RWQCB.

CALIFORNIA DIVISION OF SAFETY OF DAMS

The California Division of Safety of Dams has established specific requirements with respect to dam operation. The California Government Code requires dam operators to prepare emergency plans for dam

failure and evacuation. The contingency plans are updated every two years and submitted to the State Office of Emergency Services for review and comment.

Incorporated cities are responsible for developing contingency plans for State-designated dams affecting incorporated areas. Merced County has the responsibility for developing emergency plans for State-designated dams affecting unincorporated areas within the county.

Scenic Resources

CALIFORNIA DEPARTMENT OF TRANSPORTATION – CALIFORNIA SCENIC HIGHWAY PROGRAM

California's Scenic Highway Program was created by the Legislature in 1963 to preserve and protect scenic highway corridors from change, which would diminish the aesthetic value of lands adjacent to highways. The State laws governing the Scenic Highway Program are found in the Streets and Highways Code, Section 260 et seq. The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highways or have been so designated. These highways are identified in Section 263 of the Streets and Highways Code. A list of California's scenic highways and map showing their locations may be obtained from the Caltrans Scenic Highway Coordinators. If a route is not included on a list of highways eligible for scenic highway designation in the Streets and Highways Code Section 263 et seq., it must be added before it can be considered for official designation. A highway may be designated scenic depending on the extent of the natural landscape that can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view.

Agricultural Resources

WILLIAMSON ACT

The California Land Conservation Act of 1965, commonly known as the Williamson Act, was established based on numerous State legislative findings regarding the importance of agricultural lands in an urbanizing society. Policies emanating from those findings include those that discourage premature and unnecessary conversion of agricultural land to urban uses and discourage discontinuous urban development patterns, which unnecessarily increase the costs of community services to community residents.

The Williamson Act authorizes each County to establish an agricultural preserve. Land that is within the agricultural preserve is eligible to be placed under a contract between the property owner and County that would restrict the use of the land to agriculture in exchange for a tax assessment that is based on the yearly production yield. The contracts have a 10-year term that is automatically renewed each year, unless the property owner requests a non-renewal or the contract is cancelled. If the contract is cancelled the property owner is assessed a fee of up to 12.5 percent of the property value.

FARMLAND SECURITY ZONES

In 1998 the state legislature established the Farmland Security Zone (FSZ) program. FSZs are similar to Williamson Act contracts, in that the intention is to protect farmland from conversion. The main difference however, is that the FSZ must be designated as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance. The term of the contract is a minimum of 20 years. The property owners are offered an incentive of greater property tax reductions when compared to the Williamson Act contract tax incentives; the incentives were developed to encourage conservation of prime farmland through FSZs. The non-renewal and cancellation procedures are similar to those for Williamson Act contracts.

CALIFORNIA GOVERNMENT CODE SECTION 560643

This section of the Government Codes defines "Prime agricultural land" as follows:

- Prime agricultural land means an area of land, whether a single parcel or contiguous parcels, that has not been developed for a use other than an agricultural use and that meets any of the following qualifications:
    - Land that qualifies, if irrigated, for rating as class I or class II in the USDA Natural Resources Conservation Service land use capability classification, whether or not land is actually irrigated, provided that irrigation is feasible.
    - Land that qualifies for rating 80 through 100 Storie Index Rating.
    - Land that supports livestock used for the production of food and fiber and that has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture in the National Range and Pasture Handbook, Revision 1, December 2003.
    - Land planted with fruit or nut-bearing trees, vines, bushes, or crops that have a nonbearing period of less than five years and that will re-turn during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than four hundred dollars ($400) per acre.
    - Land that has returned from the production of unprocessed agricultural plant products an annual gross value of not less than four hundred dollars ($400) per acre for three of the previous five calendar years.

Cultural and Historic Resources

CALIFORNIA REGISTER OF HISTORIC RESOURCES (CRHR)

California State law also provides for the protection of cultural resources by requiring evaluations of the significance of prehistoric and historic resources identified in documents prepared pursuant to the California Environmental Quality Act (CEQA). Under CEQA, a cultural resource is considered an important historical resource if it meets any of the criteria found in Section 15064.5(a) of the CEQA Guidelines. Criteria identified in the CEQA Guidelines are relatively like those described under the NHPA. The State Historic Preservation Office (SHPO) maintains the CRHR. Historic properties listed, or formally designated for eligibility to be listed, on The National Register are automatically listed on the CRHR. State Landmarks and Points of Interest are also automatically listed. The CRHR can also include properties designated under local preservation ordinances or identified through local historical resource surveys.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

CEQA requires that lead agencies determine whether projects may have a significant effect on archaeological and historical resources. This determination applies to those resources which meet significance criteria qualifying them as "unique," "important," listed on the California Register of Historic Resources (CRHR), or eligible for listing on the CRHR. If the agency determines that a project may have a significant effect on a significant resource, the project is determined to have a significant effect on the environment, and these effects must be addressed. If a cultural resource is found not to be significant under the qualifying criteria, it need not be considered further in the planning process.

CEQA emphasizes avoidance of archaeological and historical resources as the preferred means of reducing potential significant environmental effects resulting from projects. If avoidance is not feasible, an excavation program or some other form of mitigation must be developed to mitigate the impacts. In order to adequately address the level of potential impacts, and thereby design appropriate mitigation measures,

the significance and nature of the cultural resources must be determined. The following are steps typically taken to assess and mitigate potential impacts to cultural resources for the purposes of CEQA:

- identify cultural resources,
- evaluate the significance of the cultural resources found,
- evaluate the effects of the project on cultural resources, and
- develop and implement measures to mitigate the effects of the project on cultural resources that would be significantly affected.

Treatment of paleontological resources under CEQA is generally like treatment of cultural resources, requiring evaluation of resources in a project's area of potential affect, assessment of potential impacts on significant or unique resources, and development of mitigation measures for potentially significant impacts, which may include monitoring combined with data recovery and/or avoidance.

STATE LAWS PERTAINING TO HUMAN REMAINS

Section 7050.5 of the California Health and Safety Code requires that construction or excavation be stopped in the vicinity of discovered human remains until the county coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the California Native American Heritage Commission. CEQA Guidelines (Section 15064.5) specify the procedures to be followed in case of the discovery of human remains on non-Federal land. The disposition of Native American burials falls within the jurisdiction of the Native American Heritage Commission.

Several sections of the California Public Resources Code protect paleontological resources.

Section 5097.5 prohibits "knowing and willful" excavation, removal, destruction, injury, and defacement of any "vertebrate paleontological site, including fossilized footprints," on public lands, except where the agency with jurisdiction has granted express permission. "As used in this section, 'public lands' means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof."

California Public Resources Code, Section 30244 requires reasonable mitigation for impacts on paleontological resources that occur resulting from development on public lands.

The sections of the California Administrative Code relating to the State Division of Beaches and Parks afford protection to geologic features and "paleontological materials" but grant the director of the State Park system authority to issue permits for specific activities that may result in damage to such resources, if the activities are in the interest of the State Park system and for State Park purposes (California Administrative Code, Title 14, Section 4307–4309).

SENATE BILL 18 (BURTON, CHAPTER 905, STATUTES 2004)

SB 18, authored by Senator John Burton and signed into law by Governor Arnold Schwarzenegger in September 2004, requires local (city and county) governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places ("cultural places") through local land use planning. This legislation, which amended §65040.2, §65092, §65351, §65352, and §65560, and added §65352.3, §653524, and §65562.5 to the Government Code; also requires the Governor's Office of Planning and Research (OPR) to include in the General Plan Guidelines advice to local governments on how to conduct these consultations. The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of

protecting, or mitigating impacts to, cultural places. The consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code §65300 et seq.) and specific plans (defined in Government Code §65450 et seq.).

ASSEMBLY BILL 52 (CHAPTER 532, STATUTES OF 2014)

Assembly Bill ("AB") 52 establishes a formal consultation process for California tribes as part of CEQA and equates significant impacts on "tribal cultural resources" with significant environmental impacts (PRC Section 21084.2). AB 52 defines a "California Native American Tribe" as a Native American tribe located in California, and included on the contact list maintained by the Native American Heritage Commission. AB 52 requires formal consultation with California Native American Tribes prior to determining the level of environmental document if a tribe has requested to be informed by the lead agency of proposed projects. AB 52 also requires that the consultation address project alternatives and mitigation measures, for significant effects, if requested by the California Native American Tribe, and that consultation be considered concluded when either the parties agree to measures to mitigate or avoid a significant effect, or the agency concludes that mutual agreement cannot be reached.

9.0 ENVIRONMENTAL JUSTICE

This section describes the federal, state, and local regulations pertaining to land use and socioeconomics.

FEDERAL

2008 USDA Farm Bill

The "Farm Bill" or the Food, Conservation, and Energy Act of 2008, enacted into law in June 2008, set the agricultural program and funding priorities for the nation and covers everything from crop payments to growers to conservation programs and efforts aimed at creating more "green energy" from farm products.

STATE

Senate Bill 1000

Senate Bill (SB) 1000, also known as *The Planning for Healthy Communities Act*, is a comprehensive state legislation that requires California cities to include an Environmental Justice element or a set of environmental justice policies into their General Plans. The Bill was established as a state regulation on September 24, 2016, with the goal of improving the health of California cities and addressing pertinent issues of environmental justice related to community wellness. SB 1000 outlines strategies to promote the protection of sensitive land uses within the state, and simultaneously mandates that cities address the needs of disadvantaged communities. Through this bill, environmental justice is a mandated consideration in all city's local land-use planning. SB 1000 was authored by Senator Connie Leyva and co-sponsored by the California Environmental Justice Alliance (CEJA) and the Center for Community Action and Environmental Justice (CCAEJ).

To aid city governments and planners in meeting the requirements of SB 1000, the California Environmental Justice Alliance (CEJA) and PlaceWorks Inc. collaborated to create a strategic toolkit. The SB 1000 Implementation Toolkit serves as a guide for key stakeholders by clarifying legislation requirements and providing tools, best practices, and resources to support these stakeholders as they begin to incorporate the law into local practice. To effectively meet the mandates of the bill, cities must formally identify disadvantaged communities (DACs) and work to reduce health risks specific to these communities by

outlining methods and programs within their plan that address the needs of DACs. Each General Plan must address the following topics in order to meet the requirements of SB 1000:

- Pollution Exposure and Air Quality
- Public Facilities
- Food Access
- Safe and Sanitary Homes
- Physical Activity
- "Civil" or Community Engagement
- Improvement and Programs That Address the Needs of Disadvantaged Communities

Senate Bill 535

In 2012, the Legislature passed SB 535, directing that 25 percent of the proceeds from the Greenhouse Gas Reduction Fund (established by the California Global Warming Solutions Act of 2006 AB 52's cap and trade program) go to projects that provide a benefit to disadvantaged communities.

Assembly Bill 1550

In 2016, the Legislature passed Assembly Bill (AB) 1550, which amended SB 535 to require all GGRF investments that benefit DACs to also be located within those communities. The law also requires that an additional 10 percent of the fund be dedicated to low-income households and communities, of which 5 percent is reserved for low-income households and communities living within a half-mile of a designated DAC.

Senate Bill 673

In 2015, the Legislature passed SB 673 directing the Department of Toxic Substances Control (DTSC) to include criteria such as cumulative impact and neighborhood vulnerability when issuing or renewing facility permits. The law provides the DTSC with an opportunity to use tools such as CalEnviroScreen when making decisions on hazardous waste permitting.

Assembly Bill 523

Approved in 2017, AB 523, allocates at least 25 percent of the Electric Program Investment Charge (EPIC) funds administered by the California Energy Commission (CEC) to support technology demonstration and deployment projects located in and benefiting "disadvantaged communities," and dedicates at least 10% of the fund to activities located in and benefiting "low-income" communities as defined by AB 1550.

Senate Bill 43

Approved in 2013, SB 43, establishes the Green Tariff Shared Renewables program, administered by the California Public Utilities Commission (CPUC), which enables utility customers to meet their energy generation needs through offsite generation of renewable energy projects. The program requires 100 MW of renewable energy projects to be sited in the top 20 percent of CalEnviroScreen CES scores based on each investor-owned utility (IOU) service territory.

Assembly Bill 693

Approved in 2015, AB 693 allocates $100 million per year for 10 years to fund solar installations on multifamily affordable housing. To qualify, a multifamily affordable housing property must be: (1) located

in a DAC as defined by SB 535 using the most recent version of CalEnviroScreen CES; or (2) have at least 80% of tenants with incomes at or below 60 percent of area median income (AMI).

Assembly Bill 2722

Approved in 2016, AB 2722 requires the California Strategic Growth Council to award competitive grants to specified eligible entities for the development and implementation of neighborhood-level transformative climate community plans that include greenhouse gas emissions reduction projects that provide local economic, environmental, and health benefits to disadvantaged communities, as defined. AB 2722 created the Transformative Climate Communities (TCC) program administered through the California Strategic Growth Council (SGC). The TCC is a GGRF-funded program that supports innovative, comprehensive, and community-led plans that reduce pollution and achieve multiple co-benefits at the neighborhood level.

Senate Bill 244

Approved in 2011, SB 244 requires cities and counties to address the infrastructure needs of unincorporated disadvantaged communities in city and county general plans and LAFCo Municipal Service Reviews (MSRs) and annexation decisions. SB 244 defines an unincorporated disadvantaged community as a place that: contains 10 or more dwelling units in close proximity to one another; is either within a city SOI, is an island within a city boundary, or is geographically isolated and has existed for more than 50 years; and has a median household income that is 80 percent or less than the statewide median household income. For cities and counties, SB 244 requires that before the due date for adoption of the next housing element after January 1, 2012, the general plan land use element must be updated to: identify unincorporated disadvantaged communities; analyze for each identified community the water, wastewater, stormwater drainage, and structural fire protection needs; and identify financial funding alternatives for the extension of services to identified communities. For LAFCos, SB 244 generally prohibits approval of city annexations greater than 10 acres that are contiguous to a disadvantaged unincorporated community unless the city applies to annex the disadvantaged unincorporated community as well.

California Department of Transportation's Active Transportation Program (ATP)

California Department of Transportation (CalTrans) the Active Transportation Program (ATP) aims to enhance public health and advance California's climate goals by increasing safety and mobility for non-motorized active transportation such as biking and walking. Twenty-five percent of program funds are set aside for ATP projects in "disadvantaged communities" (defined as census tracts within the top 25% of CalEnviroScreen (CES) scores along with several other options), while an additional 2% is set aside to fund active transportation planning in DACs.

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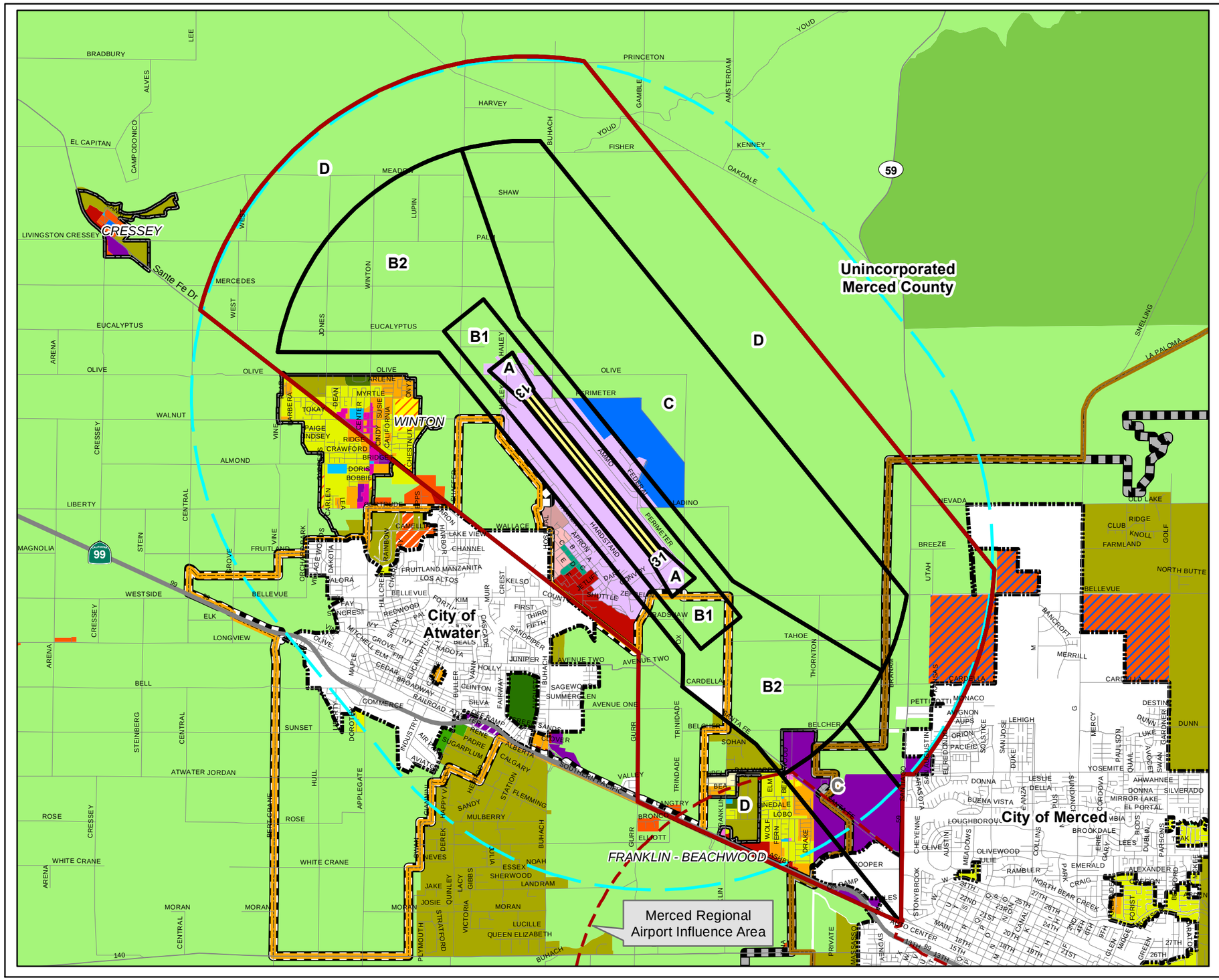
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APPENDIX C: AIRPORT LAND USE COMPATIBILITY TABLE



Legend

- Airport Land Use Compatibility Zones[1]
- Airport Influence Area
- FAA Height Notification Surface
- City Limits
- Atwater Sphere of Influence
- Merced Sphere of Influence
- Atwater General Plan Planning Area
- City of Merced General Plan Planning Area
- Community Boundaries
- Runway
- Roads

Urban Designations

Castle
- Residential
- Commercial
- Visitor Commercial
- Business Park
- Aviation/Manufacturing
- Public Use
- Open Space

Franklin Beachwood Community Plan
- Agricultural-Residential
- Very Low Density Residential
- Low Density Residential
- Medium Density Residential
- General Commercial
- Neighborhood Commercial
- Industrial
- Institutional/Public
- Recreational
- Residential Reserve

Winton Community Plan
- Agricultural-Residential
- Low Density Residential
- Medium Density Residential
- Residential
- Commercial Transition
- Industrial
- Institutional/Public
- Recreational
- Residential Reserve

City Planning Areas
- Agricultural
- Agricultural-Residential
- Rural Residential
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Residential
- General Commercial
- Neighborhood Commercial
- Heavy Commercial
- Highway Interchange Center
- Industrial
- Public/Government
- Public Use
- Recreational
- Park/Open Space/Recreational
- Regional Community
- Industrial Reserve
- Urban Reserve
- Urban Expansion Area

Rural Residential Centers
- Agricultural
- Agricultural-Residential
- Residential
- General Commercial
- Neighborhood Commercial
- Industrial
- Institutional/Public
- Public Use

Isolated Urban Designations
- Residential
- Industrial

Rural Designations
- Agricultural
- Foothill Pasture

Notes: [1]See Chapter 3, Map CAS 1, Compatibility Policy Map.

Data Sources: General Plan designations from Merced County, 2011. Basemap details from Merced County, 2011. Runway alignment from FAA Airport Master Record, 2010.

0 3,000 6,000 12,000 Feet

N

Castle Airport

Land Use Compatibility Plan

(Adopted June 21, 2012)

Exhibit CAS 7A

Detailed General Plan Land Uses: County of Merced

Land Use Category [1]	Compatibility Zones					Criteria for Conditional Uses [2]
› Land Use Acceptability Legend for Green, Yellow, and Red provided on last page of this table	**A**	**B1**	**B2**	**C**	**D**	› Intensity criteria apply to all nonresidential uses including ones shown as "Normally Compatible" (green) › Nonresidential development must satisfy both sitewide and single-acre intensity limits (see *Policy 5.2.5)* › Conditions listed below apply to uses listed as "Conditional" (yellow) for a particular zone › Numbers in Conditional cells are Floor Area Ratio (FAR) limits (see *Policy 5.2.9* for applicability) › Up to 10% of total floor area may be devoted to an ancillary use (see *Policy 3.1.2(d))*
Max. Sitewide Average Intensity (people/acre)[3] **Max. Single-Acre Intensity (people/acre)** *applicable to all nonresidential development*	**10** **10**	**50** **100**	**100** **300**	**200** **800**	**no limit**	
Open Land Requirement (see *Policy 5.2.12*)	**all remaining**	**30%**	**30%**	**15%**	**no requirement**	
General Characteristics						
Any use having more than 3 habitable floors						
Any use having structures or trees up to 100 feet in height						B1: Ensure airspace obstruction does not occur (see Airspace Protection Plans)
Any use having structures or trees more than 100 feet in height						B1, B2, C, D: Ensure airspace obstruction does not occur(see Airspace Protection Plans)
Any use having the potential to cause an increase in the attraction of birds or other wildlife						B1, B2, C, D: Mitigation must be provided consistent with FAA rules and regulations [4]
Any use creating visual or electronic hazards to flight [5]						
Natural Land Areas: woods, brush lands, desert						A: Objects above runway elevation not allowed in OFA [6] B: Vegetation must be clear of airspace surfaces
Water: flood plains, wetlands, lakes, reservoirs						A: Objects above runway elevation not allowed in OFA [6] All: Avoid new features that attract more birds
Agriculture (except residences and livestock): crops, orchards, vineyards, pasture, range land						A: Not allowed in OFA [6] A, B1, B2, C: ensure airspace obstruction does not occur (see Airspace Protection Plans) All: Avoid crops that attract birds
Livestock Uses: feed lots, stockyards, breeding, fish hatcheries, horse stables						B1, B2, C: Avoid uses that attract birds B1, B2, C: Exercise caution with uses involving noise-sensitive animals [7]
Outdoor Major Assembly Facilities (capacity ≥1,000 people): spectator-oriented outdoor stadiums, amphitheaters, fairgrounds, zoos						D: Allowed only if alternative site outside zone would not serve intended function
Group Recreation (limited spectator stands): athletic fields, water recreation facilities, picnic areas						B2, C: Avoid if intended for noise-sensitive uses; ensure intensity criteria met
Small/Non-Group Recreation: golf courses, tennis courts, shooting ranges						B1, B2, C: Avoid if intended for noise-sensitive uses; ensure intensity criteria met
Local Parks: children-oriented neighborhood parks, playgrounds						B2, C: Allowed only if alternative site outside zone would not serve intended function, ensure intensity criteria met
Camping: campgrounds, recreational vehicle/ motor home parks						B2, C: Ensure intensity criteria met
Cemeteries (except chapels)						

Table 2A

Basic Compatibility Criteria

Land Use Category [1]	Compatibility Zones					Criteria for Conditional Uses [2]
› Land Use Acceptability Legend for Green, Yellow, and Red provided on last page of this table	**A**	**B1**	**B2**	**C**	**D**	› Intensity criteria apply to all nonresidential uses including ones shown as "Normally Compatible" (green) › Nonresidential development must satisfy both sitewide and single-acre intensity limits (see *Policy 5.2.5)* › Conditions listed below apply to uses listed as "Conditional" (yellow) for a particular zone › Numbers in Conditional cells are Floor Area Ratio (FAR) limits (see *Policy 5.2.9* for applicability) › Up to 10% of total floor area may be devoted to an ancillary use (see *Policy 3.1.2(d))*
Max. Sitewide Average Intensity (people/acre)[3] **Max. Single-Acre Intensity (people/acre)** *applicable to all nonresidential development*	**10** **10**	**50** **100**	**100** **300**	**200** **800**	**no limit**	
Open Land Requirement (see *Policy 5.2.12*)	**all remaining**	**30%**	**30%**	**15%**	**no requirement**	
Residential and Lodging Uses						
Single-Family Residential: individual dwellings, townhouses, mobile homes, bed & breakfast inns						B1: B2: Portions of parcel including accessory buildings can be in zone; dwelling must be outside of zone B1: Max. 1 d.u./5 acres B2: Max. 1 d.u./acre C: Max. 8 d.u./acre B1, B2: CNEL 45 dB max. interior noise level
Multi-Family Residential						C: Max. 8 d.u./acre
Long-Term Lodging (>30 nights): extended-stay hotels, dormitories						C: Ensure intensity criteria met
Short-Term Lodging (≤30 nights): hotels, motels, other transient lodging (except conference/assembly facilities) [approx. 200 s.f./person]			0.46	0.92		B2, C: Ensure intensity criteria met B2: CNEL 45 dB max. interior noise level
Congregate Care: retirement homes, assisted living, nursing homes, intermediate care facilities						C: Ensure intensity criteria met
Educational and Institutional Uses						
Family day care homes (≤14 children)						B2, C: Only small family care homes (≤8 children) as permitted by state law [8] B2: CNEL 45 dB max. interior noise level
Children's Schools: K-12, day care centers (>14 children); school libraries						B2, C: Limited expansion on existing sites; no new sites (see Policy 5.5.2(c)(2)) B2: CNEL 50 dB max. interior noise level
Adult Education classroom space: adult schools, colleges, universities [approx. 40 s.f./person]			0.09	0.18		B2, C: Ensure intensity criteria met B2: CNEL 50 dB max. interior noise level
Community Libraries [approx. 100 s.f./person]						C: Ensure intensity criteria met
Indoor Major Assembly Facilities (capacity ≥1,000 people): auditoriums, conference centers, concert halls, indoor arenas						
Indoor Large Assembly Facilities (capacity 300 to 999 people): movie theaters, places of worship, cemetery chapels, mortuaries [approx. 15 s.f./person]				0.07		C: Ensure intensity criteria met
Indoor Recreation: gymnasiums, club houses, athletic clubs, dance studios [approx. 60 s.f./person]			0.14	0.28		B2, C: Ensure intensity criteria met
In-Patient Medical: hospitals, mental hospitals						C: No new sites or land acquisition; replacement/ expansion of existing facilities limited to existing size

Table 2A, continued

Land Use Category [1]	Compatibility Zones					Criteria for Conditional Uses [2]
› Land Use Acceptability Legend for Green, Yellow, and Red provided on last page of this table	**A**	**B1**	**B2**	**C**	**D**	› Intensity criteria apply to all nonresidential uses including ones shown as "Normally Compatible" (green) › Nonresidential development must satisfy both sitewide and single-acre intensity limits (see *Policy 5.2.5)* › Conditions listed below apply to uses listed as "Conditional" (yellow) for a particular zone › Numbers in Conditional cells are Floor Area Ratio (FAR) limits (see *Policy 5.2.9* for applicability) › Up to 10% of total floor area may be devoted to an ancillary use (see *Policy 3.1.2(d))*
Max. Sitewide Average Intensity (people/acre)[3] **Max. Single-Acre Intensity (people/acre)** *applicable to all nonresidential development*	**10** **10**	**50** **100**	**100** **300**	**200** **800**	**no limit**	
Open Land Requirement (see *Policy 5.2.12*)	**all remaining**	**30%**	**30%**	**15%**	**no requirement**	
Out-Patient Medical: health care centers, clinics [approx. 240 s.f./person]			0.55	1.10		B2, C: Ensure intensity criteria met B2: CNEL 50 dB max. interior noise level
Penal Institutions: prisons, reformatories						C: Ensure intensity criteria met
Public Safety Facilities: police, fire stations						B1: Allowed only if airport serving B2: Allowed only if alternative site outside zone would not serve intended public function B2: CNEL 50 dB max. interior noise level for office areas
Commercial, Office, and Service Uses						
Major Retail: regional shopping centers, 'big box' retail [approx. 110 s.f./person]				0.51		C: Ensure intensity criteria met; capacity <1,000 people per bldg; evaluate eating/drinking areas separately if >10% of total floor area
Local Retail: community/neighborhood shopping centers, grocery stores [approx. 170 s.f./person]			0.39	0.78		B2, C: Ensure intensity criteria met; capacity <150 people per bldg; evaluate eating/drinking areas separately if >10% of total floor area B2: CNEL 50 dB max. interior noise level for office areas
Eating/Drinking Establishments: restaurants, fast-food dining, bars [approx. 60 s.f./person]			0.14	0.28		B2, C: Ensure intensity criteria met; capacity <500 people per bldg B2: CNEL 50 dB max. interior noise level for office areas
Limited Retail/Wholesale: furniture, automobiles, heavy equipment, lumber yards, nurseries [approx. 250 s.f./person]		0.29	0.57	1.15		B1: Design site to place parking inside and bldgs outside of zone if possible B1, B2, C: Ensure intensity criteria met B1, B2: CNEL 50 dB max. interior noise level for office areas
Offices: professional services, doctors, finance, civic; radio, television & recording studios, office space related to other listed uses [approx. 215 s.f./person]		0.25	0.49	0.99		B1, B2, C: Ensure intensity criteria met B1, B2: CNEL 50 dB max. interior noise level
Personal & Miscellaneous Services: barbers, car washes, print shops [approx. 200 s.f./person]			0.46	0.92		B2, C: Ensure intensity criteria met B2: CNEL 50 dB max. interior noise level for office areas
Fueling Facilities: gas stations, trucking & transportation terminals						B1: All fuel storage placed underground B1, B2: Ensure intensity criteria met B1, B2: CNEL 50 dB max. interior noise level for office areas

Table 2A, continued

Land Use Category [1]	Compatibility Zones					Criteria for Conditional Uses [2]
› Land Use Acceptability Legend for Green, Yellow, and Red provided on last page of this table	**A**	**B1**	**B2**	**C**	**D**	› Intensity criteria apply to all nonresidential uses including ones shown as "Normally Compatible" (green) › Nonresidential development must satisfy both sitewide and single-acre intensity limits (see *Policy 5.2.5)* › Conditions listed below apply to uses listed as "Conditional" (yellow) for a particular zone › Numbers in Conditional cells are Floor Area Ratio (FAR) limits (see *Policy 5.2.9* for applicability) › Up to 10% of total floor area may be devoted to an ancillary use (see *Policy 3.1.2(d))*
Max. Sitewide Average Intensity (people/acre)[3] **Max. Single-Acre Intensity (people/acre)** *applicable to all nonresidential development*	**10** **10**	**50** **100**	**100** **300**	**200** **800**	**no limit**	
Open Land Requirement (see *Policy 5.2.12*)	**all remaining**	**30%**	**30%**	**15%**	**no requirement**	
Industrial, Manufacturing, and Storage Uses						
Hazardous Materials Production: oil refineries, chemical plants						
Heavy Industrial						C, D: Avoid bulk storage of hazardous (flammable, explosive, corrosive, or toxic) materials; permitting agencies to evaluate possible need for special measures to minimize hazards if struck by aircraft
Light Industrial, High Intensity: food products preparation, electronic equipment [approx. 200 s.f./person]			0.46	0.92		B2, C: Ensure intensity criteria met; avoid bulk storage of hazardous (flammable, explosive, corrosive, or toxic) materials; permitting agencies to evaluate possible need for special measures to minimize hazards if struck by aircraft B2: CNEL 50 dB max. interior noise level for office areas
Light Industrial, Low Intensity: machine shops, wood products, auto repair [approx. 350 s.f./person]		0.40	0.80			B1, B2: Ensure intensity criteria are met; avoid bulk storage of hazardous (flammable, explosive, corrosive, or toxic) materials; permitting agencies to evaluate possible need for special measures to minimize hazards if struck by aircraft B1, B2: CNEL 50 dB max. interior noise level for office areas
Research & Development [approx. 300 s.f./person]		0.34	0.69	1.38		B1, B2, C: Ensure intensity criteria are met; avoid bulk storage of hazardous (flammable, explosive, corrosive, or toxic) materials; permitting agencies to evaluate possible need for special measures to minimize hazards if struck by aircraft B1, B2: CNEL 50 dB max. interior noise level for office areas
Indoor Storage: wholesale sales, warehouses, mini/other indoor storage, barns, greenhouses [approx. 1,000 s.f./person]		1.14				B1: Ensure intensity criteria are met B1, B2 (green): CNEL 50 dB max. interior noise level for office areas
Outdoor Storage: public works yards, automobile dismantling						
Mining & Extraction						
Transportation, Communication, and Utilities						
Airport Terminals: airline, general aviation						
Rail & Bus Stations						B1, B2: Allowed only if site outside zone would not serve intended public function; ensure intensity criteria met B1, B2: CNEL 50 dB max. interior noise level for office areas

Table 2A, continued

Land Use Category [1]	Compatibility Zones					Criteria for Conditional Uses [2]
› Land Use Acceptability Legend for Green, Yellow, and Red provided on last page of this table	**A**	**B1**	**B2**	**C**	**D**	› Intensity criteria apply to all nonresidential uses including ones shown as "Normally Compatible" (green) › Nonresidential development must satisfy both sitewide and single-acre intensity limits (see *Policy 5.2.5)* › Conditions listed below apply to uses listed as "Conditional" (yellow) for a particular zone › Numbers in Conditional cells are Floor Area Ratio (FAR) limits (see *Policy 5.2.9* for applicability) › Up to 10% of total floor area may be devoted to an ancillary use (see *Policy 3.1.2(d))*
Max. Sitewide Average Intensity (people/acre)[3] **Max. Single-Acre Intensity (people/acre)** *applicable to all nonresidential development*	**10** **10**	**50** **100**	**100** **300**	**200** **800**	**no limit**	
Open Land Requirement (see *Policy 5.2.12*)	**all remaining**	**30%**	**30%**	**15%**	**no requirement**	
Transportation Routes: road & rail rights-of-way, bus stops						A: Not allowed in OFA [6]; avoid road intersections if traffic congestion occurs
Auto Parking: surface lots, structures						A: Not allowed in OFA [2]; allowed only if site outside zone would not serve intended function
Communications Facilities: emergency communications, broadcast & cell towers						B2, C: Allowed only if site outside zone would not serve intended public function B2: CNEL 50 dB max. interior noise level for office areas
Power Plants						D: Allowed only if site outside zone would not serve intended public function
Electrical Substations						B2, C: Allowed only if site outside zone would not serve intended public function
Wastewater Facilities: treatment, disposal						B1, B2: Avoid new features that may attract birds
Solid Waste Disposal Facilities: landfill, incineration						
Solid Waste Transfer Facilities, Recycle Centers						D: Avoid new features that may attract birds

Table 2A, continued

Land Use Acceptability		Interpretation/Comments
	Normally Compatible	Normal examples of the use are compatible with noise, safety, and airspace protection criteria. Atypical examples may require review to ensure compliance with usage intensity, lot coverage, and height limit criteria.
	Conditional	Use is compatible if indicated usage intensity, lot coverage, and other listed conditions are met. For the purposes of these criteria, "avoid" is intended as cautionary guidance, not a prohibition of the use.
	Incompatible	Use should not be permitted under any circumstances.

Notes

1 Land uses not specifically listed shall be evaluated using the criteria for similar uses. Assumed occupancy levels (square feet / person) cited for many listed uses can be used as a factor in determining the appropriate land use category for unlisted uses or atypical examples of a use. Multiple land use categories and compatibility criteria may apply to a project.

2 Dedication of an avigation easement is required as a condition for approval of any proposed development, except ministerial actions associated with modification of existing single-family residences, situated on a site that lies completely or partially within any of the following: within Compatibility Zones A or B1; or, as defined by FAR Part 77 and shown on the airport's Airspace Protection Map in Chapter 3, an area (1) within the primary surface, (2) beneath the approach or transitional surfaces to where the latter surfaces intersect with the horizontal surface or (3) situated at an elevation that penetrates or is less than 35 feet below any other airspace protection surface. Recorded overflight notification is required for all residential development in the remainder of the airport influence area. See *Policies 5.4.4 and 5.5.6*.

3 Usage intensity calculations shall include all people (e.g., employees, customers/visitors) who may be on the property at any single point in time, whether indoors or outdoors. Local agencies may make exceptions for rare special events (e.g., an air show at the airport) for which a facility is not designed and normally not used and for which extra safety precautions can be taken as appropriate. See *Policy 5.2.9 and 5.5.4*.

4 No proposed use shall be allowed that would create an increased attraction for wildlife and that is inconsistent with FAA rules and regulations including, but not limited to, FAA Order 5200.5A, Waste Disposal Sites on or Near Airports, and Advisory Circular 150/5200-33, Hazardous Wildlife Attractants On or Near Airports. Of particular concern are landfills and certain recreational or agricultural uses that attract large flocks of birds which pose bird strike hazards to aircraft in flight.

5 Specific characteristics to be avoided include: sources of glare (such as from mirrored or other highly reflective structures or building features) or bright lights (including search lights and laser light displays); distracting lights that could be mistaken for airport lights; sources of dust, steam, or smoke that may impair pilots' vision; sources of steam or other emissions that cause thermal plumes or other forms of unstable air; and sources of electrical interference with aircraft communications or navigation. See *Policy 5.3.5*.

6 Object Free Area (OFA): Shown on the Airport Layout Plan (see Chapter 3) and the Compatibility Plan in this chapter; dimensions are established by FAA airport design standards for the runway.

7 This caution is directed at the project proponent and is not intended to preclude approval of the project.

8 Small family day care homes provide family day care for eight or fewer children (Health and Safety Code Section 1596.78).

Table 2A, continued

Economic, Demographic, Real Estate, and Fiscal Existing Conditions Report

Prepared for the City of Atwater

September 22, 2023

bae urban economics

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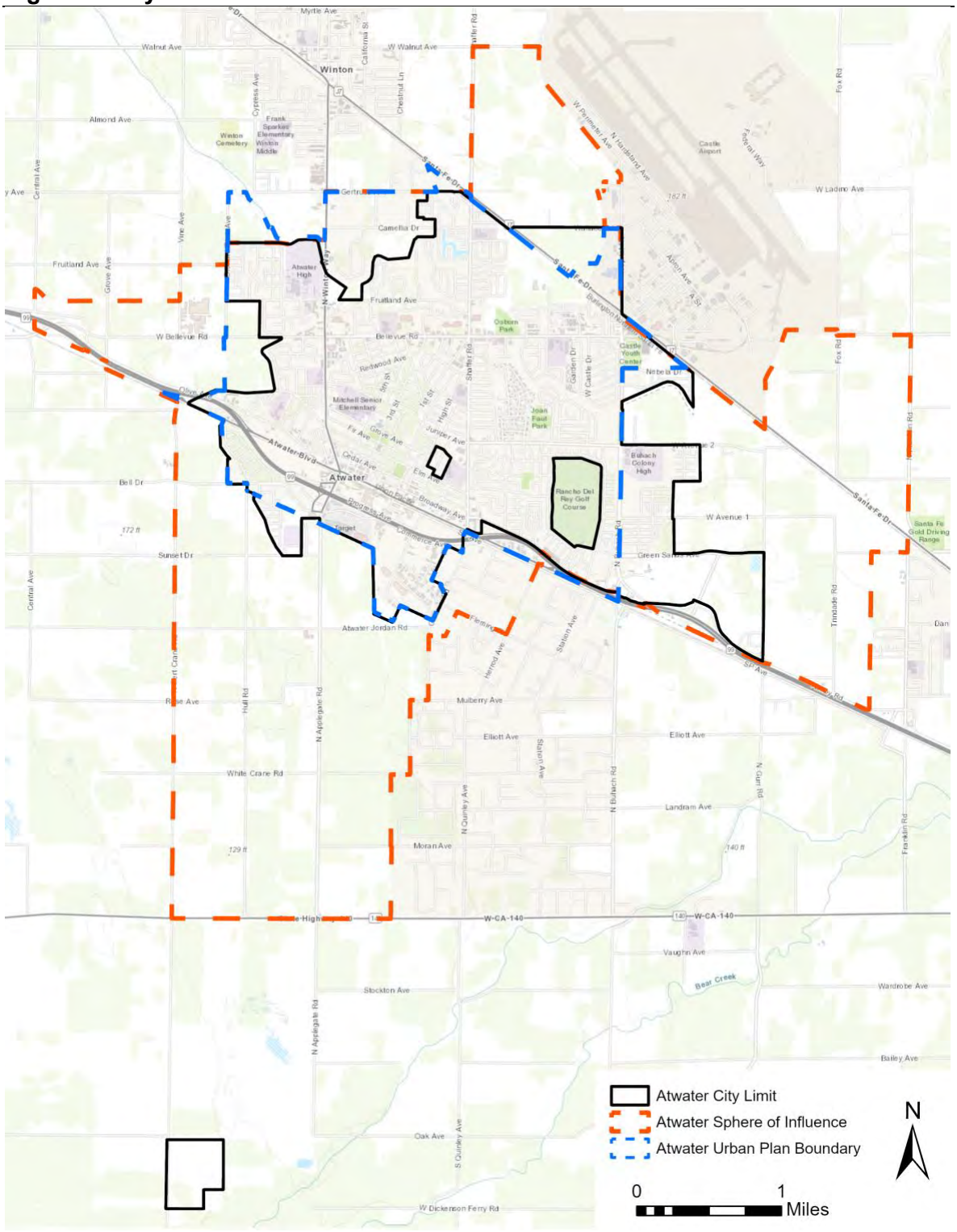
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INTRODUCTION

In support of the City of Atwater General Plan Update, BAE Urban Economics (BAE) has prepared this Demographic and Economics Existing Conditions Report to provide overviews of existing conditions and trends for the city's demographic makeup, the local and regional economy, the local real estate market for housing and other major land uses, and the City's fiscal status as indicated by its General Fund. In particular, the information contained in this report will help to inform preparation of the updated Land Use and Economic Development Element.

