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2025 URBAN WATER MANAGEMENT PLAN

PREPARED FOR

CITY OF DIXON

PREPARED BY

Luhdorff & Scalmanini
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LIST OF ACRONYMS AND ABBREVIATIONS

Acronym	Meaning
AB	Assembly Bill
ACS	American Community Survey
ACWA	Association of California Water Agencies
AF	Acre-Feet
CAP	Climate Action Plan
CCF	Hundred Cubic Feet
CDPH	California Department of Public Health
CII	Commercial, Industrial, and Institutional
CIMIS	California Irrigation Management Information System
CIP	Capital Improvement Project
Cr(VI)	Hexavalent Chromium
CVC	Climate Vulnerability Assessment
CWC	California Water Code
DMC	Dixon Municipal Code
DMM	Demand Management Measure
DOF	California Department of Finance
DRA	Drought Risk Assessment
DWR	California Department of Water Resources
EAR	Electronic Annual Report
GHG	Greenhouse Gas
GPCD	Gallons per Capita per Day
GSP	Groundwater Sustainability Plan
IPP	Indirect Potable Reuse
JPA	Joint Powers Agreement
kWh	Kilowatt-Hours
LEF	Landscape Efficiency Factor
LSCE	Luhdorff & Scalmanini Consulting Engineers
MCL	Maximum Contaminant Level
MG	Million Gallons
NA	Not Applicable
RCD	Resource Conservation District
RD	Reclamation District
SB	Senate Bill
SB X7-7	Senate Bill X7-7, Water Conservation Act of 2009
SCWA	Solano County Water Agency
SGMA	Sustainable Groundwater Management Act
SID	Solano Irrigation District
SWRCB	State Water Resources Control Board
TDS	Total Dissolved Solids

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Acronym	Meaning
UWMP	Urban Water Management Plan
WSCP	Water Shortage Contingency Plan
WSMP	Water System Master Plan
WWTF	Wastewater Treatment Facility

EXECUTIVE SUMMARY

ES 1. Introduction

An Urban Water Management Plan (UWMP) helps water suppliers assess the availability and reliability of their water supplies and current and projected water use to help ensure reliable water service under different conditions. This water supply planning is especially critical for California currently, as climate change is resulting in changes in rainfall and snowfall which impact water supply availability and development is occurring throughout the State resulting in increased needs for reliable water supplies. The Urban Water Management Planning Act (Act) requires larger water suppliers that provide water to urban users (whether directly or indirectly) to develop UWMPs every five years. UWMPs evaluate conditions for the next 20 years, so these regular updates ensure continued long-term planning.

As of 2025, the City provides water service directly to more than 4,000 connections in its water service area and is therefore required to prepare a UWMP.

This Executive Summary serves as a Lay Description of the City's UWMP, as required by California Water Code (CWC) §10630.5.

ES 2. California Water Code Requirements

The CWC documents specific requirements for California water suppliers. The Act is included in the CWC and specifies the required elements of a UWMP, including discussing the City's water system and facilities, calculating how much water its customers use (i.e., water demand) and how much the City can supply, and detailing how the City would respond during a drought or other water supply shortage. A UWMP must also describe what specific coordination steps were taken to prepare, review, and adopt the plan.

The Act has been revised over the years. The Water Conservation Act of 2009 (also known as Senate Bill [SB] X7-7) required retail water agencies to establish water use targets for 2015 and 2020 that would result in statewide water savings of 20 percent by 2020. In 2025, retail agencies are required to report on their progress toward meeting their urban water use targets. Because the City was not defined as an urban water supplier until 2021 when it connected its 3,000th customer, the City was not required to establish and meet baselines and targets for daily per capita water use, nor required to comply with SB X7-7.

The 2014 to 2016 drought led to further revisions of the Act under the 2018 Water Conservation Legislation to improve water supply planning for long-term reliability and resilience to drought and climate change. Major changes to the 2020 UWMP included: dry-year water reliability assessment, drought risk assessment, seismic risk, energy use information, Water Shortage Contingency Plan, and this Lay Description. No major changes have been made to the Act since 2020. The major components of the City's 2025 UWMP, including its findings, are summarized below.

ES 3. City Water Service Area and Facilities

The City is one of two water service purveyors within the City limits. It provides potable water to the residences and businesses within its water service area. The remaining residences and businesses within

the City limits are served by California Water Service (Cal Water), and are not included in this plan. Cal Water prepares its own UWMP.

The City's water facilities produce, store, and deliver drinking water to its customers. The City produces water by pumping it from City-owned groundwater wells. The City utilizes sodium hypochlorite for disinfection prior to the water entering the distribution system. The City also owns and operates an extensive network of pipelines, storage tanks, and pumping facilities to deliver drinking water to its customers.

ES 4. City Water Use

The City's 2025 water service area population is 13,596 as reported in the City's 2025 Electronic Annual Report (EAR) as submitted to the State Water Resources Control Board (State Water Board). It anticipates population growth and future planned development in its water service area, which would increase demand for water. Planned and future residential growth is expected in the Southwest and East Dixon areas, along with residential and non-residential growth in the Northeast. Thorough and accurate accounting of current and future water demands is critical for City planning efforts. To continue delivering safe and reliable drinking water, the City must know how much water its customers currently use and how much they expect to use in the future.

Projected future water demands have been estimated based on the anticipated growth as defined by the 2040 General Plan, adopted by the Dixon City Council in May 2021 and Luhdorff and Scalmanini Consulting Engineer's 2024 Water System Evaluation Report. Based on the anticipated growth, water demands in the City water service area are expected to increase approximately 109 percent from 2025 demands of 807 million gallons (MG) to 2050 demands of 1,687 MG. Most of that growth is expected in the next ten years.

ES 5. City Water Supplies

The City's existing potable water supply consist of groundwater pumped from City-owned and operated wells from the underlying Solano Groundwater Subbasin.

The City's groundwater supply is expected to meet its projected water demands. The City only uses as much groundwater as is necessary to meet its demands. The City will continue to monitor its existing groundwater wells and continue to participate in the Solano Groundwater Sustainability Agency Board for groundwater management of the Solano Subbasin.

ES 6. Conservation Target Compliance

The City was not defined as an urban water supplier until April 2021 when it connected its 3,000th customer connection. Therefore, the City was not required to adopt and meet 2015 and 2020 targets for daily per capita water use, nor required to complete the SB X7-7 Verification or 2020 Compliance Forms.

ES 7. Water Service Reliability

The CWC requires water suppliers to evaluate their water service reliability by examining the impact of drought on their water supplies and comparing those reduced supplies to water demands. Specifically, agencies must project available water supplies during a single dry year and five consecutive dry years using historical records.

The City is well-positioned to withstand the effects of a single dry year and a five-year drought for any period between 2030 and 2050. The City's drought risk was specifically assessed between 2026 and 2030, assuming that the next five years are dry years. In each case, water supplies comfortably meet water demands. This remains true whether the drought occurs in 2026, 2050, or any year between, largely due to the region's careful management of the Solano Groundwater Subbasin.

ES 8. Water Shortage Contingency Plan

A WSCP describes an agency's plan for preparing and responding to water shortages. The City prepared its WSCP to include its process for assessing potential gaps between planned water supply and demands for current year and the next potentially dry year. It aligned its water service area's water shortage levels with the State for consistent messaging and reporting and planned for locally appropriate water shortage responses. The WSCP may be used for foreseeable and unforeseeable events. The WSCP is adopted concurrently with this UWMP by separate resolution so that it may be updated as necessary to adapt to changing conditions.

ES 9. UWMP Preparation, Review, and Adoption

While preparing its UWMP, the City notified other stakeholders (e.g., Solano County and the general public) of its preparation, its availability for review, and the public hearing prior to adoption. The City encouraged community participation in the development of the 2025 UWMP using web-based communication. The City issued public notices in the local newspapers to encourage the public review of the UWMP and WSCP. The notices provided the location where the plan would be available for public inspection and the time and place of the public hearing.

The public hearing provided an opportunity for the City's water customers and the general public to become familiar with the 2025 UWMP and ask questions about the City's water supply, its continuing plans for providing a reliable, safe, high-quality water supply, and its plans to address potential water shortages. Following the public hearing, the Dixon City Council adopted the 2025 UWMP on June XX, 2026 by City Resolution No. 26-xxx. A copy of the adopted UWMP was provided to the Department of Water Resources and is available on the City's website: https://www.cityofdixonca.gov.

CHAPTER 1. URBAN WATER MANAGEMENT PLAN INTRODUCTION AND OVERVIEW

This chapter provides an introduction and overview of the City of Dixon's (City) 2025 Urban Water Management Plan (UWMP) update, including the importance and extent of the City's water management planning efforts and the organization of the City's 2025 UWMP update. This 2025 UWMP update has been prepared jointly by City staff and Luhdorff and Scalmanini, Consulting Engineers (LSCE).

1.1. Introduction

The Urban Water Management Planning Act (Act) was originally established by Assembly Bill (AB) 797 on September 21, 1983. Passage of the Act was recognition by State legislators that water is a limited resource and a declaration that efficient water use and conservation would be actively pursued throughout the state. The primary objective of the Act is to direct "urban water suppliers" to develop a UWMP that provides a framework for long-term water supply planning and documents how urban water suppliers are carrying out their long-term resource planning responsibilities to ensure adequate water supplies are available to meet existing and future water demands. A copy of the current version of the Act, as incorporated in Sections 10608 through 10657 of the California Water Code (CWC), is provided in **Appendix A** of this plan.

1.2. Importance and Extent of the City's Water Management Planning Efforts

The purpose of the UWMP is to provide a planning tool for the City for developing and delivering municipal water supplies to the City's water service area. This UWMP provides the City with a water management action plan for guidance as water conditions change and management conditions arise. The City was not required to prepare a 2015 UWMP and Water Shortage Contingency Plan (WSCP) since it did not meet the 3,000-customer connection threshold until 2021. After meeting the threshold, the City prepared the 2020 UWMP and WSCP both of which were adopted by the City in April 2022.

The City has prepared a UWMP and WSCP in accordance with the current version of the Act. The City's WSCP is part of this UWMP and provides a plan for response to various water supply shortage conditions. The City's UWMP is a comprehensive guide for planning a safe and adequate water supply.

1.3. Changes to the Urban Water Management Planning Act Since Passage

The Urban Water Management Planning Act has been modified over the years in response to the State's water shortages, droughts, and other factors. A significant amendment was made in 2009, after the 2007 to 2009 drought, and as a result of the Governor's call for a statewide 20 percent reduction in urban water use by the year 2020. This was the Water Conservation Act of 2009, also known as Senate Bill Seven of the Senate's Seventh Extraordinary Session of 2009 (SB X7-7). This act required agencies to establish water use targets for 2015 and 2020 that would result in statewide water savings of 20 percent by 2020. The City was not required to comply with SB X7-7 since the City did not become an urban water supplier until April 2021 and therefore was not required to adopt per capita water use targets to be met in 2015 and 2020.

The 2014 to 2016 drought led to further amendments to the CWC to improve water supply planning for long-term reliability and resilience to drought and climate change. Major additions and changes were made to the CWC for the 2020 UWMP including the incorporation of: five consecutive dry-year water reliability assessment, drought risk assessment, seismic risk, energy use information, water loss reporting, groundwater supplies coordination, lay description, water loss management and the WSCP. Only minor changes were made to the CWC since the 2020 UWMP requirements.

1.4. Plan Organization

This 2025 UWMP update contains the appropriate sections and tables required per CWC Division 6, Part 2.6 (Urban Water Management Planning Act), included in **Appendix A** of this 2025 UWMP, and has been prepared based on guidance provided by the California Department of Water Resources (DWR) in their "Urban Water Management Plan Guidebook" (DWR Guidebook).

This 2025 UWMP is organized into the following chapters:

- Chapter 1: Urban Water Management Plan Introduction and Overview
- Chapter 2: Urban Water Management Plan Preparation
- Chapter 3: Service Area Description
- Chapter 4: Water Use Characterization
- Chapter 5: SB X7-7 Baselines, 2020 Targets and 2025 Reporting
- Chapter 6: Normal-Year Water Supply Characterization
- Chapter 7: Water Service Reliability and Drought Risk Assessment
- Chapter 8: Water Shortage Contingency Plan
- Chapter 9: Demand Management Measures
- Chapter 10: Urban Water Management Plan Adoption, Submittal, and Implementation

This 2025 UWMP also contains the following appendices of supplemental information and data related to the City's 2025 UWMP:

- Appendix A: Legislative Requirements
- Appendix B: DWR 2025 Urban Water Management Plan Tables
- Appendix C: DWR 2025 Urban Water Management Plan Checklist
- Appendix D: Agency and Public Notices
- Appendix E: SB X7-7 Compliance Tables
- Appendix F: Water Shortage Contingency Plan
- Appendix G: Water Conservation Ordinance
- Appendix H: UWMP Adoption Resolution

Furthermore, this 2025 UWMP contains all the tables recommended in the DWR Guidebook, both embedded into the UWMP chapters where appropriate and included in **Appendix B**.

DWR's UWMP Checklist, as provided in the DWR Guidebook, has been completed by LSCE, to demonstrate the 2025 UWMP's compliance with applicable requirements. A copy of the completed checklist is included in **Appendix C**.

CHAPTER 2. URBAN WATER MANAGEMENT PLAN PREPARATION

This chapter describes the preparation of the City's 2025 UWMP and WSCP updates, including the basis for the preparation of the plan, individual or regional planning, fiscal or calendar year reporting, units of measure, and plan coordination and outreach.

2.1. Basis for Preparing a Plan

The Act requires every urban water supplier to prepare and adopt a UWMP, to periodically review its UWMP at least once every five years, and make any amendments or changes that are indicated by the review. An urban water supplier is defined as a supplier, either publicly or privately owned, providing 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 (AFY). In 2021, the City became an urban water supplier by meeting the 3,000 customer connection threshold with a total of 3,148 customer connections. The City was not required to prepare a UWMP in previous years.

The City manages the Water System CA4810009. As shown in Table 2-1, the City supplied 807 MG of water in 2025 on a retail basis to its water customers.

Table 2-1. Retail: Public Water Systems (DWR Table 2-1)

Public Water System Number	Public Water System Name	Number of Municipal Connections 2025	Volume of Water Supplied 2025 (a*) (MG)
Add additional rows as needed			
CA4810009	City of Dixon	4,120	807
TOTAL		4,120	807
*** Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Table 2-3.			
NOTES: (a) Volumes are in MG.			

2.2. Regional Planning

As described in Section 2.3 below, the City has prepared this 2025 UWMP and associated WSCP on an individual reporting basis, not part of a regional planning process.

2.3. Individual or Regional Planning and Compliance

This 2025 UWMP has been prepared on an individual reporting basis covering only the City's water service area, as summarized in Table 2-2. The City did not participate in a regional alliance for the preparation of this 2025 UWMP and therefore, has not prepared a Regional Urban Water Management Plan (RUWMP).

As described below in Section 2.5, the City has notified and coordinated planning and compliance with appropriate regional agencies and constituents.

Table 2-2. Plan Identification (DWR Table 2-2)

Select One	Type of Plan	Name of Regional Alliance or RUWMP (Drop Down List)
☑	**Individual UWMP**	
	If the Water Supplier is also a member of an SB X7-7 Regional Alliance, select the name from the drop-down.	
☐	**Regional Urban Water Management Plan (RUWMP)**	
	If Supplier selected RUWMP, select the name from the drop-down.	
NOTES:		

2.4. Fiscal or Calendar Year and Units of Measure

Per DWR's definition, the City is a water retailer. The City's 2025 UWMP has been prepared on a calendar year basis, with the calendar year starting on January 1 and ending on December 31 of each year. Water use and planning data for the entire calendar year of 2025 has been included. The water volumes in this 2025 UWMP are reported in units of MG. The City's reporting methods for this 2025 UWMP are summarized in Table 2-3.

Table 2-3. Supplier Identification (DWR Table 2-3)

Type of Supplier (select one or both)	
☐	Supplier is a wholesaler
☑	Supplier is a retailer
Fiscal or Calendar Year (select one)	
☑	UWMP Tables are in calendar years
☐	UWMP Tables are in fiscal years
If using fiscal years provide month and date that the fiscal year begins (mm/dd)	
Units of measure used in UWMP * (select from drop down)	
Unit	MG
*** Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in	

Table 2-3.
NOTES:

2.5. Coordination and Outreach

This section includes a discussion of the City's inter-agency coordination and coordination with the general public. The UWMP Act requires the City to coordinate the preparation of its UWMP and WSCP with other appropriate agencies and all departments within the City, including other water suppliers that share a common source, water management agencies, and relevant public agencies. These agencies, as well as the public, participated in the coordination and preparation of this 2025 UWMP and the associated WSCP, and are summarized below.

2.5.1. Wholesale and Retail Coordination

The City does not rely upon a wholesale agency for water supply. Therefore, Table 2-4 is intentionally blank.

Table 2-4. Retail: Water Supplier Information Exchange (DWR Table 2-4)

Water Code Section 10631(h)The retail Supplier has informed the following wholesale supplier(s) of projected water use.
Wholesale Water Supplier Name[(a)]
NOTES: (a) The City does not rely on a wholesale supplier. Table is left intentionally blank.

2.5.2. Coordination with Other Agencies and the Community

The City actively encourages community participation in water management activities and specific water-related projects. The City's public participation program includes both active and passive means of obtaining input from the community, such as mailings, public meetings, and web-based communication. The City's website describes ongoing projects and posts announcements of planned rate increases to fund these water projects.

As part of the 2025 UWMP and WSCP preparation, the City facilitated a public review period. Public noticing, pursuant to Section 6066 of the Government Code, was conducted prior to the commencement of a public comment period. Public hearing notices are included in **Appendix D** of this plan. During the public comment period, the Draft 2025 UWMP and WSCP were made available on the City's website and at City offices and City Hall.

The City also coordinated the preparation of this 2025 UWMP and associated WSCP with several agencies, including relevant public agencies that utilize the same water supplies. These agencies included the following:

- City of Dixon
- California Water Service – Dixon (Cal Water)
- Solano County
- Solano County Water Agency
- Solano Irrigation District
- Solano Subbasin Groundwater Sustainability Agency

The public hearings provided an opportunity for the City's water customers and the general public to become familiar with the UWMP and ask questions about the City's water supply, in addition to the City's continuing plans for providing a reliable, safe, high-quality water supply.

2.5.3. Notice to Cities and Counties

CWC Section 10621 (b) requires agencies to notify the cities and counties to which they serve water at least 60 days in advance of the public hearing that the plan is being updated and reviewed. In March 2026, a notice of preparation was sent to the cities and counties and other stakeholders to inform them of the UWMP and WSCP update process and schedule, and to solicit input for the 2025 UWMP and WSCP. The notifications to cities and counties, the public hearing notifications, and the public hearing and adoption are discussed in Chapter 10 of this UWMP.

CHAPTER 3. SYSTEM DESCRIPTION

This chapter provides a description of the City's water system and service area. This description includes the water system facilities, climate, population, and housing within the City's water service area.

3.1. General Description

The City, incorporated in 1878, is located in the California Central Valley along Interstate Highway 80, and is surrounded by agricultural and open space lands. Located in the northeastern portion of Solano County, the City is approximately 20 miles west of the City of Sacramento and the Sacramento River and 65 miles northeast of the City of San Francisco. The City is relatively flat at an average elevation of 64 feet (ft) above mean sea level (MSL).

The City's water system is responsible for delivering potable water to residential, commercial, industrial, institutional/governmental, and landscape customers. The City supplies treated water for irrigation at local parks. Within the service area, a handful of private wells exist, including private homes and schools for irrigation, which are not interconnected with the City's water system and are excluded from this 2025 UWMP. As of December 2025, the City serves 4,120 active service connections within its water service area.

3.1.1. SERVICE AREA BOUNDARY

The City is one of two water purveyors within the City limits. It provides potable water to the residences and businesses within its water service area. The remaining residences and businesses within the City limits are served by Cal Water. The City's water service area boundary and Cal Water's service area boundary are shown on **Figure 3-1** (Page 10). Areas within the City that are served by Cal Water are excluded from this plan.

The City's water service area includes residential, commercial, industrial, institutional/governmental, landscape, and fire service connections. Municipal water supply for the City is currently entirely groundwater (see more discussion in Chapter 6). The City also provides wastewater collection and treatment services for the entire City.

3.2. Water System Description

The City operates a water distribution system consisting of a groundwater well, pumping facilities, storage tanks, and distribution/transmission pipelines. Each of these components is discussed in more detail below, and the locations of the major facilities are shown on **Figure 3-2** (Page 11).

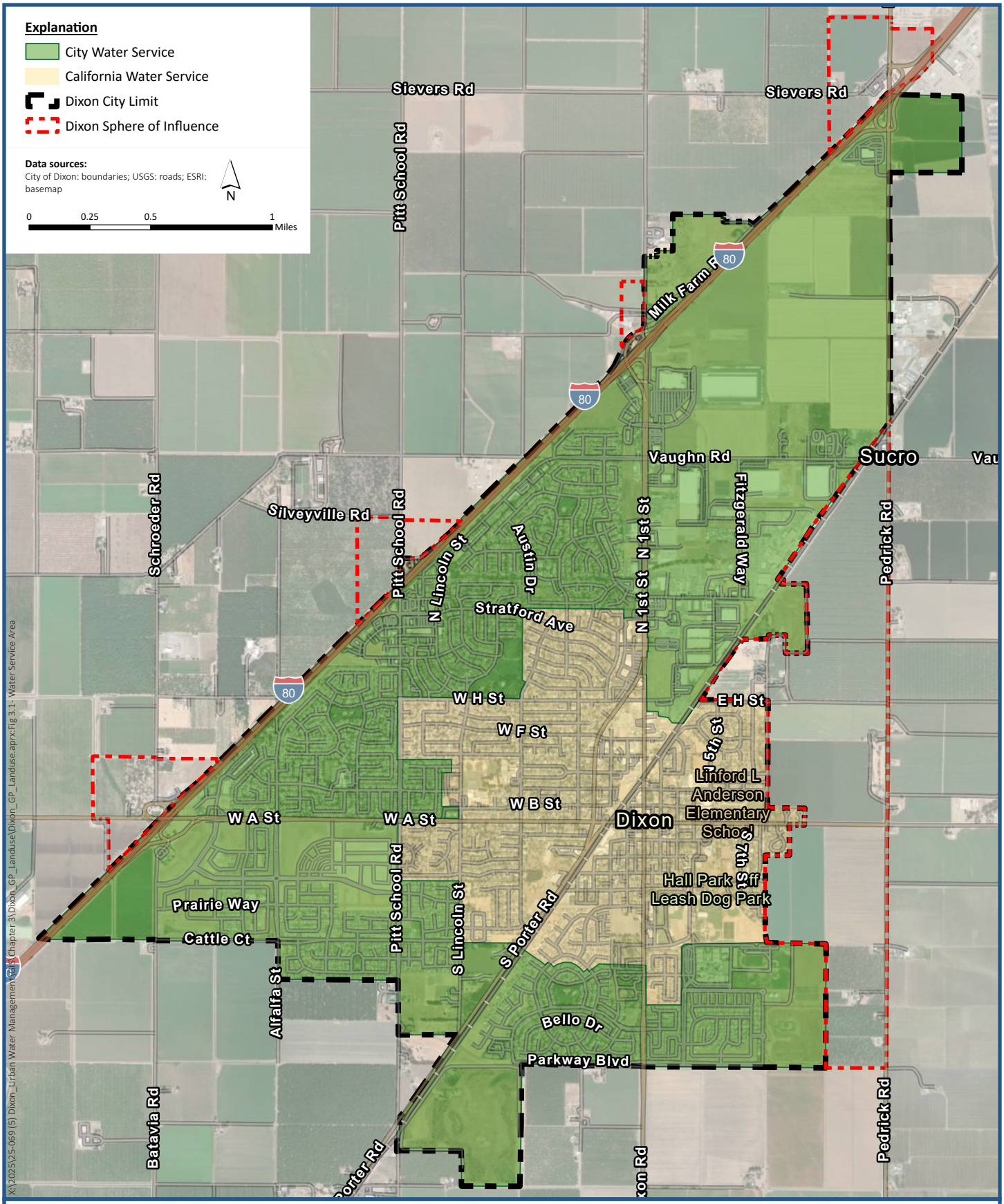
3.2.1. Groundwater Wells

The City has five (5) active groundwater wells and one (1) well on standby in its water service area. The Parklane Well, School Well, Valley Glen Well, Watson Ranch Well, and Homestead Well are active, and the Industrial Well is on standby. The City firm well capacity of each existing well and the total firm capacity of the active wells (8,100 gallons per minute (gpm)) are shown in **Table 3-1**.

Table 3-1. Existing Groundwater Well Capacity			
Well No.	**Facility Name**	**Status**	**Well Capacity, gpm**
DW-37	Watson Ranch Well[(a)]	Active	1,100
DW-44	Industrial Well[(b)]	Standby	0
DW-48	School Well[(c)]	Active	1,500
DW-52	Valley Glen Well	Active	1,500
DW-54	Parklane Well	Active	2,500
DW-55	Homestead Well	Active	1,500
		Total Capacity of Active Wells[(c)]	**8,100**

Notes:
(a) Watson Ranch Well production varies from 800 to 1,200 gpm due to seasonal water level fluctuations.
(b) The Industrial well is permitted as a standby well, but due to the condition of the well, it is excluded from this analysis.
(c) School Well production varies from 1,400 to 1,700 gpm due to seasonal water level fluctuations.

The Industrial Well is located in the northeast portion of the City's water service area, the School Well in the west, the Watson Ranch Well in the northwest, the Parklane Well in the southeast, the Valley Glen Well in the south, and the Homestead Well in the southwest. The locations of the wells are shown in **Figure 3-2** (Page 11).

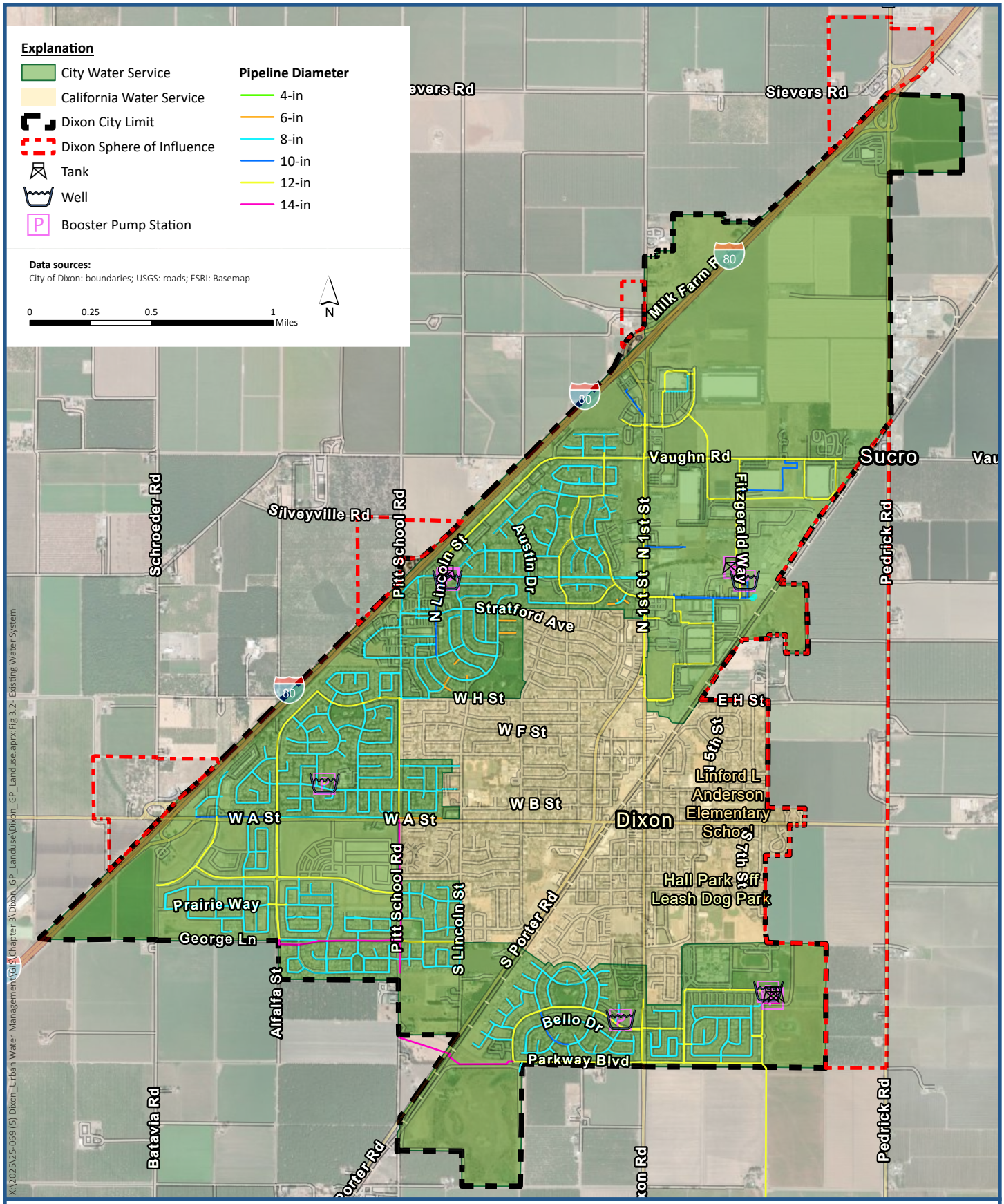


Luhdorff & Scalmanini Consulting Engineers

City of Dixon Water Service Area

2025 Urban Water Management Plan
City of Dixon

Figure 3-1



Luhdorff & Scalmanini Consulting Engineers

Existing Water System

2025 Urban Water Management Plan
City of Dixon

Figure 3-2

3.2.2. Storage Tanks and Pump Stations

The City has a total of four (4) storage tanks: Parklane Tank 1 (1 MG), Parklane Tank 2 (1 MG), Watson Ranch Tank (0.8 MG), and Fitzgerald Tank (1.5 MG). The total storage capacity of the four tanks is approximately 4.3 MG.

A pump station is located at each of the tank sites to pump stored water from the tanks into the distribution system. Water from wells is injected with 12.5% sodium hypochlorite for disinfection prior to going to the water distribution system. Parklane Tank 1 and 2, and Watson Ranch Tank are filled directly from their corresponding well. The Fitzgerald Tank is filled from the distribution system since the Industrial Well is now on standby. The pump stations at Watson Ranch Tank and Parklane Tanks are used to supply groundwater into the distribution system, as well as to pump the stored tank volume during high demands. Fitzgerald Tank is fed by the distribution system and used to meet peak demand periods. School Well and Valley Glen Well pump directly to the distribution system. The City's total firm capacity is 8,100 gpm (11.7 MGD). When the largest production well (DW-54 Parklane Well) is offline, the existing firm's capacity is reduced to 5,600 gpm (8.1 MGD)

The locations of the tanks and pump stations are shown on **Figure 3-2** (Page 11).

3.2.3. Distribution and Transmission Pipelines

The City maintains approximately 50 miles of transmission and distribution system mains ranging in size from 4 to 14 inches in diameter. The majority of the City's water system consists of 8-inch diameter pipelines at approximately 61.1 percent, followed by 12-inch diameter pipelines at approximately 30.0 percent. The remaining 8.9 percent consists of 4-inch, 10-inch, and diameter pipelines. The locations of the pipelines are shown in **Figure 3-2** (Page 11).

3.3. Service Area Climate

The City has a Mediterranean climate. Summers are hot and dry, while winters are cold and wet, with an annual average precipitation of approximately 17.61 inches. The climate ranges from summer temperatures occasionally exceeding 100 degrees Fahrenheit (°F) with low humidity, and winter temperatures dropping into the 30 °F range. Based on the historical data obtained from the California Irrigation Management Information System (CIMIS) and the Western Regional Climate Center (WRCC), the City's average monthly temperatures are as low as 37°F and as high as 94°F. Climate data, including temperature and precipitation, were obtained for Davis, California, which is located approximately 9 miles northeast of the City, along I-80.

The average rainfall over the last five years (2021-2025) was 19.26 inches. The region is subject to wide variations in annual precipitation. Water years 2022 (October 2021 through September 2022), 2024, and 2025 were average rain years with 18.98, 17.39, and 18.84 inches of rainfall, respectively, while water year 2023 was a wet year with 28.49 inches of rainfall. Water year 2021 was dry, with only 6.54 inches of rain.

Evapotranspiration (ET) describes the combined water lost through evaporation from the soil and surface-water bodies and plant transpiration. In general, the ET is given for turf grass, and then corrected for a specific crop type. Although the City owns its own weather station located at its wastewater treatment facility (Dixon WWTF), this 2025 UWMP uses the local ET data from the nearest CIMIS monitoring station, which is located in Davis, California (Station #6). The historical climate characteristics affecting water management in the City's water service area are shown in **Table 3-2**.

Table 3-2. Climate Data Summary

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Average Et_o, inches[(a)]	1.35	2.12	3.68	5.49	7.28	8.22	8.34	7.37	5.70	4.14	2.04	1.23	56.96
Average Max Temperature, °F[(b)]	54.4	60.7	65.9	72.7	80.7	88.7	94.1	92.9	88.8	79.2	65.6	55.1	74.8
Average Min Temperature, °F[(b)]	36.9	39.7	42.0	44.8	49.4	54.0	55.7	54.5	52.9	47.7	40.9	37.0	46.3
Average Rainfall, inches[(b)]	3.78	3.22	2.39	1.15	0.46	0.17	0.01	0.03	0.24	0.82	1.90	3.42	17.61

Notes:
(a) California Irrigation Management Information System (CIMIS) Website: www.cimis.water.ca.gov, Station 6 Davis, California (July 1982 to December 2025), Monthly Average ET_o Report, Printed January 2026.
(b) Western Regional Climate Center (WRCC) website: www.wrcc.dri.edu, Station 042294 Davis 2 WSW Exp Farm, California. Period of record: 1/1/1893 to 01/14/2026.

These climate characteristics highly influence the City's water use. As described in Chapter 4, the City's water use in the summer months is significantly higher than that in the winter, reflecting increased water use for irrigation purposes during the hot, dry summers.

3.4. Service Area Population and Demographics

The City is experiencing growth within its boundaries. A majority of the development is occurring within the City's water service area. On May 18, 2021, the City adopted its General Plan 2040 Update, which is available on the City's website: https://www.cityofdixonca.gov. The GP was used to project the City's water needs.

3.4.1. Service Area Population

Because the City's water service area does not align with the City's boundary, the City's current water service area population was estimated using the population data from the City's 2025 Electronic Annual

Report (eAR) to the State Water Board, Cal Water's 2020 UWMP, and the City's 2040 GP, adopted May 2021. The City's 2025 service area population is 13,596 as reported in the City's 2025 EAR.

The City's 2040 General Plan (GP) identifies the buildout population for the entire City, including both Cal Water's 2040 projected population and City water service areas. The 2050 population for the City's water service area was estimated by linearly interpolating Cal Water's projected population between 2020 and 2045 and extrapolating projected growth through 2050. Cal Water's projected population for the service area of 11,503 people was subtracted from the GP buildout projection of 28,450 people to determine the City's service area population for 2050. As noted by the City, buildout is assumed for the year 2050. Populations for the years between 2025 and 2045 were linearly interpolated, assuming the General Plan buildout year of 2050. The City's current and projected populations for its water service area are shown in **Table 3-3**.

Table 3-3. Retail: Population – Current and Projected (DWR Table 3-1)

Water Code Section 10631(a)

Population Served	2025[(a)]	2030[(b)]	2035[(b)]	2040[(b)]	2045[(b)]	2050(opt)[(c)]
	13,596	14,266	14,936	15,607	16,277	16,947

NOTES:
(a) The City's 2025 service area population was taken from the City's 2025 Electronic Annual Report (EAR) to the State Water Board, and the 2050 projection was taken from the City's 2040 GP. Buildout for the City was assumed to be 2050.
(b) The City's service area population for 2030 through 2045 was estimated using linear interpolation with the City's service area population for 2025 and 2050 as anchor points.
(c) The 2050 projected population was obtained by linearly extrapolating Cal Water's population projection in the 2020 UWMP to 2050 and then subtracting the City's GP build out population.

3.4.2. Other Social, Economic, and Demographic Factors

The CWC now requires the inclusion of service area socioeconomic information as part of the system description in UWMPs. However, differences in household water use across sociodemographic groups in Dixon have not been studied. Therefore, the following social, economic, and demographic information is being provided to comply with the new CWC requirement. The information was derived from the US Census Bureau's profile of the entire City of Dixon for 2019-2023[1]. Although it provides water service only to a portion of the City, this data is considered representative of the City's water service area.

- The average number of people per household in the five-year period analyzed was 3.24.
- The median household income in Dixon was $98,798, while 8.4 percent of all individuals and 6.4 percent of youth under the age of 18 lived in poverty.
- The average employment rate was 67.6 percent

[1] United States Census Bureau, American Community Survey, 2019-2023 ACS 5-Year Data Profile for Dixon, California. https://data.census.gov/profile/Dixon_city,_California?g=160XX00US0619402

- The homeownership rate was 59.3 percent, with 64.1 percent of homes valued at $500,000 to $999,999.
- The median gross rent was $1,728 per month.
- The median age was 34.2 years.
- Of persons 25 years or older in Dixon, 16.1 percent do not have a high school diploma or equivalent, 27.3 percent have a high school or equivalent degree, 24.5 percent have some college but no degree, 7.8 percent have an Associate's degree, 15.1 percent have earned a Bachelor's degree, and 9.2 percent have graduated or have a professional degree.
- 13.3 percent of the population has a disability, and 4.2 percent did not have health care coverage.
- By race/ethnicity, 51.5 percent of people were White alone, 3.11 percent were Black or African American alone, 1.62 percent were American Indian or Alaska Native alone, 3.61 percent were Asian alone, 0.50 percent were Native Hawaiian and other Pacific Islander alone, 23.1 percent were some other race, 15.3 percent were of two races, 1.18 percent were of three races and 0.11 were of four races.
- Of the total City population, 43.7 percent were Hispanic or Latino, and 56.3 percent were not Hispanic or Latino.
- 17.2 percent of Dixon residents were foreign-born, and 32.8 percent of people spoke a language other than English at home.

3.5. Land Uses Within Service Area

This section describes the City's current and projected land uses in its water service area.

3.5.1. Current Land Uses

The City's current land use ratios within City limits are as follows: 40 percent undeveloped, 22 percent residential, 12 percent public facilities, 7.5 percent industrial, and 3.6 percent commercial and mixed use per the City's 2040 GP. The areas within the City's water service area follow a similar land use breakdown as identified in the General Plan land use designations, with the exception of the Downtown area and areas surrounding Downtown, which are served by Cal Water. The Cal Water service area includes a mixture of low and medium-density residential, mixed-use, commercial, industrial, and public facilities, and parks/open space.

3.5.2. Projected Land Uses

The City's 2040 GP discusses four key growth areas: Downtown, the SR-113/1st Street Corridor, the Northeast Quadrant, and the Southwest Quadrant. **Figure 3-3** (Page 17) shows the City's projected land use within the City's water service area per the 2040 GP, and **Figure 3-4** (Page 18) shows the four growth areas from the 2040 GP.

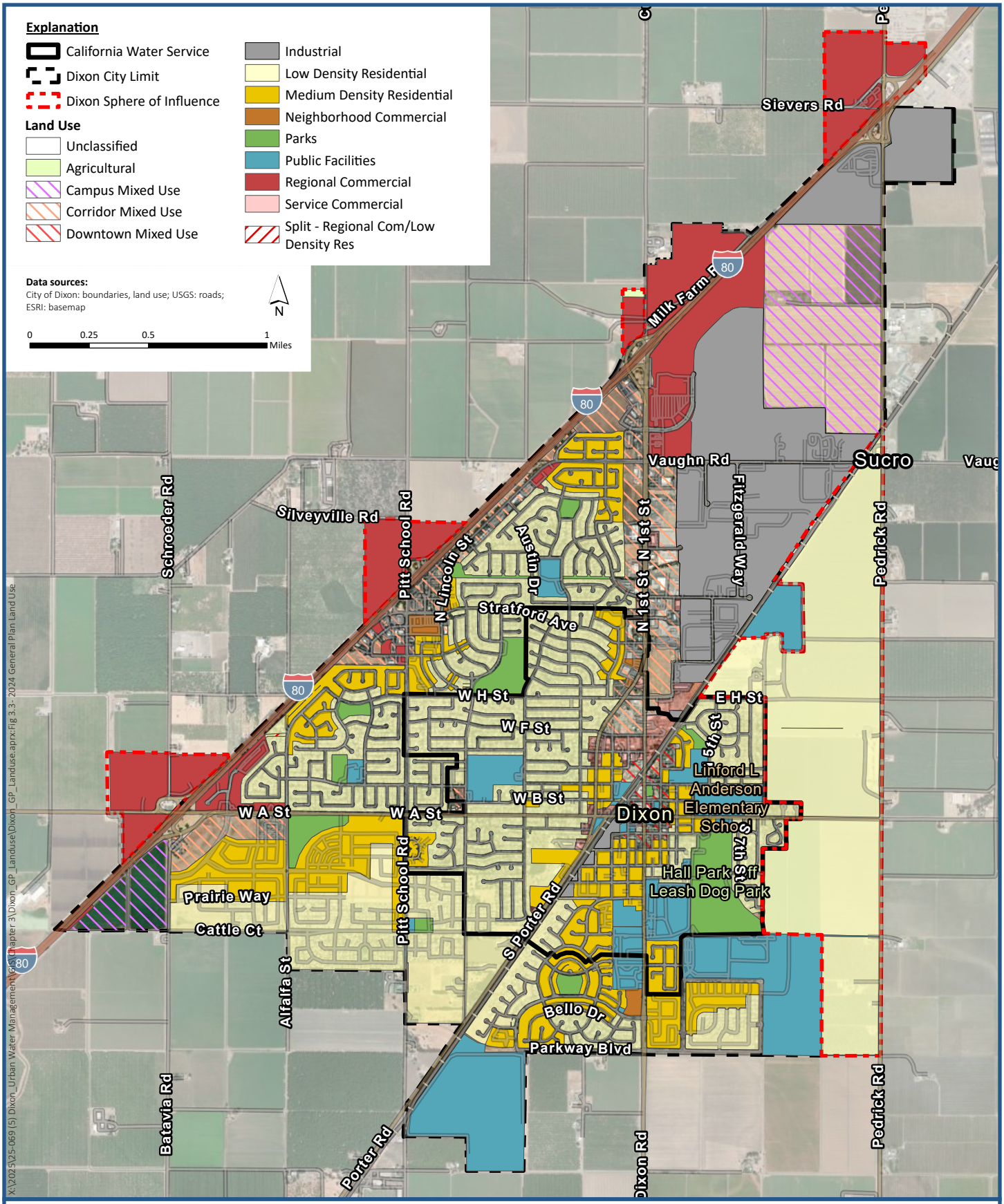
The City's water service area does not serve the Downtown area, which is served by Cal Water, as shown in **Figure 3-2** (Page 11). Downtown, designated as mixed-use, will include new retail, commercial, and open space areas for dining and entertainment, along with existing civic facilities.

The SR-113/1st Street Corridor, the Northeast Quadrant, and the Southwest Quadrant are within the City's water service area. The SR-113 corridor, designated as mixed use, is projected to be developed into retail, commercial, and residential uses. The Northeast Quadrant is projected to be developed into an employment area with a mix of regional commercial, industrial, and campus mixed-use land uses to generate more jobs for the City. The Southwest Quadrant will consist primarily of low- and medium-density residential land uses, with the remaining land designated for retail and commercial uses.

The City is a member of the Association of Bay Area Governments (ABAG) and participates in the Regional Housing Needs Allocation (RHNA), which allocates participating cities and counties their "fair share" of the region's projected housing needs. The RHNA is updated every eight years and provides the housing units that a city or county must plan for within an 8-year time period. The Solano County subregion of ABAG completed and adopted its final RHNA allocation on November 18, 2021[2]. The City's 2023-2031 RHNA allocation is 416 residential units[3]. The City's RHNA allocation is included in the 2040 GP planned land use, and therefore meets the RHNA requirements.

[2] ABAG, Final Regional Housing Needs Allocation (RHNA) Plan: San Francisco Bay Area, 2023-2031, p. 29, December 2021. https://abag.ca.gov/sites/default/files/documents/2021-12/Final_RHNA_Allocation_Report_2023-2031-approved_0.pdf

[3] ABAG Solano County Subregion, 6th Cycle Regional Housing Needs Allocation Final Methodology, Table 1, September 2021. https://www.solanocounty.com/depts/rm/planning/regional_housing_needs_allocation_and_housing_element.asp

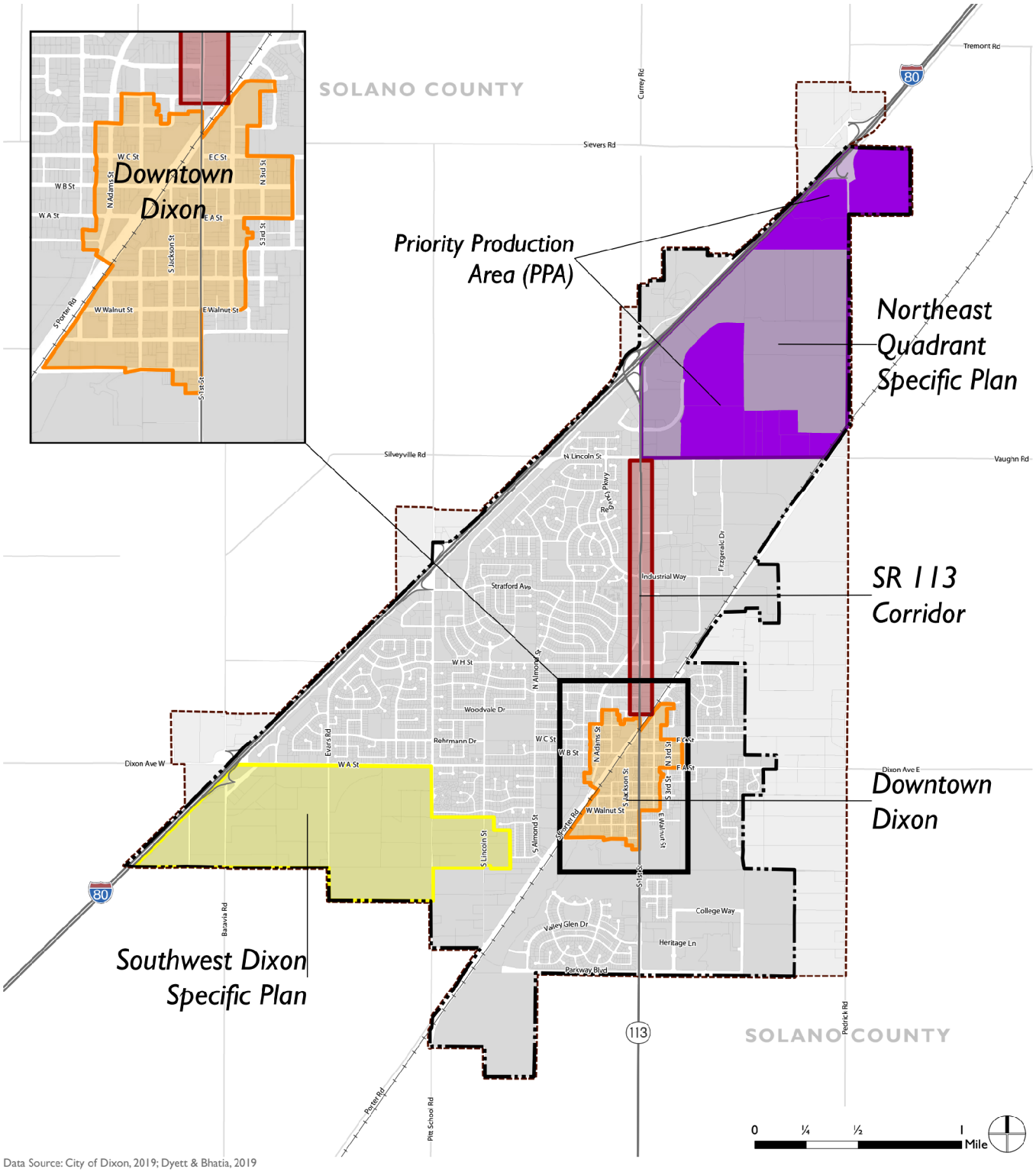


Luhdorff & Scalmanini Consulting Engineers

2024 General Plan Land Use

2025 Urban Water Management Plan
City of Dixon

Figure 3-3



Data Source: City of Dixon, 2019; Dyett & Bhatia, 2019

Railroad

Dixon City Limit

Sphere of Influence

Data sources:
City of Dixon: May 2021.General Plan 2040. Section 3.3 Historical Growth Pattern

X:\2025\25-069 (5) Dixon_Urban Water Management\GIS\Chapter 3\Dixon_GP_Landuse\Dixon_GP_Landuse.aprx:Fig 3.4- General Plan Key Growth Areas

Luhdorff & Scalmanini Consulting Engineers

General Plan Key Growth Areas

2025 Urban Water Management Plan
City of Dixon

Figure 3-4

CHAPTER 4. WATER USE CHARACTERIZATION

This chapter describes and quantifies the City's past, current, and projected potable water use. Water demands are provided by the customer sector. Water distribution system water losses, future passive water savings, and low-income household water use are quantified. Water demand projections are based on the projected growth within the City's water service area. Accurately tracking and reporting current water demands allows the City to properly analyze the use of its existing water resources and perform water resource planning for the future.

4.1. Non-Potable Versus Potable Water Use

Potable water is water that is safe to drink, which typically has had various levels of treatment and/or disinfection. The City utilizes liquid sodium hypochlorite for disinfection at all of its groundwater wells before the water goes into the water distribution system to its customers within its water service area.

Recycled water is municipal wastewater that has been treated to a specified quality for beneficial reuse. The City does not distribute recycled water for use within its water service area.

Raw water is untreated water used in its natural state or with minimal treatment. Currently, no park in the City's service area has an irrigation well. A few schools have irrigation wells, but these wells are not affiliated with the City and are not interconnected with the City's water system. Any raw water wells, not part of the City's water system are excluded from the 2025 UWMP.

4.2. Water Use By Sector

This section describes the City's past, current, and projected water use by water use sector, as listed in CWC §10631(d) and defined in the DWR Guidebook. These classifications were used to analyze current consumption patterns among the various types of City water customers. Each water use sector is listed and defined below.

- Single Family Residential: A single-family dwelling unit. A parcel with a free-standing building containing one dwelling unit that may include a detached secondary dwelling.
- Multi-Family Residential: Multiple dwelling units contained within one building or several buildings within one complex.
- Commercial: A water user that provides or distributes a product or service

(CWC 10608.12(d)). For consistency with the City's customer classification system, water use for churches is included under this classification instead of the Institutional and Governmental category. For 2021 to 2025, Commercial and Institutional uses will reflect the combined total under the Commercial category, with the Institutional/Governmental category left empty.

- Industrial: A water user that is primarily a manufacturer or processor of materials as defined by the North American Industry Classification System (NAICS) code sectors 31 to 33, inclusive, or an entity that is a water user primarily engaged in research and development (CWC 10608.12(h)).

- Institutional/Governmental: A water user dedicated to public service. This type of user includes, among other users, higher education institutions, schools, courts, churches, hospitals, government facilities, and nonprofit research institutions (CWC 10608.12(i)). Although the CWC defines church as "Institutional (and Governmental)," church water use is classified as "Commercial" for this 2020 UWMP to remain consistent with the City's customer classification system.
- Landscape: Water connections supplying water solely for landscape irrigation. Such landscapes may be associated with multi-family, commercial, industrial, or institutional/governmental sites, but are considered a separate water use sector if the connection is solely for landscape irrigation. Prior to 2023, water at parks were classified as landscape water for both parks and irrigation. After 2023, irrigation use is classified under Landscape meters, while water use at parks for domestic purposes is now classified as domestic water.
- Other: Any other water demand that is not adequately described by the water sectors defined above. System water losses are not to be reported in the "Other" category.

The City does not have any current plans to use water for groundwater recharge, saline water intrusion barriers, agricultural irrigation, wetlands, or wildlife habitat.

4.2.1. Historical Water Use

The 2021 through 2024 retail water use by sector is summarized in **Table 4-1.** The City has been fully metered for the years shown in **Table 4-1**.

Table 4-1. Historical Water Demand by Water Use Sector, MG					
Water Use Sector	2020[a]	2021	2022[f]	2023	2024
Single-Family	335	342	357	369	406
Multi-Family	37	39.2	29.1	27.8	29.4
Commercial[b]	60	57.2	59.2	59.2	83.4
Industrial	54	52.2	65.2	46.3	48.3
Institutional/Governmental[c]	2	0	0	0	0
Landscape[d]	119	125	115	111	130
Other[e]	3	19.6	16.8	7.7	12.0
Losses[f]	92	69.1	61.3	89.1	101
Total	702	704	704	711	810

Notes:
(a) The 2020 Historical water Demand by Water Use Sector was taken from the City's 2020 UWMP
(b) Church, Firehouse, Motel, School, WTTF/WTTP, and Commercial and Institutional (C&I) water use is classified as "Commercial" for this 2025 UWMP to remain consistent with the City's Production and Consumption report.
(c) For the years 2021–2025, Commercial and Institutional water uses are combined and reported under the Commercial category, with the Institutional/Governmental category left empty.
(d) After 2023 the domestic meters at the parks were reported as commercial.
(e) "Other" includes unknown, miscellaneous water use such as hydrant/construction meters, street sweeping use, and calculated unmetered use.
(f) In 2022, one of the City's production meters was inaccurate and was not identified until after year-end.

4.2.2. Current Water Use

At the end of December 2025, the City had 4,120 active water service connections. The City surpassed the 3,000th customer connection threshold for classification as an urban water supplier in April 2021 with 3,148 customer connections. The customer connection count does not include fire service connections.

The actual retail water use by sector is summarized in **Table 4-2** (DWR Table 4-1). The City is fully metered for 2025 as shown in **Table 4-2** (DWR Table 4-1).

Table 4-2. Retail: Total Uses for Potable and Non-Potable Water (DWR Table 4-1)

Water Code Section 10631(d)(a)

Use Type	2025 Actual Water Use		
Drop down list May select each use multiple times. These are the only Use Types that will be recognized by the WUEdata online submittal tool.	Additional Description (as needed)	Potable or Non-Potable (optional)	Volume[(a)]
Add additional rows as needed.			
Single Family		Drinking Water	415
Multi-Family		Drinking Water	35.0
Commercial	See Note (b)	Drinking Water	73.9
Industrial		Drinking Water	46.8
Institutional/Governmental	See Note (c)	Drinking Water	0
Landscape	See Note (d)	Drinking Water	123
Other	See Note (e)	Drinking Water	17.6
Losses		Drinking Water	96.1
Subtotal Potable			807
Subtotal Non-Potable			0
Total			807
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.			

NOTES:

(a) Volumes are in MG.

(b) Church, Firehouse, Motel, School, WTTF/WTTP, and Commercial and Institutional (C&I) water use is classified as "Commercial" for this 2025 UWMP to remain consistent with the City's Production and Consumption report.

(c) For the years 2021–2025, Commercial and Institutional water uses are combined and reported under the Commercial category, with the Institutional/Governmental category left empty.

(d) After 2023 the domestic meters at the parks were reported as commercial.

(e) "Other" includes unknown, miscellaneous water use such as hydrant/construction meters, street sweeping use, and calculated unmetered use. Run-to-Waste water use data was included in the 2025 data.

4.2.3. Projected Water Use

Demand projections provide the basis for sizing and phasing future water facilities to ensure adequate supply is available to all water customers. In May 2021, the City adopted its 2040 GP. The City subsequently completed a 2021 Water System Master Plan Update (WSMP Update), which is an addendum to the City's 2016 Water System Master Plan (WSMP). The 2021 WSMP Update included updates to the water demand projections, water system evaluations, and recommendations that were previously in the 2016 WSMP.

The City's 2021 WSMP Update includes water use factors to develop water demand projections. In 2024, LSCE completed a Water System Evaluation Report for the City, which projected water demands through buildout, assumed to be in 2050, utilizing land use projections adopted in the 2040 GP. The projected water demands through 2050 are from LSCE's City of Dixon Water System Evaluation Report and are the basis for the projected water demands summarized in **Table 4-3** (DWR Table 4-2).

The water demand projections shown in **Table 4-3** (DWR Table 4-2) were estimated through linear interpolation. The water demand for 2030 through 2045 was estimated using linear interpolation, with 2025 actual water use and LSCE's 2024 Water System Evaluation Report water demand projections for 2050 serving as anchor points, assuming a strictly linear trend. The City has noted that development projects have accelerated since the development of its 2040 General Plan.

The water demand projections between 2030 and 2045 were linearly interpolated using the 2025 actual water demands and the LSCE 2024 Water System Evaluation buildout (2050) water demand projections as anchor points. The City does not provide recycled water services for non-potable water use.

Table 4-3. Retail: Total Uses for Potable, and Non-Potable Water – Project (DWR Table 4-2)

Water Code Section 10631(d)(a)

Use Type		Projected Water Use[a] Report To the Extent that Records are Available					
Drop down list May select each use multiple times. These are the only Use Types that will be recognized by the WUEdata online submittal tool	Additional Description (as needed)	Potable or Non-Potable (Optional)	2030	2035	2040	2045	2050 (opt)
Add additional rows as needed.							
Single Family		Potable	497	586	675	764	853
Multi-Family		Potable	42	50	58	65	73
Industrial		Potable	87	103	118	134	150
Commercial		Potable	69	81	93	106	118
Institutional/Governmental		Potable	0	0	0	0	0
Landscape		Potable	159	188	216	245	273
Other		Potable	19	23	26	30	33
Losses		Potable	109	129	148	168	187
Subtotal Potable			982	1,160	1,334	1,512	1,687
Subtotal Non-Potable			0	0	0	0	0
Total			982	1,160	1,334	1,512	1,687
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.							
NOTES: (a) Volumes are in MG.							

4.2.3.1 20- or 25-Year Planning Horizon

As previously mentioned, the land use adopted in the 2040 GP was used to update the projected City water demands as documented in LSCE's 2024 Water System Evaluation. The 2024 Water System Evaluation assumed that parcels located within the City's existing water service area will be developed by 2040; the parcels located within the City's sphere of influence (SOI) will develop by 2050 and will constitute a buildout of the entire City system.

Unit water demand factors developed in the 2021 WSMP Update were utilized by LSCE in the 2024 Water System Evaluation and multiplied by the projected developed acreage from the City's 2040 GP to obtain the 2050 projected water demands. The total 2050 projected retail water demand is 1,687 MG.[5].

4.2.3.2 Characteristic Five-Year Water Use

Water Code Section 10635(b) requires urban suppliers to include a five-year drought risk assessment (DRA) in their UWMP. A key component of the DRA is estimating water demands for the next five years (2026-2030) without drought conditions (i.e., unconstrained demand). Chapter 7 details the DRA, but the

five-year demand projections are summarized in **Table 4-5**. Projected water demands for 2026 through 2030 were estimated as a linear interpolation between the actual 2025 water use, reported in Table **4-3** (DWR Table 4-2), and the 2050 projected water use, reported in **Table 4-3** (DWR Table 4-2).

Projected water use by category for 2026 through 2030 was estimated by applying the average distribution of water use from 2015 through 2025 to the total projected water demand from 2026 through 2030, assuming the historical distribution remains constant.

Table 4-5. Projected Five-Year Water Use for Retail Customers, MG

Water Use Sector	2026	2027	2028	2029	2030
Single-Family	426	444	462	479	497
Multi-Family	36	38	39	41	42
Commercial[(b)]	75	78	81	84	87
Industrial	59	61	64	66	69
Institutional/Governmental[(c)]	0	0	0	0	0
Landscape[(d)]	137	142	148	154	159
Other[(e)]	17	17	18	19	19
Losses[(f)]	93	97	101	105	109
Total	843	878	913	948	982

Notes:

(a) Volumes are in MG.

(b) Church, Firehouse, Motel, School, WTTF/WTTP, and Commercial and Institutional (C&I) water use is classified as "Commercial" for this 2025 UWMP to remain consistent with the City's Production and Consumption report.

[5] City of Dixon. December 2024. 2024 Water System Evaluation

4.3. Estimating Future Water Savings

The water use projections presented in **Table 4-6** are based on land use projections within the City's water service area. Additional water savings from codes, standards, ordinances, or transportation and land use plans, also known as passive savings, can decrease the water use for new and future customers. As indicated in **Table 4-6** (DWR Table 4-3) below, these potential passive savings have not been included in the City's water demand projections to be conservative.

Table 4-6. Retail: Inclusion in Water Use Projections (DWR Table 4-3)

Water Code Section 10631(d)(a), 10631(d)(4)(A) and 10631 (d)(4)(B)

Are Future Water Savings Included in Projections? (Refer to Appendix K of UWMP Guidebook) Drop down list (y/n)	No
If "Yes" to the above, state the section or page number, in the cell to the right, where citations of the codes, ordinances, or otherwise are utilized in demand projections are found.	N/A
Are Lower-Income Residential Demands Included In Projections? Drop down list (y/n)	Yes

4.4. Water Use for Lower Income Households

This UWMP considers current adopted codes, plans, and other policies or laws to estimate water savings projections. As indicated in **Table 4-6** (DWR Table 4-3), it includes projected water use for lower-income households in the City's water service area.

A lower-income household has an income below 80 percent of the median income of the area, adjusted for family size. Projected water demands for low-income, single-family, and multi-family residential water uses are included in the total water demands described in Section 4.2.

The City's 2023-2031 Housing Element Update includes the number of total units required by the end of 2030. In accordance with Solano County's Regional Housing Needs Plan, the City must plan to accommodate 416 housing units between June 30, 2022, and December 15, 2030. Of the total required units, the Housing Element specifies that 113 units (27.2 percent) must serve very low-income households, 62 units (14.9 percent) must serve low-income households, 62 units (14.9 percent) must serve moderate-income households, and 179 units (43.0 percent) must serve above moderate-income households.[6] Assuming that gross per capita water demand is equal for all residential housing units regardless of income, an estimated 450 MG (55.8 percent) of the City's residential water deliveries in 2025 (807 MG) were to lower-income households. The City assumes that lower-income households will continue to represent approximately 56 percent of the City's total residential customers through 2040, but this is subject to change as demographic changes occur.

[6] City of Dixon. March 2023. Housing Element Update 2023 – 2031. *Table 5 Dixon's Share of the Regional Housing Need.*

4.5. Distribution System Water Losses

System losses are the difference between the actual volume of water treated and delivered into the distribution system and the actual metered consumption. Such total water losses are always present in a water system due to pipe leaks, unauthorized connections or use, faulty meters, unmetered services such as fire protection and training, and system and street flushing.

The City was not required to track water loss until April 2021, when it became an urban water supplier. The City did not complete the 2020 Water Loss Audit Report, as shown in **Table 4-7** (DWR Table 4-5), because it did not qualify as an urban water supplier until surpassing its 3,000th customer connection in April 2021. As a result, **Table 4-8** (DWR Table 4-6) has been intentionally left blank.

Table 4-7. Retail: Water Loss Audit Reporting (DWR Table 4-5)
Water Code Section 10631(d)(3)(A)

Public Water System ID # Reported in Table 2-1 R	Reporting Period	Submitted to DWR Water Loss Audit Program (yes/no)
Report submittal status for all five years for each Public Water System as available. Add rows as needed		
	2020	No
	2021	Yes
	2022	Yes
	2023	Yes
	2024	Yes
DWR NOTES: Suppliers will provide a link to the WUEdata submittals of their Water Loss Audit Reports.		
NOTES: The City did not become an urban water supplier until April 2021 and was not required to submitted a water loss audit for 2020. The City's subsequent Water Audit reports can be found online at the following links for 2021, 2022, 2023 and 2024.		

Table 4-8. Retail: Progress Towards 2028 Water Loss Standards (DWR Table 4-6)
Water Code Section 10631(d)(3)(C)

Public Water System ID # Reported in Submittal Table 2-1 R	Did the Water Board Calculate a Water Loss Standard for this Public Water System? (y/n) If no, Supplier will not complete this row.	Real Water Loss					Apparent Water Loss				
		State Water Board Standard		Most Recent AWWA Water Loss Audit			State Water Board Standard		Most Recent AWWA Water Loss Audit		
		2028 Real Water Loss Standard per Unit per day	Units for Real Water Loss Drop down list	Number of Units (Connections or Miles corresponding with units selected)	Volume of Total Real Loss (from AWWA Water Loss Audit)	Real Water Loss Per Unit per Day	2028 Apparent Water Loss Standard per Unit per Day	Units for Apparent Water Loss	Number of Connections	Volume of Total Apparent Loss (from AWWA Water Loss Audit)	Apparent Water Loss Per Unit per Day
Add additional rows as needed.											
	No							Gallons per Service Connection per Day (GPSCD)			

4.6. Climate Change Considerations

Climate change has the potential to alter local climatic patterns and meteorology. As described in the City's 2040 General Plan, Cal-Adapt predicts the average annual temperature to be 5 degrees hotter in Dixon between 2040 and 2060. Heat can already be dangerous in Dixon, with July temperatures often rising above 100 degrees, and hotter temperatures could present serious health risks to residents.8

The City's future water demand and use patterns may be impacted by climate change. Warmer temperatures are expected to increase landscaping and irrigation demand and lengthen the growing season. In addition, climate change may increase the frequency and intensity of wildfires, which would increase water demands for firefighting. The water demand projections included in this 2025 UWMP reflect anticipated increases in demand, along with current and ongoing water use efficiencies and water conservation by the City's water customers.

California State law, in SB 379, requires cities to identify local risks arising from climate change. The City is not subject to risks from sea level rise, but climate change-related risks arise mainly from increased heat and reduced rainfall, which could lead to more drought and increased fire risk. More extreme and unpredictable weather would also threaten the agricultural sector through unseasonable weather, frosts, heat, and loss of important pollinators.3

Solano County adopted the Solano County Climate Action Plan (CAP) in 2011 to identify how the County and the broader community can reduce greenhouse gas emissions (GHGs). The CAP identifies strategies and actions to adapt to the effects of climate change. Examples of strategies and actions include planning for mixed-use developments that encourage walking and biking, the use of public transit, or water conservation measures.

As discussed in the April 2021 Final Environmental Impact Report (EIR) for the City's 2040 GP, the City shall adopt and begin to implement a CAP within a goal of 18 months, but no later than 36 months, of adopting the 2040 GP. The CAP will lay out a series of goals, policies, and actions to reduce GHG emissions to a level that is consistent with State GHG reduction goals. Some examples of these actions include sourcing a specific percentage of the City's power through renewable sources, installing a specific length of bicycle lanes, or installing greywater systems in a specific percentage of homes in Dixon. 9

The potential impacts of climate change on the City's water supplies are described in Chapter 6.

CHAPTER 5. SB X7-7 BASELINES, 2020 TARGETS, AND 2025 REPORTING

In November 2009, SB X7-7, the Water Conservation Act of 2009, was signed into law as part of a comprehensive water legislation package. The Water Conservation Act addressed both urban and agricultural water conservation. The legislation set a goal of achieving a 20 percent statewide reduction in urban per capita water use by December 31, 2020 (i.e., "20 by 2020"). In order to meet the urban water use target requirement, each retail supplier was required to determine its baseline water use, as well as its target water use for the year 2020. Water use is measured in gallons per capita per day (GPCD) and includes all sectors within a service area.

5.1. Overview and Background

The City was not defined as an urban water supplier until April 2021, when it connected its 3,000th customer. Therefore, the City was not required to establish and meet baselines and targets for daily per capita water use, nor was the City required to complete the SB X7-7 Verification Forms. However, the City is required to provide an assessment of present and proposed programs and policies that will help reduce water use. A discussion of the City's programs and policies for water conservation is provided in Chapter 9, Demand Management Measures of this plan.

In this chapter, the tables required to document the 2020 targets and demonstrate compliance with urban water use target requirements are intentionally left blank, as the City was not classified as an urban water supplier during or before the 2020 UWMP reporting cycle.

5.2. General Requirements for Baseline and Targets

SB X7-7 required each urban water retailer to determine its baseline daily per capita water use over a 10-year or 15-year baseline period. The 10-year baseline period is defined as a continuous 10-year period ending no earlier than December 31, 2004, and no later than December 31, 2010. SB X7-7 also defined that for those urban water retailers that met at least 10 percent of their 2008 water demand using recycled water, the urban water retailers could extend the baseline GPCD calculation for a maximum of a continuous 15-year baseline period, ending no earlier than December 31, 2004, and no later than December 31, 2010.

SB X7-7 and DWR provided four different methods for the calculation of an urban water retailer's 2020 target. Three of these methods are defined in Water Code Section 10608.20(a)(1), and the fourth method was developed by DWR. The 2020 water use target can be calculated using one of the following four methods:

- **Method 1**: 80 percent of the City's base daily per capita water use
- **Method 2**: Per capita daily water use estimated using the sum of performance standards applied to indoor residential use, landscaped area water use, and commercial, industrial, and institutional/governmental uses
- **Method 3**: 95 percent of the applicable State hydrologic region target as stated in the State's April 30, 2009, draft 20x2020 Water Conservation Plan

- **Method 4**: An approach that considers the water conservation potential from: 1) indoor residential savings, 2) metering savings, 3) commercial, industrial, and institutional/governmental savings, and 4) landscape and water loss savings

Urban water retailers were required to choose one of the four methods above to calculate the 2020 target as part of the 2010 UWMPs and had the option to update the 2020 target during the 2015 UWMP. The City did not have 3,000 service connections until 2021; therefore, the City was not required to prepare a UWMP in 2010, 2015, or 2020. Therefore, the City was not required to calculate and meet a 2020 water use target.

5.3. Service Area Population

To correctly calculate its compliance year water use, GPCD, water retailers must determine the population that it served in 2025. The City's 2025 service area population is 13,596 as reported in the City's 2025 EAR, as shown in Table 5-2 (SB X7-7 Table 3).

Table 5-1. Method for 2025 Population Estimates (SB X7-7 Table 2)

Water Code Section 10608.20 (e) and 10608.20(h)(1)(2)

Method Used to Determine 2025 Population[a] (may check more than one)	
☐	1. Department of Finance (DOF) or American Community Survey (ACS)
☐	2. Persons-per-Connection Method
☐	3. DWR Population Tool
☑	4. Other DWR recommends pre-review
NOTES: (a) The City's 2025 service area population was taken from the City's 2025 Electronic Annual Report (EAR)	

Table 5-2. Service Area Population (SB X7-7 Table 3)

Water Code Section 10608.20(h)(1)(2)

2025 Compliance Year Population	
2025[a]	13,596
NOTES: (a) The City's 2025 service area population was taken from the City's 2025 Electronic Annual Report (EAR)	

5.4. Gross Water Use

Annual gross water use, as defined in CWC §10608.12 (h), is the water that enters the City's distribution system over a 12-month period (calendar year) with certain exclusions. Although the City would have annual gross water use for each year in the previous baseline periods, the City was not required to report this annual gross water use data because the City did not become an urban water supplier until 2021.

5.5. Baselines and Targets Summary

Daily per capita water use is reported in GPCD. Annual gross water use is divided by annual service area population to calculate the annual per capita water use for each year in the baseline periods. However, as discussed in previous sections, the City is not subject to SB X7-7 requirements. Since the City did not become an urban water supplier until April of 2021, Table 5-3 (DWR Table 5-1) showing the City's baseline and targets summary is left intentionally blank.

Table 5-3. Retail: SB X7-7 2020 Target Progress (DWR Table 5-1)

Water Code Section 10608.40

☑	**Check the box if the Supplier was not an Urban Water Supplier during or before the 2020 UWMP reporting cycle. Proceed to the next table.**					
Was Supplier part of a merger or consolidation since 2020?	Regional Alliance Target or Individual Target? Drop down list	2020 Target	Actual 2020 GPCD	Did Supplier Achieve Targeted Reduction for 2020?	**Only for suppliers that did not meet the Target in 2020 See DWR NOTES below.**	
					Actual 2025 GPCD (From SB X7-7 Compliance Form)	Did Supplier meet the 2020 Target in 2025?
						NA

DWR NOTES:
Suppliers calculating a 2025 GPCD will need to complete and submit SB X 7-7 Compliance Tables to verify the use of SB X7-7 Methodologies.
Suppliers that were part of a merger or consolidation since 2020 see Chapter 5 and Appendix P for guidance.
NA=Not Applicable

NOTES:

CHAPTER 6. NORMAL-YEAR WATER SUPPLY CHARACTERIZATION

This chapter characterizes the City's water supply portfolio, including currently available and reasonably anticipated future water supplies under normal-year conditions. The management of each supply source is described, along with its relationship to other supplies, potential regulatory and climate change impacts, and the associated energy required to treat and distribute water within the City's service area.

The management of the groundwater supply is discussed in this chapter. Anticipated availability of the City's water supplies under a normal water year is also provided in this chapter. The availability of the City's water supplies under a single dry year and a drought lasting five years, as well as more frequent and severe periods of drought, are described in detail in Chapter 7 of this UWMP, along with the basis of those estimates.

6.1. Water Supply Analysis Overview

The City's existing water supply comes solely from City-owned and operated groundwater wells throughout the City's water service area. A portion of the City is provided with water by Cal Water. The City's existing water system is shown in **Figure 3-2** (Page 11).

6.2. Water Supply Characterization

6.2.1. Purchased or Imported Water

The City does not currently purchase or import water and does not have plans in place to do so during the planning horizon of this UWMP.

6.2.2. Groundwater

As described in Chapter 3, currently, the City's sole water supply source is groundwater wells. The City is located within the Solano Subbasin (DWR Basin No. 5-21.66) of the Sacramento Valley Groundwater Basin, as shown on **Figure 6-1** (Page 35). A groundwater sustainability plan (GSP) was developed for the Solano Subbasin and submitted to the California Department of Water Resources (DWR) in January 2022. The GSP describes groundwater monitoring activities and conditions, groundwater management, and serves as a guide for the sustainable management of groundwater in the Solano Subbasin. The Sacramento Valley Groundwater Basin is bounded on the east by the Sierra Nevada and Cascade Ranges, and on the west by the North Coast Range and extends from near Red Bluff about 150 miles to the Sacramento-San Joaquin Delta, covering approximately 6,000 square miles. The Sacramento Valley Groundwater Basin has been divided into many smaller subbasins based on physical and institutional boundaries established by DWR.

The Solano Subbasin is bounded by Putah Creek on the north, the Yolo County line on the east, the North Mokelumne River on the southeast (from Walnut Grove to the San Joaquin River), and the San Joaquin River on the south (from the North Mokelumne River to the Sacramento River). The western Subbasin boundary is defined by consolidated rocks of the Coast Range and a groundwater divide present between the Sacramento Valley Groundwater Basin within the Sacramento River Hydrologic Region and the Suisun-Fairfield Valley Groundwater Basin within the San Francisco Bay Hydrologic Region.

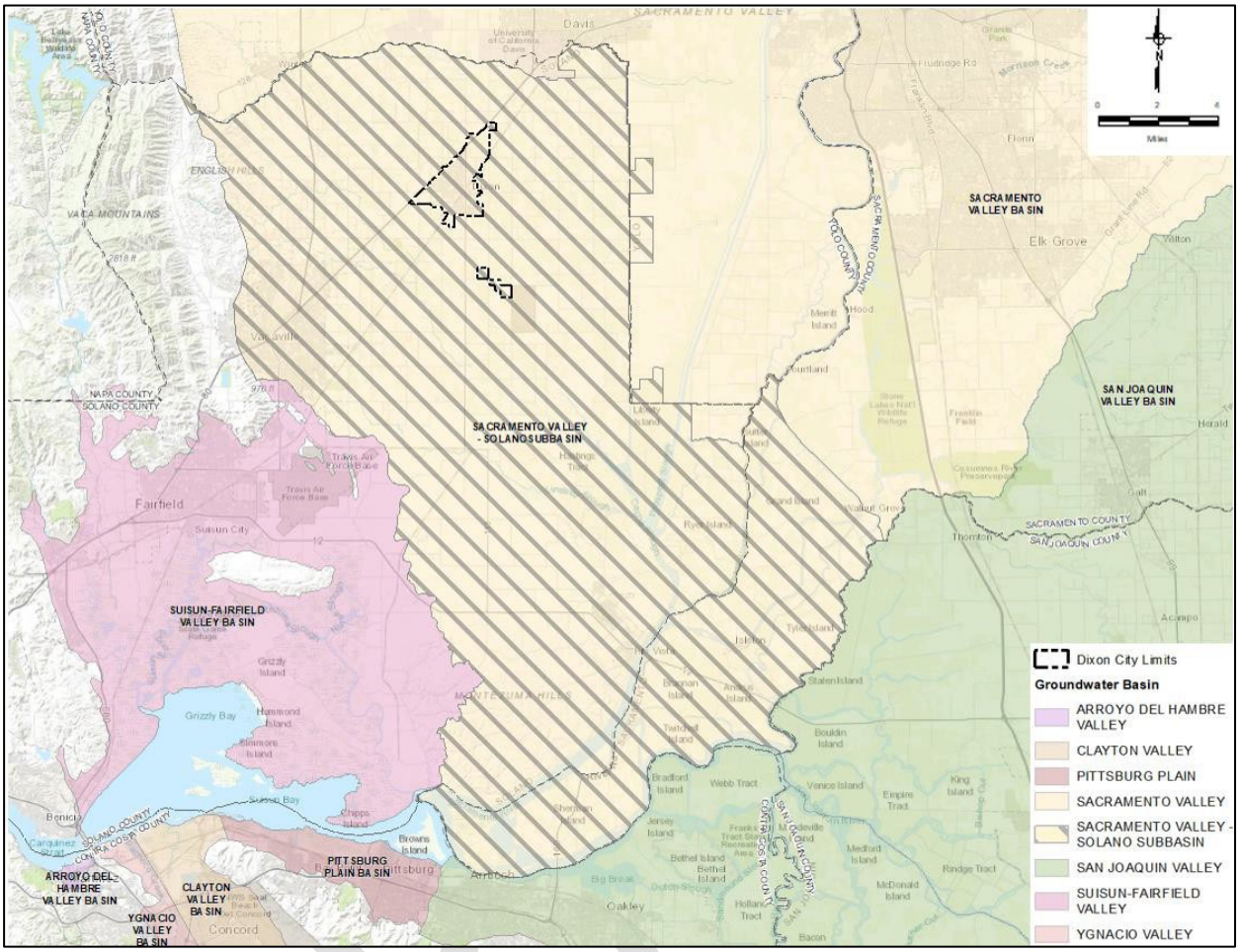


Figure 6-1. Sacramento Valley Basin – Solano Subbasin – DWR Defined Boundary

The City has partnered with other local users through the Solano Subbasin Groundwater Sustainability Agency (GSA). The Solano Subbasin GSA is a part of the Solano Collaborative, which comprises a total of five (5) GSAs to manage the groundwater basin. The following sections describe the management of groundwater in the Solano Subbasin.[7], the City's historical groundwater use, and the City's projected groundwater use.

Groundwater Basin Management

This section discusses historical groundwater management in the Solano Subbasin and evolving management organizational structures required by the Sustainable Groundwater Management Act of 2014 (SGMA). The Solano Subbasin is not an adjudicated basin, and DWR has identified the Subbasin as a medium-priority basin. Prior to the 1950s, groundwater was extensively used in Solano County for municipal and agricultural supplies. The Solano Subbasin Groundwater Sustainability Plan reports that

7 Solano Subbasin. Solano Subbasin GSA. Solano Collaborative. November 2021. Solano Subbasin Groundwater Sustainability Plan. Glossary.

overall long-term groundwater levels in the Subbasin are generally stable, with localized declines most notable in the northwestern region. In the 38,000-acre Northwest Focus Area, groundwater levels declined by approximately 10 feet between 1988 and 2018. Groundwater levels typically decrease during drought periods and recover during and after wet periods, with seasonal fluctuations driven by annual urban and agricultural pumping during the irrigation season.1

The Solano Project refers to the United States Bureau of Reclamation project to store surface water in Lake Berryessa for potable and non-potable uses primarily in Solano County. One of the primary reasons behind the Solano Project was to correct the overdraft of groundwater, which was occurring in agricultural areas. Since 1959, when the Solano Project began to supply surface water to Solano County, groundwater levels have rebounded in most areas of the Solano Subbasin. Groundwater level data presented in the North Central Solano County Groundwater Resources Report and additional data published by DWR indicate that current conditions show the subbasin is being managed sustainably. The groundwater levels are not permanently impacted by multiple dry years, and data also show slight variations in response to climatic conditions.

SGMA, a three-bill legislative package composed of AB 1739 (Dickinson), SB 1168 (Pavley), and SB 1319 (Pavley), was passed in September 2014. The legislation provides a framework for sustainable management of groundwater supplies by local authorities, with a limited role for state intervention when necessary to protect the resource. The legislation lays out a process and a timeline for local authorities to achieve sustainable management of groundwater basins. It also provides tools, authorities, and deadlines to take the necessary steps to achieve the goal. For local agencies involved in implementation, the requirements are significant and can be expected to take years to accomplish. The State Water Resources Control Board (State Water Board) may intervene if local agencies do not form a GSA and/or fail to adopt and implement a GSP.

Since the Solano Subbasin was designated as a medium-priority subbasin, a GSP was required to be developed and submitted to DWR by January 31, 2022. The City is a part of the Solano Subbasin GSA. The Solano Subbasin GSA is a Joint Powers Agency representing the City of Dixon, City of Rio Vista, Solano County, Dixon Resource Conservation District (RCD), Solano RCD, Maine Prairie Water District, and Reclamation District (RD) 2068 and associated members from the Solano Farm Bureau, Solano County Agricultural Advisory Committee, and Cal Water Dixon. The Joint Powers Agreement, effective June 8, 2017, created the Solano Subbasin GSA.

The Solano Subbasin GSA is part of the Solano Collaborative, which is made up of a total of five (5) GSAs located in the Solano Subbasin. The five GSAs include the following:

- Solano Subbasin GSA
- City of Vacaville GSA
- Northern Delta GSA
- Sacramento County GSA
- Solano Irrigation District GSA

The Collaboration Agreement, which formalizes the coordination between the five GSAs to develop and implement a single GSP, was executed on February 4, 2020. All of the GSAs in the Solano Collaborative have equal representation in the development and implementation of the Solano Subbasin GSP. The Collaboration Agreement allows the various agencies to work collaboratively to meet the requirements of SGMA. Existing groundwater and surface water monitoring programs have been implemented by a variety of local, state, and federal agencies and are often dictated by statutory and regulatory requirements. The Solano Subbasin GSP outlines how the Solano Collaborative plans to continue sustainable groundwater management in the Solano Subbasin.

Groundwater Use – Past Five Years

The City has historically relied solely on groundwater from the Solano Subbasin to meet its water demands. The City's groundwater use is equal to the actual water demand summarized in Table 4-1. The volume of groundwater pumped over the last five years is summarized in Table 6-1.

Table 6-1. Retail: Groundwater Pumped in Last Five Years (DWR Table 6-1)

Water Code Section 10631(4) and 10631(4)(c)

☐	Check the box if the supplier does not pump groundwater.					
☐	Check the box if all or part of the groundwater described below is desalinated.					
Groundwater Type Drop Down List May use each category multiple times	Location or Basin Name	2021*	2022*	2023*	2024*	2025*
Add additional rows as needed						
Alluvial Basin	Solano Subbasin[(a)]	704	704	711	810	807
TOTAL		704	704	711	810	807
*** Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Table 2-3.						
NOTES: (a) Volumes are in MG.						

Groundwater Use – Projected

The City currently plans to use groundwater in the future to meet all of its water demands. Table 6-2 summarizes the City's projected water supply through 2050. The City's projected water supply is equal to the projected water demand summarized in Table 4-3.

Table 6-2. Groundwater Supplies – Projected

Groundwater Type	Location or Basin Name	Projected Water Supply Volume [a, b]				
		2030	2035	2040	2045	2050
Alluvial Basin	Solano Subbasin	982	1,160	1,354	1,512	1,687

Notes:
Volumes are in MG.
Projected groundwater supplies are assumed to equal projected water demands, as the City relies exclusively on groundwater. Demand projections are based on LSCE's 2024 Water System Evaluation Report and the City's General Plan land use projections. Intermediate planning years were estimated using linear interpolation between established projection years.

6.2.3. Surface Water

The City holds some surface water rights associated with regional supplies; however, it does not currently have infrastructure in place to divert, treat, or distribute surface water. While the City does not plan to utilize surface water during this planning horizon, future evaluation of surface water integration may be considered to enhance long-term supply reliability. Per the Solano Subbasin GSP, the primary surface water bodies within the subbasin include Putah Creek, Lake Berryessa, and waterways within the Delta (Sacramento River, San Joaquin River, North Mokelumne River, and various sloughs).[8]

6.3. Stormwater

The City does not currently use or plan to use stormwater for beneficial reuse.

6.3.1. Wastewater and Recycled Water

The City is responsible for the collection, treatment, and disposal of wastewater within the City limits. The City operates the wastewater treatment facility (Dixon WWTF), which is located south of the City. Currently, no wastewater is recycled for use within the City limits.

Recycled Water Coordination

The City does not currently use recycled water and does not have plans in place to do so during the planning horizon of this UWMP.

Wastewater Collection, Treatment, and Disposal

The City provides wastewater services within the City limits. In this section, the City's collection system, treatment, and disposal services are described.

[8] Solano Subbasin. Solano Subbasin GSA. Solano Collaborative. November 2021. Solano Subbasin Groundwater Sustainability Plan. Section 3.3.7 Interconnected Surface Water.

Wastewater Collected Within Service Area

The City is served by a system of gravity sewers, lift stations, and force mains to collect wastewater. The collection system transports wastewater to the Dixon WWTF, located in the southern portion of the City. Substantially all of the City is served by the wastewater collection system, providing service to a population of approximately 19,000 persons, including Cal Water's water service area.[9] In 2025, the City collected 477 MG (equal to 1,461 acre-feet per year) of wastewater within the City limits. Even though the wastewater collected from Cal Water's water service area is not metered separately, The City estimates that 70 percent of the wastewater collected by the City is from its water service area.[10] Thus, 30 percent of the wastewater collected within the City limits is estimated to be from Cal Water's water service area.

A summary of the wastewater generated in the City's water service area is provided in Table 6-3 and excludes the volume of wastewater collected from Cal Water service area.

Table 6-3. Retail: Wastewater Collected Within City's Water Service Area in 2025 (DWR Table 6-2)

Water Code Section 10633(a)

☐	There is no wastewater collection system. The supplier will not complete the table below.			
	Percentage of 2025 service area covered by wastewater collection system *(optional)*			
	Percentage of 2025 service area population covered by wastewater collection system *(optional)*			
Wastewater Collection			Recipient of Collected Wastewater	
Name of Wastewater Collection Agency	Wastewater Volume Metered or Estimated? Drop Down List	Volume of Wastewater Collected from UWMP Service Area 2025[a,b] *	Name of Wastewater Treatment Plant (WWTP) and Place ID Number	Is WWTP Located Within UWMP Area? *Drop Down List*
City of Dixon	Estimated	334	Dixon WWTF, Place ID 220396	No
Total Wastewater Collected from Service Area in 2025:		334		
*** Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Table 2-3.				

NOTES:

(a) Volumes are in MG.

(b) The City's wastewater service area is larger than its water service area, as it includes Cal Water's water service area. The City collected 477 MG in 2025. According to Cal Water's 2020 UWMP, 70 percent of wastewater influent into the WWTF is from the City's service area. The remaining 30 percent of wastewater influent is assumed to come from Cal Water's water service area.

[9] United States Census Bureau. April 2020. *Quick Facts Dixon City, California*. Assessed at https://www.census.gov/quickfacts/dixoncitycalifornia on October 21, 2021.

[10] California Water Service. June 2021. 2020 Urban Water Management Plan - Dixon District.

Table 6-4. Retail: Wastewater Treatment and Outcomes Within UWMP Service Area (DWR Table 6-3)

Water Code Section 10633(b)

☑	**Check the box if no wastewater is treated or disposed of within the UWMP service area.** Proceed to the next table.													
Wastewater Treatment Plant Name and Place ID Number **Drop down list**	Does This Plant Treat Wastewater Generated Outside the UWMP Service Area? (OPTIONAL) **Drop down list**	2025 Volume of Wastewater Received from UWMP Service Area (As Reported in Submittal Table 6-2 R)[(a)]	Total 2025 Volume of Water Treated[(a)]	**2025 Outcomes of Treated Wastewater**[1, a]										
				Water Recycled Within UWMP Service Area (enter data as applicable)		**Water Recycled Outside of UWMP Service Area** (enter data as applicable)		**Effluent Discharge that is not a Permitted Recycled Water Use** (enter data as applicable)		**Required Discharge for Instream Flow** (enter data as applicable)		**Delivered to Another Entity for Additional Treatment** (enter data as applicable)		
				Treatment Level **Drop down list**	Volume	Treatment Level **Drop down list**	Volume	Treatment Level **Drop down list**	Volume[(a)]	Treatment Level **Drop down list**	Volume	Treatment Level **Drop down list**	Volume	Name of other entity
Add additional rows as needed														
Dixon WWTF, Place ID 22039		334	477		0		0	Secondary, Undisinfected	455					
Total		334	477		0		0		455		0		0	

NOTES:

[1] **Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Table 2-3.

Notes:

(a) Volumes are in MG.

(b) The City's wastewater service area is larger than its water service area, as it includes the Cal Water's water service area. The Dixon WWTF is located to the south of the City and is outside both the City water service area and Cal Water's water service area.

(c) The difference between the wastewater treated and the discharged treated wastewater is approximately 11 MG of effluent waste, which is activated sludge, and was sent back to the sludge stabilization basins for further treatment under aerobic digestion.

Table 6-5. Retail: Recycled Water Direct Beneficial Uses Within Service Area (DWR Table 6-4)

Water Code Section 10633(c),(d),(e)

☑	Check box if recycled water is not used and is not planned for use within the service area of the supplier. The supplier will only complete the column on "Potential Recycled Water Use" and submit an accompanying narrative on the feasibility of that potential recycled water use.
Name(s) of Facility/ies Producing (Treating) the Recycled Water (OPTIONAL) :	
Name of Supplier Operating the Recycled Water Distribution System (OPTIONAL) :	
Volume of Supplemental Water Added in 2025 (OPTIONAL) :	
Source of 2025 Supplemental Water (OPTIONAL) :	

Use Type **Drop down list**	**Potable or Non-Potable** (after treatment if treated) (OPTIONAL) Drop down list	Additional Information (as needed)	2025[1]	2030[1]	2035[1]	2040[1]	2045[1]	2050[1]	**Potential Recycled Water Use**	
									Volume	Narrative page number (OPTIONAL)
Add additional rows as needed										
Subtotal Potable			0	0	0	0	0	0	0	
Subtotal Non-Potable			0	0	0	0	0	0	0	
Total			0	0	0	0	0	0	0	0

1 Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Table 2-3.

NOTES:
(a) The City does not use not does it currently have plans in place to use recycled water. This table has been intentionally left blank.

Table 6-6. Retail: 2020 UWMP Recycled Water Use Projected Compared to 2025 Actual (DWR Table 6-5)

Water Code Section 10633(e)

☑	Check the box if recycled water was not used in 2025 nor previously projected for use in 2020. Proceed to next table.	
Use Type	2020 Projection for 2025[(a)]	2025 Actual Use[(a)]
Insert additional rows as needed.		
Agricultural irrigation		
Landscape irrigation (exc golf courses)		
Golf course irrigation		
Commercial use		
Industrial use		
Geothermal and other energy production		
Seawater intrusion barrier		
Recreational impoundment		
Wetlands or wildlife habitat		
Groundwater recharge (IPR)		
Reservoir water augmentation (IPR)		
Direct potable reuse		
Other (Description Required)		
Total	0	0
[1] **Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Table 2-3.		

NOTES:

(a) The City does not use recycled water, nor does it currently have plans in place to use recycled water. This table has been intentionally left blank.

Table 6-7. Retail: Methods to Encourage Future Recycled Water Use (DWR Table 6-6)

Water Code Section 10633(f)

☑	Check the box if the Supplier does not plan to expand recycled water use in the future. Supplier will not complete the table below but will provide narrative explanation.		
38	Provide page location of narrative in UWMP.		
Name of Action	Description	Planned Implementation Year	Expected Increase in Recycled Water Use *
Total			0
Unit Conversation to AF			
***Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Table 2-3.			
NOTES: (a) The City does not use not does it currently have plans in place to use recycled water. This table has been intentionally left blank.			

6.3.2. Desalinated Water

Desalination is the process of removing dissolved minerals from brackish or saltwater to produce freshwater that can be used for municipal needs such as drinking water and industrial uses. It is one of several elements that may be included in a community's water supply portfolio.

The City currently has no need to develop desalinated water supply sources for its long-term supply. Thus, the City has not included desalinated water in planning for its future water supply sources.

6.3.3. Water Exchanges and Transfers

Water exchanges or transfers between willing sellers and willing buyers supplement water supplies in dry times and move water to places of critical need. The City has a formal emergency water supply agreement with Cal Water (See Appendices to Appendix F - Water Shortage Contingency Plan). In anticipation of an emergency or disaster, water can be transferred through the interconnections between the two water systems.

The City does not plan to pursue water resource exchanges or transfers during this UWMP planning period unless there is an emergency or disaster. The City will continue to rely on its groundwater supply.

6.3.4. Future Water Projects

Water supply projects are recommended in the 2021 WSMP Update, an addendum to the 2016 WSMP, and are based on projected water demands and results from the existing and future water system capacity evaluations that were performed as part of the master plan update effort. The 2021 WSMP Update defines

near-term as 2040 and buildout as 2050. To meet near-term and buildout demands, the City will provide hex chrome treatment for the Homestead Well and reclassify the School Well as standby. The City added 80 feet of pump column to the School Well to lower the suction inlet, but production did not increase. The City is also planning on replacing the industrial well with a deep well at the Fitzgerald site that meets the hex chrome regulations with work beginning in April 2026.

Table 6-8 summarizes the recommended groundwater projects to increase water supply.

Table 6-8. Retail: Expected Future Water Supply Projects or Programs (DWR Table 6-7)

Water Code Section 10631(f)

☐	No expected future water supply projects or programs that provide a quantifiable increase to the agency's water supply. The supplier will not complete the table below.					
☐	Some or all of the supplier's future water supply projects or programs are not compatible with this table and are described in a narrative format.					
45	Provide page location of narrative in the UWMP.					
Name of Future Projects or Programs	Joint Project with other suppliers?		Additional Description (if needed)	Planned Implementation Year	Planned for Use in Year Type Drop Down List	Expected Increase in Water Supply to Supplier[a]* This may be a range
	Drop Down List (y/n)	If Yes, Supplier Name				
Add additional rows as needed						
Near-Term New Wells[b]	No		Construct 2 additional wells to replace existing infrastructure	By 2040	All Year Types	788
Buildout Improvements to Existing Wells[b]	No		Various improvement to Sites	By 2050	All Year Types	210
Buildout New Wells[b]	No		Construct 3 additional wells	By 2050	All Year Types	1,577
***Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Table 2-3.						

NOTES:

(a) Volumes are in MG.

(b) Water supply projects are recommended groundwater projects per the City's 2021 WSMP Update (see Table 10) to meet projected water demands and replace lost supply capacity from the Industrial Well. The Industrial Well is now on standby due to excessive sanding issues and other water quality concerns. The recommended projects may be implemented by the City as the need arises and as funding is available.

Per the City's 2016 WSMP, the City may explore the possibility of using its surface water rights in conjunction with groundwater in the future. Although the City does not anticipate having to rely on surface water supplies through the planning horizon of this UWMP, as regulations become more stringent

and regional water resources become scarcer, integration of other water supply sources could be desirable to strengthen management and sustainability of the groundwater resources and provide the City with additional supply reliability.

6.3.5. Summary of Existing and Planned Sources of Water

The City's existing water supplies and future projected normal year water supplies are summarized in Table 6-9 and Table 6-10, respectively.

Table 6-9. Retail: Water Supplies - Actual (DWR Table 6-8)

Water Code Section 10631(f)

Water Supply		2025		
Drop down list May use each category multiple times. These are the only water supply categories that will be recognized by the WUE data online submittal tool	Additional Description	Potable or Non-Potable (after treatment if treated)* (optional)[(a)]*	Actual Volume[(a)]*	Total Entitlement (optional)[(b)]* (optional)
Add additional rows as needed				
Groundwater (not desalinated)	City-owned and operated wells	807	Drinking Water	
Subtotal Potable		807		
Subtotal Non-Potable		0		
***Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Table 2-3.				

NOTES:
(a) Volumes are in MG.
(b) The total entitlement is intentionally left blank. The Solano Subbasin is not adjudicated and the City does not have a contract that limits its groundwater use. The City uses as much groundwater as is necessary to meet demands.

Table 6-10. Retail: Water Supplies Projected (DWR Table 6-9)

Water Code Section 10631(b)

Water Supply			Projected Water Supply (Report to the Extent Practicable) [a, b] *									
Drop down list May use each category multiple times. These are the only water supply categories that will be recognized by the WUEdata online submittal tool	Additional Detail on Water Supply	**Potable or Non-Potable** (after treatment if treated) (OPTIONAL) Drop Down list	**2030**		**2035**		**2040**		**2045**		**2050 (opt)**	
			Reasonably Available Volume	Total Entitlement (OPTIONAL) See 'DWR Notes' below	Reasonably Available Volume	Total Entitlement (OPTIONAL) See 'DWR Notes' below	Reasonably Available Volume	Total Entitlement (OPTIONAL) See 'DWR Notes' below	Reasonably Available Volume	Total Entitlement (OPTIONAL) See 'DWR Notes' below	Reasonably Available Volume	Total Entitlement (OPTIONAL) See 'DWR Notes' below
Add additional rows as needed												
			982		1,160		1,334		1,512		1,687	
Subtotal Potable			982	0	1,160	0	1,334	0	1,512	0	1,687	0
Subtotal Non-Potable			0	0	0	0	0	0	0	0	0	0
Total			982	0	1,160	0	1,334	0	1,512	0	1,687	0

***Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Submittal Table 2-3.
Total Entitlement: e.g., Water Right, Groundwater Allocation, Contracted Amount.

NOTES:

(a) Volumes are in MG.

The Solano Subbasin is not adjudicated and is not in overdraft or expected to be in overdraft. The City does not have a contract that limits its groundwater use and uses as much groundwater as is necessary to meet demands. The volumes shown are equal to the projected demands and are not intended to represent the City's maximum pumping volume.

6.3.6. Special Conditions

The City's water supply availability may be affected by climate change impacts and regulatory actions.

Climate Change Impacts

In 2011, Solano County developed a Climate Action Plan (CAP) to evaluate the potential impacts of climate change for the county. The global climate change effects include increased average temperature, subsequent altered precipitation patterns, thermal expansion of the ocean, and reduced extent of polar and global sea ice. The CAP anticipates that these effects will translate to the following impacts on Solano County:

- Sea level rise with possible increases in coastal flooding
- Saltwater intrusion
- Water supply shortages
- Energy supply shortages
- Increased occurrence and severity of flooding, storms, and wildfires
- Habitat loss and species endangerment
- Decline in agricultural production

While not all the effects listed in the CAP may impact the City, the City's groundwater, its sole water supply source, may still be impacted.

The Solano County Multi-Jurisdictional Hazard Mitigation Plan (July 2021) included a Climate Vulnerability Assessment (CVA). The CVA evaluates each previously identified climate change-related vulnerability for the City. The CVA indicates that the City is vulnerable to increased intensity of storms, droughts, and fires.

The City has implemented strategies to efficiently use its groundwater supply in response to climate change effects. In cooperation with Solano County, the City conducts water conservation outreach and provides incentives for its customers. Installation of water-efficient plumbing fixtures in remodels, renovations, and new constructions is required. Furthermore, the City has adopted the State's model water landscape ordinance (DMC 13.02.275) and requires new construction to conform with these requirements, including the requirement to use drought-resistant landscaping. The City's efforts in reducing water demands are further described in Chapter 9.

Regulatory Conditions

Emerging regulatory conditions and planned future projects may affect the characterization of future water supply availability and analysis. As described in Section 6.2.8, the City plans to continue relying on groundwater wells to meet future demands by rehabilitating existing wells and constructing new wells as needed to serve projected growth.

A key regulatory consideration for the City's groundwater supply is hexavalent chromium (Cr(VI)). The City's existing groundwater wells contain Cr(VI) concentrations that are generally above 10 micrograms

per liter (µg/L), which corresponds to the State Water Resources Control Board's current maximum contaminant level (MCL) for Cr(VI). The original California Cr(VI) MCL of 10 µg/L became effective on July 1, 2014. Senate Bill 385 required full compliance with the Cr(VI) MCL at the earliest feasible date prior to January 1, 2020. However, on May 31, 2017, the Sacramento County Superior Court invalidated the Cr(VI) MCL, with the decision becoming effective September 11, 2017. The court determined that the California Department of Public Health did not adequately consider the economic feasibility of compliance when adopting the MCL.

Following the court decision, the State Water Resources Control Board initiated development of a new Cr(VI) MCL. On October 1, 2024, the State Water Board adopted a revised MCL for Cr(VI) of 10 µg/L. For water systems with 1,000 to 9,999 service connections, which includes the City, the compliance date for meeting the new Cr(VI) MCL is October 1, 2027.