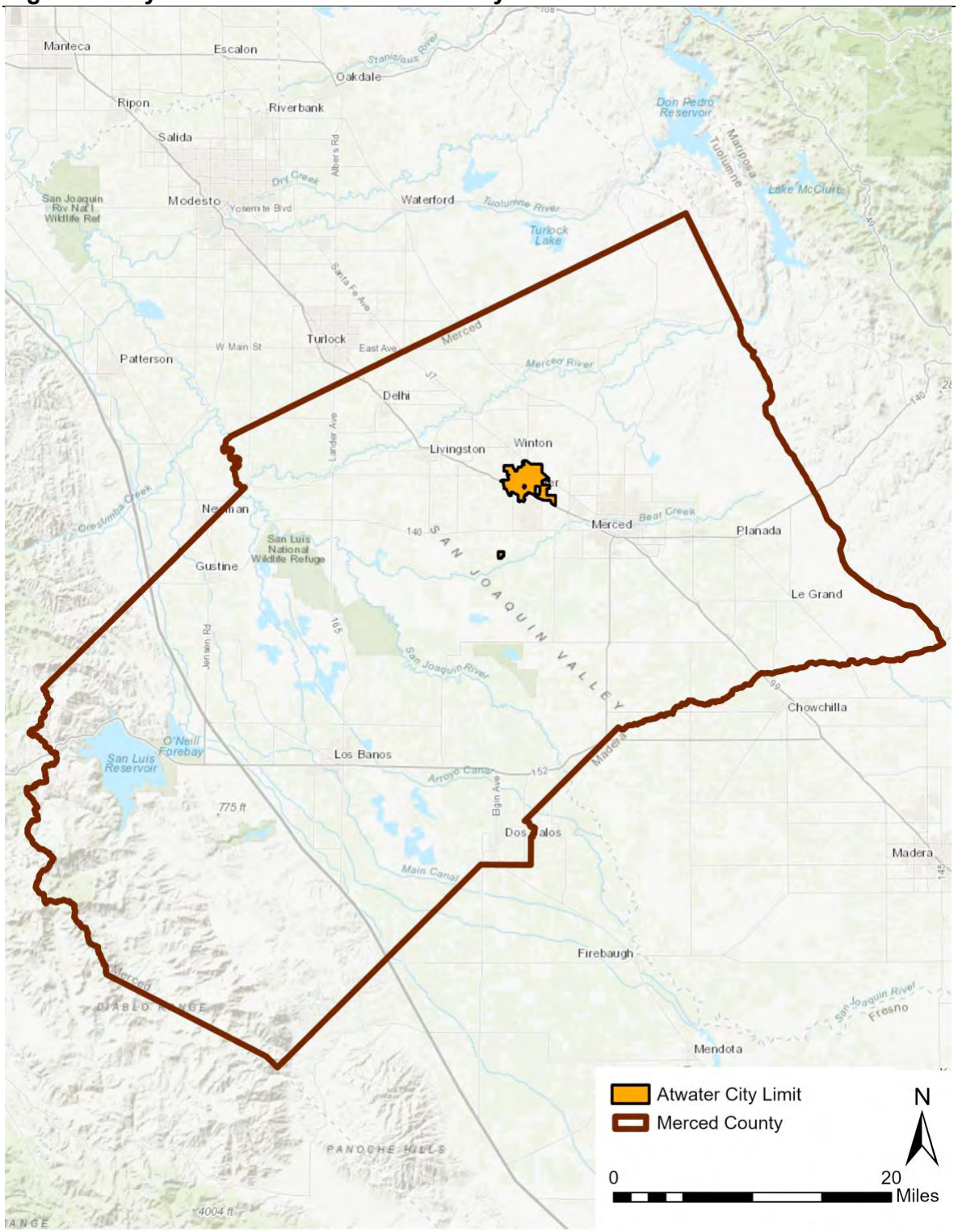
The City of Atwater (see Figure 1) is located in Merced County, in the heart of California's Central Valley. The regional context is shown in Figure 2. Comparative data for the county and the state are provided throughout the report to provide context for conditions and trends in Atwater itself.

Figure 1: City of Atwater



Sources: Merced County GIS; Esri; BAE, 2023.

Figure 2: City of Atwater and Merced County



Sources: Merced County GIS; Esri; BAE, 2023.

SUMMARY FINDINGS

The following sections summarize key findings of the analysis in this report.

Demographic Characteristics

Population and Household Trends

The California Department of Finance (DOF) estimates Atwater at 31,418 persons and 10,136 households as of 2023. By population, Atwater is the third largest of the six incorporated cities in Merced County, ranking behind Merced and Los Banos. Merced County is the 23rd most populous of California's 58 counties. These rankings have been relatively unchanged since 2000, as the city, the county, and the state have all shown population growth. Since 2020 the number of city residents has been relatively unchanged; however, the number of households continued to grow, leading to a decline in average household size.

Future Population Growth

Overall, Atwater and Merced County have shown population and household growth since 2010; however, as mentioned above, since 2020, estimates indicate that population growth has stalled for Atwater, but the county continues to see population growth. The most recent projections, which incorporated 2020 Census data, show more limited growth or even possible declines in population statewide. In contrast, Merced County's population is projected to increase even as the state population overall stagnates. Assuming Atwater mirrors county trends and maintains a constant percentage of the countywide population as estimated by DOF, Atwater can be expected to grow gradually, from 31,751 in 2020 to approximately 37,000 persons in 2050, or about a 17 percent increase, with a commensurate increase in demand for housing.

Age Characteristics

Atwater has a young population, with a 2020 median age of 33.2 years, which is lower than the state median of 37.5. This is largely due to the greater presence of non-adult children, who make up almost 30 percent of the Atwater population. Atwater shows an increasing percentage and number of persons 65 and older, as the "baby boom" generation ages. The growth in the population for all age groups may indicate demand for increased services targeting different age groups, especially children and the elderly, as well as housing suitable for household needs ranging from smaller homes for seniors who may be interested in downsizing and larger homes for young families.

Race and Ethnicity

Atwater and Merced County are "minority majority" areas. The city and county ethnic profiles are dominated by large and increasingly Latino populations, which may influence the types of retail and services demanded within the community.

Educational Attainment

The educational levels of an area's residents are a key driver of local economic potential; a more educated populace is likely to be associated with stronger economic conditions including higher resident incomes and a more fully employable labor force. Atwater, though, shows a lower level of educational achievement than California overall. Improving educational outcomes for local students would likely provide more employment opportunities and an improved quality of life for those residents and make Atwater more attractive to a broader range of employers.

Household and Per Capita Income

Resident incomes are an indicator of local economic conditions, with local spending strongly linked to resident incomes; local resident expenditures also generate tax dollars to support city services. Atwater's resident income levels are well below statewide levels. These income levels are likely associated with the lower educational attainment levels in the city, and result in lower per capita gross domestic product and retail sales in comparison to the state. Further, the prevailing incomes indicate that it will be important for the City to consider the need for housing types that are built and rented and/or sold at costs that can be more attainable to households with modest incomes.

Economic Conditions

Gross Domestic Product

One measure of an area's economy is gross domestic product (GDP), which estimates the annual value of all goods and services produced within that area. In 2021 the total GDP for Merced County was approximately $10.5 billion; this amounts to only about 0.3 percent of California's overall GDP of $3.4 trillion. In the county, the government and agriculture sectors are over-represented relative to the state. Nondurable goods manufacturing (e.g., food processing) is also a strong contributor to GDP for Merced County. Finance and real estate, professional and related services, and especially information are relatively small sectors in Merced County, indicating that the county's participation in California's tech and related services sector is limited. Overall, GDP data indicates that the county's economy is growing at only about half the rate for the state overall. The county GDP also lags on a per capita basis, at less than half the statewide figure. For the Atwater Zip Code, 95301, which also encompasses areas beyond the city limits, IMPLAN estimates that the area's GDP constitutes 14 percent of the county-wide GDP. Although this is fairly well correlated to the City's 11 percent share of the countywide population, suggesting that Atwater has a reasonable balance between residential and commercial activity, as discussed below, there is a fairly large deficit of local jobs in relation to the number of employed local residents.

Unemployment Trends

The unemployment rate is an indicator of local and regional economic strength; lower unemployment is generally linked to a healthy economy that is providing adequate job opportunities to area residents. Areas with large agriculture sectors typically have higher rates of unemployment and more seasonal variation in employment.

Between 2010 and 2022, Atwater and Merced County experienced consistently higher unemployment rates than California, with unemployment rates from three to six percent above the statewide rate. In 2022, the city's unemployment rate averaged 7.5 percent, with the county rate at 7.7 percent, compared to a state rate of only 4.2 percent.

In addition to having high unemployment relative to the state, Atwater and Merced County have substantial seasonal swings in employment tied to the region's agricultural economy. The creation of additional year-round jobs would likely benefit local workers by reducing the reliance on seasonal employment and providing more stable year-round income.

Jobs by Industry

Employment by major industry sector shows the strong focus on agriculture and food product manufacturing in Merced County. For Atwater, in descending rank order, natural resources and mining (which includes agricultural employment), retail trade, and the government sector (which includes public schools) provide over half of the city's employment.

Between 2017 and 2022, Atwater showed rapid employment growth compared to the county and the state, with that growth concentrated in agriculture, construction, retail trade, and accommodation and food services. However, the limited growth, and even loss of jobs, in "white collar" sectors such as professional services, indicates that Atwater and Merced County have so far had limited success in diversifying their economies to provide more of these types of jobs, which tend to provide higher earnings and more full-time work than many of the current agriculture and service-related jobs. This information suggests that further economic diversification should be an economic development priority.

Future Job Growth

Based on Caltrans projections, Merced County will experience 17.8 percent growth in employment between 2020 and 2050, to a total of approximately 96,000 jobs, with most of this growth occurring by 2030. Assuming that Atwater maintains a constant share of Merced County jobs, employment in the city would reach 8,900 jobs in 2050. However, City actions with respect to economic development, land use, and other factors could influence the future of job creation in Atwater. The Caltrans projections by major industry group indicate that the overall economic base of Merced County will remain similar over time, with agriculture and related industries continuing to be a key component of the economy. Thus, to achieve economic diversification, the City of Atwater will need to make concerted efforts to retain,

expand, and attract business types that are outside of the City's legacy agriculture, government, and services sectors.

Worker Earnings

As noted above, Atwater residents and households have incomes below statewide levels. This results in large part from the pay levels associated with the jobs available in the city. Average annual pay for jobs in Atwater is below that of the county, and well below the average for California, further highlighting the need for diversification of the local economy into new industry sectors.

Resident Employment

Resident occupations in Atwater and Merced County also reflect the local economy, with an orientation toward production and manufacturing jobs rather than professional services and information. Compared to California, Atwater, and Merced County show high proportions of residents in "blue collar" occupations including production, transportation, and material moving occupations and natural resources, construction, and maintenance occupations. Residents of the city and county exhibit low concentrations of "white collar" jobs in computer, engineering, and science and in management, business, and financial occupations.

Overall, the labor force appears relatively well-matched with the current local jobs, but the educational attainment and the particular skill sets of local residents may limit the ability of the city to attract industries such as professional services or life sciences that require higher education levels or specific training. This information indicates that the City should consider undertaking efforts to increase its attractiveness to workers with higher education and skill levels who, in turn, may help to attract a more diversified set of local businesses. Typically, these types of workers seek communities with a high quality of life, including good parks and recreational amenities and arts, educational, and cultural opportunities. The City can also work on "upskilling" the local workforce to enhance the attractiveness of the local workforce to businesses that seek a labor force with higher education and skills.

Major Employers in Merced County

As discussed above, government establishments provide a large share of the jobs in Merced County, account for a large share of the county's GDP, and accordingly, represent six of the top seven largest employers reported for Merced County. Mercy Medical Center and food processing businesses round out the list of the top ten employers.

Jobs/Employed Residents Balance and Commute Flows

Atwater and Merced County both show an imbalance between workers and jobs, with more working residents than jobs. This is an indicator of net out-commuting from the city and the county, with only approximately one job in Atwater for every two working residents. Additionally, there is substantial cross-commuting, such that local residents hold only 38 percent of the jobs within the city, and only approximately 20 percent of employed residents

work in the city. This information highlights the importance of local economic development, to create a better balance between the size of the local working population and the number of local employment opportunities.

Taxable Sales Trends

The level of purchases by households, businesses, and government provides another measure of the strength of a local economy. In 2022, Atwater had local taxable sales of approximately $392 million, 11 percent of the countywide total of $3.57 billion. On a per capita basis, Atwater and Merced County had comparable sales levels, at $12,419 and $12,551, respectively. In contrast, statewide per capita sales were $20,019. The lower sales in Atwater and the county reflect the lower incomes and spending power of city and county residents. The lower per capita retail sales levels have implications for the quality of City services, as sales tax revenue is a major source of General Fund revenues that the City uses to fund basic municipal services.

Atwater lags the county and state for motor vehicle-related retail, home furnishings and appliances stores, and building materials outlets with sales to Atwater residents being captured in other larger nearby cities. Attracting a large building materials outlet to the city may represent a potential opportunity to capture additional taxable retail sales. Atwater has strong general merchandise store sales, due to the presence of large Walmart and Target stores which attract customers from outside the city. It should be noted, however, that the growth of online shopping has adversely affected the viability of local "brick and mortar" retail outlets, especially for certain types of specialty goods such as electronics, books, and clothing.

Castle Commerce Center

Located adjacent to Atwater, the former Castle Air Force Base, now the Castle Airport and Castle Commerce Center, offers a key asset serving the local economic base. This facility includes a general aviation airport and a developing multi-modal freight facility with rail service for local agricultural producers and industries. The Airport is within a Foreign Trade Zone, and the Commerce Center includes office, warehouse, and R&D facilities and acreage, as well as aviation support and training facilities. In July 2023, the California State Transportation Agency awarded a Port and Freight Infrastructure Project grant of $49.6 million toward a $115.7 million project to build out an inland port at the Castle Commerce Center, providing multiple transportation modes for the shipment and transfer of goods, particularly agricultural products.

While the Airport and Commerce Center are outside city limits, the current and future facilities will provide jobs for city residents and generate economic activity within Atwater itself. The development of improved rail-related facilities will also provide environmental benefits by replacing multiple truck trips with fewer train trips, resulting in reduced emissions and improved local air quality.

Real Estate Market Conditions

Residential Real Estate Market

The housing stock in Atwater consists of a preponderance of single-family detached homes. Conversely, the city's housing unit mix includes limited proportions of apartment-style multifamily housing units.

Despite housing being oriented toward single-family detached homes in Atwater and Merced County, neither area shows a higher level of owner-occupancy than the state, perhaps indicating that the lower income levels in the county are limiting the ability of local households to purchase their own homes.

Housing construction in Atwater peaked in the 1970s, with nearly one-fourth of all housing in the city constructed during that decade. Less than five percent of housing units have been built since 2010, with more recent development shifting to other areas of Merced County.

Vacancy rates help demonstrate the relationship between housing supply and demand and can indicate whether a jurisdiction has an adequate housing supply to accommodate demand. As of 2020, Atwater shows a relatively low overall housing vacancy rate of 3.2 percent, lower than the 4.9 percent countywide and 6.4 percent statewide rates. The vacancy rate for Atwater is a steep decline from vacancy rates in 2010 during the Great Recession and associated housing market and financial market crisis. The low vacancy rate in Atwater may indicate that the local housing market is struggling to meet demand as new households and existing households seeking different housing types face a lack of choices and may indicate that there is pent-up demand for new housing development.

Between June 2022 and April 2023, larger single-family residential units with three or more bedrooms were the most commonly sold unit type. The median home sale price for single-family units was $360,000.

CoStar reports approximately 2,700 market-rate multifamily units in Atwater, with a vacancy rate of only 1.7 percent. The citywide average apartment rental rate is $1,153 as of the second quarter of 2023. This low vacancy rate is indicative of a strong apartment rental market in Atwater.

Retail Real Estate Market

Retail properties in Atwater are primarily concentrated in three nodes: adjacent to State Highway 99 near the Applegate Road exit, along or near Bellevue Road, and Downtown along or near Broadway. The largest shopping center (by far) in Atwater is the Applegate Ranch Shopping Center at Applegate Road and State Route 99, containing both a Walmart Supercenter and a Super Target, along with numerous other retailers. Bellevue Road is home to several older centers anchored by supermarkets or second-generation replacement stores.

Downtown Atwater is home to a mix of small independent retailers and service businesses along Broadway and nearby streets. The City has undertaken efforts to enhance "Old Town Atwater," including the 2009 *Atwater Downtown Revitalization Strategy,* with work on this strategy ongoing.

Overall, CoStar reports approximately 1.7 million square feet of retail space in Atwater, out of a total of 12 million square feet countywide, or about 14 percent of the countywide retail inventory. Considering that Atwater's resident population is about 11 percent of the countywide population, the City has a disproportionate share of the inventory and may be a net attractor of shoppers from other areas. Vacancies are limited, at only 1.6 percent of the retail inventory in the city. This low vacancy rate indicates that the supply of retail space will need to expand as the City's population expands, with little "slack" in the existing inventory to accommodate growth in the retail spending of local households.

Office Real Estate Market

The data on employment by major industry indicates limited demand for office space in Atwater. CoStar data confirms this, with a total reported inventory of only approximately 340,000 square feet, out of a total of 3.6 million square feet in Merced County. In Atwater, office uses are scattered throughout the city. Office vacancies are extremely low, at less than one percent. This low vacancy rate may indicate that there is existing pent-up demand for space for local office-based businesses to expand, and it also limits the City's ability to foster start-up businesses or attract businesses from outside the community that wish to relocate or expand locally. Expanding the supply of office space will likely be needed to support economic diversification.

Industrial Real Estate Market

Industrial development in Atwater is concentrated in the southern portions of the city, with a large cluster of properties to the south of Highway 99 and east of the Applegate Ranch Shopping Center. Other industrial uses, including the Teasdale Latin Foods facility, are found between the Union Pacific rail line and Highway 99. Much of the city south of Highway 99 is zoned for manufacturing, industrial, and business park uses, along with some areas near the airport and in the westernmost areas of the city north of Highway 99. CoStar reports approximately 1.2 million square feet of existing industrial space in Atwater, and 12.0 million in Merced County overall. Vacancies for industrial space are extremely low, at 1.0 percent for Atwater and 2.3 percent for the county.

The low vacancy rates in not only the industrial sector but also the retail and office sectors indicate that new businesses or existing businesses seeking to expand within the City would have little choice of space offered for sale or for lease. This could encourage businesses to choose locations outside of Atwater where there is greater availability of space. The lack of vacancies may hinder efforts to attract new and/or retain existing businesses as a means of

diversifying the local economy. Land use and economic development-related policies should encourage and facilitate developers to expand the local supply of non-residential real estate.

Fiscal Conditions

The City of Atwater General Fund receives the City's discretionary revenues and funds its basic municipal services. Atwater's General Fund revenues and expenditures vary annually based on the changing conditions in the city. The majority of revenue generated within Atwater is attributed to property and sales taxes, while General Fund expenditures are primarily associated with police and fire services.

With the exception of the proposed budget for the current fiscal year, Atwater's General Fund has maintained a positive annual balance, allowing the City to build a reserve that, even with this year's imbalance, remains at 25 percent. The substantial reserve could assist the City during any future periods of declining revenues and/or increasing expenses. With the State of California projected to experience a substantial budget deficit for the 2024/2025 Fiscal Year, the local budget reserve could give the City flexibility to adapt to cutbacks in State subventions to local governments that sometimes occur during State budget crises.

Property taxes are a critical source of revenue for the City. The Tax Rate Area (TRA) property tax shares for Atwater falls in two ranges. TRAs covering most of the city provide between 31 percent and 32 percent of the total one percent ad valorem property tax rate to the city, but some peripheral areas, representing more recent annexations, only provide between 17 percent and 18 percent of the ad valorem property tax to the City General Fund. Based on the current master property tax revenue sharing agreement with the County, Atwater's share of property taxes from any future annexations would likely be similar to that from other recently incorporated areas covered by the lower rate of 17 to 18 percent. This means that the City generally receives a lower share of property tax revenue to help fund services for new development than it had historically, which could make the City more dependent upon other sources of revenue, such as sales tax and transient occupancy tax, to ensure long-term fiscal sustainability as the City continues to grow.

The City should carefully assess the fiscal impacts of any annexation to ensure that the cost to provide services to the new areas does not exceed the revenue generated by the annexation. In particular, the City should carefully consider the needs for expansion of Fire and Police services, which represent more than 50 percent of General Fund revenue consumption. Typically, providing services to infill development is more efficient than for newly annexed properties, and the more limited property tax allocated to the City from annexed properties provides an additional reason for the city to focus new development as much as possible within infill areas where the City receives more robust property tax shares. In addition, the City could likely benefit from expansion of non-residential land uses within the City which, in addition to helping improve the local jobs housing balance (i.e., shortfall of jobs relative to employed residents), would likely create fiscal benefits as non-residential land uses often

generate more revenue than new service costs. In addition, economic diversification can help to make the local economy (and tax base) more resilient to broader regional, state, and national economic challenges, such as the projected State budget deficit.

DEMOGRAPHIC CHARACTERISTICS

The following section presents population, household, and housing characteristics and trends for Atwater, Merced County, and the State of California, providing demographic context for the General Plan Update. This section draws primarily from public sources such as the U.S Bureau of the Census and the State California Department of Finance. In addition to current year estimates, the following analysis also presents historical data in order to identify important demographic trends within Atwater and Merced County.

Population and Household Trends

Population and households, and changes over time in their numbers, are key factors in assessing conditions for a locale, driving local trends in housing, labor force and employment, real estate (both residential and commercial), and consumer, business and government expenditures.

Population Trends

By population, Atwater is the third largest of the six incorporated cities in Merced County, ranking behind Merced and Los Banos. Merced County is the 23rd most populous of California's 58 counties. These rankings have been relatively unchanged since 2000, as the city, the county, and the state have all shown population growth.

Since 2010, Atwater's population has increased at a faster rate than for Merced County overall, which in turn has grown faster than California's (see Table 1). However, that growth occurred between 2010 and 2020, with little change in population since 2020. The California Department of Finance (DOF) estimates the 2023 Atwater population at 31,418 and the county population at 285,337.

Household Trends

The number of households in Atwater also grew faster than in the county or California, at about the same rate as population growth. However, the number of households continued to grow after 2020 in Atwater, Merced County, and California even where population did not in Atwater and the state. For 2023, DOF estimates the city has 10,136 households, with the county at 86,906 households. Due to the growth in the number of households after 2020 while population showed declines or limited growth, all three geographies showed a decrease in average household size to levels below those in 2010. Even as the average sizes have

declined, Atwater and Merced County still both have larger households on average than the state; larger households are likely to seek larger housing units than smaller households. The discussion of the housing market below will examine whether the city and county housing stock characteristics reflect this demographic differentiation from the state overall.

Table 1: Population and Household Trends, 2010, 2020, and 2023

Population	2010 (a)	2020 (b)	2023 (b)	% Change 2010-2020	% Change 2020-2023
City of Atwater	28,168	31,751	31,418	12.7%	-1.0%
Merced County	255,793	281,202	285,337	9.9%	1.5%
California	37,253,956	39,538,223	38,940,231	6.1%	-1.5%
Households					
City of Atwater	8,838	9,970	10,136	12.8%	1.7%
Merced County	75,642	83,464	86,906	10.3%	4.1%
California	12,568,167	13,475,623	13,739,470	7.2%	2.0%
Average Household Size					
City of Atwater	3.18	3.18	3.09	0.0%	-2.7%
Merced County	3.32	3.29	3.20	-0.8%	-2.7%
California	2.90	2.86	2.77	-1.2%	-3.4%

Notes:
(a) Decennial 2010 Census figures, as adjusted by California Department of Finance.
(b) California Department of Finance 2020 and 2023 figures.

Sources: California Department of Finance 2010, 2020 and 2023, Table E5; BAE, 2023.

Age Characteristics

Atwater and Merced County have a young population relative to California overall (see Table 2), with the 2020 median age at 33.2 years in Atwater and 32.0 in the county, compared to 37.5 statewide. These lower median ages are largely due to the presence of more non-adult children; 29.4 percent of the Atwater population and 28.8 percent of the county population is under 18 years of age, in contrast to only 22.0 percent for California. Each of the age categories displayed in Table 2 shows at least some growth in Atwater and the county over the 2010 to 2020 decade, while the state has actually lost population for the under 25 group. All three geographies show an increasing percentage and number of 65 and older persons, as the "baby boom" generation ages, but the proportions are lower in the city and county than in the state. Nevertheless, the growth in the population for all age groups may indicate demand for increased services targeting different age groups, especially children and the elderly.

Table 2: Age Distribution, 2010 and 2020

	2010		2020		Change, 2010-2020	
City of Atwater	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Under 18	9,016	32.0%	9,409	29.4%	393	4.4%
18-24	2,968	10.5%	3,015	9.4%	47	1.6%
25-34	4,004	14.2%	4,374	13.7%	370	9.2%
35-44	3,488	12.4%	4,173	13.1%	685	19.6%
45-54	3,314	11.8%	3,493	10.9%	179	5.4%
55-64	2,446	8.7%	3,409	10.7%	963	39.4%
65 or older	2,932	10.4%	4,097	12.8%	1,165	39.7%
Total Population (a)	**28,168**	**100.0%**	**31,970**	**100.0%**	**3,802**	**13.5%**
Median Age	**30**		**33.2**			

	2010		2020		Change, 2010-2020	
Merced County	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Under 18	80,698	31.5%	80,979	28.8%	281	0.3%
18-24	30,456	11.9%	32,004	11.4%	1,548	5.1%
25-34	35,060	13.7%	38,711	13.8%	3,651	10.4%
35-44	31,967	12.5%	35,409	12.6%	3,442	10.8%
45-54	31,007	12.1%	31,107	11.1%	100	0.3%
55-64	22,645	8.9%	29,511	10.5%	6,866	30.3%
65 or older	23,960	9.4%	33,481	11.9%	9,521	39.7%
Total Population	**255,793**	**100.0%**	**281,202**	**100.0%**	**25,409**	**9.9%**
Median Age	**29.6**		**32.0**			

	2010		2020		Change, 2010-2020	
California	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Under 18	9,295,040	25.0%	8,711,118	22.0%	(583,922)	-6.3%
18-24	3,922,951	10.5%	3,809,055	9.6%	(113,896)	-2.9%
25-34	5,317,877	14.3%	5,826,832	14.7%	508,955	9.6%
35-44	5,182,710	13.9%	5,326,009	13.5%	143,299	2.8%
45-54	5,252,371	14.1%	4,977,255	12.6%	(275,116)	-5.2%
55-64	4,036,493	10.8%	4,870,790	12.3%	834,297	20.7%
65 or older	4,246,514	11.4%	6,017,164	15.2%	1,770,650	41.7%
Total Population	**37,253,956**	**100.0%**	**39,538,223**	**100.0%**	**2,284,267**	**6.1%**
Median Age	**35.2**		**37.5**			

Note:
(a) Totals may not match other tables due to independent rounding or different source data.

Sources: U.S. Census, Decennial Census 2010, Tables P12 and P13; U.S. Census, Decennial Census 2020, Tables P12 and P13; BAE, 2023.

Race and Ethnicity

Atwater and Merced County are “minority majority” areas. The city and county ethnic profiles are dominated by large and increasing Latino populations. The city’s population was approximately 60 percent Latino in 2020, up from 53 percent in 2010, and the county was approximately 62 percent, an increase from 55 percent in 2010 (see Table 3). While California also has an increasing Latino share of the total population, in 2020 the proportion was still slightly below 40 percent. The city, county, and state are all undergoing an absolute

decline in the white and Black non-Hispanic populations, with increases for other smaller racial categories.

Table 3: Race and Ethnicity, 2010 and 2020

	2010		2020		Change, 2010-2020	
City of Atwater	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Hispanic/Latino (a)	**14,808**	**52.6%**	**19,042**	**59.6%**	**4,234**	**28.6%**
Not Hispanic/Latino	**13,360**	**47.4%**	**12,928**	**40.4%**	**(432)**	**-3.2%**
White	10,085	35.8%	8,788	27.5%	(1,297)	-12.9%
Black/African American	1,087	3.9%	1,001	3.1%	(86)	-7.9%
Native American	132	0.5%	133	0.4%	1	0.8%
Asian	1,347	4.8%	1,684	5.3%	337	25.0%
Native Hawaiian/Pacific Islander	66	0.2%	60	0.2%	(6)	-9.1%
Other	61	0.2%	144	0.5%	83	136.1%
Two or More Races	795	2.8%	5,014	15.7%	4,219	530.7%
Total Population	**28,168**	**100.0%**	**31,970**	**100.0%**	**3,802**	**13.5%**

	2010		2020		Change, 2010-2020	
Merced County	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Hispanic/Latino (a)	**140,485**	**54.9%**	**173,857**	**61.8%**	**33,372**	**23.8%**
Not Hispanic/Latino	**115,308**	**45.1%**	**107,345**	**38.2%**	**(7,963)**	**-6.9%**
White	81,599	31.9%	68,729	24.4%	(12,870)	-15.8%
Black/African American	8,785	3.4%	8,191	2.9%	(594)	-6.8%
Native American	1,126	0.4%	1,164	0.4%	38	3.4%
Asian	18,183	7.1%	19,824	7.0%	1,641	9.0%
Native Hawaiian/Pacific Islander	476	0.2%	617	0.2%	141	29.6%
Other	439	0.2%	1,242	0.4%	803	182.9%
Two or More Races	62,226	24.3%	87,873	31.2%	25,647	41.2%
Total Population	**255,793**	**100.0%**	**281,202**	**100.0%**	**25,409**	**9.9%**

	2010		2020		Change, 2010-2020	
California	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Hispanic/Latino (a)	**14,013,719**	**37.6%**	**15,579,652**	**39.4%**	**1,565,933**	11.2%
Not Hispanic/Latino	**23,240,237**	**62.4%**	**23,958,571**	**60.6%**	**718,334**	3.1%
White	14,956,253	40.1%	13,714,587	34.7%	(1,241,666)	-8.3%
Black/African American	2,163,804	5.8%	2,119,286	5.4%	(44,518)	-2.1%
Native American	162,250	0.4%	156,085	0.4%	(6,165)	-3.8%
Asian	4,775,070	12.8%	5,978,795	15.1%	1,203,725	25.2%
Native Hawaiian/Pacific Islander	128,577	0.3%	138,167	0.3%	9,590	7.5%
Other	85,587	0.2%	223,929	0.6%	138,342	161.6%
Two or More Races	846,688	2.3%	4,132,513	10.5%	3,285,825	388.1%
Total Population	**37,253,956**	**100.0%**	**39,538,223**	**100.0%**	**2,284,267**	**6.1%**

Notes:
(a) Includes all races for those of Hispanic/Latino background.

Sources: U.S. Census, Decennial Census 2010, Table P5; and Decennial Census 2020, Table P5; BAE, 2023.

Educational Attainment

The educational levels of an area's residents are a key driver of local economic potential; a more educated populace is likely to be associated with stronger economic conditions including higher resident incomes and a more fully employable labor force. As shown in Table 4, Atwater and Merced County show lower level of educational achievement than California overall, with lower proportions of high school graduates and less than half the percentage of adults with

bachelor's degrees or higher. Nearly 30 percent of the city and county adults 25 or older have not completed high school, almost twice the statewide proportion. Improving educational outcomes for local students would likely provide more employment opportunities and an improved quality of life for those students as well as improving the City's attractiveness to the types of businesses that prioritize the educational attainment of the local workforce.

Table 4: Educational Attainment, 2021 Five-Year Sample Data

	City of Atwater		Merced County		California	
Educational Attainment	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Less than 9th Grade	3,061	15.6%	30,984	18.1%	2,380,657	8.8%
9th to 12th Grade, No Diploma	2,672	13.6%	17,822	10.4%	1,804,222	6.7%
High School Graduate (incl. Equivalency)	4,703	23.9%	50,217	29.4%	5,578,997	20.7%
Some College, No Degree	4,892	24.9%	34,479	20.2%	5,287,901	19.7%
Associate Degree	1,740	8.8%	12,854	7.5%	2,120,275	7.9%
Bachelor's Degree	2,024	10.3%	16,472	9.6%	5,958,030	22.1%
Graduate/Professional Degree	590	3.0%	8,166	4.8%	3,779,787	14.0%
Total Population 25+ (a)	**19,682**	**100.0%**	**170,994**	**100.0%**	**26,909,869**	**100.0%**
Population 25+ No High School Diploma	**29.1%**		**28.5%**		**15.6%**	
Population 25+ High School Graduate (incl. Equivalency) or Higher (%)	**70.9%**		**71.5%**		**84.4%**	
Population 25+ with Bachelor's Degree or Higher (%)	**13.3%**		**14.4%**		**36.2%**	

Notes:
(a) Totals may not match other tables due to independent rounding or different source data.

Sources: U.S. Census Bureau, American Community Survey 2017-2021 five-year sample period, Table S1501; BAE, 2023.

Household Composition

Atwater and the county have somewhat higher proportions of family households than California. Over three-fourths of their households are family households, compared to slightly less than 70 percent statewide (see Table 5). A family household is a household with at least two related individuals in it. The higher proportions of family households is linked to the high proportion of children as discussed above.

Table 5: Household Type, 2010 and 2020

	2010		2020		Change, 2010-2020	
City of Atwater	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Family Households	6,823	77.2%	7,676	77.0%	853	12.5%
Non-Family Households	2,015	22.8%	2,294	23.0%	279	13.8%
Total Households	**8,838**	**100.0%**	**9,970**	**100.0%**	**1,132**	**12.8%**

	2010		2020		Change, 2010-2020	
Merced County	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Family Households	58,767	77.7%	64,458	77.2%	5,691	9.7%
Non-Family Households	16,875	22.3%	19,006	22.8%	2131	12.6%
Total Households	**75,642**	**100.0%**	**83,464**	**100.0%**	**7,822**	**10.3%**

	2010		2020		Change, 2010-2020	
California	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Family Households	8,642,473	68.7%	9,296,271	69.0%	653,798	72.8%
Non-Family Households	3,935,025	31.3%	4,179,352	31.0%	244,327	27.2%
Total Households	**12,577,498**	**100.0%**	**13,475,623**	**100.0%**	**898,125**	**7.1%**

Note:
Sources: U.S. Census, Decennial Census 2010, Table P28; U.S. Census, Decennial Census 2020, Table P16; BAE, 2023.

Household and Per Capita Income

Resident incomes are an indicator of local economic conditions. Local spending is largely dependent on these income levels, with greater spending supporting more jobs and importantly to the local jurisdictions such as Atwater, those expenditures generate tax dollars to support city services. As displayed in Table 6, Atwater and the County have similar income characteristics, with median annual household incomes between $50,000 and $60,000 and annual per capita incomes between $23,000 and $25,000. These are well below the income levels statewide, where the median household income per the 2021 American Community Survey is almost $85,000 and the per capita income is approximately $42,000 annually. As discussed elsewhere in this analysis, these income levels are likely associated with the lower educational attainment levels in the city and county, and result in the lower per capita gross domestic product and retail sales in comparison to the state, as shown in Table 7 and **Error! Reference source not found.**.

Table 6: Household and Per Capita Income, 2021

	City of Atwater		Merced County		California	
Income Category	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Less than $15,000	963	9.3%	12,234	14.4%	1,185,540	8.8%
$15,000-$24,999	909	8.8%	8,909	10.5%	808,568	6.0%
$25,000-$34,999	871	8.4%	8,111	9.5%	829,411	6.2%
$35,000-$49,999	1,603	15.5%	9,130	10.7%	1,206,545	9.0%
$50,000-$74,999	2,095	20.3%	17,211	20.3%	1,974,452	14.7%
$75,000-$99,999	1,329	12.9%	9,352	11.0%	1,639,647	12.2%
$100,000-$149,999	1,792	17.4%	12,203	14.4%	2,359,723	17.6%
$150,000-$199,999	495	4.8%	4,753	5.6%	1,343,134	10.0%
$200,000 or more	252	2.4%	3,064	3.6%	2,082,043	15.5%
Total Households (a)	**10,309**	**100.0%**	**84,967**	**100.0%**	**13,429,063**	**100.0%**
Median HH Income	**$59,436**		**$53,992**		**$84,907**	
Per Capita Income	**$24,576**		**$23,118**		**$42,396**	

Note:
(a) Totals may not match other tables due to independent rounding or different source data.

Sources: U.S. Census, American Community Survey 2017-2021 five-year sample period, Tables B19001, B19013 and B19301; BAE, 2023.

ECONOMIC OVERVIEW

This section summarizes current economic conditions in the City of Atwater and Merced County. The analysis draws from several sources, including data published by the California Employment Development Department (EDD), the US Bureau of Labor Statistics (BLS), the US Bureau of Economic Analysis (BEA), and the California Department of Tax and Fee Administration (CDTFA).

Gross Domestic Product

One measure of an area's economy is gross domestic product (GDP), which is a measure of the annual value of all goods and services within that area. The BEA provides estimates by major industry sectors for US counties and states, thus highlighting key economic sectors for a given county or region. As shown in Table 7, in 2021 (most recent year available) the total GDP for Merced County was approximately $10.5 billion; this amounts to only about 0.3 percent of California's overall GDP of $3.4 trillion. In the county, the government[1] and agriculture sectors are over-represented relative to the state, accounting for 18.6 percent and 16.8 percent of GDP, respectively. Nondurable goods manufacturing (e.g., food processing) is also a strong contributor to GDP for Merced County. Finance and real estate, professional and related services, and especially information are relatively small sectors in Merced County, indicating that the county's participation in California's tech and related services sector is limited.

Overall, GDP data indicates that the county's economy is growing at only about half the rate for the state overall; in constant 2012 dollars, Merced County's GDP grew by 20 percent between 2011 and 2021; statewide GDP growth was 39 percent.[2] The county GDP also lags on a per capita basis, at only $37,280, less than half the statewide figure of $85,863.

While BEA does not provide sub-county estimates of GDP, there are Zip Code-level estimates from IMPLAN, a provider of software for modelling economic impacts. For the Atwater Zip Code, 95301, which also encompasses areas outside the city but is the "best fit" available, IMPLAN estimates that the area's GDP constitutes 14 percent of the county-wide GDP.[3]

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[1] Note that government includes public education and other public sector activities.
[2] Bureau of Economic Analysis Tables SAGDP1 and CAGDP9, https://www.bea.gov/data/gdp, accessed Jully 20, 2023.
[3] IMPLAN's GDP estimates are similar to but vary somewhat from BEA estimates, so cannot be compared directly to the BEA figures. Per IMPLAN's internal estimates, the 95301 Zip Code includes approximately 15 percent of the jobs and population of Merced County.

Table 7: Gross Domestic Product by Industry in 2021, Merced County & California

GDP in thousands of 2021 dollars

	Merced County		Cailfornia	
Industry Sector	Number	Percent	Number	Percent
Government & government enterprises	$1,947,378	18.6%	$373,598,430	11.1%
Private industries				
Agriculture, forestry, fishing & hunting	$1,762,513	16.8%	$38,294,632	1.1%
Finance, insurance, real estate, rental, & leasing	$1,455,538	13.9%	$617,020,764	18.3%
Nondurable goods manufacturing	$1,087,716	10.4%	$152,636,729	4.5%
Educational services, health care& social assistance	$776,060	7.4%	$256,456,541	7.6%
Retail trade	$761,052	7.3%	$178,861,745	5.3%
Professional & business services	$507,037	4.8%	$492,172,731	14.6%
Transportation & warehousing	$450,599	4.3%	$93,492,570	2.8%
Construction	$395,654	3.8%	$124,564,467	3.7%
Arts, entertainment, recreation, accommodation & food services	$274,837	2.6%	$137,809,403	4.1%
Durable goods manufacturing	$223,149	2.1%	$242,190,990	7.2%
Other services (except government & government enterprises)	$216,899	2.1%	$57,713,613	1.7%
Information	$48,225	0.5%	$362,001,669	10.7%
Mining, quarrying,& oil & gas extraction	(a)	na	$12,014,817	0.4%
Utilities	(a)	na	$45,687,406	1.4%
Wholesale trade	(a)	na	$188,724,156	5.6%
All industry total	$10,465,518	100.0%	$3,373,240,664	100.0%
Gross Domestic Product per Capita in 2021 Dollarts $ (b)	$37,280		$85,863	

Notes:
Gross Domestic Product (GDP) is in thousands of current dollars (not adjusted for inflation). Industry detail is based on the 2012 North American Industry Classification System (NAICS).
Last updated: December 8, 2022
(a) Not shown to avoid disclosure of confidential information; estimates are included in higher-level totals.
Totals may not sum exactly from parts due to independent rounding.
(b) Based on DOF population estimates for 2021 from 2023 E-5 Report.

Sources: Bureau of Economic Analysis Table CAGDP2, Gross domestic product by county& metropolitan area; California Department of Finance (DOF); BAE.