In response to this regulatory requirement, the City has initiated pilot testing of treatment technologies to evaluate feasible approaches for removal of Cr(VI) from its groundwater supplies. The results of this pilot testing will inform the design and implementation of treatment systems for existing wells and future groundwater production facilities. Because groundwater in the area is expected to contain Cr(VI), treatment is anticipated to be incorporated into future well development projects as necessary to comply with drinking water regulations. Implementation of treatment systems is not expected to reduce the availability of groundwater supply but will ensure that water produced by the City's wells meets applicable drinking water standards.

6.4. Energy Intensity

In accordance with CWC §10631.2(a), the energy intensity to provide water service to the City's water customers over a one-year period is presented in this section to the extent that the information is available. The amount of energy to pump, treat, and distribute the City's water supply within the system it owns and operates is included.

Water energy intensity is the total amount of energy in kilowatt hours (kWh), calculated on a whole-system basis, expended on a per-million-gallon basis, to deliver water from the City's sources to its water customers. Understanding the whole-system energy intensity would allow the City to make informed strategies in managing its water supplies and operating its system as follows:

- Identifying energy-saving opportunities, as energy consumption is often a large portion of the cost of delivering water
- Calculating energy savings and GHG emissions reductions associated with water conservation programs
- Potential opportunities for receiving energy efficiency funding for water conservation programs
- Informing climate change mitigation strategies
- Benchmarking of energy use at each water acquisition and delivery step, and the ability to compare energy use among similar agencies

In Table 6-11 below, the energy intensity of the City's water service is calculated for 2025. The total energy intensity for the City's water service area is 1,782 kWh/MG.

Table 6-11. Energy Intensity – Total Utility Approach (DWR Table O-1B)

Water Delivery Product drop down list (If delivering more than one type of product recommend using Table O-1C)	Retail Potable Deliveries	**Only for Water Delivery Products Under the Urban Water Supplier's Operational Control**		
Start Date of Reporting Period	1/1/2025	**Sum of All Water Management Processes**	**Non-Consequential Hydropower**	
End Date of Reporting Period	12/31/2025			
Is upstream embedded energy in the values reported?	No			
Units of Measure for Water		**Total Utility** See DWR NOTES	**Hydropower**	**Net Utility**
Volume of Water Entering Process		807	0	807
Energy Consumed (kWh)		1,437,746	0	1,437,746
Energy Intensity (kWh/vol. converted to MG)		1,782	0	1,782

DWR NOTES:
Total Utility: The volume of water entered in the "Total Utility" column should equal the volume of water entering the distribution system (excluding recycled water); in most cases, this is the total volume calculated in UWMP Table 4-1: 2025 Actual Total Uses for Potable and Non-Potable Water. Note if recycled water is included in your Submittal Table 4-1, you must exclude it from your volume in this table.

Quantity of Self-Generated Renewable Energy

0	kWh

Data Quality (Estimate, Metered Data, Combination of Estimates and Metered Data)

Metered Data

Data Quality Narrative:

Monthly electrical energy data was provided for groundwater wells and storage tank pump stations.

Narrative:

The City's water service area is supplied by groundwater from City-owned wells. Refer to Section 6.2 for an in-depth explanation of the City's groundwater supply. The energy data provided summarized the monthly energy consumption for operating the groundwater wells and storage tanks.

As discussed in Section 6.2.5, the City provides wastewater collection, treatment, and disposal services to customers within its limits, including the City water service area and Cal Water's water service area. The City owns and operates the wastewater collection, treatment, and disposal system. The energy intensity associated with the City's wastewater services for 2025 is provided in Table 6-12. The energy intensity associated with the collection and conveyance is approximately 31 kWh/MG. The energy intensity associated with the wastewater treatment process is 3,370 kWh/MG.

Table 6-12. Energy Intensity – Wastewater & Recycled Water (DWR Table O-2)

		Only for Water Delivery Products Under the Urban Water Supplier's Operational Control			
Start Date of Reporting Period	1/1/2025				
End Date of Reporting Period	12/30/2025				
Is upstream embedded energy in the values reported?	Yes	Water Management Process			
Units of Measure for Water	MG	Collection / Conveyance	Treatment	Discharge / Distribution	Total
Volume of Wastewater Entering Process (volume units selected above)		477	477	455	1409
Wastewater Energy Consumed (kWh)		14,604	1,607,600	0	1,622,204
Wastewater Energy Intensity (kWh/volume converted to MG)		30.6	3,370.2	0.0	1,151.3
Volume of Recycled Water Entering Process (volume units selected above)		0	0	0	0
Recycled Water Energy Consumed (kWh)		0	0	0	0
Recycled Water Energy Intensity (kWh/volume converted to MG)		0.0	0.0	0.0	0.0

Quantity of Self-Generated Renewable Energy related to recycled water and wastewater operations

N/A kWh

Data Quality (drop down)

Metered Data

Data Quality Narrative:

City of Dixon provided the energy consumed for the collection/conveyance process and the wastewater treatment process at the City's wastewater treatment facility (WWTF) for the 2025 calendar year. The total energy consumed for the collection/conveyance process is for the City's one lift station, Lincoln Street lift station.

Narrative:

The City is responsible for the collection, treatment, and disposal of wastewater for the City, including its water service area and Cal Water's service area. The WWTF uses an activated sludge process and the treated wastewater discharged from the facility is used to recharge the local aquifer through percolation ponds located at the WWTF. The difference between the wastewater treated and the discharged treated wastewater of approximately 22 MG is effluent waste activated sludge, which is sent back to the sludge stabilization basins for further treatment under aerobic digestion. The City does not produce or distribute recycled water.

CHAPTER 7. WATER SERVICE RELIABILITY AND DROUGHT RISK ASSESSMENT

This chapter discusses the City's water supply reliability under varying conditions through 2050. Factors impacting long-term reliability of water supplies are discussed. In assessing the City's water supply reliability, a comparison of projected water supplies and projected water demand in normal, single dry, and five consecutive dry years is provided for the City's water service area. This chapter also includes the City's Drought Risk Assessment (DRA) for the next five years. Findings show that the City's water supplies are sufficient to meet the existing and projected water demands during normal and dry conditions.

7.1. Water Service Reliability Assessment

The City's water supply reliability reflects its ability to meet the needs of its water customers with its water supply under varying conditions. Details from Chapter 4, which describes the City's water use, and Chapter 6, which describes the City's water supply, are incorporated in this chapter to conduct the assessment. Findings from this assessment influence the City's water management decisions.

7.1.1. Constraints on Water Sources

The City's water supply is from City-owned and operated groundwater wells located within the City's water service area. The City's groundwater supply is impacted by groundwater availability, groundwater quality, and climate change. Prior to 1959, the Solano Subbasin showed groundwater levels declining due to increased agricultural and urban development. After the implementation of the Solano Project in 1959 to store surface water in Lake Berryessa, groundwater levels in the Solano Subbasin have rebounded, and the subbasin is in a state of equilibrium. Since the 1980s, the groundwater levels have been stable with low levels in the dry season and high levels in the wet season of each year. This trend is shown with monitoring well 07N01E12N002M, which is the closest monitoring well to the City.[11] Prior to 1980, groundwater levels (depth to water) ranged from 50 to 90 feet in the alluvial zone. After 1980, groundwater levels ranged from 5 to 50 feet. Per the City's 2016 WSMP, the quality of groundwater underlying the City in the Solano Subbasin is good quality and is suitable for domestic and agricultural purposes. Total dissolved solids (TDS) concentrations generally range from 250 to 500 milligrams per liter (mg/L) and are comprised predominantly of calcium, magnesium, and sodium cations and bicarbonate anions. The groundwater is hard to very hard. Section 6.2.10.2 discusses the growing concern for Cr(VI) for the City's groundwater supply.

LSCE's 2024 Water System Evaluation report evaluated the City's future system capacity to meet projected water demands to buildout (2050). The City's 2024 Water System Evaluation report recommended construction of two groundwater wells to meet the projected future water demands.

[11] Solano Subbasin. Solano Subbasin GSA. Solano Collaborative. November 2021. Solano Subbasin Groundwater Sustainability Plan. *Figure 3-10a Groundwater Level Hydrographs: Alluvial Zone and Other Shallow Deposits*

7.1.2. Year Type Characterization

Water supply reliability is assessed based on the characteristics of the City's water supplies during various water year types, which are provided in this section. CWC §10635(a) requires that the City's water service reliability be assessed based on the following three water year types:

1. Normal Year – This condition represents the water supplies the City considers available during normal conditions. This could be a single year or an averaged range of years in the historical sequence that most closely represents the median or average water supply available. The year 2006 represents a normal year for the City. This year represents the City's typical year where all of its combined water supply sources are available to meet demands. Annual precipitation data from 2005 to 2025 were reviewed, and precipitation data from 2005 to 2011 were selected to determine the City's normal year. A statewide drought occurred from 2012 to 2016. The years 2017 to 2020 were either wet years or dry years. Years 2021 through 2025 were near average in terms of average rainfall over the last five years (2021-2025). However, 2021 was a dry year, while 2023 was considered a wet year.
2. Single Dry Year – This condition represents the year with the lowest water supply availability to the City. The year 2013 represents the Single Dry Year for the City.
3. Five-Consecutive-Year Drought – This condition represents a five-consecutive-year drought period, such as the lowest average water supply available to the Supplier for five years in a row since 2005. The Years 2011 through 2015 represent the five consecutive-year drought for the City.

The basis of the hydrologic years used precipitation data from CIMIS Station 6, located in Davis, California, the closest CIMIS monitoring station to the City. The City does have a weather station at the Dixon WWTF, but the 2025 UWMP references the closest CIMIS monitoring station. Annual precipitation data from 2005 to 2025 were reviewed to determine the base years. During a portion of this time period, the City was in a Joint Powers Agreement (JPA) with Solano Irrigation District (SID) from 1984 to 2014. The City managed the administrative aspect of the public water system, while SID conducted operations and maintenance. When the JPA expired in 2014, the City assumed full ownership and operations of the public water system after the State Water Board issued a permit to operate the water system directly to the City. Years that the City identifies as the historical average, single driest year, and driest multi-year period are shown in Table 7-1.

Table 7-1. Basis of Water Year Data

Water Year Type	Base Year(s)
Normal Water Year	2006
Single Dry Water Year	2013
Five-Consecutive-Year Drought	2011 - 2015

Table 7-2 summarizes each year's type for the City's water supply portfolio. These years are also known as the "Base Years". Since the City's sole water supply source is groundwater, the volumes shown in Table 7-2 are the actual volume of water supplied during each of those years rather than the groundwater volume that is available. The City uses as much groundwater as necessary to meet demands and the water supply volumes in Table 7-2 indicate that the groundwater supply is sufficient to meet demands as needed.

Table 7-2. Retail: Basis of Water Year Data for Groundwater Supply (DWR Table 7-1)

Year Type	Base Year If not using a calendar year, type in the last year of the fiscal, water year, or range of years, for example, water year 2024-2025, use 2025	Available Supplies if Year Type Repeats	
		☐ Check the box if quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP. **Location: [insert location from UWMP]**	
		Quantification of available supplies is provided in this table as either volume only, percent only, or both.	
		Volume Available[a, b] *	% of Average Supply
Average Year	2006	742	100%
Single-Dry Year	2013	519	100%
Consecutive Dry Years 1st Year	2011	694	100%
Consecutive Dry Years 2nd Year	2012	730	100%
Consecutive Dry Years 3rd Year	2013	777	100%
Consecutive Dry Years 4th Year	2014	578	100%
Consecutive Dry Years 5th Year	2015	519	100%
***Units of measure (AF, CCF, MG**) must remain consistent throughout the UWMP as reported in Table 2-3.			

NOTES:

(a) Volumes are in MG.

(b) The volumes shown are the actual water volume supplied during the respective year and not the water supply available during each base year. The City uses as much groundwater as is necessary to meet demands and therefore, the volumes shown indicate that the groundwater supply is sufficient to meet demands as needed.

7.1.3. Water Service Reliability

In this section, the City's normal, single dry, and five consecutive dry years projected supplies and demands are integrated and compared. Projected water demands are detailed in Chapter 4, and projected water supplies are detailed in Chapter 6. Under the various water year types, the total annual water supply sources available are compared to the total annual projected water use for the City's water service area from 2030 to 2050 in five-year increments.

As explained in Chapter 6, the City's groundwater supply is expected to meet the City's projected water demands. The City relies on groundwater from the Solano Subbasin, which is not adjudicated and is not currently in overdraft nor expected to be in overdraft. The Solano Subbasin benefited from the development of the Solano Project, which allowed for the storage and use of surface water and contributed to the recovery of groundwater levels. The basin is monitored and managed through the Solano Collaborative and implementation of the Solano Subbasin Groundwater Sustainability Plan. Based on available basin monitoring data and groundwater management planning efforts, groundwater levels in the vicinity of the City's wells have remained relatively stable, and projected groundwater demands through the 2050 planning horizon remain within the range of historical pumping volumes

The City is not limited in how much groundwater it can use. The City only uses as much groundwater as is necessary to meet its demands. Thus, the projected water supply and demand are equal for each base year type.

Water Service Reliability – Normal Year

Projected normal year supply from Chapter 6 and projected water use demand from Chapter 4 are compared in Table 7-3. The City's water supplies are reliable during normal years. No water supply shortage is anticipated during normal years through 2050.

Table 7-3. Retail: Normal Year Supply and Use Comparison (DWR Table 7-2)

Water Code Section 10635(a)

	2030[a]	2035[a]	2040[a]	2045[a]	2050[a]
Supply totals[a, b] (autofill from Table 6-9)	982	1,160	1,334	1,512	1,687
Use totals[a, b] (autofill from Table 4-3)	982	1,160	1,334	1,512	1,687
Surplus/(shortfall)	0	0	0	0	0
***Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Table 2-3.					

NOTES:

(a) Volumes are in MG.

(b) The Solano Subbasin is not adjudicated and is not in overdraft or expected to be in overdraft. The City uses as much groundwater as is necessary to meet use, and therefore, the volumes shown are equal to the projected use. This indicates that the groundwater supply is sufficient to meet use as needed.

Water Service Reliability – Single Dry Year

Projected single dry year supply and projected use are compared in Table 7-4. No water supply shortage is anticipated during single dry years through 2050. The City's water supplies are reliable during single dry years.

Table 7-4. Retail: Single Dry Year Supply and Use Comparison (DWR Table 7-3)
Water Code Section 10635(a)

	2030[a]	2035[a]	2040[a]	2045[a]	2050[a]
Supply totals[a, b]*	982	1,160	1,334	1,512	1,687
Use totals[a, b]*	982	1,160	1,334	1,512	1,687
Surplus/(shortfall)	0	0	0	0	0
***Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Table 2-3.					

NOTES:
(a) Volumes are in MG.
(b) The Solano Subbasin is not adjudicated and is not in overdraft or expected to be in overdraft. The City uses as much groundwater as is necessary to meet use, and therefore, the volumes shown are equal to the projected use. This indicates that the groundwater supply is sufficient to meet use as needed.

Water Service Reliability – Five Consecutive Dry Years

Projected five consecutive dry years supply and projected water use are compared in Table 7-5. No water supply shortage is anticipated during the five consecutive dry years through 2050. The City's water supplies are reliable during a five-year consecutive dry period.

Table 7-5. Retail: Multiple Dry Years Supply and Use Comparison (DWR Table 7-4)

Water Code Section 10635(a)

		2030[a]	2035[a]	2040[a]	2045[a]	2050[a]
First year	Supply totals[a, b]	982	1,160	1,334	1,512	1,687
	Use totals[a, b]	982	1,160	1,334	1,512	1,687
	Surplus/(shortfall)	0	0	0	0	0
Second year	Supply totals[a, b]	1,018	1,195	1,370	1,547	1,722
	Use totals[a, b]	1,018	1,195	1,370	1,547	1,722
	Surplus/(shortfall)	0	0	0	0	0
Third year	Supply totals[a, b]	1,053	1,230	1,405	1,582	1,757
	Use totals[a, b]	1,053	1,230	1,405	1,582	1,757
	Surplus/(shortfall)	0	0	0	0	0
Fourth year	Supply totals[a, b]	1,089	1,264	1,441	1,617	1,792
	Use totals[a, b]	1,089	1,264	1,441	1,617	1,792
	Surplus/(shortfall)	0	0	0	0	0
Fifth year	Supply totals[a, b]	1,124	1,299	1,476	1,652	1,827
	Use totals[a, b]	1,124	1,299	1,476	1,652	1,827
	Surplus/(shortfall)	0	0	0	0	0

***Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Table 2-3.

NOTES:

(a) Volumes are in MG.

(b) The Solano Subbasin is not adjudicated and is not in overdraft or expected to be in overdraft. The City uses as much groundwater as is necessary to meet use, and therefore, the volumes shown are equal to the projected use. This indicates that the groundwater supply is sufficient to meet use as needed.

7.2. Description of Management Tools and Options

As described in Chapter 6, the City plans to continue to use groundwater as necessary to meet its projected water use during the different base years. Per the City's 2024 Water Supply Evaluation,

groundwater is expected to be sufficient to meet all projected use, assuming the City constructs new groundwater wells as the need arises. The City will continue to monitor its existing groundwater wells and continue to participate in the Solano Subbasin GSA and the Solano Collaborative to continue groundwater management of the Solano Subbasin.

7.3. Drought Risk Assessment

CWC §10635(b) requires that the City prepare a DRA based on the supply condition associated with the five driest consecutive years on record. This supply condition is to be assumed to occur over the next five years, from 2026 through 2030.

This section reviews the data and methods used to define the DRA water shortage condition and evaluates each water source's reliability under the proposed drought condition. Total water supplies during the five-year drought are compared to projected use, accounting for any applicable supply augmentation or demand reduction measures available to the City.

This DRA would allow the City to prepare for a potential water shortage and for implementation of its Water Shortage Contingency Plan, if necessary. Findings show that, should the region experience a five-year consecutive dry period starting in 2026, adequate water supplies are available to meet projected use.

7.3.1. Data, Methods, and Basis for Water Shortage Condition

The DRA was performed for 2021 through 2025 using the same five-consecutive-dry-years period conditions presented in Section 7.1.3.3. The 2025 projected water use demand is based on water use projections developed for the City's 2021 WSMP Update.[12] combined with known approved, accelerated developments within the City's water service area. The City's 2021 WSMP Update incorporated the most recent and accurate future development estimates and unit water use factors available to develop water use projections. Future water use demands for 2022 through 2025 were linearly interpolated between the 2021 actual water use demand and the 2025 water use demand projections.

7.3.2. DRA Water Source Reliability

Chapter 6 provides an in-depth discussion on the reliability of the City's groundwater supply. The City pumps groundwater from the Solano Subbasin. The Solano Subbasin is not adjudicated and is not in overdraft or expected to be in overdraft. The City uses as much groundwater as is necessary to meet water use demands, and therefore, the volumes shown are equal to the projected water use demands. Per the City's 2021 WSMP Update, groundwater is expected to be sufficient to meet all projected water use demands, assuming the City rehabilitates existing groundwater wells and constructs new groundwater wells as the need arises.

[12] West Yost, December 2021. City of Dixon Water System Master Plan Update.

7.3.3. Total Water Supply and Use Comparison

As shown in Table 7-6, during the five-year drought beginning in 2021, the City's groundwater supply is projected to be adequate to meet projected water use demands through 2025, even without water conservation.

Table 7-6. Retail: Five-Year Drought Risk Assessment (DWR Table 7-5)
Water Code Section 10635(b)(3)

2026	Total [a, b]
Total Water Use	843
Total Supplies	843
Surplus/Shortfall w/o WSCP Action	0
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	0
2027	Total [a, b]
Total Water Use	878
Total Supplies	878
Surplus/Shortfall w/o WSCP Action	0
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	0
2028	Total [a, b]
Total Water Use	913
Total Supplies	913
Surplus/Shortfall w/o WSCP Action	0
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	0
2029	Total [a, b]

Total Water Use	948
Total Supplies	948
Surplus/Shortfall w/o WSCP Action	0
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	0
2030	Total [a, b]
Total Water Use	982
Total Supplies	982
Surplus/Shortfall w/o WSCP Action	0
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	0
NOTES: (a) Volumes are in MG. (b) Total water use for 2026 through 2030 is projected.	

CHAPTER 8. WATER SHORTAGE CONTINGENCY PLAN

This chapter discusses the City's Water Shortage Contingency Plan (WSCP), seismic risk to City facilities, and WSCP adoption procedures. The City's WSCP is included as Appendix F and incorporated herein by reference. Inclusion as a standalone appendix allows the WSCP to be updated outside of the UWMP preparation cycle, consistent with California Water Code §10632.

8.1. Background

Water shortages occur whenever the available water supply cannot meet the normally expected customer water use. This can be due to several reasons, including climate change, drought, and catastrophic events. Drought, regulatory action constraints, and natural and manmade disasters may occur at any time. A WSCP presents how an urban water supplier plans to respond to a water shortage condition and helps prevent catastrophic service disruptions.

In 2018, the California State Legislature enacted two policy bills, (SB 606 (Hertzberg) and AB 1668 (Friedman)) (2018 Water Conservation Legislation), to establish a new foundation for long-term improvements in water conservation and drought planning to adapt to climate change and the resulting longer and more intense droughts in California. The 2018 Water Conservation Legislation amended California Water Code §10632 and established updated requirements for water shortage contingency planning. The City's WSCP has been prepared to comply with these statutory requirements.

8.2. City Water Shortage Contingency Plan

The City's WSCP was developed to provide a strategic plan for preparing and responding to water shortages. The WSCP establishes six water shortage levels and associated response actions, and addresses the City's legal authorities, communication protocols, enforcement procedures, financial considerations, and monitoring and reporting requirements.

The WSCP is intended to function as an adaptive management framework, allowing the City to evaluate response effectiveness and adjust actions in response to changing hydrologic, regulatory, or emergency conditions. Therefore, the City's WSCP is included in this plan as Appendix F to allow for updates to be made outside of the UWMP preparation process. When an update to the WSCP is proposed, the revised WSCP will undergo the process described in Section 8.4.

8.3. Seismic Risk Assessment and Mitigation Plan

CWC §10632.5(a) requires that UWMPs include a seismic risk assessment and mitigation plan to assess and mitigate a water system's seismic vulnerabilities. Details of the City's seismic risk assessment and mitigation plan, prepared in accordance with CWC §10632.5(a), are provided in Appendix F, Section 4.6.

8.4. Plan Adoption, Submittal, and Availability

The City's WSCP (Appendix F) is adopted concurrently with this 2025 UWMP by separate resolution. Prior to adoption, a duly noticed public hearing was conducted. An electronic copy of the WSCP will be submitted to DWR within 30 days of adoption.

No later than 30 days after adoption, an electronic copy of the WSCP will be available for public review and download on the City's website, https://www.cityofdixonca.gov. A copy will also be provided to Solano County.

The City's WSCP is an adaptive management plan and is subject to refinements as needed to ensure that the City's shortage response actions and mitigation strategies are effective and produce the desired results. Any future revisions to the WSCP will be adopted by City Council resolution following public notice and will be distributed in accordance with applicable statutory requirements.

CHAPTER 9. DEMAND MANAGEMENT MEASURES

The City implements demand management measures to sustainably manage its water resources. If not mitigated, reliability may be reduced due to an increase in water demand and/or changes in water supplies due to climate change and other factors. The implementation of demand management measures can help improve water service reliability and help meet City and State water conservation goals. This chapter describes the City's historical and existing water conservation program, the status of implementation of Demand Management Measures (DMMs), and projected future conservation implementation.

9.1. Demand Management Measures

The City is required to describe the following six DMMs in this UWMP:

- Water waste prevention ordinances
- Metering
- Conservation pricing
- Public education and outreach
- Programs to assess and manage the distribution system real loss
- Water conservation program coordination and staffing support

The City is also required to describe any additional demand management measures, including innovative strategies, that significantly affect water use as measured in gallons per capita per day, if implemented.

For each of the DMMs, the current program is described along with plans for continued implementation. Since the City became an urban water supplier in 2021, the City was not required to describe how the DMM was implemented over the previous five years to achieve water use targets in the 2020 UWMP.

9.1.1. Water Waste Prevention Ordinances

DMM Description

Dixon Municipal Code (DMC) Section 14.02. Article IX (Appendix G) is dedicated to water conservation. DMC Section 14.02.905 prohibits water waste by restricting specific uses, including watering lawns in a manner that causes runoff, washing motor vehicles with hoses not equipped with a shutoff nozzle, and hosing off driveways and sidewalks. The restrictions are enforceable per DMC Section 09.01.600 and are administered by the City. Other water conservation efforts in DMC Section 14.02.900 include requiring operators of hotels or motels to provide guests with the option of choosing not to have towels and linens laundered daily and ceasing the watering of turf areas located on public right-of-way.

Plans for Continued Implementation

The City will continue to implement this DMM. Although water savings from this program cannot be directly quantified, this DMM is expected to help the City achieve its future water use objectives by

minimizing the non-essential uses of water so that water is available for human consumption, sanitation, and fire protection.

The City anticipates revising its DMC to support its WSCP (Appendix F). At that time, the Sections discussed herein may be refined.

9.1.2. Metering

DMM Description

The City's entire water service area is fully metered. In accordance with DMC Section 14.02.630, all connections are billed based on user class, reflecting the different capacity and water volume requirements for each class. Per DMC Section 14.02.630, each user in a class pays charges in two (2) parts: a service charge based on the size of the water meter regardless of water use and a volumetric charge at the rate that applies to the customer's volume of use during the applicable billing cycle. The volumetric water rate structure includes three-tier for single-family residential customers and a two-tier for commercial, industrial, institutional, irrigation and construction are uniformed rates.

In 2018, the City completed a multi-year water rate study and adopted and implemented updated water rates starting in Fiscal Year 2019. However, the updated water rates were repealed by the general election on November 3, 2020. In 2024, the City completed a cost-of-service water rate study, which went into effect on August 1, 2024. The City's current single-family residential water rate schedule and meter fees, effective July 2025, are presented in Table 9-1 and Table 9-2, respectively.

Table 9-1. City of Dixon Water Rates (Volumetric Charge)

Tier	Water Use (CCF)	Rate ($/CCF)
Single Family Residential – Tier 1	1-6	$2.18
Single Family Residential – Tier 2	7-21	$2.47
Single Family Residential – Tier 3	22+	$2.99
CCF = hundred cubic feet		

Table 9-2. City of Dixon Meter Fees (Service Charge)

Meter Size (inches)	Rate ($/bi-monthly)
¾	$26.42
1	$37.82
1.5	$66.32
2	$100.52
3	$208.82
4	$368.42
6	$750.32

Plans for Continued Implementation

Continued implementation of this DMM is expected to help the City achieve its water efficiency goals by providing accurate water use information to the customer and the City. The meters allow the City to track customer water use and compare current use to historical data. They also allow customers to make informed decisions in managing their water use.

9.1.3. Conservation Pricing

DMM Description

The City's water operations are organized as an Enterprise Fund in which the costs of providing goods or services to the general public on a continuing basis are financed or recovered primarily through user charges. As discussed above, single-family residential customers are billed based on a tiered volumetric charge, while all other customers are billed based on a uniform volumetric charge. During times of drought, the City may consider implementing drought rates to maintain financial stability.

Plans for Continued Implementation

This DMM was expected to help the City achieve its water efficiency goals by ensuring water customers pay the true cost of water and to adequately fund water system operations and maintenance, including repair and replacement programs, and water conservation programs. The water rate structure, which took effect on August 1, 2024, will help address these concerns.

9.1.4. Public Education and Outreach

DMM Description

The City interacts with the public through a water conservation website for its customers (https://www.cityofdixonca.gov/departments/utilities/WaterConservation). The City partners with Solano County Water Agency (SCWA) to promote water conservation, and the rebate programs are described in Section 9.1.7. The City's website provides information on rebates and links to valuable water conservation information as follows:

- Solano County Water Agency, which provides real-time data, interactive maps, and flood monitoring in Solano County: https://www.scwamonitoring.com/index.html
- Sacramento Tree Foundation's Caring for Trees in a Drought, which provides tips on how to conserve water and grow healthy trees in a drought: https://bewatersmart.info/wp-content/uploads/2014/07/STF_TreesInDrought_English.pdf
- Association of California Water Agencies (ACWA) and DWR's Save Our Water Program, which provides water conservation tips: https://saveourwater.com/#1.
- Cal Water's conservation webpage, which provides water conservation tips and other informational resources: https://www.calwater.com/conservation/conservation/

- Today's Homeowner webpage discusses sustainable living through water conservation and how to save money on your utility bill: https://todayshomeowner.com/eco-friendly/sustainable-living/
- The City's website includes flyers in English and Spanish with information regarding the City's water savings assistance program for toilets: https://www.cityofdixonca.gov/media/Water/Conservation/Water%20Savings%20Assistance%20Program%20Cut%20Sheet%20%20(6).pdf

  and

  https://www.cityofdixonca.gov/media/Water/Conservation/Water%20Savings%20Assistance%20Program%20Final%20%20Final%20%20(2).pdf

Plans for Continued Implementation

Continued implementation of this DMM is expected to help the City achieve its water efficiency goals by educating water users about the importance of maintaining water use efficiency and avoiding water waste.

9.1.5. Programs to Assess and Manage Distribution System Real Loss

DMM Description

The City continuously monitors its water distribution system for water loss. When water loss appears abnormally high, the City will attempt to identify the location of the loss and resolve the problem. High water loss is determined through customer and production well meters that are specific to a geographical area, showing abnormal high demand or a specific customer showing high consumption or continued use. If a leak is identified, the City will fix the leak immediately.

Furthermore, the City performs courtesy leak checks monthly after water bills are sent out to customers. For example, accounts of customers who use 50 units or more in a month will be flagged. The City will then check the customer's historical water use to determine if the customer is just a normal high-use customer or if the high water use is due to a potential leak.

The City started tracking hydrant meter and construction meter use in January 2020 and added these uses to their water consumption data. Starting in January 2021, the City began tracking water use through large fire backflows (i.e., private fire hydrant use, hydrant flushing, cross connections, and theft). The City will also start calculating water use for new subdivision filling, hydrant flushing, and unmetered water use. This will allow the City to further track and identify unmetered water use not accounted for by leaks.

In addition, to improve apparent water loss and accuracy of consumption data, the City is implementing a four-year program to replace all customer water meters. By 2029, all meters will be less than 10 years old and converted to Advanced Metering Infrastructure (AMI). The new meters will measure water use in cubic feet (CF) rather than hundred cubic feet (HCF), allowing for more precise consumption data.

Specific areas of the water distribution system have been identified as susceptible to leakage from components used during construction. These areas have been identified and put on a list of long-term Capital Improvement Projects (CIP) for pipeline replacements.

Plans for Continued Implementation

Implementation of this DMM is expected to help the City achieve its water efficiency goals by identifying sources of water loss quickly so repairs can be made and losses are minimized.

9.1.6. Water Conservation Program Coordination and Staffing Support

DMM Description

The City coordinates with SCWA for its Water Conservation Program and is a member of the Urban Water Conservation Committee. The City Engineer attends the SCWA meetings, while the Water Operations Supervisor attends the Urban Water Conservation Committee meetings.

The City Engineer and Water Operations Supervisor work collaboratively to implement the various demand management measures discussed in this chapter.

Plans for Continued Implementation

The implementation of this DMM is ongoing and is expected to help the City achieve its water efficiency targets by making water conservation and implementation of its water conservation program a priority within the City. It also allows consistency in the messaging of the value of water throughout the region.

9.1.7. Other Demand Management Measures

The City collaborates with SCWA to promote water conservation. SCWA offers rebate programs to encourage water use efficiency. The SCWA rebates are summarized in Table 9-3.

Table 9-3. SCWA Rebate Programs	
Program	**Rebate Amount**
Flume App - helps customers manage, monitor, and conserve water	$65
Pool covers	$50
Hot water recirculating system components	$50
Laundry-to-landscape system components	$50
Rain barrels	$50
Rain sensors	$50
High-efficiency washers	$100
Smart irrigation controllers (residential)	$300
Smart irrigation controllers (commercial)	$300 (4-12 stations) $700 (13-24 stations) $1,000 (25 or more stations)
Water-efficiency landscapes	$1 per square foot (up to $1,000)
Free residential water survey	N/A

9.2. Water Use Objectives (Future Requirements)

In 2018, the State Legislature enacted two policy bills, SB 606 (Hertzberg) and AB 1668 (Friedman), to establish long-term water conservation and drought planning to adapt to climate change and the associated longer and more intense droughts in California. These two policy bills build on SB X7-7 and set authorities and requirements for urban water use efficiency. The legislation sets standards for indoor residential use and requires the State Water Resources Control Board (SWRCB), in coordination with DWR, to adopt efficiency standards for outdoor residential use, water losses, and Commercial, Industrial, and Institutional (CII) outdoor landscape areas with dedicated irrigation meters.

In January 2025, the SWRCB adopted "Making Conservation a California Way of Life," which requires the water agency and not the individual water user to meet water use objectives to reduce urban water use. This regulation establishes guidelines and methodologies for calculating urban water use objectives for urban water retailers, based on efficient indoor and outdoor residential water use. The State established the standard for efficient residential outdoor water use at a landscape efficiency factor (LEF) of 0.80 through June 30, 2035. From July 1, 2035, through June 30, 2040, the standard will be reduced to 0.63 LEF. Beginning July 1, 2040, the long-term standard will be 0.55 LEF. For new construction, newly installed residential landscapes are required to meet a 0.55 LEF standard, while special landscape areas must meet a 1.0 LEF standard. By November 1, 2023, and November 1 of every year thereafter, the City will calculate its urban water use objective and actual water use and provide an annual report to the State.

One component of the Making Conservation a California Way of Life framework is performance standards for water loss. The SWRCB recently finalized water loss performance standards for individual water systems. Individual water systems have until 2028 to meet the standards.

CHAPTER 10. URBAN WATER MANAGEMENT PLAN ADOPTION, SUBMITTAL AND IMPLEMENTATION

This chapter provides information regarding the notification, public hearing, adoption, and submittal of the City's 2025 UWMP and WSCP. It also includes discussion on plan implementation and the process of amending the UWMP and the WSCP.

10.1. Plan Completion Timeline

If a water supplier bases its accounting on a fiscal year (July through June), the data must be through the end of the 2025 fiscal year (June 2025). If the water supplier bases its accounting on a calendar year, the data must be through the end of the 2025 calendar year (December 2025).As indicated in Section 2.4 of this plan, the City uses a calendar year for water supply and demand accounting; therefore, this 2025 UWMP includes data through December 2025.

10.2. Notice of Public Hearing

In accordance with Water Code Section 10621, the City must provide an opportunity for the public to provide input on this 2025 UWMP and associated WSCP with notice sent at least 60 days prior to the public hearing. The City must consider all public input prior to its adoption. There are two audiences to be notified for the public hearing: cities and counties, and the public.

10.2.1. Notices to Cities and Counties

The City provided greater than a 60-day notice regarding the preparation of its 2025 UWMP and WSCP to cities and counties in its service area as discussed in Section 2.5 of this plan. In addition, the City provided notices to the following agencies:

- City of Dixon
- California Water Service – Dixon (Cal Water)
- Solano County
- Solano Water Agency
- Solano Irrigation District
- Solano Subbasin Groundwater Sustainability Agency

The City coordinated the preparation of its UWMP and WSCP internally, with Solano County, and with the above listed agencies. The notices of preparation are included in Appendix D. Upon substantial completion of this 2025 UWMP, the City provided the agencies listed above, including internally within the City and Solano County, the Notice of Public Hearing (Appendix D).

Notifications to cities and counties, in accordance with the UWMP Act, are summarized in Table 10-1 (DWR Table 10-1).

Table 10-1. Retail: Notification to Cities and Counties (DWR Table 10-1)
Water Code Section 10621(b) and 10642

City Name	60 Day Notice	Notice of Public Hearing
City of Dixon	Yes	Yes
County Name	60 Day Notice	Notice of Public Hearing)
Solano County	Yes	Yes
NOTES:		

10.2.2. Notice to the Public

The City issued a notice of public hearing to the public and provided a public review period following the notice, and prior to adoption, to allow ample time for public comments to be prepared and received.

A notice of public hearing was issued in accordance with Government Code Section 6066 and was published twice (14 calendar days total) in the Independent Voice newspapers to notify all customers and local governments of the public hearing. In addition, the notice was posted on the City's website, https://www.cityofdixonca.us/. A copy of the published Notice of Public Hearing is included in **Appendix D**.

10.3. Public Hearing and Adoption

The City encouraged community participation in the development of this 2025 UWMP, including its WSCP, using public notices and web-based communication. The notice included the time and place of the public hearing, as well as the location where the plan is available for public review.

The public hearing provided an opportunity for City water customers and the general public to become familiar with the 2025 UWMP and ask questions about the City's water supply, its continuing plans for providing a reliable, safe, high-quality water supply, and plans to mitigate various potential water shortage conditions. Copies of the draft 2025 UWMP and WSCP were made available for public review at the City's offices and on the City website.

10.3.1. Public Hearing

A public hearing was held on June xx, 2026. As part of the public hearing, the City provided an overview of the UWMP and WSCP.

10.3.2. Adoption

Subsequent to the public hearing, this 2025 UWMP and the associated WSCP was adopted by the City Council on June xx, 2026 by Resolution No. 26-xxx and Resolution No. 26-xxx, respectively. The City adopted the WSCP separately so that the City may update it as necessary. A copy of the adoption resolutions are included in **Appendix H**.

10.4. Plan Submittal

The 2025 UWMP is due to DWR on July 1, 2026

This 2025 UWMP and the WSCP will be submitted to DWR within 30 days of adoption. The adopted 2025 UWMP and WSCP will be submitted electronically to DWR using the Water Use Efficiency (WUE) data portal. A CD or hardcopy of the adopted 2025 UWMP and WSCP will also be submitted to the California State Library.

No later than 30 days after adoption, a copy of the adopted 2025 UWMP, including the WSCP, will be provided to the cities and counties to which the City provides water.

10.5. Public Availability

No later than 30 days after submittal to DWR, an electronic copy of this 2025 UWMP, including the adopted WSCP, will be available on the City's website for public review and download. (https://www.cityofdixonca.us/departments/water)

10.6. Amending an Adopted UWMP or Water Shortage Contingency Plan

The City may amend its 2025 UWMP and WSCP jointly or separately. If the City amends one or both documents, the City will follow the notification, public hearing, adoption, and submittal process described in Sections 10.2 through 10.4 above. In addition to submitting amendments to DWR through the WUE data portal, copies of amendments or changes to the plans will be submitted to the California State Library, and any city or county within which the supplier provides water supplies within 30 days after adoption.

APPENDIX A

Legislative Requirements

WATER CODE - WAT

DIVISION 6. CONSERVATION, DEVELOPMENT, AND UTILIZATION OF STATE WATER RESOURCES [10000 - 12999] *(Heading of Division 6 amended by Stats. 1957, Ch. 1932.)*

PART 2.6. URBAN WATER MANAGEMENT PLANNING [10610 - 10657] *(Part 2.6 added by Stats. 1983, Ch. 1009, Sec. 1.)*

CHAPTER 1. General Declaration and Policy [10610 - 10610.4] *(Chapter 1 added by Stats. 1983, Ch. 1009, Sec. 1.)*

10610. This part shall be known and may be cited as the "Urban Water Management Planning Act."

(Added by Stats. 1983, Ch. 1009, Sec. 1.)

10610.2. (a) The Legislature finds and declares all of the following:

(1) The waters of the state are a limited and renewable resource subject to ever-increasing demands.

(2) The conservation and efficient use of urban water supplies are of statewide concern; however, the planning for that use and the implementation of those plans can best be accomplished at the local level.

(3) A long-term, reliable supply of water is essential to protect the productivity of California's businesses and economic climate, and increasing long-term water conservation among Californians, improving water use efficiency within the state's communities and agricultural production, and strengthening local and regional drought planning are critical to California's resilience to drought and climate change.

(4) As part of its long-range planning activities, every 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 water years now and into the foreseeable future, and every urban water supplier should collaborate closely with local land-use authorities to ensure water demand forecasts are consistent with current land-use planning.

(5) Public health issues have been raised over a number of contaminants that have been identified in certain local and imported water supplies.

(6) Implementing effective water management strategies, including groundwater storage projects and recycled water projects, may require specific water quality and salinity targets for meeting groundwater basins water quality objectives and promoting beneficial use of recycled water.

(7) Water quality regulations are becoming an increasingly important factor in water agencies' selection of raw water sources, treatment alternatives, and modifications to existing treatment facilities.

(8) Changes in drinking water quality standards may also impact the usefulness of water supplies and may ultimately impact supply reliability.

(9) The quality of source supplies can have a significant impact on water management strategies and supply reliability.

(b) This part is intended to provide assistance to water agencies in carrying out their long-term resource planning responsibilities to ensure adequate water supplies to meet existing and future demands for water.

(Amended by Stats. 2018, Ch. 14, Sec. 18. (SB 606) Effective January 1, 2019.)

10610.4. The Legislature finds and declares that it is the policy of the state as follows:

(a) The management of urban water demands and efficient use of water shall be actively pursued to protect both the people of the state and their water resources.

(b) The management of urban water demands and efficient use of urban water supplies shall be a guiding criterion in public decisions.

(c) Urban water suppliers shall be required to develop water management plans to achieve the efficient use of available supplies and strengthen local drought planning.

(Amended by Stats. 2018, Ch. 14, Sec. 19. (SB 606) Effective January 1, 2019.)

WATER CODE - WAT

DIVISION 6. CONSERVATION, DEVELOPMENT, AND UTILIZATION OF STATE WATER RESOURCES [10000 - 12999] *(Heading of Division 6 amended by Stats. 1957, Ch. 1932.)*

PART 2.6. URBAN WATER MANAGEMENT PLANNING [10610 - 10657] *(Part 2.6 added by Stats. 1983, Ch. 1009, Sec. 1.)*

CHAPTER 2. Definitions [10611 - 10618] *(Chapter 2 added by Stats. 1983, Ch. 1009, Sec. 1.)*

10611. Unless the context otherwise requires, the definitions of this chapter govern the construction of this part.

(Added by Stats. 1983, Ch. 1009, Sec. 1.)

10611.3. "Customer" means a purchaser of water from a water supplier who uses the water for municipal purposes, including residential, commercial, governmental, and industrial uses.

(Added by renumbering Section 10612 by Stats. 2018, Ch. 14, Sec. 20. (SB 606) Effective January 1, 2019.)

10611.5. "Demand management" means those water conservation measures, programs, and incentives that prevent the waste of water and promote the reasonable and efficient use and reuse of available supplies.

(Amended by Stats. 1995, Ch. 854, Sec. 3. Effective January 1, 1996.)

10612. "Drought risk assessment" means a method that examines water shortage risks based on the driest five-year historic sequence for the agency's water supply, as described in subdivision (b) of Section 10635.

(Added by Stats. 2018, Ch. 14, Sec. 21. (SB 606) Effective January 1, 2019.)

10613. "Efficient use" means those management measures that result in the most effective use of water so as to prevent its waste or unreasonable use or unreasonable method of use.

(Added by Stats. 1983, Ch. 1009, Sec. 1.)

10614. "Person" means any individual, firm, association, organization, partnership, business, trust, corporation, company, public agency, or any agency of such an entity.

(Added by Stats. 1983, Ch. 1009, Sec. 1.)

10615. "Plan" means an urban water management plan prepared pursuant to this part. A plan shall describe and evaluate sources of supply, reasonable and practical efficient uses, reclamation and demand management activities. The components of the plan may vary according to an individual community or area's characteristics and its capabilities to efficiently use and conserve water. The plan shall address measures for residential, commercial, governmental, and industrial water demand management as set forth in Article 2 (commencing with Section 10630) of Chapter 3. In addition, a strategy and time schedule for implementation shall be included in the plan.

(Amended by Stats. 1995, Ch. 854, Sec. 4. Effective January 1, 1996.)

10616. "Public agency" means any board, commission, county, city and county, city, regional agency, district, or other public entity.

(Added by Stats. 1983, Ch. 1009, Sec. 1.)

10616.5. 'Recycled water" means the reclamation and reuse of wastewater for beneficial use.

(Added by Stats. 1995, Ch. 854, Sec. 5. Effective January 1, 1996.)

10617. "Urban water supplier" means a supplier, either publicly or privately owned, providing 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. An urban water supplier includes a supplier or contractor for water, regardless of the basis of right, which distributes or sells for ultimate resale to customers. This part applies only to water supplied from public water systems subject to Chapter 4 (commencing with Section 116275) of Part 12 of Division 104 of the Health and Safety Code.

(Amended by Stats. 1996, Ch. 1023, Sec. 428. Effective September 29, 1996.)

10617.5. "Water shortage contingency plan" means a document that incorporates the provisions detailed in subdivision (a) of Section 10632 and is subsequently adopted by an urban water supplier pursuant to this article.

(Added by Stats. 2018, Ch. 14, Sec. 22. (SB 606) Effective January 1, 2019.)

10618. "Water supply and demand assessment" means a method that looks at current year and one or more dry year supplies and demands for determining water shortage risks, as described in Section 10632.1.

(Added by Stats. 2018, Ch. 14, Sec. 23. (SB 606) Effective January 1, 2019.)

WATER CODE - WAT

DIVISION 6. CONSERVATION, DEVELOPMENT, AND UTILIZATION OF STATE WATER RESOURCES [10000 - 12999] *(Heading of Division 6 amended by Stats. 1957, Ch. 1932.)*

PART 2.6. URBAN WATER MANAGEMENT PLANNING [10610 - 10657] *(Part 2.6 added by Stats. 1983, Ch. 1009, Sec. 1.)*

CHAPTER 3. Urban Water Management Plans [10620 - 10645] *(Chapter 3 added by Stats. 1983, Ch. 1009, Sec. 1.)*

ARTICLE 1. General Provisions [10620 - 10621] *(Article 1 added by Stats. 1983, Ch. 1009, Sec. 1.)*

10620. (a) Every urban water supplier shall prepare and adopt an urban water management plan in the manner set forth in Article 3 (commencing with Section 10640).

(b) Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.

(c) An urban water supplier indirectly providing water shall not include planning elements in its water management plan as provided in Article 2 (commencing with Section 10630) that would be applicable to urban water suppliers or public agencies directly providing water, or to their customers, without the consent of those suppliers or public agencies.

(d) (1) An urban water supplier may satisfy the requirements of this part by participation in areawide, regional, watershed, or basinwide urban water management planning where those plans will reduce preparation costs and contribute to the achievement of conservation, efficient water use, and improved local drought resilience.

(2) Notwithstanding paragraph (1), each urban water supplier shall develop its own water shortage contingency plan, but an urban water supplier may incorporate, collaborate, and otherwise share information with other urban water suppliers or other governing entities participating in an areawide, regional, watershed, or basinwide urban water management plan, an agricultural management plan, or groundwater sustainability plan development.

(3) Each urban water supplier shall coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.

(e) The urban water supplier may prepare the plan with its own staff, by contract, or in cooperation with other governmental agencies.

(f) An urban water supplier shall describe in the plan water management tools and options used by that entity that will maximize resources and minimize the need to import water from other regions.

(Amended by Stats. 2018, Ch. 14, Sec. 24. (SB 606) Effective January 1, 2019.)

10621. (a) Each urban water supplier shall update its plan at least once every five years on or before July 1, in years ending in six and one, incorporating updated and new information from the five years preceding each update.

(b) Every urban water supplier required to prepare a plan pursuant to this part shall, at least 60 days before the public hearing on the plan required by Section 10642, notify any city or county within which the supplier provides water supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan. The urban water supplier may consult with, and obtain comments from, any city or county that receives notice pursuant to this subdivision.

(c) An urban water supplier regulated by the Public Utilities Commission shall include its most recent plan and water shortage contingency plan as part of the supplier’s general rate case filings.

(d) The amendments to, or changes in, the plan shall be adopted and filed in the manner set forth in Article 3 (commencing with Section 10640).

(e) Each urban water supplier shall update and submit its 2015 plan to the department by July 1, 2016.

(f) Each urban water supplier shall update and submit its 2020 plan to the department by July 1, 2021.

(Amended by Stats. 2019, Ch. 239, Sec. 7. (AB 1414) Effective January 1, 2020.)

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DIVISION 6. CONSERVATION, DEVELOPMENT, AND UTILIZATION OF STATE WATER RESOURCES [10000 - 12999] *(Heading of Division 6 amended by Stats. 1957, Ch. 1932.)*

PART 2.6. URBAN WATER MANAGEMENT PLANNING [10610 - 10657] *(Part 2.6 added by Stats. 1983, Ch. 1009, Sec. 1.)*

CHAPTER 3. Urban Water Management Plans [10620 - 10645] *(Chapter 3 added by Stats. 1983, Ch. 1009, Sec. 1.)*

ARTICLE 2.5. Water Service Reliability [10635- 10635.] *(Article 2.5 added by Stats. 1995, Ch. 854, Sec. 11.)*

10635. (a) Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the long-term total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and a drought lasting five consecutive water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.

(b) Every urban water supplier shall include, as part of its urban water management plan, a drought risk assessment for its water service to its customers as part of information considered in developing the demand management measures and water supply projects and programs to be included in the urban water management plan. The urban water supplier may conduct an interim update or updates to this drought risk assessment within the five-year cycle of its urban water management plan update. The drought risk assessment shall include each of the following:

(1) A description of the data, methodology, and basis for one or more supply shortage conditions that are necessary to conduct a drought risk assessment for a drought period that lasts five consecutive water years, starting from the year following when the assessment is conducted.

(2) A determination of the reliability of each source of supply under a variety of water shortage conditions. This may include a determination that a particular source of water supply is fully reliable under most, if not all, conditions.

(3) A comparison of the total water supply sources available to the water supplier with the total projected water use for the drought period.

(4) Considerations of the historical drought hydrology, plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria.

(c) The urban water supplier shall provide that portion of its urban water management plan prepared pursuant to this article to any city or county within which it provides water supplies no later than 60 days after the submission of its urban water management plan.

(d) Nothing in this article is intended to create a right or entitlement to water service or any specific level of water service.

(e) Nothing in this article is intended to change existing law concerning an urban water supplier’s obligation to provide water service to its existing customers or to any potential future customers.

(Amended by Stats. 2018, Ch. 14, Sec. 36. (SB 606) Effective January 1, 2019.)

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DIVISION 6. CONSERVATION, DEVELOPMENT, AND UTILIZATION OF STATE WATER RESOURCES [10000 - 12999] *(Heading of Division 6 amended by Stats. 1957, Ch. 1932.)*

PART 2.6. URBAN WATER MANAGEMENT PLANNING [10610 - 10657] *(Part 2.6 added by Stats. 1983, Ch. 1009, Sec. 1.)*

CHAPTER 3. Urban Water Management Plans [10620 - 10645] *(Chapter 3 added by Stats. 1983, Ch. 1009, Sec. 1.)*

ARTICLE 2. Contents of Plans [10630 - 10634] *(Article 2 added by Stats. 1983, Ch. 1009, Sec. 1.)*

10630. It is the intention of the Legislature, in enacting this part, to permit levels of water management planning commensurate with the numbers of customers served and the volume of water supplied, while accounting for impacts from climate change.