Unemployment Trends

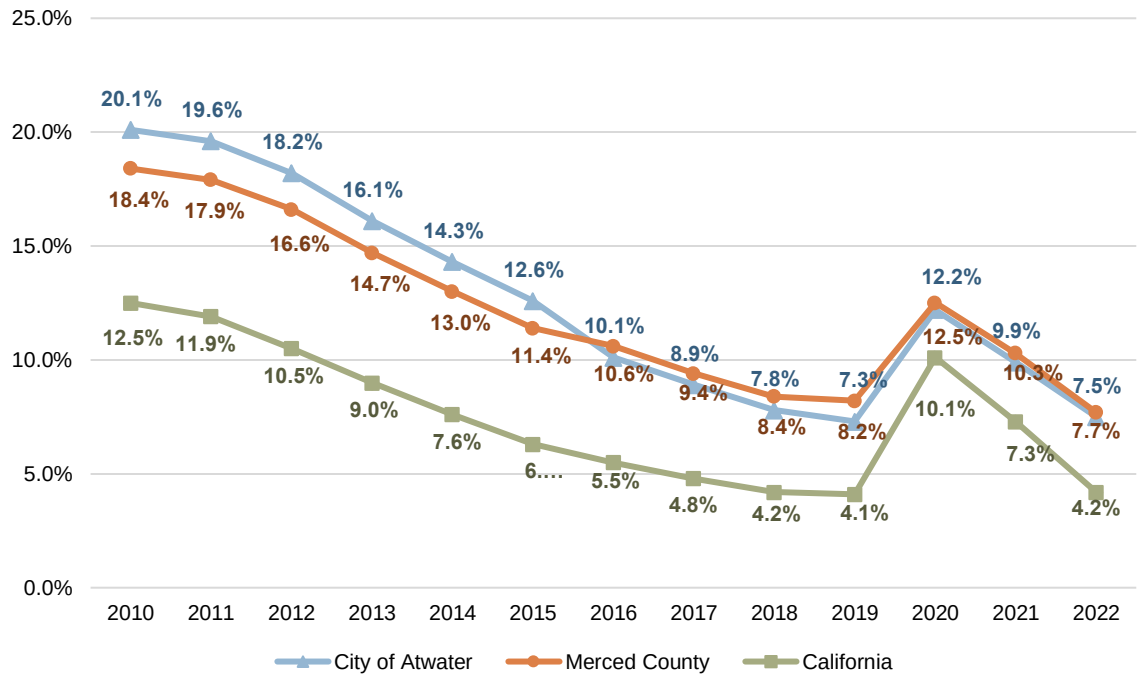
Another indicator of local and regional economic strength and trends is the unemployment rate; lower unemployment is generally linked to a healthy economy that is providing adequate job opportunities to area residents. As a "rule of thumb," a rate of five percent is considered to represent full employment, high enough to allow workers to move between jobs and to limit upward inflationary wage pressures due to employers having difficulty filling open positions.

As presented in Figure 3, between 2010 and 2022, Atwater and Merced Monterey County experienced consistently higher unemployment rates than California. For the 12-year period,

the city and county unemployment rates have remained from three to six percent above the statewide rate. Areas with large agriculture sectors typically have higher rates of unemployment and more seasonal variation in employment.

Unemployment decreased and the gap between the local and county rates and the California rate narrowed between 2010 and 2019; unemployment rates spiked in 2020 due to the negative impacts of the COVID-19 pandemic, but by 2022 were again below or near the 2019 rates. The lower proportional decline for Atwater and Merced County may be in part due to larger proportions of essential workers in agriculture who continued to work throughout the pandemic period. For 2022, the city's unemployment rate averaged 7.5 percent, with the county rate at 7.7 percent, compared to a state rate of 4.2 percent.

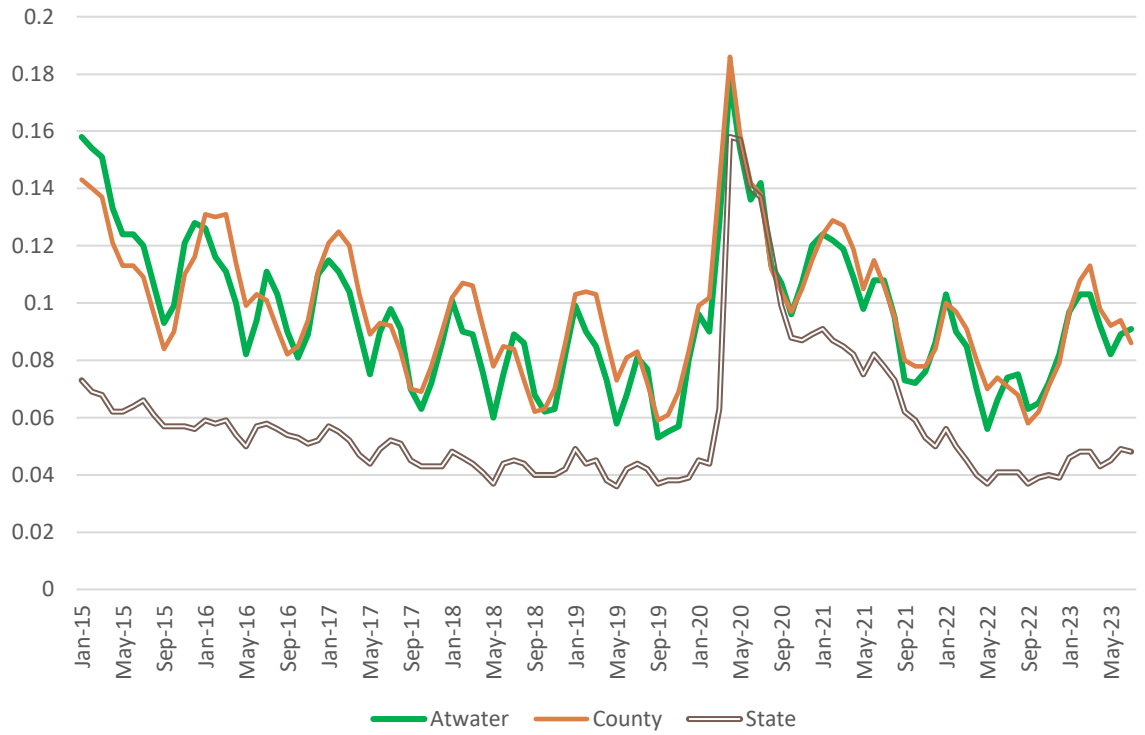
Figure 3: Average Annual Unemployment Rate, 2010-2022



Sources: California Employment Development Department (EDD), Local Area Unemployment Statistics, 2023; BAE, 2023.

In addition to having high unemployment relative to the state, Atwater and Merced County have substantial seasonal swings in employment tied to the region's agricultural economy (see Figure 4). For example, the unemployment rate for Atwater in 2022 peaked in January, at 10.3 percent, with the lowest rate for the year at 5.6 percent in May. In contrast, the unemployment rate in California in 2022 only fluctuated between 3.7 percent and 5.6 percent. The creation of additional year-round jobs would likely benefit the local labor force and reduce the reliance on seasonal employment.

Figure 4: Monthly Unemployment Rates, 2015- July 2023



Sources: California Employment Development Department (EDD), Local Area Unemployment Statistics, 2023; BAE, 2023.

Jobs by Industry

Employment by major industry sector shows the strong focus on agriculture and food product manufacturing in Merced County, as shown in Table 9, which presents industry job trends from 2017 through 2022 for wage and salary workers employed in Atwater, Merced County and California.[4] For Atwater, in descending rank order, natural resources and mining (which includes agricultural employment)[5], retail trade, and the government sector[6] provide over half of the city's employment. Countywide, government provides the most jobs, followed by natural resources and mining, and manufacturing (which consists largely of food manufacturing) provide over half of total employment. In comparison, "white collar" employment (in a set of several combined sectors as shown in Table 9), government, and health care and social assistance are the top three employment sectors in California, providing slightly less than half of all wage and salary employment. Natural Resources and Mining account for only 2.4 percent of jobs statewide.

[4] This section is for workers by place of work, not necessarily place of residence.
[5] Atwater shows no employment in mining.
[6] This includes all government employment in all industries, not just public administration. For example, public school employment is in this category, not in education services.

Atwater shows rapid employment growth compared to the county and the state, with growth concentrated in agriculture, construction, retail trade, and accommodation and food services. However, the limited growth, and even loss of jobs, in "white collar" jobs such as professional services, indicates that Atwater and Merced County have so far had limited success in diversifying their economies to provide more of these types of jobs, which tend to provide higher earnings and more full-time work than many of the current agriculture and service-related jobs.

Worker Earnings

As discussed previously and shown in Table 6 above, Atwater residents and households have incomes below statewide levels. This results in large part from the pay levels associated with the jobs available in the city. Average annual pay for jobs in Atwater, at $42,733, is below that of the county ($50,912), and well below the average for California overall ($84,376).

Table 8: Average Annual Pay for Wage and Salary Workers, 2022

Atwater	$42,733
Merced County	$50,912
California	$84,376

Note: Wage and salary employment; excludes sole proprietors and other self-employed persons.

Sources: QCEW; BLS; EDD.

Table 9: Jobs by Industry, Atwater, Merced California, and California, 2017-2022

City of Atwater	2017 Number	2017 Percent	2022 Number	2022 Percent	Change 2017-2022 Number	Change 2017-2022 Percent
Private Sector						
Natural Resources and Mining	733	12.7%	1,710	22.0%	977	133.3%
Construction	367	6.3%	857	11.0%	490	133.4%
Manufacturing	551	9.5%	615	7.9%	64	11.6%
Wholesale Trade	66	1.1%	50	0.6%	(16)	-24.2%
Retail Trade	1,176	20.3%	1,405	18.1%	229	19.5%
Transporation, Warehousing, and Utilities	3	0.1%	39	0.5%	36	1202.8%
Information; Professional, Scientific, & Technical Services: Management of Companies & Enterprises; Administrative & Waste Services; Educational Services	233	4.0%	203	2.6%	(30)	-12.9%
Finance and Insurance	108	1.9%	62	0.8%	(47)	-43.1%
Real Estate and Rental and Leasing	28	0.5%	36	0.5%	8	27.1%
Healthcare and Social Assistance (a)	647	11.2%	712	9.2%	65	10.0%
Arts, Entertainment, and Recreation	56	1.0%	55	0.7%	(1)	-2.2%
Accommodation and Food Services	649	11.2%	808	10.4%	159	24.5%
Other Services (except Public Administration) (b)	109	1.9%	129	1.7%	20	18.7%
Unclassified	12	0.2%	n.a.	n.a.	n.a.	n.a.
Government	1,052	18.2%	1,086	14.0%	34	3.3%
Total Employment (c)	**5,790**	**100.0%**	**7,766**	**100.0%**	**1,988**	**34.1%**

Merced County	2017 Number	2017 Percent	2022 Number	2022 Percent	Change 2017-2022 Number	Change 2017-2022 Percent
Private Sector						
Natural Resources and Mining	14,050	17.7%	14,078	16.9%	28	n.a.
Construction	2,359	3.0%	3,279	3.9%	920	39.0%
Manufacturing	9,504	12.0%	9,832	11.8%	328	3.5%
Wholesale Trade	na	na	na	na	na	na
Retail Trade	8,304	10.5%	8,805	10.6%	501	6.0%
Transporation, Warehousing, and Utilities	2,802	3.5%	2,966	3.6%	164	5.9%
Information; Professional, Scientific, & Technical Services: Management of Companies & Enterprises; Administrative & Waste Services; Educational Services	4,363	5.5%	4,322	5.2%	(41)	-0.9%
Finance and Insurance	1,304	1.6%	1,245	1.5%	(59)	-4.5%
Real Estate and Rental and Leasing	547	0.7%	622	0.7%	75	13.7%
Healthcare and Social Assistance (a)	6,428	8.1%	6,456	7.8%	28	0.4%
Arts, Entertainment, and Recreation	498	0.6%	585	0.7%	87	17.5%
Accommodation and Food Services	5,078	6.4%	6,341	7.6%	1,263	24.9%
Other Services (except Public Administration) (b)	1,173	1.5%	1,532	1.8%	359	30.6%
Unclassified or Excluded	5,141	6.5%	6,067	7.3%	926	18.0%
Government	17,823	22.5%	17,126	21.6%	(697)	-3.9%
Total Employment (c)	**79,373**	**100.0%**	**83,257**	**104.9%**	**3,884**	**4.9%**

California	2017 Number	2017 Percent	2022 Number	2022 Percent	Change 2017-2022 Number	Change 2017-2022 Percent
Private Sector						
Natural Resources and Mining	441,460	2.6%	436,751	2.4%	(4,709)	-1.1%
Construction	805,942	4.7%	911,750	5.1%	105,808	13.1%
Manufacturing	1,303,550	7.7%	1,335,625	7.5%	32,075	2.5%
Wholesale Trade	720,304	4.2%	668,518	3.7%	(51,786)	
Retail Trade	1,680,913	9.9%	1,616,028	9.0%	(64,885)	-3.9%
Transporation, Warehousing, and Utilities	609,765	3.6%	837,196	4.7%	227,431	
Information; Professional, Scientific, & Technical Services: Management of Companies & Enterprises; Administrative & Waste Services; Educational Services	3,377,250	19.8%	3,803,496	21.2%	426,246	12.6%
Finance and Insurance	544,087	3.2%	535,890	3.0%	(8,197)	-1.5%
Real Estate and Rental and Leasing	283,407	1.7%	305,110	1.7%	21,703	7.7%
Healthcare and Social Assistance (a)	1,686,165	9.9%	1,846,465	10.3%	160,300	9.5%
Arts, Entertainment, and Recreation	305,110	1.8%	307,399	1.7%	2,289	0.8%
Accommodation and Food Services	1,630,870	9.6%	1,621,370	9.1%	(9,500)	-0.6%
Other Services (except Public Administration) (b)	495,632	2.9%	505,685	2.8%	10,053	2.0%
Unclassified or Excluded	674,197	4.0%	718,047	4.0%	43,850	6.5%
Government	2,461,050	14.5%	2,464,630	13.8%	3,580	0.1%
Total Employment (c)	**17,019,702**	**100.0%**	**17,913,958**	**100.0%**	**894,256**	**5.3%**

Notes:
Universe consists of all wage and salary employment by place of work on an annual average basis. Excludes self-employed persons not on payroll.
Some categories have been combined for the city due to disclosure rules. NAICS 51, 55, 56 and 61 are rolled up with NAICS 54, and Government is rolled up into one category. NAICS 62412 and 814 are deleted. To be consistent, the county and state data has been presented similarly.
(a) NAICS 62412 excluded. Included in total employment, and in unclassified for county and state. Merced County employment in 62412 estimated using the ratio of jobs to establishments from statewide data.
(b) NAICS 814 excluded. Included in total employment, and in unclassified for county and state.
(c) Totals may not match sum of parts due to independent rounding and data confidentiality.

Sources: Quarterly Census of Employment and Wages (QCEW), US Bureau of Labor Statistics, 2023; BAE, 2023.

Resident Employment by Industry

Table 10 provides the industry distribution of workers for workers residing in Atwater, Merced County, and California, i.e., for the labor force. While the time period is different, the industry categorization varies, and the data is from a different source and should only be compared to the above data provided in Table 9 with caution, it appears that Atwater and Merced County both show an imbalance between workers and jobs, with more working residents than jobs. This is an indicator of net out-commuting from the city and the county. Commute flows are discussed in more detail below.

Similar to the jobs by industry in the city and county, the number of local residents employed in information, professional services and related "white collar" jobs is limited. Overall, the labor force appears relatively matched with the current local jobs, but the educational attainment and the particular skill sets of local residents may limit the ability of the city to attract industries such as professional services or life sciences that require higher education levels or specific training.

Table 10: Employed Residents by Industry

NAICS Industry Sector		City of Atwater		Merced County		California	
		Number	Percent	Number	Percent	Number	Percent
11, 21	Agriculture, Forestry, & Mining	1,231	9.3%	12,326	11.4%	394,881	2.1%
23	Construction	1,064	8.1%	8,623	8.0%	1,235,586	6.6%
22, 31-33, 42, 48-49	Manufacturing, Utilities, Transportation & Warehousing, & Wholesale Trade	3,101	23.5%	23,440	21.7%	3,249,274	17.4%
44-45	Retail Trade	1,455	11.0%	11,804	10.9%	1,919,513	10.3%
52	Finance & Insurance	354	2.7%	1,836	1.7%	702,567	3.8%
53	Real Estate & Rental & Leasing	160	1.2%	1239	1.1%	405394	2.2%
51, 54, 55	Information, Professional Services, & Business Management	340	2.6%	3,923	3.6%	2,296,302	12.3%
56	Administrative & Support & Waste Management & Remediation Services	524	4.0%	4,191	3.9%	856,240	4.6%
61, 62	Education, Health Care, & Social Assistance	3,352	25.4%	23,797	22.0%	3,990,094	21.4%
71, 72	Arts, Entertainment, Accommodation, & Food Services	698	5.3%	7,682	7.1%	1,835,141	9.8%
81	Other Services	409	3.1%	4,275	4.0%	927,253	5.0%
92	Public Administration	502	3.8%	5,058	4.7%	864,476	4.6%
	Total, All Industries (a)	**13,190**	**100%**	**108,194**	**100%**	**18,676,721**	**100%**

Note:
(a) Universe consists of all workers by place of residence. Previous table provides government workers regardless of industry; this table does not separate out government workers except those in public administration (e.g., public school staff would be in the education, etc. category, not public administration in this table). As a result, comparisons between these two tables should be made with caution.

Sources: US. Census Bureau, American Community Survey 2017-2021 five-year sample period, Table S2403; BAE, 2023.

Resident Employment by Occupation

Resident occupations in Atwater and Merced County also reflect the local economy, with an orientation toward production and manufacturing jobs rather than professional services and information as shown in Table 11. Compared to California, Atwater and Merced County show high

proportions of residents in “blue collar” occupations including production, transportation, and material moving occupations and natural resources, construction, and maintenance occupations. The city and county exhibit low concentrations of “white collar” jobs in computer, engineering, and science and in management, business, and financial occupations.

Table 11: Employed Residents by Occupation, 2017-2021

	City of Atwater		Merced County		California	
Occupational Category	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Computer, Engineering, & Science	1,086	8.2%	10,426	10.0%	3,138,038	17.3%
Management, Business, & Financial	597	4.5%	4,952	4.7%	1,848,659	10.2%
Sales & Office	2,538	19.2%	16,583	15.9%	3,545,812	19.5%
Production, Transportation, & Material Moving	2,637	20.0%	20,078	19.2%	2,190,054	12.1%
Health Practitioners & Technicians	1,235	9.4%	9,207	8.8%	1,709,679	9.4%
Service	1,549	11.7%	12,383	11.9%	2,344,883	12.9%
Education, Legal, & Arts	954	7.2%	10,732	10.3%	1,788,448	9.9%
Natural Resources, Construction, & Maintenance	2,594	19.7%	20,048	19.2%	1,590,478	8.8%
Total Employed Labor Force (a)	**13,190**	**100.0%**	**104,409**	**100.0%**	**18,156,051**	**100.0%**

Note:
(a) Totals may not match other tables due to independent rounding and use of different sources for the estimates.

Sources: US. Census Bureau, American Community Survey 2017-2021 five-year sample period, table C24010; BAE, 2023.

Major Employers in Merced County

As discussed above, government establishments provide a large share of the jobs in Merced County, account for a large share of the county’s GDP, and accordingly, represent six of the top seven largest employers reported for Merced County. Mercy Medical Center is ranked fourth, and food processing businesses round out the list of top ten employers (see Table 12). Combined, these employers provide over 14,000 jobs in the county, approximately 12 percent of total wage and salary employment.

Table 12: Major Employers, Merced County, 2022

Major Employers in Merced County	Location	Industry	Employees	Percentage of Total County Employment
UC Merced	Merced	Schools-Universities & Colleges Academic	2,811	2.41%
County of Merced	Merced	Government Offices-County	2,157	1.85%
Merced County Office of Education	Merced	Government Offices-County	2,015	1.73%
Mercy Medical Center	Merced	Hospitals	1,371	1.18%
Merced City School District	Merced	School Districts	1,364	1.17%
Merced Union High School District	Merced	School Districts	1,334	1.15%
Merced College	Merced	Schools-Universities & Colleges Academic	1,012	0.87%
Dole Packaged Foods LLC	Atwater	Food Processors	834	0.72%
Liberty Packing Company LLC	Los Banos	Packing & Crating Service	650	0.56%
Hilmar Cheese Company Inc.	Hilmar	Food Processors	650	0.56%
Total County Employment			**14,198**	**12.20%**

Sources: County of Merced, Annual Comprehensive Financial Report, 2022, based on data from EDD; BAE, 2023.

Jobs/Employed Residents Balance and Commute Flows

As indicated above, the jobs-employed residents ratio in Atwater is heavily weighted toward employed residents, indicating many of those residents commute elsewhere for work. Using a single consistent source of commute data for Atwater, as shown in Table 13, shows that there is only approximately one job in Atwater for every two working residents. Additionally, there is substantial cross-commuting, such that only 38 percent of the jobs within the city are held by local residents, and only approximately 20 percent of employed residents work in the city. Slightly greater than half of the remainder work within Merced County, with about one-quarter commuting outside the county.

Table 13: Commute Flows, 2017-2021

	Workers			Employed Residents	
Place of Residence	**Number**	**Percent**	**Place of Work**	**Number**	**Percent**
Atwater	**2,517**	**38.1%**	**Merced County**	**9,486**	**73.5%**
All Other Locations	**4,081**	**61.9%**	Atwater	2,517	19.5%
Total Working in City	**6,598**	**100.0%**	All Other Merced County	6,969	54.0%
			All Other Locations	**3,420**	**26.5%**
			Total Employed Residents	**12,906**	**100.0%**

Sources: U.S. Census Bureau, American Community Survey 2017-2021 five-year sample period, Tables B08007, B08008, and B08624; BAE, 2023.

Taxable Sales Trends

The relative level of purchases by households, businesses, and government provides another measure of the strength of a local economy. In California, taxable sales reports provide a way to assess local buying power; comparing sales on a per capita basis with other locales and larger regions can highlight an area's strengths and weaknesses. With the exception of most food for offsite consumption and prescription drugs, most end-user purchases of tangible goods in California

are taxable, with data on the level of sales published by the state on a quarterly and annual basis. The sales and use taxes collected also provide a source of revenue for government entities to provide services to a community, thus enhancing the community's quality of life.

In 2022, Atwater had local taxable sales of approximately $392 million, 11 percent of the countywide total of $3.57 billion (see **Error! Reference source not found.** below); statewide taxable s ales were $782 billion. On a per capita basis, Atwater and Merced County had similar sales levels, at $12,419 and $12,551, respectively.[7] In contrast, statewide per capita sales were $20,019. The lower sales in Atwater and the county reflect the lower incomes and spending power of city and county residents, as shown above in Table 6, with per capita income in Atwater and the county at less than 60 percent of the state level.

Detail by type of business type (also presented in **Error! Reference source not found.**) highlights s trengths and weaknesses of particular retail and related sectors in Atwater. Atwater lags the county and state for motor vehicle-related retail, home furnishings and appliances stores, and building materials outlets. These types of retail are dominated by auto malls and "big box" stores, and sales to Atwater residents are being captured in other larger nearby cities, especially in the auto center and Home Depot and Lowe's stores in Merced city. Attracting a large building materials outlet to the city may represent a potential opportunity to capture additional taxable retail sales. On the other hand, Atwater has strong general merchandise store sales, due to the presence of large Walmart and Target stores which likely attract customers from nearby unincorporated areas such as Winton and McSwain. It should be noted, however, that the growth of online shopping has adversely affected the viability of local "brick and mortar" retail outlets, especially for certain types of goods such as electronics, books, and clothing, Nevertheless, as discussed below, Atwater and Merced County show extremely limited retail vacancies and continued demand for space according to CoStar, a service providing data on the retail, office, and industrial real estate inventory nationwide (see discussion and Table 21 below).

[7] Note that in order to provide an appropriate comparison, county sales that are unallocated by city are excluded. This includes online sales and sales related to construction projects.

Table 14: Taxable Sales by Category, 2022

Category	City of Atwater		
	Number	Percent	Per Capita
Motor Vehicle and Parts Dealers	$12,985,938	3.3%	$411
Home Furnishings and Appliance Stores	$5,103,456	1.3%	$161
Bldg. Matrl. and Garden Equipment	$7,314,452	1.9%	$231
Food and Beverage Stores	$34,629,202	8.8%	$1,095
Gasoline Stations	$54,011,056	13.8%	$1,708
Clothing and Clothing Accessories Stores	$27,693,037	7.1%	$876
General Merchandise Stores	$83,472,161	21.3%	$2,639
Food Services and Drinking Places	$61,097,926	15.6%	$1,932
Other Retail Group	$32,119,360	8.2%	$1,016
Subtotal, All Retail and Food	**$318,426,588**	**81.1%**	**$10,068**
All Other Outlets	**$74,378,366**	**18.9%**	**$2,352**
Total, All Outlets	**$392,804,954**	**100.0%**	**$12,419**

Category	Merced County		
	Number	Percent	Per Capita
Motor Vehicle and Parts Dealers	$412,670,490	11.6%	$1,452
Home Furnishings and Appliance Stores	$53,040,170	1.5%	$187
Bldg. Matrl. and Garden Equipment	$207,260,383	5.8%	$729
Food and Beverage Stores	$204,926,156	5.7%	$721
Gasoline Stations	$755,294,810	21.2%	$2,658
Clothing and Clothing Accessories Stores	$100,778,637	2.8%	$355
General Merchandise Stores	$450,826,994	12.6%	$1,587
Food Services and Drinking Places	$404,520,705	11.3%	$1,424
Other Retail Group	$202,273,007	5.7%	$712
Subtotal, All Retail and Food	**$2,791,591,352**	**78.3%**	**$9,825**
All Other Outlets	**$774,577,022**	**21.7%**	**$2,726**
Total, All Outlets	**$3,566,168,374**	**100.0%**	**$12,551**

Category	California		
	Number	Percent	Per Capita
Motor Vehicle and Parts Dealers	$107,327,993,599	13.7%	$2,746
Home Furnishings and Appliance Stores	$28,123,859,305	3.6%	$720
Bldg. Matrl. and Garden Equipment	$47,782,134,266	6.1%	$1,223
Food and Beverage Stores	$34,280,182,642	4.4%	$877
Gasoline Stations	$70,636,801,148	9.0%	$1,808
Clothing and Clothing Accessories Stores	$40,072,459,084	5.1%	$1,025
General Merchandise Stores	$63,997,398,244	8.2%	$1,638
Food Services and Drinking Places	$101,686,416,493	13.0%	$2,602
Other Retail Group	$75,396,667,543	9.6%	$1,929
Subtotal, All Retail and Food	**$569,303,912,324**	**72.8%**	**$14,568**
All Other Outlets	**$213,004,255,626**	**27.2%**	**$5,451**
Total, All Outlets	**$782,308,167,950**	**100.0%**	**$20,019**

Notes:
Excludes unallocated sales at the city, county, and state level, in order to provide better comparison of city with larger areas.
(a) Based on 2022 population estimates published by the Department of Finance.

Sources: California Department of Tax and Fee Administration (CDTFA); California Department of Finance; BAE, 2023.

Castle Commerce Center

Located adjacent to Atwater, the former Castle Air Force Base, now the Castle Airport and Castle Commerce Center, offers a key asset serving the local economic base. This facility includes a general aviation airport with an 11,800 foot runway, over 100,000 annual aircraft operations, and a developing multi-modal freight facility with rail service for local agricultural producers and industries, providing access to the neighboring BNSF line. The Airport is within a Foreign Trade Zone, and the Commerce Center includes office, warehouse, and R& D facilities and acreage, as well as aviation support and training facilities.[8]

One of the activities taking place at the former air base is research on and testing of autonomous vehicles, including by Waymo. Merced County has provided funding to support this activity, including $2.1 million in 2021 to expand the 2.2-mile oval test track and other related facilities. These facilities are part of the TRC California Test Center, a branch of Ohio-based Transportation Research, Inc. More recently, in July 2023, the California State Transportation Agency awarded a Port and Freight Infrastructure Project grant of $49.6 million toward a $115.7 million project to build out an inland port at the Castle Commerce Center, providing multiple transportation modes for the shipment and transfer of goods, particularly agricultural products.

While the Airport and Commerce Center are outside city limits, the current and future facilities will provide jobs for city residents and generate economic activity within Atwater itself. The development of improved rail-related facilities will also provide environmental benefits by replacing multiple truck trips with fewer train trips, resulting in reduced emissions and better local air quality.

[8] https://www.countyofmerced.com/1245/Castle-Commerce-Center.

REAL ESTATE MARKET CONDITIONS

Building on the demographic and economic conditions and trends presented above, the following section provides an overview of the current real estate market in Atwater, Merced County, and California using data published by the California Department of Finance, the US Census Bureau's American Community Survey (ACS), and from private data vendors, including ListSource and CoStar.

Residential Market Overview

Housing Stock Characteristics

The housing stock in Atwater and Merced County is characterized by a preponderance of single family detached homes. Almost two-thirds of housing units in the city are in this category, and nearly three-fourths are countywide, in contrast to only 57 percent statewide (see Table 15). Conversely, the city and the county' housing unit mix includes small proportions of larger multifamily (e.g., apartment) units, with units in buildings of five or more units making up less than 10 percent of housing, compared to almost 25 percent statewide.

Table 15: Units in Structure, 2023

	City of Atwater		Merced County		California	
Units in Structure	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Detached Single-Family	6,947	66.4%	67,630	73.9%	8,420,792	57.3%
Attached Single-Family	637	6.1%	2,872	3.1%	1,056,780	7.2%
2 to 4 Units	1,594	15.2%	7,485	8.2%	1,146,148	7.8%
5 or more	583	5.6%	8,104	8.9%	3,545,018	24.1%
Mobile Homes	707	6.8%	5,374	5.9%	538,960	3.7%
Total, All Units	**10,468**	**100.0%**	**91,465**	**100.0%**	**14,707,698**	**100.0%**
% Single Family	**72.4%**		**77.1%**		**64.4%**	
% Multifamily	**20.8%**		**17.0%**		**31.9%**	

Sources: Department of Finance, Table E-5, 2023; BAE, 2023.

Housing Tenure

Despite housing being oriented toward single-family detached homes in Atwater and Merced County, neither area shows a higher level of owner-occupancy than the state, perhaps indicating that the lower income levels in the county are limiting the ability of local households to purchase their own homes. In 2020, all three geographies showed between 54 and 56 percent owner-occupancy. These levels are almost unchanged from 2010.

Table 16: Occupied Housing Units by Tenure, 2010 and 2020

	2010		2020		Change, 2010-2020	
City of Atwater	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Owner-Occupied	4,905	55.5%	5,576	55.9%	671	13.7%
Renter-Occupied	3,933	44.5%	4,394	44.1%	461	11.7%
Total Occupied Units	**8,838**	**100.0%**	**9,970**	**100.0%**	**1,132**	**12.8%**

	2010		2020		Change, 2010-2020	
Merced County	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Owner-Occupied	41,196	54.5%	45,639	54.7%	4,443	10.8%
Renter-Occupied	34,446	45.5%	37,825	45.3%	3,379	9.8%
Total Occupied Units	**75,642**	**100.0%**	**83,464**	**100.0%**	**7,822**	**10.3%**

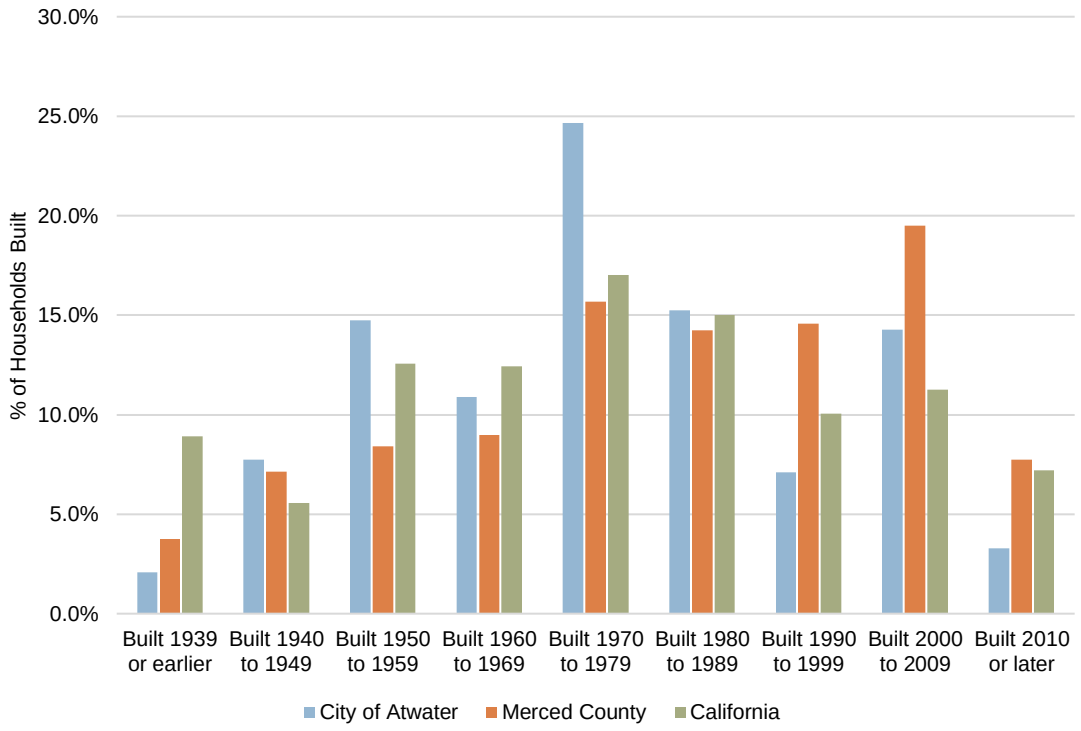
	2010		2020		Change, 2010-2020	
California	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Owner-Occupied	7,035,371	55.9%	7,348,329	54.5%	312,958	4.4%
Renter-Occupied	5,542,127	44.1%	6,127,294	45.5%	585,167	10.6%
Total Occupied Units	**12,577,498**	**100.0%**	**13,475,623**	**100.0%**	**898,125**	**7.1%**

Sources: U.S. Census, Decennial Census 2010, Table H16 and Decennial Census 2020, Table H4; BAE, 2023.

Year Built

Housing construction in Atwater peaked in the 1970s, with nearly one-fourth of all housing in the city constructed during that decade (see Figure 5). Less than five percent of housing units have been built since 2010. More recent development has shifted to other areas of the county; the busiest decade for construction countywide was from 2000 through 2009, accounting for slightly less than one-fifth of the county housing inventory. While decades since the 1970s have seen a slower pace of construction in Atwater, new home construction continued at a healthy pace until the recession and housing market meltdown in 2010.

Figure 5: Housing Units by Year Built, 2017-2021 Five-Year Sample Data



Sources: US Census Bureau, American Community Survey 2017-2021 five-year sample period, Table B25034; BAE, 2023.

Housing Occupancy Status

Vacancy rates help demonstrate the relationship between housing supply and demand and cany indicate whether a jurisdiction has an adequate housing supply to accommodate demand. The following section examines the published vacancy data from the U.S. Decennial Census. Since this data is collected on a regular and consistent basis every ten years, it allows an analysis of any changes in the local housing market over that time period. Vacancy trends may be linked to other changes in the housing market including increasing affordability problems.

As of 2020, Atwater shows a relatively low overall housing vacancy rate of 3.2 percent, lower than the 4.9 percent countywide and 6.4 percent statewide (see Table 17). These rates represent a steep decline from conditions in 2010 during the Great Recession and associated housing market and financial market crisis. Even though the overall housing inventory grew between 2010 and 2020 in the three geographies, there were less units vacant in 2020 than 2010. The low vacancy rate in Atwater may indicate that the local housing market is struggling to meet demand as new households and existing households seeking different housing face a lack of choices.

Table 17: Housing Occupancy and Vacancy Status, 2010 and 2020

Occupancy/Vacancy	2010 Number	2010 Percent	2020 Number	2020 Percent	Change, 2010-2020 Number	Change, 2010-2020 Percent
City of Atwater						
Occupied Housing Units	8,838	90.5%	9,970	96.8%	1,132	12.8%
Vacant Housing Units	933	9.5%	326	3.2%	(607)	-65.1%
Total, Housing Units	**9,771**	**100.0%**	**10,296**	**100.0%**	**525**	**5.4%**
Merced County						
Occupied Housing Units	75,642	90.4%	83,464	95.1%	7,822	10.3%
Vacant Housing Units	8,056	9.6%	4,319	4.9%	(3,737)	-46.4%
Total, Housing Units	**83,698**	**100.0%**	**87,783**	**100.0%**	**4,085**	**4.9%**
California						
Occupied Housing Units	12,577,498	91.9%	13,475,623	93.6%	898,125	7.1%
Vacant Housing Units	1,102,583	8.1%	916,517	6.4%	(186,066)	-16.9%
Total, Housing Units	**13,680,081**	**100.0%**	**14,392,140**	**100.0%**	**712,059**	**5.2%**

Sources: U.S. Census Bureau, Decennial Census 2010, Tables H4 and H5; Decennial Census 2020, Tables H4 and H5; BAE, 2023.

Vacant housing units are not always available for occupancy in the regular housing market, with some units held for seasonal or occasional use, for use by migrant workers, or simply held off the market for other reasons (e.g., awaiting settlement of an estate, foreclosure, storage, needing repairs, or other personal reasons of the owner). Measuring vacancy rates by tenure, excluding units that are not occupied and not available for rent or sale, provides a more refined measure of market conditions relevant to those seeking a primary residence. Economists typically consider a healthy vacancy rate to be between approximately one and two percent in the ownership market, and approximately five percent for rental housing market. The rental vacancy rate is generally higher than the ownership vacancy rate as renters switch residences more frequently, such that at any given time a higher proportion of units are between occupants.

The low 2020 vacancy rates for renters in Atwater and Merced County indicate a constrained rental market, where demand may be greater than the overall supply, where one result could be increasing affordability issues as rents increase. In Atwater, the for-sale market also shows low vacancy rates that may also indicate a limited supply relative to demand. Merced County's rate is also at the low end of the range for a balanced market, as is California's also.

Table 18: Vacancy Rate by Tenure, 2010 and 2020

Atwater	2010	2020
Homeowner Vacancy Rate	3.3%	0.6%
Rental Vacancy Rate	10.9%	3.1%

Merced County	2010	2020
Homeowner Vacancy Rate	3.2%	1.1%
Rental Vacancy Rate	8.1%	3.9%

California	2010	2020
Homeowner Vacancy Rate	1.0%	1.0%
Rental Vacancy Rate	6.3%	4.6%

Sources: U.S. Census Bureau, Decennial Census 2010, Tables H4 and H5; Decennial Census 2020, Table DP1.

For-Sale Residential Market Conditions

Between June 2022 and April 2023, 176 full and verified home sales were recorded in Atwater, consisting almost entirely of single-family residences, as displayed in Table 19. Larger single-family residential units with three or more bedrooms were the most commonly sold unit type during this period. The median home sale price for single-family units was $360,000 and the median sale price for condominiums (based on a very limited number of sales) was $335,000.

Table 19: Characteristics of Home Sales by Type, City of Atwater, June 2022 through April 2023

Single-Family Residences						
Sale Price Range	**1 BD**	**2 BD**	**3 BD**	**4+ BD**	**Total**	**% Total**
Less than $550,000	1	8	110	48	167	97.7%
$550,000-$599,999	0	0	3	1	4	2.3%
$600,000-$649,999	0	0	0	0	0	0.0%
$650,000 or more	0	0	0	0	0	0.0%
Total, SFR Sales	**1**	**8**	**113**	**49**	**171**	**100.0%**
% of Total	*0.6%*	*4.7%*	*66.1%*	*28.7%*	*100.0%*	
Median Sale Price	**n.a.**	**$261,000**	**$350,000**	**$381,000**	**$360,000**	
Average Sale Price	**n.a.**	**$258,625**	**$354,239**	**$398,255**	**$361,711**	
Average Living Area (sq. ft.)	**n.a.**	**1,154**	**1,498**	**1,961**	**1,608**	
Average Lot Size (sq. ft.)	**n.a.**	**7,656**	**12,746**	**7,609**	**11,004**	
Average Price per Living sq. ft.	**n.a.**	**$226**	**$242**	**$210**	**$234**	

Condominium						
Sale Price Range	**1 BD**	**2 BD**	**3 BD**	**4+ BD**	**Total**	**% Total**
Less than $400,000	0	0	4	1	5	100.0%
$400,000-$499,999	0	0	0	0	0	0.0%
$500,000 or more	0	0	0	0	0	0.0%
Total, Condominium Sales	**0**	**0**	**4**	**1**	**5**	**100.0%**
% of Total	*0.0%*	*0.0%*	*80.0%*	*20.0%*	*100.0%*	
Median Sale Price	**n.a.**	**n.a.**	**$325,000**	**$350,000**	**$335,000**	
Average Sale Price	**n.a.**	**n.a.**	**$333,750**	**$350,000**	**$337,000**	
Average Living Area (sq. ft.)	**n.a.**	**n.a.**	**1,453**	**2,247**	**1,611**	
Average Lot Size (sq. ft.)	**n.a.**	**n.a.**	**4,986**	**2,945**	**4,578**	
Average Price per Living sq. ft.	**n.a.**	**n.a.**	**$239**	**$156**	**$222**	

Note:
Data reflects single-family and condominiums sold from June 2022 through April 2023 (most recent data available at time of research).

Sources: ListSource; BAE, 2023.

Rental Residential Market Conditions

While the Census data provides insights into long-term trends regarding housing market conditions in Atwater, data from CoStar, a private data vendor tracking the real estate inventory across residential, industrial, retail, and commercial properties, reports more recent information on rents, vacancies, absorption, and new construction. CoStar multifamily data captures only a sample of the residential rental market and is not an exhaustive survey of the city or the county rental inventory; for instance, the total rental inventory includes single-family homes not counted by CoStar.