(Amended by Stats. 2018, Ch. 14, Sec. 26. (SB 606) Effective January 1, 2019.)

10630.5. Each plan shall include a simple lay description of how much water the agency has on a reliable basis, how much it needs for the foreseeable future, what the agency's strategy is for meeting its water needs, the challenges facing the agency, and any other information necessary to provide a general understanding of the agency's plan.

(Added by Stats. 2018, Ch. 14, Sec. 27. (SB 606) Effective January 1, 2019.)

10631. A plan shall be adopted in accordance with this chapter that shall do all of the following:

(a) Describe the service area of the supplier, including current and projected population, climate, and other social, economic, and demographic factors affecting the supplier's water management planning. The projected population estimates shall be based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier and shall be in five-year increments to 20 years or as far as data is available. The description shall include the current and projected land uses within the existing or anticipated service area affecting the supplier's water management planning. Urban water suppliers shall coordinate with local or regional land use authorities to determine the most appropriate land use information, including, where appropriate, land use information obtained from local or regional land use authorities, as developed pursuant to Article 5 (commencing with Section 65300) of Chapter 3 of Division 1 of Title 7 of the Government Code.

(b) Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a), providing supporting and related information, including all of the following:

(1) A detailed discussion of anticipated supply availability under a normal water year, single dry year, and droughts lasting at least five years, as well as more frequent and severe periods of drought, as described in the drought risk assessment. For each source of water supply, consider any information pertinent to the reliability analysis conducted pursuant to Section 10635, including changes in supply due to climate change.

(2) When multiple sources of water supply are identified, a description of the management of each supply in correlation with the other identified supplies.

(3) For any planned sources of water supply, a description of the measures that are being undertaken to acquire and develop those water supplies.

(4) If groundwater is identified as an existing or planned source of water available to the supplier, all of the following information:

(A) The current version of any groundwater sustainability plan or alternative adopted pursuant to Part 2.74 (commencing with Section 10720), any groundwater management plan adopted by the urban water supplier, including plans adopted pursuant to Part 2.75 (commencing with Section 10750), or any other specific authorization for groundwater management for basins underlying the urban water supplier's service area.

(B) A description of any groundwater basin or basins from which the urban water supplier pumps groundwater. For basins that 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 urban water supplier has the legal right to pump under the order or decree. For a basin that has not been adjudicated, information as to whether the department has identified the basin as a high- or medium-priority basin in the most current official departmental bulletin that characterizes the condition of the groundwater basin, and a detailed description of the efforts being undertaken by the urban water supplier to coordinate with groundwater sustainability agencies or groundwater management agencies listed in subdivision (c) of Section 10723 to maintain or achieve sustainable groundwater conditions in accordance with a groundwater sustainability plan or alternative adopted pursuant to Part 2.74 (commencing with Section 10720).

(C) A detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

(D) A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the urban water supplier. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

(c) Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.

(d) (1) For an urban retail water supplier, quantify, to the extent records are available, past and current water use, over the same five-year increments described in subdivision (a), and projected water use, based upon information developed pursuant to subdivision (a), identifying the uses among water use sectors, including, but not necessarily limited to, all of the following:

(A) Single-family residential.

(B) Multifamily.

(C) Commercial.

(D) Industrial.

(E) Institutional and governmental.

(F) Landscape.

(G) Sales to other agencies.

(H) Saline water intrusion barriers, groundwater recharge, or conjunctive use, or any combination thereof.

(I) Agricultural.

(J) Distribution system water loss.

(2) The water use projections shall be in the same five-year increments described in subdivision (a).

(3) (A) The distribution system water loss shall be quantified for each of the five years preceding the plan update, in accordance with rules adopted pursuant to Section 10608.34.

(B) The distribution system water loss quantification shall be reported in accordance with a worksheet approved or developed by the department through a public process. The water loss quantification worksheet shall be based on the water system balance methodology developed by the American Water Works Association.

(C) In the plan due July 1, 2021, and in each update thereafter, data shall be included to show whether the urban retail water supplier met the distribution loss standards enacted by the board pursuant to Section 10608.34.

(4) (A) Water use projections, where available, shall display and account for the water savings estimated to result from adopted codes, standards, ordinances, or transportation and land use plans identified by the urban water

supplier, as applicable to the service area.

(B) To the extent that an urban water supplier reports the information described in subparagraph (A), an urban water supplier shall do both of the following:

(i) Provide citations of the various codes, standards, ordinances, or transportation and land use plans utilized in making the projections.

(ii) Indicate the extent that the water use projections consider savings from codes, standards, ordinances, or transportation and land use plans. Water use projections that do not account for these water savings shall be noted of that fact.

(e) Provide a description of the supplier's water demand management measures. This description shall include all of the following:

(1) (A) For an urban retail water supplier, as defined in Section 10608.12, a narrative description that addresses the nature and extent of each water demand management measure implemented over the past five years. The narrative shall describe the water demand management measures that the supplier plans to implement to achieve its water use targets pursuant to Section 10608.20.

(B) The narrative pursuant to this paragraph shall include descriptions of the following water demand management measures:

(i) Water waste prevention ordinances.

(ii) Metering.

(iii) Conservation pricing.

(iv) Public education and outreach.

(v) Programs to assess and manage distribution system real loss.

(vi) Water conservation program coordination and staffing support.

(vii) Other demand management measures that have a significant impact on water use as measured in gallons per capita per day, including innovative measures, if implemented.

(2) For an urban wholesale water supplier, as defined in Section 10608.12, a narrative description of the items in clauses (ii), (iv), (vi), and (vii) of subparagraph (B) of paragraph (1), and a narrative description of its distribution system asset management and wholesale supplier assistance programs.

(f) Include a description of all water supply projects and water supply programs that may be undertaken by the urban water supplier to meet the total projected water use, as established pursuant to subdivision (a) of Section 10635. The urban water supplier shall include a detailed description of expected future projects and programs that the urban water supplier may implement to increase the amount of the water supply available to the urban water supplier in normal and single-dry water years and for a period of drought lasting five consecutive water years. The description shall identify specific projects and include a description of the increase in water supply that is expected to be available from each project. The description shall include an estimate with regard to the implementation timeline for each project or program.

(g) Describe the opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply.

(h) An urban water supplier that relies upon a wholesale agency for a source of water shall provide the wholesale agency with water use projections from that agency for that source of water in five-year increments to 20 years or as far as data is available. The wholesale agency shall provide information to the urban water supplier for inclusion in the urban water supplier's plan that identifies and quantifies, to the extent practicable, the existing and planned sources of water as required by subdivision (b), available from the wholesale agency to the urban water supplier over the same five-year increments, and during various water-year types in accordance with subdivision (f). An urban water supplier may rely upon water supply information provided by the wholesale agency in fulfilling the plan informational requirements of subdivisions (b) and (f).

(Amended by Stats. 2019, Ch. 239, Sec. 8. (AB 1414) Effective January 1, 2020.)

10631.1. (a) The water use projections required by Section 10631 shall include projected water use for single-family and multifamily residential housing needed for lower income households, as defined in Section 50079.5 of the

Health and Safety Code, as identified in the housing element of any city, county, or city and county in the service area of the supplier.

(b) It is the intent of the Legislature that the identification of projected water use for single-family and multifamily residential housing for lower income households will assist a supplier in complying with the requirement under Section 65589.7 of the Government Code to grant a priority for the provision of service to housing units affordable to lower income households.

(Added by Stats. 2005, Ch. 727, Sec. 2. Effective January 1, 2006.)

10631.2. (a) In addition to the requirements of Section 10631, an urban water management plan shall include any of the following information that the urban water supplier can readily obtain:

(1) An estimate of the amount of energy used to extract or divert water supplies.

(2) An estimate of the amount of energy used to convey water supplies to the water treatment plants or distribution systems.

(3) An estimate of the amount of energy used to treat water supplies.

(4) An estimate of the amount of energy used to distribute water supplies through its distribution systems.

(5) An estimate of the amount of energy used for treated water supplies in comparison to the amount used for nontreated water supplies.

(6) An estimate of the amount of energy used to place water into or withdraw from storage.

(7) Any other energy-related information the urban water supplier deems appropriate.

(b) The department shall include in its guidance for the preparation of urban water management plans a methodology for the voluntary calculation or estimation of the energy intensity of urban water systems. The department may consider studies and calculations conducted by the Public Utilities Commission in developing the methodology.

(c) The Legislature finds and declares that energy use is only one factor in water supply planning and shall not be considered independently of other factors.

(Amended by Stats. 2018, Ch. 14, Sec. 29. (SB 606) Effective January 1, 2019.)

10632. (a) Every urban water supplier shall prepare and adopt a water shortage contingency plan as part of its urban water management plan that consists of each of the following elements:

(1) The analysis of water supply reliability conducted pursuant to Section 10635.

(2) The procedures used in conducting an annual water supply and demand assessment that include, at a minimum, both of the following:

(A) The written decisionmaking process that an urban water supplier will use each year to determine its water supply reliability.

(B) The key data inputs and assessment methodology used to evaluate the urban water supplier’s water supply reliability for the current year and one dry year, including all of the following:

(i) Current year unconstrained demand, considering weather, growth, and other influencing factors, such as policies to manage current supplies to meet demand objectives in future years, as applicable.

(ii) Current year available supply, considering hydrological and regulatory conditions in the current year and one dry year. The annual supply and demand assessment may consider more than one dry year solely at the discretion of the urban water supplier.

(iii) Existing infrastructure capabilities and plausible constraints.

(iv) A defined set of locally applicable evaluation criteria that are consistently relied upon for each annual water supply and demand assessment.

(v) A description and quantification of each source of water supply.

(3) (A) Six standard water shortage levels corresponding to progressive ranges of up to 10, 20, 30, 40, and 50 percent shortages and greater than 50 percent shortage. Urban water suppliers shall define these shortage levels based on the suppliers' water supply conditions, including percentage reductions in water supply, changes in groundwater levels, changes in surface elevation or level of subsidence, or other changes in hydrological or other local conditions indicative of the water supply available for use. Shortage levels shall also apply to catastrophic interruption of water supplies, including, but not limited to, a regional power outage, an earthquake, and other potential emergency events.

(B) An urban water supplier with an existing water shortage contingency plan that uses different water shortage levels may comply with the requirement in subparagraph (A) by developing and including a cross-reference relating its existing categories to the six standard water shortage levels.

(4) Shortage response actions that align with the defined shortage levels and include, at a minimum, all of the following:

(A) Locally appropriate supply augmentation actions.

(B) Locally appropriate demand reduction actions to adequately respond to shortages.

(C) Locally appropriate operational changes.

(D) Additional, mandatory prohibitions against specific water use practices that are in addition to state-mandated prohibitions and appropriate to the local conditions.

(E) For each action, an estimate of the extent to which the gap between supplies and demand will be reduced by implementation of the action.

(5) Communication protocols and procedures to inform customers, the public, interested parties, and local, regional, and state governments, regarding, at a minimum, all of the following:

(A) Any current or predicted shortages as determined by the annual water supply and demand assessment described pursuant to Section 10632.1.

(B) Any shortage response actions triggered or anticipated to be triggered by the annual water supply and demand assessment described pursuant to Section 10632.1.

(C) Any other relevant communications.

(6) For an urban retail water supplier, customer compliance, enforcement, appeal, and exemption procedures for triggered shortage response actions as determined pursuant to Section 10632.2.

(7) (A) A description of the legal authorities that empower the urban water supplier to implement and enforce its shortage response actions specified in paragraph (4) that may include, but are not limited to, statutory authorities, ordinances, resolutions, and contract provisions.

(B) A statement that an urban water supplier shall declare a water shortage emergency in accordance with Chapter 3 (commencing with Section 350) of Division 1.

(C) A statement that an urban water supplier shall coordinate with any city or county within which it provides water supply services for the possible proclamation of a local emergency, as defined in Section 8558 of the Government Code.

(8) A description of the financial consequences of, and responses for, drought conditions, including, but not limited to, all of the following:

(A) A description of potential revenue reductions and expense increases associated with activated shortage response actions described in paragraph (4).

(B) A description of mitigation actions needed to address revenue reductions and expense increases associated with activated shortage response actions described in paragraph (4).

(C) A description of the cost of compliance with Chapter 3.3 (commencing with Section 365) of Division 1.

(9) For an urban retail water supplier, monitoring and reporting requirements and procedures that ensure appropriate data is collected, tracked, and analyzed for purposes of monitoring customer compliance and to meet state reporting requirements.

(10) Reevaluation and improvement procedures for systematically monitoring and evaluating the functionality of the water shortage contingency plan in order to ensure shortage risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented as needed.

(b) For purposes of developing the water shortage contingency plan pursuant to subdivision (a), an urban water supplier shall analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas, as defined in subdivision (a) of Section 115921 of the Health and Safety Code.

(c) The urban water supplier shall make available the water shortage contingency plan prepared pursuant to this article to its customers and any city or county within which it provides water supplies no later than 30 days after adoption of the water shortage contingency plan.

(Repealed and added by Stats. 2018, Ch. 14, Sec. 32. (SB 606) Effective January 1, 2019.)

10632.1. An urban water supplier shall conduct an annual water supply and demand assessment pursuant to subdivision (a) of Section 10632 and, on or before July 1 of each year, submit an annual water shortage assessment report to the department with information for anticipated shortage, triggered shortage response actions, compliance and enforcement actions, and communication actions consistent with the supplier's water shortage contingency plan. An urban water supplier that relies on imported water from the State Water Project or the Bureau of Reclamation shall submit its annual water supply and demand assessment within 14 days of receiving its final allocations, or by July 1 of each year, whichever is later.

(Amended by Stats. 2019, Ch. 239, Sec. 9. (AB 1414) Effective January 1, 2020.)

10632.2. An urban water supplier shall follow, where feasible and appropriate, the prescribed procedures and implement determined shortage response actions in its water shortage contingency plan, as identified in subdivision (a) of Section 10632, or reasonable alternative actions, provided that descriptions of the alternative actions are submitted with the annual water shortage assessment report pursuant to Section 10632.1. Nothing in this section prohibits an urban water supplier from taking actions not specified in its water shortage contingency plan, if needed, without having to formally amend its urban water management plan or water shortage contingency plan.

(Added by Stats. 2018, Ch. 14, Sec. 34. (SB 606) Effective January 1, 2019.)

10632.3. It is the intent of the Legislature that, upon proclamation by the Governor of a state of emergency under the California Emergency Services Act (Chapter 7 (commencing with Section 8550) of Division 1 of Title 2 of the Government Code) based on drought conditions, the board defer to implementation of locally adopted water shortage contingency plans to the extent practicable.

(Added by Stats. 2018, Ch. 14, Sec. 35. (SB 606) Effective January 1, 2019.)

10632.5. (a) In addition to the requirements of paragraph (3) of subdivision (a) of Section 10632, beginning January 1, 2020, the plan shall include a seismic risk assessment and mitigation plan to assess the vulnerability of each of the various facilities of a water system and mitigate those vulnerabilities.

(b) An urban water supplier shall update the seismic risk assessment and mitigation plan when updating its urban water management plan as required by Section 10621.

(c) An urban water supplier may comply with this section by submitting, pursuant to Section 10644, a copy of the most recent adopted local hazard mitigation plan or multihazard mitigation plan under the federal Disaster Mitigation Act of 2000 (Public Law 106-390) if the local hazard mitigation plan or multihazard mitigation plan addresses seismic risk.

(Added by Stats. 2015, Ch. 681, Sec. 1. (SB 664) Effective January 1, 2016.)

10633. The plan shall provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier. The preparation of the plan shall be coordinated with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area, and shall include all of the following:

(a) A description of the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.

(b) A description of the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.

(c) A description of the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use.

(d) A description and quantification of the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, indirect potable reuse, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.

(e) The projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision.

(f) A description of actions, including financial incentives, which may be taken to encourage the use of recycled water, and the projected results of these actions in terms of acre-feet of recycled water used per year.

(g) A plan for optimizing the use of recycled water in the supplier's service area, including actions to facilitate the installation of dual distribution systems, to promote recirculating uses, to facilitate the increased use of treated wastewater that meets recycled water standards, and to overcome any obstacles to achieving that increased use.

(Amended by Stats. 2009, Ch. 534, Sec. 2. (AB 1465) Effective January 1, 2010.)

10634. The plan shall include information, to the extent practicable, relating to the quality of existing sources of water available to the supplier over the same five-year increments as described in subdivision (a) of Section 10631, and the manner in which water quality affects water management strategies and supply reliability.

(Added by Stats. 2001, Ch. 644, Sec. 3. Effective January 1, 2002.)

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PART 2.6. URBAN WATER MANAGEMENT PLANNING [10610 - 10657] *(Part 2.6 added by Stats. 1983, Ch. 1009, Sec. 1.)*

CHAPTER 3. Urban Water Management Plans [10620 - 10645] *(Chapter 3 added by Stats. 1983, Ch. 1009, Sec. 1.)*

ARTICLE 3. Adoption and Implementation of Plans [10640 - 10645] *(Article 3 added by Stats. 1983, Ch. 1009, Sec. 1.)*

10640. (a) Every urban water supplier required to prepare a plan pursuant to this part shall prepare its plan pursuant to Article 2 (commencing with Section 10630). The supplier shall likewise periodically review the plan as required by Section 10621, and any amendments or changes required as a result of that review shall be adopted pursuant to this article.

(b) Every urban water supplier required to prepare a water shortage contingency plan shall prepare a water shortage contingency plan pursuant to Section 10632. The supplier shall likewise periodically review the water shortage contingency plan as required by paragraph (10) of subdivision (a) of Section 10632 and any amendments or changes required as a result of that review shall be adopted pursuant to this article.

(Amended by Stats. 2018, Ch. 14, Sec. 37. (SB 606) Effective January 1, 2019.)

10641. An urban water supplier required to prepare a plan or a water shortage contingency plan may consult with, and obtain comments from, any public agency or state agency or any person who has special expertise with respect to water demand management methods and techniques.

(Amended by Stats. 2018, Ch. 14, Sec. 38. (SB 606) Effective January 1, 2019.)

10642. Each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of both the plan and the water shortage contingency plan. Prior to adopting either, the urban water supplier shall make both the plan and the water shortage contingency plan available for public inspection and shall hold a public hearing or hearings thereon. Prior to any of these hearings, notice of the time and place of the hearing shall be published within the jurisdiction of the publicly owned water supplier pursuant to Section 6066 of the Government Code. The urban water supplier shall provide notice of the time and place of a hearing to any city or county within which the supplier provides water supplies. Notices by a local public agency pursuant to this section shall be provided pursuant to Chapter 17.5 (commencing with Section 7290) of Division 7 of Title 1 of the Government Code. A privately owned water supplier shall provide an equivalent notice within its service area. After the hearing or hearings, the plan or water shortage contingency plan shall be adopted as prepared or as modified after the hearing or hearings.

(Amended by Stats. 2018, Ch. 14, Sec. 39. (SB 606) Effective January 1, 2019.)

10643. An urban water supplier shall implement its plan adopted pursuant to this chapter in accordance with the schedule set forth in its plan.

(Added by Stats. 1983, Ch. 1009, Sec. 1.)

10644. (a) (1) An urban water supplier shall submit to the department, the California State Library, and any city or county within which the supplier provides water supplies a copy of its plan no later than 30 days after adoption. Copies of amendments or changes to the plans shall be submitted to the department, the California State Library, and any city or county within which the supplier provides water supplies within 30 days after adoption.

(2) The plan, or amendments to the plan, submitted to the department pursuant to paragraph (1) shall be submitted electronically and shall include any standardized forms, tables, or displays specified by the department.

(b) If an urban water supplier revises its water shortage contingency plan, the supplier shall submit to the department a copy of its water shortage contingency plan prepared pursuant to subdivision (a) of Section 10632 no later than 30 days after adoption, in accordance with protocols for submission and using electronic reporting tools developed by the department.

(c) (1) (A) Notwithstanding Section 10231.5 of the Government Code, the department shall prepare and submit to the Legislature, on or before July 1, in the years ending in seven and two, a report summarizing the status of the plans and water shortage contingency plans adopted pursuant to this part. The report prepared by the department shall identify the exemplary elements of the individual plans and water shortage contingency plans. The department shall provide a copy of the report to each urban water supplier that has submitted its plan and water shortage contingency plan to the department. The department shall also prepare reports and provide data for any legislative hearings designed to consider the effectiveness of plans and water shortage contingency plans submitted pursuant to this part.

(B) The department shall prepare and submit to the board, on or before September 30 of each year, a report summarizing the submitted water supply and demand assessment results along with appropriate reported water shortage conditions and the regional and statewide analysis of water supply conditions developed by the department. As part of the report, the department shall provide a summary and, as appropriate, urban water supplier specific information regarding various shortage response actions implemented as a result of annual supplier-specific water supply and demand assessments performed pursuant to Section 10632.1.

(C) The department shall submit the report to the Legislature for the 2015 plans by July 1, 2017, and the report to the Legislature for the 2020 plans and water shortage contingency plans by July 1, 2022.

(2) A report to be submitted pursuant to subparagraph (A) of paragraph (1) shall be submitted in compliance with Section 9795 of the Government Code.

(d) The department shall make available to the public the standard the department will use to identify exemplary water demand management measures.

(Amended by Stats. 2018, Ch. 14, Sec. 40. (SB 606) Effective January 1, 2019.)

10645. (a) Not later than 30 days after filing a copy of its plan with the department, the urban water supplier and the department shall make the plan available for public review during normal business hours.

(b) Not later than 30 days after filing a copy of its water shortage contingency plan with the department, the urban water supplier and the department shall make the plan available for public review during normal business hours.

(Amended by Stats. 2018, Ch. 14, Sec. 41. (SB 606) Effective January 1, 2019.)

WATER CODE - WAT

DIVISION 6. CONSERVATION, DEVELOPMENT, AND UTILIZATION OF STATE WATER RESOURCES [10000 - 12999] *(Heading of Division 6 amended by Stats. 1957, Ch. 1932.)*

PART 2.6. URBAN WATER MANAGEMENT PLANNING [10610 - 10657] *(Part 2.6 added by Stats. 1983, Ch. 1009, Sec. 1.)*

CHAPTER 4. Miscellaneous Provisions [10650 - 10657] *(Chapter 4 added by Stats. 1983, Ch. 1009, Sec. 1.)*

10650. Any actions or proceedings, other than actions by the board, to attack, review, set aside, void, or annul the acts or decisions of an urban water supplier on the grounds of noncompliance with this part shall be commenced as follows:

(a) An action or proceeding alleging failure to adopt a plan or a water shortage contingency plan shall be commenced within 18 months after that adoption is required by this part.

(b) Any action or proceeding alleging that a plan or water shortage contingency plan, or action taken pursuant to either, does not comply with this part shall be commenced within 90 days after filing of the plan or water shortage contingency plan or an amendment to either pursuant to Section 10644 or the taking of that action.

(Amended by Stats. 2018, Ch. 14, Sec. 42. (SB 606) Effective January 1, 2019.)

10651. In any action or proceeding to attack, review, set aside, void, or annul a plan or a water shortage contingency plan, or an action taken pursuant to either by an urban water supplier on the grounds of noncompliance with this part, the inquiry shall extend only to whether there was a prejudicial abuse of discretion. Abuse of discretion is established if the supplier has not proceeded in a manner required by law or if the action by the water supplier is not supported by substantial evidence.

(Amended by Stats. 2018, Ch. 14, Sec. 43. (SB 606) Effective January 1, 2019.)

10652. The California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) does not apply to the preparation and adoption of plans pursuant to this part or to the implementation of actions taken pursuant to Section 10632. Nothing in this part shall be interpreted as exempting from the California Environmental Quality Act any project that would significantly affect water supplies for fish and wildlife, or any project for implementation of the plan, other than projects implementing Section 10632, or any project for expanded or additional water supplies.

(Amended by Stats. 1995, Ch. 854, Sec. 16. Effective January 1, 1996.)

10653. The adoption of a plan shall satisfy any requirements of state law, regulation, or order, including those of the board and the Public Utilities Commission, for the preparation of water management plans, water shortage contingency plans, or conservation plans; provided, that if the board or the Public Utilities Commission requires additional information concerning water conservation, drought response measures, or financial conditions to implement its existing authority, nothing in this part shall be deemed to limit the board or the commission in obtaining that information. The requirements of this part shall be satisfied by any urban water demand management plan that complies with analogous federal laws or regulations after the effective date of this part, and which substantially meets the requirements of this part, or by any existing urban water management plan which includes the contents of a plan required under this part.

(Amended by Stats. 2018, Ch. 14, Sec. 44. (SB 606) Effective January 1, 2019.)

10654. An urban water supplier may recover in its rates the costs incurred in preparing its urban water management plan, its drought risk assessment, its water supply and demand assessment, and its water shortage contingency plan and implementing the reasonable water conservation measures included in either of the plans.

(Amended by Stats. 2018, Ch. 14, Sec. 45. (SB 606) Effective January 1, 2019.)

10655. If any provision of this part or the application thereof to any person or circumstances is held invalid, that invalidity shall not affect other provisions or applications of this part which can be given effect without the invalid provision or application thereof, and to this end the provisions of this part are severable.

(Added by Stats. 1983, Ch. 1009, Sec. 1.)

10656. An urban water supplier is not eligible for a water grant or loan awarded or administered by the state unless the urban water supplier complies with this part.

(Amended by Stats. 2018, Ch. 14, Sec. 46. (SB 606) Effective January 1, 2019.)

10657. The department may adopt regulations regarding the definitions of water, water use, and reporting periods, and may adopt any other regulations deemed necessary or desirable to implement this part. In developing regulations pursuant to this section, the department shall solicit broad public participation from stakeholders and other interested persons.

(Added by Stats. 2018, Ch. 14, Sec. 47. (SB 606) Effective January 1, 2019.)

APPENDIX B

DWR 2025 UWMP Tables

Submittal Table 2-1 Retail: Public Water Systems			
Public Water System Number	Public Water System Name	Number of Municipal Connections 2025	Volume of Water Supplied[(a)]
Add additional rows as needed			
CA4810009	City of Dixon	4,120	807
	Total	4,120	807

DWR NOTES:

Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.

NOTES:

(a)Volumes are in MG.

Submittal Table 2-2: Plan Identification		
Select One	**Type of Plan**	**Name of Regional Alliance or RUWMP** (Drop Down List)
☑	**Individual UWMP**	
	If Water Supplier is also a member of a SB X7-7 Regional Alliance, select name from the drop-down.	
☐	**Regional Urban Water Management Plan (RUWMP)**	
	If Supplier selected RUWMP, select name from the drop-down.	
NOTES:		

Submittal Table 2-3: Supplier Identification	
Type of Supplier (select one or both)	
☐	Supplier is a wholesale supplier
☑	Supplier is a retail supplier
Fiscal or Calendar Year (select one)	
☑	UWMP Tables are in calendar years
☐	UWMP Tables are in fiscal years
If using fiscal years provide month and date that the fiscal year begins (mm/dd)	
Units of measure used in UWMP (Select from the drop down list).	
Unit	MG
DWR NOTES: **Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Submittal Table 2-3.	
NOTES:	

Submittal Table 2-4 Retail: Water Supplier Information Exchange **Water Code Section 10631(h)**
The retail Supplier has informed the following wholesale supplier(s) of projected water use.
Wholesale Water Supplier Name[(a)]
NOTES: (a) The City does not rely on a wholesale supplier. Table is left intentionally blank.

Submittal Table 3-1 Retail: Population - Current and Projected
Water Code Section 10631(a)

Population Served	2025[a]	2030[b]	2035[b]	2040[b]	2045[b]	2050(opt)[c]
	13596	14266	14936	15607	16277	16947

NOTES:

(a) The City's 2025 service area population was taken from the City's 2025 Electronic Annual Report (EAR) to the State Water Board, and the 2050 projection was taken from the City's 2040 GP. Buildout for the City was assumed to be 2050.

(b) The City's service area population for 2030 through 2045 was estimated using linear interpolation with the City's service area population for 2025 and 2050 as anchor points.

(c) The 2050 projected population was obtained by linearly extrapolating Cal Water's population projection in the 2020 UWMP to 2050 and then subtracting the City's GP build out population.

Submittal Table 4-1 Retail: Total Uses for Potable and Non-Potable Water — Actual
Water Code Section 10631(d)(1)

Use Type	Additional Description (as needed)	2025 Actual Water Use	
Drop down list May select each use multiple times These are the only use types that will be recognized by the WUEdata online submittal tool		**Potable or Non-Potable** (OPTIONAL) Drop down list	Volume[(a)]
Add additional rows as needed			
Single Family		Potable	415
Multi-Family		Potable	35.0
Commercial	See Note (b)	Potable	73.9
Industrial		Potable	46.8
Institutional/Governmental	See Note (c)	Potable	0
Landscape	See Note (d)	Potable	123
Other (optional)	See Note (e)	Potable	17.6
Distribution System Water Loss		Potable	96.1
		Subtotal Potable	807
		Subtotal Non-Potable	0
		Total	807

DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.

NOTES:

(a)Volumes are in MG.

(b)Church, Firehouse, Motel, School, WTTF/WTTP, and Commercial and Institutional (C&I) water use is classified as "Commercial" for this 2025 UWMP to remain consistent with the City's Production and Consumption report.

(c)For the years 2021–2025, Commercial and Institutional water uses are combined and reported under the Commercial category, with the Institutional/Governmental category left empty.

(d)After 2023 the domestic meters at the parks were reported as commercial.

(e)"Other" includes unknown, miscellaneous water use such as hydrant/construction meters, street sweeping use, and calculated unmetered use. Run-to-Waste water use data was included in the 2025 data.

Submittal Table 4-2 Retail: Total Uses for Potable, and Non-Potable Water — Projected Water Code Section 10631(d)(1)							
Use Type	Additional Description (as needed)	**Projected Water Use[(a)]** (Report To the Extent that Records are Available)					
Drop down list May select each use multiple times These are the only Use Types that will be recognized by the WUEdata online submittal tool		**Potable or Non-Potable** (OPTIONAL) Drop down list	**2030**	**2035**	**2040**	**2045**	**2050 (opt)**
Add additional rows as needed.							
Single Family		Potable	497	586	675	764	853
Multi-Family		Potable	42	50	58	65	73
Commercial		Potable	87	103	118	134	150
Industrial		Potable	69	81	93	106	118
Institutional/Governmental		Potable	0	0	0	0	0
Landscape		Potable	159	188	216	245	273
Other (optional)		Potable	19	23	26	30	33
Distribution System Water Loss		Potable	109	129	148	168	187
		Subtotal Potable	982	1,160	1,334	1,512	1,687
		Subtotal Non-Potable	0	0	0	0	0
		Total	982	1,160	1,334	1,512	1,687
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.							
NOTES: (a)Volumes are in MG.							

Submittal Table 4-3 Retail: Inclusion in Water Use Projections Water Code Section 10631 (a), 10631 (d)(4)(A), and 10631 (d)(4)(B)	
Are Future Water Savings Included in Projections? **Drop down list (y/n)**	No
If "Yes" to above, **state the section or page number**, in the cell to the right, where citations of the codes, ordinances, or otherwise are utilized in demand projections are found. ***Optional*** Suppliers may complete Optional Submittal Table 4-4 R to quantify the expected savings.	N/A
Are Lower Income Residential Demands Included In Projections? **Drop down list (y/n)**	Yes
Optional If the method for accounting Lower Income Residential Demands has been included, provide page number where this accounting can be found.	N/A
DWR NOTES: Additional guidance is provided in Appendix K.	
NOTES:	

Submittal Table 4-5 Retail: Water Loss Audit Reporting Water Code Section 10631(d)(3)(A)		
Public Water System ID # Reported in Table 2-1 R	Reporting Period	Submitted to DWR Water Loss Audit Program (yes/no)
Report submittal status for all five years for each Public Water System as available. Add rows as needed		
	2020	No
	2021	Yes
	2022	Yes
	2023	Yes
	2024	Yes
DWR NOTES: Suppliers will provide a link to the WUEdata submittals of their Water Loss Audit Reports.		
NOTES: The City did not become an urban water supplier until April 2021 and was not required to submitted a water loss audit for 2020. The City's subsequent Water Audit reports can be found online at the following links for 2021, 2022, 2023 and 2024.		

Submittal Table 4-6 Retail: Progress Towards 2028 Water Loss Standard
Water Code Section 10631(d)(3)(C)

Public Water System ID # Reported in Submittal Table 2-1 R	Did the Water Board Calculate a Water Loss Standard for this Public Water System? (y/n) If no, Supplier will not complete this row.	Real Water Loss					Apparent Water Loss				
		State Water Board Standard		Most Recent AWWA Water Loss Audit			State Water Board Standard		Most Recent AWWA Water Loss Audit		
		2028 Real Water Loss Standard per Unit per day	Units for Real Water Loss Drop down list	Number of Units (Connections or Miles corresponding with units selected)	Volume of Total Real Loss (from AWWA Water Loss Audit) (MG)	Real Water Loss Per Unit per Day	2028 Apparent Water Loss Standard per Unit per Day	Units for Apparent Water Loss	Number of Connections	Volume of Total Apparent Loss (from AWWA Water Loss Audit) (MG)	Apparent Water Loss Per Unit per Day
Add additional rows as needed.											
	No							Gallons per Service Connection per Day (GPSCD)			

Water Board's Calculated Water Loss Standards

DWR NOTES: Units of measure (AF, CCF, MG) for Water Loss **MUST** remain consistent with units reported in Submittal Table 2-3. The units reported in Submittal Table 2-3 are used in this table's calculations.

NOTES:

Submittal Table 5-1 Retail: SB X7-7 2020 Target Progress Water Code Section 10608.40						
☑	Check the box if the Supplier was not an Urban Water Supplier during or before the 2020 UWMP reporting cycle. Proceed to the next table.					
Was Supplier part of a merger or consolidation since 2020?	Regional Alliance Target or Individual Target? Drop down list	2020 Target	Actual 2020 GPCD	Did Supplier Achieve Targeted Reduction for 2020?	Only for suppliers that did not meet the Target in 2020 See DWR NOTES below.	
					Actual 2025 GPCD (From SB X7-7 Compliance Form)	Did Supplier meet the 2020 Target in 2025?
						NA

DWR NOTES:

Suppliers calculating a 2025 GPCD will need to complete and submit SB X 7-7 Compliance Tables to verify the use of SB X7-7 Methodologies.

Suppliers that were part of a merger or consolidation since 2020 see Chapter 5 and Appendix P for guidance.

NA=Not Applicable

NOTES:

Submittal Table 6-1 Retail: Groundwater Volume Pumped
Water Code Section 10631(4) and 10631(4)(c)

☐	Check the box if the Supplier does not pump groundwater. Proceed to the next table.
☐	Check the box if all or part of the groundwater described below is desalinated. (OPTIONAL)

Groundwater Type **Drop Down List** May use each category multiple times	Potable or Non-Potable (OPTIONAL) **Drop down list**	Location or Basin Name	2021 (MG)	2022 (MG)	2023 (MG)	2024 (MG)	2025 (MG)
Add additional rows as needed							
Alluvial Basin	Potable	Solano Subbasin[(a)]	704	704	711	810	807
		Total	704	704	711	810	807

DWR NOTES:
Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.

NOTES:
(a) Volumes are in MG.

Submittal Table 6-2 Retail: Wastewater Collected Within Service Area
Water Code Section 10633(a)

☐	Check the box if there is no wastewater collection system. Proceed to the next table.
	Percentage of 2025 service area served by wastewater collection system (OPTIONAL)
	Percentage of 2025 service area population served by wastewater collection system (OPTIONAL)

Wastewater Collection			Recipient of Collected Wastewater	
Name of Wastewater Collection Agency	Wastewater Volume Metered or Estimated? OPTIONAL **Drop Down List**	Volume of Wastewater Collected from UWMP Service Area 2025[(a,b)]*	Name of Wastewater Treatment Plant (WWTP) and Place ID Number **Drop down list**	Is WWTP Located Within UWMP Area? **Drop Down List**
Add additional rows as needed				
City of Dixon	Estimated	334	Dixon WWTF, Place ID 220396	No
Total Wastewater Received from UWMP Service Area in 2025:		334		

DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.
Additional Guidance: See Appendix M, Section M.21 for detailed guidance on this table.

NOTES:
(a)Volumes are in MG.
(b)The City's wastewater service area is larger than its water service area, as it includes the Cal Water's water service area. The City collected 477 MG in 2025. According to Cal Water's 2020 UWMP, 70 percent of wastewater influent into the WWTF is from the City's service area. The remaining 30 percent of wastewater influent is assumed to come from Cal Water's water service area.

Submittal Table 6-3 Retail: Wastewater Treatment and Outcomes Within UWMP Service Area
Water Code Section 10633(b)

☑ **Check the box if no wastewater is treated or disposed of within the UWMP service area.**
Proceed to the next table.

Wastewater Treatment Plant Name and Place ID Number **Drop down list**	Does This Plant Treat Wastewater Generated Outside the UWMP Service Area? (OPTIONAL) **Drop down list**	2025 Volume of Wastewater Received from UWMP Service Area (As Reported in Submittal Table 6-2 R) (MG)	Total 2025 Volume of Water Treated (MG)	2025 Outcomes of Treated Wastewater[(a)]										
				Water Recycled Within UWMP Service Area (enter data as applicable)		**Water Recycled Outside of UWMP Service Area** (enter data as applicable)		**Effluent Discharge that is not a Permitted Recycled Water Use** (enter data as applicable)		**Required Discharge for Instream Flow** (enter data as applicable)		**Delivered to Another Entity for Additional Treatment** (enter data as applicable)		
				Treatment Level **Drop down list**	Volume (MG)	Treatment Level **Drop down list**	Volume (MG)	Treatment Level **Drop down list**	Volume (MG)	Treatment Level **Drop down list**	Volume (MG)	Treatment Level **Drop down list**	Volume (MG)	Name of other entity
Add additional rows as needed														
Dixon WWTF, Place ID 220396		334	477		-		-		0	Secondary, Undisinfected	455		0	
Total		334	477		0		0		0		455		0	

DWR NOTES:
Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.
IPR: Indirect Potable Reuse would have the treatment level of its end use requirement in the Level of Treatment drop-down.
Additional Guidance: See Appendix M, Section M.21 for detailed guidance on this table.

Notes:
(a)Volumes are in MG.
(b)The City's wastewater service area is larger than its water service area, as it includes the Cal Water's water service area. The Dixon WWTF is located to the south of the City and is outside both the City water service area and Cal Water's water service area.
(c)The difference between the wastewater treated and the discharged treated wastewater is approximately 11 MG is effluent waste activated sludge and was sent back to the sludge stabilization basins for further treatment under aerobic digestion.

Submittal Table 6-4 Retail: Recycled Water Direct Beneficial Uses Within Service Area
Water Code Section 10633 (c),(d),(e)

☑	Check box if recycled water is not used and is not planned for use within the service area of the supplier. The supplier will only complete the column on "Potential Recycled Water Use" and submit an accompanying narrative on the feasibility of that potential recycled water use.

Name(s) of Facility/ies Producing (Treating) the Recycled Water (OPTIONAL) :	
Name of Supplier Operating the Recycled Water Distribution System (OPTIONAL) :	
Volume of Supplemental Water Added in 2025 (OPTIONAL) :	
Source of 2025 Supplemental Water (OPTIONAL) :	

Use Type **Drop down list**	**Potable or Non-Potable** (after treatment if treated) (OPTIONAL) Drop down list	Additional Information (as needed)	2025 (MG)	2030 (MG)	2035 (MG)	2040 (MG)	2045 (MG)	2050 (MG)	**Potential Recycled Water Use**	
									Volume	Narrative page number (OPTIONAL)
Add additional rows as needed										
		Subtotal Potable	0	0	0	0	0	0	0	
		Subtotal Non-Potable	0	0	0	0	0	0	0	
		Total	0	0	0	0	0	0	0	0

DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.
Additional Guidance: See Appendix M, Section M.21 for detailed guidance on this table.
Potential recycled water use: a description of the feasibility of these uses must be included in the narrative.
Multiple Producers: If you have multiple recycled water producers, submit a separate table for each.

NOTES:
(a) The City does not use not does it currently have plans in place to use recycled water. This table has been intentionally left blank.

Submittal Table 6-5 Retail: 2020 UWMP Recycled Water Use Projection Compared to 2025 Actual
Water Code Section 10633(e)

☑ Check the box if recycled water was not used in 2025 nor previously projected for use in 2020.
Proceed to the next table.

Use Type Drop Down list	2020 Projections for 2025[(a)]	2025 Actual Use[(a)]
Add additional rows as needed		
Agricultural irrigation		
Landscape irrigation (exc golf courses)		
Golf course irrigation		
Commercial use		
Industrial use		
Geothermal and other energy production		
Seawater intrusion barrier		
Recreational impoundment		
Wetlands or wildlife habitat		
Groundwater recharge (IPR)		
Reservoir water augmentation (IPR)		
Direct potable reuse (DPR)		
Other (Description Required)		
Total	0	0

DWR NOTES:
Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure reported in Submittal Table 2-3
Additional Guidance: See Appendix M, Section M.21 for detailed guidance on this table.

NOTES:
(a)The City does not use recycled water nor does it currently have plans in place to use recycled water. This table has been intentionally left blank.

Submittal Table 6-6 Retail: Methods to Encourage Future Recycled Water Use Water Code Section 10633(f)			
☑	Check the box if the Supplier does not plan to expand recycled water use in the future. Supplier will not complete the table below but will provide narrative explanation.		
38	Provide page location of narrative in the UWMP		
Name of Action	Description	Planned Implementation Year	Expected Increase in Recycled Water Use (MG)
Add additional rows as needed			
		Total (MG)	0
		Unit Conversion to AF	0

DWR NOTES:

Units of measure (AF, CCF, MG) MUST remain consistent with units reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.

The unit conversion to Acre Feet addresses the Water Code's requirement that this value be provided in acre-feet.

NOTES:

(a)The City does not use not does it currently have plans in place to use recycled water. This table has been intentionally left blank.

Submittal Table 6-7 Retail: Expected Future Water Supply Projects or Programs Water Code Section 10631(f)							
☐	Check the box if there are no expected future water supply projects or programs that provide a quantifiable increase to the agency's water supply. Proceed to the next table.						
☐	Check the box if some or all of the supplier's future water supply projects or programs are not compatible with this table and are described in a narrative format.						
45	Provide page location of narrative in the UWMP						
Name of Future Projects or Programs	Joint Project with other suppliers?		Additional Description (as needed)	**Potable or Non-Potable** (after treatment if treated) (OPTIONAL) Drop Down list	Planned Implementation Year	Planned for Use in Year Type **Drop Down List**	Expected Increase in Water Supply to Supplier (This may be a range) (MG)
	Drop Down List (yes/no)	If Yes, Supplier Name					
Add additional rows as needed							
Near-Term New Wells[(b)]	No		Construct 2 additional wells to replace existing infrastructure		By 2040	All Year Types	788
Buildout Improvements to Existing Wells[(b)]	No		Various improvement to Sites		By 2050	All Year Types	210
Buildout New Wells[(b)]	No		Construct 3 additional wells		By 2050	All Year Types	1,577

DWR NOTES:
Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure reported in Submittal Table 2-3.

NOTES:
(a)Volumes are in MG.
(b)Water supply projects are recommended groundwater projects per the City's 2021 WSMP Update (see Table 10) to meet projected water demands and replace lost supply capacity from the Industrial Well. The Industrial Well is now on standby due to excessive sanding issues and other water quality concerns. The recommended projects may be implemented by the City as the need arises and as funding is available.

Submittal Table 6-8 Retail: Water Supplies — Actual
Water Code Section 10631(b)

Water Supply		2025		
Drop down list May use each category multiple times. These are the only water supply categories that will be recognized by the WUEdata online submittal tool	Additional Description (as needed)	**Potable or Non-Potable** (after treatment if treated) (OPTIONAL) Drop Down list	Actual Volume (MG)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (MG)
Add additional rows as needed				
Groundwater (not desalinated)	City owned and operated wells	Potable	807	
		Subtotal Potable	807	0
		Subtotal Non-Potable	0	0
		Total	807	0

DWR NOTES:

Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.

Total Entitlement: e.g. Water Right, Groundwater Allocation, Contracted Amount.

NOTES:

(a)Volumes are in MG.

(b)The total entitlement is intentionally left blank. The Solano Subbasin is not adjudicated and the City does not have a contract that limits its groundwater use. The City uses as much groundwater as is necessary to meet demands.

Submittal Table 6-9 Retail: Water Supplies — Projected
Water Code Section 10631 (b)

Water Supply			Projected Water Supply (Report to the Extent Practicable)									
			2030		2035		2040		2045		2050 (opt)	
Drop down list May use each category multiple times. These are the only water supply categories that will be recognized by the WUEdata online submittal tool	Additional Detail on Water Supply	**Potable or Non-Potable** (after treatment if treated) (OPTIONAL) Drop Down list	Reasonably Available Volume (MG)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (MG)	Reasonably Available Volume (MG)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (MG)	Reasonably Available Volume (MG)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (MG)	Reasonably Available Volume (MG)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (MG)	Reasonably Available Volume (MG)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (MG)
Add additional rows as needed												
Groundwater (not desalinated)		Potable	982		1,160		1,334		1,512		1,687	
		Subtotal Potable	982	0	1,160	0	1,334	0	1,512	0	1,687	0
		Subtotal Non-Potable	0	0	0	0	0	0	0	0	0	0
		Total	982	0	1,160	0	1,334	0	1,512	0	1,687	0

DWR NOTES:

Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.

Total Entitlement: e.g. Water Right, Groundwater Allocation, Contracted Amount.

NOTES:

(a)Volumes are in MG.

The Solano Subbasin is not adjudicated and is not in overdraft or expected to be in overdraft. The City does not have a contract that limits its groundwater use and uses as much groundwater as is necessary to meet demands. The volumes shown are equal to the projected demands and are not intended to represent the City's maximum pumping volume.

Optional Submittal Table 7-1 Retail: Basis of Water Year Data (Reliability Assessment)

Year Type	Base Year If not using a calendar year, type in the last year of the fiscal, water year, or range of years, for example, water year 2024-2025, use 2025	Available Supplies if Year Type Repeats	
		☐ Check the box if quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP. **Location:** [insert location from UWMP]	
		Quantification of available supplies is provided in this table as either volume only, percent only, or both.	
		Volume Available [(a,b)*]	**% of Average Supply**
Average Year	2006	742	100%
Single-Dry Year	2013	519	100%
Consecutive Dry Years 1st Year	2011	694	100%
Consecutive Dry Years 2nd Year	2012	130	100%
Consecutive Dry Years 3rd Year	2013	111	100%
Consecutive Dry Years 4th Year	2014	578	100%
Consecutive Dry Years 5th Year	2015	519	100%

DWR NOTES: Supplier may use multiple versions of Submittal Table 7-1 R if different water sources have different base years and the supplier chooses to report the base years for each water source separately. If a Supplier uses multiple versions of Submittal Table 7-1 R, in the "Note" section of each submittal table, state that multiple versions of Submittal Table 7-1 R are being used and identify the particular water source that is being reported in each submittal table.
Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table reports the units of measure reported in Submittal Table 2-3.

NOTES:
(a)Volumes are in MG.
(b)The volumes shown is the actual water volume supplied during the respective year and not the water supply available during each base year. The City uses as much groundwater as is necessary to meet demands and therefore, the volumes shown indicate that the groundwater supply is sufficient to meet demands as needed.

Submittal Table 7-2 Retail: Normal Year Supply and Use Comparison Water Code Section 10635 (a)					
	2030 (MG)	**2035 (MG)**	**2040 (MG)**	**2045 (MG)**	**2050 (MG)**
Supply totals (autofill from Submittal Table 6-9 R)[a,b]	982	1,160	1,334	1,512	1,687
Use totals (autofill from Submittal Table 4-2 R)[a,b]	982	1,160	1,334	1,512	1,687
Surplus/(shortfall)	0	0	0	0	0
DWR NOTES : Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.					

NOTES:

(a)Volumes are in MG.

(b)The Solano Subbasin is not adjudicated and is not in overdraft or expected to be in overdraft. The City uses as much groundwater as is necessary to meet use, and therefore, the volumes shown are equal to the projected use. This indicates that the groundwater supply is sufficient to meet use as needed.

Submittal Table 7-3 Retail: Single Dry Year Supply and Use Comparison Water Code Section 10635(a)					
	2030[(a)]	**2035[(a)]**	**2040[(a)]**	**2045[(a)]**	**2050[(a)]**
Supply totals	982	1,160	1,334	1,512	1,687
Use totals	982	1,160	1,334	1,512	1,687
Surplus/(shortfall)	0	0	0	0	0

DWR NOTES : Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.

NOTES:

(a)Volumes are in MG.

(b)The Solano Subbasin is not adjudicated and is not in overdraft or expected to be in overdraft. The City uses as much groundwater as is necessary to meet use, and therefore, the volumes shown are equal to the projected use. This indicates that the groundwater supply is sufficient to meet use as needed.

Submittal Table 7-4 Retail: Multiple Dry Years Supply and Use Comparison Water Code Section 10635(a)						
		2030[a]	2035[a]	2040[a]	2045[a]	2050[a]
First year	Supply totals[a,b]	982	1,160	1,334	1,512	1,687
	Use totals[a,b]	982	1,160	1,334	1,512	1,687
	Surplus/(shortfall)	0	0	0	0	0
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					
Second year	Supply totals[a,b]	1,018	1,195	1,370	1,547	1,722
	Use totals[a,b]	1,018	1,195	1,370	1,547	1,722
	Surplus/(shortfall)	0	0	0	0	0
	OPTIONAL WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					
Third year	Supply totals[a,b]	1,053	1,230	1,405	1,582	1,757
	Use totals[a,b]	1,053	1,230	1,405	1,582	1,757
	Surplus/(shortfall)	0	0	0	0	0
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					
Fourth year	Supply totals[a,b]	1,089	1,264	1,441	1,617	1,792
	Use totals[a,b]	1,089	1,264	1,441	1,617	1,792
	Surplus/(shortfall)	0	0	0	0	0
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					
Fifth year	Supply totals[a,b]	1,124	1,299	1,476	1,652	1,827
	Use totals[a,b]	1,124	1,299	1,476	1,652	1,827
	Surplus/(shortfall)	0	0	0	0	0
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					

DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.

NOTES:

(a)Volumes are in MG.

(b)The Solano Subbasin is not adjudicated and is not in overdraft or expected to be in overdraft. The City uses as much groundwater as is necessary to meet use and therefore, the volumes shown are equal to the projected use. This indicates that the groundwater supply is sufficient to meet use as needed.

Submittal Table 7-5 Retail: Five-Year Drought Risk Assessment Water Code Section 10635(b)(3)	
2026	**Total[a,b]**
Total Water Use (MG)	843
Total Supplies (MG)	843
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (MG)	
WSCP - use reduction savings benefit (MG)	
Revised Surplus/(shortfall)	
2027	**Total[a,b]**
Total Water Use (MG)	878
Total Supplies (MG)	878
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (MG)	
WSCP - use reduction savings benefit (MG)	
Revised Surplus/(shortfall)	
2028	**Total[a,b]**
Total Water Use (MG)	913
Total Supplies (MG)	913
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (MG)	
WSCP - use reduction savings benefit (MG)	
Revised Surplus/(shortfall)	
2029	**Total[a,b]**
Total Water Use (MG)	948
Total Supplies (MG)	948
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (MG)	
WSCP - use reduction savings benefit (MG)	
Revised Surplus/(shortfall)	
2030	**Total[a,b]**
Total Water Use (MG)	982
Total Supplies (MG)	982
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (MG)	
WSCP - use reduction savings benefit (MG)	
Revised Surplus/(shortfall)	
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.	
NOTES: (a)Volumes are in MG. (b)Total water use for 2026 through 2030 is projected.	

Submittal Table 10-1 Retail: Notification to Cities and Counties Water Code Section 10621(b) and 10642		
City Name	60 Day Notice **Drop Down (yes/no)**	Notice of Public Hearing **Drop Down (yes/no)**
Add additional rows as needed		
City of Dixon	Yes	Yes
County Name **Drop Down List**	60 Day Notice **Drop Down (yes/no)**	Notice of Public Hearing **Drop Down (yes/no)**
Add additional rows as needed		
Solano County	Yes	Yes
NOTES:		

Optional Submittal Table O-1B: Recommended Energy Reporting - SINGLE DELIVERY PRODUCT - TOTAL UTILITY APPROACH

Water Delivery Product drop down list (If delivering more than one type of product recommend using Table O-1C)	Retail Potable Deliveries	**Only for Water Delivery Products Under the Urban Water Supplier's Operational Control**		
Start Date of Reporting Period	1/1/2025	**Sum of All Water Management Processes**	**Non-Consequential Hydropower**	
End Date of Reporting Period	12/31/2025			
Is upstream embedded energy in the values reported?	No			
Units of Measure for Water		**Total Utility** See DWR NOTES	**Hydropower**	**Net Utility**
Volume of Water Entering Process		807		807
Energy Consumed (kWh)		1,437,746		1,437,746
Energy Intensity (kWh/vol. converted to MG)		1,782	-	1,782

DWR NOTES:

Total Utility: The volume of water entered in the "Total Utility" column should equal the volume of water entering the distribution system (excluding recycled water); in most cases, this is the total volume calculated in UWMP Table 4-1: 2025 Actual Total Uses for Potable and Non-Potable Water. Note if recycled water is included in your Submittal Table 4-1, you must exclude it from your volume in this table.

Quantity of Self-Generated Renewable Energy

0 kWh

Data Quality (Estimate, Metered Data, Combination of Estimates and Metered Data)

Metered Data

Data Quality Narrative:

Monthly electrical energy data was provided for groundwater wells and storage tank pump stations.

Narrative:

The City's water service area is supplied by groundwater from City-owned wells. Refer to Section 6.2 for an in-depth explanation of the City's groundwater supply. The energy data provided summarized the monthly energy consumption for operating the groundwater wells and storage tanks.

NOTES:

Optional Submittal Table O-2: Recommended Energy Reporting - WASTEWATER AND RECYCLED WATER

Start Date of Reporting Period	1/1/2025	**Only for Water Delivery Products Under the Urban Water Supplier's Operational Control**			
End Date of Reporting Period	12/31/2025				
Is upstream embedded energy in the values reported?	Yes	**Water Management Process**			
Units of Measure for Water	MG	**Collection / Conveyance**	**Treatment**	**Discharge / Distribution**	**Total**
Volume of Wastewater Entering Process (volume units selected above)		477	477	455	1409
Wastewater Energy Consumed (kWh)		14,604	1,607,600		1622204
Wastewater Energy Intensity (kWh/volume converted to MG)		30.6	3370.2	0.0	1151.3
Volume of Recycled Water Entering Process (volume units selected above)					0
Recycled Water Energy Consumed (kWh)					0
Recycled Water Energy Intensity (kWh/volume converted to MG)		0.0	0.0	0.0	0.0

Quantity of Self-Generated Renewable Energy related to recycled water and wastewater operations

N/A kWh

Data Quality (drop down)

Metered Data

Data Quality Narrative:

City of Dixon provided the energy consumed for the collection/conveyance process and the wastewater treatment process at the City's wastewater treatment facility (WWTF) for the 2025 calendar year. The total energy consumed for the collection/conveyance process is for the City's one lift station, Lincoln Street lift station.

Narrative:

The City is responsible for the collection, treatment, and disposal of wastewater for the City, including its water service area and Cal Water's service area. The WWTF uses an activated sludge process and the treated wastewater discharged from the facility is used to recharge the local aquifer through percolation ponds located at the WWTF. The difference between the wastewater treated and the discharged treated wastewater of approximately 22 MG is effluent waste activated sludge, which is sent back to the sludge stabilization basins for further treatment under aerobic

NOTES:

APPENDIX C

DWR 2025 UWMP Checklist

Appendix F
Urban Water Management Plan Checklist

This appendix shows the checklist of specific Urban Water Management Plan (UWMP) requirements. The California Department of Water Resources (DWR) asks urban water suppliers (Suppliers) to complete this checklist as part of their 2025 Urban Water Management Plan (UWMP). A Microsoft Excel version of this table is available on the Water Use Efficiency Data Portal (WUEdata portal). On the portal, scroll down to the "Resources" section, and click through to the file.

In the table, suppliers should enter information in the far-right column labeled "2025 UWMP Location," and indicate the page number in their UWMP where a requirement is addressed.

This checklist may be submitted with the 2025 UWMP and helps DWR reviewers assess whether a UWMP addresses Water Code requirements.

Table F-1. Urban Water Management Plan Checklist

Retail (x = required)	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	Relevant Submittal Table	2025 UWMP Location
x	Chapter 1	10615	A plan shall describe and evaluate sources of supply, reasonable and practical efficient uses, reclamation and demand management activities.	Introduction and overview	n/a	Executive Summary
x	Chapter 1	10630.5	Each plan shall include a simple description of the Supplier's plan including water availability, future requirements, a strategy for meeting needs, and other pertinent information. Additionally, a Supplier may also choose to include a simple description at the beginning of each chapter.	Plan preparation	n/a	Executive Summary
x	Section 2.1	10620(b)	Every person that becomes a Supplier shall adopt UWMP within one year after it has become a Supplier.	Plan preparation	n/a	Section 2.1
x	Section 2.5	10644	Supplier shall report the Public Water Systems number, volume of delivered water, and number of connections that are included in this UWMP.	Plan preparation	2-1	Section 2.1
x	Section 2.5	10644	Supplier shall report if this UWMP is an individual UWMP and whether the Supplier belongs to a regional UWMP or regional alliance.	Plan preparation	2-2	Section 2.3
x	Section 2.5	10644	Supplier shall report whether the data is in fiscal or calendar years and the units of measure used for reporting water volumes.	Plan preparation	2-3	Section 2.3
x	Section 2.4	10642	Provide supporting documentation that the Supplier has encouraged active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan and contingency plan.	Plan preparation	n/a	Section 2.5.2 Appendix D
x	Section 2.4.2	10620(d)(3)	Coordinate the preparation of its plan with other appropriate agencies in the area, including other Suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.	Plan preparation	n/a	Section 2.5 Appendix D
x	Section 2.4.1	10631(h)	Retail Suppliers will include documentation that they have provided their Wholesale Supplier(s)—if any—with water use projections from that source.	Plan preparation	2-4 R	Section 2.5.1
n/a	Section 2.4.1	10631(h)	Wholesale Suppliers will provide their Suppliers with identification and quantification of the existing and planned sources of water available from the Wholesale Supplier to the Supplier during various water year types.	Plan preparation	2-4 W	N/A; City is not a Wholesale Supplier
x	Chapter 3.0	10631(a)	Describe the Supplier service area.	System description	n/a	Section 3.1.1
x	Section 3.3	10631(a)	Describe the climate of the Supplier's service area.	System description	n/a	Section 3.3
x	Section 3.4.1	10631(a)	Provide the current and projected service area populations for 2030, 2035, 2040, 2045 and optionally 2050.	System description	3-1	Section 3.4.1
x	Section 3.4.2	10631(a)	Describe other social, economic, and demographic factors affecting the Supplier's water management planning.	System description	n/a	Section 3.4.2
x	Section 3.5	10631(a)	Describe the land uses within the service area… include the current and projected land uses within the existing or anticipated service area affecting the Supplier's water management planning. Describe the land uses within the service area.	System description and baselines	n/a	Section 3.5
x	Sections 4.2.3 and 4.2.4	10631(d)(1)	Quantify past, current, and projected water use, identifying the uses among water use sectors.	System water use	4-1 and 4-2	Section 4.2
x	Section 4.3.1	10631(d)(3)(A)	Report the distribution system water loss for each of the five years preceding the plan update.	System water use	4-5	Section 4.5
x	Section 4.3.2	10631(d)(3)(C)	Retail Suppliers shall provide data to show the distribution loss standards were met.	System water use	4-6	Section 4.5
x	Section 4.2.5.4	10631.1(a)	Include projected water use needed for lower income housing projected in the service area of the Supplier.	System water use	4-3	Section 4.4
x	Section 4.2.5.3	10631(d)(4)(A)	In projected water use, include estimates of water savings from adopted codes, plans, and other policies or laws.	System water use	4-3	Section 4.3

Retail (x = required)	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	Relevant Submittal Table	2025 UWMP Location
x	Section 4.2.5.3	10631(d)(4)(B)	Provide citations of codes, standards, ordinances, or plans used to make water use projections.	System water use	4-3	Section 4.2.3
x	Section 4.2.5.3	10631(d)(4)(B)(ii)	To the extent that a Supplier reports the information described in subparagraph (A), an urban water Supplier shall… Indicate the extent that the water use projections consider savings from codes, standards, ordinances, or transportation and land use plans. Water use projections that do not account for these water savings shall be noted of that fact.	System water use	4-3	Section 4.3
x	Section 4.2.5.6	10635(b)	Demands under climate change considerations must be included as part of the drought risk assessment.	System water use	n/a	Section 4.6
n/a	Section 5.1	10608.36	Wholesale Suppliers shall include an assessment of present and proposed future measures, programs, and policies to help their Retail Suppliers achieve targeted water use reductions.	Baselines and targets	n/a	N/A; City is not a Wholesale Supplier
x	Section 5.2	10608.40	Retail Suppliers shall report on their compliance in meeting their water use targets. Reporting requirements will vary depending on whether the Supplier: - Was considered an urban retail water supplier in 2020, - Met its 2020 target in 2020, or - Was part of a merger or consolidation since 2020. Chapter 5 Subsections 5.2.1, 5.2.2, and 5.2.3 address each of these situations.	Baselines and targets	5-1	Section 5.5
x	Section 6.1	10631(b)(2)	When multiple sources of water supply are identified, describe the management of each supply in relationship to other identified supplies.	System supplies	n/a	Section 6.2
x	Sections 6.1 and 6.2	10631(b)(1)	Provide a discussion of anticipated supply availability under a normal, single dry year, and a drought lasting five years, as well as more frequent and severe periods of drought, including changes in supply due to climate change.	System supplies	n/a	Section 6.2 and Section 7.1.3
x	Section 6.2.2	10631(b)(4)(C)	Indicate whether groundwater is an existing or planned source of water available to the Supplier. If groundwater is identified as an existing or planned source of water… (include) a detailed description and analysis of the location, amount and sufficiency of groundwater pumped by the Supplier for the past five years.	Water supplies and recycled water	6-1	Section 6.2.2
x	Section 6.2.2	10631(b)(4)(A)	Indicate whether a groundwater sustainability plan or groundwater management plan has been adopted by the Supplier or if there is any other specific authorization for groundwater management. Include a copy of the plan or authorization.	System supplies	n/a	Section 6.2.2
x	Section 6.2.2	10631(b)(4)(B)	Describe the groundwater basin.	System supplies	n/a	Section 6.2.2
x	Section 6.2.2	10631(b)(4)(B)	Indicate if the basin has been adjudicated and include a copy of the court order or decree and a description of the amount of water the Supplier has the legal right to pump.	System supplies	n/a	Section 6.2.2
x	Section 6.2.2	10631(b)(4)(B)	For unadjudicated basins… (include) information as to whether DWR has identified the basin as a high- or medium-priority basin in the most current official departmental bulletin…	Water supplies and recycled water	n/a	Section 6.2.2
x	Section 6.2.2	10631(b)(4)(B)	For unadjudicated basins… describe efforts by the Supplier to coordinate with sustainability or groundwater agencies to achieve sustainable groundwater conditions.	Water supplies and recycled water	n/a	Section 6.2.2
x	Section 6.2.2.	10631(b)(4)(C)	If groundwater is identified as an existing or planned source of water… (include) a detailed description and analysis of the location, amount and sufficiency of groundwater pumped by the Supplier for the past five years.	System supplies	n/a	Section 6.2.2
x	Section 6.2.2	10631(b)(4)(D)	Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped.	System supplies	6-9	Section 6.2.2
x	Section 6.1	10631(b)	Identify and quantify the existing and planned sources of water available for 2025, 2030, 2035, 2040, 2045 and optionally 2050.	System supplies	6-8 and 6-9	Section 6.2.2
x	Section 6.2.7	10631(c)	Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.	System supplies	n/a	Section 6.2.2

Retail (x = required)	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	Relevant Submittal Table	2025 UWMP Location
x	Section 6.2.5	10633(a)	Describe the wastewater collection and treatment systems in the Supplier's service area with quantified amount of collection and treatment and the disposal methods.	System supplies (recycled water)	6-2	Section 6.3.1
x	Section 6.2.5	10633(b)	Describe the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.	System supplies (recycled water)	6-3	Section 6.3.1
x	Section 6.2.5	10633(c)	Describe the recycled water currently being used in the Supplier's service area.	System supplies (recycled water)	6-4	Section 6.3.1
x	Section 6.2.5	10633(d)	Describe and quantify the potential uses of recycled water and provide a determination of the technical and economic feasibility of those uses.	System supplies (recycled water)	6-4	Section 6.3.1
x	Section 6.2.5	10633(e)	Describe the projected use of recycled water within the Supplier's service area at the end of 5, 10, 15, and 20 years, and describe the actual use of recycled water in comparison to uses previously projected.	System supplies (recycled water)	6-4 and 6-5	Section 6.3.1
x	Section 6.2.5	10633(f)	Describe the actions that may be taken to encourage the use of recycled water and the projected results of these actions in terms of acre-feet of recycled water used per year.	System supplies (recycled water)	6-6	Section 6.3.1
x	Section 6.2.5	10633(g)	Provide a plan for optimizing the use of recycled water in the Supplier's service area.	System supplies (recycled water)	n/a	Section 6.3.1
x	Section 6.2.6	10631(g)	Describe desalinated water project opportunities for long-term supply.	System supplies	6-7	Section 6.3.2
x	Section 6.2.10	10631(f)	Describe the expected future water supply projects and programs that may be undertaken by the water Supplier to address water supply reliability in average, single-dry, and for a period of drought lasting five consecutive water years.	System supplies	6-7	Section 6.3.4
x	Section 6.3 and Appendix O	10631.2(a)	The UWMP must include energy information, as stated in the code, that a Supplier can readily obtain.	System suppliers, energy intensity	O-1A, O-1B, O-1C, and O-2	Section 6.4
x	Section 7.1	10634	Provide information on the quality of existing sources of water available to the Supplier and the manner in which water quality affects water management strategies and supply reliability.	Water supply reliability assessment	n/a	Section 7.1.1
x	Section 7.2	10635(a)	Service Reliability Assessment: Assess the water supply reliability during normal, dry, and a drought lasting five consecutive water years by comparing the total water supply sources available to the Supplier with the total projected water use over the next 20 years.	Water supply reliability assessment	7-2, 7-3, and 7-4	Section 7.1
x	Section 7.2.3	10620(f)	Describe water management tools and options to maximize resources and minimize the need to import water from other regions.	Water supply reliability assessment	n/a	Section 7.2
x	Section 7.3	10635(b)	Provide a drought risk assessment as part of information considered in developing the demand management measures and water supply projects.	Water supply reliability assessment	n/a	Section 7.3
x	Section 7.3	10635(b)(1)	Include a description of the data, methodology, and basis for one or more supply shortage conditions that are necessary to conduct a drought risk assessment for a drought period that lasts five consecutive years.	Water supply reliability assessment	n/a	Section 7.3.1
x	Section 7.3	10635(b)(2)	Include a determination of the reliability of each source of supply under a variety of water shortage conditions.	Water supply reliability assessment	n/a	Section 7.3.1 and 7.3.2
x	Section 7.3	10635(b)(3)	Include a comparison of the total water supply sources available to the Supplier with the total projected water use for the drought period.	Water supply reliability assessment	7-5	Section 7.3.3
x	Section 7.3	10635(b)(4)	Include considerations of the historical drought hydrology, plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria.	Water supply reliability assessment	n/a	Section 7.3.3
x	Chapter 8	10632(a)	Provide a water shortage contingency plan (WSCP) with specified elements below.	Water shortage contingency planning	n/a	Section 8.2 and Appendix F

Retail (x = required)	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	Relevant Submittal Table	2025 UWMP Location
x	Chapter 8	10632(a)(1)	Provide an analysis of water supply reliability (from Guidebook Chapter 7) in the WSCP.	Water shortage contingency planning	n/a	Appendix F: Section 1.0
x	Section 8.2	10632(a)(2)(A)	Provide the written decision-making process and other methods that the Supplier will use each year to determine its water reliability.	Water shortage contingency planning	n/a	Appendix F: Section 2.1
x	Section 8.2	10632(a)(2)(B)	Provide data and methodology to evaluate the Supplier's water reliability for the current year and one dry year pursuant to factors in the code.	Water shortage contingency planning	n/a	Appendix F: Section 2.2 and 2.3
x	Section 8.3	10632(a)(3)(A)	Define six standard water shortage levels of 10%, 20%, 30%, 40%, 50% shortage, and greater than 50% shortage. These levels shall be based on supply conditions, including percent reductions in supply, changes in groundwater levels, changes in surface elevation, or other conditions. The shortage levels shall also apply to a catastrophic interruption of supply.	Water shortage contingency planning	n/a	Appendix F: Section 3.0
x	Section 8.3	10632(a)(3)(B)	Suppliers with an existing WSCP that uses different water shortage levels must cross reference their categories with the six standard categories.	Water shortage contingency planning	8-1	Appendix F: Section 3.0
x	Section 8.4	10632(a)(4)(A)	Suppliers with WSCPs that align with the defined shortage levels must specify locally appropriate supply augmentation actions.	Water shortage contingency planning	8-2	Appendix F: Section 4.3
x	Section 8.4	10632(a)(4)(B)	Specify locally appropriate demand reduction actions to adequately respond to shortages.	Water shortage contingency planning	8-3	Appendix F: Section 4.1
x	Section 8.4	10632(a)(4)(C)	Specify locally appropriate operational changes.	Water shortage contingency planning	8-2	Appendix F: Section 4.4
x	Section 8.4	10632(a)(4)(D)	Specify additional mandatory prohibitions against specific water use practices that are in addition to State-mandated prohibitions are appropriate to local conditions.	Water shortage contingency planning	Table 8-3	Appendix F: Section 4.2
x	Section 8.4	10632(a)(4)(E)	Estimate the extent to which the gap between supplies and demand will be reduced by implementation of the action.	Water shortage contingency planning	8-2 and 8-3	Appendix F: Section 4.1
x	Section 8.4.6	10632.5	The UWMP shall include a seismic risk assessment and mitigation plan.	Water shortage contingency plan	n/a	Section 8.3
x	Section 8.5	10632(a)(5)(A)	Suppliers must describe that they will inform customers, the public and others regarding any current or predicted water shortages.	Water shortage contingency planning	n/a	Appendix F: Section 5.0
x	Section 8.5	10632(a)(5)(B), 10632(a)(5)(C)	Suppliers must describe that they will inform customers, the public and others regarding any shortage response actions triggered or anticipated to be triggered and other relevant communications.	Water shortage contingency planning	n/a	Appendix F: Section 5.0
x	Section 8.6	10632(a)(6)	Retail Supplier must describe how it will ensure compliance with and enforce provisions of the WSCP.	Water shortage contingency planning	n/a	Appendix F: Section 6.0
x	Section 8.7	10632(a)(7)(A)	Describe the legal authority that empowers the Supplier to enforce shortage response actions.	Water shortage contingency planning	n/a	Appendix F: Section 7.0
x	Section 8.7	10632(a)(7)(B)	Provide a statement that the Supplier will declare a water shortage emergency per Water Code Chapter 3. *Water Shortage Emergencies*.	Water shortage contingency planning	n/a	Appendix F: Section 7.0
x	Section 8.7	10632(a)(7)(C)	Provide a statement that the Supplier will coordinate with any city or county within which it provides water for the possible proclamation of a local emergency.	Water shortage contingency planning	n/a	Appendix F: Section 4.5 and 7.0
x	Section 8.8	10632(a)(8)(A)	Describe the potential revenue reductions and expense increases associated with activated shortage response actions.	Water shortage contingency planning	n/a	Appendix F: Section 8.0
x	Section 8.8	10632(a)(8)(B)	Provide a description of mitigation actions needed to address revenue reductions and expense increases associated with activated shortage response actions.	Water shortage contingency planning	n/a	Appendix F: Section 8.0
x	Section 8.8	10632(a)(8)(C)	Retail Suppliers must describe the cost of compliance with Water Code Chapter 3.3, *Excessive Residential Water Use During Drought*.	Water shortage contingency planning	n/a	Appendix F: Section 9.0 and 10.1

Retail (x = required)	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	Relevant Submittal Table	2025 UWMP Location
x	Section 8.9	10632(a)(9)	Retail Suppliers must describe the monitoring and reporting requirements and procedures that ensure appropriate data are collected, tracked, and analyzed for purposes of monitoring customer compliance.	Water shortage contingency planning	n/a	Appendix F: Section 9.0 and 10.1
x	Section 8.10	10632(a)(10)	Describe reevaluation and improvement procedures for monitoring and evaluation the WSCP to ensure risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented.	Water shortage contingency planning	n/a	Appendix F: Section 2.0 and Section 10
x	Section 8.11	10632(b)	Analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas.	Water shortage contingency planning	n/a	Appendix F: Section 11.0
x	Section 8.12	10632(c)	Make available the WSCP to customers and any city or county where it provides water within 30 days after adoption of the plan.	Water shortage contingency planning	n/a	Appendix F: Section 12.0
x	Sections 9.1	10631(e)(1)	Retail Suppliers shall provide a description of the nature and extent of each demand management measure implemented over the past five years. The description will address specific measures listed in code.	Demand management measures	n/a	Section 9.1
n/a	Sections 9.2	10631(e)(2)	Wholesale Suppliers shall describe specific demand management measures listed in code, their distribution system asset management program, and Supplier assistance program.	Demand management measures	n/a	N/A; City is not a Wholesale Supplier
x	Chapter 10	10608.26(a)	Retail Suppliers shall conduct a public hearing to discuss adoption, implementation, and economic impact of water use targets (recommended to discuss compliance).	Plan adoption, submittal, and implementation	n/a	Section 10.3
x	Section 10.2.1	10621(b)	Notify, at least 60 days prior to the public hearing, any city or county within which the Supplier provides water that the Supplier will be reviewing the UWMP and considering amendments or changes to the plan.	Plan adoption, submittal, and implementation	10-1	Section 10.2 and Appendix D
x	Section 10.4	10621(f)	Each urban water Supplier shall update and submit its 2025 plan to DWR by July 1, 2026.	Plan adoption, submittal, and implementation	n/a	Section 10.4
x	Sections 10.2.2, 10.3, and 10.5	10642	Provide supporting documentation that the Supplier made the UWMP and WSCP available for public inspection, published notice of the public hearing, and held a public hearing about the UWMP and WSCP.	Plan adoption, submittal, and implementation	n/a	Section 10.3 and Appendix H
x	Section 10.2.2	10642	The Supplier is to provide the time and place of the hearing to any city or county within which the Supplier provides water.	Plan adoption, submittal, and implementation	10-1	Section 10.3
x	Section 10.3.2	10642	Provide supporting documentation that the UWMP and WSCP has been adopted as prepared or modified.	Plan adoption, submittal, and implementation	n/a	Section 10.3.2 and Appendix H
x	Section 10.4	10644(a)	Provide supporting documentation that the Supplier has submitted their UWMP to the California State Library.	Plan adoption, submittal, and implementation	n/a	Section 10.4
x	Section 10.4	10644(a)(1)	Provide supporting documentation that the Supplier has submitted their UWMP to any city or county within which the Supplier provides water no later than 30 days after adoption.	Plan adoption, submittal, and implementation	n/a	Section 10.4
x	Sections 10.4.1 and 10.4.2	10644(a)(2)	The UWMP, or amendments to the UWMP, submitted to DWR shall be submitted electronically.	Plan adoption, submittal, and implementation	n/a	Section 10.4
x	Section 10.7.2	10644(b)	If revised, submit a copy of the WSCP to DWR within 30 days of adoption.	Plan adoption, submittal, and implementation	n/a	Section 10.6

Retail (x = required)	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	Relevant Submittal Table	2025 UWMP Location
x	Section 10.5	10645(a)	Provide supporting documentation that, not later than 30 days after filing a copy of its UWMP with DWR, the Supplier has or will make the plan available for public review during normal business hours.	Plan adoption, submittal, and implementation	n/a	Section 10.5
x	Section 10.5	10645(b)	Provide supporting documentation that, not later than 30 days after filing a copy of its WSCP with DWR, the Supplier has or will make the plan available for public review during normal business hours.	Plan adoption, submittal, and implementation	n/a	Section 10.5
x	Section 10.6	10621(c)	If Supplier is regulated by the Public Utilities Commission, include its plan and contingency plan as part of its general rate case filings.	Plan adoption, submittal, and implementation	n/a	N/A

APPENDIX D

Agency and Public Notices

City of Dixon Public Water System CA4810009

March 10th, 2026

California Water Service, Dixon District
201 South First Street
Dixon CA, 95620

SUBJECT: Preparation of 2025 Urban Water Management Plan and Water Shortage Contingency Plan

Dear Interested Stakeholders,

The City of Dixon is currently in the process of preparing its Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP). The Urban Water Management Planning Act (Act), Water Code Section 10610 et seq., requires every urban water supplier providing 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 to prepare and adopt an UWMP and periodically update that plan at least every five years. The Act also requires the City to prepare a (WSCP). The City's must adopt and submit a final plan to the California Department of Water Resources by July 1st, 2026.

The UWMP is a planning document and a source document which reports, describes and evaluates water deliveries and uses, water supply sources and conservation efforts. The WSCP provides a plan for response to various water supply shortage conditions. As an urban water supplier, the City coordinates with water management agencies, relevant public agencies and other water suppliers on the preparation of the UWMP and WSCP updates.

If you wish to contact the City about its preparation process, you may do so by writing to the undersigned.

Sincerely,

Christopher Fong, P.E.
City Engineer/Director of Utilities
600 East A Street
Dixon CA 95620
cfong@cityofdixonca.gov
707-678-7030 ext. 5306

Josh Hudson
Water Operations Supervisor
600 East A Street
Dixon CA 95620
jhudson@cityofdixonca.gov
707-678-7050 ext. 5501

City of Dixon Public Water System CA4810009

March 10th, 2026

Solano County Water Agency
810 Vaca Valley Parkway, Suite 203
Vacaville, CA 95688

SUBJECT: Preparation of 2025 Urban Water Management Plan and Water Shortage Contingency Plan

Dear Interested Stakeholders,

The City of Dixon is currently in the process of preparing its Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP). The Urban Water Management Planning Act (Act), Water Code Section 10610 et seq., requires every urban water supplier providing 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 to prepare and adopt an UWMP and periodically update that plan at least every five years. The Act also requires the City to prepare a (WSCP). The City's must adopt and submit a final plan to the California Department of Water Resources by July 1st, 2026.

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Water Operations Supervisor
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Dixon CA 95620
jhudson@cityofdixonca.gov
707-678-7050 ext. 5501

City of Dixon Public Water System CA4810009

March 10th, 2026

Solano Groundwater Sustainability Agency
810 Vaca Valley Parkway, Suite 203
Vacaville, CA 95688

SUBJECT: Preparation of 2025 Urban Water Management Plan and Water Shortage Contingency Plan

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Josh Hudson
Water Operations Supervisor
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Dixon CA 95620
jhudson@cityofdixonca.gov
707-678-7050 ext. 5501

City of Dixon Public Water System CA4810009

March 10th, 2026

Solano Irrigation District
810 Vaca Valley Parkway, Suite 201
Vacaville, CA 95688

SUBJECT: Preparation of 2025 Urban Water Management Plan and Water Shortage Contingency Plan

Dear Interested Stakeholders,

The City of Dixon is currently in the process of preparing its Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP). The Urban Water Management Planning Act (Act), Water Code Section 10610 et seq., requires every urban water supplier providing 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 to prepare and adopt an UWMP and periodically update that plan at least every five years. The Act also requires the City to prepare a (WSCP). The City's must adopt and submit a final plan to the California Department of Water Resources by July 1st, 2026.

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Josh Hudson
Water Operations Supervisor
600 East A Street
Dixon CA 95620
jhudson@cityofdixonca.gov
707-678-7050 ext. 5501

City of Dixon Public Water System CA4810009

March 10th, 2026

County Administrator
Solano County
675 Texas St. Suite 6500
Fairfield, CA 94533

SUBJECT: Preparation of 2025 Urban Water Management Plan and Water Shortage Contingency Plan

Dear Interested Stakeholders,

The City of Dixon is currently in the process of preparing its Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP). The Urban Water Management Planning Act (Act), Water Code Section 10610 et seq., requires every urban water supplier providing 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 to prepare and adopt an UWMP and periodically update that plan at least every five years. The Act also requires the City to prepare a (WSCP). The City's must adopt and submit a final plan to the California Department of Water Resources by July 1st, 2026.

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Josh Hudson
Water Operations Supervisor
600 East A Street
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jhudson@cityofdixonca.gov
707-678-7050 ext. 5501

APPENDIX E

SB X7-7 Compliance Tables

SB X7-7 Table 2: Method for 2025 Population Estimate Water Code Section 10608.20 (e) and 10608.20(h)(1)(2)	
Method Used to Determine 2025 Population[(a)] (may check more than one)	
☐	**1. Department of Finance** (DOF) or **American Community Survey** (ACS)
☐	**2. Persons-per-Connection Method**
☐	**3. DWR Population Tool**
☑	**3. Other** DWR recommends pre-review
NOTES: (a) The City's 2025 service area population was taken from the City's 2025 Electronic Annual Report (EAR).	

SB X7-7 Table 3: 2025 Service Area Population Water Code Section 10608.20 (e) and 10608.20(h)(1)(2)	
2025 Compliance Year Population	
2025[(a)]	13,596
NOTES: (a) The City's 2025 service area population was taken from the City's 2025 Electronic Annual Report (EAR)	

APPENDIX F

Water Shortage Contingency Plan

LSCE

DRAFT REPORT | MARCH 2026

WATER SHORTAGE CONTINGENCY PLAN UPDATE

PREPARED FOR

CITY OF DIXON

PREPARED BY

Luhdorff & Scalmanini
Consulting Engineers

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APPENDICES

Appendix A Emergency Intertie Agreement with Cal Water

Appendix B Solano MJHMP – Jurisdictional Annex: City of Dixon

LIST OF ACRONYMS AND ABBREVIATIONS

Acronym	Meaning
Ccf	Hundred Cubic Feet
MGD	Million Gallons Per Day
USGS	United States Geological Survey
WD	Water Division
WRE	Water Resources Engineering
WSM	Water System Manager
AB	Assembly Bill
AMI	Advanced Metering Infrastructure
AMR	Automated Meter Reading
Annual Assessment	Annual Water Supply and Demand Assessment
AWIA	America's Water Infrastructure Act
Cal Water	California Water Service
CalWARN	California Water/Wastewater Agency Response Network
City	City of Dixon
County	Solano County
CWC	California Water Code
Director DMC	Director of Utilities, Dixon Municipal Code
DMC	Dixon Municipal Code
DMC	Dixon Municipal Code
DOC	Department Operations Center
DWR	Department of Water Resources
EOC	Emergency Operations Center
ERP	Emergency Response Plan
FEMA	Federal Emergency Management Agency
Legislature	California State Legislature
MJHMP	Multi-Jurisdiction Hazard Mitigation Plan
PIO	Public Information Officer
RRA	Risk and Resilience Assessment
SB	Senate Bill
SGMA	Sustainable Groundwater Management Act
State Water Board	State Water Resource Control Board
UM	Utilities Manager

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Acronym	Meaning
UWMP	Urban Water Management Plan
WSCP	Water Shortage Contingency Plan

This document presents the City of Dixon's (City) Water Shortage Contingency Plan (WSCP), which describes the strategic plan for preparing and responding to water shortages, including the water shortage stages and associated actions.

Water shortages occur whenever the available water supply cannot meet the normally expected customer water use. This can be due to several reasons, such as climate change, drought, and catastrophic events. Drought, regulatory action constraints, and natural and manmade disasters may occur at any time. As part of the WSCP, the City's legal authorities, communication protocols, compliance and enforcement, and monitoring and reporting protocols are described. Following the adoption of this WSCP, the City plans to update the City of Dixon Municipal Code (DMC) to support this WSCP.

In 2018, the California State Legislature (Legislature) enacted two policy bills, (Senate Bill (SB) 606 (Hertzberg) and Assembly Bill (AB) 1668 (Friedman)) (2018 Water Conservation Legislation), to establish a new foundation for long-term improvements in water conservation and drought planning to adapt to climate change and the resulting longer and more intense droughts in California. The 2018 Water Conservation Legislation set new requirements for water shortage contingency planning.

The City's WSCP provides a guide for the City to proactively prevent catastrophic service disruptions and has been prepared to be consistent with the 2018 Water Conservation Legislation requirements. The City intends for this WSCP to be an adaptive management plan so that it may assess response action effectiveness and adapt to emergencies and catastrophic events. Refinement procedures for this WSCP are provided to allow the City to modify this WSCP outside of the Urban Water Management Plan (UWMP) process.

1. WATER SUPPLY RELIABILITY ANALYSIS

Chapters 6 and 7 of the City's 2025 UWMP present the City's water supply sources and reliability, respectively. Findings show the City can reliably meet its projected demands through 2050 in normal and dry hydrologic conditions, including single dry years and five consecutive dry years.

A water shortage condition occurs when the available supply of potable water cannot meet ordinary water demands for human consumption, sanitation, fire protection, and other beneficial uses. In some cases, the City may foresee a water shortage, but the water shortage may also be caused by an unforeseen, sudden, or emergency event. In general, the City's water supply conditions may be affected by the following:

- Climatic variability and drought conditions (i.e., Solano Project supply reliability, snowpack, and snowmelt runoff timing)
- Water quality
- Water supply facility failures (loss of treatment facilities, pumps, tanks, or transmission pipes)
- Legislative restrictions or policies (i.e., reductions through voluntary settlements or other mandated instream flow requirements and/or diversion restrictions)
- State drinking water quality regulatory updates
- Unforeseen Sustainable Groundwater Management Act (SGMA) requirements for the available groundwater supply in the future

In general, the City's water supply is from the Solano Subbasin. Groundwater level data presented in the November 2021 Solano Subbasin Groundwater Sustainability Plan show that the subbasin is being managed sustainably. In 1959, the United States Bureau of Reclamation completed the Solano Project to store surface water in Lake Berryessa for potable and non-potable uses primarily in Solano County (County). One of the primary reasons behind the Solano Project was to correct the overdraft of groundwater, which was occurring in agricultural areas. Since then, the Solano Project has halted the overdraft of groundwater, and the groundwater levels have rebounded in most areas of the Solano Subbasin. The groundwater levels are not permanently impacted by multiple dry years, and data also show slight variations in response to climatic conditions. Since the 1980s, the groundwater levels have been stable with low levels in the dry season and high levels in the wet season of each year. The City's water supply is resilient.

Since the City prepared its 2020 UWMP in 2021, the City has prepared an annual water supply and demand assessment as described below in Section 2.0. The analysis associated with this WSCP was developed in the context of the City's water supply sources and reliability.

2. ANNUAL WATER SUPPLY AND DEMAND ASSESSMENT PROCEDURES

Since July 1, 2022, California Water Code (CWC) §10632.1 required water suppliers to complete an Annual Water Supply and Demand Assessment (Annual Assessment) and submit an Annual Water Shortage Assessment Report to the DWR. This section provides the procedures for the City to conduct its Annual Assessment, which will inform the City's Annual Water Shortage Assessment Report and assist the City with planning for potential water supply shortages. The objective of the Annual Assessment is to determine actual forecasted near-term water supply conditions so that the City can prepare logistically and financially for any anticipated water supply constraints, as well as enact appropriate shortage response actions in a timely manner.

The Annual Assessment procedures below describe the steps the City may take to declare a water shortage emergency and associated water shortage stage (see Section 3.0) and implement water shortage response actions (see Section 4.0).

At the time of preparation of this WSCP, DWR is preparing guidance for the preparation of the Annual Water Supply and Demand Assessment Guidance, and associated reporting tables and worksheets. In April 2022, the DWR released the Annual Water Supply and Demand Assessment Guidance document. The City has completed its Annual Assessment in accordance with DWR guidance and using the associated reporting tables and worksheets.

2.1. Decision-Making Process

The City will use the decision-making process described below to consistently determine its water supply reliability on an annual basis. The City may adjust and improve this process as needed.

The City's Water Operations Division is responsible for preparing the City's Annual Assessment and Annual Water Shortage Assessment Report and for submitting the report to DWR by July 1st of each year, as of

2022. This team will gather key data inputs described in Section 2.2 and conduct the assessment in accordance with Section 2.3. In May of each year, the City will finalize the assessment by assessing projected water demand, previous groundwater data, and SGMA protocols for implementing sustainable groundwater supply. The Department of Engineering and Utilities will present the Annual Assessment and Annual Water Shortage Assessment Report to the City Engineer/Director of Utilities, or designee, for

review and approval. If the Annual Assessment finds that the available water supply will be sufficient to meet expected demands for the current year and one subsequent dry year, no further action will be required. The final approved documents will be submitted to DWR by July 1st of each year.

The City will follow the schedule of activities shown in Table 1 for conducting the Annual Assessment. Due to variations in climate and hydrologic conditions, the start and end dates shown in the table are approximate and may be adjusted as needed. The intent of the schedule is to allow shortage response actions to effectively address anticipated water shortage conditions in a timely manner while complying with the State's reporting requirements.

Table 1. Schedule of Annual Assessment Activities

Schedule	Activities	Responsible Party
February to March	Determine water supply sources for the current year and one subsequent dry year. Describe sources and quantities, considering factors affecting supply as described in Section 2.2.	Water Operations Supervisor
February to March	Determine water demands for the current year and one subsequent dry year. Describe demand types and quantities considering factors affecting demand as described in Section 2.2.	Water Operations Supervisor
Early to Mid-April	Calculate the City's water supply reliability for the current year and one subsequent dry year using the methodology described in Section 2.3.	Water Operations Supervisor
Early to Mid-April	Complete assessment based on groundwater monitoring data and SGMA protocols for implementing a sustainable groundwater supply.	Water Operations Supervisor
Late April	Based on the determinations of the Annual Assessment, prepare the Annual Water Shortage Assessment Report with recommendations on water shortage condition determination and response actions. Submit to the Director of Utilities (Director) and Utilities Manager (UM), or designee(s), for review.	Water Operations Supervisor
Early May	Review the Annual Assessment and Annual Water Shortage Assessment Report and provide comments as needed.	Water Operations Supervisor
Mid-May to Early June	Finalize and approve the Annual Assessment and the Annual Water Shortage Assessment Report.	City Engineer/ Director of Utilities
Before July 1	Submit the Annual Assessment and the finalized Annual Water Shortage Assessment Report to DWR.	Water Operations Supervisor

Should the Annual Assessment find that available supply will not meet expected demands, the City will coordinate interdepartmentally, with the region's water service providers, and with the County for the

possible proclamation of a local emergency. The Department of Engineering and Utilities will present the finalized assessment to the City Council, along with recommendations on water shortage condition determination and actions. Recommended actions may include declaration of a water shortage emergency, declaration of a water shortage stage, and water shortage actions.

Based on the findings of the Annual Assessment, the City Council will determine if a water shortage condition exists and, if needed, adopt a resolution declaring a water shortage emergency and an associated water shortage stage and authorizing water shortage actions. The Water Operations Division will then prepare the City's Annual Water Shortage Assessment Report, incorporating City Council determinations and approved actions. The schedule of decision-making activities is provided in Table 2. The start and end dates and the activities shown in this table are approximate and may be adjusted as needed.

Table 2. Schedule of Decision-Making Activities if Water Shortage Condition Exists

Schedule	Activities	Responsible Party
Early May	Based on finalized determinations of Annual Assessment regarding water shortage conditions and recommended actions, prepare recommendations on water shortage condition determination and actions.	Water Operations Supervisor and City Engineer/Director of Utilities
Early May	Prepare resolutions approving determinations and actions.	Water Operations Supervisor
Mid-May	Coordinate interdepartmentally and with the County for the possible proclamation of a local emergency.	City Engineer/Director of Utilities
Early May to Mid-May	Present finalized determinations and recommendations, along with resolutions approving determinations and actions.	City Engineer/Director of Utilities
Late May to Early June	Receive presentation of finalized determinations and recommendations. Make a determination of the degree of emergency and act on resolutions that declare a water shortage emergency condition. Authorize water shortage response actions for implementation.	City Council
Mid-June	If a water shortage emergency condition is declared, implement the WSCP and the water shortage response actions as approved by the City Council.	City Staff as Assigned
July 1	Finalize Annual Water Shortage Assessment Report (See Table 1) and submit to DWR.	Water Operations Supervisor

2.2. Key Data Inputs

The Annual Assessment requires evaluating supplies and demands for the current year and one subsequent dry year.

In reviewing planned water supplies, the Annual Assessment will consider the following key inputs:

- Hydrological conditions
- Regulatory conditions
- Water quality conditions
- Groundwater well production limitations (e.g., issues with physical assets or SGMA constraints)
- Infrastructure capacity constraints or changes
- Capital improvement project implementation

Planned water supply sources and quantities will be described and should be reasonably consistent with the supply projections in Chapter 6 of the City's most recent UWMP. If the Annual Assessment and UWMP supply sources and projections differ significantly, the City will explain the difference.

In reviewing planned unconstrained (i.e., without conservation) water demands, the Annual Assessment will consider the following key inputs:

- Weather conditions
- Water year type (e.g., dry year or wet year)
- Population changes (e.g., due to development projects)
- Anticipated new demands (e.g., changes to land use)
- Pending policy changes that may impact demands

Planned water demand types and quantities will be described and should be reasonably consistent with the demand projections in Chapter 4 of the City's most recent UWMP. If the Annual Assessment and UWMP demands differ significantly, the City will explain the difference.

2.3. Assessment Methodology

In preparing the Annual Assessment, the City will use the following assessment methodology and evaluation criteria to evaluate water supply reliability for the current year and one subsequent dry year.

The City uses a spreadsheet tool to plan for the current year and future year supply and demand. Planned supply and demand inputs described in Section 2.2 will be entered in the spreadsheet in annual increments or closer time intervals as necessary during water shortage conditions.

Supply and demand will be compared to determine the reliability of the City's water supply in the current year and one subsequent dry year. The City's water supply for the current year and the subsequent dry year will be deemed reliable if the projected water supply can meet the projected water demands.

If the projected water supply cannot meet the projected water demands in the current year or the subsequent dry year, the extent of the water shortage condition will be determined, and the City will prepare response actions in accordance with this WSCP. The Annual Assessment findings will be presented to the City Council, along with recommendations for action for City Council consideration.

3. SIX STANDARD WATER SHORTAGE LEVELS

To provide a consistent regional and statewide approach to conveying the relative severity of water supply shortage conditions, the 2018 Water Conservation Legislation mandates that water suppliers plan for six standard water shortage levels that correspond to progressive ranges of up to 10, 20, 30, 40, 50 percent, and greater than 50 percent shortages from the normal supply condition. Each shortage condition should correspond to additional actions water suppliers would implement to meet the severity of the impending shortages.

For each of the State's standard shortage levels (also called "stages"), Table 3 summarizes the water shortage range (i.e., percent shortage from normal supplies) and a brief narrative description of the corresponding water shortage condition and shortage response actions. These water shortage stages apply to both foreseeable and unforeseeable water supply shortage conditions. Table 3 presents the City's stages, which align with the State's standard stages.

Table 3. Water Shortage Contingency Plan Shortage Levels (DWR Table 8-1) Water Code Section 10632(a)(3)(B)

Shortage Level	Percent Shortage Range	Suppliers Shortage Levels
1	Up to 10%	Shortage Response Actions listed in Table 4 (DWR Table 8-2) as Stage 1.
2	Up to 20%	Shortage Response Actions listed in Table 4 (DWR Table 8-2) as Stage 2.
3	Up to 30%	Shortage Response Actions listed in Table 4 (DWR Table 8-2) as Stage 3.
4	Up to 40%	Shortage Response Actions listed in Table 4 (DWR Table 8-2) as Stage 4.
5	Up to 50%	Shortage Response Actions listed in Table 4 (DWR Table 8-2) as Stage 5.
6	>50%	Shortage Response Actions listed in Table 4 (DWR Table 8-2) as Stage 6.
NOTES: The City anticipates updating the City of Dixon Municipal Code to incorporate the six shortage levels in the future. It should be noted that the actions at each stage are cumulative. For example, if Shortage Level 3 is declared, then the actions at Shortage Levels 1 and 2 shall still be implemented.		

As described in Section 2.0, the City conducts an Annual Assessment to determine its water supply condition for the current year and a subsequent dry year. Preparation of the Annual Assessment helps the City ascertain the need to declare a water shortage emergency and water shortage stage. In other cases, the City may need to declare a water shortage emergency due to unforeseen water supply interruptions. When the City anticipates or identifies that water supplies may not be adequate to meet the normal water supply needs of its customers, the City Council may determine that a water shortage exists and consider a resolution to declare a water shortage emergency and associated stage. The shortage stage provides direction on shortage response actions.

4. SHORTAGE RESPONSE ACTIONS

CWC §10632 (a)(4) requires shortage response actions that align with the defined shortage levels. The City's shortage response actions consist of a combination of use reduction, supply augmentation, and operational changes. The City's suite of response actions depends on the event that precipitates a water shortage stage, the time of the year the event occurs, the water supply sources available, and the condition of its water system infrastructure.

In general, the City plans to use a balanced approach, combining demand reduction, supply augmentation, and operational changes to respond to the event and the resulting water shortage stage. The City will adapt its response actions to close the gap between water supplies and water demand and meet the water use goals associated with the declared water shortage stage.

The City meters all of its water customers and is actively upgrading to automated meter reading (AMR). The ultimate goal for the City is to upgrade to advanced metering infrastructure (AMI) after the City has been fully upgraded to AMR. Systemwide water meters allow the City to compare water demands with demand reduction goals and adjust its shortage response actions accordingly. The City reads water meters monthly to track the extent of the effectiveness of the City's response actions. Once the City upgrades to AMI in the future, the City will have the ability to monitor its water consumption in a timely manner.

Water production and water use can be compared to previous periods by customer sector or individual customer, on a monthly basis, due to the City's current metering technology. The City meters its water production sources, which allows the City to monitor how much groundwater it uses daily and estimate water consumption patterns. This continuous monitoring allows the City to assess water system demands and compare them with water demand reduction goals. The City may then adjust its shortage response actions as needed to balance demands with available water supplies. For example, the City may intensify its public outreach or more vigorously enforce compliance with water use prohibitions if the needed water demand reduction goals are not met for any specific stage. Conversely, the City may reduce public outreach frequency or decrease compliance actions if demand reduction goals are exceeded.

The shortage response actions discussed below may be considered as tools that allow the City to respond to water shortage conditions. Shortage response actions are initiated at the shortage levels shown and continue to be implemented at higher shortage levels. Because the City may continuously monitor and adjust its response actions to reasonably balance demands with available supply, the extent to which implementation of each action reduces the gap between water supplies and water demand is difficult to

accurately quantify and can only be estimated. For example, certain response actions, such as public outreach and enforcement, support the effectiveness of other response actions and do not have a quantifiable effect on their own.

4.1. Supply Augmentation

The City's water supply portfolio consists of local groundwater, as described in Chapter 6 of the City's 2025 UWMP. At any water shortage stage and depending on the water shortage event, the City may adjust its groundwater pumping rate.

Supply augmentation options available to the City include increased groundwater pumping and a temporary arrangement with the California Water Service Dixon District (Cal Water), the other water service provider in the City, for additional groundwater supply. Since the City's groundwater pumping is already considered for reliability and dry conditions, it is included in determining the gap between supply and customer water use and should not be counted again as a potential shortage response. In a temporary arrangement, the City may have the opportunity to operate one or more of its emergency interties with Cal Water in accordance with Appendix A of this WSCP. Since this arrangement was not included in the supply reliability analysis described in Chapter 7 of the City's 2025 UWMP, it is presented here as a supply augmentation option.

The City is a participant in the California Water/Wastewater Agency Response Network (CalWARN). The mission of CalWARN is to support and promote statewide emergency preparedness, disaster response, and mutual assistance processes for public and private water and wastewater utilities. In the event of an emergency, the City may request assistance from regional CalWARN partners.

Table 4 lists the supply augmentation method the City can utilize during each shortage level. Supply augmentation response action initiated at the shortage level shown will be implemented at higher shortage levels.

Table 4. Water Shortage Contingency Plan Supply Augmentation and Other Actions (DWR Table 8-2) Water Code Section 10632(a)(4)(A),(C), and (E)

Shortage Level	Supply Augmentation Methods and Other Actions by the Water Supplier	How much is this going to reduce the shortage gap?	Additional Explanation or Reference *(optional)*
6	Other	Up to the shortage gap	The City of Dixon will coordinate with Cal Water - Dixon for emergency supplies through the interties, if needed. The City has a formal agreement with Cal Water.No.
6	Other	Up to the shortage gap	The City of Dixon will request assistance from regional CalWARN partners in case of an emergency.
NOTES: California Water/Wastewater Agency Response Network (CalWARN) mission is to support and promote statewide emergency preparedness, disaster response, and mutual assistance processes for public and private water and wastewater utilities.			

4.2. Demand Reduction

During water shortage conditions, the City plans to reduce demand by implementing the actions shown in Table 5. Demand reduction actions are organized by the triggering water shortage level (i.e., stage), and each action includes an estimate of how much its implementation will reduce the shortage gap. For each demand reduction action, Table 5 also indicates if the City uses compliance actions such as penalties, charges, or other enforcement. Demand reduction actions are initiated at the shortage levels shown and will continue to be implemented at higher shortage levels.