Table 20 provides a summary of recent multifamily rental residential market conditions for Atwater and Merced County. As presented below, CoStar reports approximately 2,700 market-rate multifamily units in Atwater, with a vacancy rate of only 1.7 percent. The citywide average apartment rental rate is $1,153, as of the second quarter of 2023, is a 2.9 percent rent increase from Q2 2022. The city's Q3 2023 average rent is slightly above the countywide average of $1,066, and the

vacancy rate is below the county rate of 3.1 percent; nevertheless, this 3.1 percent rate is indicative of a strong apartment rental market in Merced County. CoStar reports no new multifamily rental units completed since Q2 2022, and none currently under construction. Unit absorption in Atwater has been modest since 2013. Countywide, CoStar reports 119 new units delivered from Q3 2022 through Q2 2023, with an additional 238 units under construction.

Table 20: CoStar Multifamily Residential Overview, 2Q 2023

Multifamily Summary	City of Atwater	Merced County
Inventory, Q2 2023 (all unit sizes) (a)	2,712	13,642
% of Units	19.9%	100.0%
Average Unit Size (sq. ft.)	1,037	890
Vacant Units	45	424
Vacancy Rate	1.7%	3.1%
Average Rents, Q2 2022 - Q2 2023 (per unit)		
Average Rent, Q2 2022	$1,120	$1,066
Average Rent, Q2 2023	$1,153	$1,084
% Change Q2 2022 - Q2 2023	2.9%	1.7%
Net Absorption		
Ten-Year Net Absorption (units), Q3 2013 - Q2 2023	104	648
One-Year Net Absorption (units), Q3 2022 - Q2 2023	(9)	21
New Deliveries (units), Q3 2022 - Q2 2023	0	119
Under Construction (units), Q2 2023	0	238

Note:
(a) Market-rate units only.

Sources: CoStar; BAE, 2023.

Retail Market Overview

Retail in Atwater is primarily concentrated in three nodes: adjacent to State Highway 99 near the Applegate Road exit, along or near Bellevue Road, and Downtown along or near Broadway.

The largest shopping center (by far) in Atwater is the Applegate Ranch Shopping Center at Applegate Road and Route 99, containing both a Walmart Supercenter and a Super Target, along with numerous other retailers in a power center configuration totaling approximately 470,000 square feet. Also at this retail node is the nearby Atwater Gateway Center, anchored by Tractor Supply.

Bellevue Road is home to several older centers anchored by supermarkets or second-generation replacement stores. Centers include the Atwater Plaza Shopping Center, Five Corners Crossings, Atwater Marketplace, Atwater Town Center, and the Atwater Shopping Center. Anchor tenants include Food 4 Less and Walgreens, Sams Foods Supermarket and Rite-Aid, Big Lots (in a former Kmart space), SaveMart and CVS, and a 99 Cents Only store.

Downtown Atwater is home to a mix of small independent retailers and service businesses along Broadway and nearby streets. The City has undertaken efforts to enhance "Old Town Atwater," including the 2009 *Atwater Downtown Revitalization Strategy;* work on this strategy is ongoing.[9]

Overall, CoStar reports approximately 1.7 million square feet of retail space in Atwater, out of a total of 12 million square feet countywide (see Table 21). Vacancies are limited, at only 1.6 percent of the inventory in Atwater and 3.1 percent in Merced County. Average triple net asking rents in Atwater have increased 40 percent since 2013, from $12.17 to $17.06 per square foot in 2Q 2023. Asking rents for the county run slightly higher, reaching an average of $17.28 per square foot triple net in 2Q 2023. Both the city and the county exhibit net positive absorption of space in the last year and the last decade. CoStar shows very limited recent retail construction activity in Atwater, and approximately 100,000 square feet of retail space either completed or under construction in the last year countywide.

Table 21: CoStar Retail Market Overview, Q2 2023

Retail Summary	City of Atwater	Merced County
Total Inventory (sq. ft.), Q2 2023	**1,690,357**	**12,028,975**
Vacant Stock (sq. ft.)	26,584	387,102
Vacancy Rate	1.6%	3.1%
Avg. Asking NNN Rents		
Avg. Asking NNN Rent per sq. ft., Q2 2013	$12.17	$13.08
Avg. Asking NNN Rent per sq. ft., Q2 2023	$17.06	$17.28
% Change, Q2 2013 - Q2 2023	40.2%	32.1%
Net Absorption		
Net Absorption (sq. ft.), Q3 2013 - Q2 2023	107,315	686,692
Net Absorption (sq. ft.), Q3 2022 - Q2 2023	26,067	39,530
New Deliveries (sq. ft.), Q3 2022 - Q2 2023	**1,794**	**35,310**
Under Construction (sq. ft.), Q2 2023	**0**	**65,425**

Sources: CoStar, 2023; BAE, 2023.

Office Real Estate Market Overview

Echoing the data on employment by major industry, CoStar data indicates that the office market in Atwater is somewhat limited, with a total reported inventory of about 340,000 square feet, out of a total of 3.6 million square feet in Merced County.

In Atwater, office uses are scattered throughout the city, and the city's zoning allows office uses for properties in the following categories:

[9] https://www.atwater.org/downtown-revitalization/

- Office Commercial
- Central Commercial District
- Downtown Business District
- General Commercial District
- Business Park District Overlay (Mixed Use District)

The business park district designation provides zoning focused on encouraging more concentrated office uses on a larger scale than other areas, such downtown.

Office vacancies are extremely low at less than one percent, and the lack of available space results in no reported average asking gross rent for the city, although historically it appears that average rents are below those for the county. Office space in Atwater and Merced County has shown limited absorption and no inventory growth in the last year; the county has actually seen net negative absorption of office space for the most recent four quarters reported.

Table 22: CoStar Office Market Overview, Q4 2022

Office Summary	City of Atwater	Merced County
Total Inventory (sq. ft.), Q2 2023	**337,762**	**3,588,724**
Vacant Stock (sq. ft.)	2,250	97,098
Vacancy Rate	0.7%	2.7%
Avg. Asking Gross Rents		
Avg. Asking Gross Rent per sq. ft., Q2 2013	$9.83	$12.06
Avg. Asking Gross Rent per sq. ft., Q2 2023	n.a	$21.05
% Change, Q2 2013 - Q2 2023	n.a	74.5%
Net Absorption		
Net Absorption (sq. ft.), Q3 2013 - Q2 2023	14,566	295,665
Net Absorption (sq. ft.), Q3 2022 - Q2 2023	6,092	(31,720)
New Deliveries (sq. ft.), Q3 2022 - Q2 2023	**0**	**0**
Under Construction (sq. ft.), Q2 2023	**0**	**0**

Sources: CoStar; BAE, 2023.

Industrial Real Estate Market Overview

Industrial development in Atwater is concentrated in the southern portions of the city, with a large cluster of properties to the south of Highway 99 and east of the Applegate Ranch Shopping Center. Other industrial uses, including the Teasdale Latin Foods facility, are found between the Union Pacific rail line and Highway 99. Much of the city south of Highway 99 is zoned for manufacturing, industrial and business park uses, along with some areas near the airport and in the westernmost areas of the city north of Highway 99. The city has three zones where industrial development is allowed:

- Business Park Overlay
- Light Industrial
- Heavy Industrial

CoStar reports approximately 1.2 million square feet of existing industrial space in Atwater, and 12.0 million in Merced County overall, as shown in Table 23. Vacancies for industrial space are extremely low, at 1.0 percent for Atwater and 2.3 percent for the county. The strong local market in Atwater is also shown through the relatively high average asking rents, at $12.00 per square foot, or twice the countywide average. The low Atwater vacancy rate and high rent levels may be due in part to a constrained supply, with little increase in the inventory and limited absorption since 2013. Over the same period, the county has seen absorption of almost 700,000 square feet. The county has shown very little new industrial space developed or under development since mid-2022; Atwater shows no additions to the industrial space inventory over the same period. The net absorption since 2013 as a percent of total industrial space is of the same order of magnitude as the limited gains in manufacturing employment.

Table 23: Industrial Market Overview, Q3 2023

Industrial Summary	City of Atwater	Merced County
Total Inventory (sq. ft.), Q2 2023	**1,174,741**	**12,010,172**
Vacant Stock (sq. ft.)	11,372	281,264
Vacancy Rate	1.0%	2.3%
Avg. Asking NNN Rents		
Avg. Asking NNN Rent per sq. ft., Q2 2013	$3.00	$3.14
Avg. Asking NNN Rent per sq. ft., Q2 2023	$12.00	$5.99
% Change, Q2 2013 - Q2 2023	300.0%	90.8%
Net Absorption		
Net Absorption (sq. ft.), Q3 2013 - Q2 2023	1,728	699,806
Net Absorption (sq. ft.), Q3 2022 - Q2 2023	(6,372)	34,835
New Deliveries (sq. ft.), Q3 2022 - Q2 2023	**0**	**0**
Under Construction (sq. ft.), Q2 2023	**0**	**15,000**

Sources: CoStar; BAE, 2023.

FISCAL CONDITIONS

This section provides an overview of the City's fiscal condition, focusing on revenue and expenditure trends for the General Fund.

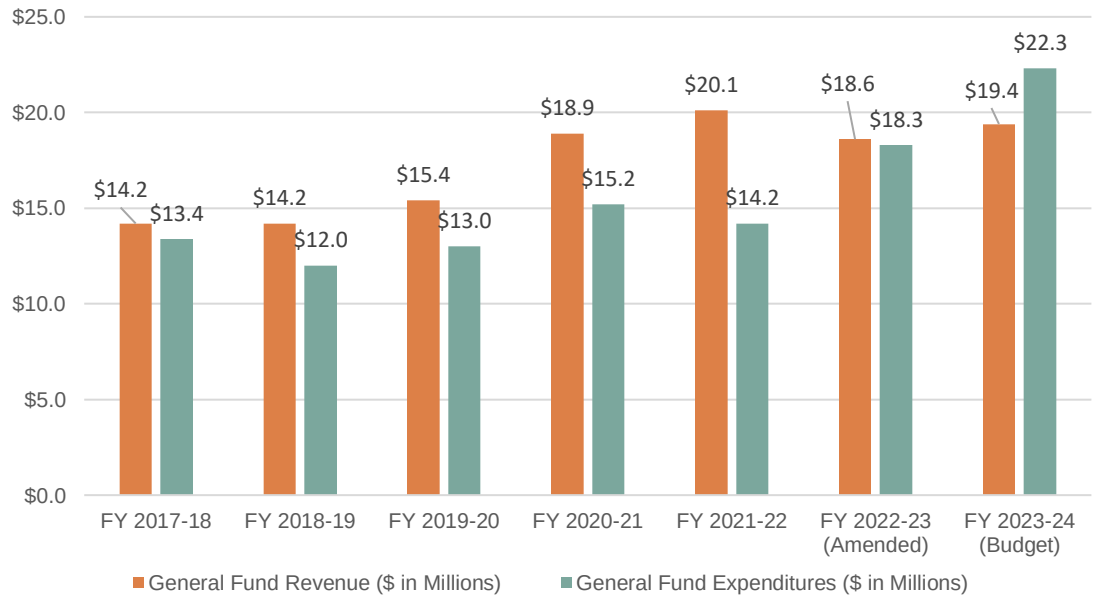
General Fund Balance

General Fund revenues and expenditures vary annually based on the changing conditions in the city. The majority of revenue generated within Atwater is attributed to property and sales taxes, while General Fund expenditures are primarily associated with police and fire services. Figure 6, below, shows City of Atwater General Fund revenues and expenditures from Fiscal Year (FY) 2017-18 through FY 2023-24.

Historically, General Fund revenues have exceeded expenditures, resulting in fiscal surpluses. As seen in Figure 6, annual General Fund revenues in Atwater have fluctuated between $14.2 and $19.4 million over the past several years. From FY 17-18 through FY 2021-22 revenues increased, and since then revenues have declined slightly or are projected to decline slightly, to $19.4 million in FY 2023-24.

Over the same seven-year period, General Fund expenditures have also fluctuated, with expenditures declining from $13.4 million in FY 201718 to $12.0 million in FY 2018-19, and then increasing each year and projected to reach $22.3 million in FY 2023-24.

Figure 6: General Fund Revenue & Expenditure Trends, FY 2017-18 to FY 2023-24



Sources: City of Atwater Finance Department, City Budgets, 2023; BAE, 2023.

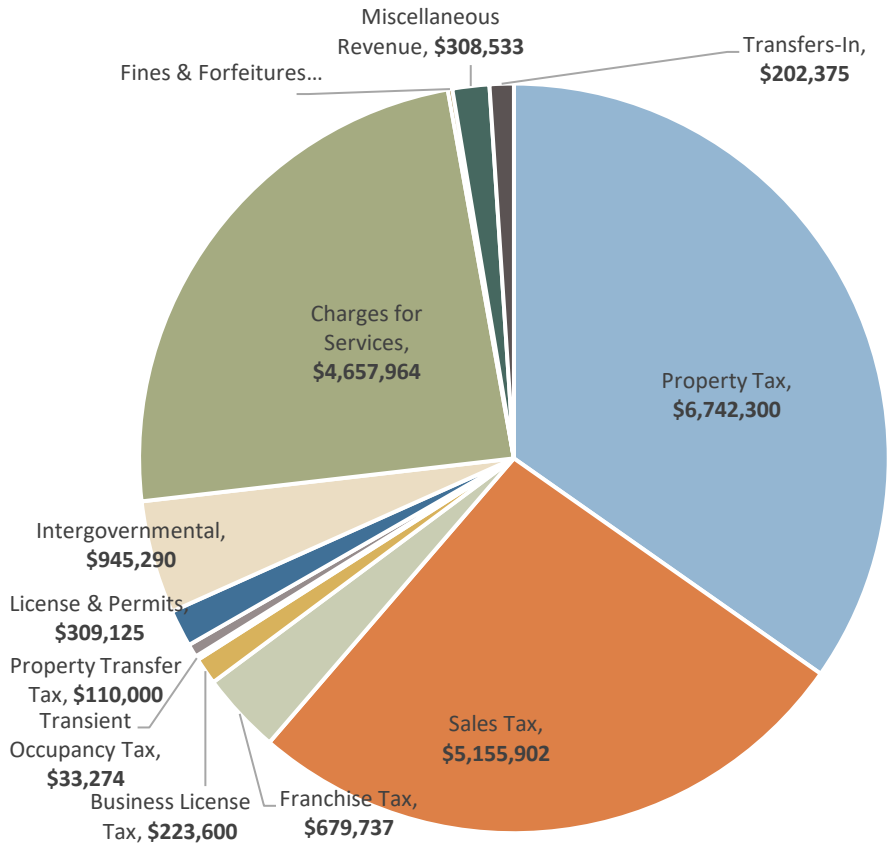
General Fund Revenues

The following section profiles the various sources of General Fund revenue to highlight specific revenue categories in the Atwater General Fund budget.

General Fund Revenue by Type

The City of Atwater relies on a mix of revenue sources to support its General Fund. As illustrated in Figure 7, the primary revenues assumed in the FY 2023-24 budget are taxes, with property tax and sales tax together providing over half of General Fund revenues. The other significant source of revenue is charges for services, which provide more than one-fourth of the General Fund revenue. The remaining revenues include but are not limited to other taxes, intergovernmental transfers, and miscellaneous revenues.

Figure 7: General Fund Revenue Sources, FY 2023-24



Sources: City of Atwater Finance Department, City Budgets, 2023; BAE, 2023.

Tax Revenue

Taxes are the primary source of funding for Atwater's General Fund, projected to account for nearly two-thirds of the total revenue in FY 2023-24 (see Table 24). Of the taxes that the City anticipates

accruing, sales and use taxes are the largest source of revenue ($3,932,988), while motor vehicle in-lieu tax ($3,315,123) and secured-roll property tax ($2,480,100) represent the second and third largest share of revenue. Transient occupancy tax, collected from overnight visitors by lodging places, is a relatively small source of General Fund revenue. Given Atwater's location along State Route 99, additional lodging development may represent an opportunity for further revenue diversification.

Table 24: General Fund Revenue – Taxes, FY 2023-24

	General Fund Revenue - Taxes	
Category	**Number**	**Percent**
Sales & Use Tax	$4,426,700	35.7%
Sales & Use Tax-Public Safety	$199,202	1.6%
Business License Tax	$220,000	1.8%
Franchise Tax	$679,737	5.5%
Property Tax In Lieu Vehicle License Tax	$3,690,000	29.7%
Property Tax , Current Secure	$2,800,000	22.6%
Property Tax, Current Unsecure	$175,000	1.4%
Property Tax, Prior Secured	$300	0.002%
Property Tax, Prior Unsecure	$2,000	0.02%
Property Tax, Supplemental	$50,000	0.4%
Property Tax, Miscellaneous	$3,000	0.02%
Property Tax, Homeowner Exempt	$18,000	0.1%
Transient Occupancy Tax	$33,274	0.3%
Document Stamp Tax	$110,000	0.9%
Total Revenue, All Taxes	**$12,407,213**	**100.0%**

Sources: City of Atwater, City Finance Department; BAE, 2023.

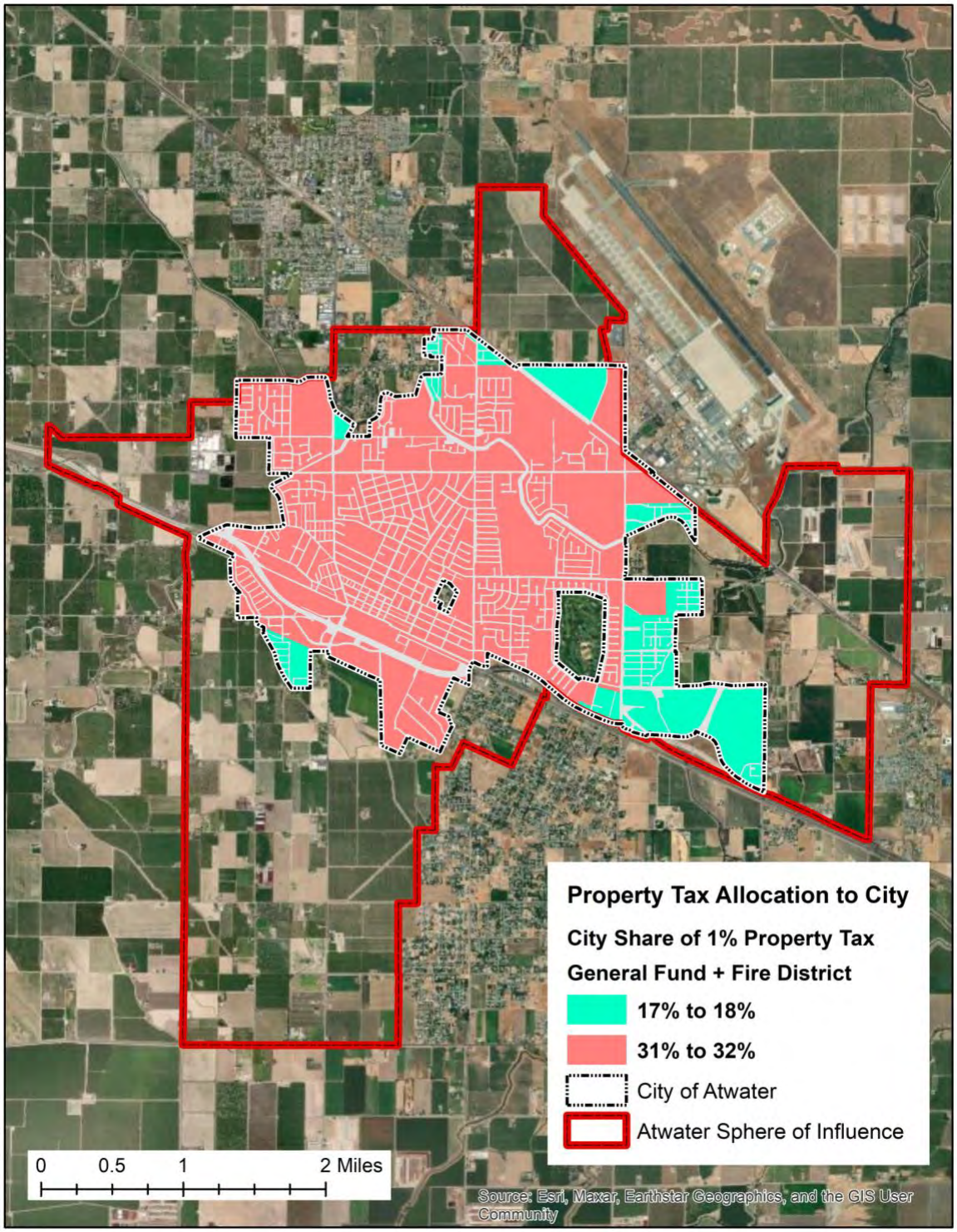
Property Tax Allocation Factors by TRA

Property taxes are a critical source of revenue for the City. Figure 8 shows the proportion of the one percent ad valorem property tax that flows to either the City General Fund or the Fire District for different tax rate areas (TRAs) in Atwater. The TRA tax share for Atwater properties falls in two ranges. As shown, TRAs covering most of the city provide between 31 percent and 32 percent of the total one percent tax rate to the city, but some peripheral areas, representing more recent annexations, only provide between 17 percent and 18 percent based on revenue sharing agreements with Merced County. For a given type of development, it will generally be more fiscally beneficial for the City to focus that development in areas where the City receives the highest share of the new property tax revenue.

BAE also considered the potential property tax revenue that would flow to the City for parcels within the Sphere of Influence (SOI) that could potentially annex to the City for future development. Based

on the City-County master revenue sharing agreement from 2017, the City would receive 25 percent of the General Fund property tax increment that would otherwise be allocated to the Merced County General Fund in these areas, while the County would continue to receive 100 percent of the share from the property tax base as of the date of annexation. The County Fire District would also continue to receive 100 percent of its base allocation, while the Atwater Fire District would receive 100 percent of the increment. These allocations of property tax would provide the City with a share of the tax increment roughly equivalent or marginally above the 17 percent to 18 percent from recent annexations, depending on the particular TRA in question. Much of the unincorporated area in the SOI is currently in agricultural uses, and the tax increment as the area is developed is likely to end up providing the majority of the overall property value and tax generation. In any case, the ability of the City's share of property taxes from potential annexations along with other funding sources to support the services required in that area should be evaluated carefully for any annexations under consideration.

Figure 8: Property Tax Allocation Factors, City of Atwater

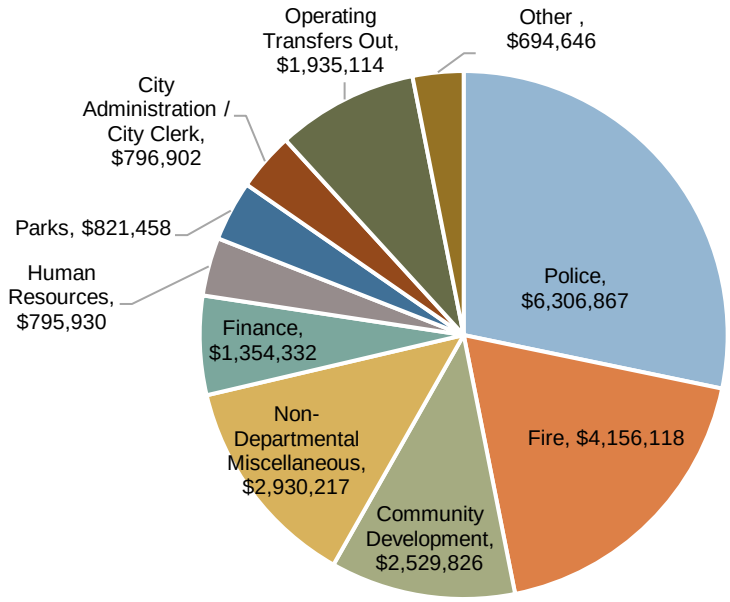


Sources: Esri; County of Merced

General Fund Expenditures

General Fund expenditures in Fiscal Year 2023-2024 are anticipated to be $22.3 million, of which Police and Fire constitute the largest shares, as shown in Figure 9. Police account for 28 percent, or $6.3 million of the total expenses, with Fire services at 19 percent, or $4.2 million. Community Development expenditures are budgeted at 11 percent ($2.5 million) of the General Fund total, miscellaneous non-department expenses at $2.9 million and the Finance department at $1.4 million. In descending order, the remaining expenses are Operating Transfers Out, Parks, City Administration/City Clerk, Human Resources, Recreation & Community Events, City Council, and City Treasurer.

Figure 9: General Fund Expenditure Sources, FY 2023-24



Sources: City of Atwater Finance Department, City Budgets, 2023; BAE, 2023.

Fiscal Considerations

With the exception of the proposed budget for the current fiscal year, Atwater's General Fund has maintained a positive annual balance, allowing the City to build a reserve that even with this year's imbalance remains at 25 percent. Revenues and expenses have both increased gradually over the last several years. The substantial reserve could assist the City during any future periods of declining revenues and/or increasing expenses. The City should carefully assess the fiscal impacts of any annexation to ensure that the cost to provide services to the new areas does not exceed the revenue generated by the annexation. Given that Police and Fire services consume more than half of the City General Fund revenues, particular attention should be paid to the needs for expansion of these services in areas that the updated General Plan Land Use Element would plan for growth. Typically, providing services to infill development is more efficient than for newly annexed properties. Considering the more limited property tax allocated to the City from annexed properties this suggests

the City could benefit from focusing new development as much as possible within infill areas where the City receives more robust property tax shares.

PROJECTED POPULATION AND EMPLOYMENT GROWTH

This section provides a discussion of future population and employment growth in Atwater and Merced County. The discussion reviews the following population and employment projections:

- California Department of Finance's (DOF's) Demographic Research Unit's Interim Projections
- Long-Term Socio-Economics Forecasts by County from Caltrans
- Merced County Association of Governments (MCAG) 2022 Regional Transportation Plan

DOF's projections were released in July 2023 and incorporate 2020 Census data and more current estimates from DOF. These are county- and state-level population projections only and go out to 2060. Statewide estimates show California population stagnating long-term, with some decades showing population declines, a reversal of long term historic growth trends.

The Caltrans estimates were released in March 2023, and also incorporate 2020 Census data. Numerous variables are covered, including population, employment, households, net migration, income, and employment by major industry group. Projections are available out to 2050.

The MCAG projections for the 2022 Regional Transportation Plan (RTP) were developed prior to the release of 2020 Census data and provide estimates of population and total employment through 2040.

Future Population Growth

Overall and as discussed above, Atwater and Merced County have shown population and household growth in recent years. However, since 2020, estimates indicate that growth has stalled for Atwater, while the county continues to see population growth. The projections series considered here vary considerably regarding future growth; DOF shows population increasing to 329,168 in 2040 (despite statewide trends of no estimated growth), with Caltrans projecting a 2040 population of 334,620, and MCAG projecting 346,085 by 2040 (see Table 25). Given that Caltrans and DOF have provided more recent updates and incorporate the 2020 Census, their projections may more accurately reflect long-term patterns. Assuming Atwater mirrors county trends and maintains a constant percentage of the countywide population as estimated by DOF, Atwater is projected to grow gradually from 31,751 in 2020 to approximately 37,000 persons in 2050. This would roughly translate to a 16 percent increase in population, households, and housing unit demand.

Table 25: Population and Employment Projections

County Population	2020	2030	2040	2050	% Change 2020-2030	% Change 2030-2040	% Change 2040-2050
Merced County							
DOF	280,909	311,578	329,168	336,170	10.9%	5.6%	2.1%
Caltrans	280,873	309,756	334,620	352,891	10.3%	8.0%	5.5%
MCAG RTP	284,761	314,690	346,085	na	10.5%	10.0%	na
Atwater (a)	31,751	34,300	36,200	37,000			
County Employment							
Caltrans	81,120	91,804	93,622	95,589	13.2%	2.0%	2.1%
MCAG RTP	80,882	95494	105,544	na	18.1%	10.5%	na
Atwater (b)	7,600	8,600	8,700	8,900			

Notes:
(a) Atwater 2020 population from Table 1. Future population estimates based on city share of DOF-projected county population at 11 percent, which is approximately the ratio in 2023; this ratio has been relatively constant over the 2010 through 2023 period. Future estimates for Atwater rounded to nearest 100.
(b) 2020 and future employment estimates based on city share of jobs based on ratio of jobs in city to jobs in county in 2022 as shown in Table 9. Estimates rounded to nearest 100.

Sources: California Department of Finance (DOF) Report P-2A; Merced County Association of Governments 2022 Regional Transportation Plan; Caltrans Long-Term Socio-Economic Forecasts by County, 2022; Quarterly Census of Employment and Wages (QCEW), US Bureau of Labor Statistics, 2023; BAE, 2023.

Future Job Growth

Since population growth to some extent drives job growth, and the MCAG projections of population appear high in light of 2020 Census figures, the employment growth estimated by Caltrans may better forecast job growth in Merced County. As shown in Table 25, Caltrans projects 17.8 percent growth in employment between 2020 and 2050, to a total of approximately 96,000 jobs, with most of this growth occurring by 2030. Assuming that Atwater maintains a constant share of Merced County jobs, employment in the city would reach 8,900 jobs in 2050, or about a 13 percent increase in jobs and non-residential real estate demand. It should be noted that this estimate for Atwater is based on a model trending out current conditions, and while macroeconomic conditions strongly influence regional trends, City actions with respect to economic development, land use, and other factors could influence the future of job creation in Atwater.

In addition to providing estimates of overall county employment, Caltrans projections allocate these jobs by major industry groups, as shown in Table 26. Caltrans projects that overall, employment growth in Merced County will lag California overall, with county job growth at 17.8 percent and statewide job growth at 24.1 percent between 2020 and 2050. County employment will continue to be dominated by jobs in the government, farm, and health and education employment sectors, with the top three sectors statewide being health and education, professional services, and government. The county proportion of jobs will continue to be particularly low relative to the state in the professional services sector as well as financial activities and information. In absolute numbers the largest employment gains in the county between 2020 and 2050 are projected to be in health and

education, government, and leisure (which includes arts, recreation, and hospitality). These projections indicate that the overall economic base of Merced County will remain similar over time, with agriculture and related industries continuing to be a key component of the economy.

Table 26: Employment by Industry Projections

	Merced County					
	2020		2050		Change 2020-2050	
Major Industry Sector	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Private Sector						
Farm	14,210	17.5%	15,282	16.0%	1,072	7.5%
Construction	3,060	3.8%	3,696	3.9%	636	20.8%
Manufacturing	9,700	12.0%	9,589	10.0%	(111)	-1.1%
Transportation, Utilities	3,610	4.5%	4,770	5.0%	1,160	32.1%
Wholesale & Retail Trade	9,360	11.5%	9,802	10.3%	442	4.7%
Financial Activities	1,830	2.3%	1,884	2.0%	54	3.0%
Professional Services	3,740	4.6%	4,651	4.9%	911	24.4%
Information	230	0.3%	109	0.1%	(121)	-52.4%
Health & Education	10,320	12.7%	14,417	15.1%	4,097	39.7%
Leisure	5,330	6.6%	7,666	8.0%	2,336	43.8%
Government	18,400	22.7%	21,775	22.8%	3,375	18.3%
Unclassified	1,330	1.6%	1,947	2.0%	617	46.4%
Total Employment (c)	**81,120**	**100.0%**	**95,589**	**100.0%**	**13,852**	**17.8%**

	California					
	2020		2050		Change 2020-2050	
Major Industry Sector	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Private Sector						
Farm	407,000	2.5%	425,499	2.1%	18,499	4.5%
Construction	857,000	5.2%	963,681	4.7%	106,681	12.4%
Manufacturing	1,264,000	7.6%	1,293,873	6.3%	29,873	2.4%
Transportation, Utilities	732,000	4.4%	1,139,190	5.5%	407,190	55.6%
Wholesale & Retail Trade	2,170,000	13.1%	2,340,120	11.4%	170,120	7.8%
Financial Activities	818,000	4.9%	849,182	4.1%	31,182	3.8%
Professional Services	2,600,000	15.7%	3,206,576	15.6%	606,576	23.3%
Information	536,000	3.2%	651,323	3.2%	115,323	21.5%
Health & Education	2,737,000	16.5%	3,786,644	18.4%	1,049,644	38.4%
Leisure	1,484,000	8.9%	2,432,950	11.8%	948,950	63.9%
Government	2,493,000	15.0%	2,817,898	13.7%	324,898	13.0%
Unclassified	497,000	3.0%	691,054	3.4%	194,054	39.0%
Total Employment (c)	**16,595,000**	**100.0%**	**20,597,990**	**100.0%**	**3,808,936**	**24.1%**

Notes:
Universe consists of all wage and salary employment by place of work on an annual average basis. Does not include self-employed persons not on payroll.

Sources: Caltrans Long-Term Socio-Economic Forecasts by County, 2022; BAE, 2023.

CITY COUNCIL
AGENDA REPORT

CITY COUNCIL

Mike Nelson, Mayor
Danny Ambriz — Tyler Button
John Cale — Brian Raymond

MEETING DATE: May 13, 2024
TO: Mayor and City Council
FROM: Justin Vinson, Public Works Director
PREPARED BY: Justin Vinson, Public Works Director
SUBJECT: **Approving and Adopting a List of Projects for Fiscal Year 2024-25 Funded by SB 1: The Road Repair and Accountability Act of 2017** (Public Works Director Vinson)

RECOMMENDED COUNCIL ACTION

Adoption of Resolution No. 3457-24 approving and adopting the Fiscal Year 2024-25 annual list of projects funded by SB 1, The Road Repair and Accountability Act of 2017; and authorizes and directs the Interim City Manager to transmit a certified copy of the resolution to the California Transportation Commission.

I. BACKGROUND/ANALYSIS:

Senate Bill 1 (SB 1), the Road Repair and Accountability Act of 2017, was passed in April 2017 to address the significant multi-modal transportation funding shortfalls statewide. The Bill includes accountability and transparency provisions that will ensure our residents are aware of the projects proposed for funding in our community and which projects have been completed each fiscal year.

SB 1 funding will help the City maintain and rehabilitate streets/roads, and add active transportation infrastructure throughout the City. The City is estimated to receive $812,583 from SB 1 Road Maintenance and Rehabilitation Account (RMRA) funding in Fiscal Year 2024-25. The City Council is required to adopt a list of projects by resolution, identifying a description and location of each proposed project, along with a proposed schedule for completion and estimated useful life of the improvements, and upload the list to the California Transportation Commission (CTC) prior to July 1, 2024.

Staff identified the following projects for FY 2024-25:

- FY 24/25 Curb, Gutter, and Sidewalk Maintenance, Repair, and Replacement
- FY 24/25 Traffic Signals Maintenance and Repairs
- FY 24/25 Pavement Markings and Signage Maintenance
- FY 24/25 Pavement Repairs

- Olive Avenue Reconstruction

II. FISCAL IMPACTS:

The City will receive an estimated $812,583 in RMRA funding in FY 2024-25.

III. LEGAL REVIEW:

This item has been reviewed by the City Attorney's Office.

IV. EXISTING POLICY:

This item is consistent with goal numbers one (1) and two (2) of the City's 2020-2025 Strategic Plan: to ensure the City's continued financial stability and to improve public safety, respectively.

V. ALTERNATIVES:

VI. INTERDEPARTMENTAL COORDINATION:

This item was routed and reviewed by all departments.

VII. PUBLIC PARTICIPATION:

The public will have an opportunity to provide comments on this item prior to Council action.

VIII. ENVIRONMENTAL REVIEW:

The proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines. The proposed action and listed projects involve the operation, maintenance, or minor alteration of existing public facilities including streets, sidewalks, gutters, bicycle and pedestrian trails, and similar facilities with negligible or no expansion of use. with construction of minor appurtenant structures involving negligible or no expansion of use and no possibility of significantly impacting the physical environment. Accordingly, the proposed action qualifies under Class 1 Categorical Exemptions (Section 15301 of the State CEQA Guidelines).

IX. STEPS FOLLOWING APPROVAL:

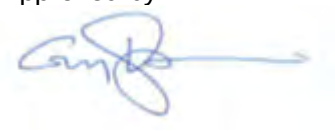
Following approval and adoption of the resolution, City staff will upload the adopted resolution identifying the FY 2024-25 SB 1 Project List to the California Transportation Commission (CTC) by July 1, 2024.

Submitted by:



Justin Vinson, Public Works Director

Approved by:



Greg Thompson, Interim City Manager

Attachments:

1. 3457-24 Adopting FY 24 25 List of SB1 Funded Projects

CITY COUNCIL
OF THE
CITY OF ATWATER

RESOLUTION NO. 3457-24

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ATWATER ADOPTING A LIST OF PROJECTS FOR FISCAL YEAR 2024-25 FUNDED BY SB 1: THE ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017

WHEREAS, Senate Bill 1 (SB 1), the Road Repair and Accountability Act of 2017 (Chapter 5, Statutes of 2017) was passed by the Legislature and signed into law by the Governor in April 2017 in order to address the significant multi-modal transportation funding shortfalls statewide; and

WHEREAS, SB 1 includes accountability and transparency provisions that will ensure the residents of our City are aware of the projects proposed for funding in our community and which projects have been completed each fiscal year; and

WHEREAS, the City must adopt by resolution a list of all projects proposed to receive fiscal year funding from the Road Maintenance and Rehabilitation Account (RMRA), created by SB 1, which must include a description and the location of each proposed project, a proposed schedule for the project's completion, and the estimated useful life of the improvement; and

WHEREAS, the City will receive an estimated $812,583 in RMRA funding in Fiscal Year 2024-25 from SB 1; and

WHEREAS, this is the eighth year in which the City is receiving SB 1 funding and will enable the City to continue essential road maintenance and rehabilitation projects, safety improvements, repairing and replacing aging bridges, and increasing access and mobility options for the traveling public that would not have otherwise been possible without SB 1; and

WHEREAS, the City has undergone a robust public process to ensure public input into our community's transportation priorities/the project list; and

WHEREAS, the City used a Pavement Management System to develop the SB 1 project list to ensure revenues are being used on the most high-priority and cost-effective projects that also meet the community's priorities for transportation investment; and

WHEREAS, the funding from SB 1 will help the City maintain and rehabilitate streets/roads, bridges, and add active transportation infrastructure throughout the City this year and several of similar projects into the future; and

WHEREAS, the 2023 California Statewide Local Streets and Roads Needs Assessment found that the City's streets and roads are in an at-risk condition and this revenue will help us increase the overall quality of our road system and over the next decade is expected to help prevent further deterioration to our streets and roads into a worse condition; and

WHEREAS, the SB 1 project list and overall investment in our local streets and roads infrastructure with a focus on basic maintenance and safety, investing in complete streets infrastructure, and using cutting-edge technology, materials and practices, will have significant positive co-benefits statewide.

NOW, THEREFORE, BE IT RESOLVED, ORDERED AND FOUND by the City Council of the City of Atwater, State of California, as follows:

1. The foregoing recitals are true and correct.

2. The following list of newly proposed projects are hereby approved and will be funded in-part or solely with fiscal year 2024-25 Road Maintenance and Rehabilitation Account revenues:

   Project Title: FY 24/25 Curb, Gutter, and Sidewalk Maintenance, Repair, and Replacement
   Project Description: Grind, patch, crack seal, and/or replace curbs, gutters, and sidewalks to maintain safe pedestrian facilities, prioritizing school zones
   Project Location: Locations of reported complaints and logged damages, including but not limited to: Mitchell Ave, Terri Dr, Tamarack Ave, Grove Ave, Quince Ave, Laurel Ave, Cedar Ave, Della Dr, Cindy Dr, Fifth St, Boulder Dr, Sixth St, Palm Ave, Linden Ave, First St, Kadota St, Clark Terrace, Drakeley Ave, Herman, Winton Way, Nutmeg, Fir Ave, Cordelia Dr, Redwood St, Bellevue Rd, Shaffer Rd, Yosemite Ct, Third St, Spruce Ave, Fortuna Ave, Chalet Ct, Nebela Dr, Marguerite, Vine Ave, Mulberry Ave, Village Cir.
   Estimated Project Schedule: 07/24 – 06/25
   Estimated Project Useful Life: 5 – 25 years

   Project Title: FY 24/25 Pavement Markings and Signage Maintenance
   Project Description: Replace damaged or missing road signs and pavement markings, prioritizing school zones.
   Project Location: As needed on Grove Ave, Fifth St, Juniper Ave, Bridgewater St, Shaffer Road, Fruitland Ave, Winton Way, Buhach Rd, Avenue Two, Menlo Ave, High St, Bellevue Rd, Granite Dr, Lake View Dr.
   Estimated Project Schedule: 07/24 – 06/25
   Estimated Project Useful Life: 1 – 25 years

   Project Title: FY 24/25 Traffic Signals Maintenance and Repairs
   Project Description: Repair failed and/or damaged traffic signal equipment, including but not limited to indicators, pedestrian crossing hardware, internally illuminated street signs, battery backup systems, flashing beacons, and rapid rectangular flashing beacons.

Project Location: As needed to address failure or damage at intersections on Bell Ln, Bell Dr, Applegate Rd, Commerce Ave, Sycamore Ave, Atwater Blvd, Winton Way, Olive Ave, Juniper Ave, Bellevue Rd, Fruitland Ave, Seventh St, Linden St, Redwood Ave, First St, Shaffer Rd, Granite Dr, Crest Rd, Buhach Rd, Santa Fe Dr, Avenue Two, Avenue One, Lake Ridge St, Green Sands Ave, Atwater-Merced Expy, Gurr Rd, Broadway Ave, Clover Ave.
Estimated Project Schedule: 07/24 – 06/25
Estimated Project Useful Life: 5 – 25 years

Project Title: FY 24/25 Pavement Repairs
Project Description: Fill potholes/cracks, slurry seal pavements.
Project Location: Areas within City Limits west of Shaffer Rd.
Estimated Project Schedule: 07/24 – 06/25
Estimated Project Useful Life: 5 – 10 years

Project Title: Olive Avenue Reconstruction
Project Description: Reconstruct Olive Avenue pavement, including upgrading curb ramps where required
Project Location: From west of Winton Way to City Limits
Estimated Project Schedule: 07/25 – 08/25
Estimated Project Useful Life: 20 years

The foregoing resolution is hereby passed and adopted this 13th day of May 2024.

AYES:
NOES:
ABSENT:

APPROVED:

_____
MIKE NELSON, MAYOR

ATTEST:

_____
KORY J. BILLINGS, CITY CLERK

CITY COUNCIL
AGENDA REPORT

CITY COUNCIL

Mike Nelson, Mayor
Danny Ambriz — Tyler Button
John Cale — Brian Raymond

MEETING DATE: May 13, 2024
TO: Mayor and City Council
FROM: Michael Salvador, Police Chief
PREPARED BY: Michael Salvador, Police Chief
SUBJECT: **Authorizing and Approving a Cooperative Purchase, Purchase Agreement (Purchase Order) to Montrose Ford for the purchase of one (1) new 2023 Dodge Charger Police Vehicle and Equipment** (Police Chief Michael Salvador)

RECOMMENDED COUNCIL ACTION

Authorizes and approves a Cooperative Purchase, Purchase Agreement (Purchase Order), in a form approved by the City Attorney, to Montrose Ford, Akron, Ohio, for the purchase of one (1) new 2023 Dodge Charger Pursuit with Police Equipment, in the combined amount not to exceed $56,100; and authorizes and directs the Interim City Manager or designee to execute the Agreement (Purchase Order) on behalf of the City.

I. BACKGROUND/ANALYSIS:

The Police Department currently uses Dodge Charger Pursuit police vehicles as patrol cars. As part of the Department's ongoing program to replace aging public safety vehicles, the Department continuously looks for patrol vehicles that can be procured from a variety of sources. The post-pandemic supply chain issues have hampered the Department's ability to procure patrol vehicles.

Identification, budgeting, and replacement of outdated equipment, prior to the breakdown of equipment, have become goals of the Police Department. The Department was made aware of a source of fully equipped new police vehicles ready for delivery to the department. Montrose Ford is one of the major police vehicle suppliers for the State of Ohio, and they reached out to the department after the Police Chief's attendance at the Government Fleet expo in Dallas, Texas in 2023. The Department has reserved a fully equipped Dodge Charger police vehicle for immediate delivery upon purchase approval.

In accordance with the City of Atwater Purchasing System Manual, Section 9, Procurement Methods, “Cooperative Purchases,” the City may join in purchases and contracts established by other jurisdictions, provided the cooperative agreement is established following a competitive bid process consistent with the City’s competitive

process. Sourcewell, formerly known as the National Joint Powers Alliance ("NJPA"), a public agency serving as a national municipal contracting agency, released a Request for Proposals ("RFP") for the procurement of Vehicles, Cars, Vans, SUV's, and Light Trucks with Related Equipment, Accessories, and Services (EXHIBIT "A"). Montrose Ford is an authorized vendor, Sourcewell number PUR21-208.

Montrose Ford has provided a quotation for one (1) new Dodge Charger Pursuit (EXHIBIT "B").

II. FISCAL IMPACTS:

Sufficient funding for the Purchase Agreement (Purchase Order) for the vehicles is available in Fiscal Year 2023-2024 Budget, Public Safety Transactions and Use Tax, Machinery and Equipment Account No. 0004-2021-6021.

This item has been reviewed by the Finance Department.

III. LEGAL REVIEW:

This item has been reviewed by the City Attorney's Office.

IV. EXISTING POLICY:

This item is consistent with goal numbers one (1) and two (2) of the City's Strategic Plan: to ensure the City's continued financial stability and to improve public safety, respectively.

V. ALTERNATIVES:

N/A

VI. INTERDEPARTMENTAL COORDINATION:

This item has been reviewed by all necessary departments.

VII. PUBLIC PARTICIPATION:

The public will have an opportunity to provide comments on this item prior to City Council action.

VIII. ENVIRONMENTAL REVIEW:

This item is not considered a project as defined under Section 21065 of the Public Resources Code as this action would not directly or reasonably indirectly significantly impact the physical environment.

IX. STEPS FOLLOWING APPROVAL:

Staff will prepare a Purchase Agreement (Purchase Order) for the purchase of the one (1) Dodge Charge Pursuit and coordinate delivery with Montrose Ford.
Submitted by:



Michael Salvador, Police Chief
Approved by:



Greg Thompson, Interim City Manager

Attachments:

1. RFP and Addendums-Autos SUVs 091521 (Exhibit A)
2. 5PS088 2023 CHARGER PURSUIT AWD V6 - ATWATER (Exhibit B)

RFP #091521
REQUEST FOR PROPOSALS
for
Automobiles, SUVs, Vans, and Light Trucks with Related Equipment and Accessories

Proposal Due Date: September 15, 2021, 4:30 p.m., Central Time

Sourcewell, a State of Minnesota local government unit and service cooperative, is requesting proposals for Automobiles, SUVs, Vans, and Light Trucks with Related Equipment and Accessories to result in a contracting solution for use by its Participating Entities. Sourcewell Participating Entities include thousands of governmental, higher education, K-12 education, nonprofit, tribal government, and other public agencies located in the United States and Canada. A full copy of the Request for Proposals can be found on the Sourcewell Procurement Portal [https://proportal.sourcewell-mn.gov]. Only proposals submitted through the Sourcewell Procurement Portal will be considered. Proposals are due no later than September 15, 2021, at 4:30 p.m. Central Time, and late proposals will not be considered.

Solicitation Schedule

Public Notice of RFP Published:	July 28, 2021
Pre-proposal Conference:	August 25, 2021, 10:00 a.m., Central Time
Question Submission Deadline:	September 8, 2021, 4:30 p.m., Central Time
Proposal Due Date:	**September 15, 2021**, 4:30 p.m., Central Time Late responses will not be considered.
Opening:	September 15, 2021, 6:30 p.m., Central Time See RFP Section V.G. "Opening"

I. ABOUT SOURCEWELL

A. SOURCEWELL

Sourcewell is a State of Minnesota local government unit and service cooperative created under the laws of the State of Minnesota (Minnesota Statutes Section 123A.21) that facilitates a competitive public solicitation and contract award process for the benefit of its 50,000+ participating entities across the United States and Canada. Sourcewell's solicitation process complies with State of Minnesota law and policies, conforms to Canadian trade agreements, and results in cooperative purchasing solutions from which Sourcewell's Participating Entities procure equipment, products, and services.

Cooperative purchasing provides participating entities and suppliers increased administrative efficiencies and the power of combined purchasing volume that result in overall cost savings. At times, Sourcewell also partners with other purchasing cooperatives to combine the purchasing volume of their membership into a single solicitation and contract expanding the reach of contracted suppliers' potential pool of end users.

Sourcewell uses a website-based platform, the Sourcewell Procurement Portal, through which all proposals to this RFP must be submitted.

B. USE OF RESULTING CONTRACTS

In the United States, Sourcewell's contracts are available for use by:

- Federal and state government entities[1];
- Cities, towns, and counties/parishes;
- Education service cooperatives;
- K-12 and higher education entities;
- Tribal government entities;
- Some nonprofit entities; and
- Other public entities.

In Canada, Sourcewell's contracts are available for use by:

- Provincial and territorial government departments, ministries, agencies, boards, councils, committees, commissions, and similar agencies;
- Regional, local, district, and other forms of municipal government, municipal organizations, school boards, and publicly-funded academic, health, and social service entities referred to as MASH sector (this should be construed to include but not be limited to the Cities of Calgary, Edmonton, Toronto, Ottawa, and Winnipeg), as well as any corporation or entity owned or controlled by one or more of the preceding entities;

[1] Pursuant to HAR §3-128-2, the State of Hawaii, Department of Accounting and General Services, State Procurement Office, on behalf of the State of Hawaii and participating jurisdictions, has provided notice of its Intent to Participate in the solicitation as a participating entity.

- Crown corporations, government enterprises, and other entities that are owned or controlled by these entities through ownership interest;

- Members of the Rural Municipalities of Alberta (RMA) and their represented Associations: MASH (municipalities, academic institutions, schools and hospitals) and MUSH (municipalities, universities, schools and hospitals) sectors, and other governmental agencies eligible to use the Sourcewell contracts. MASH and MUSH sector refers to regional, local, district or other forms of municipal government, school boards, publicly-funded academic, health and social service entities, as well as any corporation or entity owned or controlled by one or more of the preceding entities, including but not limited to represented associations, Saskatchewan Association of Rural Municipalities ("SARM"), Association of Manitoba Municipalities ("AMM"), Local Authorities Services/Association of Municipalities Ontario ("LAS/AMO", excluding the cities of Toronto and Ottawa), Nova Scotia Federation of Municipalities ("NSFM"), Federation of Prince Edward Island Municipalities ("FPEIM"), Municipalities Newfoundland Labrador ("MNL"), Union of New Brunswick Municipalities ("UNBM"), North West Territories Association of Communities ("NWTAC") and their members. RMA Participants may include all not-for-profit agencies for Canadian provinces and territories.

For a listing of current United States and Canadian Participating Entities visit Sourcewell's website (note: there is a tab for each country): https://www.sourcewell-mn.gov/sourcewell-for-vendors/agency-locator.

Participating Entities typically access contracted equipment, products, or services through a purchase order issued directly to the contracted supplier. A Participating Entity may request additional terms or conditions related to a purchase. Use of Sourcewell contracts is voluntary and Participating Entities retain the right to obtain similar equipment, products, or services from other sources.

To meet Participating Entities' needs, Sourcewell broadly publishes public notice of all solicitation opportunities, including this RFP. In the United States each state-level procurement department receives notice for possible re-posting.

Proof of publication will be available at the conclusion of the solicitation process.

II. SOLICITATION DETAILS

A. SOLUTIONS-BASED SOLICITATION

This RFP and contract award process is a solutions-based solicitation; meaning that Sourcewell is seeking equipment, products, or services that meet the general requirements of the scope of this RFP and that are commonly desired or are required by law or industry standards.

B. REQUESTED EQUIPMENT, PRODUCTS, OR SERVICES

It is expected that proposers will offer a wide array of equipment, products, or services at lower prices and with better value than what they would ordinarily offer to a single government entity, a school district, or a regional cooperative.

1. Sourcewell is seeking proposals for Automobiles, SUVs, Vans, and Light Trucks with Related Equipment and Accessories, including, but not to be limited to:

a. Vehicles of the following types and classifications:
    i. Automobiles: mini, subcompact, compact, coupe, sedan, and full-size;
    ii. Sport Utility Vehicles: cross-over, light duty, and heavy duty;
    iii. Vans: passenger and cargo;
    iv. Trucks: light duty, half ton, three-quarter ton, and one ton; and
    v. Vehicles of the varieties described in subsections 1. a. i – iv. above, with upfitting designed for Public Safety applications, such as equipment, lighting, technology, and accessories.

b. A wide range of vehicles by: 1) engine type, to include conventional internal combustion, natural gas or propane autogas, hybrid or alternative fuel, and electric powered solutions; 2) seating or cargo configurations, drive train options, and trim levels; and, 3) optional equipment offerings.

c. Proposers may include related equipment, accessories, supplies, parts, and services to the extent that the solutions are an incidental portion of the response.

2. This solicitation does not include those equipment, products, or services covered under categories included in contracts currently maintained by Sourcewell:

a. Ambulance and Emergency Medical Transport Vehicles, with Related Equipment, Accessories, And Supplies (RFP #022118);
b. Firefighting Apparatus, with Related Equipment, Accessories, and Supplies (RFP #022818);
c. Class 4-8 Chassis with Related Equipment, Accessories, and Services (RFP #060920);
d. School Buses with Related Accessories, Supplies, Parts, and Services (RFP #063020); and,
e. Electric Vehicle Supply Equipment and Related Services (RFP #042221).

Generally, the solutions for Participating Entities are turn-key solutions, providing a combination of equipment, products and services, delivery, and installation to a properly operating status. However, equipment or products only solutions may be appropriate for situations where Participating Entities possess the ability, either in-house or through local third-party contractors, to properly install and bring to operation the equipment or products being proposed.

Sourcewell prefers suppliers that provide a sole source of responsibility for the equipment, products, and services provided under a resulting contract If proposer is including the equipment, products, and services of its subsidiary entities, the proposer must also identify all included subsidiaries in its proposal. If proposer requires the use of distributors, dealers, resellers, or subcontractors to provide the equipment, products, or services, the proposal must address how the equipment, products or services will be provided to Participating Entities, and describe the network of distributors, dealers, resellers, and/or subcontractors that will be available to serve Participating Entities under a resulting contract.

Sourcewell desires the broadest possible selection of equipment, products, and services being proposed over the largest possible geographic area and to the largest possible cross-section of Sourcewell current and future Participating Entities.

C. REQUIREMENTS

It is expected that proposers have knowledge of all applicable industry standards, laws, and regulations and possess an ability to market and distribute the equipment, products, or services to Participating Entities.

1. Safety Requirements. All items proposed must comply with current applicable safety or regulatory standards or codes.
2. Deviation from Industry Standard. Deviations from industry standards must be identified with an explanation of how the equipment, products, and services will provide equivalent function, coverage, performance, and/or related services.
3. New Equipment and Products. Proposed equipment and products must be for new, current model; however, proposer may offer certain close-out equipment or products if it is specifically noted in the Pricing proposal.
4. Delivered and operational. Unless clearly noted in the proposal, equipment and products must be delivered to the Participating Entity as operational.
5. Warranty. All equipment, products, supplies, and services must be covered by a warranty that is the industry standard or better.

D. ANTICIPATED CONTRACT TERM

Sourcewell anticipates that the term of any resulting contract(s) will be four years, with an optional one year extension that may be offered based on the best interests of Sourcewell and its Participating Entities.

E. ESTIMATED CONTRACT VALUE AND USAGE

Based on past volume of similar contracts, the estimated annual value of all transactions from contracts resulting from this RFP are anticipated to be USD $300 Million; therefore, proposers are expected to propose volume pricing. Sourcewell anticipates considerable activity under the

contract(s) awarded from this RFP; however, sales and sales volume from any resulting contract are not guaranteed.

F. MARKETING PLAN

Proposer's sales force will be the primary source of communication with Participating Entities. The proposer's Marketing Plan should demonstrate proposer's ability to deploy a sales force or dealer network to Participating Entities, as well as proposer's sales and service capabilities. It is expected that proposer will promote and market any contract award.

G. ADDITIONAL CONSIDERATIONS

1. Contracts will be awarded to proposers able to best meet the need of Participating Entities. Proposers should submit their complete line of equipment, products, or services that are applicable to the scope of this RFP.
2. Proposers should include all relevant information in its proposal, since Sourcewell cannot consider information that is not included in the proposal. Sourcewell reserves the right to verify proposer's information and may request clarification from a proposer, including samples of the proposed equipment or products.
3. Depending upon the responses received in a given category, Sourcewell may need to organize responses into subcategories in order to provide the broadest coverage of the requested equipment, products, or services to Participating Entities. Awards may be based on a subcategory.
4. A proposer's documented negative past performance with Sourcewell or its Participating Entities occurring under a previously awarded Sourcewell contract may be considered in the evaluation of a proposal.

III. PRICING

A. REQUIREMENTS

All proposed pricing must be:

1. Either Line-Item Pricing or Percentage Discount from Catalog Pricing, or a combination of these:
   a. **Line-item Pricing** is pricing based on each individual product or services**.** Each line must indicate the proposer's published "List Price," as well as the "Contract Price."
   b. **Percentage Discount from Catalog or Category** is based on a percentage discount from a catalog or list price, defined as a published Manufacturer's Suggested Retail Price (MSRP) for the products or services. Individualized percentage discounts can be applied to any number of defined product groupings. Proposers will be responsible for providing and maintaining current published MSRP with Sourcewell, and this pricing must be included in its proposal and provided throughout the term of any Contract resulting from this RFP.

2. The proposer's not to exceed price. A not to exceed price is the highest price for which equipment, products, or services may be billed to a Participating Entity. However, it is permissible for suppliers to sell at a price that is lower than the contracted price.
3. Stated in U.S. and Canadian dollars (as applicable).
4. Clearly understandable, complete, and fully describe the total cost of acquisition (e.g., the cost of the proposed equipment, products, and services delivered and operational for its intended purpose in the Participating Entity's location).

Proposers should clearly identify any costs that are NOT included in the proposed product or service pricing. This may include items such as installation, set up, mandatory training, or initial inspection. Include identification of any parties that impose such costs and their relationship to the proposer. Additionally, proposers should clearly describe any unique distribution and/or delivery methods or options offered in the proposal.

B. ADMINISTRATIVE FEES

Proposers are expected to pay to Sourcewell an administrative fee in exchange for Sourcewell facilitating the resulting contracts. The administrative fee is normally calculated as a percentage of the total sales to Participating Entities for all contracted equipment, products, or services made during a calendar quarter, and is typically one percent (1%) to two percent (2%). In some categories, a flat fee may be an acceptable alternative.

IV. CONTRACT

Proposers awarded a contract will be required to execute a contract with Sourcewell (see attached template). Only those modifications the proposer indicates in its proposal will be available for discussion. Much of the language in the Contract reflects Minnesota legal requirements and cannot be altered. Numerous and/or onerous exceptions that contradict Minnesota law may result in the proposal being disqualified from further review and evaluation.

To request a modification to the template Contract, a proposer must submit the Exceptions to Terms, Conditions, or Specifications table with its proposal. Only those exceptions noted at the time of the proposal submission will be considered.
Exceptions must:

1. Clearly identify the affected article and section.
2. Clearly note the requested modification; and as applicable, provide requested alternative language.

Unclear requests will be automatically denied.

Only those exceptions that have been accepted by Sourcewell will be included in the contract document provided to the awarded supplier for signature.

If a proposer receives a contract award resulting from this solicitation it will have up to 30 days to sign and return the contract. After that time, at Sourcewell's sole discretion, the contract award may be revoked.

V. RFP PROCESS

A. PRE-PROPOSAL CONFERENCE

Sourcewell will hold an optional, non-mandatory pre-proposal conference via webcast on the date and time noted in the Solicitation Schedule for this RFP and on the Sourcewell Procurement Portal. The purpose of this conference is to allow potential proposers to ask questions regarding this RFP and Sourcewell's competitive contracting process. Information about the webcast will be sent to all entities that have registered for this solicitation opportunity through their Sourcewell Procurement Portal Supplier Account. Pre-proposal conference attendance is optional.

B. QUESTIONS REGARDING THIS RFP AND ORAL COMMUNICATION

All questions regarding this RFP must be submitted through the Sourcewell Procurement Portal. The deadline for submission of questions is found in the Solicitation Schedule and on the Sourcewell Procurement Portal. Answers to questions will be issued through an addendum to this RFP. Repetitive questions will be summarized into a single answer and identifying information will be removed from the submitted questions.

All questions, whether specific to a proposer or generally related to the RFP, must be submitted using this process. Do not contact individual Sourcewell staff to ask questions or request information as this may disqualify the proposer from responding to this RFP. Sourcewell will not respond to questions submitted after the deadline.

C. ADDENDA

Sourcewell may modify this RFP at any time prior to the proposal due date by issuing an addendum. Addenda issued by Sourcewell become a part of the RFP and will be delivered to potential proposers through the Sourcewell Procurement Portal. Sourcewell accepts no liability in connection with the delivery of any addenda.

Before a proposal will be accepted through the Sourcewell Procurement Portal, all addenda, if any, must be acknowledged by the proposer by checking the box for each addendum. It is the responsibility of the proposer to check for any addenda that may have been issued up to the solicitation due date and time.

If an addendum is issued after a proposer submitted its proposal, the Sourcewell Procurement Portal will WITHDRAW the submission and change the proposer's proposal status to INCOMPLETE. The proposer can view this status change in the "MY BIDS" section of the

Sourcewell Procurement Portal Supplier Account. The proposer is solely responsible to check the "MY BIDS" section of the Sourcewell Procurement Portal Supplier Account periodically after submitting its proposal (and up to the Proposal Due Date). If the proposer's proposal status has changed to INCOMPLETE, the proposer is solely responsible to:

i) make any required adjustments to its proposal;
ii) acknowledge the addenda; and
iii) ensure the re-submitted proposal is received through the Sourcewell Procurement Portal no later than the Proposal Due Date and time shown in the Solicitation Schedule above.

D. PROPOSAL SUBMISSION

Proposer's complete proposal must be submitted through the Sourcewell Procurement Portal no later than the date and time specified in the Solicitation Schedule. Any other form of proposal submission, whether electronic, paper, or otherwise, will not be considered by Sourcewell. **Late proposals will not be considered.** It is the proposer's sole responsibility to ensure that the proposal is received on time.

It is recommended that proposers allow sufficient time to upload the proposal and to resolve any issues that may arise. The time and date that a proposal is received by Sourcewell is solely determined by the Sourcewell Procurement Portal web clock.

In the event of problems with the Sourcewell Procurement Portal, follow the instructions for technical support posted in the portal. It may take up to 24 hours to respond to certain issues.

Upon successful submission of a proposal, the Sourcewell Procurement Portal will automatically generate a confirmation email to the proposer. If the proposer does not receive a confirmation email, contact Sourcewell's support provider at support@bidsandtenders.ca.

To ensure receipt of the latest information and updates via email regarding this solicitation, or if the proposer has obtained this solicitation document from a third party, the onus is on the proposer to create a Sourcewell Procurement Portal Supplier Account and register for this solicitation opportunity.

Within the Sourcewell Procurement Portal, all proposals must be digitally acknowledged by an authorized representative of the proposer attesting that the information contained in in the proposal is true and accurate. By submitting a proposal, proposer warrants that the information provided is true, correct, and reliable for purposes of evaluation for potential contract award. The submission of inaccurate, misleading, or false information is grounds for disqualification from a contract award and may subject the proposer to remedies available by law.

E. GENERAL PROPOSAL REQUIREMENTS

Proposals must be:

- In substantial compliance with the requirements of this RFP or it will be considered nonresponsive and be rejected.
- Complete. A proposal will be rejected if it is conditional or incomplete.
- Submitted in English.
- Valid and irrevocable for 90 days following the Proposal Due Date.

Any and all costs incurred in responding to this RFP will be borne by the proposer.

F. PROPOSAL WITHDRAWAL

Prior to the proposal deadline, a proposer may withdraw its proposal.

G. OPENING

The Opening of proposals will be conducted electronically through the Sourcewell Procurement Portal. A list of all proposers will be made publicly available in the Sourcewell Procurement Portal after the Proposal Due Date, but no later than the Opening time listed in the Solicitation Schedule.

To view the list of proposers, verify that the Sourcewell Procurement Portal opportunities list search is set to "All" or "Closed." The solicitation status will automatically change to "Closed" after the Proposal Due Date and Time.

VI. EVALUATION AND AWARD

A. EVALUATION

It is the intent of Sourcewell to award one or more contracts to responsive and responsible proposers offering the best overall quality, selection of equipment, products, and services, and price that meet the commonly requested specifications of Sourcewell and its Participating Entities. The award(s) will be limited to the number of proposers that Sourcewell determines is necessary to meet the needs of its Participating Entities. Factors to be considered in determining the number of contracts to be awarded in any category may include the following:

- The number of and geographic location of:
  - Proposers necessary to offer a comprehensive selection of equipment, products, or services for Participating Entities' use.
  - A proposer's sales and service network to assure availability of product supply and coverage to meet Participating Entities' anticipated needs.
- Total evaluation scores.
- The attributes of proposers, and their equipment, products, or services, to assist Participating Entities achieve environmental and social requirements, preferences, and goals.

Information submitted as part of a proposal should be as specific as possible when responding to the RFP. Do not assume Sourcewell has any knowledge about a specific supplier or product.

B. AWARD(S)

Award(s) will be made to the proposer(s) whose proposal conforms to all conditions and requirements of the RFP, and consistent with the award criteria defined in this RFP.

Sourcewell may request written clarification of a proposal at any time during the evaluation process.

Proposal evaluation will be based on the following scoring criteria and the Sourcewell Evaluator Scoring Guide (a copy is available in the Sourcewell Procurement Portal):

Conformance to RFP Requirements	50
Financial Viability and Marketplace Success	75
Ability to Sell and Deliver Service	100
Marketing Plan	50
Value Added Attributes	75
Warranty	50
Depth and Breadth of Offered Equipment, Products, or Services	200
Pricing	400
TOTAL POINTS	**1000**

C. PROTESTS OF AWARDS

Any protest made under this RFP by a proposer must be in writing, addressed to Sourcewell's Executive Director, and delivered to the Sourcewell office located at 202 12th Street NE, P.O. Box 219, Staples, MN 56479. All documents that comprise the complete protest package must be received no later than 10 calendar days' following Sourcewell's notice of contract award(s) or non-award and must be time stamped by Sourcewell no later than 4:30 p.m., Central Time. A protest must allege a procedural, technical, or legal defect, with supporting documentation. A protest that merely requests a re-evaluation of a proposal's content will not be entertained

A protest must include the following items:

- The name, address, and telephone number of the protester;
- Identification of the solicitation by RFP number;
- A precise statement of the relevant facts;
- Identification of the alleged procedural, technical, or legal defect;
- Analysis of the basis for the protest;
- Any additional supporting documentation;
- The original signature of the protester or its representative; and
- Protest bond in the amount of $20,000 (except where prohibited by law or treaty).

Protests that do not address these elements will not be reviewed.

D. RIGHTS RESERVED

This RFP does not commit Sourcewell to award any contract, and a proposal may be rejected if it is nonresponsive, conditional, incomplete, conflicting, or misleading. Proposals that contain false statements or do not support an attribute or condition stated by the proposer may be rejected.

Sourcewell reserves the right to:

- Modify or cancel this RFP at any time;
- Reject any and all proposals received;
- Reject proposals that do not comply with the provisions of this RFP;
- Select, for contracts or for discussion, a proposal other than that with the lowest cost;
- Independently verify any information provided in a proposal;
- Disqualify any proposer that does not meet the requirements of this RFP, is debarred or suspended by the United States or Canada, State of Minnesota, Participating Entity's state or province; has an officer, or other key personnel, who have been charged with a serious crime; or is bankrupt, insolvent, or where bankruptcy or insolvency are a reasonable prospect;
- Waive or modify any informalities, irregularities, or inconsistencies in the proposals received;
- Clarify any part of a proposal and discuss any aspect of the proposal with any proposer; and negotiate with more than one proposer;
- Award a contract if only one responsive proposal is received if it is in the best interest of Participating Entities; and
- Award a contract to one or more proposers if it is in the best interest of Participating Entities.

E. DISPOSITION OF PROPOSALS

All materials submitted in response to this RFP will become property of Sourcewell and will become public record in accordance with Minnesota Statutes Section 13.591, after negotiations are complete. Sourcewell considers that negotiations are complete upon execution of a resulting contract. It is the proposer's responsibility to clearly identify any data submitted that it considers to be protected. Proposer must also include a justification for the classification citing the applicable Minnesota law. Sourcewell may reject proposals that are marked confidential or nonpublic, either substantially or in their entirety.

Sourcewell will not consider the prices submitted by the proposer to be confidential, proprietary, or trade secret materials. Financial information, including financial statements, provided by a proposer is not considered trade secret under the statutory definition.

8/5/2021

Addendum No. 1
Solicitation Number: RFP 091521
Solicitation Name: Automobiles, SUVs, Vans, and Light Trucks with Related Equipment and Accessories

Consider the following Question and Answer to be part of the above-titled solicitation documents. The remainder of the documents remain unchanged.

Question 1:

We manufacture service bodies and do not sell complete vehicles. Can we bid our product as an accessory to the bid?

Answer 1:

Refer to RFP Section II. B. 1. c., “Proposers may include related equipment, accessories, supplies, parts, and services to the extent that the solutions are an incidental portion of the response.” A proposal that does not include complete vehicles, of the types described in RFP Section II. B. 1. a., will be deemed non-responsive.

End of Addendum

Acknowledgement of this Addendum to RFP 091521 posted to the Sourcewell Procurement Portal on 8/5/2021, is required at the time of proposal submittal.

8/8/2021

Addendum No. 2
Solicitation Number: RFP 091521
Solicitation Name: Automobiles, SUVs, Vans, and Light Trucks with Related Equipment and Accessories

Consider the following Question and Answer to be part of the above-titled solicitation documents. The remainder of the documents remain unchanged.

Question 1:

Are you accepting leasing options for this bid?

Answer 1:

Refer to RFP Section II. B. for the description of the requested equipment, products, and services. Sourcewell is seeking equipment, products, or services that meet the general requirements of the scope of this RFP and that are commonly desired by participating entities. A proposer may submit their complete line of equipment, products, or services that are applicable to the scope of this RFP. It is left to the discretion of each proposer to articulate their ability to serve Sourcewell participating entities.

End of Addendum

Acknowledgement of this Addendum to RFP 091521 posted to the Sourcewell Procurement Portal on 8/8/2021, is required at the time of proposal submittal.

8/23/2021
Addendum No. 3
Solicitation Number: RFP 091521
Solicitation Name: Automobiles, SUVs, Vans, and Light Trucks with Related Equipment and Accessories

Consider the following Questions and Answers to be part of the above-titled solicitation documents. The remainder of the documents remain unchanged.

Question 1:

I would like to see an example of line-item pricing for Sourcewell. Please provide.

Answer 1:

In the competitive process, Sourcewell cannot conduct research for, or expressly identify resources that may be relevant to, a proposer. A proposer may review a sampling of past pricing proposals within the current awarded contract documentation available on the Sourcewell website. Navigate to the following address: https://www.sourcewell-mn.gov/contract-search and use the list or search functions.

Question 2:

Where can I get a copy of the current contract pricing for the brand of vehicles that I offer?

Answer 2:

Each Sourcewell solicitation represents a separate and distinct opportunity. For examples of current Sourcewell-awarded contracts, refer to the link provided in Answer No. 1 above. Currently active contracts offering similar solutions were awarded under solicitation numbers 120716 and 060920.

End of Addendum
Acknowledgement of this Addendum to RFP 091521 posted to the Sourcewell Procurement Portal on 8/23/2021, is required at the time of proposal submittal.

8/26/2021

Addendum No. 4
Solicitation Number: RFP 091521
Solicitation Name: Automobiles, SUVs, Vans, and Light Trucks with Related Equipment and Accessories

Consider the following Question and Answer to be part of the above-titled solicitation documents. The remainder of the documents remain unchanged.

Question 1:

The manufacturer that I represent has not developed pricing for the 2022 model year vehicles. Should pricing be presented for 2021 and 2022 models that have pricing, and a TBD associated with 2022 models that have yet to be priced by the manufacturer?

Answer 1:

In the competitive process, Sourcewell will not advise a proposer on the content of the proposal. It is left to the discretion of each proposer to articulate and propose the pricing approach that aligns with its business methods and satisfies the requirements of RFP Section III. – Pricing. Proposals are evaluated based on the criteria stated in the RFP.

Refer also to the Sourcewell contract template for additional details on the process for requesting a product or pricing change during the term of an awarded contract. A downloadable version of the contract template is found on the Bid Details page for this solicitation within the Sourcewell Procurement Portal.

End of Addendum

Acknowledgement of this Addendum to RFP 091521 posted to the Sourcewell Procurement Portal on 8/26/2021, is required at the time of proposal submittal.

9/7/2021

Addendum No. 5
Solicitation Number: RFP 091521
Solicitation Name: Automobiles, SUVs, Vans, and Light Trucks with Related Equipment and Accessories

Consider the following Questions and Answers to be part of the above-titled solicitation documents. The remainder of the documents remain unchanged.

Question 1:

We are requesting a clarification on Table 4 and Table 5. Could we include a reference from a fleet management company or a supplier we use?

Answer 1:

In the competitive process, Sourcewell will not advise a proposer on the content of the proposal. It is left to the discretion of each proposer to determine how to best demonstrate the ability to serve Sourcewell participating entities and satisfy all requirements of the questionnaire tables.

Question 2:

Is it acceptable to provide a redline of the entire Sourcewell template contract?

Answer 2:

A request for modification to the Sourcewell contract template may only be submitted with a proposal. To request a modification to the template Contract terms, conditions, or specifications, a Proposer must complete and submit the Exceptions to Terms, Conditions, or Specifications Form, which is found as the final Table of Step 1 in the proposal submission process. A proposer may elect to include additional supporting materials in its discretion.

Question 3:

Could a video be uploaded as additional content?

Answer 3:

It is left to the discretion of each proposer to determine the method it deems best suited to submit its relevant information in a timely fashion through the Sourcewell Procurement Portal. Proposer's complete proposal must be submitted through the Sourcewell Procurement Portal no later than the date and time specified in the Solicitation Schedule (RFP Section V. D.), and all relevant information should be included in the proposal (RFP Section II., G.).

Question 4:

Can you elaborate on line item 71? Is there a list of subcategory titles that can be used for reference?

Answer 4:

It is left to the discretion of the proposer to identify subcategory descriptors that may be relevant to the proposer's offered equipment, products, and services.

End of Addendum

Acknowledgement of this Addendum to RFP 091521 posted to the Sourcewell Procurement Portal on Tuesday, September 7, 2021 6:58 PM, is required at the time of proposal submittal.

9/8/2021

Addendum No. 6
Solicitation Number: RFP 091521
Solicitation Name: Automobiles, SUVs, Vans, and Light Trucks with Related Equipment and Accessories

Consider the following Questions and Answers to be part of the above-titled solicitation documents. The remainder of the documents remain unchanged.

Question 1:

With the ongoing supply chain delays related to Covid, microchip shortages, and across-the-industry shortages of raw materials, we respectfully request an extension to the submittal deadline.

Answer 1:

No extension of the due date is contemplated at this time.

Question 2:

In what format would you like financial stability to be verified?

Answer 2:

In the competitive process, Sourcewell will not advise a proposer on the content of the proposal. It is left to the discretion of each proposer to determine how to best demonstrate its financial stability and satisfy all requirements of the questionnaire tables.

End of Addendum

Acknowledgement of this Addendum to RFP 091521 posted to the Sourcewell Procurement Portal on 9/8/2021, is required at the time of proposal submittal.

2023 CHARGER POLICE AWD V-6 (PATROL)

Order No: **5PS088** **FAN#**

LDEE48	CHARGER POLICE AWD	**LNF**	**D/S LED SPOT LIGHT**
29A	PREFERRED PKG	LNX	LED SPOT LAMP
COLORS AVAILABLE ON GROUND:	**BLACK ONLY**		
X5	CLTH FRT BKT / VNL R		
X9	BLACK		
ERB	**3.6L V6 24V ENGINE**		
DFT	8-SPD AUTO		

$ 37,105.00

Items included in the build			
245/55R18 BSW PERFORMANCE TIRES	TYL	$200.00	**$ 200.00**
CONVENIENCE GROUP I	AHM	$540.00	**$ 540.00**
DEACTIVATE REAR DOORS/WINDOWS	CW6	$85.00	**$ 85.00**
POWER HEATED MIRRORS W/MAN FOLD AW	GUK	$70.00	**$ 70.00**
DELIVERY TO CA	DEALER	$2,000.00	**$ 2,000.00**
TITLE FEE	DEALER	$ 15.00	**INCLUDED**

0

Attn:

Derek Powers
Fleet/Gvmt. Sales Mgr.
Montrose Ford

TOTAL QUOTE FOR UNIT W/ ADDED ITEMS FROM ABOVE	**$ 40,000.00**
TOTAL FOR UPFIT PROVIDED VIA MONTROSE FORD	**$ 14,600.00**
TOTAL FOR SECOND SPOTLIGHT (PS)	**$ 1,000.00**
TOTAL FOR CHANGING LIGHTS TO RED (front of light bar only)	**$ 500.00**
TOTAL FOR SINGLE UNIT QUOTED / ORDERED	**$ 56,100.00**
1 unit/s requested	***$ 56,100.00***

QUOTED
ORDERED 1/5/2023

QUOTE ACCEPTED BY: Date:

Item & Description	Qty
Whelen 48" Legacy DUO WeCanX Lightbar- Red/Blue with white front and amber rear SKU : EB8SP3J	1.00 EA
Whelen Lightbar Mount Kit for 11-21 Charger SKU : MKEZ82	1.00 EA
Whelen Cencom Core Amplifier Control Module SKU : C399	1.00 EA
Whelen Core controller 8 push buttons, 4 position slide switch, 7 position rotary knob and traffic advisor buttons SKU : CCTL6	1.00 EA
Whelen Installation Kit for Cencom Core for 18-23 Durango and Charger SKU : C399K3	1.00 EA
Whelen WeCanX 16 Output Expansion Module SKU : CEM16	1.00 EA
Whelen Vehicle to Vehicle Module, Includes Internal Antenna SKU : CV2V	1.00 EA
Whelen compact 100 Watt Composite Speaker SKU : SA315U	1.00 EA
Whelen SA315 Mount Kit, 11-21 Charger SKU : SAK37	1.00 EA
Whelen ION Duo Red/Blue SKU : I2J Rear deck	2.00 EA
Whelen ION-T Series Linear DUO Red/White SKU : TLI2D Lower fog area	1.00 EA
Whelen ION T-Series Linear DUO Blue/White SKU : TLI2E Lower fog area	1.00 EA
Havis Vehicle-Specific 17" Angled Console for 2021-2023 Dodge Charger Police SKU : C-VS-0809-CHGR-2	1.00 EA
Havis 1 piece equipment bracket for Whelen Carbide SKU : C-EB40-CCS-1P	1.00 EA
Havis 1 piece equipment bracket for XTL2500, GM300, APX6500 (SC)	1.00

SKU : C-EB25-MMT-1P EA

Havis Internal Adjustable Dual Cup Holder SKU : CUP2-1001	1.00 EA
Havis large pad flip arm rest SKU : C-ARM-103	1.00 EA
Havis Universal Rugged Cradle for 11'-14' Computing Devices SKU : UT-1001	1.00 EA
Setina Partition for SUV with recess panel, coated polycarb Horizontal Sliding Window SKU : 10-VS-RP	1.00 EA
Setina Dual Vertical Gun Rack with 2 X-Large Universal Locks and Handcuff Key SKU : GK10342UHK	1.00 EA
Setina Aluminum Push Bumper with 4 ION TRIO LED lights for Sedans SKU : PB450L4D-C	1.00 EA
Setina Vertical Steel Window Bars for 11-23 Dodge Charger SKU : WK0513CGR11	1.00 EA
Setina Full Width Aluminum Trunk Tray For 11-23 Charger SKU : TK1189CGR11	1.00 EA
Havis 11" Slide Out Locking Swing Arm with Motion Adapter SKU : C-MD-112	1.00 EA
Havis 8.5" Telescoping Pole, side mount, short handle SKU : C-HDM-204	1.00 EA
Two way radio antenna and cable SKU : Antenna	2.00 EA
Circuit breaker Safety circuit breaker	1.00 EA
Data control harness and cables SKU : Data control	1.00 EA
Misc. wires, connectors, supplies and hardware SKU : Misc. wires	1.00 EA

CITY COUNCIL
AGENDA REPORT

CITY COUNCIL

Mike Nelson, Mayor
Danny Ambriz — Tyler Button
John Cale — Brian Raymond

MEETING DATE: May 13, 2024
TO: Mayor and City Council
FROM: Robert Ayuso, Battalion Chief
PREPARED BY: Robert Ayuso, Battalion Chief
SUBJECT: **Approving Memorandum of Understanding with the County of Merced Office of Emergency Services for the State Homeland Security Grant Programs Funding for Equipment, Planning, Administration, Training and Exercises** (CAL FIRE Battalion Chief Ayuso)

RECOMMENDED COUNCIL ACTION

Approval of the Memorandum of Understanding, in a form approved by the City Attorney, with the County of Merced Office of Emergency Services for the State Homeland Security Grant Programs Funding for Equipment, Planning, Administration, Training and Exercises; and authorizes and directs the City Manager, or designee, to execute any and all documents related to the Memorandum of Understanding on behalf of the City.

I. BACKGROUND/ANALYSIS:

Staff is requesting approval of the Memorandum of Understanding (MOU) with the County of Merced Office of Emergency Services (OES) for State Homeland Security Grant Programs Funding (HSGP) for Equipment, Planning, Administration, Training and Exercises. Approval will allow the City of Atwater to formally receive Homeland Security Grant funding for the FY 23. If the City intends on requesting funds through HSGP or obtaining reimbursement, attachment "A" the City Manager needs to read and initial each page with the attached MOU.

These documents need to be processed and approved by all local City Council and a copy needs to be submitted to Merced County OES for their records. Even if the City doesn't plan on obtaining funds through HSGP, it's highly suggested to process all MOUs should any funds be available in the future.

II. FISCAL IMPACTS:

There are currently no fiscal impacts with the approval of this MOU however, should HSGP funding be available in the future this would allow the City to apply for those funds, and in turn, relieve some fiscal burden on the City.

This item has been reviewed by the Finance Department.

III. LEGAL REVIEW:

This item has been reviewed by the City Attorney's Office.

IV. EXISTING POLICY:

This item is consistent with goal numbers one (1) and two (2) of the City's 2020-2025 Strategic Plan: to ensure the City's continued financial stability and to improve public safety, respectively.

V. ALTERNATIVES:

N/A

VI. INTERDEPARTMENTAL COORDINATION:

This item has been reviewed by all departments.

VII. PUBLIC PARTICIPATION:

The public will have an opportunity to provide comments on this item prior to City Council action.