Table 5. Water Shortage Contingency Plan Demand Reduction Actions

Water Code Section 10632(a)(4)(B), (D) and (E), (DWR Table 8-3)

Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap?	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
1	Expand Public Information Campaign	Studies have shown that a targeted public information campaign during a drought can reduce water use by 7 - 8%		No
1	Provide Rebates on Plumbing Fixtures and Devices	Up to 9,000 gallons/year/participating household, depending on the number and type of fixtures being replaced		No
1	Provide Rebates for Landscape Irrigation Efficiency	Boosts other methods. No statistically significant effect on water use rates		No
1	Offer Water Use Surveys	Boosts the effectiveness of other methods - not readily quantifiable		No
1	Other	Boosts the effectiveness of other methods - not readily quantifiable	Water Bill Inserts	No
1	Reduce System Water Loss	Depends on extent and magnitude of current system losses, but could reduce system loss by up to 25 - 35%	City to maintain water repairs as a high priority	No
1	Decrease Line Flushing	Depends on extent and frequency of current flushing activities	Flushing to be performed as needed to maintain public health and safety	No
1	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Boosts the effectiveness of other methods - not readily quantifiable		Yes
1	Landscape - Restrict or prohibit runoff from landscape irrigation	Many suppliers already prohibit runoff at all times		Yes
1	Other - Prohibit use of potable water for washing hard surfaces	Boosts other methods - not readily quantifiable		Yes
1	Other - Require automatic shut of hoses	Many suppliers already prohibit unrestricted hose use		Yes
1	Other	N/A	Prohibit application of potable water to outdoor landscapes within 48 hours of measurable rainfall.	Yes
2	Landscape - Limit landscape irrigation to specific days	Every third day - 22% reduction; twice a week - 33% reduction; once a week - 56% reduction	Limit landscape irrigation to 1 - 3 days per week.	Yes
2	CII - Restaurants may only serve water upon request	50 gallons/day/commercial connection		Yes
2	CII - Lodging establishment must offer opt out of linen service	250-500 gallons/day/hotel		Yes
2	Water Features - Restrict water use for decorative water features, such as fountains	Boosts other methods as a public display of drought conservation, difficult to quantify	Potable water use for decorative features is prohibited unless the decorative feature recirculates water.	Yes
2	Landscape - Prohibit certain types of landscape irrigation	Boosts the effectiveness of other methods - not readily quantifiable	Prohibit irrigation of ornamental turf on public street medians with potable water (where those medians incluse trees, watering shall take place to maintain tree health).	Yes
2	Other	10%	Customers shall reduce water use by 10%	Yes
3	Other	Boosts the effectiveness of other methods - not readily quantifiable	Increase water compliance actions	No
4	Implement or Modify Drought Rate Structure or Surcharge	Generally, the cost of water does not significantly effect water use. The cost increase needs to be significant to result in water use reduction.		Yes
4	Other - Prohibit use of potable water for construction and dust control	3,000 gallons/acre/day for construction areas		Yes
4	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	100-200 gallons/year/residential connection		Yes
4	Other	20%	Customers shall reduce water use by 20%	Yes
5	Moratorium or Net Zero Demand Increase on New Connections	Current average water use per connection times the number of planned new connections that do not occur or are required to comply with net zero demand provisions	Only net zero demand increase on new connections	Yes
5	Pools and Spas - Require covers for pools and spas	Evapotranspiration of approximate surface area of pools		Yes
5	Pools - Allow filling of swimming pools only when an appropriate cover is in place.	Boosts other methods as a public display of drought conservation, difficult to quantify		Yes
6	Moratorium or Net Zero Demand Increase on New Connections	Current average water use per connection times the number of planned new connections that do not occur or are required to comply with net zero demand provisions	Moratorium on new connection	Yes
6	Landscape - Prohibit all landscape irrigation	Nearly eliminates irrigation demand		Yes

NOTES: It should be noted that the demand reduction actions and shortage gap reduction estimations at each stage are cumulative. For example, if Shortage Level 3 is declared, then the actions at Shortage Level 1 and 2 shall still be implemented. The exact amount that each demand reduction action will reduce the shortage gap. Either a quantitative or qualitative estimation has been provided.

4.3. Additional Mandatory Restrictions

In addition to the above discussed demand reduction response actions, the City may implement mandatory water use restrictions. Table 6 lists the mandatory restrictions for each shortage level. These restrictions are in addition to State-mandated prohibitions and are cumulative, so restrictions associated with a given water shortage level also include any restrictions from lower levels.

Table 6. City of Dixon Additional Mandatory Restrictions
Standard Shortage Level 1 (Up to 10 percent Shortage)
Car washing is permitted with use of a positive shutoff nozzle and is allowed all hours of the approved watering days as cited above.
Restaurants encouraged to serve water only upon request.
Lodging establishments are encouraged to offer opt out linen services.
Hosing concrete areas, building exteriors, etc., is prohibited except for health/safety concerns and only with the use of a positive shutoff nozzle.
Water leaks, once identified by the homeowner, must be repaired within 48 hours.
Standard Shortage Level 2 (Up to 20 percent Shortage)
Outdoor water use is prohibited from 10:00 am to 7:00 pm. Odd-numbered addresses are watered on Wednesdays, Fridays, and Sundays. Even-numbered addresses are watered on Tuesdays, Thursdays, and Saturdays. No outdoor water use on Mondays.
Standard Shortage Level 3 (Up to 30 percent Shortage)
City to evaluate operations and make all possible conservation adjustments that do not affect public health.
Standard Shortage Level 4 (Up to 40 percent Shortage)
Car washing permitted at car wash facilities only (or with recycled/reclaimed water).
Standard Shortage Level 5 (Up to 50 percent Shortage)
Mandatory retrofit of toilets (in addition to low-flow showerheads) in homes when remodeling occurs.
Standard Shortage Level 6 (More than 50 percent Shortage)
Moratorium on all new landscaping. Only zero-scape allowed.
No outdoor water uses except for trees, and vegetation is maintained through drip irrigation.
Building a moratorium on all new connections, including new swimming pools.

4.4. Operational Changes

Beginning in Stage 3, the City will adjust operations to minimize supply losses and more closely track customer water use. These adjustments may include decreasing line flushing, increasing meter reading, and increasing water waste patrols.

4.5. Emergency Response Plan

As stated in Section 3.0, the City's water shortage stages outlined in Table 3 apply to both foreseeable and unforeseeable water supply shortage conditions, including catastrophic water shortage conditions. Catastrophic water shortage conditions are addressed in the City's Emergency Response Plan (ERP). ERPs outline preparation, response, and recovery procedures associated with unforeseeable incidents such as water supply contamination, earthquake, infrastructure failure, and other events.

The City's 2021 ERP describes the equipment and resources available in an unforeseen water shortage, including backup generators (stationary and portable) and emergency water storage (i.e., groundwater and reservoirs). In the event of an emergency that impacts water delivery, if possible, the City will coordinate with Cal Water to organize and deliver alternate water supplies to their customers.

4.6. Seismic Risk Assessment and Mitigation Plan

CWC §10632.5(a) requires that UWMPs include a seismic risk assessment and mitigation plan to assess and mitigate a water system's seismic vulnerabilities. The Solano County Department of Resource Management and Office of Emergency Services prepared the 2022 Multi-Jurisdictional Hazard Mitigation Plan (MJHMP), which recognized earthquake events as a significant concern countywide. The County has been seismically active since it is situated on the boundary between two tectonic plates. The County is on the North American Plate. A number of active faults cross the County into the surrounding San Francisco Bay Area.1

The City participated in the preparation of the 2022 MJHMP and developed a jurisdictional annex to address hazard mitigation planning elements specific to the City (Appendix B). Seismic risk assessment is included in Section 1.4, and the mitigation strategy is provided in Section 1.5 of the City's jurisdictional annex. The 2022 Solano County MJHMP and the City's jurisdictional annex are available at https://www.solanocounty.com/depts/oes/emergency_plans.asp, and incorporated herein by reference.

The City has implemented efforts to address its facilities' seismic vulnerabilities. In accordance with America's Water Infrastructure Act (AWIA), the City completed a Risk and Resilience Assessment (RRA) of its water system in November 2021. The RRA systematically evaluated the City's assets, threats, and risks, as well as countermeasures that might be implemented to minimize overall risk to the system. To ensure the security of the City's water system, the RRA is retained by the City as a confidential document.

5. COMMUNICATION PROTOCOLS

In the event of a water shortage, the City must inform its customers, the general public, interested parties, the County, and local, regional, and state entities. Communication protocols for foreseeable and unforeseeable events are provided in this section. In any event, timely and effective communication must occur for an appropriate response to the event. Cell phone numbers for City staff are shared internally, and City email accounts are available for internal and external communication. Office numbers, cell phone numbers, and email addresses for key City staff are provided on the City's website. The City also communicates with the public through social media accounts.

5.1. Communication for Foreseeable Events

Water shortage may be foreseeable when the City conducts its Annual Assessment as described in Section 2.0. When the City determines the potential of a water shortage event, the City Council may declare a water shortage emergency by resolution and authorize shortage response actions.

The City will follow the communication protocols and procedures detailed below. The City may trigger any of these protocols at any water shortage stage.

1. If a water shortage emergency is anticipated, the City will coordinate interdepartmentally, with the region's water service providers, and with the County for the possible proclamation of a local emergency.
2. The City will schedule a City Council meeting in which the Annual Assessment findings and recommendations for a water shortage emergency and shortage response actions are presented.
3. The City will communicate conditions to the general public using some or all of the following options, as needed at the various shortage levels: press releases, radio/television coverage, social media posts, bill inserts, newsletters, and postings on the City's website. Public entities, such as Solano County, State Water Board, and Cal Water, and officials are informed of water shortage information via email.

5.2. Communication for Unforeseeable Events

Water shortages may occur during unforeseeable events such as earthquakes, fires, infrastructure failures, civil unrest, and other catastrophic events. The City's ERP provides specific communication protocols and procedures to convey water shortage contingency planning actions during these events. The City may trigger any of these communication protocols at any water shortage stage, depending on the event.

In general, communications and notifications should proceed along the chain of command. As described in the City's ERP, events causing a water shortage are significant enough to activate the Department Operations Center (DOC) or the City's Emergency Operations Center (EOC), led by the Incident Commander. Notification decisions will be made under the direction of the Incident Commander, who must verify and approve all information before the Communications/Media Coordinator releases it to the media and the public. Internal and external communications will be managed by the Communications/Media Coordinator, a role typically assigned to the Public Information Officer (PIO).

All City staff are provided with their communication responsibilities. Depending on the event, the City may designate someone other than the Communications/Media Coordinator as a spokesperson to interact with the media. The ERP also provides a list of relevant contacts to notify at the local, regional, and state levels.

6. COMPLIANCE AND ENFORCEMENT

When a water shortage is anticipated, the City Council will adopt a resolution declaring a water shortage emergency condition and the regulations and restrictions that should be enforced in response to the declared water shortage level.

Customer water use can be quantified and compared to determine the extent of compliance with water reduction requirements. The City may also become aware of non-compliance through its water waste reporting outreach or through staff inspections. Non-compliance is deemed a code violation. Under DMC §14.02.905, violators of water use restrictions may receive an administrative citation, which may include penalties up to $500 for each day in which the violation occurs.

Provisions for administrative citations are provided in Chapter 1.07 and Chapter 9.01 Article VI of the DMC. The City may issue a written warning for the first offense, which identifies the violation, the correction required, and a date by which the violation can be reasonably corrected. City Council may adopt a schedule of fines for violations associated with a water shortage condition. If one has not been established, the City may impose fines up to $100 for the first violation, up to $200 for the second violation of the same code section, and up to $500 for each violation of the same code within one year.

Water users or property owners can appeal the violation by submitting a request for a hearing within 30 days from the date of issuance of the administrative citation. The appeal hearing shall be held before the hearing officer, and the appellant may present witnesses and evidence as desired. The decision of the hearing officer is final.

7. LEGAL AUTHORITIES

The City will be updating the DMC to support its water shortage contingency actions. DMC Chapter 14.02 provides general provisions for the City's water service. The Director of Utilities and the City Manager are authorized to administer, implement, and enforce provisions of the chapter. DMC §14.02.905 addresses water conservation and irrigation restrictions. DMC §14.02.910, Chapter 1.07, and Chapter 9.01 Article VI include provisions for compliance and enforcement of its water use regulations, restrictions, and prohibitions.

When a water shortage is determined, the City will coordinate interdepartmentally, with the region's water service providers (including Cal Water), and with Solano County for the possible proclamation of a local emergency in accordance with the California Government Code, California Emergency Services Act (Article 2, Section 8558).

In a duly noticed meeting, the City Council will determine whether a water shortage emergency condition exists and, if so, the degree of the emergency and what regulations and restrictions should be enforced in response to the shortage. The City shall declare a water shortage emergency in accordance with CWC Chapter 3 of Division 1.

California Water Code Division 1, Section 350

…The governing body of a distributor of a public water supply…shall declare a water shortage emergency condition to prevail within the area served by such distributor whenever it finds and determines that the ordinary demands and requirements of water consumers cannot be satisfied without depleting the water supply of the distributor to the extent that there would be insufficient water for human consumption, sanitation, and fire protection.

The water shortage emergency declaration triggers communication protocols described in Section 5.0 and compliance and enforcement actions described in Section 4.0.

8. FINANCIAL CONSEQUENCES OF WSCP

The City's water operations are organized as an Enterprise Fund in which the costs of providing goods or services to the general public on a continuing basis are financed or recovered primarily through user charges. The City completed a multi-year water rate study in 2018 and adopted and implemented updated water rates starting Fiscal Year 2019. However, the updated water rates were repealed by the general election on November 3, 2020. The repeal of these rates has created economic hardship for City water operations. Subsequently, the City completed a cost-of-service water rate study in 2024, which went into effect on August 1, 2024. Results of the assessment showed that the City was underfunded with an increasing deficit. The 2024 Water Rate Study maintained the single-family residential rate at a three-tiered structure, revised the multi-family residential rate from a uniform rate to a two-tier rate, and commercial/irrigation was maintained at a uniform rate. The financial plan will generate positive income above operating expenses, cover the City's critical and near-term needs, and exceed minimum reserve requirements.

During times of drought, when the City may implement its WSCP, water shortage actions may result in reduced water usage and, accordingly, reduced operating revenues. Operating expenses may be reduced due to lower customer water demands that result in decreased water production (i.e., pumping less groundwater). Implementation of Stage 4 or higher is expected to decrease operating revenues by up to 50 percent.

Expenditure impacts, resulting from implementation of the WSCP, may include additional costs to provide increased outreach to customers about water conservation, purchase more expensive water supplies, and conduct compliance inspections and enforcement associated with water use restrictions. The City may consider implementing drought rates to maintain financial stability. The goal of the drought rates is to recover the temporary loss of revenue due to the reduction of water sales during a period of drought and offset increased costs associated with enforcing compliance with water use restrictions. Drought rates also encourage water use conservation.

In addition to the rate adjustments, the City may need to defer projects from its capital improvement program to fund the water shortage actions in the WSCP. The City does not have a separate water shortage contingency fund in case a water shortage is declared.

9. MONITORING AND REPORTING

Meter readings are an important tool to help the City adjust public outreach, enforcement, and other water shortage response actions. The City has meters at its water sources (groundwater production wells) and meters all its water customers. Although customers' water meters can be read at any time, the City has this meter reading scheduled monthly to track the extent of customers' compliance with the City's water use restrictions. Water production information may be read daily.

At the time of preparation of this WSCP, the State Water Resources Control Board is preparing regulations for monthly reporting of water production and other uses, along with associated enforcement metrics. The City regularly records its water meter readings, ensuring that the City will be able to comply with upcoming reporting requirements.

10. WSCP REFINEMENT PROCEDURES

This WSCP is an adaptive management plan. It is subject to refinements as needed to ensure that the City's shortage response actions and mitigation strategies are effective and produce the desired results. Based on monitoring described in Section 9.0 and the need for compliance and enforcement actions described in Section 4.0, the City may adjust its response actions and modify its WSCP. The City may also modify its WSCP based on improvements identified through systematic monitoring or feedback from City staff and customers, as discussed below. When a revised WSCP is proposed, the revised WSCP will undergo the process described in Section 12.0 for adoption by the City Council and distribution to Solano County, local water purveyors, the City's customers, and the general public.

10.1. Systematic Monitoring

The City will monitor meters at its water sources to evaluate the overall effectiveness of its response actions in meeting the declared water shortage stage. Should overall demands fall short of the goals of the declared water shortage stage, the City can increase the intensity of public outreach for water conservation and the extent of enforcement of water use restrictions. Conversely, should overall demands meet or exceed the goals of the declared water shortage stage, the City can decrease the intensity of public outreach for water conservation and the extent of enforcement of water use restrictions.

The City may implement operational changes in combination with enforcement of its water use restrictions and prohibitions to meet the objectives of the water shortage stage while maintaining overall public health and safety.

10.2. Feedback from City Staff and Customers

Feedback from City staff and the public is important in refining or incorporating new actions. The City seeks input from staff who interface with customers to gauge the effectiveness of its response actions and solicit response action ideas.

Customer water meter data may be evaluated for each customer sector or each individual customer. The City tracks water use violations and may evaluate their frequency to determine restrictions that customers

may not be able to meet. This evaluation may also show water demand reduction actions that customers can implement effectively.

The City seeks input from its customers and the general public through its website, through public hearings, and through regularly scheduled City Council meetings.

11. SPECIAL WATER FEATURE DISTINCTION

The City distinguishes special water features, such as decorative fountains and ponds, from pools and spas. Special water features are regulated separately under DMC §14.02.905. The use of potable water for outdoor fountains or decorative water features is prohibited, except where water is recirculated.

12. PLAN ADOPTION, SUBMITTAL, AND AVAILABILITY

This WSCP is adopted concurrently with the City's 2025 UWMP, by separate resolution. Prior to adoption, a duly noticed public hearing was conducted. An electronic copy of this WSCP will be submitted to DWR within 30 days of adoption.

No later than 30 days after adoption, a copy of this WSCP will be available at the City's offices. A copy will also be provided to Solano County. An electronic copy of this WSCP will also be available for public review and download on the City's website, www.cityofdixon.us.

The City's WSCP is an adaptive management plan and is subject to refinements as needed to ensure that the City's shortage response actions and mitigation strategies are effective and produce the desired results. When a revised WSCP is proposed, the revised WSCP will undergo the process described above for adoption by the City Council and distribution to Solano County, the City's customers, and the general public.

APPENDIX A

Emergency Intertie Agreement with Cal Water

COPY

AGREEMENT FOR INTERCONNECTION FOR EMERGENCY WATER SUPPLY

THIS AGREEMENT entered into this 27th day of August 2014, by and between the **CITY OF DIXON,** a Municipal Corporation of the State of California, hereinafter referred to as "CITY", and **CALIFORNIA WATER SERVICE COMPANY,** a California Corporation, hereinafter referred to as "CWS", who, for valuable consideration, receipt of which is hereby acknowledged, do agree as follows:

WITNESSETH:

WHEREAS, both parties hereto are each engaged in the supply of water in the City of Dixon, County of Solano, State of California;

WHEREAS, CITY serves potable water to a portion of the City of Dixon, as said service area is shown on Exhibit "A", which is attached hereto and incorporated herein by reference;

WHEREAS, CWS serves potable water to a portion of the City of Dixon, as said service area is shown on said Exhibit "A";

WHEREAS, in anticipation of possible emergency or disaster situations, the parties believe it is a wise precaution to provide for interconnection of the water system of CITY with the water system of CWS, with the objective that water can be supplied by either party to the other party upon a limited and emergency basis;

WHEREAS, a similar agreement was originally entered into between Dixon-Solano Municipal Water Service and/or Dixon-Solano Water Authority in November 1994 with a second agreement in October 2004, a modification to the October 2004 agreement in May 2005 and a superseding modification in March 2006;

NOW, THEREFORE, the parties, for and in consideration of the mutual agreements and covenants contained in this Agreement, do agree as follows:

A. **Term:**

This Agreement shall become effective on the date above entered and shall

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continue in full force and effect until terminated by either party with sixty (60) days written notice.

B. Duties and Obligations:

1. The water system of CITY shall be connected to the water system of CWS at the following three (3) locations:

    a. The west side of North First Street, between Regency Parkway and Stratford Avenue, at the southeast corner of Assessor's Parcel Number 113-112-11, as shown on Exhibit "B", which is attached hereto and incorporated herein by reference.

    b. The north side of Rehrmann Drive, east of Lynd Way at the southwest corner of Assessor's Parcel Number 113-260-12, as shown on Exhibit "C", which is attached hereto and incorporated herein by reference.

    c. The east side of South First Street (AKA: Highway 113), approximately 690 feet south of Country Faire Drive at the southernmost service area boundary of CWS, as shown on attached drawing and incorporated herein as reference Exhibit "E".

2. CWS constructed said interconnections as per the details shown on Exhibits "B", "C" and "D", which is attached hereto and incorporated herein by reference. The intertie on South First Street, shown on Exhibit "E" was received via a main extension agreement with Pulte Homes.

3. All costs associated with the original installation of the interconnections were subject to the conditions established under a prior agreement between CWS and Dixon-Solano Municipal Water Service, a Joint Exercise of Powers Agreement between CITY and Solano Irrigation District.

4. CITY will own, operate, and maintain the connection from the CITY water main up to the point shown on Exhibit "D", and CWS will own, operate, and maintain the connection from the CWS water main up to the point shown on attached Exhibit "D" and Exhibit "E".

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5. The parties shall maintain the interconnection located on South First Street, south of Country Faire Drive, in the closed position consistent with the terms of this Agreement. In the event either party shall require supplemental water for a limited period of time, due to emergency or disaster, failure of water supply, power failure for an extended period of time, mechanical failure of pumps and/or a major pipeline break, that party shall have the right to obtain water from the other party, on a two hour notification and, to the extent the supplying party is able to provide such water in view of its circumstances and demands at the time of the request. However, nothing shall prevent either party from activating the connection in less than two hours if the other party has been properly notified and has declared that it is ready to start delivery.

6. Nothing herein shall be deemed to constitute a dedication of the water supply of either party to service the territory of the other party or to constitute a commitment to supply water to the other party as a regular customer. The obligation to supply water hereunder is limited to surplus water above and beyond that required to service the needs of the supplying party's regular customers and to a reasonable period of time to permit the party being supplied to effect repairs to its own facilities.

7. To compensate the party supplying water hereunder for its costs of operation, any party receiving water shall pay to the supplying party for all water delivered, as registered on the bi-directional meter at each interconnection, in accordance with the supplying party's then effective regular tariff schedule. Charges are to be made only for months in which water is actually delivered. Payment for said usage is to be made within thirty (30) days after receipt of bill. In the event conditions do not permit water usage to be metered, the amount of water delivered shall be estimated by the supplier.

C. <u>Unauthorized Water Use:</u>

Any water usage, during a period in which the receiving party has not received the

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prior authorization of the supplying party, shall be discontinued and the supplying party shall have the option of unilaterally terminating this Agreement. This option shall expire thirty (30) days after the supplying party discovers the unauthorized use.

D. Water Entitlements:

This Agreement shall not affect, alter, or modify the water entitlements of either party under any other agreement or arrangement now existing.

E. Indemnification:

1. It is agreed that CITY shall defend, hold harmless, and indemnify CWS, its officers, employees, agents and consultants from any and all claims for injuries or physical and financial damage to persons and/or property, which arise out of the terms and conditions of this Agreement and which result from the negligent acts or omissions of CITY, its officers, employees, agents and consultants.
2. It is agreed that CWS shall defend, hold harmless, and indemnify CITY, its officers, employees, agents and consultants from any and all claims for injuries or physical or financial damage to persons and/or property, which arise out of the terms and conditions of this Agreement and which result from the negligent acts or omissions of CWS, its officers, employees, agents and consultants.
3. In the event of concurrent negligence of CITY, its officers and/or employees, and CWS, its officers, and/or employees, the liability for any and all claims for injuries or damages to persons and/or property which arise out of such concurrent negligence shall be apportioned according to the California theory of comparative negligence.
4. It is agreed that since the pressures in each water system are sufficiently close to allow direct meter connection, pressure reducing or regulating equipment is not needed to protect each system from variations in pressure between and within the other system. Therefore it is agreed as follows:

AGREEMENT NO. 14-033

a. CITY shall defend, hold harmless, and indemnify CWS, its officers, employees, agents and consultants from any and all claims for injuries or damage to persons and/or property which arise out of the pressure of water served by CWS to CITY under the terms of this Agreement.

b. CWS shall defend, hold harmless, and indemnify CITY, its officers, employees, agents and consultants from any and all claims for injuries or damage to persons and/or property which arise out of the pressure of water served by CITY to CWS under the terms of this Agreement.

F. Severability:

Should any part, term, or provision of this Agreement be decided by the courts to be illegal or in conflict with any law of the State of California, or otherwise rendered unenforceable or ineffectual, this Agreement shall be null and void.

G. Amendment of Agreement:

1. This Agreement may be amended by a written supplemental Agreement executed by both parties.

2. This agreement as to CWS, shall be subject to such changes or modifications as the Public Utilities Commission of the State of California may, from time to time direct, in the exercise of its jurisdiction. CWS shall notify CITY of such changes that are mandated by the California Public Utilities Commission. If CITY believes that such change unreasonably, adversely, or significantly affects its rights, duties and obligations under this Agreement, then CITY may terminate this Agreement upon ten (10) days written notice.

H. Successors and Assignment:

This Agreement shall be binding upon and shall inure to the benefit of the successors of each party. Either party may assign any right or obligation under this Agreement with the approval of the other party.

AGREEMENT NO. 14-033

I. **Time:**

Time is of the essence in the performance of this Agreement and of every term and provision thereof.

J. **Notification:**

Any notice, which it is herein provided may or shall be given by either party to the other, shall be delivered to the party to whom such notice is given at the following respective addresses:

CITY:
City of Dixon
600 East A Street
Dixon, CA 95620
Attn: Jim Lindley, City Manager

Churchwell White, LLP
1204 K Street, Suite 710
Sacramento, CA 95814
Attn: Douglas White, Esq.

CWS:
California Water Service Company
1720 North First Street San Jose, CA 95112
Attn: _____

Either party may change the address or addressee to which notice shall thereafter be delivered, by notice given as provided herein.

K. **Entire Agreement:**

There are no other terms, conditions, promises, or warranties, either implied or explicit, or promises other than are contained within the written terms of this Agreement. This Agreement is whole and entire and may not be altered except by a writing executed by each party hereto.

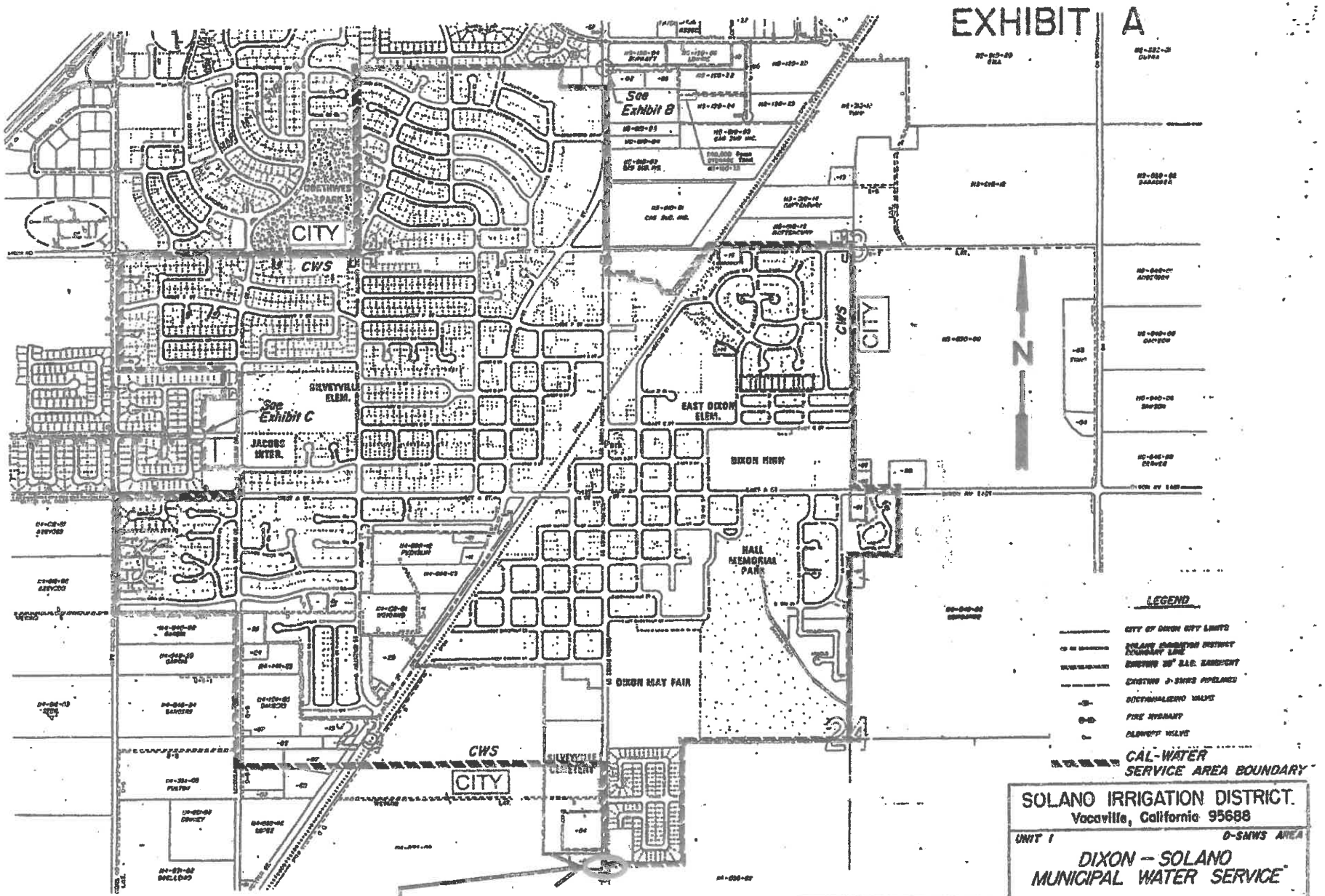
AGREEMENT NO. 14-033

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the date above entered:

CITY OF DIXON:	**CALIFORNIA WATER SERVICE COMPANY**
By:	By: .....
Title: CITY MANAGER	Title: VICE PRESIDENT OPERATIONS

AGREEMENT NO. 14-033

EXHIBIT A



See Exhibit E

UPDATED:
AUGUST 2014

SOLANO IRRIGATION DISTRICT.
Vacaville, California 95688

UNIT I — D-SMWS AREA

DIXON – SOLANO MUNICIPAL WATER SERVICE

Date AUG. 8, 1994
Drawn By TD
Checked By JD

Original Base Map prepared by City of Dixon Planning Dept.
Drawing No. M-1, Supp. D

AGREEMENT NO. 14-033

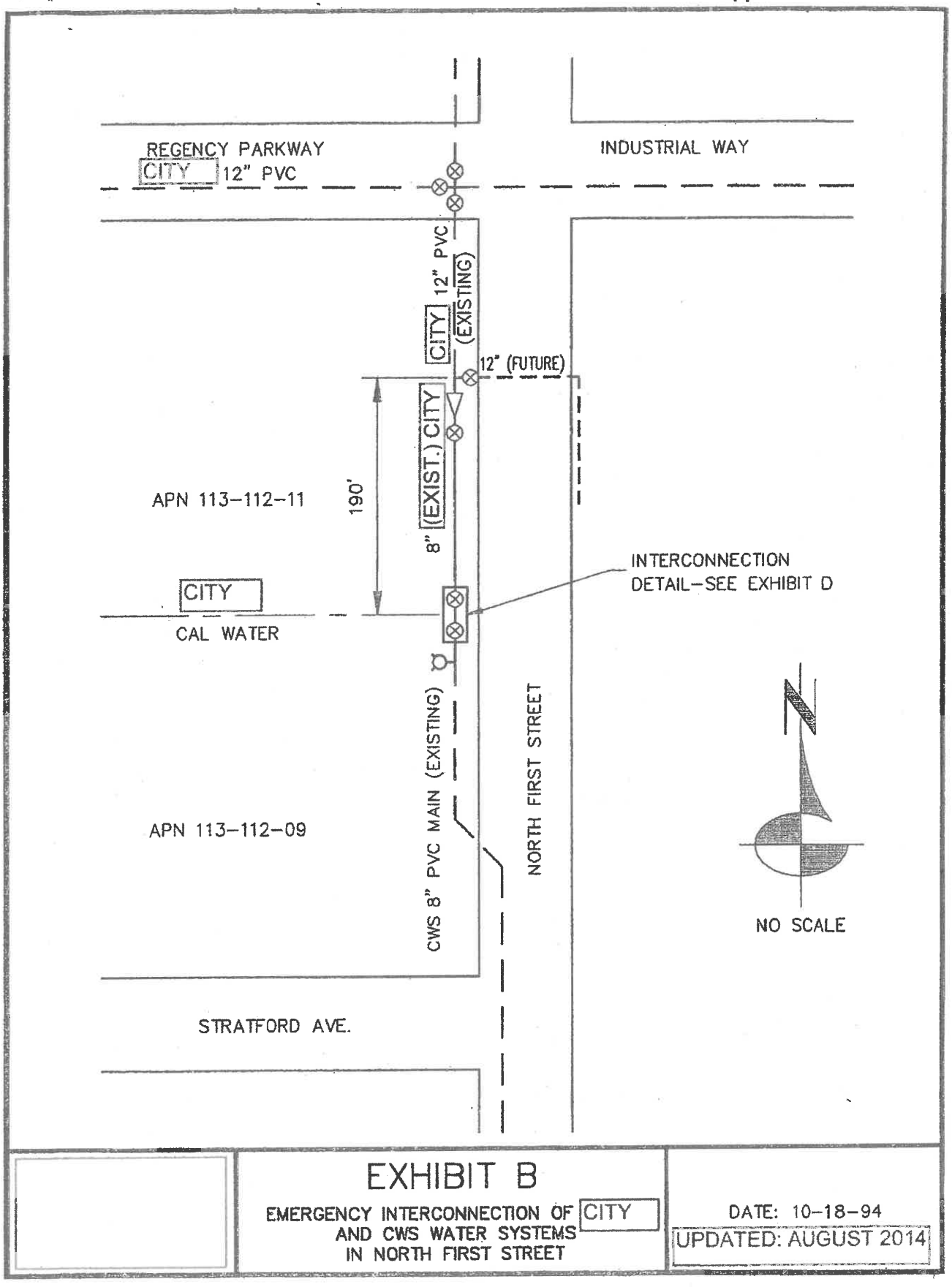


EXHIBIT B

EMERGENCY INTERCONNECTION OF CITY AND CWS WATER SYSTEMS IN NORTH FIRST STREET

DATE: 10-18-94

UPDATED: AUGUST 2014

AGREEMENT NO. 14-033

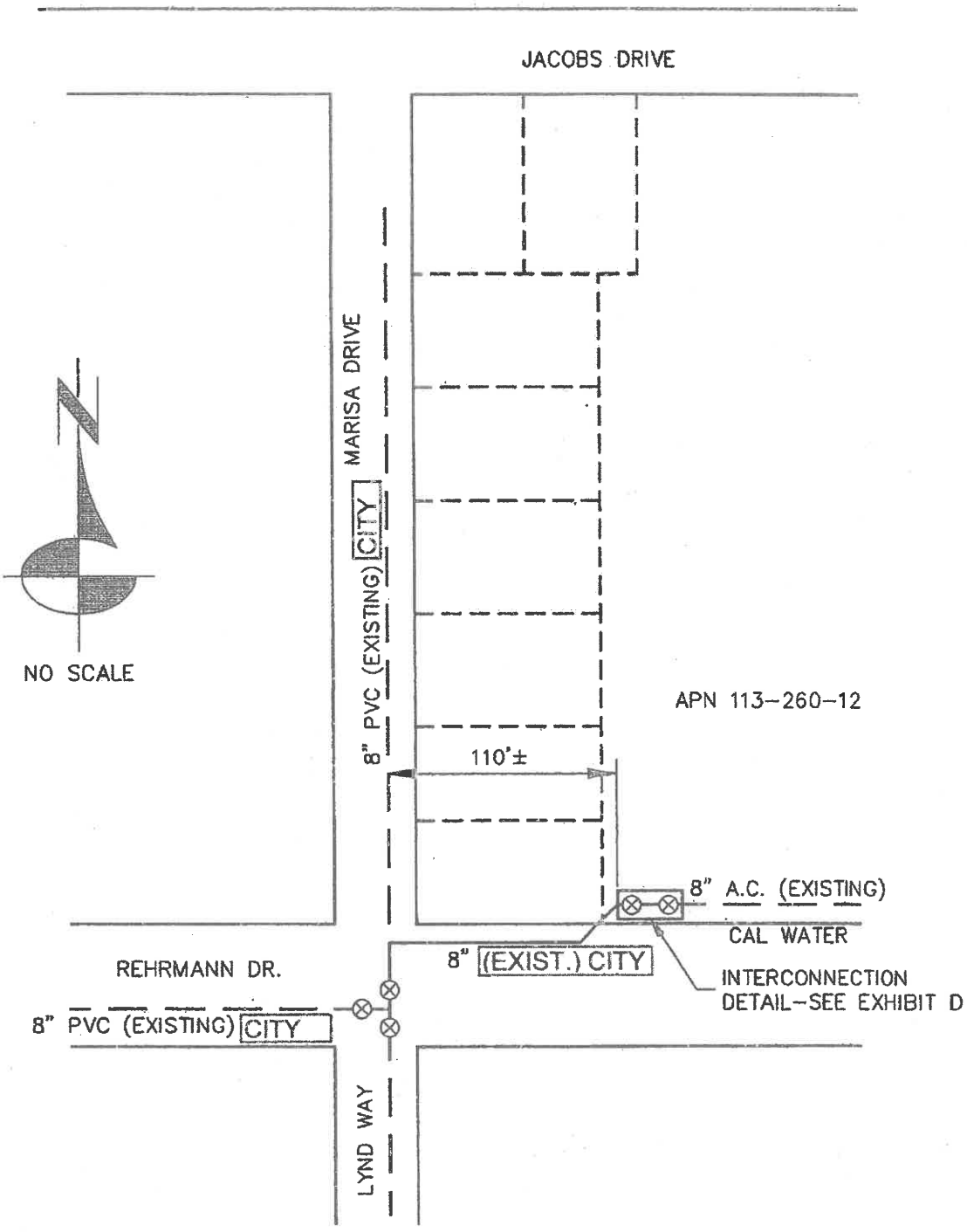


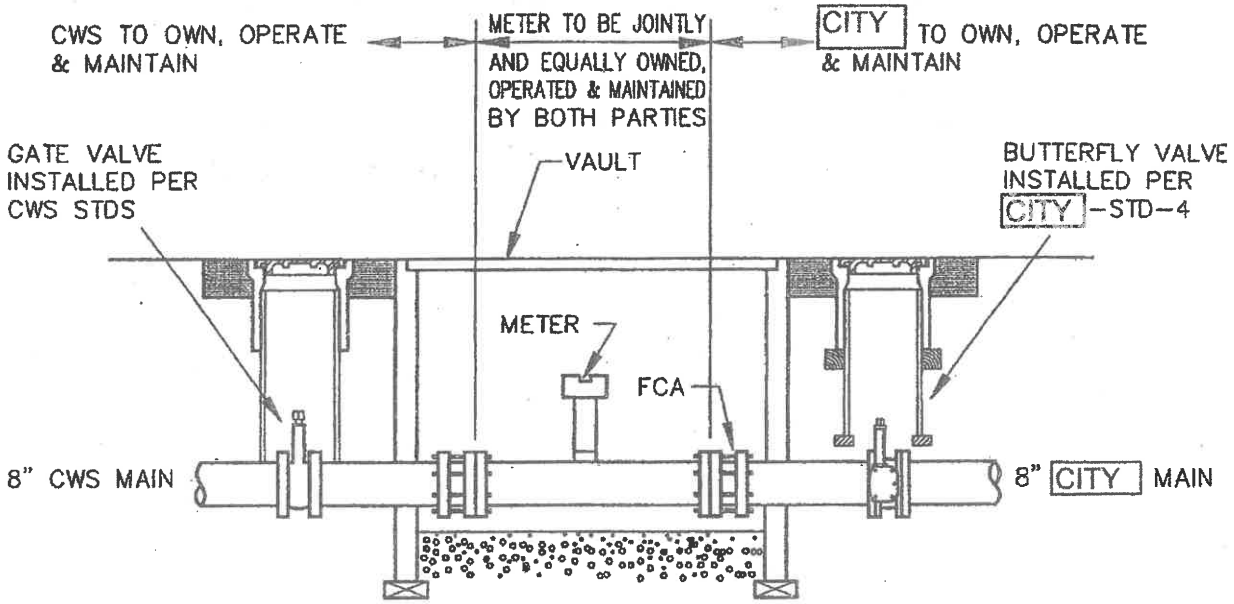
EXHIBIT C

EMERGENCY INTERCONNECTION OF CITY AND CWS WATER SYSTEMS IN REHRMANN DRIVE

DATE: 10-18-94

UPDATED: AUGUST 2014

AGREEMENT NO. 14-033



Extend mains to connect to new facilities.

Meter: Water Specialities Model ML-04 standard construction with CN-02 head extension, CN-04 flowrate indicator and totalizer. Use 6" meter at both locations.

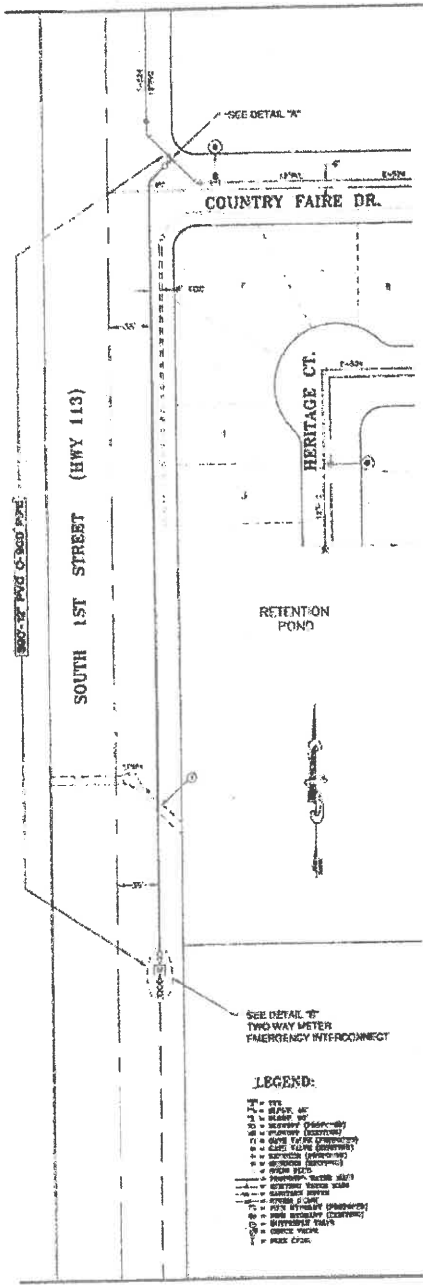
EXHIBIT D

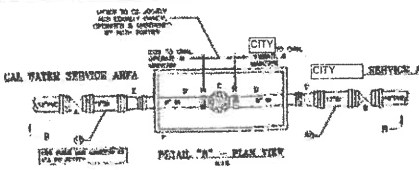
PROPOSED INTERCONNECTION DETAIL

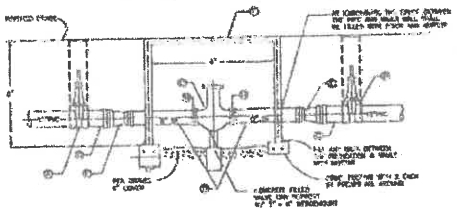
DATE: 10-18-94

UPDATED: AUGUST 2014

AGREEMENT NO. 14-033

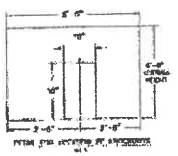


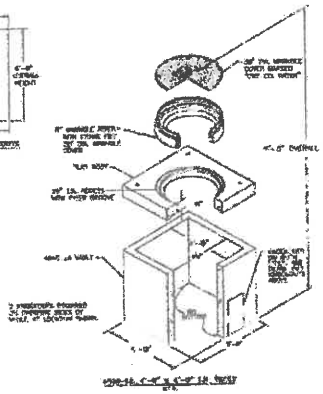




MATERIAL LIST

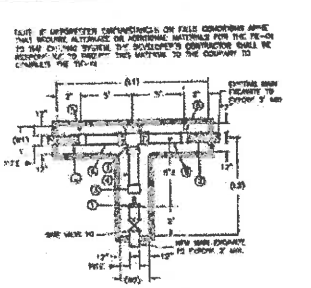
KEY	QTY	ITEM
A	1	12" CAST IRON, PD W/FIELD LOK GASKET ON IN PIPE
B	1	12" INCH SWING-TYPE RESILIENT WEDGE GATE VALVE, FLANGED HOT RATED, 200 PSIG WP, NRS, NON, FULL OPENING, COATED PER AWWA C-550, WITH/NO, EXCEPTIONS
C	1	6" WATER INTEGRATOR, MODEL M-70 W/ PULSER, CONCEPTUAL TEAL WITH DIGITAL REGISTER & REMOTE FLOWRATE INDICATOR AND PULSE PICK-UP.
D	4.5'	6" DUCTILE IRON PIPE
E	1	12" x 6" REDUCER PD w/ FIELD LOK GASKETS BOTH ENDS
F	1	VALVE PER DETAIL BELOW
G	2	12" D FOR PIPE 3'-0" LONG
H	3	45° M.J.
I	3	VALVE CROSS 3 COVER KEY
J	1	3" x 6" REDUCER/SOCKET
K	16	3/4" x 3-1/2 STAINLESS NUTS & BOLTS
L	30'	POLYWRAP 7.75" DI PIPE w/PIPE
M	2	6" FLANGE TYPE GASKETS

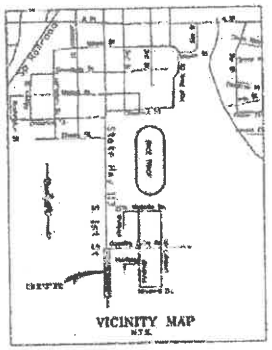




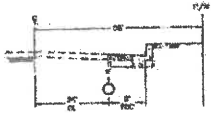
UTILITY VAULT NO. 4848 LA WITH 36" DIA. MANHOLE COVER

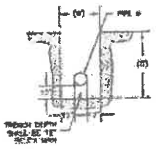
DETAIL "B"
6" TWO WAY METER WITH TOTALIZER & FLOWRATE INDICATOR





TYPICAL STREET CROSS SECTION





TRENCH NOTES FOR TIE-IN:

TRENCH WIDTH (W1) & (W2) SHALL BE ONE PIPE DIAMETER PLUS 12" ON EACH SIDE OF THE PIPE O.D. A 8" OR 6" MAIN REQUIRES A 30" TRENCH.

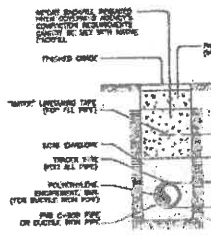
TRENCH LENGTH (L1) SHALL BE 10' (MIN), (10' FOR 6" W FLEX 2' EXPANSION OF EXISTING PIPE) NEW MAIN.

TRENCH LENGTH (L2) SHALL BE 2' (MIN) 10' FOR TIE-IN PLUS 2' EXPANSION OF EXIST. PIPE.

TRENCH DEPTH (D) SHALL BE 12" (MIN) BELOW BOTTOM OF MAIN.

DEVELOPER'S CONTRACTOR SHALL PROVIDE TRENCH SHORING PER OSHA STANDARDS.

DEVELOPER'S CONTRACTOR SHALL BE RESPONSIBLE FOR EXCAVATION, BACKFILL, TRENCH COMPACTION TO REQUIREMENTS, AND FINAL PAVEMENT RESTORATION.



PIPELINE CROSSING INFORMATION

AT WATER MAIN CROSSINGS IN CONFLICT WITH OTHER FACILITIES: Where the water main is in conflict with existing facilities or proposed facilities that require more than a 2 foot adjustment from the nominal 4 feet of cover, a fabricated steel cement mortar lined and cement mortar coated offset will be installed at the crossing per CWS Co. standard.

(1) CL 30" STORM DRAIN — FINISHED GRADE ELEV. = verify; PAVEMENT ELEV. = 18" COVER; PROPOSE 12" PVC UNDER 30" RCP w/5' COVER

NOTE: THESE WATER PLANS WERE PREPARED FROM INCOMPLETE IMPROVEMENT PLANS. FIELD VERIFY ALL UTILITIES PRIOR TO EXCAVATION.

BILL OF MATERIALS

12" MAIN
690'-12" PVC C-900 PIPE
760'-TRACER WIRE #12AWG STRANDED COPPER THWN INSULATED
1-12" GATE VALVE PD
1-WAY CAP/w 8 COVER ASSY
1-12" DI ADV PD
4-12" KINGS F/PD PIPEFIT
10'-POLYWRAP F/DI FITTINGS
1-12" CAP SWP 2" W
1-2" BLOWOFF ASSY
19'-DI SHEETPILES PER DETAIL "A"

METER
1 6" TRU WAY METER w/FLOWRATE INDICATOR AND TOTALIZER & VAULT MATERIALS PER DETAIL "B"

NOTE: WHEN ABANDONING A PVC C-900 PIPE TO AN DCM FITTING (Ductile Iron or Mechanical Joint), REMOVE ALL BUT 1/4 INCH OF THE FACTORY MADE BEVEL FROM THE SPIGOT END OF THE PIPE PRIOR TO INSTALLATION.