VIII. ENVIRONMENTAL REVIEW:

This item is not considered a "project" under Section 21065 of the Public Resources Code as it will not directly or reasonably indirectly affect the physical environment and therefore not subject to review or analysis.

IX. STEPS FOLLOWING APPROVAL:

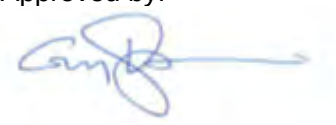
Upon approval by the City Council, staff circulate the Memorandum of Understanding and any other necessary documents necessary for the City Manager's execution.

Submitted by:



Bobby Ayuso, CAL FIRE Battalion Chief

Approved by:



Greg	Thompson,	Interim	City	Manager

Attachments:

1. FY 23 HSGP Standard Assurances-Attachment A
2. HSGP MOU-City of Atwater FY23

Standard Assurances
For Cal OES Federal Non-Disaster Grant Programs

As the duly authorized representative of the Applicant, I hereby certify that the Applicant has the legal authority to apply for federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay any non-federal share of project cost) to ensure proper planning, management, and completion of the project described in this application, within prescribed timelines.

I further acknowledge that the Applicant is responsible for reviewing and adhering to all requirements within the:

(a) Applicable Federal Regulations (see below);
(b) Federal Program Notice of Funding Opportunity (NOFO);
(c) Federal Preparedness Grants Manual;
(d) California Supplement to the NOFO; and
(e) Federal and State Grant Program Guidelines.

Federal Regulations
Government cost principles, uniform administrative requirements, and audit requirements for federal grant programs are set forth in Title 2, Part 200 of the Code of Federal Regulations (C.F.R.). Updates are issued by the Office of Management and Budget (OMB) and can be found at http://www.whitehouse.gov/omb/.

State and federal grant award requirements are set forth below. The Applicant hereby agrees to comply with the following:

1. **Proof of Authority**
   The Applicant will obtain proof of authority from the city council, governing board, or authorized body in support of this project. This written authorization must specify that the Applicant and the city council, governing board, or authorized body agree:
   (a) To provide all matching funds required for the grant project and that any cash match will be appropriated as required;
   (b) Any liability arising out of the performance of this agreement shall be the responsibility of the Applicant and the city council, governing board, or authorized body;
   (c) Grant funds shall not be used to supplant expenditures controlled by the city council, governing board, or authorized body;

Initials _____

(d) Applicant is authorized by the city council, governing board, or authorized body to apply for federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-federal share of project cost, if any) to ensure proper planning, management and completion of the project described in this application; and
(e) Official executing this agreement is authorized by the Applicant.

This Proof of Authority must be maintained on file and readily available upon request.

2. Period of Performance

The period of performance is specified in the Award. The Applicant is only authorized to perform allowable activities approved under the award, within the period of performance.

3. Lobbying and Political Activities

As required by Section 1352, Title 31 of the United States Code (U.S.C.), for persons entering into a contract, grant, loan, or cooperative agreement from an agency or requests or receives from an agency a commitment providing for the United States to insure or guarantee a loan, the Applicant certifies that:

(a) No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
(b) If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.
(c) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

The Applicant will also comply with provisions of the Hatch Act (5 U.S.C. §§ 1501- 1508 and §§ 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with federal funds.

Finally, the Applicant agrees that federal funds will not be used, directly or indirectly, to support the enactment, repeal, modification or adoption of any law, regulation or policy without the express written approval from the California Governor's Office of Emergency Services (Cal OES) or the federal awarding agency.

4. Debarment and Suspension

As required by Executive Orders 12549 and 12689, and 2 C.F.R. § 200.214 and codified in 2 C.F.R. Part 180, Debarment and Suspension, the Applicant will provide protection against waste, fraud, and abuse by debarring or suspending those persons deemed irresponsible in their dealings with the federal government. The Applicant certifies that it and its principals, recipients, or subrecipients:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or agency;
(b) Have not within a three-year period preceding this application been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or contract under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
(c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state, or local) with commission of any of the offenses enumerated in paragraph (2)(b) of this certification; and
(d) Have not within a three-year period preceding this application had one or more public transaction (federal, state, or local) terminated for cause or default.

Where the Applicant is unable to certify to any of the statements in this certification, he or she shall attach an explanation to this application.

5. Non-Discrimination and Equal Employment Opportunity

The Applicant will comply with all state and federal statutes relating to non-discrimination, including:

(a) Title VI of the Civil Rights Act of 1964 (Public Law (P.L.) 88-352 and 42 U.S.C. § 2000d et. seq.) which prohibits discrimination on the basis of race, color, or national origin and requires that recipients of federal financial assistance take reasonable steps to provide meaningful access to persons with limited English proficiency (LEP) to their programs and services;
(b) Title IX of the Education Amendments of 1972, (20 U.S.C. §§ 1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex in any federally funded educational program or activity;
(c) Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794), which prohibits discrimination against those with disabilities or access and functional needs;
(d) Americans with Disabilities Act (ADA) of 1990 (42 U.S.C. §§ 12101- 12213), which prohibits discrimination on the basis of disability and requires buildings and structures be accessible to those with disabilities and access and functional needs;
(e) Age Discrimination Act of 1975, (42 U.S.C. §§ 6101-6107), which prohibits discrimination on the basis of age;
(f) Public Health Service Act of 1912 (42 U.S.C. §§ 290 dd—2), relating to confidentiality of patient records regarding substance abuse treatment;
(g) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. § 3601 et seq.), relating to nondiscrimination in the sale, rental or financing of housing as implemented by the Department of Housing and Urban Development at 24 C.F.R. Part100. The prohibition on disability discrimination includes the requirement that new multifamily housing with four or more dwelling units—i.e., the public and common use areas and individual apartment units (all units in buildings with elevators and ground-floor units in buildings without elevators)— be designed and constructed with certain accessible features (See 24 C.F.R. § 100.201);
(h) Executive Order 11246, which prohibits federal contractors and federally assisted construction contractors and subcontractors, who do over $10,000 in Government business in one year from discriminating in employment decisions on the basis of race, color, religion, sex, sexual orientation, gender identification or national origin;
(i) Executive Order 11375, which bans discrimination on the basis of race, color, religion, sex, sexual orientation, gender identification, or national origin in hiring and employment in both the United States federal workforce and on the part of government contractors;
(j) California Public Contract Code § 10295.3, which prohibits discrimination based on domestic partnerships and those in same sex marriages;

(k) DHS policy to ensure the equal treatment of faith-based organizations, under which all applicants and recipients must comply with equal treatment policies and requirements contained in 6 C.F.R. Part 19;
(l) The Applicant will comply with California's Fair Employment and Housing Act (FEHA) (California Government Code §§12940, 12945, 12945.2), as applicable. FEHA prohibits harassment and discrimination in employment because of ancestry, familial status, race, color, religious creed (including religious dress and grooming practices), sex (which includes pregnancy, childbirth, breastfeeding and medical conditions related to pregnancy, childbirth or breastfeeding), gender, gender identity, gender expression, sexual orientation, marital status, national origin, ancestry, mental and physical disability, genetic information, medical condition, age, pregnancy, denial of medical and family care leave, or pregnancy disability leave, military and veteran status, and/or retaliation for protesting illegal discrimination related to one of these categories, or for reporting patient abuse in tax supported institutions;
(m) Any other nondiscrimination provisions in the specific statute(s) under which application for federal assistance is being made; and
(n) The requirements of any other nondiscrimination statute(s) that may apply to this application.

6. Drug-Free Workplace

As required by the Drug-Free Workplace Act of 1988 (41 U.S.C. § 701 et seq.), the Applicant certifies that it will maintain a drug-free workplace and a drug-free awareness program as outlined in the Act.

7. Environmental Standards

The Applicant will comply with state and federal environmental standards, including:

(a) California Environmental Quality Act (CEQA) (California Public Resources Code §§ 21000- 21177), to include coordination with the city or county planning agency;
(b) CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, §§ 15000- 15387);
(c) Federal Clean Water Act (CWA) (33 U.S.C. § 1251 et seq.), which establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters;
(d) Federal Clean Air Act of 1955 (42 U.S.C. § 7401) which regulates air emissions from stationary and mobile sources;

(e) Institution of environmental quality control measures under the National Environmental Policy Act (NEPA) of 1969 (P.L. 91-190); the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA; and Executive Order 12898 which focuses on the environmental and human health effects of federal actions on minority and low-income populations with the goal of achieving environmental protection for all communities;
(f) Evaluation of flood hazards in floodplains in accordance with Executive Order 11988;
(g) Executive Order 11514 which sets forth national environmental standards;
(h) Executive Order 11738 instituted to assure that each federal agency empowered to enter into contracts for the procurement of goods, materials, or services and each federal agency empowered to extend federal assistance by way of grant, loan, or contract shall undertake such procurement and assistance activities in a manner that will result in effective enforcement of the Clean Air Act and the Federal Water Pollution Control Act Executive Order 11990 which requires preservation of wetlands;
(i) The Safe Drinking Water Act of 1974, (P.L. 93-523);
(j) The Endangered Species Act of 1973, (P.L. 93-205);
(k) Assurance of project consistency with the approved state management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.);
(l) Conformity of Federal Actions to State (Clear Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.);
(m) Wild and Scenic Rivers Act of 1968 (16 U.S.C. § 1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

The Applicant shall not be: 1) in violation of any order or resolution promulgated by the State Air Resources Board or an air pollution district; 2) subject to a cease and desist order pursuant to § 13301 of the California Water Code for violation of waste discharge requirements or discharge prohibitions; or 3) determined to be in violation of federal law relating to air or water pollution.

8. **Audits**
   For subrecipients expending $750,000 or more in federal grant funds annually, the Applicant will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and Title 2 of the Code of Federal Regulations, Part 200, Subpart F Audit Requirements.

9. **Cooperation and Access to Records**
   All Applicants must cooperate with any compliance reviews or investigations conducted by DHS. In accordance with 2 C.F.R. § 200.337, the Applicant will give the awarding agency, the Comptroller General of the United States and, if appropriate, the state, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award. The Applicant will require any subrecipients, contractors, successors, transferees and assignees to acknowledge and agree to comply with this provision.

10. **Conflict of Interest**
    The Applicant will establish safeguards to prohibit the Applicant's employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.

11. **Financial Management**
    False Claims for Payment - The Applicant will comply with 31 U.S.C §§ 3729-3733 which sets forth that no subrecipient, recipient, or subrecipient shall submit a false claim for payment, reimbursement or advance.

12. **Reporting - Accountability**
    The Applicant agrees to comply with applicable provisions of the Federal Funding Accountability and Transparency Act (FFATA) (P.L. 109-282), specifically (a) the reporting of subawards obligating $30,000 or more in federal funds and (b) executive compensation data for first-tier subawards. This includes the provisions of FFATA, which includes requirements for executive compensation, and also requirements implementing the Act for the non-federal entity at 2 C.F.R. Part 25 Financial Assistance Use of Universal Identifier and Central Contractor Registration and 2 C.F.R. Part 170 Reporting Subaward and Executive Compensation Information.

13. **Whistleblower Protections**
    The Applicant also must comply with statutory requirements for whistleblower protections at 10 U.S.C. § 2409, 41 U.S.C. § 4712, and 10 U.S.C. § 2324, 41 U.S.C. § 4304 and § 4310.

14. Human Trafficking

The Applicant will comply with the requirements of Section 106(g) of the Trafficking Victims Protection Act of 2000, as amended (22 U.S.C. § 7104) which prohibits grant award recipients or a subrecipient from: (1) engaging in trafficking in persons during the period of time that the award is in effect; (2) procuring a commercial sex act during the period of time that the award is in effect; (3) using forced labor in the performance of the award or subawards under the award.

15. Labor Standards

The Applicant will comply with the following federal labor standards:

(a) The Davis-Bacon Act (40 U.S.C. §§ 276a to 276a-7), as applicable, and the Copeland Act (40 U.S.C. § 3145 and 18 U.S.C. § 874) and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§ 327-333), regarding labor standards for federally-assisted construction contracts or subcontracts, and

(b) The Federal Fair Labor Standards Act (29 U.S.C. § 201 et al.) as they apply to employees of institutes of higher learning (IHE), hospitals and other non-profit organizations.

16. Worker's Compensation

The Applicant must comply with provisions which require every employer to be insured to protect workers who may be injured on the job at all times during the performance of the work of this Agreement, as per the workers compensation laws set forth in California Labor Code §§ 3700 et seq.

17. Property-Related

If applicable to the type of project funded by this federal award, the Applicant will:

(a) Comply with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of federal participation in purchase;

(b) Comply with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires subrecipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is $10,000 or more;

(c) Assist the awarding agency in assuring compliance with Section 106 of the
(d) National Historic Preservation Act of 1966, as amended (16 U.S.C. § 470), Executive Order 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §469a-1 et seq.); and
(e) Comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. § 4831 and 24 CFR Part 35) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.

18. Certifications Applicable Only to Federally-Funded Construction Projects

For all construction projects, the Applicant will:

(a) Not dispose of, modify the use of, or change the terms of the real property title or other interest in the site and facilities without permission and instructions from the awarding agency. Will record the federal awarding agency directives and will include a covenant in the title of real property acquired in whole or in part with federal assistance funds to assure nondiscrimination during the useful life of the project;
(b) Comply with the requirements of the awarding agency with regard to the drafting, review and approval of construction plans and specifications; and
(c) Provide and maintain competent and adequate engineering supervision at the construction site to ensure that the complete work conforms with the approved plans and specifications and will furnish progressive reports and such other information as may be required by the assistance awarding agency or State.

19. Use of Cellular Device While Driving is Prohibited

Applicants are required to comply with California Vehicle Code sections 23123 and 23123.5. These laws prohibit driving motor vehicle while using an electronic wireless communications device to write, send, or read a text-based communication. Drivers are also prohibited from the use of a wireless telephone without hands-free listening and talking, unless to make an emergency call to 911, law enforcement, or similar services.

Initials _____

20. California Public Records Act and Freedom of Information Act

The Applicant acknowledges that all information submitted in the course of applying for funding under this program, or provided in the course of an entity's grant management activities that are under Federal control, is subject to the Freedom of Information Act (FOIA), 5 U.S.C. § 552, and the California Public Records Act, California Government Code section 6250 et seq. The Applicant should consider these laws and consult its own State and local laws and regulations regarding the release of information when reporting sensitive matters in the grant application, needs assessment, and strategic planning process.

HOMELAND SECURITY GRANT PROGRAM (HSGP) – PROGRAM SPECIFIC ASSURANCES / CERTIFICATIONS

21. Acknowledgment of Federal Funding from DHS

All recipients must acknowledge their use of federal funding when issuing statements, press releases, requests for proposals, bid invitations, and other documents describing projects or programs funded in whole or in part with federal funds.

22. Activities Conducted Abroad

All recipients must ensure that project activities carried on outside the United States are coordinated as necessary with appropriate government authorities and that appropriate licenses, permits, or approvals are obtained.

23. Best Practices for Collection and Use of Personally Identifiable Information (PII)

DHS defines personally identifiable information (PII) as any information that permits the identity of an individual to be directly or indirectly inferred, including any information that is linked or linkable to that individual. All recipients who collect PII are required to have a publicly-available privacy policy that describes standards on the usage and maintenance of PII they collect. Recipients may also find the DHS Privacy Impact Assessments: Privacy Guidance and Privacy template a useful resource respectively.

24. Copyright

All recipients must affix the applicable copyright notices of 17 U.S.C. §§ 401 or 402 and an acknowledgement of U.S. Government sponsorship (including the award number) to any work first produced under federal financial assistance awards.

25. Duplication of Benefits

Any cost allocable to a particular federal financial assistance award provided for in 2 C.F.R. Part 200, Subpart E may not be charged to other federal financial assistance awards to overcome fund deficiencies, to avoid restrictions imposed by federal statutes, regulations, or federal financial assistance award terms and conditions, or for other reasons. However, these prohibitions would not preclude recipients from shifting costs that are allowable under two or more awards in accordance with existing federal statutes, regulations, or the federal financial assistance award terms and conditions.

26. Energy Policy and Conservation Act

All recipients must comply with the requirements of 42 U.S.C. § 6201 which contain policies relating to energy efficiency that are defined in the state energy conservation plan issued in compliance with this Act.

27. Federal Debt Status

All recipients are required to be non-delinquent in their repayment of any federal debt. Examples of relevant debt include delinquent payroll and other taxes, audit disallowances, and benefit overpayments. See OMB Circular A-129.

28. Fly America Act of 1974

All recipients must comply with Preference for U.S. Flag Air Carriers: (air carriers holding certificates under 49 U.S.C. § 41102) for international air transportation of people and property to the extent that such service is available, in accordance with the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. § 40118) and the interpretative guidelines issued by the Comptroller General of the United States in the March 31, 1981, amendment to Comptroller General Decision B-138942.

29. Hotel and Motel Fire Safety Act of 1990

In accordance with Section 6 of the Hotel and Motel Fire Safety Act of 1990, all Applicants must ensure that all conference, meeting, convention, or training space funded in whole or in part with federal funds complies with the fire prevention and control guidelines of the Federal Fire Prevention and Control Act of 1974, as amended, 15 U.S.C. § 2225a.

30. Non-supplanting Requirement

All recipients who receive federal financial assistance awards made under programs that prohibit supplanting by law must ensure that federal funds do not replace (supplant) funds that have been budgeted for the same purpose through non-federal sources.

31. Patents and Intellectual Property Rights

Unless otherwise provided by law, recipients are subject to the Bayh-Dole Act, Pub. L. No. 96-517, as amended, and codified in 35 U.S.C. § 200 et seq. All recipients are subject to the specific requirements governing the development, reporting, and disposition of rights to inventions and patents resulting from financial assistance awards located at 37 C.F.R. Part 401 and the standard patent rights clause located at 37 C.F.R. § 401.14.

32. SAFECOM

All recipients who receive federal financial assistance awards made under programs that provide emergency communication equipment and its related activities must comply with the SAFECOM Guidance for Emergency Communication Grants, including provisions on technical standards that ensure and enhance interoperable communications.

33. Terrorist Financing

All recipients must comply with Executive Order 13224 and U.S. law that prohibit transactions with, and the provisions of resources and support to, individuals and organizations associated with terrorism. Recipients are legally responsible to ensure compliance with the Order and laws.

34. Reporting of Matters Related to Recipient Integrity and Performance

If the total value of the recipient's currently active grants, cooperative agreements, and procurement contracts from all federal assistance offices exceeds $10,000,000 for any period of time during the period of performance of this federal financial assistance award, you must comply with the requirements set forth in the government-wide Award Term and Condition for Recipient Integrity and Performance Matters located at 2 C.F.R. Part 200, Appendix XII, the full text of which is incorporated here by reference in the award terms and conditions.

35. USA Patriot Act of 2001

All recipients must comply with requirements of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act (USA PATRIOT Act), which amends 18 U.S.C. §§ 175–175c.

36. Use of DHS Seal, Logo, and Flags

All recipients must obtain permission from their DHS Financial Assistance Office, prior to using the DHS seal(s), logos, crests or reproductions of flags or likenesses of DHS agency officials, including use of the United States Coast Guard seal, logo, crests or reproductions of flags or likenesses of Coast Guard officials.

37. Performance Goals

In addition to the Biannual Strategy Implementation Report submission requirements outlined in the Preparedness Grants Manual, subrecipients must demonstrate how the grant-funded project addresses the core capability gap associated with each project and identified in the Threat and Hazard Identification and Risk Analysis or Stakeholder Preparedness Review or sustains existing capabilities, as applicable. The capability gap reduction or capability sustainment must be addressed in the Project Description of the BSIR for each project.

38. Applicability of DHS Standard Terms and Conditions to Tribes

The DHS Standard Terms and Conditions are a restatement of general requirements imposed upon recipients and flow down to subrecipients as a matter of law, regulation, or executive order. If the requirement does not apply to Indian tribes or there is a federal law or regulation exempting its application to Indian tribes, then the acceptance by Tribes of, or acquiescence to, DHS Standard Terms and Conditions does not change or alter its inapplicability to an Indian tribe. The execution of grant documents is not intended to change, alter, amend, or impose additional liability or responsibility upon the Tribe where it does not already exist.

Standard Assurances
For Cal OES Federal Non-Disaster Grant Programs

IMPORTANT
The purpose of the assurance is to obtain federal and state financial assistance, including any and all federal and state grants, loans, reimbursement, contracts, etc. The Applicant recognizes and agrees that state financial assistance will be extended based on the representations made in this assurance. This assurance is binding on the Applicant, its successors, transferees, assignees, etc. Failure to comply with any of the above assurances may result in suspension, termination, or reduction of grant funds.

All appropriate documentation, as outlined above, must be maintained on file by the Applicant and available for Cal OES or public scrutiny upon request. Failure to comply with these requirements may result in suspension of payments under the grant or termination of the grant or both and the subrecipient may be ineligible for award of any future grants if the Cal OES determines that any of the following has occurred: (1) the recipient has made false certification, or (2) violates the certification by failing to carry out the requirements as noted above.

All of the language contained within this document must be included in the award documents for all subawards at all tiers. All recipients are bound by the Department of Homeland Security Standard Terms and Conditions 2021, Version 11.4, hereby incorporated by reference, which can be found at: https://www.dhs.gov/publication/fy15-dhs-standard-terms-and-conditions.

The undersigned represents that he/she is authorized to enter into this agreement for and on behalf of the Applicant.

Subrecipient:_____

Signature of Authorized Agent: _____

Printed Name of Authorized Agent: _____

Title:_____Date: _____

Initials _____

OFFICE OF EMERGENCY SERVICES

State Homeland Security Grant Programs
Funding for Equipment, Planning, Administration, Training and Exercises

THIS AGREEMENT is entered into by and between County of Merced ("County") and the City of Atwater ("Sub-Recipient").

County and Sub-Recipient have entered into this AGREEMENT with reference to the following circumstances:

A. The California State Homeland Security Grant Program (SHSGP) is providing funding through federal grants from the Department of Homeland Security to enhance the capabilities of state and local first responders by allowing the purchase of advanced types of equipment, as well as addressing other critical homeland security needs, including administration, planning, training and exercise related costs.

NOW, THEREFORE, based on the foregoing recitals, which the parties agree to be true and correct, it is mutually agreed between both parties:

I. This AGREEMENT applies to the State Homeland Security Grant Program, funded through the County to the Sub-Recipient.

II. Amendments or modifications to the terms of this AGREEMENT must be made in writing, and approved by all parties hereto, in order to maintain compliance with changes pursuant to federal or state laws, regulations, or policies affecting pertinent regulations or funding.

III. The FY 2023 GRANT ASSURANCES for the SHSGP, promulgated by the California Office of Emergency Services, is made part of this AGREEMENT and included as ATTACHMENT A.

Sub-Recipient certifies that:

1) Sub-Recipient will comply with the FY 2023 GRANT ASSURANCES;

2) Sub-Recipient's signatory to this agreement will separately sign the FY 2023 GRANT ASSURANCES included as ATTACHMENT A;

3) Sub-Recipient's signatory has obtained the required written authorization from signatory's applicable governing body, as set forth in the attached FY 2023 GRANT ASSURANCES, that signatory is authorized to sign this AGREEMENT.

IV. TERMINATION:

A. Without Cause: County will have the right to terminate this AGREEMENT without cause by giving thirty (30) days prior written notice of intention to terminate pursuant to this provision, specifying the date of termination. County will pay to the Sub-Recipient the compensation earned for pre-approved work performed and not previously paid for during the period of this AGREEMENT to the date of termination. County will not pay lost anticipated profits or other economic loss.

The payment of such compensation is subject to the restrictions on payment of compensation otherwise provided in this AGREEMENT, and is conditioned upon receipt from Sub-Recipient of any and all plans, specifications and estimates, and other documents prepared by Sub-Recipient in accordance with this AGREEMENT. No sanctions will be imposed.

B. With Cause: This AGREEMENT may be terminated by either party should the other party:

1. be adjudged as bankrupt, or
2. become insolvent or have a receiver appointed, or
3. make a general assignment for the benefit of creditors, or
4. suffer any judgment which remains unsatisfied for 30 days, and which would substantively impair the ability of the judgment debtor to perform under this AGREEMENT, or
5. materially breach this AGREEMENT.

For any of the occurrences except item (5), termination may be effected upon written notice by the terminating party specifying the date of the termination. Upon a material breach, the AGREEMENT may be terminated following the failure of the defaulting party to remedy the breach to the satisfaction of the non-defaulting party within five (5) days of written notice specifying the breach. If the breach is not remedied within that five (5) day period, the non-defaulting party may terminate the AGREEMENT on further written notice specifying the date of termination. If the nature of the breach is such that it cannot be cured within a five (5) day period, the defaulting party may, submit a written proposal within that period which sets forth a specific means to resolve the default. If the non-defaulting party consents to that proposal in writing, which consent shall not be unreasonably withheld, the defaulting party shall immediately embark on its plan to cure. If the default is not cured within the time agreed, the non-defaulting party may terminate upon written notice specifying the date of termination. County will pay to the Sub-Recipient the compensation earned for work performed and not previously paid for to the date of termination. County will not pay lost anticipated profits or other economic loss, nor will the County pay compensation or make reimbursement to cure a breach arising out of or resulting from such termination. If the expense of finishing the Sub-Recipient scope of work exceeds the unpaid balance of the AGREEMENT, the Sub-Recipient must pay the difference to the County. The payment of such compensation is subject to the restrictions on payment of compensation otherwise provided in this AGREEMENT, and is conditioned upon receipt from Sub-Recipient of any and all plans, specifications and estimates, and other documents prepared by Sub-Recipient by the date of termination in accordance with this AGREEMENT. Sanctions taken will be possible rejection of future proposals based on specific causes of non-performance.

C. Effects of Termination: Expiration or termination of this AGREEMENT shall not terminate any obligations to indemnify, to maintain and make available any records pertaining to the AGREEMENT, to cooperate with any audit, to be subject to offset, or to make any reports of pre-termination contract activities. Where Sub-Recipient's services have been terminated by the County, said termination will not affect any rights of the County to recover damages against the Sub-Recipient or to require the forfeiture of equipment acquired or obtained through grant funds as provided in section III, paragraph 44, subparagraph (c).

D. Suspension of Performance: Independent of any right to terminate this AGREEMENT, the authorized representative of County for which Sub-Recipient's services are to be performed, may immediately suspend performance by Sub-Recipient, in whole or in part, in response to health, safety or financial emergency, or a failure or refusal by Sub-Recipient to comply with the provisions of this AGREEMENT, until such time as the cause for suspension is resolved, or a notice of termination becomes effective.

V. TERM: This AGREEMENT shall commence on the date of County signature and continue until terminated under the provisions of paragraph IV. The performance period for the FY 2023 SHSGP is 09/01/2023 to 05/31/2026.

VI. INDEMNIFICATION:

A. County shall defend, indemnify and hold Sub-Recipient and its respective officers, board members, employees and agents, harmless from and against any and all liability, loss, expense, reasonable attorneys' fees, or claims for injury or damages arising out of the performance of this AGREEMENT but only in proportion to and to the extent such liability, loss, expense, reasonable attorneys' fees, or claims for injury or damages are caused by or result from the negligent acts or omissions, or willful misconduct of County, its officers, agents, or employees.

B. Sub-Recipient shall defend, indemnify and hold County, its officers, board members, employees and agents, harmless from and against any and all liability, loss, expense, reasonable attorneys' fees, or claims for injury or damage arising out of the performance of this AGREEMENT but only in proportion to and to the extent such liability, loss, expense, attorneys' fees, or claims for injury or damages are caused by or result from the negligent acts or omissions, or willful misconduct of Sub-Recipient and its officers, agents, or employees.

VII. INSURANCE: Sub-Recipient certifies it is insured or self-insured for general liability exposures with limits of no less than $1 million per occurrence. Sub-Recipient certifies it is insured or self-insured for workers' compensation and maintains statutory limits. Sub-Recipient agrees that coverage limits specified within the agreement will not be used to reduce limits of coverage from Sub-Recipient full policy limits. Insurance Policies will not be used to limit liability or to limit the indemnification provisions and requirements of this agreement or act in any way to reduce available coverage and limits from the insurer. Failure to maintain or renew coverage may be a material breach of this AGREEMENT.

VIII. ENTIRE AGREEMENT REPRESENTED: This AGREEMENT represents the entire agreement between Sub-Recipient and County as to its subject matter and no prior oral or written understanding shall be of any force or effect. No part of this AGREEMENT may be modified without the written consent of both parties.

Signature page to follow

Sub-Recipient

The undersigned represents that he/she is authorized to enter into this agreement for and on behalf of the Sub-Recipient.

Name: _____

Address: _____

Title: _____ Date: _____

Signature: _____

Printed Name: _____

County of Merced

By:_____

Chairman, Board of Supervisors

Date: _____

REVIEWED AS TO LEGAL FORM

By: _____

County Counsel

CITY COUNCIL
AGENDA REPORT

CITY COUNCIL

Mike Nelson, Mayor
Danny Ambriz — Tyler Button
John Cale — Brian Raymond

MEETING DATE: May 13, 2024
TO: Mayor and City Council
FROM: Justin Vinson, Public Works Director
PREPARED BY: Justin Vinson, Public Works Director
SUBJECT: **Awarding Purchase to Tesco Controls, Inc of Sacramento, California for a Control Panel for the Future Storm Pond/Basin for Lower Shaffer Drainage Project**(Public Works Director Vinson)

RECOMMENDED COUNCIL ACTION

Award a purchase to Tesco Controls, Inc of Sacramento, California for a control panel for the future storm pond/basin for the future Lower Shaffer Drainage Project, in an amount not to exceed $215,000.00; and authorize and direct the Interim City Manager, or designee, to execute the Purchase Order on behalf of the City.

I. BACKGROUND/ANALYSIS:

The City of Atwater currently uses Tesco Controls software and services to provide the City with its supervisory control and data acquisition (SCADA) system that allows the City to remotely control its water, sewer, and storm stations. The City's SCADA system allows the Public Works Department to receive alarms, adjust levels or pressures at sites, change the status of a station, run detailed reports on stations, and etc.

To ensure that the pump controls and alarms for the future storm pond/basin can integrate with he city's existing system, the city will purchase the control panel from Tesco, which provides the control panel for every existing water, sewer, and storm station in the City. Staff is recommending moving forward with the purchase now instead of when bidding for the project due to the lead times in electrical equipment and to prevent delays in the project due to not having the control panel in time of the completion of the project. The city's designer (GHD) has been involved with the details of the control panel and has included the control panel in the drawings to ensure the pumps will be functional with the control panel.

Sole Source

AMC 3.04.110(C) lists sole source purchases as an exemption to the formal, centralized purchasing procedures. One of the qualifications for a sole source purchase is that the product "has been proven to be the only product that is acceptable."

Further, the City of Atwater Purchasing System Manual, Section 9, Procurement Methods, “Sole Source Purchases (page 17),” states that the City’s bidding procedures may be dispensed when it qualifies as a sole source due to the fact when any of the following apply:

1. The brand or trade name article, goods, or product or proprietary service is the only one which will properly meet the needs of the City; or
2. The item or service is unique and available only from a sole source; or
3. The item or service is designed to match others already in use or necessary to be compatible with others already in use.

Here, due to the need to integrate one SCADA system city-wide, and the efficiencies and economies of scale captured by such integration, this purchase represents the only acceptable choice for the City and comports with the City's purchasing requirements for sole source purchases.

II. FISCAL IMPACTS:

There is sufficient funding available in the Fiscal Year 2023-24 Budget Sewer Enterprise Fund, Capital Projects, Lower Shaffer Storm Drainage Improvements Account No. 6010.1080. W009.

This item has been reviewed by the Finance Department.

III. LEGAL REVIEW:

This item has been reviewed by the City Attorney's Office.

IV. EXISTING POLICY:

This item is consistent with goal numbers one (1) and two (2) of the City's Strategic Plan: to ensure the City's continued financial stability and to improve public safety, respectively.

V. ALTERNATIVES:

N/A

VI. INTERDEPARTMENTAL COORDINATION:

This item has been reviewed by all necessary departments.

VII. PUBLIC PARTICIPATION:

The public will have an opportunity to provide comments on this item prior to City Council action.

VIII. ENVIRONMENTAL REVIEW:

This item is not considered a "project" under Section 21065 of the Public Resources Code as it will not directly or reasonably indirectly affect the physical environment and therefore is not subject to review or analysis.

IX. STEPS FOLLOWING APPROVAL:

The Public Works Department will coordinate with Administration and Finance to execute the Purchase Order.

Submitted by:



Justin Vinson, Public Works Director

Approved by:



Greg Thompson, Interim City Manager

Attachments:

1. Control Panel Quote for Lower Shaffer Drainage
2. Letter of Exclusivity & Proprietorship - Atwater SCADA Control & Telemetry System

TESCO CONTROLS www.TescoControls.com

Corporate Office
8440 Florin Road, Sacramento, CA 95828
P.O. Box 299007, Sacramento, CA 95829
PH: 916.395.8800 FX: 916.429.2817

To: City of Atwater
Attn: Justin Vinson
Re: City of Atwater
Lower Shaffer Road Drainage Improvements – Control Panel

Quote Date: 5/2/2024
Quote No.: 24C095Q01

Dear Justin:

Thank you for your continued interest in TESCO products, services, and solutions. We are pleased to quote the following scope of work pertaining to the above-referenced project.

Project Background

The City of Atwater is currently in design for improvements to their drainage system at Lower Shaffer Road. This design will be similar to Fruitland Ave Storm Lift Station (Tesco Job T-52366) however, Lower Shaffer will be rated for 400 amps and have larger pumps with a smaller low-flow pump. This panel will be purchased before the rest of the job goes out to bid in order to begin the design and manufacturing of the panel. If the design changes apart from what is listed out in the Scope of Work and Scope of Supply below, it will be quoted on a change order.

Scope of Work

Tesco Controls will design and manufacture a control panel similar to Fruitland Ave Storm Lift Station. This will be a three or four section metered control panel that will house a Tesco L3000 PLC and controls for two main 75HP pumps and one low-flow 3HP pump. The enclosure will be designed with sunshields to help with heat mitigation within the panel.

A Tesco Project Engineer will design this custom panel and create drawings with a bill of material for the equipment. This design will be submitted to the City for approval. Upon approval Tesco will begin manufacturing the panel.

A Tesco L3000 PLC will automate the site. It is understood that there will be two modes for this site. Wet season and dry season modes. Wet season will mainly utilize the large 75 HP pumps and dry season will mainly utilize the 3 HP pump.

Tesco will provide a Reactive Air System (RAS) for level instrumentation. The RAS will be mounted inside of the control panel. Paraflex tubing and a RAS PVC bell will be provided and installed by others. Two float switches will be provided for backup instrumentation.

In order to be able to bring this site onto SCADA, Tesco will perform a radio study. This radio study will include a preliminary path profiling of the site to get theoretical radio links from this site to an access point. Then Networking & Telemetry Engineers will perform an onsite survey to test the feasibility and needs criteria for this radio link. Please note that the link may require a tower which is not provided within this quotation. Tesco will be providing a radio, antenna, and antenna cabling for this project, any additional needs above what is quoted in the scope of supply below will be quoted separately on a change order. The antenna and antenna cable will be installed by others.

A Tesco SCADA Programming Engineer will perform the SCADA modifications required to bring this site onto SCADA. The Engineer will follow the City's current standards and create a new screen to match the look and feel of the rest of the application. The Engineer will utilize existing storm water pump stations and match the required data provided on those existing screens.

Once the control panel is designed, manufactured, programmed, and factory tested, it will be shipped to the City for installation by others. It is understood that this will be a bid project and this control panel is pre purchased. The winning electrical contractor will install this panel per the plans and specs of the project. Once the panel is installed, a Tesco Field Service Engineer will perform onsite startup of the panel.

Scope of Supply

Item	Qty	Description

1	1	**Control Panel to Include:**
		▪ Custom, Freestanding, Multi-Section, NEMA 3R, Galvanized Enclosure – Powder Coated White with Sunshields on Top and Back
		▪ Metered Section
		  ▪ Utility Meter Socket
		  ▪ Utility Pull Section
		  ▪ Qty. of Two (2): 400A Main Disconnect Circuit Breaker
		  ▪ Manual Transfer Switch
		  ▪ Generator Receptacle
		  ▪ Power Distribution Blocks
		  ▪ Phase Failure Relay
		  ▪ Power Distribution Transformer
		  ▪ Power Distribution Circuit Breakers as Required
		▪ Motor Control Section(s)**:**
		  ▪ Qty. of Two (2): 150A Motor Disconnect Breakers
		  ▪ Qty. of Two (2): Soft Starters – 75HP
		  ▪ 15A Motor Disconnect Breaker
		  ▪ 3 HP ATL Starter
		  ▪ Qty. of Three (3): Pump Controls to Include
		  ▪ Push Buttons
		  ▪ Indicator Lights
		  ▪ HOA Switches
		  ▪ Elapsed Time Meters
		  ▪ Nameplates, Din Rails, Fuses, Relays, Terminal Blocks, Ground Bus Bar, Wires, and Labels as Required
		▪ PLC Section:
		  ▪ Main Disconnect
		  ▪ Power Supply
		  ▪ Tesco L3000 PLC to Include:
		  ▪ Power Supply
		  ▪ L3000 CPU
		  ▪ Qty. of Two (2): HDIO Card
		  ▪ Qty. of Two (2): HDIO Terminal Board
		  ▪ Qty. of Two (2): HDIO Cable
		  ▪ Small Tesco Faceplate
		  ▪ C-More OIT - 10”
		  ▪ Ethernet Switch
		  ▪ Radio
		  ▪ Lightning Arrester
		  ▪ Backup Battery with Charger
		  ▪ Intrinsically Safe Relay
		  ▪ Panel Light with Switch
		  ▪ Panel Heater with Thermostat
		  ▪ Panel Fan with Filtered Louver
		  ▪ Duplex Convenience Receptacle

Item	Qty	Description
		▪ Nameplates, Din Rails, Fuses, Relays, Circuit Breakers, Terminal Blocks, Ground Bus Bar, Wires, and Labels as Required
2	Lot	**Instrumentation to Include:** ▪ Reactive Air System ▪ Open chassis to be installed within control panel ▪ Compressor ▪ Solenoid ▪ Transducer ▪ Solenoid Control Board ▪ Terminal Blocks, Wires, Labels as Required ▪ PVC Bell with Paraflex Tubing and Mounting Straps (installed by others) ▪ Qty. of Two (2): Float Switches (Installed by Others)
3	Lot	**Shipped Loose Items:** ▪ Antenna and Antenna Cable (Pole/Mast by Others)
4	Lot	**Professional Services:** ▪ Project Management ▪ Engineering – engineered shop drawings, equipment schematics, engineered submittals, technical data, as-built documentation, and project records ▪ Manufacturing Services – fabrication, manufacturing, assembly, equipment wiring, and factory testing ▪ PLC Programming ▪ OIT Programming ▪ SCADA Programming ▪ Networking/Communications/Telemetry ▪ Product Startup Services – product quality review, verification of product installation, product parameter adjustments, product programming, software upload/download as required, instrument/ device signal spanning, product/equipment reconfiguration as required, product function checks, and product startup. ▪ Onsite Training ▪ O&M Manuals
		TOTAL (including applicable sales tax): $215,000.00

Progress Payment Milestones

Project Stage:	***Progress Payment:***
Initialization / Down-Payment	20%
Internal Factory Testing / Ready to Ship	70%
Startup Services	10%

Project Clarifications

- Unless otherwise indicated by the Scope of Work above, quote is to **furnish only** and does not include any trade labor, trade work, construction work, site improvement, contractor services, or any trade installation services. Any trade labor and/or related trade work shall be performed by others/contractor.
- Unless otherwise indicated by the Scope of Work above, the following is **not** included within this quotation:

- Conduit, field wire, tubing, or basic trade installation materials (brackets, screws, bolts, j-box, stanchions, pull-box, etc.)
- Instrumentation mounting components, brackets, stanchions, sunshields, etc.
- Local control stations and/or field mounted disconnects.
- Instrumentation, devices, components, or equipment not specifically identified in the above quotation.
- Fiber optic patch panels, cable, splicing or terminations.
- Networking infrastructure or architecture modifications to existing facilities.
- Any 3rd party testing, harmonic testing/analysis, protective device coordination study, short-circuit analysis, or Arc-Flash Risk Assessment (AFRA) services.
- Electrical interconnection diagrams for equipment not furnished by TESCO.
- ISA process control loop diagrams.
- Signal loop diagrams for equipment not furnished by TESCO.