NOTES:

1. Inspection of all materials and installation for pipeline, hydrants and services shall be made by California Water Service Company. Telephone (707) 678-3936 at least 48 hours before starting work on water facilities.
2. Any easements and rights-of-way which may be necessary or reasonably appropriate for the extension will be furnished or obtained by the applicant.
3. Contact Underground Service Alert at 800-642-2444 at least 48 hours prior to the commencement of this project.
4. Place a continuous wire and strip of detectable tape over all pipe and extend up into all valve boxes. Tracer wire is required on all pipe.
5. For details of typical thrust block installation, see drawing CW 430-44.
6. Protect underground facilities encircling, and place sand around them, and all fills (including trenches shown) as follows:
   1. The entire area of the fitting shall be dry and free of sand, dirt, and other foreign matter. Pipe or other foreign material must be removed by sweeping or with blowing. Wiping with a dry clean cloth may be necessary to remove the particles from brush coating. Any oil or grease must be removed with a non-oily solvent. Suitable petroleum solvent before application of grease and wrapping.
   2. The exposed area should be coated with a heavy coating of Petrolastic 351 grease by the glove method to a thickness of at least 1/4".
   3. Firmly wrap the entire grease area with one layer, 10-mil thickness of Petrowrap 351 grease on the glove method to a thickness of at least 1/4".
   4. Apply a second layer of Petrolastic 351 grease on top of the first. Thickness of the grease method to a thickness of at least 1/4".
   5. Firmly wrap the entire ground area with a second layer, half lapped on the second grease-impregnated cloth.
   6. Cover the entire area's wrapped area of the fitting with a thick and final coating at least 1/4" thick of Petrolastic 351 grease by the glove method.
   7. Firmly apply 2 layers of polyvinyl half lapped over all areas of the repaired and wrapped fitting. Excessive may have irregularities and fold wrapping.
7. Water mains must be installed at least 10 ft horizontally from and one foot higher than the trench and sewage sewers installed parallel to the main if parallel. Crown to 20 feet length at all points and sanitary sewer crossings. Minimum separation between water and sewer mains shall be one foot unless otherwise indicated.
8. No valve covers or meter boxes are to be in sidewalks, crown gutter, curb or driveways. Care services should also be located to provide protection to the water box from auto traffic and strains.
9. The exact location of each service is to be determined at the time of installation to avoid conflicts with other utilities. Therefore, the number of long, short and split services may vary. Preferred CWS locations to be staked and indicated by Developer's engineer. Any relocations after installation will be at developer's expense.
10. Location of blow-off in new street area or landscape where street improvement exist
11. Service installed across street area 10" adult impact resistant polyethylene material, corporation requirements covered by and with owner service.
12. It is the responsibility of the contractor to verify the exact location and depth of all existing and proposed facilities prior to water main installation.
13. The list of materials for this project is for the CWS Co. estimating and reference purposes only and is intended as a full requirement of projected material.
14. The water supply for this development is from local underground sources. Additional wells for the development and provisions will be required in the future.
15. Developer shall provide all permits necessary for the installation of the materials.
16. This water plan design is based on subdivision and unimproved improvement plans. Therefore, grades shown and street grading can vary.
17. ⊙ Indicates Fire Hydrant (Typ)
    Limits of CWS Co. ownership for each hydrant:
    1 - 8 inch Outlet tee PD
    1 - 8 inch Gate Valve PD
    1 - 6" Type Box Complete
    1 - Valve Cover and Cover Assembly
    w/- 20 feet of 6 inch Ductile Iron Pipe
    1 - 6x6 Inch Fire Hydrant Body FD6HD
    1 - 6x6 Inch Fire Hydrant Extension
    1 - 6" Bell Retro, Mufu & Gasket F/ Hydrant
    1 - 6" Set Retro, Mufu & Gasket F/ Hyd. Nut
    Polywrap Tubes, PVC Tape, Line Gasket and other sealing mat'l.
    IF FIELD INSPECTIONS OF FIRE PROTECTION AGENCY REQUIRE AN ALTERNATIVE INSTALLATION, THE OUTLET TEE AND GATE VALVE MAY BE REPLACED WITH:
    1 - 8 Inch Outlet Tee PD/PE O.D. CL
    1 - 8 Inch Gate Valve FD/DFD MJ x PD FG
    1 - 8 Inch Flanged Tyton Coupling
    8 - 5/8x3-1/2 Inch Stainless Steel Bolts B/Heat Nuts, 16-8 Stainless Steel 304
    ITT REQUIRED:
    1 - CLS" 690 (2) 2-1/2 & 4-1/2
    (The fire relief will review the final choice of the hydrant head with CWS for approval)

SUMMARY
690'-12" PVC C-900 PIPE
1-8" TWO WAY METER & VAULT

ENGINEERING
CALIFORNIA WATER SERVICE CO.
DEPARTMENT

DRAWN	
CHK.	
ENGR.	
SUPV.	
APPD.	

FILE WATER NO.: K12
SCALE: 1"=50'
DRAWN BY: PERALTA
CHECKED BY: TING HE
APPROVED BY: 10/14/05
DATE:
REGISTERED PROFESSIONAL ENGINEER TING HE No. 49490 EXP. 06-30-05 CIVIL STATE OF CALIFORNIA

TITLE: CWS - CITY SOUTH EMERGENCY INTERCONNECT
DISTRICT: DIXON
DATE: 12/18/02
PROJECT NO.: 8454
DRAWING NO.: DIX-506
SHT 1 OF 1

UPDATED AUGUST 2014 EXHIBIT E

AGREEMENT NO. 14-033

APPENDIX B

Solano County MJHMP – Jurisdictional Annex: City of Dixon

SECTION 2

JURISDICTIONAL ANNEX:

City of Dixon

SOLANO COUNTY
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

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Solano County

Multi-Jurisdiction Hazard Mitigation Plan

CITY OF DIXON (DX.)

Municipal Annex

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Adoption Resolution

To comply with DMA 2000, the City of Dixon has officially adopted this Solano County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP), Volume 1, and its jurisdictional annex. The adoption of the MJHMP recognizes the City's commitment to reducing the impacts of natural hazards. See included adoption resolution.

RESOLUTION NO. 22-073

ADOPTING THE UPDATED SOLANO COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

WHEREAS, the City of Dixon, a political subdivision of the State of California, is an official participating jurisdiction in the updated Solano Multi-Jurisdiction Hazard Mitigation Plan ("MJHMP"); and

WHEREAS, the City of Dixon recognizes the updated MJHMP as the official hazard mitigation plan for participating jurisdictions; and

WHEREAS, the City of Dixon has gathered information and prepared the updated MJHMP in accordance with Federal Emergency Management Agency (FEMA) requirements at 44 CFR § 201.6

WHEREAS, Volume 1 of the updated MJHMP recognizes the threat that natural hazards pose to people and property Solano County-wide; and

WHEREAS, the City of Dixon's Annex to Volume 1 of the updated MJHMP provides additional information specific to the City of Dixon, with a focus on providing additional details on the planning process, risk assessment, and mitigation strategy for this community; and

WHEREAS, the City of Dixon has reviewed Volume 1 of the updated MJHMP and its Annex and affirms that the plan actions in Volume 1 and its Annex should reduce the potential for harm to people and property from future hazard occurrences within the community; and

WHEREAS, the U. S. Congress passed the Disaster Mitigation Act of 2000 ("Disaster Mitigation Act") emphasizing the need for pre-disaster mitigation of potential hazards; and

WHEREAS, the Disaster Mitigation Act made available mitigation grants to state and local governments; and

WHEREAS, an adopted hazard mitigation plan is required as a condition of future funding for mitigation projects under multiple FEMA pre- and post-disaster mitigation grant programs; and

WHEREAS, the City of Dixon fully participated in the FEMA-prescribed mitigation planning process to prepare this updated MJHMP; and

WHEREAS, the residents were afforded opportunities to comment and provide input in the updated MJHMP and the mitigation actions in the Plan; and

WHEREAS, the City of Dixon, as a fully participating jurisdiction of the updated MJHMP, is an eligible sub-applicant to the State of California under FEMA's hazard mitigation grant program guidance; and

WHEREAS, the California Office of Emergency Services (Cal OES), and the FEMA Region IX officials have reviewed the updated MJHMP, and approved it contingent upon this official adoption by the participating governing body; and

WHEREAS, the City of Dixon desires to comply with the requirements of the Disaster Mitigation Act and to augment its emergency planning efforts by formally adopting the updated MJHMP; and

WHEREAS, adoption by the governing body for the City of Dixon demonstrates the jurisdiction's commitment to fulfilling the mitigation goals and objectives outlined in this updated MJHMP; and

WHEREAS, adoption of this plan helps to coordinate the responsible agencies to carry out their responsibilities under the updated MJHMP.

NOW, THEREFORE, IT IS RESOLVED BY THE CITY COUNCIL OF THE CITY OF DIXON AS FOLLOWS:

1. That the City Council finds the facts mentioned above to be true and further finds that this City Council has jurisdiction to consider, approve, and adopt the subject of this Resolution.

2. That the City Council does hereby adopt the updated Solano County Multi-Jurisdiction Hazard Mitigation Plan Volume 1 and its Annex, as approved by FEMA and Cal OES, as the official mitigation plan for the City of Dixon.

3. That the City Council authorizes the Solano County Emergency Services Manager to submit an approved and signed copy of this adoption resolution to the California Office of Emergency Services and FEMA Region IX officials to enable the plan's final approval in accordance with the requirements of the Disaster Mitigation Act of 2000.

PASSED AND ADOPTED THIS 5TH DAY OF APRIL, 2022, BY THE FOLLOWING VOTE:

AYES: Ernest, Hendershot, Johnson, Pederson, Bird
NOES: None
ABSENT: None
ABSTAIN: None

RESOLUTION NO.: 22-073

DATE: APR 05 2022

ATTEST:

Kristin M. Janisch
Elected City Clerk

Steven C. Bird
Mayor

RESOLUTION NO.: 22-073

DATE: APR 05 2022

Section 2. City of Dixon

2.1 Purpose

This Annex details the hazard mitigation planning elements specific to the City of Dixon. This Annex is not intended to be a standalone document but appends to and supplements the information contained in the umbrella plan document. As such, all sections of the umbrella plan, including the planning process and other procedural requirements apply to and were met by the City of Dixon. This Annex provides additional information specific to the City of Dixon, with a focus on providing additional details on the planning process, risk assessment, and mitigation strategy for this community.

Hazard Mitigation Plan Points of Contact

Primary Point of Contact

Todd McNeal, Fire Chief
City of Dixon
205 Ford Way
Dixon, CA 95620
Telephone: (707) 678-1489
e-mail: tmcneal@cityofdixon.us

Alternate Point of Contact

Jim Lindley, City Manager
City of Dixon
600 East A St.
Dixon, CA 95620
(707) 678-7000 ext. 1101
e-mail: jlindley@ci.dixon.ca.us

2.2 Planning Methodology

The City of Dixon followed the planning process detailed in Volume 1, Section 3, including participating in the County Hazard Mitigation Planning Committee (HMPC) and Steering Committee and formulating their own internal planning team to support the broader planning process. Internal planning participants, their positions, and how they participated in the planning process are shown in Table 2-1.

Table 2-1: Planning Committee Members

Planning Committee Members	Department
Todd McNeal	Fire Chief
Dave Horigan	Parks & Maintenance Supervisor
Jim Lindley	City Manager
Joe Leach	Public Works Director & City Engineer
Joel Engrahm	Building Inspector II
Rachel Ancheta	Human Resources & Risk Manager
Sandy Soriano	Public Information Officer
Scott Greeley	Associate Planner

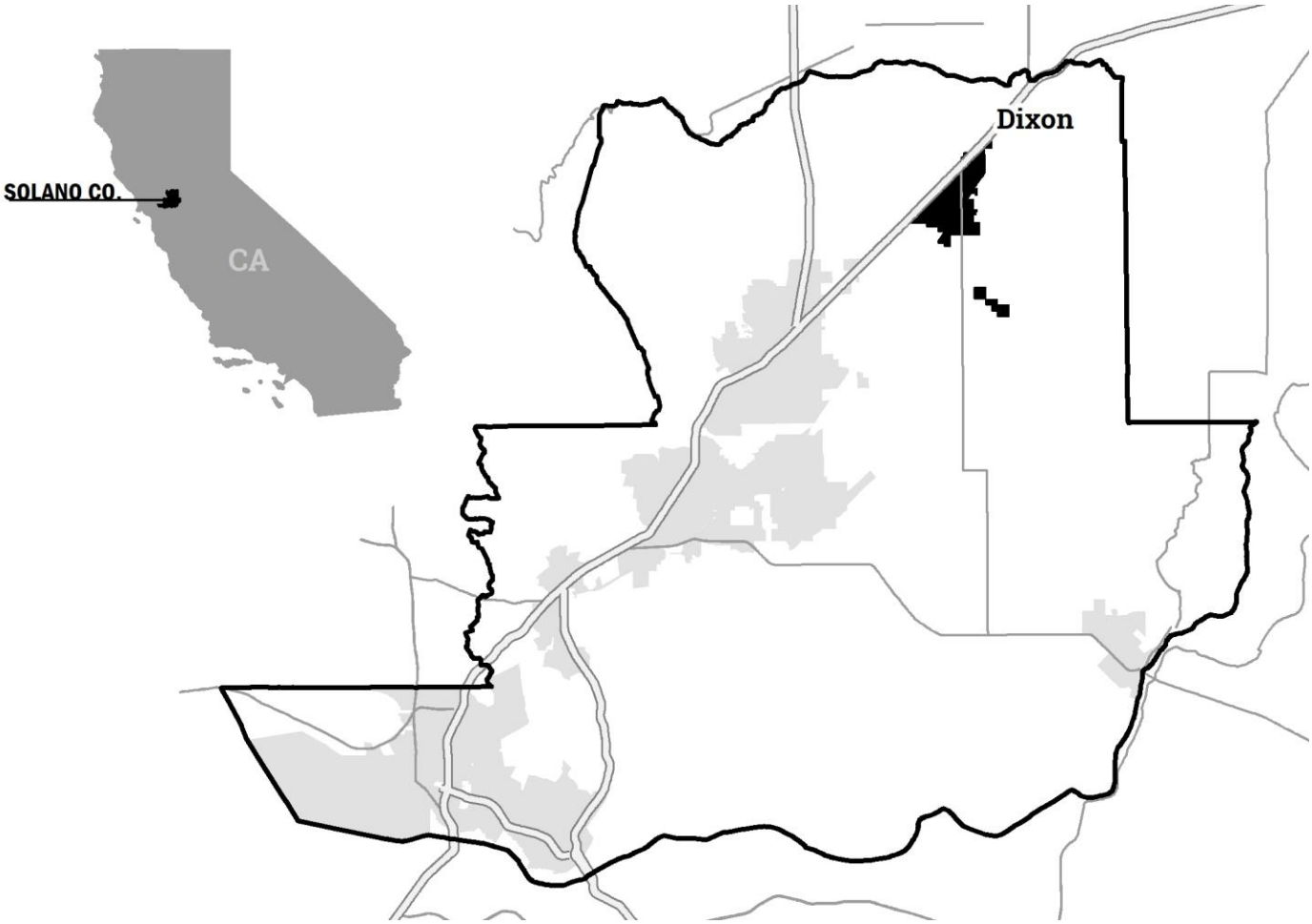


Figure 2-1: City of Dixon Location

2.3 What's New

The City of Dixon has not had a hazard mitigation plan since participating in the 2006 Association of Bay Area Governments MJHMP. Because the City's annex to the ABAG Plan is so old, the Planning Committee elected to not include any of the mitigation actions from the earlier plan in this MJHMP. Starting fresh will ensure that the City's mitigation strategy addresses its most pressing current vulnerabilities. The City's efforts to incorporate hazard mitigation into other planning mechanisms are documented in Section 2.5.1, the Capabilities Assessment.

2.3.1 Success Stories

Artificial Turf Fields: In effort to respond to drought conditions, the City recently installing artificial turf in many City-owned fields through the city.

Subsidized Desalination Station: The City of Dixon has also instituted subsidized desalination stations which reduce the need for salt filters to make water softer. The water softening company now removes cartridges which aids in regional salinity, putting less salt back into the system.

Dam Emergency Action Plan: Lastly, the City of Dixon has also developed a dam emergency action plan, which has been submitted to CalOES, to address the City-owned dam "Pond A."

2.4 Risk Assessment

The intent of this section is to profile the City of Dixon's hazards and assess the City's vulnerabilities, distinct from that of the County wide planning area. The hazard profiles in Volume 1 discuss overall impacts to the planning area and describes the hazard problem description, hazard extent, magnitude/severity, previous occurrences of hazard events and the likelihood of future occurrences. For more information on Risk Assessment Methodologies, see Vol. 1 and Appendix A.

2.4.1 Hazard Screening Criteria

Planning Team members from each participating jurisdiction collectively discussed which hazards should be profiled in the Plan and which should not. The results of that discussion can be found in Table 2-2. Detailed hazard profiles of the most significant County wide hazards are described in Section 4 of Volume 1. The Planning Team reviewed previously prepared hazard mitigation plans and other relevant documents to determine the realm of natural hazards that have the potential to affect the City of Dixon. Table 2-3 provides a crosswalk of hazards identified in Vol. 1 of this plan, the City of Dixon General Plan, and 2018 California State Hazard Mitigation Plan. The crosswalk was used to develop a preliminary hazards list, providing a framework for the Planning Team members to evaluate which hazards were truly relevant to the City of Dixon and which ones were not. Section 2.4.2 below describes the hazard risk ranking process that was performed by the planning team which prioritized hazards that are specifically relevant to the City of Dixon.

Table 2-2: County-Wide Hazard Prioritization

Hazard Type	Explanation
Climate Change	**High priority county-wide, profiled hazard.**
Dam/ Levee failure	Dam failure is possible in Solano County but is best addressed in other plans, specifically Emergency Action Plans for high hazard dams affecting Solano County.
Drought	**High priority county-wide, profiled hazard.**
Earthquake/ Geologic Hazards	**High priority county-wide, profiled hazard.**
Flood	**High priority county-wide, profiled hazard.**
Hazardous Material	While hazardous materials can release and impact the County, there are better avenues to address this hazard outside this plan.
High Winds/ Straight Line Winds	**High priority county-wide, profiled as part of Extreme Weather.**
Insect Hazards	While hazardous insects exist in Solano County, this was not considered a priority and is not profiled in this plan.
Pandemic Disease	While pandemic disease can impact the County, there are better avenues to address this hazard outside this plan.
Extreme Weather, including:	**High priority county-wide for high wind, heavy rain, and high heat.**
Extreme Heat	**Profiled as part of Extreme Weather.**
Hail	Hail events are rare and not considered a priority.
High Wind	**Profiled as part of Extreme Weather.**
Heavy Rain	**Profiled as part of Extreme Weather.**
Fog	Fog events are rare and are not considered a priority.
Lightning	Not a priority as an extreme weather event; discussed as source of wildfire.
Severe Thunderstorm	Severe thunderstorms were not identified as a priority in this plan.
Winter Storm / Extreme Cold/ Freeze Events	Winter storms are rare in Solano County and not identified as a priority for this plan.
Slope Failure	**High priority county-wide, profiled hazard.**
Soil Hazards	While limited soil hazards exist in Solano County (erosion and shifting soils), these are not prioritized in this plan. Erosion discussed under flood hazard.
Terrorism/Human Caused Threats	While terrorism is certainly a threat to the County and participating jurisdictions, it is best addressed in other plans as this HMP does not address human-caused threats.
Tornado	Impacts to the County from tornados are extremely unlikely, if any.
Volcanic Activity	Due to distance from volcanoes and the limited chance of an eruption, this hazard was not identified as a priority.
Wildfire	**High priority county-wide, profiled hazard.**

Table 2-3: City Document Review Crosswalk

Hazards	2020 Dixon General Plan	2014 Solano County HMP	2018 California State HMP
Agricultural Pests			■
Climate Change	■	■	■
Dam Failure	■	■	■
Drought	■	■	■
Earthquake	■	■	■
Flood	■	■	■
Landslide		■	■
Levee Failure			■
Manmade Hazards	■		■
Pandemic Disease			■
Sea Level Rise		■	■
Extreme Weather		■	■
Soil Hazards			■
Terrorism & Tech Hazards	■		■
Tsunami			■
Volcano			■
Wildfire	■	■	■

2.4.2 Hazard Risk Ranking

The City of Dixon's Planning Team used the same hazard prioritization process as the Solano County Hazard Mitigation Planning Committee. This process is described in detail in Section 4.3.1 of Vol. 1. Figure 2-2 displays the results of the hazard risk ranking exercise that was performed by the Planning Team. The Planning Team chose to assess the City of Dixon's vulnerability to the following hazards:

- Flood
- Extreme Weather (High heat, Heavy rain, High wind)
- Climate Change
- Earthquake
- Drought

All of these hazards have been profiled in Vol. 1 of this document. The purpose of this annex to specifically address the City of Dixon's vulnerability to these specifically-identified hazards.

2.4.3 Vulnerability Assessment

Assessing vulnerabilities exposes the unique characteristics of individual hazards and begins the process of narrowing down which areas within the City of Dixon are vulnerable to specific hazard events. The vulnerability assessment considered unique local knowledge of hazards and impacts and a GIS overlaying

method for examining such vulnerabilities more in depth. Using these methods, participating jurisdictions estimated vulnerable populations, infrastructure, and potential losses from hazards.

2.4.3.1 Risk Assessment

Each participating jurisdiction developed a risk matrix that assessed the probability and impact of various hazards within the jurisdiction. Figure 2-2 is the jurisdiction's risk assessment, which was completed in part using the web based and interactive Risk Assessment Mapping Platform (RAMP), accessed via the project website at www.mitigatehazards.com. RAMP allows interactive discovery of robust risk, vulnerability, and exposure data developed especially for Solano County. RAMP is a mapping platform built specifically for mitigation planning. It displays County/jurisdiction facilities and buildings overlaid with natural hazards layers to bring interactivity and individual discovery to the GIS analysis performed for the MJHMP. See Vol. 1 for a detailed description of RAMP. The Planning Team used RAMP in meetings and as needed to understand vulnerabilities to the City of Dixon. Users interactively filter facilities and buildings by natural hazard zones and/or construction characteristics. The City of Dixon also conducted a more detailed climate vulnerability assessment, included as Appendix A to this annex. The climate vulnerability assessment analyzed climate-related vulnerabilities by considering the impact from the climate vulnerability and the community's adaptive capacity to respond to the vulnerability.

2.4.3.2 Exposure Maps and Damage Estimation Tables

The included snapshot maps and damage estimation tables illustrate the City of Dixon's vulnerability to specific hazards. Based on the risk assessment, the snapshot maps focus on those hazards prioritized by the jurisdiction. These maps helped the Planning Team understand the exposure of population, parcels, and critical infrastructure to specific hazards. Each map contains an exposure summary that displays the percent of the population, the improvement and content value of parcels, and the amount of critical infrastructure that is exposed to each respective hazard. For flood and earthquake, detailed damage estimations were conducted through FEMA's Hazus software and are shown in tabular form. Additional mapping is also included. Figures and tables include:

- Figure 2-3: Dixon - FEMA Flood Risk Exposure
- Table 2-4: Dixon - Damage Estimate Summaries, 100 YR Flood
- Figure 2-4: Dixon - BAM 200-YR Flooding and Awareness Zones
- Figure 2-5: Dixon - Hayward Rodger's Creek EQ Scenario (M7.1)
- Table 2-5: Dixon - Hayward Roger's Creek Damage Estimation Summaries
- Figure 2-6: Dixon - Concord Green Valley EQ Scenario (M6.8)
- Table 2-6: Dixon - Concord Green Valley Damage Estimate Summaries
- Figure 2-7: Dixon – Areas with Potential for Liquefaction
- Figure 2-8: Dixon - 30-YR Normal Maximum Temperature for July
- Figure 2-9: Dixon - Average Annual Precipitation (1981-2010)
- Figure 2-10: Dixon - Average Annual Wind Speed (Power Class)
- Figure 2-11: Drought Severity Timeline - Suisun Bay
- Figure 2-12: Dixon - RCP Comparison

Risk Assessment Matrix Definitions

PROBABILITY RATING

The likelihood of a hazard event occurring within a time period?

PROBABILITY

- **Highly Likely** - **Highly likely** - 100% annual probability. Or likely to occur every year in your lifetime.
- **Likely** - **Likely** - Between 10 and 100% annual probability. Or will occur several times in your lifetime.
- **Possible** - **Possible** - Between 1 and 10% annual probability. Or likely to occur some time in your lifetime.
- **Unlikely** - **Unlikely** - Less than 1% annual probability. Or unlikely but possible to occur in your lifetime.

IMPACT RATING

In terms of injuries, damage, or death, would you anticipate impacts to be minor, limited, critical, or catastrophic when a significant hazard event occurs? The impact could be in terms of one hazard event (flooding from a culvert failure) or a large-scale event (multiple rivers flooding) in the same jurisdictional boundary.

IMPACT

Minor	Limited	Critical	Catastrophic

Minor - Very few injuries, if any. Only minor property damage and minimal disruption on quality of life. Temporary shutdown of critical facilities.

Limited - Minor injuries only. Approx. 10% or less of property in disaster footprint damaged or destroyed. Complete shutdown of critical facilities for more than one day.

Critical - Multiple deaths/injuries possible. Between 25% and 50% of property in disaster footprint is damaged or destroyed. Complete shutdown of critical facilities for more than one week.

Catastrophic - High number of deaths/injuries possible. More than 50% of property in affected area damaged or destroyed. Complete shutdown of critical facilities for 30 days or more.

To concentrate resources on highest priority hazards, the jurisdictional planning team will focus on "High" and "Extreme" risk hazards in this annex. These hazards have higher probability and greater impact as it relates to the jurisdiction's planning area.

Hazard definitions are included in Vol. 1 of this plan.

Hazard Information / Legend:

Climate Change is prioritized for all jurisdictions.

Sea-Level Rise is a subhazard of climate change for some jurisdictions (County, Vallejo, Benicia, Suisun City, Fairfield).

Extreme Weather in Solano County includes high heat, high wind, and heavy rain.

If a hazard symbol is grey, the planning team did not develop hazard vulnerability information due to lower perceived probability and impact.

City Of Dixon Risk Matrix

IMPACT

PROBABILITY

	Minor	Limited	Critical	Catastrophic
Highly Likely	Medium	DROUGHT	Extreme	Extreme
Likely	Medium	FLOOD, EXTREME WEATHER	High	Extreme
Possible	Low	WILDFIRE	EARTHQUAKE	High
Unlikely	SLOPE FAILURE	Low	Medium	Medium

Figure 2-2: City of Dixon Risk Assessment

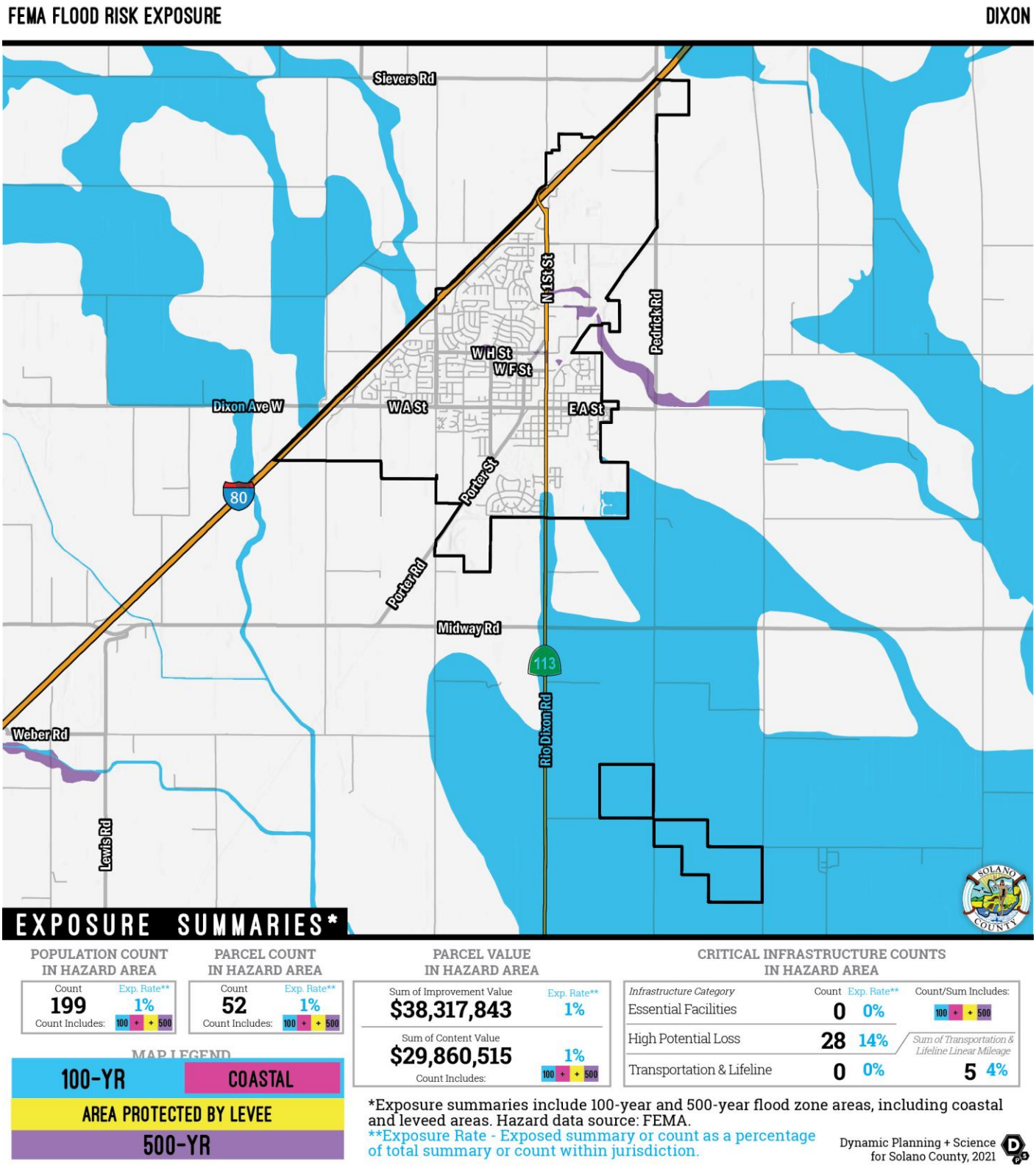
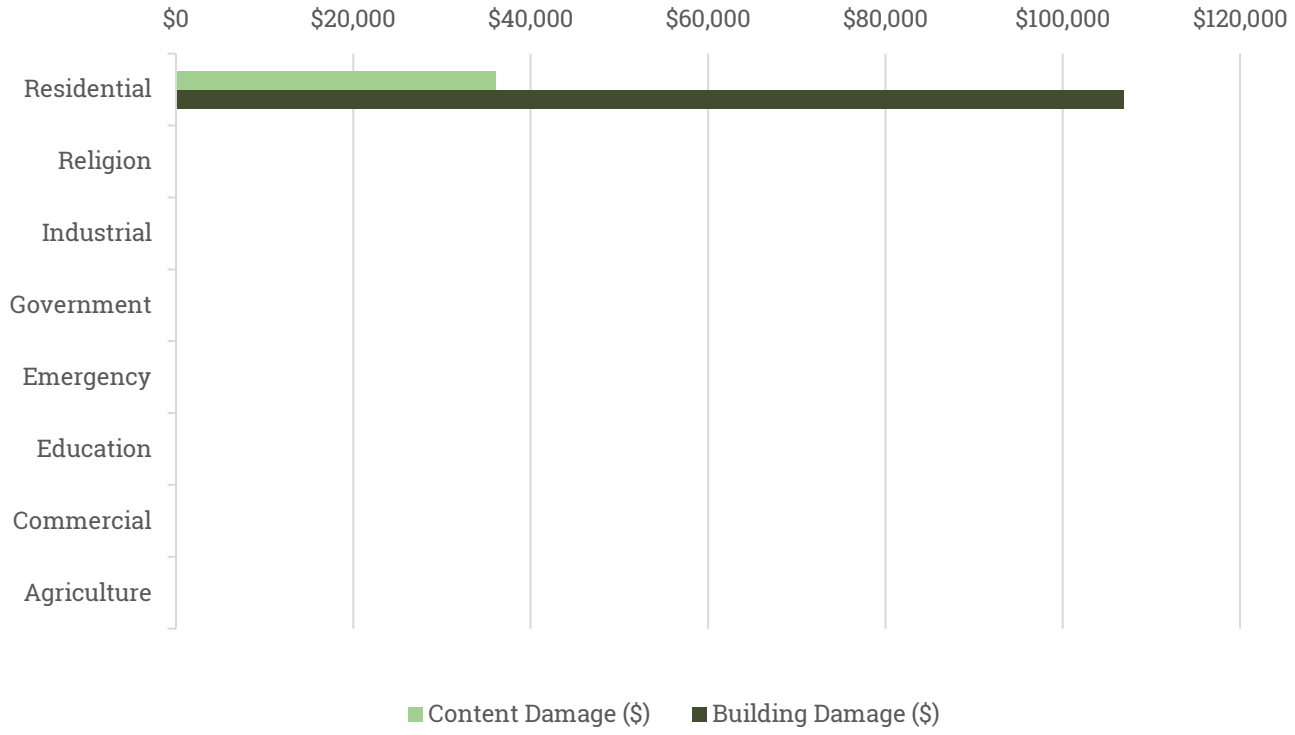


Figure 2-3: Dixon - FEMA Flood Risk Exposure

Table 2-4: Dixon - Damage Estimate Summaries, 100 YR Flood

Building Type	Building Damage ($)	Building Damage (% of total loss)	Content Damage ($)	Content Damage (% of total loss)	Total Damage ($)	Proportion of Loss (%)
Agriculture	$0	0.0%	$0	0.0%	$0	0%
Commercial	$0	0.0%	$0	0.0%	$0	0%
Education*	$0	0.0%	$0	0.0%	$0	0%
Emergency	$0	0.0%	$0	0.0%	$0	0%
Government	$0	0.0%	$0	0.0%	$0	0%
Industrial	$0	0.0%	$0	0.0%	$0	0%
Religion	$0	0.0%	$0	0.0%	$0	0%
Residential	$106,811	74.8%	$36,057	25.2%	$142,868	100%
Total	**$106,811**	**75%**	**$36,057**	**25%**	**$142,868**	

**School district asset information not available during time of Hazus analysis.*
Note: Total Inventory Values
1 - Building Replacement Costs = $3,773,922,295
2 - Content Replacement Costs = $2,667,166,517
3 - Total Value = $6,441,088,812



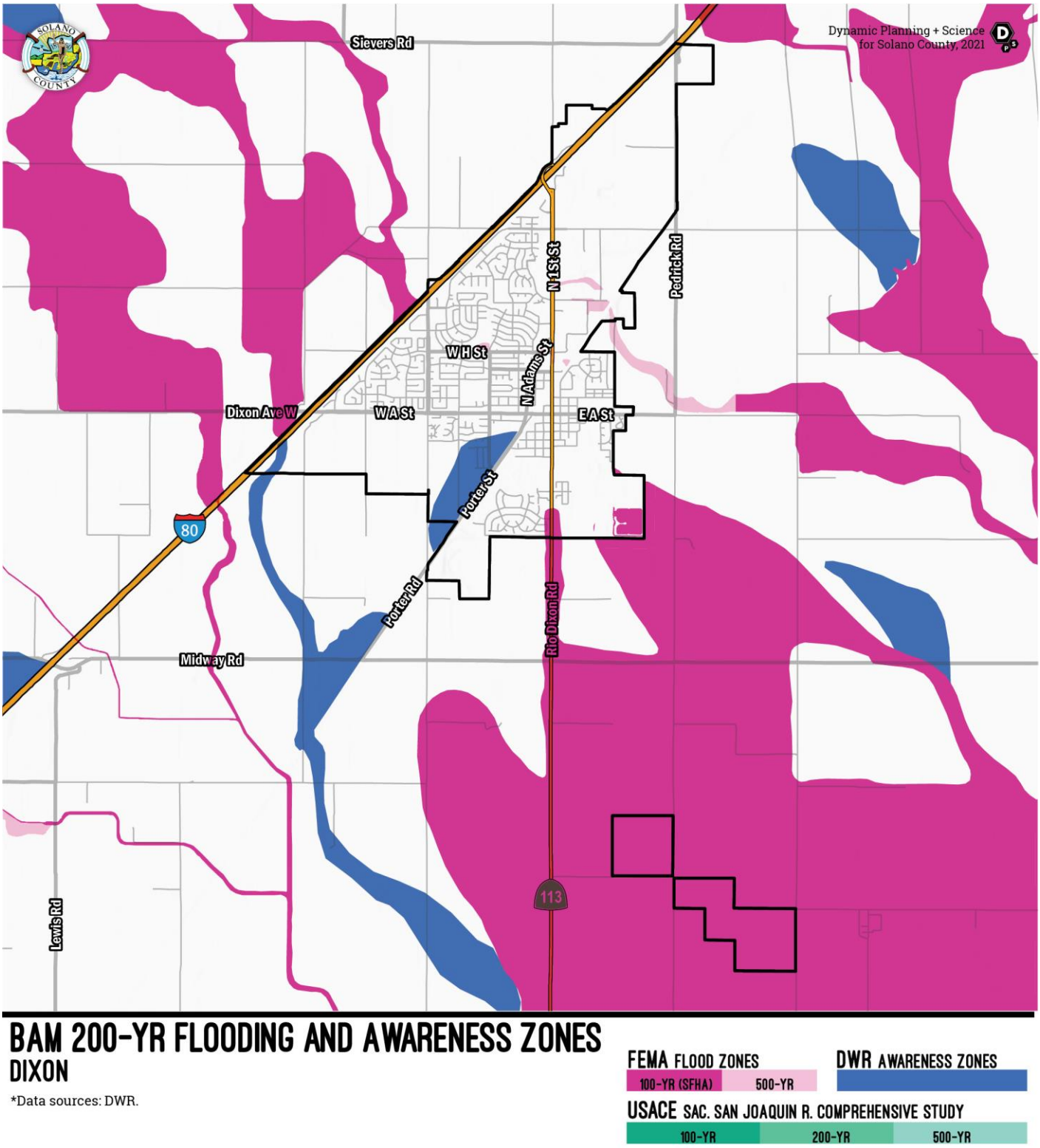


Figure 2-4: Dixon - BAM 200-YR Flooding and Awareness Zones

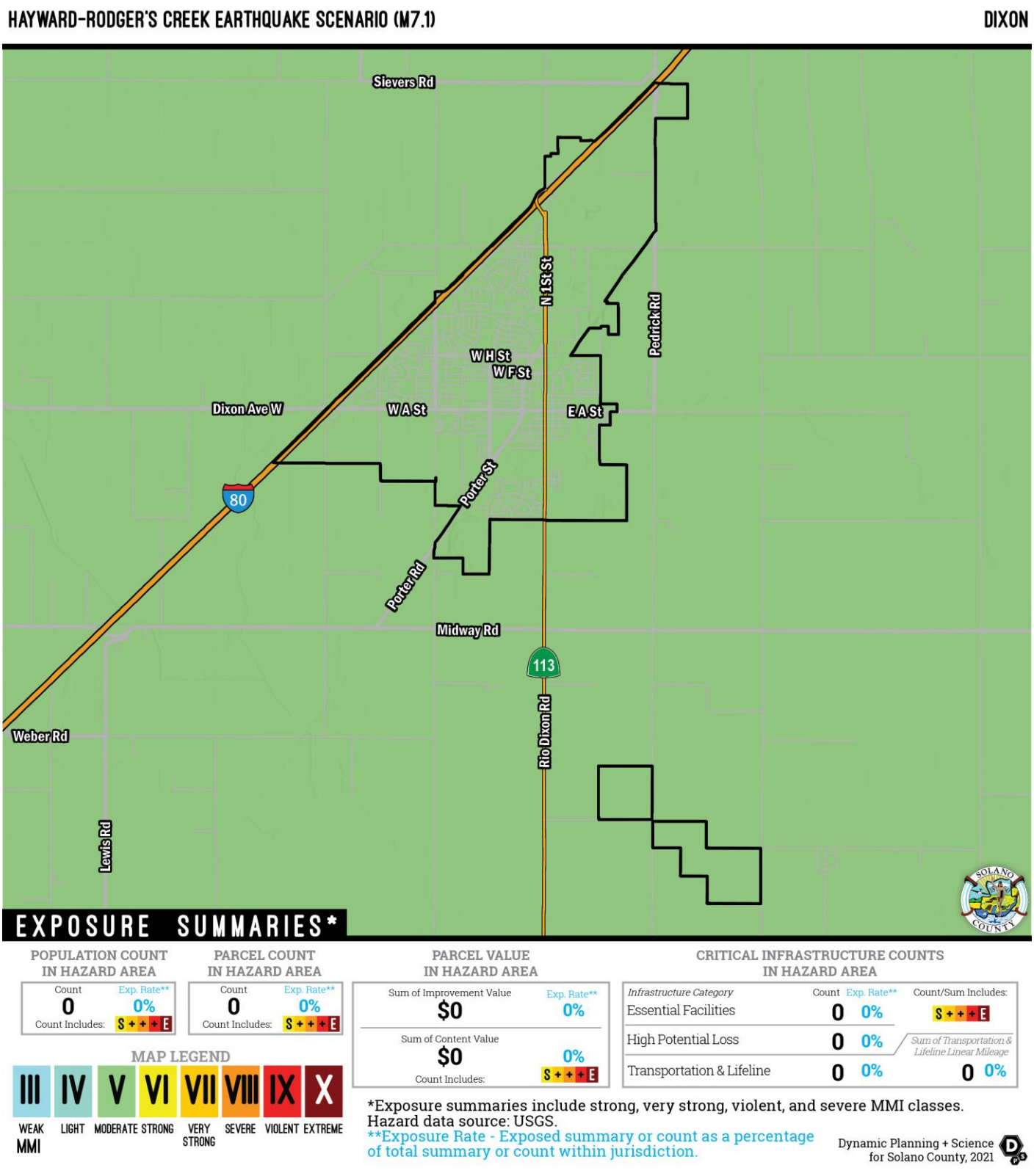
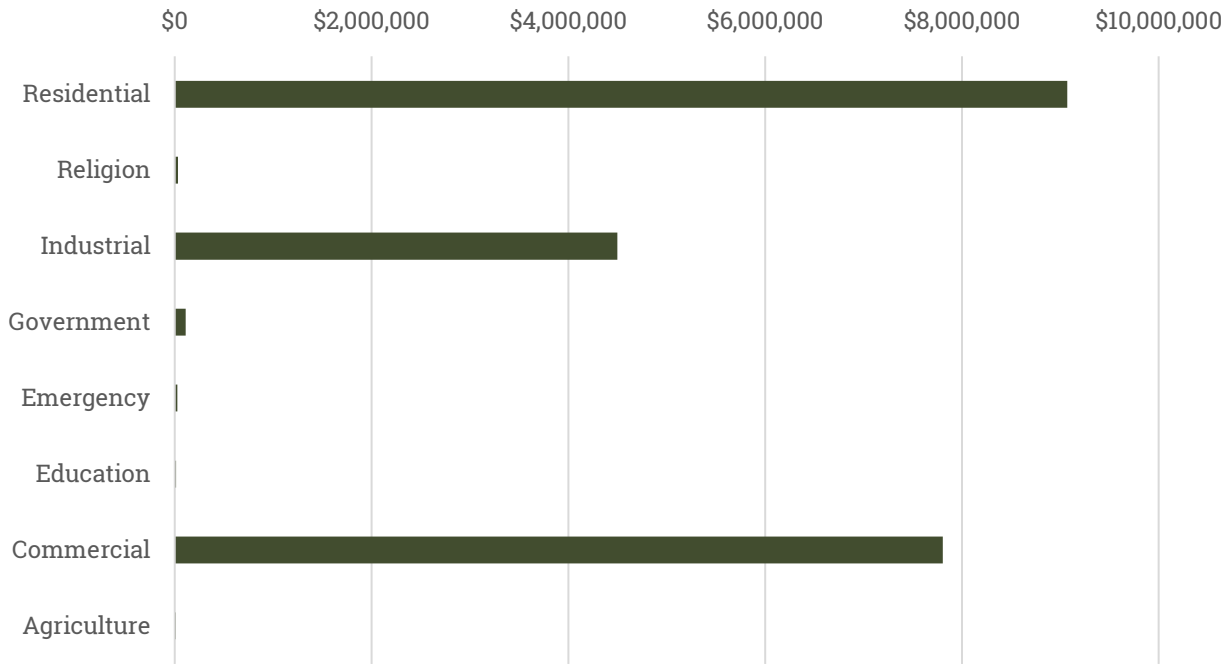


Figure 2-5: Dixon - Hayward Rodger's Creek EQ Scenario (M7.1)

Table 2-5: Dixon - Hayward Roger's Creek Damage Estimation Summaries

Building Type	Average of Potential Damage to Exceed "Slight"	Average of Potential Damage to Exceed "Moderate"	Average of Potential Damage to Exceed "Extensive"	Average Economic Loss for Each Building Category	Sum of Economic Loss	Proportion of Loss (%)
Agriculture	12%	4%	0%	$5,291	$10,583	0%
Commercial	5%	1%	0%	$45,923	$7,806,889	36%
Education*	12%	4%	0%	$13,291	$13,291	0%
Emergency	2%	0%	0%	$8,466	$25,397	0%
Government	4%	1%	0%	$1,966	$112,039	1%
Industrial	12%	4%	0%	$71,411	$4,498,869	21%
Religion	4%	0%	0%	$3,208	$32,085	0%
Residential	3%	0%	0%	$1,695	$9,071,995	42%
Total					**$21,571,146**	

**School district asset information not available during time of Hazus analysis.*
Note: Total Inventory Values
1 - Building Replacement Costs = $3,773,922,295
2 - Content Replacement Costs = $2,667,166,517
3 - Total Value = $6,441,088,812



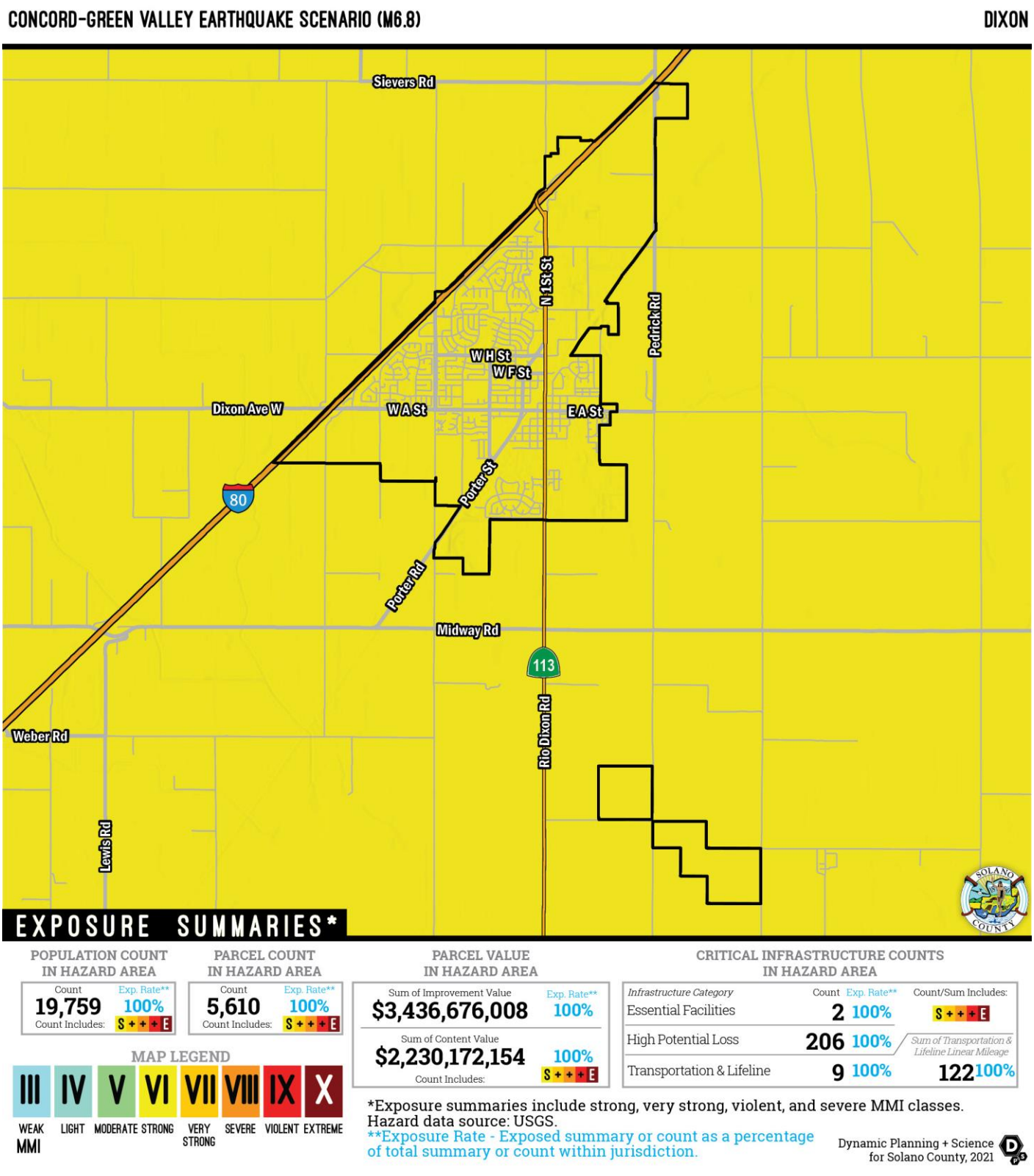
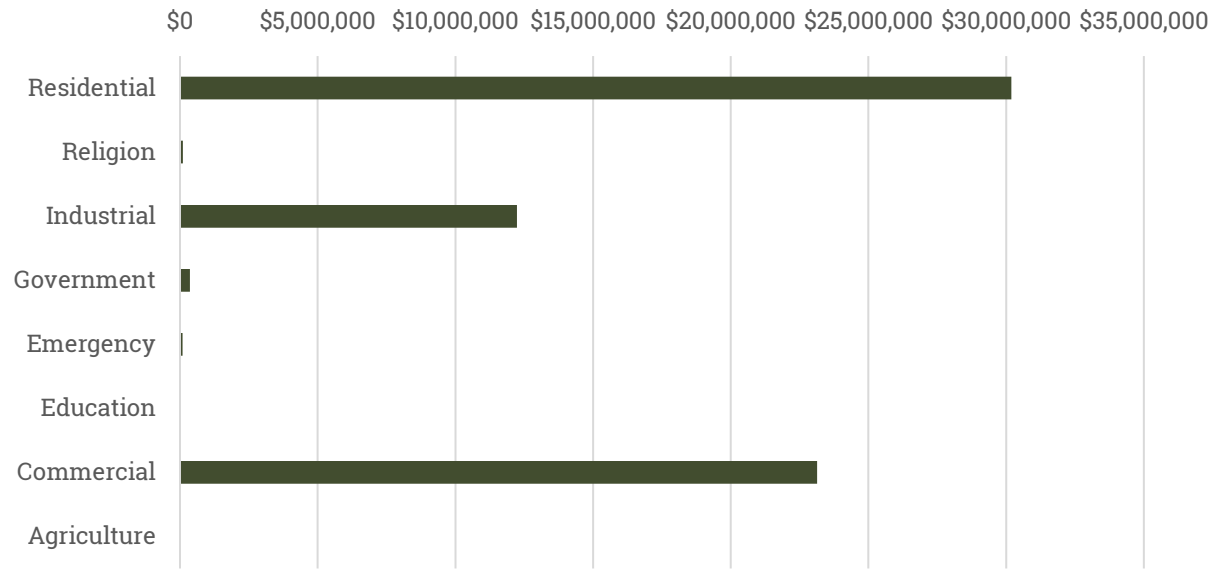


Figure 2-6: Dixon - Concord Green Valley EQ Scenario (M6.8)