Clauses, Terms and Conditions

- Addendums Acknowledged: **0**
- Quote is firm for **30 days** unless otherwise stated.
- Submittals:
  - Product/Equipment Submittals: Initial equipment submittal(s) "schedule" to be provided approximately **06** weeks after receipt of purchase order or written notice of intent. Lead-time for this "schedule" may be subject to delays imposed by 3rd party submittal providers. Submittal "schedule" will list all project submittals and will indicate lead-times for each product/equipment submittal. Generation of submittal(s) may be subject to availability of specified material components; supply-chain constraints may impact material item selections, therefore, may impact submittal lead-times.
  - Information Submittals: Information Submittals are dependent on the approval of Product/Equipment Submittals. An updated Submittal Schedule will be provided after receiving approval of corresponding Product/Equipment Submittal showing schedule and lead-times for Information Submittals.
- Submittals: Initial equipment submittal(s) to be provided approximately **12-16** weeks after receipt of purchase order or written notice of intent; however, generation of submittal(s) will be contingent on supply-chain availability and variability for material components which may impact material item selections affecting submittal lead-times, therefore lead-times are subject to change without notice.
- Delivery: Initial shipment(s) anticipated to commence approximately **16-20** weeks minimum after Product/ Equipment Submittal approval; however, delivery schedule(s) will be contingent on supply-chain availability and variability for material component selections, therefore, lead-times are subject to change. Delivery schedules will be confirmed and provided after receiving Product/Equipment Submittals approval.
- Lead-Time & Supply Chain Impacts: Due to the supply chain impacts imposed by the pandemic, all quoted lead-times are subject to change.
- Storage Terms: Any item of the product on which shipment is delayed by Buyer may be placed in storage by Seller at Buyer's expense and risk. If a delay in shipment is requested by Buyer after an order has been entered and accepted:
  - a. No charge will be made if the request for delay is made more than six (6) weeks before acknowledged shipping date and the requested delay is for a period not in excess of thirty (30) days.
  - b. A charge will be made if the requested delay exceeds a period of thirty (30) days or if the request is made within six (6) weeks of the acknowledged shipping date. Seller will advise Buyer of the charge within ten (10) days of receiving Buyer's request for delay.
  - c. If the product is within six (6) weeks of the acknowledged shipping date, then Seller has the option of completing, invoicing and storing the product and charging one and one-half percent (1.5%) per month, or the maximum percentage permitted by law, whichever is lesser, of the established price for such product, plus storage cost.
- TESCO price is Ex Works (EXW) per INCOTERMS, freight allowed.
- Product startup will commence once the product is properly installed and powered up. If buyer requests or schedules product startup and seller is unable to conduct startup due to product not being properly installed, powered, or ready for startup (including being put into full service or full operation), then a fee of $1500 will be charged to buyer to remobilize seller for product startup.

- TESCO carries liability insurance, with full worker's compensation coverage.
- TESCO warranties against defect in design workmanship and materials for a period of one year from date of product startup, and does not exceed 18 months from the date of shipment from the factory.
- Unless otherwise stated above, price does not include any sales tax, use tax, or applicable fees; please apply any taxes and/or fees as appropriate. Please note that all invoices will include sales tax where applicable.
- Invoices will be billed in accordance with a customer-approved schedule of values and customer-approved pay application.
- Terms are net 45 days on approved credit. Shipment release requires the following:
  - Accounts with sub-par credit will require 50% down-payment upon order and 50% payment at pickup (prior to shipment).
  - Accounts with approved credit, all milestone progress payments must be current for releasing shipment or deploying services.
- Interest will be applied to all past due invoices. Buyer shall pay to Seller all invoiced amount within forty-five (45) calendar days from the date of such invoice. Flow-down provisions are not accepted. In the event any payment becomes past due, Buyer shall pay interest on all late payments, calculated daily and compounded monthly at the rate of 1.5% per month. Buyer shall also reimburse Seller for all reasonable costs incurred by Seller in collecting any late payments, including attorneys' fees and court costs.
- Price Escalation: If between the proposal date and actual procurement and through no fault of the Seller, the relevant cost of labor, material, freight, tariffs, and other Seller costs combined relating to the contract, increase by greater than 2.5% of the overall contract price, then the contract price shall be subject to escalation and increased. Such increase shall be verified by documentation and the amount of contract price escalation shall be calculated as either the actual increased cost to the Seller or, if agreed by the Parties, the equivalent increase of a relevant industry recognized third-party index, and in both cases without any additional profit or margin being added.
- All merchandise sold is subject to lien laws.
- A processing fee of up to 4% will be added for credit card payments.
- TESCO's liabilities shall not exceed 10% of TESCO's total order value.
- Final retention to be paid within 10 days after the project notice of completion.

Please feel free to contact us at (916) 395-8800 to discuss any questions or comments you may have regarding this quotation.

Sincerely,

TESCO CONTROLS



Caleb Ernst
Technical Sales Estimator
cernst@tescocontrols.com

TESCO CONTROLS www.TescoControls.com

Corporate Office
8440 Florin Road, Sacramento, CA 95828
P.O. Box 299007, Sacramento, CA 95829
PH: 916.395.8800 FX: 916.429.2817

May 6, 2024

Mr. Justin Vinson
City of Atwater
470 Aviator Drive
Atwater, CA 95301
(209) 357-6370

Re: City of Atwater
SCADA Control & Telemetry System
Exclusivity Letter

Dear Mr. Justin Vinson,

Tesco Controls (TESCO) is the system supplier and equipment manufacturer for the City of Atwater's control system installed at various water, wastewater, and storm station sites, including: Remote Telemetry Units (RTUs) / Programmable Logic Controllers (PLCs), communication systems, hardware, software (including SCADA software drivers), and programming. These systems are comprised of TESCO-brand products, which are interconnected to orchestrate system controls and SCADA data monitoring, and incorporate custom, **site-specific software and programming specifically developed by TESCO for the City's systems and automation/control needs. The technology deployed incorporates the integration of hardware, software, and communication protocols with aspects of these systems being proprietary in nature**.

The products installed at the numerous sites and facilities within the City of Atwater's system communicate between one another via radio telemetry and use specialty protocol drivers to facilitate efficient and effective SCADA data monitoring and control data messaging. In order to leverage lighter "over-the-air" payloads and enhanced communications management, the system is deployed using a proprietary data telemetry protocol to orchestrate controls and automation. Such protocols are specific to RTU/PLC equipment, which are **TESCO-brand products specifically manufactured and sourced solely by Tesco Controls.**

TESCO remains committed to provide products, service, integration, and support services to the City of Atwater and its control system. We actively maintain the City's control strategy documentation and programming code for these systems. TESCO possesses the experience, intimate knowledge, and understanding of the City's automation equipment to service and support the City's systems and City's needs. This makes **TESCO the most cost-effective and ideal solution provider for continued support, services and product builds, while also preserving uniformity throughout the City's system relating to standards, maintenance, operations, training, and spare parts.**

We hope this information helps identify the importance of maintaining the City's pre-established standards, which will **manage costs, downtime, consistency, training, and support for the City's infrastructure**. If you have any questions, comments, or need additional information, please feel free to contact us.

Best regards,

TESCO CONTROLS



John Wright
Manager Inside Sales
jwright@tescocontrols.com

File Ref: Letter of Exclusivity & Proprietorship - Atwater SCADA Control & Telemetry System

CITY COUNCIL
AGENDA REPORT

CITY COUNCIL

Mike Nelson, Mayor
Danny Ambriz — Tyler Button
John Cale — Brian Raymond

MEETING DATE: May 13, 2024
TO: Mayor and City Council
FROM: Michael Salvador, Police Chief
PREPARED BY: Michael Salvador, Police Chief
SUBJECT: **Accepting the Qualified Bid, Authorizing and Approving a Purchase Agreement (Purchase Order) with Cooks Communications of Fresno for the lease purchase of Fifty (50) New Kenwood Portable Radios** (Police Chief Salvador)

RECOMMENDED COUNCIL ACTION

Accepts qualified bid, authorizes and approves a Purchase Agreement (Purchase Order) with Cooks Communications of Fresno, California, for the lease purchase of Fifty (50) new portable radios in an amount not to exceed $176,009.17; and authorizes and directs the Interim City Manager, or designee, to execute the purchase on behalf of the City.

I. BACKGROUND/ANALYSIS:

At the regular City Council meeting on March 11, 2024, the City Council approved the issuance of Bid Call 727-24 for the purchase of fifty (50) portable radios for the Police Department. This bid call was transmitted to potential bidders pursuant to the city's purchasing manual. On April 11th, 2024, a public bid opening was held for Bid Call 727-24 and the City received two responsive bids. Cooks Communications of Fresno, CA and Motorola Solutions.

After analysis of the submitted packages, Quote #14869, submitted by Cooks Communications out of Fresno, provides a comprehensive cost-effective solution to replace the Department's aging portable radios. As part of the bid package, the bidders were required to submit lease purchase options for the equipment. After an analysis of the lease terms, staff recommended a 5-year lease with a 10% down payment as the most cost-effective solution to acquire the equipment.

Staff requests the City Council accept the bid and authorize the execution of a lease purchase agreement with Cooks Communications of Fresno Ca., Community Leasing Partners of Kansas for the 5-year lease purchase of fifty (50) Kenwood Portable Radios that match the specification in Bid Call 727-24, for an amount not to exceed $176,007.17.

II. FISCAL IMPACTS:

There are sufficient resources in the approved Fiscal Year 2023-24 operating budget to make the down payment from the following account:
Public Safety Transactions and Use Tax, Police Department Administration-Communications: 0004-2021-6021. After this payment, the yearly lease payments of $38,380.79 will commence in July 2025 and continue on a yearly basis until July 2030. See the attached proposed lease agreement (Exhibit A)

III. LEGAL REVIEW:

This item has been reviewed by the City Attorney's Office.

IV. EXISTING POLICY:

This item is consistent with goal numbers one (1) and two (2) of the City's 2020-2025 Strategic Plan: to ensure the City's continued financial stability and to improve public safety, respectively.

V. ALTERNATIVES:

N/A

VI. INTERDEPARTMENTAL COORDINATION:

The Police Department will coordinate with the City Manager and Finance Department to execute the Purchase Order.

VII. PUBLIC PARTICIPATION:

The public will have an opportunity to provide comments on this item prior to City Council action.

VIII. ENVIRONMENTAL REVIEW:

This item is not a “project” under the California Environmental Quality Act (CEQA) as this activity does not cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, pursuant to Public Resources Code section 21065.

IX. STEPS FOLLOWING APPROVAL:

The Police Department will coordinate with the Administration and Finance Department to execute the Purchase Order.
Submitted by:



Michael Salvador, Police Chief
Approved by:



Greg Thompson, Interim City Manager

Attachments:

1. Cooks Communications Quote# 14869 (Exhibit A)

Bid Call No.727-24
Bid Deadline: 4/11/2024

Quote #14869 – Amount $176,007.17 is for a Multi band radio, that only has the 800Mhz license active. This radio is capable of activating a license for the VHF, and UHF band at a to be determined future date.

160 North Broadway
Fresno, CA 93701-1592

Phone: (559) 233-8818 (559) 268-8506

Quote

Customer No.: ATWATERPD
Quote No.: 14869

Quote To: **City of Atwater Police Dept**
750 Bellevue Road
Accounts Payable
Atwater, CA 95301

Phone: (209) 357-6298
Fax: (209) 357-9822

Ship To: **City of Atwater Police Dept**
750 Bellevue Road
Chief Pietro
Atwater, CA 95301

Phone:
Email: msalvador@atwater.org

Date	Ship Via	F.O.B.	Terms
04/01/24	Deliver	Origin	Net 30

Purchase Order Number	Sales Person	Expiration Date
	Paul Lambert	05/01/24

Quantity Required	Item Number	Description	Unit Price	Amount
50	VP8000BKF2	EFJ Multi Band Portable VL-8000 Stock Radio No Bands or Features	1718.50	85925.00
50	832VP8000-7800	EFJ VP8000 License Key 7/800MHz	500.00	25000.00
50	KRA-47MB	EFJ Wide Band Antenna 136-870MHZ, VP8000	73.50	3675.00
50	KNB-L11X	Kenwood Lion Battery 3400mah	153.47	7673.50
50	KSC-52AK	Rapid Rate Single Unit Charger for KNB-L11X High Capacity Battery	64.61	3230.50
62	KSC-52PAW	Charger pocket A, KSC-52/526, KNB-L11, VP-T Compatible with VP6000	7.56	468.72
2	KSC-526K	Kenwood Multi-Unit Charger 6 Unit Charger Base (Old P/N KSC-256AK)	575.00	1150.00
50	8322000002	KW P25 Conventional Option	290.50	14525.00
50	8322000005	Kenwood Viking Option P25 Phase 1 Trunking	101.50	5075.00
50	8322000006	P25 Phase 2 TDMA Viking	332.50	16625.00
50	8322000104	Kenwood Viking Option SmartNet II/SMartZone	0.00	0.00
50	8326000006	KW 1024 CH option	0.00	0.00
50	8323000001	Single Key DES-OFB	0.00	0.00
50	8323000005	KW ARC4(ADP) Encryption Option	0.00	0.00
50	8323000006	Multi Key Disable	0.00	0.00
50	8326000039	EFJ Wifi Option	0.00	0.00
50	8326000025	EFJ Bluetooth Option	0.00	0.00

Thank You

Quote

160 North Broadway
Fresno, CA 93701-1592

Phone: (559) 233-8818 (559) 268-8506

Customer No.: ATWATERPD
Quote No.: 14869

Quote To: **City of Atwater Police Dept**
750 Bellevue Road
Accounts Payable
Atwater, CA 95301

Phone: (209) 357-6298
Fax: (209) 357-9822

Ship To: **City of Atwater Police Dept**
750 Bellevue Road
Chief Pietro
Atwater, CA 95301

Phone:
Email: msalvador@atwater.org

Date	Ship Via	F.O.B.	Terms
04/01/24	Deliver	Origin	Net 30

Purchase Order Number	Sales Person	Expiration Date
	Paul Lambert	05/01/24

Quantity Required	Item Number	Description	Unit Price	Amount
50	8326000033	EFJ Blutooth Low Energy Option	0.00	0.00
50	8326000015	EFJ 25KHz Disabled Option	0.00	0.00
		Delivery before 90 days		

Subtotal	163347.72
Sales tax @ 7.75000%	12659.45
Total	176007.17

We appreciate your continued patronage

Thank You

KENWOOD

VIKING®
P25 Mission Critical

VP8000

Multi-Band · Multi-Protocol
Mission Critical Portable Radio

The KENWOOD Viking 8000 series Multi-Band, Multi-Protocol portable is specifically designed for today's public safety agencies with advanced features and ergonomics to meet the first responder's mission critical operational needs.





Features

- Multi-Band operation (VHF, UHF, 700/800 MHz)
- Multi-Protocol
  - P25 Phase 1 & 2 Trunking
  - P25 Conventional
  - DMR[1]
  - Viking16 (SmartNet/SmartZone™ Compatible)
  - FM Analog
- Mixed protocol zones (each channel in a zone can be from a different system)
- 1024 channels (2048 & 4096 options)
- Public safety ergonomics: Flare grip for control, large glove friendly knobs, large emergency button
- 3-Watt audio maximum output for high noise environments
- Voice annunciation & custom announcement creation
- Fully ruggedized - IP67/68 & MIL-STD-810 C/D/E/F/G/H
- Full key models (with numeric keypad)
- Built-in GPS receiver/antenna for enhanced awareness
- MDC-1200 & GE-Star signaling
- P25 Authentication
- Bluetooth® / Bluetooth Low Energy
- Wi-Fi® 2.4 & 5 GHz (802.11a/b/g/n/ac)
- Man Down
- Instant Recording Replay (IRR) and Voice Recording
- Text Messaging
- Radio Cloning
- FIRESafe® Fire Ground Commander and First Responder
- Encryption
  - ARC4™ software encryption; compatible with Motorola ADP™
  - P25/TIA defined: AES-256
  - DES-OFB
  - Over-the-Air-Rekeying (OTAR)

User Selectable Color Themes

- Large full-color top LCD
- Multi-line text on both front and top displays
- Top flip display changes text orientation for viewing while in holster
- Multiple visual indicators including battery health & signal strength
- Day & night user selectable display options (8 themes available)



Day - High Contrast



Night - High Contrast

Accessories

Complete line of accessories including microphones, speakers & antennas.
Download the accessory catalog here:
https://info.efjohnson.com/viking-accessory-catalog/

We combine P25 design expertise with recognized quality & reliability along with advanced technology to make KENWOOD Viking radios simple to use & maintain.

Perpetual Software Licensing

Adds greater value to your radios by extending the life of the software into your next hardware platform — you own the software option forever, and your licenses are simple to manage with our cloud-based tool — Vault™.

Armada® Fleet Management

Update radios in a group rather than one at a time. One template programs both portables & mobiles. Supports either direct computer connection or Over-the-Air Programming (OTAP). Elite Battery Management enables wireless tracking of battery fleet.

TrueVoice™ Noise Cancellation

Software-based noise cancellation automatically filters out noise source frequencies and eliminates the need for extra configuration. Works in analog or digital mode and with any accessory.

VP8000 Portable Specifications

General		VHF	UHF	700/800 MHz
Frequency Ranges (FCC ID K44515000)		136-174 MHz	380-520 MHz	RX: 763-776, 851-870 MHz TX: 763-776, 793-806, 806-825, 851-870 MHz
Channel Spacing	Analog	12.5/15/20/25[2]/30[2] kHz	12.5/25[2] kHz	12.5/25 kHz
	Digital	12.5 kHz	12.5 kHz	12.5 kHz
Frequency Stability		±1.0 ppm -22 °F to +140 °F (-30 °C to +60 °C) [+77 °F Reference (+25 °C)]		
Maximum Channels or Talkgroups		1024 (2048 and 4096 options)		
Number of Zones		255		
Maximum Channels Per Zone		255		
Power Supply		7.5 V DC ±20%		
Operating Temperature		-22 °F to +140 °F (-30 °C to +60 °C)		
Case		Reinforced polycarbonate plastic - black or high visibility (additional fee)		
Dimensions (radio with battery)	KNB-L2 (2600 mAh)	3.04/2.28 x 5.91 x 1.73 in. (77.3/58.0 x 150.0 x 44.0 mm) [W(Top/Bottom) x H x D, projections not included]		
	KNB-L3 (3400 mAh)	3.04/2.28 x 5.91 x 1.94 in. (77.3/58.0 x 150.0 x 49.4 mm) [W(Top/Bottom) x H x D, projections not included]		
	KNB-L11 (3900 mAh)	3.04/2.28 x 5.91 x 2.02 in. (77.3/58.0 x 150.0 x 51.4 mm) [W(Top/Bottom) x H x D, projections not included]		
Weight (radio with battery)	KNB-L2 (2600 mAh)	18.7 oz (530.0 g)		
	KNB-L3 (3400 mAh)	20.2 oz (574.0 g)		
	KNB-L11 (3900 mAh)	20.7 oz (586.0 g)		

Receiver		VHF	UHF	700/800 MHz
Sensitivity	P25 Digital (5% BER)	-122 dBm (0.178 µV)	-121 dBm (0.199 µV)	-120 dBm (0.224 µV)
	Analog (12 dB SINAD) @ 12.5 kHz	-122 dBm (0.178 µV)	-121 dBm (0.199 µV)	-120 dBm (0.224 µV)
Selectivity	P25 Digital	62 dB		
	Analog @ 12.5 kHz	75 dB	71 dB	65 dB
	Analog @ 25 kHz	78 dB	75 dB	70 dB
Intermodulation		77 dB		75 dB
Spurious Rejection		85 dB		83 dB
Audio Distortion		1.25% (Analog)		
Audio Output Power		Nominal 1.5 W (P25 Digital < 1% Distortion), Maximum 3 W		

Transmitter		VHF	UHF	700/800 MHz
RF Output Power		1W/6W	1W/5W	1W/3W
Spurious Emission		77 dB	76 dB	75 dB
FM Hum & Noise	Analog @ 12.5 kHz	51 dB	47 dB	43 dB
	Analog @ 25 kHz	57 dB	53 dB	49 dB
Audio Distortion		1%		
Emission Designator		11K0F3E, 8K10F1E, 8K10F1D, 8K10F1W, 7K60FXD, 7K60FXE, 7K60F1E, 7K60F1D, 7K60F1W, 7K60FXW		16K0F3E, 14K0F3E, 11K0F3E, 8K10F1E, 8K10F1D, 8K10F1W, 7K60FXD, 7K60FXE, 7K60F1E, 7K60F1D, 7K60F1W, 7K60FXW

MIL Standard	810H
Low Pressure	500.6/ I, II
High Temperature	501.7/ I, II
Low Temperature	502.7/ I, II
Temp. Shock	503.7/ I
Solar Radiation	505.7/ I
Rain	506.6/ I, III
Humidity	507.6/ II
Salt Fog	509.7
Dust	510.7/ I
Vibration	514.8/ I
Immersion	512.6/I
Shock	516.8/ I, IV, VI

Encryption Options	
Supported Encryption	AES, DES-OFB, ARC4 (ADP compatible)
Encryption Keys per Radio	Capable of storing 1024 keys. Programmable for 252. Common Key Reference (CKR), 252 Physical Identifier, (PID), Compatible w/ Motorola Key Variable Loader
Encryption Frame Re-sync Interval	P25 CAI 360 MSEC
Encryption Keying	External Key Loader, OTAR
Mode	OFB-Output Feedback
Encryption Type	Digital
Key Erasure	Keyboard Command, OTAR Zeroize, Tamper Detection
Standards	FIPS 140-3 Level 1, FIPS 140-3 Level 3, FIPS 197 (Pending)

Hazardous Location Standard (Pending)	
Certification Lab	CSA Group
Standard Applied	ANSI/TIA 4950-A-2014, UL913 5th Edition & ANSI/ISA-12.12.01-2011
Classification Rating	Intrinsically Safe: Classes I II, III, Division 1, Groups C[3], D, E, F, G Non-incendive: Class I, Division 2, Groups A, B, C, D
Approved Battery	KNB-LS7
Approved Speaker Microphones	KMC-70M, KMC-70GR, KMC-72W

International Protection Standard	
Dust & Water	IP54, IP55
Immersion	IP67, IP68[4]

[1] DMR - future release
[2] 25 and 30 kHz are not included in the models sold in the USA or US territories.
[3] Division I US Group C is applicable for radio with approved battery only, or radio with approved battery and KMC-70-type speaker microphone only. If radio is in combination with any other approved accessories, Group D is applicable.
[4] IP68 = 2 m/2 hours

Specifications shown are typical and subject to change without notice. Please check the website for the latest version. V.01.12.23

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EF Johnson Technologies, Inc.
a JVCKENWOOD Company
1440 Corporate Drive, Irving, TX 75038-2401
Phone: 800-328-[illegible]



Customer Name: **Atwater, CA**

Equipment: Fifty Kenwood Radios
Sales Representative: Paul Lambert @ Cook's Communications
Delivery: TBD

Community Leasing Partners, a Division of *Community First National Bank*, is pleased to present the following financing options for your review and consideration.

Option 1

Total Cost:	$	176,007.17	Payment Frequency:	Annual
Down Payment:	$	17,000.00	First Payment:	July 15, 2025
Prepayment Discount:	$	-		
Amount Financed:	**$**	**159,007.17**		

Term in Years:	4	5
Payment:	$46,628.83	$38,380.79
Factor:	0.293250	0.241378
Interest Rate:	6.14%	6.14%

Option 2

Total Cost:	$	176,007.17	Payment Frequency:	Annual
Down Payment:	$	34,000.00	First Payment:	July 15, 2025
Prepayment Discount:	$	-		
Amount Financed:	**$**	**142,007.17**		

Term in Years:	4	5
Payment:	$41,643.58	$34,277.37
Factor:	0.293250	0.241378
Interest Rate:	6.14%	6.14%

- THERE ARE NO DOCUMENTATION OR CLOSING FEES ASSOCIATED WITH THIS PROPOSAL.
- The quoted interest rate is valid for 10-days from the date of the proposal. To lock in the interest rate, a credit submission would be required, and a credit approval attained within the same 10-day period. This financing is to be executed & funded within 30 days of the date of the proposal or Lessor reserves the right to adjust the interest rate. The proposal is subject to credit review and approval and mutually acceptable documentation.
- This proposal has been prepared assuming the lessee is bank qualified and that the proposed lease qualifies for Federal Income Tax Exempt Status for the Lessor under Section 103 of the IRS Code.

Thank you for allowing Community Leasing Partners the opportunity to provide this proposal. If you have any questions regarding the options presented, need additional options, or would like to proceed with a financing, please contact me at 888.777.7850.

Respectively,

Blake J. Kaus
Vice President & Director of Leasing
blakekaus@clpusa.net

ORIGINAL

ATTACHMENT A

SIGNATURE SHEET

I/We the undersigned hereby certify that I/We am/are a duly authorized official of the company and have the authority to sign on behalf of the company and assure that all statements made in the bid are true. I/We agree to furnish and deliver the specified items/services at the prices stated herein, and have read, understand, and agree to the terms and conditions contained herein and on all the attachments.

Name of Individual/Company: Cook's Communications Corporation

Business Address: 160 N Broadway Fresno CA 93701

Telephone No.: 559-233-8818 Fax : _____

County Business License No. _____ Expiration Date: _____

State Business License No. 22785185 Expiration Date: _____

Signature of Authorized Official: Paul M. Lambert

Name/Title of Authorized Official: Paul M. Lambert Vice President

E-Mail: paul@cookscom.com

THIS PAGE MUST BE COMPLETED AND RETURNED WITH BID

ORIGINAL

ATTACHMENT B
BID SHEET

I/We agree that the prices stated herein will be firm for ninety (90) calendar days from the Bid Submittal Deadline.

`Item No.	Qty	Description	Price
1.	50	800 MHZ Portable Radios (to specifications)	$162,107.00
2	2	Gang Chargers	$ 1240.72 XX
		TOTAL	$ 163,347.72 XX
DATE 4/9/24		SIGNATURE: Paul M. Jr	

THIS PAGE MUST BE COMPLETED AND RETURNED WITH BID

ORIGINAL

ATTACHMENT C

REFERENCE LIST

1) NAME: Hanford Police Department

ADDRESS: 425 N. Irwin St. Hanford CA 93230
P.O. Box/Street City State Zip

CONTACT PERSON/TITLE: Captain James Lutz

TELEPHONE NUMBER: 559-585-4720 FAX NUMBER: _____

EMAIL ADDRESS: jLutz@cityofhanfordca.com

DOLLAR AMOUNT OF CONTRACT: $700K

DATE AND SERVICES PROVIDED: January 2023 Dispatch/citywide Radio upgrade

2) NAME: Madera County Sheriff Department

ADDRESS: 2725 Falcon Drive Madera CA 93637
P.O. Box/Street City State Zip

CONTACT PERSON/TITLE: Reannon Cook dispatch Supervisor

TELEPHONE NUMBER: 559-675-7770 FAX NUMBER: _____

EMAIL ADDRESS: Reannon.Cook@maderacounty.com

DOLLAR AMOUNT OF CONTRACT: $250K

DATE AND SERVICES PROVIDED: 12/21 Radios and new dispatch

3) NAME: County of Fresno

ADDRESS: 2200 Fresno Street Fresno CA 93721
P.O. Box/Street City State Zip

CONTACT PERSON/TITLE: Mike Severson FSO Fleet Sergeant

TELEPHONE NUMBER: 559-600-8592 FAX NUMBER: _____

EMAIL ADDRESS: michael.severson@fresnosheriff.org

DOLLAR AMOUNT OF CONTRACT: $6,000,000

DATE AND SERVICES PROVIDED: August 2021- July 2026 upfit Vehicles

THIS PAGE MUST BE COMPLETED AND RETURNED WITH BID

Copy

ATTACHMENT A

SIGNATURE SHEET

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Telephone No.: 559-233-8818 Fax : _____

County Business License No. _____ Expiration Date: _____

State Business License No. 22785185 Expiration Date: _____

Signature of Authorized Official: Paul M. Lamb

Name/Title of Authorized Official: Paul M. Lambert Vice President

E-Mail: paul@cookscom.com

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COPY

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P.O. Box/Street City State Zip

CONTACT PERSON/TITLE: Captain James Lutz

TELEPHONE NUMBER: 559-585-4720 FAX NUMBER: _____

EMAIL ADDRESS: jLutz@cityofhanfordca.com

DOLLAR AMOUNT OF CONTRACT: $700K

DATE AND SERVICES PROVIDED: January 2023 Dispatch/citywide Radio upgrad

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ADDRESS: 2725 Falcon Drive Madera CA 93637
P.O. Box/Street City State Zip

CONTACT PERSON/TITLE: Reannon Cook dispatch Supervisor

TELEPHONE NUMBER: 559-675-7770 FAX NUMBER: _____

EMAIL ADDRESS: Reannon.Cook@maderacounty.com

DOLLAR AMOUNT OF CONTRACT: $250K

DATE AND SERVICES PROVIDED: 12/21 Radios and new dispatch

3) NAME: County of Fresno

ADDRESS: 2200 Fresno Street Fresno CA 93721
P.O. Box/Street City State Zip

CONTACT PERSON/TITLE: Mike Severson FSO Fleet Sergeant

TELEPHONE NUMBER: 559-600-8592 FAX NUMBER: _____

EMAIL ADDRESS: michael.Severson@fresnosheriff.org

DOLLAR AMOUNT OF CONTRACT: $6,000,000

DATE AND SERVICES PROVIDED: August 2021- July 2026 upfit Vehicles

THIS PAGE MUST BE COMPLETED AND RETURNED WITH BID

CITY COUNCIL
AGENDA REPORT

CITY COUNCIL

Mike Nelson, Mayor
Danny Ambriz — Tyler Button
John Cale — Brian Raymond

MEETING DATE: May 13, 2024
TO: Mayor and City Council
FROM: Michael Salvador, Police Chief
PREPARED BY: Michael Salvador, Police Chief
SUBJECT: **Approving Equipment/Software Lease-Purchase Agreement with Axon Taser for the Lease-Purchase of a Body Camera, In-Car Video, Conductive Energy Weapon, and Video Evidence Management System** (Police Chief Salvador)

RECOMMENDED COUNCIL ACTION

Approval of retiring the current Five-Year Lease-Purchase Agreement and execution of a New 10-year agreement, in a form approved by the City Attorney, with Axon Taser of Arizona, in the amount not to exceed $122,000 per year, over a 10-year period, for the Police Department's Current Body Camera System, Video evidence management system, In-car Video System, conductive energy weapons system; and authorizes and directs the Interim City Manager or designee to execute the Agreement on behalf of the City.

I. BACKGROUND/ANALYSIS:

The Police Department currently equips its officers with the Taser Body Camera system via a five-year lease. The growth of the department and increases in department activity has exposed a need for the system to be expanded. The Department received a proposal from Taser to expand the system to accommodate the growth in the department and activity. This package supplies not only the camera equipment but the technology upgrades needed to keep the department current. The Department has made appropriate plans by sourcing a lease option to fill its needs versus a large capital outlay. The department has also taken into consideration leasing enough equipment to accommodate department expansion. This critical equipment replacement fulfills a critical officer safety and procecutorial need.

The Police Department also equipped its officers with the Taser Less lethal weapons system via a five-year lease. The growth of the department and increases in department activity has exposed a need for the system to be expanded. The Department received a proposal from Taser to expand the system to accommodate the growth in the department and activity. This package supplies not only the camera equipment but the technology upgrades needed to keep the department current. The Department has

made appropriate plans by sourcing a lease option to fill its needs versus a large capital outlay. The department has also taken into consideration leasing enough equipment to accommodate department expansion. This critical equipment replacement fulfills a critical officer safety need.

The Police Department is in need of equipping its parol fleet with a Taser in-car camera system. This system will provide the department with a third video feed to complement the body camera system. The proposed package supplies not only the camera equipment but the necessary technology upgrades needed to keep the department current. The Department has made appropriate plans by sourcing a lease option to fill its needs versus a large capital outlay. The department has also taken into consideration leasing enough equipment to accommodate department expansion. This critical equipment fulfills a critical officer safety and prosecutorial need.

The final piece of this system is the integration of the Department's drone program. In the current fiscal year, the Department purchased a drone compatible with the Taser systems above. This agreement would provide licensing for four pilots and integrate the drone with the Evidence.com system.

These systems are tied together with Taser's cloud based Evidence.com digital storage solution. This solution was first procured when the Department received its body camera system and has grown with the Department's needs in the four years since implementation. This system provides a comprehensive video evidence management system that stores video from all the Department's digital evidence gathering equipment.

To simplify budgeting and to provide greater transparency, this proposal would consolidate the four current contracts with an additional in-car video solution. The Department would receive a single bill for all four systems. Lease and replacement terms would also be consolidated into one contract. Damage replacement and technology upgrades are a part of the Agreement and scheduled throughout the term. The Department would then have a fixed cost for this vital equipment for the next ten years.

Purchasing Policy

Generally, the Atwater Municipal Code (AMC) requires all purchases which exceed $25,000 in price to be competitively bid through the City’s centralized purchasing requirements. However, AMC section 3.04.110 expressly provides that the centralized purchasing requirements may be dispensed with for (i) sole source purchases or (ii) when approved by City Council to take advantage of unique cost-saving opportunities. As detailed below, both exceptions apply to this purchase, allowing the Council to waive the formal, centralized purchasing requirements.

Sole Source

AMC 3.04.110(C) lists sole source purchases as an exemption to the formal, centralized purchasing procedures. One of the qualifications for a sole source purchase is that the product "has been proven to be the only product that is acceptable." Further, the City of Atwater Purchasing System Manual, Section 9, Procurement Methods, "Sole Source Purchases (page 17)," states that the City's bidding procedures may be dispensed when it qualifies as a sole source due to the fact when any of the following apply:

1. The brand or trade name article, goods, or product or proprietary service is the only one which will properly meet the needs of the City; or
2. The item or service is unique and available only from a sole source; or
3. The item or service is designed to match others already in use or necessary to be compatible with others already in use.

The proposed package includes a complete multi-disciplinary technology solution. This system includes weapons, cameras, chargers, training equipment, mounting equipment, cloud storage, management software, and "Evidence.com" software. The software to utilize Evidence.com will provide the City with the ability to integrate/interface directly with other Merced County law enforcement agencies, including the District Attorney's Office, Merced Police Department, and Merced County Sheriff's Office. The following benefits are achieved with Axon Taser:

Axon Taser is a fully integrated system (one database). Additionally, Sun Ridge Systems has a module to allow Axon's Evidence.com to integrate and catalog videos to the case number it was drawn from.

Axon Taser provides an "evergreen" yearly support plan, which ensures the system always updates to its most recent version, without additional costs. This reduces the workload impact on the City of Atwater Information Technology and Police personnel as it offers not only a fully supported body camera software and hardware package, but also engineering team support from Axon Taser to assist with the updated system versions, equipment replacement, and upgrades.

- No other commercial hardware and software package will provide the department with the represented features, interoperability potential, and cost savings potential.
- These features will ultimately allow for the Atwater Police Department to better serve our community. This item executes a goal of the 2019 Police Department Strategic Plan by deploying modern law enforcement tools to enhance service delivery, transparency, and professionalism.
-

Unique Cost Savings Opportunity

In addition to this product being a sole source within the meaning AMC 3.04.110(C), centralized bidding procedures may also be waived here because it represents the only viable opportunity for the City to "take advantage of unique cost-saving opportunities." The lease purchase of the Axon Taser integrated system is the best and only acceptable alternative that will yield the deployment of an integrated system in a cost-effective manner.

For all the reasons set forth above, including those applicable to the sole source of justification, this is also a purchase that represents a unique cost-savings opportunity for the City. Therefore, staff is recommending approval to enter into a lease-purchase agreement with Axon Taser to acquire an integrated system.

II. FISCAL IMPACTS:

The total cost of the unified solution is approximately $1,197,957. An initial payment of $105,122.76 is due in FY 2024-25. The initial payment will cover the cost of the lease equipment and maintenance for year one. The balance of the lease cost of $1,092,834.38 will be financed over nine years with annual payments of $121,426.07. The Agreement is for the term of ten years and the payment amounts will be incorporated into future budgets until paid in full. There are no interest payments. At the conclusion of the term, the department would need to renegotiate the agreement.

This Agreement has been budgeted in the FY 24-25 budget submitted by the Police Department.

This item has been reviewed by the Finance Department.

III. LEGAL REVIEW:

This item has been reviewed by the City Attorney's Office.

IV. EXISTING POLICY:

This item is consistent with and is a step to complete the Police Department's strategic plan presented on April 8th, 2019.

This item is consistent with goal numbers one (1) and two (2) of the City's 2020-2025 Strategic Plan: to ensure the City's continued financial stability and to improve public safety, respectively.

V. ALTERNATIVES:

Not Applicable

VI. INTERDEPARTMENTAL COORDINATION:

This item has been reviewed by all necessary departments.

VII. PUBLIC PARTICIPATION:

The public will have an opportunity to speak prior to City Council action.

VIII. ENVIRONMENTAL REVIEW:

This item is not a "project" under the California Environmental Quality Act (CEQA) as this activity does not cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, pursuant to Public Resources Code section 21065.

IX. STEPS FOLLOWING APPROVAL:

Upon City Council approval, staff will coordinate the execution of the Agreement.

Submitted by:



Michael Salvador, Police Chief
Approved by:



Greg Thompson, Interim City Manager

Attachments:

1. Atwater PD Ab4 T10 Cert F3 Adv 10 Year agreement

Axon Enterprise, Inc.
17800 N 85th St.
Scottsdale, Arizona 85255
United States
VAT: 86-0741227
Domestic: (800) 978-2737
International: +1.800.978.2737

Q-563068-45397.843SR

Issued: 04/15/2024

Quote Expiration: 06/28/2024

Estimated Contract Start Date: 10/01/2024

Account Number: 113455

Payment Terms: N30

Delivery Method:

SHIP TO	BILL TO
Atwater Police Dept. - CA 750 Bellevue Rd Atwater, CA 95301-2859 USA	Atwater Police Dept. - CA 750 Bellevue Rd Atwater CA 95301-2859 USA Email:

SALES REPRESENTATIVE	PRIMARY CONTACT
Sylas Rohner Phone: 4805509350 Email: srohner@axon.com Fax:	Michael Salvador Phone: (209) 357-6396 Email: msalvador@atwater.org Fax:

Quote Summary

Program Length	120 Months
TOTAL COST	$1,139,579.23
ESTIMATED TOTAL W/ TAX	$1,197,957.14

Discount Summary

Average Savings Per Year	$37,276.61
TOTAL SAVINGS	$372,766.07

Payment Summary

Date	Subtotal	Tax	Total
Sep 2024	$100,000.00	$5,122.76	$105,122.76
Sep 2025	$115,508.83	$5,917.24	$121,426.07
Sep 2026	$115,508.80	$5,917.24	$121,426.04
Sep 2027	$115,508.80	$5,917.24	$121,426.04
Sep 2028	$115,508.80	$5,917.24	$121,426.04
Sep 2029	$115,508.80	$5,917.24	$121,426.04
Sep 2030	$115,508.80	$5,917.24	$121,426.04
Sep 2031	$115,508.80	$5,917.24	$121,426.04
Sep 2032	$115,508.80	$5,917.24	$121,426.04
Sep 2033	$115,508.80	$5,917.23	$121,426.03
Total	$1,139,579.23	$58,377.91	$1,197,957.14

Quote Unbundled Price:	$1,512,345.30
Quote List Price:	$1,286,197.60
Quote Subtotal:	$1,139,579.23

Pricing

All deliverables are detailed in Delivery Schedules section lower in proposal

Item	Description	Qty	Term	Unbundled	List Price	Net Price	Subtotal	Tax	Total
Program									
100553	TRANSFER CREDIT - SOFTWARE AND SERVICES	1			$1.00	($2,857.40)	($2,857.40)	$0.00	($2,857.40)
100847	TRUE UP - TASER 10 CERTIFICATION W/VR	35	2		$47.09	$47.09	$3,296.30	$288.42	$3,584.72
100552	TRANSFER CREDIT - GOODS	1			$1.00	$59,103.40	$59,103.40	$5,171.54	$64,274.94
C00017	BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	35	118	$148.15	$114.06	$114.06	$471,067.80	$35,893.23	$506,961.03
CLASS1UAS	AXON AIR, CLASS 1 UAS BUNDLE	1	120	$183.34	$183.34	$0.00	$0.00	$0.00	$0.00
Fleet3A10Yr	Fleet 3 Advanced 10 Year	10	120	$275.14	$248.53	$166.73	$200,076.00	$5,162.23	$205,238.23
BWCamTAP10Yr	Body Worn Camera TAP 10 Year Bundle	35	120	$44.71	$37.46	$37.46	$157,332.00	$10,234.16	$167,566.16
BWCamMBDTAP10Year	Body Worn Camera Multi-Bay Dock TAP 10 Year Bundle	5	120	$78.27	$39.98	$39.98	$23,988.00	$1,628.33	$25,616.33
A la Carte Hardware									
72049	AXON FLEET 3 - SIM INSERTION - TMO	10			$15.00	$0.00	$0.00	$0.00	$0.00
100971	AXON FLEET - AIRGAIN ANT - 5-IN-1 INT 2LTE/5G 2WIFI 1GNSS	10			$110.00	$0.00	$0.00	$0.00	$0.00
100989	AXON FLEET - CRADLEPOINT R920-C7A+5YR NETCLOUD	10			$1,449.00	$0.00	$0.00	$0.00	$0.00
H00001	AB4 Camera Bundle	35			$849.00	$0.00	$0.00	$0.00	$0.00
H00002	AB4 Multi Bay Dock Bundle	5			$1,638.90	$0.00	$0.00	$0.00	$0.00
A la Carte Software									
100112	AXON AIR - EVIDENCE.COM LICENSE - PILOT DATA	4	120		$37.80	$37.80	$18,144.00	$0.00	$18,144.00
73686	AXON EVIDENCE - STORAGE - UNLIMITED (AXON DEVICE)	35	120		$30.29	$30.29	$127,218.00	$0.00	$127,218.00
BasicLicense	Basic License Bundle	35	120		$18.17	$18.01	$75,642.00	$0.00	$75,642.00
ProLicense	Pro License Bundle	3	120		$48.47	$18.25	$6,569.13	$0.00	$6,569.13
A la Carte Services									
101267	AXON VR - PSO - FULL INSTALLATION	1			$12,000.00	$0.00	$0.00	$0.00	$0.00
101208	AXON TASER 10 - 2 DAY INSTRUCTOR COURSE - INSIDE SALES	1			$2,500.00	$0.00	$0.00	$0.00	$0.00
100159	AXON FLEET 3 - SERVICES - ALPR API INTEGRATION	1			$3,000.00	$0.00	$0.00	$0.00	$0.00
Total							$1,139,579.23	$58,377.91	$1,197,957.14

Delivery Schedule

Hardware

Bundle	Item	Description	QTY	Shipping Location	Estimated Delivery Date
AB4 Camera Bundle	100147	AXON BODY 4 - CAMERA - NA US FIRST RESPONDER BLK RAPIDLOCK	35	1	09/01/2024
AB4 Camera Bundle	100147	AXON BODY 4 - CAMERA - NA US FIRST RESPONDER BLK RAPIDLOCK	1	1	09/01/2024
AB4 Camera Bundle	100466	AXON BODY 4 - CABLE - USB-C TO USB-C	39	1	09/01/2024
AB4 Camera Bundle	74020	MAGNET MOUNT, FLEXIBLE, AXON RAPIDLOCK	39	1	09/01/2024
AB4 Multi Bay Dock Bundle	100206	AXON BODY 4 - DOCK - EIGHT BAY	5	1	09/01/2024
AB4 Multi Bay Dock Bundle	70033	AXON - DOCK WALL MOUNT - BRACKET ASSY	5	1	09/01/2024
AB4 Multi Bay Dock Bundle	71019	AXON BODY - DOCK POWERCORD - NORTH AMERICA	5	1	09/01/2024
Fleet 3 Advanced 10 Year	70112	AXON SIGNAL - SIGNAL UNIT	10	1	09/01/2024
Fleet 3 Advanced 10 Year	72036	AXON FLEET 3 - STANDARD 2 CAMERA KIT	10	1	09/01/2024
A la Carte	100971	AXON FLEET - AIRGAIN ANT - 5-IN-1 INT 2LTE/5G 2WIFI 1GNSS	10	1	09/01/2024
A la Carte	100989	AXON FLEET - CRADLEPOINT R920-C7A+5YR NETCLOUD	10	1	09/01/2024
A la Carte	72049	AXON FLEET 3 - SIM INSERTION - TMO	10	1	09/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100126	AXON VR - TACTICAL BAG	2	1	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100390	AXON TASER 10 - HANDLE - YELLOW CLASS 3R	35	2	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100390	AXON TASER 10 - HANDLE - YELLOW CLASS 3R	1	2	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100393	AXON TASER 10 - MAGAZINE - LIVE DUTY BLACK	35	1	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100393	AXON TASER 10 - MAGAZINE - LIVE DUTY BLACK	1	1	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100394	AXON TASER 10 - MAGAZINE - HALT TRAINING BLUE	4	1	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100395	AXON TASER 10 - MAGAZINE - LIVE TRAINING PURPLE	3	1	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100396	AXON TASER 10 - MAGAZINE - INERT RED	30	1	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100399	TASER 10 LIVE CARTRIDGE	700	1	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100400	AXON TASER 10 - CARTRIDGE - HALT	210	1	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100401	AXON TASER 10 - CARTRIDGE - INERT	300	1	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100611	AXON TASER 10 - SAFARILAND HOLSTER - RH	35	1	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100623	AXON TASER - TRAINING - ENHANCED HALT SUIT V2	1	1	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100748	AXON VR - CONTROLLER - TASER 10	2	1	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100832	AXON VR - CONTROLLER - HANDGUN VR19H	2	1	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	101122	AXON VR - HOLSTER - T10 SAFARILAND GREY - RH	1	1	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	101123	AXON VR - HOLSTER - T10 SAFARILAND GREY - LH	1	1	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	101294	AXON VR - TABLET	2	1	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	101300	AXON VR - TABLET CASE	2	1	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	20018	AXON TASER - BATTERY PACK - TACTICAL	35	1	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	20018	AXON TASER - BATTERY PACK - TACTICAL	6	1	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	20018	AXON TASER - BATTERY PACK - TACTICAL	1	1	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	20378	AXON VR - HEADSET - HTC FOCUS 3	2	1	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	70033	AXON - DOCK WALL MOUNT - BRACKET ASSY	1	1	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	71019	AXON BODY - DOCK POWERCORD - NORTH AMERICA	1	1	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	74200	AXON TASER - DOCK - SIX BAY PLUS CORE	1	1	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	80087	AXON TASER - TARGET - CONDUCTIVE PROFESSIONAL RUGGEDIZED	1	1	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	80090	AXON TASER - TARGET FRAME - PROFESSIONAL 27.5 IN X 75 IN	1	1	11/01/2024
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100399	TASER 10 LIVE CARTRIDGE	110	1	11/01/2025
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100400	AXON TASER 10 - CARTRIDGE - HALT	280	1	11/01/2025
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100399	TASER 10 LIVE CARTRIDGE	100	1	11/01/2026
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100400	AXON TASER 10 - CARTRIDGE - HALT	280	1	11/01/2026
Body Worn Camera Multi-Bay Dock TAP 10 Year Bundle	73689	AXON BODY - TAP REFRESH 1 - DOCK MULTI BAY	5	1	03/01/2027
Body Worn Camera TAP 10 Year Bundle	73309	AXON BODY - TAP REFRESH 1 - CAMERA	36	1	03/01/2027
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100210	AXON VR - TAP REFRESH 1 - TABLET	2	1	05/01/2027

Bundle	Item	Description	QTY	Shipping Location	Estimated Delivery Date
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	101009	AXON VR - TAP REFRESH 1 - SIDEARM CONTROLLER	2	1	05/01/2027
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	101012	AXON VR - TAP REFRESH 1 - CONTROLLER	2	1	05/01/2027
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	20373	AXON VR - TAP REFRESH 1 - HEADSET	2	1	05/01/2027
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100399	TASER 10 LIVE CARTRIDGE	110	1	11/01/2027
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100400	AXON TASER 10 - CARTRIDGE - HALT	280	1	11/01/2027
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100399	TASER 10 LIVE CARTRIDGE	100	1	11/01/2028
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100400	AXON TASER 10 - CARTRIDGE - HALT	280	1	11/01/2028
Body Worn Camera Multi-Bay Dock TAP 10 Year Bundle	73688	AXON BODY - TAP REFRESH 2 - DOCK MULTI BAY	5	1	09/01/2029
Body Worn Camera TAP 10 Year Bundle	73310	AXON BODY - TAP REFRESH 2 - CAMERA	36	1	09/01/2029
Fleet 3 Advanced 10 Year	72040	AXON FLEET - TAP REFRESH 1 - 2 CAMERA KIT	10	1	09/01/2029
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100211	AXON VR - TAP REFRESH 2 - TABLET	2	1	11/01/2029
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	101010	AXON VR - TAP REFRESH 2 - SIDEARM CONTROLLER	2	1	11/01/2029
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	101013	AXON VR - TAP REFRESH 2 - CONTROLLER	2	1	11/01/2029
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	20374	AXON VR - TAP REFRESH 2 - HEADSET	2	1	11/01/2029
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	20242	AXON TASER - CERTIFICATION PROGRAM YEAR 6-10 HARDWARE	35	1	05/01/2030
Body Worn Camera Multi-Bay Dock TAP 10 Year Bundle	73347	AXON BODY - TAP REFRESH 3 - DOCK MULTI BAY	5	1	03/01/2032
Body Worn Camera TAP 10 Year Bundle	73345	AXON BODY - TAP REFRESH 3 - CAMERA	36	1	03/01/2032
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100212	AXON VR - TAP REFRESH 3 - TABLET	2	1	05/01/2032
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	101011	AXON VR - TAP REFRESH 3 - SIDEARM CONTROLLER	2	1	05/01/2032
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	101014	AXON VR - TAP REFRESH 3 - CONTROLLER	2	1	05/01/2032
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	20375	AXON VR - TAP REFRESH 3 - HEADSET	2	1	05/01/2032
Body Worn Camera Multi-Bay Dock TAP 10 Year Bundle	73348	AXON BODY - TAP REFRESH 4 - DOCK MULTI BAY	5	1	09/01/2034
Body Worn Camera TAP 10 Year Bundle	73346	AXON BODY - TAP REFRESH 4 - CAMERA	36	1	09/01/2034
Fleet 3 Advanced 10 Year	100092	AXON FLEET - TAP REFRESH 2 - 2 CAMERA KIT	10	1	09/01/2034

Software

Bundle	Item	Description	QTY	Estimated Start Date	Estimated End Date
AXON AIR, CLASS 1 UAS BUNDLE	100579	AXON AIR - UAS LICENSE - CLASS 1	1	10/01/2024	09/30/2034
AXON AIR, CLASS 1 UAS BUNDLE	100584	AXON AIR - ADVANCED STREAMING ADD-ON	1	10/01/2024	09/30/2034
AXON AIR, CLASS 1 UAS BUNDLE	100586	AXON AIR - API INTEGRATIONS ADD-ON	1	10/01/2024	09/30/2034
Basic License Bundle	73683	AXON EVIDENCE - STORAGE - 10GB A LA CARTE	35	10/01/2024	09/30/2034
Basic License Bundle	73840	AXON EVIDENCE - ECOM LICENSE - BASIC	35	10/01/2024	09/30/2034
Fleet 3 Advanced 10 Year	80400	AXON EVIDENCE - FLEET VEHICLE LICENSE	10	10/01/2024	09/30/2034
Fleet 3 Advanced 10 Year	80401	AXON FLEET 3 - ALPR LICENSE - 1 CAMERA	10	10/01/2024	09/30/2034
Fleet 3 Advanced 10 Year	80402	AXON RESPOND - LICENSE - FLEET 3	10	10/01/2024	09/30/2034
Fleet 3 Advanced 10 Year	80410	AXON EVIDENCE - STORAGE - FLEET 1 CAMERA UNLIMITED	20	10/01/2024	09/30/2034
Pro License Bundle	73683	AXON EVIDENCE - STORAGE - 10GB A LA CARTE	9	10/01/2024	09/30/2034
Pro License Bundle	73746	AXON EVIDENCE - ECOM LICENSE - PRO	3	10/01/2024	09/30/2034
A la Carte	100112	AXON AIR - EVIDENCE.COM LICENSE - PILOT DATA	4	10/01/2024	09/30/2034
A la Carte	73686	AXON EVIDENCE - STORAGE - UNLIMITED (AXON DEVICE)	35	10/01/2024	09/30/2034
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	101180	AXON TASER - DATA SCIENCE PROGRAM	35	12/01/2024	09/30/2034
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	20248	AXON TASER - EVIDENCE.COM LICENSE	35	12/01/2024	09/30/2034
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	20248	AXON TASER - EVIDENCE.COM LICENSE	1	12/01/2024	09/30/2034
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	20370	AXON VR - FULL ACCESS - TASER ADD-ON USER	35	12/01/2024	09/30/2034

Services

Bundle	Item	Description	QTY
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100751	AXON TASER 10 - REPLACEMENT ACCESS PROGRAM - DUTY CARTRIDGE	35
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	101193	AXON TASER - ON DEMAND CERTIFICATION	1
Fleet 3 Advanced 10 Year	73391	AXON FLEET 3 - DEPLOYMENT (PER VEHICLE)	10
Fleet 3 Advanced 10 Year	73392	AXON FLEET 3 - INSTALLATION - UPGRADE (PER VEHICLE)	10
A la Carte	100159	AXON FLEET 3 - SERVICES - ALPR API INTEGRATION	1
A la Carte	101208	AXON TASER 10 - 2 DAY INSTRUCTOR COURSE - INSIDE SALES	1
A la Carte	101267	AXON VR - PSO - FULL INSTALLATION	1

Warranties

Bundle	Item	Description	QTY	Estimated Start Date	Estimated End Date
Body Worn Camera Multi-Bay Dock TAP 10 Year Bundle	80465	AXON BODY - TAP WARRANTY - MULTI BAY DOCK	5	09/01/2025	09/30/2034
Body Worn Camera TAP 10 Year Bundle	80464	AXON BODY - TAP WARRANTY - CAMERA	35	09/01/2025	09/30/2034
Body Worn Camera TAP 10 Year Bundle	80464	AXON BODY - TAP WARRANTY - CAMERA	1	09/01/2025	09/30/2034
Fleet 3 Advanced 10 Year	80379	AXON SIGNAL - EXT WARRANTY - SIGNAL UNIT	10	09/01/2025	09/30/2034
Fleet 3 Advanced 10 Year	80495	AXON FLEET 3 - EXT WARRANTY - 2 CAMERA KIT	10	09/01/2025	09/30/2034
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100197	AXON VR - EXT WARRANTY - HTC FOCUS 3 HEADSET	2	11/01/2025	09/30/2034
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100213	AXON VR - EXT WARRANTY - TABLET	2	11/01/2025	09/30/2034
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100704	AXON TASER 10 - EXT WARRANTY - HANDLE	35	11/01/2025	09/30/2034
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	100704	AXON TASER 10 - EXT WARRANTY - HANDLE	1	11/01/2025	09/30/2034
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	101007	AXON VR - EXT WARRANTY - CONTROLLER	2	11/01/2025	09/30/2034
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	101008	AXON VR - EXT WARRANTY - HANDGUN CONTROLLER	2	11/01/2025	09/30/2034
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	80374	AXON TASER 7 - EXT WARRANTY - BATTERY PACK	35	11/01/2025	09/30/2034
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	80374	AXON TASER 7 - EXT WARRANTY - BATTERY PACK	1	11/01/2025	09/30/2034
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	80374	AXON TASER 7 - EXT WARRANTY - BATTERY PACK	6	11/01/2025	09/30/2034
BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	80396	AXON TASER 7 - EXT WARRANTY - DOCK SIX BAY	1	11/01/2025	09/30/2034

Shipping Locations

Location Number	Street	City	State	Zip	Country
1	750 Bellevue Rd	Atwater	CA	95301-2859	USA
2	750 Bellevue Rd	Atwater	CA	95301-2859	USA

Payment Details

Sep 2024

Invoice Plan	Item	Description	Qty	Subtotal	Tax	Total
1	100112	AXON AIR - EVIDENCE.COM LICENSE - PILOT DATA	4	$1,592.17	$0.00	$1,592.17
1	100159	AXON FLEET 3 - SERVICES - ALPR API INTEGRATION	1	$0.00	$0.00	$0.00
1	100552	TRANSFER CREDIT - GOODS	1	$5,186.42	$453.81	$5,640.23
1	100553	TRANSFER CREDIT - SOFTWARE AND SERVICES	1	($250.74)	$0.00	($250.74)
1	100847	TRUE UP - TASER 10 CERTIFICATION W/VR	35	$289.26	$25.31	$314.57
1	100971	AXON FLEET - AIRGAIN ANT - 5-IN-1 INT 2LTE/5G 2WIFI 1GNSS	10	$0.00	$0.00	$0.00
1	100989	AXON FLEET - CRADLEPOINT R920-C7A+5YR NETCLOUD	10	$0.00	$0.00	$0.00
1	101208	AXON TASER 10 - 2 DAY INSTRUCTOR COURSE - INSIDE SALES	1	$0.00	$0.00	$0.00
1	101267	AXON VR - PSO - FULL INSTALLATION	1	$0.00	$0.00	$0.00
1	72049	AXON FLEET 3 - SIM INSERTION - TMO	10	$0.00	$0.00	$0.00
1	73686	AXON EVIDENCE - STORAGE - UNLIMITED (AXON DEVICE)	35	$11,163.59	$0.00	$11,163.59
1	BasicLicense	Basic License Bundle	35	$6,637.71	$0.00	$6,637.71
1	BWCamMBDTAP10Year	Body Worn Camera Multi-Bay Dock TAP 10 Year Bundle	5	$2,104.99	$142.90	$2,247.89
1	BWCamTAP10Yr	Body Worn Camera TAP 10 Year Bundle	35	$13,806.15	$898.07	$14,704.22
1	C00017	BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	35	$41,337.00	$3,149.68	$44,486.68
1	CLASS1UAS	AXON AIR, CLASS 1 UAS BUNDLE	1	$0.00	$0.00	$0.00
1	Fleet3A10Yr	Fleet 3 Advanced 10 Year	10	$17,557.00	$452.99	$18,009.99
1	H00001	AB4 Camera Bundle	35	$0.00	$0.00	$0.00
1	H00002	AB4 Multi Bay Dock Bundle	5	$0.00	$0.00	$0.00
1	ProLicense	Pro License Bundle	3	$576.45	$0.00	$576.45
Total				$100,000.00	$5,122.76	$105,122.76

Sep 2025

Invoice Plan	Item	Description	Qty	Subtotal	Tax	Total
2	100112	AXON AIR - EVIDENCE.COM LICENSE - PILOT DATA	4	$1,839.09	$0.00	$1,839.09
2	100159	AXON FLEET 3 - SERVICES - ALPR API INTEGRATION	1	$0.00	$0.00	$0.00
2	100552	TRANSFER CREDIT - GOODS	1	$5,990.78	$524.19	$6,514.97
2	100553	TRANSFER CREDIT - SOFTWARE AND SERVICES	1	($289.63)	$0.00	($289.63)
2	100847	TRUE UP - TASER 10 CERTIFICATION W/VR	35	$334.12	$29.23	$363.35
2	100971	AXON FLEET - AIRGAIN ANT - 5-IN-1 INT 2LTE/5G 2WIFI 1GNSS	10	$0.00	$0.00	$0.00
2	100989	AXON FLEET - CRADLEPOINT R920-C7A+5YR NETCLOUD	10	$0.00	$0.00	$0.00
2	101208	AXON TASER 10 - 2 DAY INSTRUCTOR COURSE - INSIDE SALES	1	$0.00	$0.00	$0.00
2	101267	AXON VR - PSO - FULL INSTALLATION	1	$0.00	$0.00	$0.00
2	72049	AXON FLEET 3 - SIM INSERTION - TMO	10	$0.00	$0.00	$0.00
2	73686	AXON EVIDENCE - STORAGE - UNLIMITED (AXON DEVICE)	35	$12,894.94	$0.00	$12,894.94
2	BasicLicense	Basic License Bundle	35	$7,667.14	$0.00	$7,667.14
2	BWCamMBDTAP10Year	Body Worn Camera Multi-Bay Dock TAP 10 Year Bundle	5	$2,431.46	$165.04	$2,596.50
2	BWCamTAP10Yr	Body Worn Camera TAP 10 Year Bundle	35	$15,947.32	$1,037.35	$16,984.67

Sep 2025						
Invoice Plan	Item	Description	Qty	Subtotal	Tax	Total
2	C00017	BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	35	$47,747.87	$3,638.18	$51,386.05
2	CLASS1UAS	AXON AIR, CLASS 1 UAS BUNDLE	1	$0.00	$0.00	$0.00
2	Fleet3A10Yr	Fleet 3 Advanced 10 Year	10	$20,279.89	$523.25	$20,803.14
2	H00001	AB4 Camera Bundle	35	$0.00	$0.00	$0.00
2	H00002	AB4 Multi Bay Dock Bundle	5	$0.00	$0.00	$0.00
2	ProLicense	Pro License Bundle	3	$665.85	$0.00	$665.85
Total				$115,508.83	$5,917.24	$121,426.07

Sep 2026						
Invoice Plan	Item	Description	Qty	Subtotal	Tax	Total
3	100112	AXON AIR - EVIDENCE.COM LICENSE - PILOT DATA	4	$1,839.09	$0.00	$1,839.09
3	100159	AXON FLEET 3 - SERVICES - ALPR API INTEGRATION	1	$0.00	$0.00	$0.00
3	100552	TRANSFER CREDIT - GOODS	1	$5,990.78	$524.19	$6,514.97
3	100553	TRANSFER CREDIT - SOFTWARE AND SERVICES	1	($289.63)	$0.00	($289.63)
3	100847	TRUE UP - TASER 10 CERTIFICATION W/VR	35	$334.12	$29.23	$363.35
3	100971	AXON FLEET - AIRGAIN ANT - 5-IN-1 INT 2LTE/5G 2WIFI 1GNSS	10	$0.00	$0.00	$0.00
3	100989	AXON FLEET - CRADLEPOINT R920-C7A+5YR NETCLOUD	10	$0.00	$0.00	$0.00
3	101208	AXON TASER 10 - 2 DAY INSTRUCTOR COURSE - INSIDE SALES	1	$0.00	$0.00	$0.00
3	101267	AXON VR - PSO - FULL INSTALLATION	1	$0.00	$0.00	$0.00
3	72049	AXON FLEET 3 - SIM INSERTION - TMO	10	$0.00	$0.00	$0.00
3	73686	AXON EVIDENCE - STORAGE - UNLIMITED (AXON DEVICE)	35	$12,894.93	$0.00	$12,894.93
3	BasicLicense	Basic License Bundle	35	$7,667.14	$0.00	$7,667.14
3	BWCamMBDTAP10Year	Body Worn Camera Multi-Bay Dock TAP 10 Year Bundle	5	$2,431.45	$165.04	$2,596.49
3	BWCamTAP10Yr	Body Worn Camera TAP 10 Year Bundle	35	$15,947.32	$1,037.35	$16,984.67
3	C00017	BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	35	$47,747.86	$3,638.18	$51,386.04
3	CLASS1UAS	AXON AIR, CLASS 1 UAS BUNDLE	1	$0.00	$0.00	$0.00
3	Fleet3A10Yr	Fleet 3 Advanced 10 Year	10	$20,279.89	$523.25	$20,803.14
3	H00001	AB4 Camera Bundle	35	$0.00	$0.00	$0.00
3	H00002	AB4 Multi Bay Dock Bundle	5	$0.00	$0.00	$0.00
3	ProLicense	Pro License Bundle	3	$665.85	$0.00	$665.85
Total				$115,508.80	$5,917.24	$121,426.04

Sep 2027						
Invoice Plan	Item	Description	Qty	Subtotal	Tax	Total
4	100112	AXON AIR - EVIDENCE.COM LICENSE - PILOT DATA	4	$1,839.09	$0.00	$1,839.09
4	100159	AXON FLEET 3 - SERVICES - ALPR API INTEGRATION	1	$0.00	$0.00	$0.00
4	100552	TRANSFER CREDIT - GOODS	1	$5,990.78	$524.19	$6,514.97
4	100553	TRANSFER CREDIT - SOFTWARE AND SERVICES	1	($289.63)	$0.00	($289.63)
4	100847	TRUE UP - TASER 10 CERTIFICATION W/VR	35	$334.12	$29.23	$363.35
4	100971	AXON FLEET - AIRGAIN ANT - 5-IN-1 INT 2LTE/5G 2WIFI 1GNSS	10	$0.00	$0.00	$0.00
4	100989	AXON FLEET - CRADLEPOINT R920-C7A+5YR NETCLOUD	10	$0.00	$0.00	$0.00
4	101208	AXON TASER 10 - 2 DAY INSTRUCTOR COURSE - INSIDE SALES	1	$0.00	$0.00	$0.00
4	101267	AXON VR - PSO - FULL INSTALLATION	1	$0.00	$0.00	$0.00
4	72049	AXON FLEET 3 - SIM INSERTION - TMO	10	$0.00	$0.00	$0.00
4	73686	AXON EVIDENCE - STORAGE - UNLIMITED (AXON DEVICE)	35	$12,894.93	$0.00	$12,894.93
4	BasicLicense	Basic License Bundle	35	$7,667.14	$0.00	$7,667.14
4	BWCamMBDTAP10Year	Body Worn Camera Multi-Bay Dock TAP 10 Year Bundle	5	$2,431.45	$165.04	$2,596.49
4	BWCamTAP10Yr	Body Worn Camera TAP 10 Year Bundle	35	$15,947.32	$1,037.35	$16,984.67
4	C00017	BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	35	$47,747.86	$3,638.18	$51,386.04
4	CLASS1UAS	AXON AIR, CLASS 1 UAS BUNDLE	1	$0.00	$0.00	$0.00
4	Fleet3A10Yr	Fleet 3 Advanced 10 Year	10	$20,279.89	$523.25	$20,803.14

Sep 2027						
Invoice Plan	Item	Description	Qty	Subtotal	Tax	Total
4	H00001	AB4 Camera Bundle	35	$0.00	$0.00	$0.00
4	H00002	AB4 Multi Bay Dock Bundle	5	$0.00	$0.00	$0.00
4	ProLicense	Pro License Bundle	3	$665.85	$0.00	$665.85
Total				$115,508.80	$5,917.24	$121,426.04

Sep 2028						
Invoice Plan	Item	Description	Qty	Subtotal	Tax	Total
5	100112	AXON AIR - EVIDENCE.COM LICENSE - PILOT DATA	4	$1,839.09	$0.00	$1,839.09
5	100159	AXON FLEET 3 - SERVICES - ALPR API INTEGRATION	1	$0.00	$0.00	$0.00
5	100552	TRANSFER CREDIT - GOODS	1	$5,990.78	$524.19	$6,514.97
5	100553	TRANSFER CREDIT - SOFTWARE AND SERVICES	1	($289.63)	$0.00	($289.63)
5	100847	TRUE UP - TASER 10 CERTIFICATION W/VR	35	$334.12	$29.23	$363.35
5	100971	AXON FLEET - AIRGAIN ANT - 5-IN-1 INT 2LTE/5G 2WIFI 1GNSS	10	$0.00	$0.00	$0.00
5	100989	AXON FLEET - CRADLEPOINT R920-C7A+5YR NETCLOUD	10	$0.00	$0.00	$0.00
5	101208	AXON TASER 10 - 2 DAY INSTRUCTOR COURSE - INSIDE SALES	1	$0.00	$0.00	$0.00
5	101267	AXON VR - PSO - FULL INSTALLATION	1	$0.00	$0.00	$0.00
5	72049	AXON FLEET 3 - SIM INSERTION - TMO	10	$0.00	$0.00	$0.00
5	73686	AXON EVIDENCE - STORAGE - UNLIMITED (AXON DEVICE)	35	$12,894.93	$0.00	$12,894.93
5	BasicLicense	Basic License Bundle	35	$7,667.14	$0.00	$7,667.14
5	BWCamMBDTAP10Year	Body Worn Camera Multi-Bay Dock TAP 10 Year Bundle	5	$2,431.45	$165.04	$2,596.49
5	BWCamTAP10Yr	Body Worn Camera TAP 10 Year Bundle	35	$15,947.32	$1,037.35	$16,984.67
5	C00017	BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	35	$47,747.86	$3,638.18	$51,386.04
5	CLASS1UAS	AXON AIR, CLASS 1 UAS BUNDLE	1	$0.00	$0.00	$0.00
5	Fleet3A10Yr	Fleet 3 Advanced 10 Year	10	$20,279.89	$523.25	$20,803.14
5	H00001	AB4 Camera Bundle	35	$0.00	$0.00	$0.00
5	H00002	AB4 Multi Bay Dock Bundle	5	$0.00	$0.00	$0.00
5	ProLicense	Pro License Bundle	3	$665.85	$0.00	$665.85
Total				$115,508.80	$5,917.24	$121,426.04

Sep 2029						
Invoice Plan	Item	Description	Qty	Subtotal	Tax	Total
6	100112	AXON AIR - EVIDENCE.COM LICENSE - PILOT DATA	4	$1,839.09	$0.00	$1,839.09
6	100159	AXON FLEET 3 - SERVICES - ALPR API INTEGRATION	1	$0.00	$0.00	$0.00
6	100552	TRANSFER CREDIT - GOODS	1	$5,990.78	$524.19	$6,514.97
6	100553	TRANSFER CREDIT - SOFTWARE AND SERVICES	1	($289.63)	$0.00	($289.63)
6	100847	TRUE UP - TASER 10 CERTIFICATION W/VR	35	$334.12	$29.23	$363.35
6	100971	AXON FLEET - AIRGAIN ANT - 5-IN-1 INT 2LTE/5G 2WIFI 1GNSS	10	$0.00	$0.00	$0.00
6	100989	AXON FLEET - CRADLEPOINT R920-C7A+5YR NETCLOUD	10	$0.00	$0.00	$0.00
6	101208	AXON TASER 10 - 2 DAY INSTRUCTOR COURSE - INSIDE SALES	1	$0.00	$0.00	$0.00
6	101267	AXON VR - PSO - FULL INSTALLATION	1	$0.00	$0.00	$0.00
6	72049	AXON FLEET 3 - SIM INSERTION - TMO	10	$0.00	$0.00	$0.00
6	73686	AXON EVIDENCE - STORAGE - UNLIMITED (AXON DEVICE)	35	$12,894.93	$0.00	$12,894.93
6	BasicLicense	Basic License Bundle	35	$7,667.14	$0.00	$7,667.14
6	BWCamMBDTAP10Year	Body Worn Camera Multi-Bay Dock TAP 10 Year Bundle	5	$2,431.45	$165.04	$2,596.49
6	BWCamTAP10Yr	Body Worn Camera TAP 10 Year Bundle	35	$15,947.32	$1,037.35	$16,984.67
6	C00017	BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	35	$47,747.86	$3,638.18	$51,386.04
6	CLASS1UAS	AXON AIR, CLASS 1 UAS BUNDLE	1	$0.00	$0.00	$0.00
6	Fleet3A10Yr	Fleet 3 Advanced 10 Year	10	$20,279.89	$523.25	$20,803.14
6	H00001	AB4 Camera Bundle	35	$0.00	$0.00	$0.00
6	H00002	AB4 Multi Bay Dock Bundle	5	$0.00	$0.00	$0.00
6	ProLicense	Pro License Bundle	3	$665.85	$0.00	$665.85

Sep 2029						
Invoice Plan	Item	Description	Qty	Subtotal	Tax	Total
Total				$115,508.80	$5,917.24	$121,426.04

Sep 2030						
Invoice Plan	Item	Description	Qty	Subtotal	Tax	Total
7	100112	AXON AIR - EVIDENCE.COM LICENSE - PILOT DATA	4	$1,839.09	$0.00	$1,839.09
7	100159	AXON FLEET 3 - SERVICES - ALPR API INTEGRATION	1	$0.00	$0.00	$0.00
7	100552	TRANSFER CREDIT - GOODS	1	$5,990.78	$524.19	$6,514.97
7	100553	TRANSFER CREDIT - SOFTWARE AND SERVICES	1	($289.63)	$0.00	($289.63)
7	100847	TRUE UP - TASER 10 CERTIFICATION W/VR	35	$334.12	$29.23	$363.35
7	100971	AXON FLEET - AIRGAIN ANT - 5-IN-1 INT 2LTE/5G 2WIFI 1GNSS	10	$0.00	$0.00	$0.00
7	100989	AXON FLEET - CRADLEPOINT R920-C7A+5YR NETCLOUD	10	$0.00	$0.00	$0.00
7	101208	AXON TASER 10 - 2 DAY INSTRUCTOR COURSE - INSIDE SALES	1	$0.00	$0.00	$0.00
7	101267	AXON VR - PSO - FULL INSTALLATION	1	$0.00	$0.00	$0.00
7	72049	AXON FLEET 3 - SIM INSERTION - TMO	10	$0.00	$0.00	$0.00
7	73686	AXON EVIDENCE - STORAGE - UNLIMITED (AXON DEVICE)	35	$12,894.93	$0.00	$12,894.93
7	BasicLicense	Basic License Bundle	35	$7,667.14	$0.00	$7,667.14
7	BWCamMBDTAP10Year	Body Worn Camera Multi-Bay Dock TAP 10 Year Bundle	5	$2,431.44	$165.04	$2,596.48
7	BWCamTAP10Yr	Body Worn Camera TAP 10 Year Bundle	35	$15,947.32	$1,037.35	$16,984.67
7	C00017	BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	35	$47,747.87	$3,638.18	$51,386.05
7	CLASS1UAS	AXON AIR, CLASS 1 UAS BUNDLE	1	$0.00	$0.00	$0.00
7	Fleet3A10Yr	Fleet 3 Advanced 10 Year	10	$20,279.89	$523.25	$20,803.14
7	H00001	AB4 Camera Bundle	35	$0.00	$0.00	$0.00
7	H00002	AB4 Multi Bay Dock Bundle	5	$0.00	$0.00	$0.00
7	ProLicense	Pro License Bundle	3	$665.85	$0.00	$665.85
Total				$115,508.80	$5,917.24	$121,426.04

Sep 2031						
Invoice Plan	Item	Description	Qty	Subtotal	Tax	Total
8	100112	AXON AIR - EVIDENCE.COM LICENSE - PILOT DATA	4	$1,839.09	$0.00	$1,839.09
8	100159	AXON FLEET 3 - SERVICES - ALPR API INTEGRATION	1	$0.00	$0.00	$0.00
8	100552	TRANSFER CREDIT - GOODS	1	$5,990.78	$524.19	$6,514.97
8	100553	TRANSFER CREDIT - SOFTWARE AND SERVICES	1	($289.63)	$0.00	($289.63)
8	100847	TRUE UP - TASER 10 CERTIFICATION W/VR	35	$334.12	$29.23	$363.35
8	100971	AXON FLEET - AIRGAIN ANT - 5-IN-1 INT 2LTE/5G 2WIFI 1GNSS	10	$0.00	$0.00	$0.00
8	100989	AXON FLEET - CRADLEPOINT R920-C7A+5YR NETCLOUD	10	$0.00	$0.00	$0.00
8	101208	AXON TASER 10 - 2 DAY INSTRUCTOR COURSE - INSIDE SALES	1	$0.00	$0.00	$0.00
8	101267	AXON VR - PSO - FULL INSTALLATION	1	$0.00	$0.00	$0.00
8	72049	AXON FLEET 3 - SIM INSERTION - TMO	10	$0.00	$0.00	$0.00
8	73686	AXON EVIDENCE - STORAGE - UNLIMITED (AXON DEVICE)	35	$12,894.93	$0.00	$12,894.93
8	BasicLicense	Basic License Bundle	35	$7,667.14	$0.00	$7,667.14
8	BWCamMBDTAP10Year	Body Worn Camera Multi-Bay Dock TAP 10 Year Bundle	5	$2,431.44	$165.04	$2,596.48
8	BWCamTAP10Yr	Body Worn Camera TAP 10 Year Bundle	35	$15,947.32	$1,037.35	$16,984.67
8	C00017	BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	35	$47,747.87	$3,638.18	$51,386.05
8	CLASS1UAS	AXON AIR, CLASS 1 UAS BUNDLE	1	$0.00	$0.00	$0.00
8	Fleet3A10Yr	Fleet 3 Advanced 10 Year	10	$20,279.89	$523.25	$20,803.14
8	H00001	AB4 Camera Bundle	35	$0.00	$0.00	$0.00
8	H00002	AB4 Multi Bay Dock Bundle	5	$0.00	$0.00	$0.00
8	ProLicense	Pro License Bundle	3	$665.85	$0.00	$665.85
Total				$115,508.80	$5,917.24	$121,426.04

Sep 2032						
Invoice Plan	Item	Description	Qty	Subtotal	Tax	Total
9	100112	AXON AIR - EVIDENCE.COM LICENSE - PILOT DATA	4	$1,839.09	$0.00	$1,839.09
9	100159	AXON FLEET 3 - SERVICES - ALPR API INTEGRATION	1	$0.00	$0.00	$0.00
9	100552	TRANSFER CREDIT - GOODS	1	$5,990.78	$524.19	$6,514.97
9	100553	TRANSFER CREDIT - SOFTWARE AND SERVICES	1	($289.63)	$0.00	($289.63)
9	100847	TRUE UP - TASER 10 CERTIFICATION W/VR	35	$334.12	$29.23	$363.35
9	100971	AXON FLEET - AIRGAIN ANT - 5-IN-1 INT 2LTE/5G 2WIFI 1GNSS	10	$0.00	$0.00	$0.00
9	100989	AXON FLEET - CRADLEPOINT R920-C7A+5YR NETCLOUD	10	$0.00	$0.00	$0.00
9	101208	AXON TASER 10 - 2 DAY INSTRUCTOR COURSE - INSIDE SALES	1	$0.00	$0.00	$0.00
9	101267	AXON VR - PSO - FULL INSTALLATION	1	$0.00	$0.00	$0.00
9	72049	AXON FLEET 3 - SIM INSERTION - TMO	10	$0.00	$0.00	$0.00
9	73686	AXON EVIDENCE - STORAGE - UNLIMITED (AXON DEVICE)	35	$12,894.93	$0.00	$12,894.93
9	BasicLicense	Basic License Bundle	35	$7,667.14	$0.00	$7,667.14
9	BWCamMBDTAP10Year	Body Worn Camera Multi-Bay Dock TAP 10 Year Bundle	5	$2,431.44	$165.04	$2,596.48
9	BWCamTAP10Yr	Body Worn Camera TAP 10 Year Bundle	35	$15,947.32	$1,037.35	$16,984.67
9	C00017	BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	35	$47,747.87	$3,638.18	$51,386.05
9	CLASS1UAS	AXON AIR, CLASS 1 UAS BUNDLE	1	$0.00	$0.00	$0.00
9	Fleet3A10Yr	Fleet 3 Advanced 10 Year	10	$20,279.89	$523.25	$20,803.14
9	H00001	AB4 Camera Bundle	35	$0.00	$0.00	$0.00
9	H00002	AB4 Multi Bay Dock Bundle	5	$0.00	$0.00	$0.00
9	ProLicense	Pro License Bundle	3	$665.85	$0.00	$665.85
Total				$115,508.80	$5,917.24	$121,426.04

Sep 2033						
Invoice Plan	Item	Description	Qty	Subtotal	Tax	Total
10	100112	AXON AIR - EVIDENCE.COM LICENSE - PILOT DATA	4	$1,839.09	$0.00	$1,839.09
10	100159	AXON FLEET 3 - SERVICES - ALPR API INTEGRATION	1	$0.00	$0.00	$0.00
10	100552	TRANSFER CREDIT - GOODS	1	$5,990.78	$524.21	$6,514.99
10	100553	TRANSFER CREDIT - SOFTWARE AND SERVICES	1	($289.63)	$0.00	($289.63)
10	100847	TRUE UP - TASER 10 CERTIFICATION W/VR	35	$334.12	$29.27	$363.39
10	100971	AXON FLEET - AIRGAIN ANT - 5-IN-1 INT 2LTE/5G 2WIFI 1GNSS	10	$0.00	$0.00	$0.00
10	100989	AXON FLEET - CRADLEPOINT R920-C7A+5YR NETCLOUD	10	$0.00	$0.00	$0.00
10	101208	AXON TASER 10 - 2 DAY INSTRUCTOR COURSE - INSIDE SALES	1	$0.00	$0.00	$0.00
10	101267	AXON VR - PSO - FULL INSTALLATION	1	$0.00	$0.00	$0.00
10	72049	AXON FLEET 3 - SIM INSERTION - TMO	10	$0.00	$0.00	$0.00
10	73686	AXON EVIDENCE - STORAGE - UNLIMITED (AXON DEVICE)	35	$12,894.93	$0.00	$12,894.93
10	BasicLicense	Basic License Bundle	35	$7,667.14	$0.00	$7,667.14
10	BWCamMBDTAP10Year	Body Worn Camera Multi-Bay Dock TAP 10 Year Bundle	5	$2,431.44	$165.11	$2,596.55
10	BWCamTAP10Yr	Body Worn Camera TAP 10 Year Bundle	35	$15,947.32	$1,037.29	$16,984.61
10	C00017	BUNDLE - TASER 10 CERTIFICATION WITH VR 10YR	35	$47,747.87	$3,638.11	$51,385.98
10	CLASS1UAS	AXON AIR, CLASS 1 UAS BUNDLE	1	$0.00	$0.00	$0.00
10	Fleet3A10Yr	Fleet 3 Advanced 10 Year	10	$20,279.89	$523.24	$20,803.13
10	H00001	AB4 Camera Bundle	35	$0.00	$0.00	$0.00
10	H00002	AB4 Multi Bay Dock Bundle	5	$0.00	$0.00	$0.00
10	ProLicense	Pro License Bundle	3	$665.85	$0.00	$665.85
Total				$115,508.80	$5,917.23	$121,426.03

Tax is estimated based on rates applicable at date of quote and subject to change at time of invoicing. If a tax exemption certificate should be applied, please submit prior to invoicing.

Standard Terms and Conditions

Axon Enterprise Inc. Sales Terms and Conditions

Axon Master Services and Purchasing Agreement:

This Quote is limited to and conditional upon your acceptance of the provisions set forth herein and Axon's Master Services and Purchasing Agreement (posted at https://www.axon.com/sales-terms-and-conditions), as well as the attached Statement of Work (SOW) for Axon Fleet and/or Axon Interview Room purchase, if applicable. In the event you and Axon have entered into a prior agreement to govern all future purchases, that agreement shall govern to the extent it includes the products and services being purchased and does not conflict with the Axon Customer Experience Improvement Program Appendix as described below.

ACEIP:

The Axon Customer Experience Improvement Program Appendix, which includes the sharing of de-identified segments of Agency Content with Axon to develop new products and improve your product experience (posted at www.axon.com/legal/sales-terms-and-conditions), is incorporated herein by reference. By signing below, you agree to the terms of the Axon Customer Experience Improvement Program.

Acceptance of Terms:

Any purchase order issued in response to this Quote is subject solely to the above referenced terms and conditions. By signing below, you represent that you are lawfully able to enter into contracts. If you are signing on behalf of an entity (including but not limited to the company, municipality, or government agency for whom you work), you represent to Axon that you have legal authority to bind that entity. If you do not have this authority, please do not sign this Quote.

Exceptions to Standard Terms and Conditions

Agency has existing contract(s) originated via Quote(s): Q-261716, Q-355200, & Q-321454

Agency is terminating those contracts effective 10/01/2024. Any change in this date will result in modification of the program value which may result in additional fees or credits due to or from Axon.

The parties agree that Axon is applying a Net Transfer Debit of $58,487.00 to the quote for delivered but unpaid items.

Any credits contained in this quote are contingent upon payment in full of the following amounts: Q-309680 - 12/1/2023 - INUS208208 - $20,951.16

100% discounted body-worn camera and docking station hardware contained in this quote reflects a TAP replacement for hardware purchased under existing quotes Q-261716 + Q-355200. All TAP obligations from this contract will be considered fulfilled upon execution of this quote.

_____ _____

Signature Date Signed

4/15/2024