Table 2-6: Dixon - Concord Green Valley Damage Estimate Summaries

Building Type	Average of Potential Damage to Exceed "Slight"	Average of Potential Damage to Exceed "Moderate"	Average of Potential Damage to Exceed "Extensive"	Average Economic Loss for Each Building Category	Sum of Economic Loss	Proportion of Loss (%)
Agriculture	27%	12%	2%	$13,309	$26,617	0%
Commercial	15%	4%	1%	$136,066	$23,131,297	35%
Education*	26%	11%	1%	$33,656	$33,656	0%
Emergency	6%	1%	0%	$32,038	$96,113	0%
Government	12%	2%	0%	$6,354	$362,185	1%
Industrial	29%	12%	2%	$194,249	$12,237,657	18%
Religion	11%	2%	0%	$10,559	$105,595	0%
Residential	10%	1%	0%	$5,641	$30,191,928	46%
Total					**$66,185,048**	

**School district asset information not available during time of Hazus analysis.*
Note: Total Inventory Values
1 - Building Replacement Costs = $3,773,922,295
2 - Content Replacement Costs = $2,667,166,517
3 - Total Value = $6,441,088,812



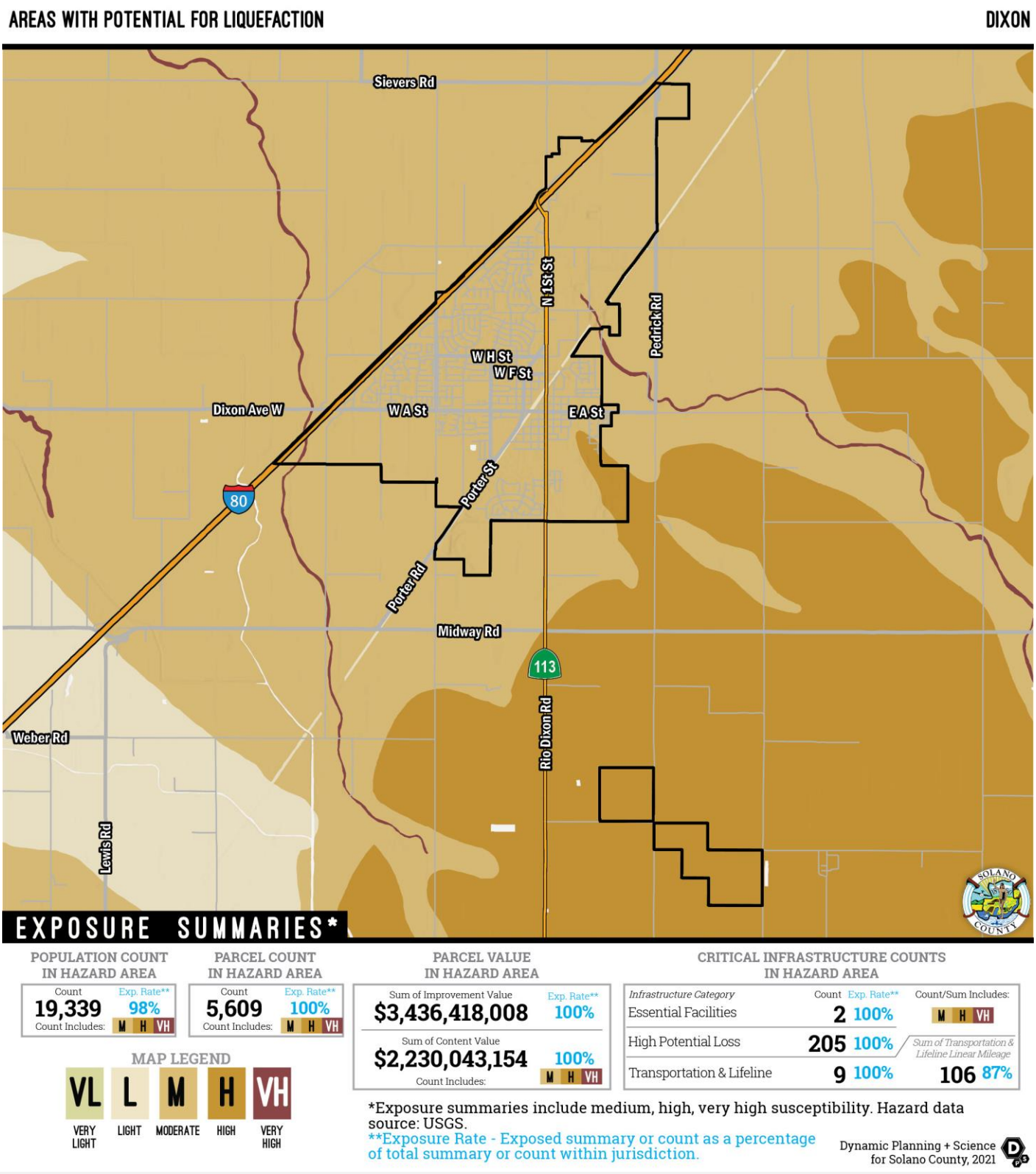


Figure 2-7: Dixon – Areas with Potential for Liquefaction

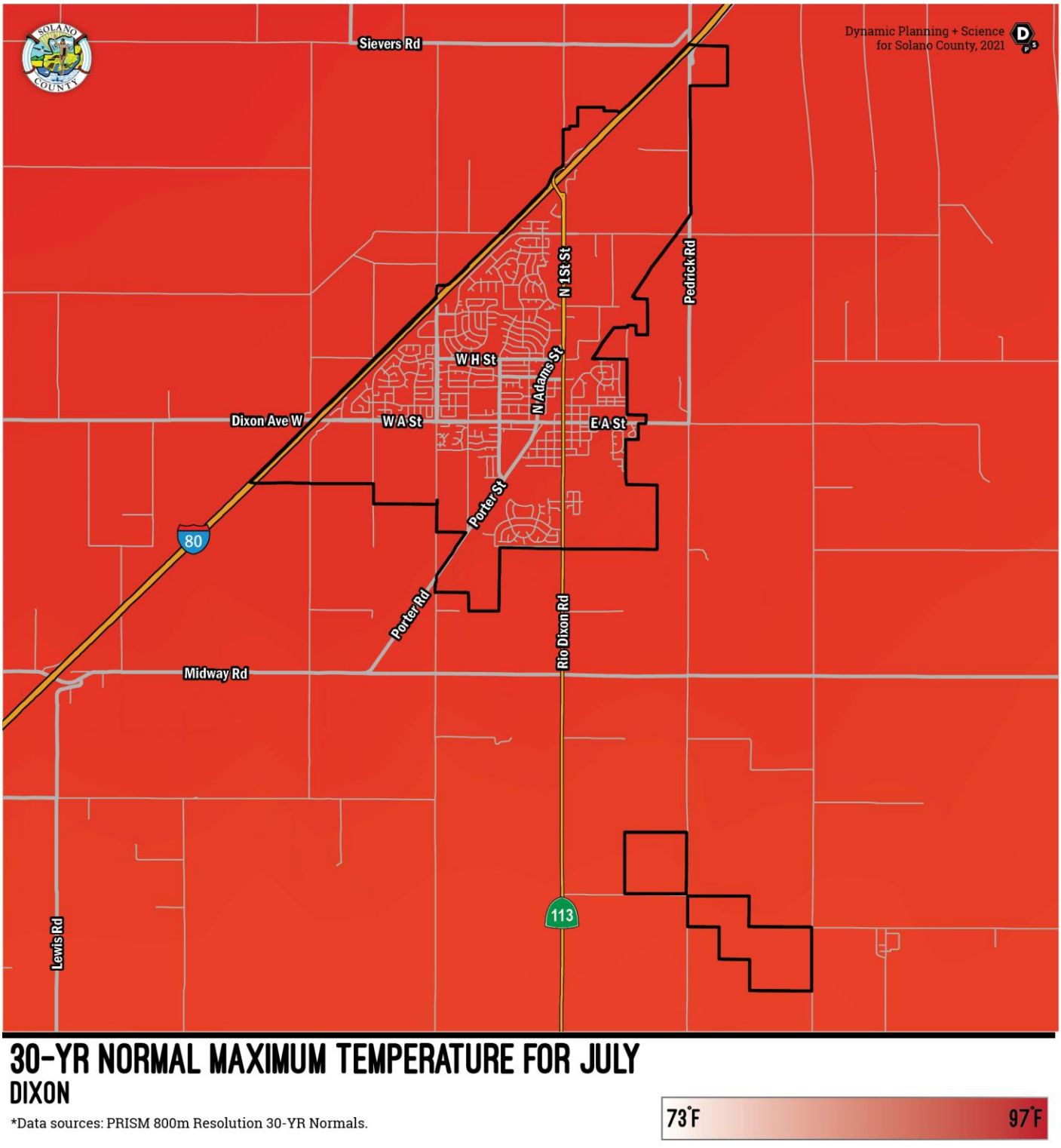


Figure 2-8: Dixon - 30-YR Normal Maximum Temperature for July

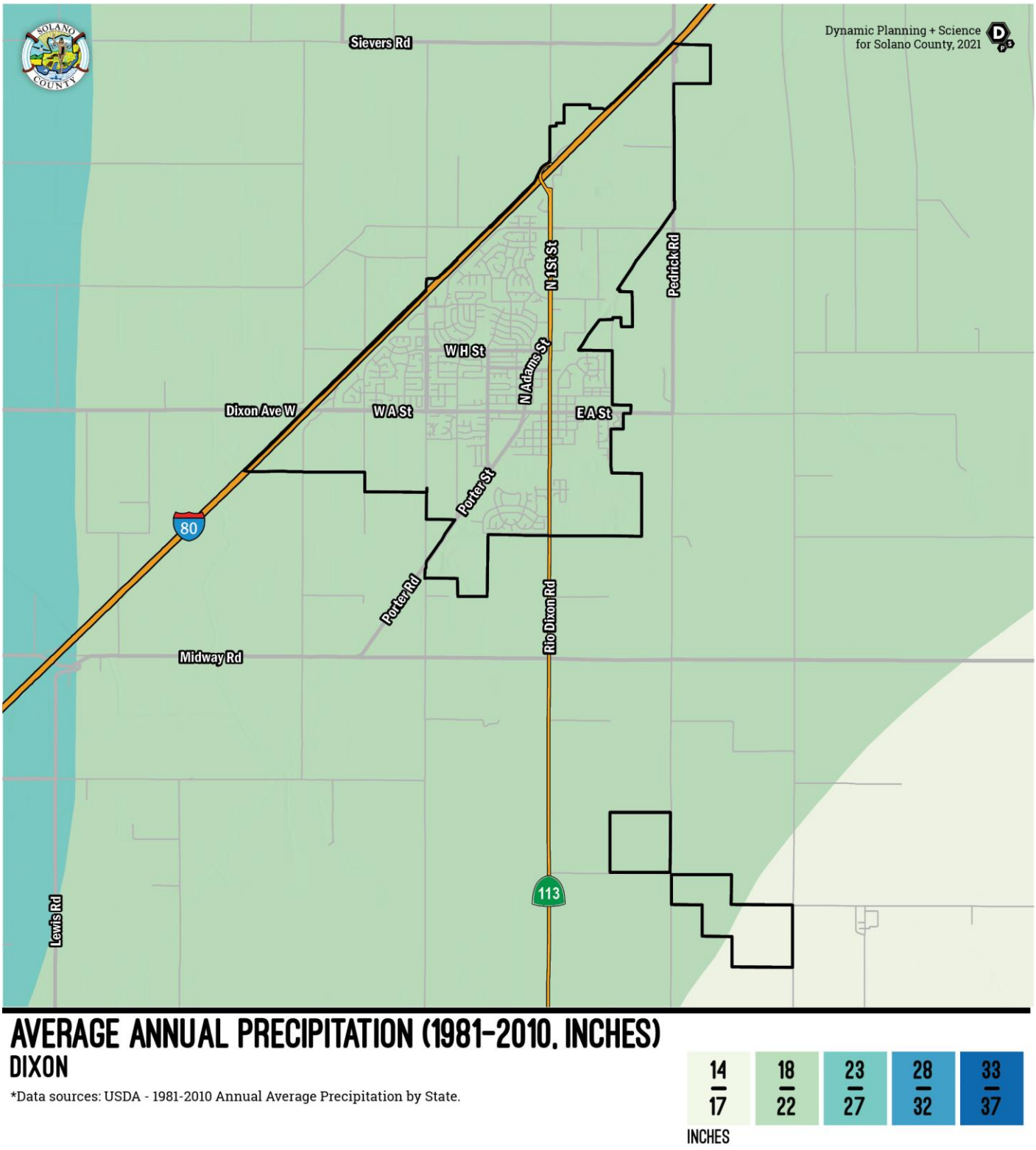


Figure 2-9: Dixon - Average Annual Precipitation (1981-2010)

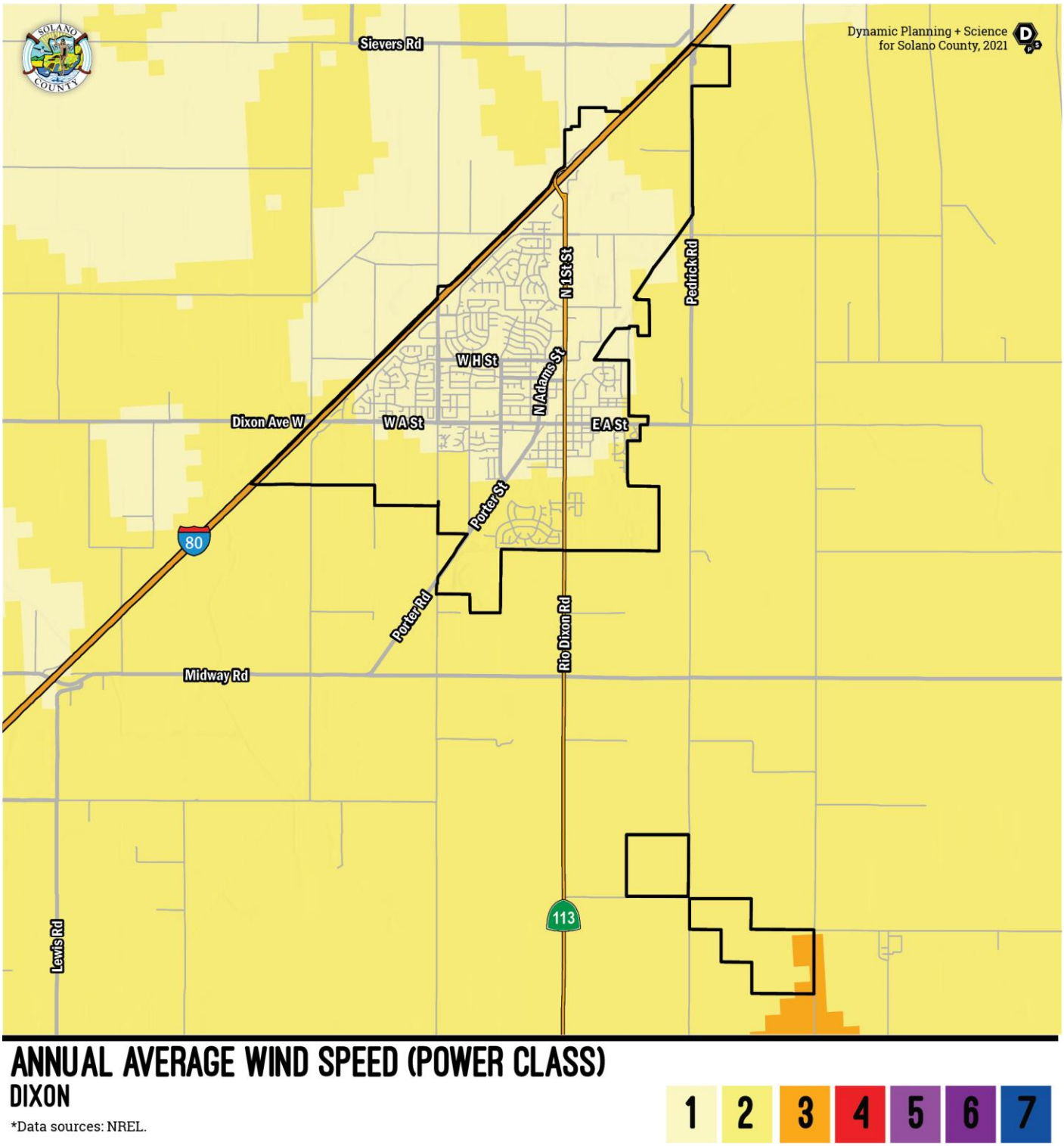


Figure 2-10: Dixon - Average Annual Wind Speed (Power Class)

Table 2-7: Dixon Drought Classifications and Impacts

Category	Description	Possible Impacts
D0	Abnormally Dry	▪ Active fire season begins. ▪ Going into drought, short term dryness, slowing planting, growth of crops or pastures. ▪ Coming out of drought, some lingering water deficits and pasture or crops not fully recovered
D1	Moderate Drought	▪ Some damage to crops, pastures. ▪ Streams, reservoirs, or wells low, some water shortages developing or imminent. ▪ Voluntary water-use restrictions requested
D2	Severe Drought	▪ Crop or pasture losses likely ▪ Water shortages common ▪ Water restrictions imposed
D3	Extreme Drought	▪ Major crop/ pasture losses ▪ Widespread water shortages or restrictions
D4	Exceptional Drought	▪ Exceptional and widespread crop/ pasture losses ▪ Shortages of water in reservoirs, streams, and wells creating water

Adapted from U.S. Drought Monitor Drought Classifications and Impacts

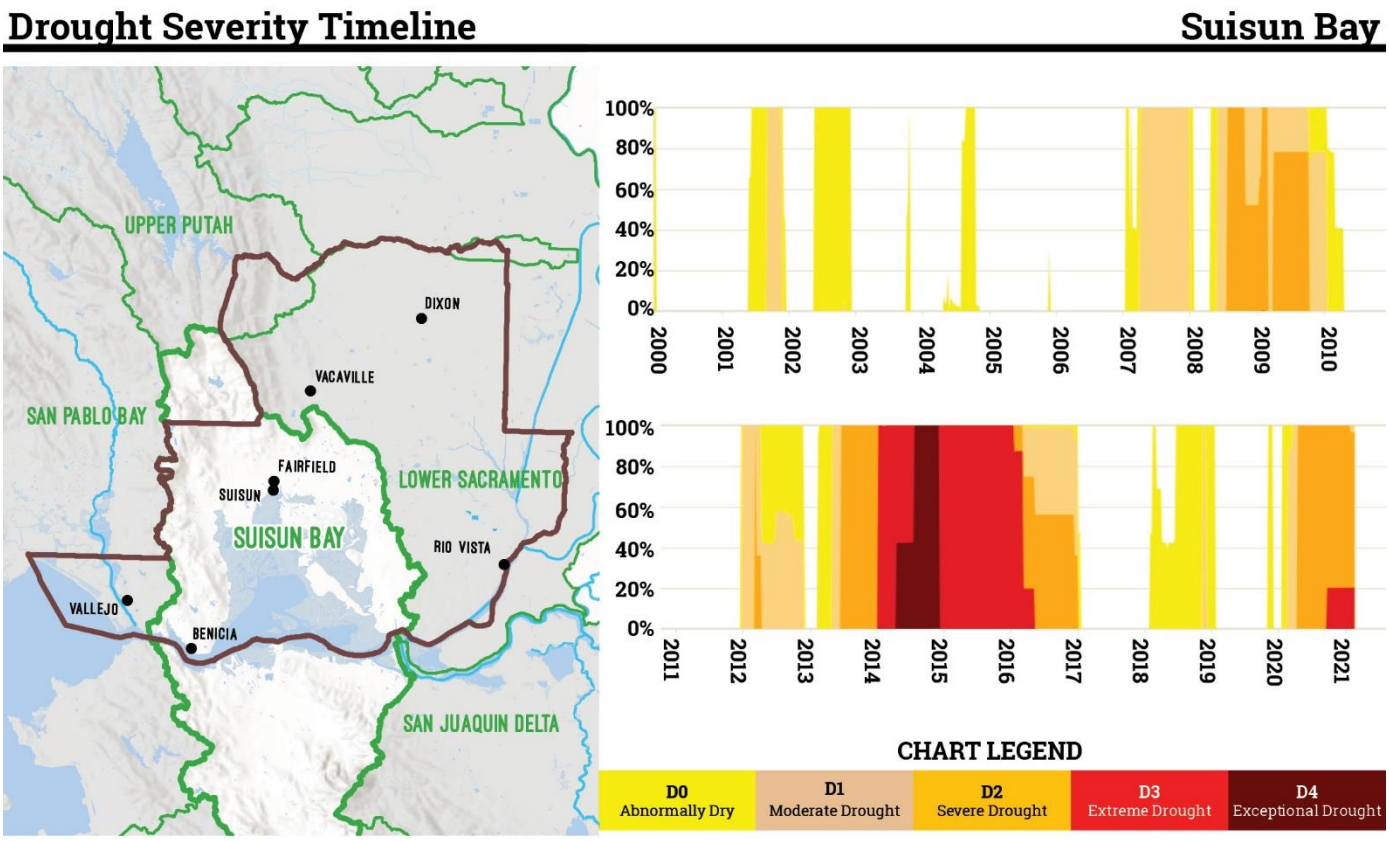


Figure 2-11: Drought Severity Timeline - Suisun Bay

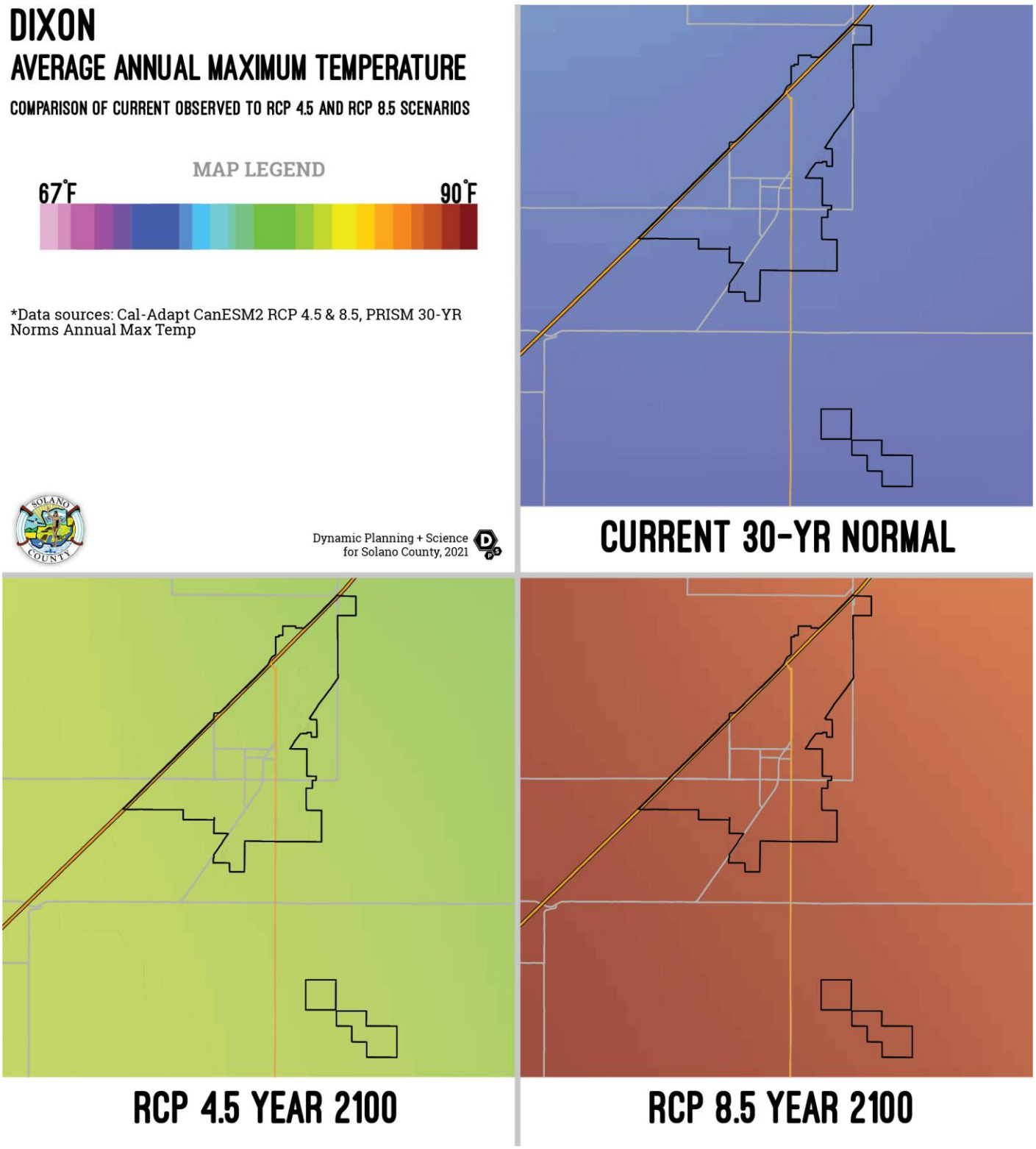


Figure 2-12: Dixon - RCP Comparison

2.4.3.3 Past and Future Development

The City of Dixon is a general law city that crafts its own development regulations and is subject to State law. Future development is subject to compliance with state and local planning, zoning, subdivision, and architecture laws.

The City of Dixon's General Plan (GP) establishes long-range development policies. The GP is designed to help the City address issues related to land use, circulation (traffic), housing, open space, conservation, noise, and safety. The Land Use portion of the plan helps guide the City in determining the location of future development(s), including possible future annexation. In addition to the GP, the City has other plans that guide development in specific areas, including specific plans, policy plans, and master plans. These plans help to shape future development and dictate the City's Sphere of Influence (SOI). One of the central functions in these planning documents is to decrease risk of impact from natural hazards.

Development since Previous HMP

The City considered its growth since the last HMP and determined it had completed several significant mitigation activities and substantially decreased its vulnerability to hazards. In effort to respond to drought conditions, the City recently installed artificial turf fields and instituted subsidized desalination stations which reduce the need for salt filters to make water softer. The City of Dixon has also developed a dam emergency action plan for City-owned dam "Pond A," which has been submitted to CalOES. This HMP Annex reflects these substantial changes and focuses on avenues to better mitigate impacts from problematic past development.

Future Development

City of Dixon is required to update building codes to meet the minimum standards to those required in the California Building Code last updated in 2019. California Building Codes provide some of the safest construction standards in the world and are meant to reduce risk to occupants from high wind, seismic activity, landslides, flood, wildfire, and other natural hazards. In addition to California minimum develop standards, all jurisdictions belong to the NFIP, and all development must meet minimum flood protection standards set forth by FEMA. See Section 4.3.5 of Volume 1 for more information about past and future development in Solano County.

As the General Plan is updated and incorporates information from this HMP, City of Dixon staff are continually improving hazard information through these hazard mitigation plan updates. With this 2020 update, improved online mapping about natural hazards available on RAMP will inform those responsible for future development to make better decisions where and how future development occurs.

City of Dixon reviewed its general plans under the capability assessments undertaken for this hazard mitigation plan. See Section 2.5.1. Deficiencies revealed by these reviews are identified as mitigation actions to decrease risks to move beyond past trends.

The City's municipal codes includes regulations to mitigate the impact of hazards on new and existing development, including:

- Drainage and stormwater retention requirements,
- Steep slope restrictions for new development,
- Waterbody buffer requirements,
- Floodplain management regulations,
- Zoning that prevents development in hazardous areas of the community such as floodplains, landslide areas, the wildland-urban interface (WUI), or other known hazard areas, and
- Building codes that include the most up-to-date California Fire Code, seismic standards, and many other provisions crafted to protect new construction from hazard events.

The City of Dixon is currently growing at a fast pace, specifically within two previously approved subdivisions at the south and southwest portions of the city. Future residential growth will continue in the southwest as well as vacant lands on the southwest and eastern parts of the city. Future industrial and commercial growth will focus on the northeast portions of the city and along the interstate, along with infill and redevelopment within developed parts of the city.

With the recent adoption of the general plan 2040 on May 18, 2021, the City will next embark on two major planning initiatives. The first will include updating the Housing Element for the next housing cycle of 2023-2031. This is due to be completed by 2023. Additionally, the City will update the outdated Zoning Ordinance and Zoning Map, Funds were requested as part of the 2021-22 budget and recently approved. The updated Zoning Ordinance will review and modernize the City's zoning and development standards

Even in the event that limited development did occur within a hazard area, the municipal code should ensure impacts from a hazard event are mitigated and losses are minimal. If development does occur in hazard areas, evacuation and emergency planning should take into consideration the anticipated local impacts of the hazard event, including potential interrupted services or the elimination of access.

The anticipated growth in the City will not cause significant change in vulnerability to the City for identified priority hazards.

National Flood Insurance Program (NFIP)

The NFIP makes federally backed flood insurance available to homeowners, renters, and business owners in participating communities. FEMA has prepared a detailed Flood Insurance Study (FIS) for Solano County and municipalities. The study presents water surface elevations for floods of various magnitudes, including the 1-percent annual chance flood and the 0.2-percent annual chance flood (the 500-YR flood). Base flood elevations and the boundaries of the 100- and 500-YR floodplains are shown on Flood Insurance Rate Maps (FIRMs), which are the principal tools for identifying the extent and location of the flood hazard. FIRMs are the most detailed and consistent data source available, and for many communities they represent the minimum area of oversight under their floodplain management program. See Section 4 of Volume 1 for general information on the NFIP.

The City of Dixon has participated in the NFIP since 1981 The City of Dixon is currently in good standing with the provisions of the NFIP. Compliance is monitored by FEMA regional staff and by the California Department of Water Resources under a contract with FEMA. Maintaining compliance under the NFIP is an important component of flood risk reduction. See Table 2-8 for more information on the City's policies and historic flood insurance claims.

Table 2-8: NFIP Status Table

NFIP and CRS Status & Information	
City of Dixon	
NFIP Status	05/19/81
CRS Class	-
Policies in Force	20
Policies in SFHA	2
Policies in non-SFHA	18
Total Claims Paid	$3,342
Paid Losses	7
Repetitive Loss Properties	1
Severe Repetitive Loss Properties	-
Repetitive Loss Payment by NFIP on Building	$10,488
Repetitive Loss Payment by NFIP on Contents	$0

Source: FEMA CIS 2021, OpenFEMA Data, FIMA RUL Solano County

Note: Policies and claims provided directly from FEMA Region IX CIS Report (8/2021). Repetitive loss tabulations by jurisdiction derived via GIS-based intersect of data available at OpenFEMA Data (https://www.fema.gov/about/openfema/data-sets). Countywide data reported for entire county area including municipalities.The Privacy Act of 1974 (5 U.S.C. 522a) restricts the release of certain types of data to the public. Flood insurance policy and claims data are included in the list of restricted information. FEMA can only release such data to state and local governments, and only if the data are used for floodplain management, mitigation, or research purposes. Therefore, this plan does not identify the repetitive loss properties or include claims data for any individual property.

See Volume 1, Section 4.5 for more information on the NFIP

2.4.3.4 Identify Hazard Problem Statements

As part of the mitigation action identification process, the Planning Committee for each jurisdiction identified areas of concern (aka problem statements) for their respective facilities based on the risk assessment and vulnerability analysis, utilizing the RAMP mapping and static snapshot maps. Problem statements focused on the impact, victim, or threat that the hazard could create in the jurisdiction, as described in Figure 2-13. Identifying common issues and weaknesses through these problem statements assisted the Planning Committee in understanding the realm of resources needed for mitigation. Jurisdiction problem statements are listed in Table 2-9.

The goal is to have at least one mitigation action for every problem statement. Projects or actions have been developed to mitigate each problem identified. See Table 2-14 for a full list of mitigation actions and corresponding problem statements that they address. Each problem statement is coded with a problem number for cross-referencing between Table 2-9 and Table 2-14.

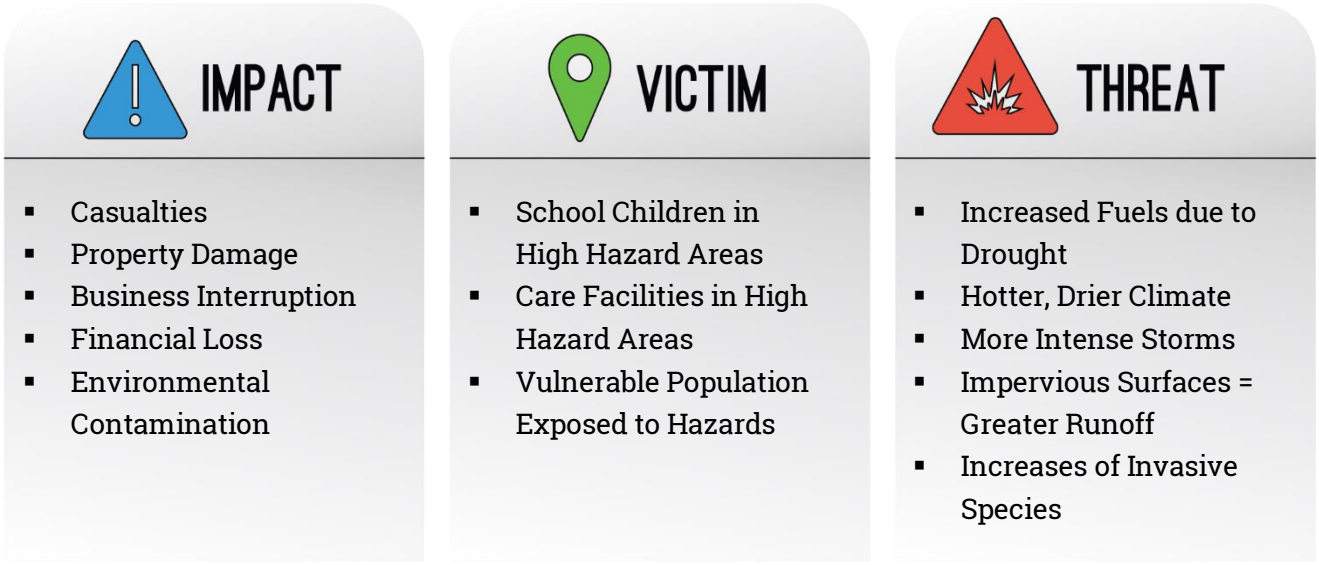


Figure 2-13: Guidance for Problem Statements

Table 2-9: Problem Statements

Problem No.	Hazard Type	Area of Concern	Mitigation Alternatives	Primary Agency	Problem Description	Related MA
ps-AH-DX-149	All Hazard	Impact	PRV - Prevention, PE&A - Public Education & Awareness, ES - Emergency Services	**City of Dixon**	If the jurisdiction's railway were damaged, the city would not have access to the interstate.	ma-AH-DX-116
ps-AH-DX-150	All Hazard	Victim	PE&A - Public Education & Awareness, ES - Emergency Services	**City of Dixon**	Dixon needs a secondary alerting system to notify community of impending incidents.	ma-AH-DX-117
ps-EQ-DX-151	Earthquake	Impact	PPRO - Property Protection, PE&A - Public Education & Awareness, NRP - Natural Resource Protection, SP - Structural Projects	**City of Dixon**	Earthquakes can cause major damage to the jurisdiction causing liquefaction throughout the city.	ma-EQ-DX-119
ps-EQ-DX-152	Earthquake	Impact	PRV - Prevention, PPRO - Property Protection, SP - Structural Projects	**City of Dixon**	Many city facilities, constructed in 1978 including city administration buildings, need retrofits.	ma-EQ-DX-120
ps-EQ-DX-153	Earthquake	Impact	PRV - Prevention, PPRO - Property Protection, SP - Structural Projects	**City of Dixon**	Most of the City's water is produced from wells, however if pumps are damaged during an earthquake, this may cause major water supply issues.	ma-EQ-DX-121
ps-EQ-DX-154	Earthquake	Impact	PRV - Prevention, PE&A - Public Education & Awareness	**City of Dixon**	Dixon has several petroleum transmission (PGE) lines running through jurisdiction, mostly natural gas, which presents the potential for gas leaks throughout the town.	ma-EQ-DX-122
ps-EQ-DX-155	Earthquake	Impact	PRV - Prevention, SP - Structural Projects	**City of Dixon**	Sewer lines are vitrified clay pipes, there is potential for failure when shaking.	ma-EQ-DX-123
ps-FL-DX-156	Flood	Impact	PRV - Prevention, PE&A - Public Education & Awareness	**City of Dixon**	Sandbagging is required annually to address flooding.	ma-FL-DX-126, ma-FL-DX-186
ps-DR-DX-157	Drought	Impact	PE&A - Public Education & Awareness	**City of Dixon**	There is not enough public outreach to educate the community about drought and drought impacts.	ma-DR-DX-118
ps-EW-DX-158	Extreme Weather	Impact	PRV - Prevention, PPRO - Property Protection, PE&A - Public Education & Awareness, ES - Emergency Services	**City of Dixon**	70 mile per hour wind gusts have become more frequent presenting potential damage opportunity to infrastructure and increased susceptibility to damaging wildland fires.	ma-EW-DX-124

Problem No.	Hazard Type	Area of Concern	Mitigation Alternatives	Primary Agency	Problem Description	Related MA
ps-EW-DX-159	Extreme Weather	Impact	PE&A - Public Education & Awareness, ES - Emergency Services	**City of Dixon**	The city lacks a documentation system and additional resources to document recurring heavy rain events, causing flooding.	ma-EW-DX-179
ps-EW-DX-160	Extreme Weather	Impact	PE&A - Public Education & Awareness, ES - Emergency Services	**City of Dixon**	Need for more generators throughout the jurisdiction for cooling centers.	ma-EW-DX-125
ps-CC-DX-180	Climate Change	Impact	PRV - Prevention, PPRO - Property Protection, SP - Structural Projects	**City of Dixon**	Climate change is predicted to increase the intensity of storms, drought, flooding, and wildfire.	ma-FL-DX-126; ma-CC-DX-215

2.4.4 Mitigation Action Support Tool (MAST)

As a living document, hazard problem statements and mitigation activities will be updated through a web interface application developed specifically for participating jurisdictions. The Mitigation Action Support Tool (MAST) is accessible through mitigatehazards.com/SolanoHMP/.

MAST is a web-based interactive tool that enables multiple users to search, view, enter, and update mitigation actions, ideas or projects, and other information. MAST provides participating jurisdictions and plan reviewers (Cal OES/FEMA) access to valuable mitigation information that can be leveraged by future planning or other risk reduction efforts within the County. Participating jurisdictions can update the status of their mitigation projects throughout the planning lifecycle, and this web-based tool will improve participating jurisdiction's ability to apply for FEMA's Hazard Mitigation Assistance (HMA) grant programs including initial grant application processes through Cal OES.

2.5 Mitigation Strategy

The mitigation strategy is the guidebook to future hazard mitigation administration, capturing the key outcomes of the MJHMP planning process. The mitigation strategy is intended to reduce vulnerabilities outlined in the previous section (a.k.a. problem statements) with a prescription of policies and physical projects. These mitigation actions should be compatible with existing planning mechanisms and should outline specific roles and resources for implementation success.

2.5.1 Capabilities & Adaptive Capacity Assessment

This section examines the planning and regulatory, administrative, technical, financial, educational, and outreach capabilities to augment known issues and weaknesses from identified natural hazards.

Capabilities assessments in this Volume 1 and in Volume 2 include considerations of a community's adaptive capacity for climate change, as outlined in Cal OES' 2020 California Adaptation Planning Guide. Adaptive capacity is a community or region's existing ability to moderate climate change impacts. Assessing adaptive capacity includes analysis of policies, plans, programs, funding, and staffing capacity.

The tables in this section explore various local planning mechanisms, administrative capacity, financial capabilities, and education and outreach initiatives. The columns in each table represent deeper dives into the following questions:

- Is the existing planning or regulatory mechanism used currently? (Column 1, Status)
- Has the HMP been integrated into the planning mechanism currently so that the named mechanism is currently used in HMP planning? (Column 2, Current Mitigation Use)
- Is there a future opportunity to expand, improve upon, and incorporate this 2020 HMP Update into the planning or regulatory mechanism? (Column 3, Future Opportunity)

The capabilities assessment is easily digestible and based on color coding to indicate which policies and plans are adequate, need improvement or in which the HMP could be integrated. Each table includes a legend that explain how each one of these questions are being answered according to the color indicated: green, yellow, and orange.

For more information on the regulatory environment surrounding each hazard, see hazard-specific sections of Volume 1. Volume 1, Section 5.3.5 includes an extensive list of federal and state funding opportunities as well.

2.5.1.1 Planning and Regulatory Capabilities

Table 2-10: Planning and Regulatory Capabilities

CAPABILITY ASSESSMENT LEGEND

Status	Current Mitigation Use	Future Opportunity
Currently in use or present.	Used widely for mitigation.	Opportunity to expand and integrate.
(Sort of) Seldomly used or limited presence.	Limited use in mitigation planning.	Limited opportunity to expand and integrate.
(No) Not present or available.	Not used in mitigation planning.	No opportunity to expand or integrate.

	HMP Integration			
Resource	Status	Current Mitigation Use	Future Opportunity	**Notes / Additional Detail**
Planning and Regulatory Capabilities				
Construction and Future Development Regulations				
Building Codes				2019 California Building Code
Building Code Effectiveness Grading Schedule (BCEGS) Rating	N/A	N/A	N/A	Unknown
Public Protection (ISO Class)				3
Hazard Related Development Standards				Flood Damage Prevention (9.04)
Hazard-Specific Ordinance				Flood Damage Prevention (9.04); Fire Code, Means of Egress (Chapter 10); Water efficient landscaping (14.02.275)
Zoning Ordinance				
Growth Management Ordinance				Measure B Residential Growth Implementation Plan (18.48).
Hazard Reduction Programs (Annually Conducted)				
Capital Improvements Program (CIP) or Plan				2017/18-2021/22.Capital Improvement Plan
Erosion/Sediment Control Program				
Hazard-Related Public Outreach Program				See Education & Outreach Capabilities for more specifics.
Stormwater Management Program (Annual Inspections)				.
Seismic Safety Program (Non-structural Inspections)				
Earthquake Modernization Program (Building Safety Inspections)				
Hazard Plans				
General Plan Safety Element				1993, currently being updated
Noteworthy Area/ Specific Plan with Hazard Focus	N/A	N/A	N/A	

Resource	HMP Integration: Status	HMP Integration: Current Mitigation Use	HMP Integration: Future Opportunity	Notes / Additional Detail
Planning and Regulatory Capabilities				
Community Wildfire Protection Plan (CWPP)		N/A	N/A	
Wildfire Vulnerability Assessment	N/A	N/A	N/A	
Urban or Integrated Regional Water Management Plan				Cal Water Service, Dixon Area, 2015
Floodplain Management Plan				See UWMP
Stormwater Management Plan				Stormwater Management Plan fiscal years 2003/4-2007/8
Ground Water Management Plan(s)				Solano County Groundwater Sustainability Plan in development
Open Space and Land Management Plan(s)				
Emergency Operations Plan				2014 City of Dixon Emergency Operations Plan
Climate Action Plan, Vulnerability Ass'mt, or Adaptation Plan				2011 County of Solano Climate Action Plan
Sustainable Community Plan (SB 375)				ABAG Plan Bay Area 2040 (2017)
Local Delta/ Wetlands Program(s)	N/A	N/A	N/A	
Downtown Plan with hazard focus	N/A	N/A	N/A	
Community Health Assessment(s)	N/A	N/A	N/A	Solano County Health Assessment
National Flood Protection Program (NFIP)				
Floodplain Management Regulations				Methods of Reducing Flood Losses (9.04.040)
Flood Insurance Education and Technical Assist.				2013 Flood Insurance Study
Flood Hazard Mapping / Re-Mapping				FEMA Flood Insurance Rate Map 2009
Community Rating System (CRS)				

2.5.1.2 Administrative and Technical Capabilities

Table 2-11: Administrative and Technical Capabilities

CAPABILITY ASSESSMENT LEGEND

Status	Current Mitigation Use	Future Opportunity
Currently in use or present.	Used widely for mitigation.	Opportunity to expand and integrate.
(Sort of) Seldomly used or limited presence.	Limited use in mitigation planning.	Limited opportunity to expand and integrate.
(No) Not present or available.	Not used in mitigation planning.	No opportunity to expand or integrate.

	HMP Integration			
Resource	Status	Current Mitigation Use	Future Opportunity	**Notes / Additional Detail**
Administrative and Technical				
Community Planning and Development Services				
Community Planner				Associate Planner, Scott Greeley
Civil Engineer				Public Works Director/City Engineer Joe Leach
Building Code Official				Building inspector II, Joel Engrahm
Floodplain Administrator				Deputy Public Works Director, Louren Kotow
Fire Marshall				Fire Chief, Greg Lewis
Dedicated Public Outreach Personnel				
GIS Specialist and Capability				
Emergency Manager				
Grant Manager, Writer, or Specialist				
Other				
Warning Systems/Services				
General				AlertSolano
Flood				AlertSolano: Flood Risk: California Department of Water Resources Flood Risk Notification Program Flood Control: Solano County Water Agency
Wildfire				AlertSolano
Geological Hazards				AlertSolano ShakeAlert.org (nation-wide)

2.5.1.3 Financial Capabilities

Table 2-12: Financial Capabilities

CAPABILITY ASSESSMENT LEGEND

Status	Current Mitigation Use	Future Opportunity
Currently in use or present.	Used widely for mitigation.	Opportunity to expand and integrate.
(Sort of) Seldomly used or limited presence.	Limited use in mitigation planning.	Limited opportunity to expand and integrate.
(No) Not present or available.	Not used in mitigation planning.	No opportunity to expand or integrate.

Resource	HMP Integration: Status	HMP Integration: Current Mitigation Use	HMP Integration: Future Opportunity	Notes / Additional Detail
Fiscal Capabilities				
Financial Resources for Hazard Mitigation				
Levy for Specific Purposes with Voter Approval				While the City has employed these various financial capabilities to varying degrees, there are no examples of employing them for hazard mitigation projects or planning. However, it's not anticipated that many of these would be used to fund hazard mitigation projects in the future, either, unless paired with other grant funding.
Utilities Fees				
Benefit assessments				
System Development Fee				
Various Bonds to Incur Debt				
Withheld Spending in Hazard-Prone Areas	N/A	N/A	N/A	
Stormwater Service Fees				
Capital Improvement Project Funding				

2.5.1.4 Education and Outreach

Table 2-13: Education and Outreach Capabilities

CAPABILITY ASSESSMENT LEGEND

Status	Current Mitigation Use	Future Opportunity
Currently in use or present.	Used widely for mitigation.	Opportunity to expand and integrate.
(Sort of) Seldomly used or limited presence.	Limited use in mitigation planning.	Limited opportunity to expand and integrate.
(No) Not present or available.	Not used in mitigation planning.	No opportunity to expand or integrate.

Resource	HMP Integration			Notes / Additional Detail
	Status	Current Mitigation Use	Future Opportunity	
Education / Outreach Capabilities				
Education/Outreach Resources				
Website Dedicated to Hazard Topics				"Disaster Resources" webpage
Dedicated Social Media				Yes, City and Police FB, Instagram, Twitter
Hazard Info. Avail. at Library/ Planning Desk				
Annual Public Safety Events				not currently during COVID-19 pandemic
Ability to Field Public Tech. Assistance Requests				
Public Safety Newsletters or Printed Outreach				
Fire Safe Councils	N/A	N/A	N/A	
Resource Conservation Districts				Solano Resource Conservation District
Other				

2.5.1.5 Capability and Adaptive Capacity Opportunities

The City of Dixon identified many opportunities for strengthening community capabilities and adaptive capacity. The City considered this assessment in developing its Mitigation Strategy in Section 2.5.2. Volume 1, Section 5.3.5 includes an extensive list of federal and state funding opportunities to leverage to improve community capabilities. The City's General Plan is almost twenty years old and currently being updated Like many small cities, Dixon could increase staffing capacity, especially with emergency response and grant writing assistance, and could look to increase fiscal capabilities to improve. This City could also review its inspection programs for stormwater and earthquake safety. The City also has good capacity under its current codes and current education and outreach capacity.

2.5.2 Mitigation Actions

Mitigation actions were developed based upon the jurisdiction's priorities, risk assessment results, and mitigation alternatives. The mitigation action prioritization method used by all participating jurisdictions is described in Section 5.5.1 of Volume 1. Table 2-14 lists each priority mitigation action, responsible party, time frame, potential funding source, implementation steps, and resources need to implement based upon the Planning Committee consensus.

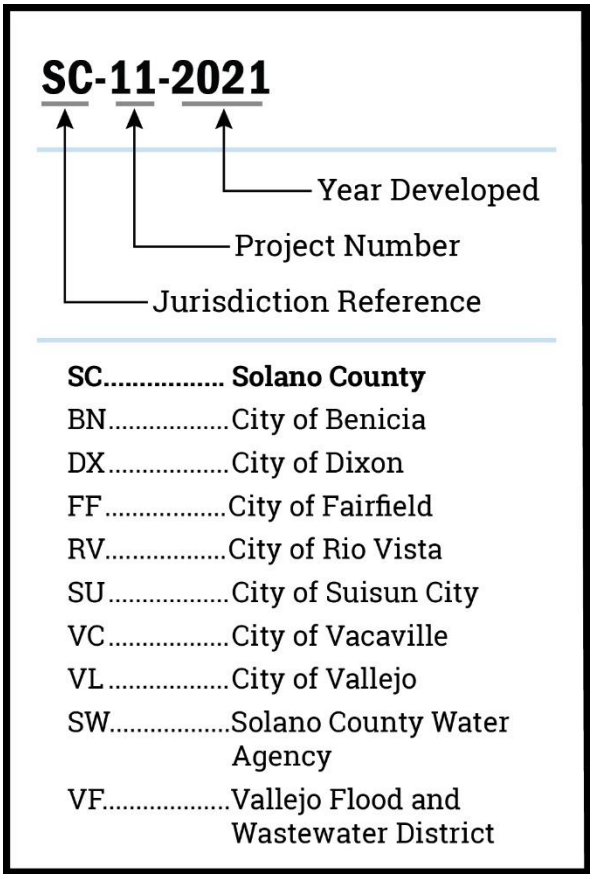


Figure 2-14: Mitigation Action Key

Each participating jurisdiction, including the City of Dixon, considered ongoing relevancy of mitigation actions from the existing MJHMP and retained or removed such actions while adding new relevant actions as well. Mitigation actions were examined for relevancy and the potential for future implementation and then evaluated for potential follow-up. Some mitigation actions developed during the previous HMP effort were not included because they were an inherent part of the HMP update process or were not detailed enough for implementation at a local Jurisdiction level. the City of Dixon has made significant changes to other mitigation actions because of the updated risk assessment and implementation strategy, to include more detail, or to update based on current mitigation practices. Volume 1, Section 5.5.2 provides a record of County wide mitigation actions, the status, and additional notes for each action.

Table 2-14 lists each mitigation action for the City of Dixon. Each participating jurisdiction developed unique mitigation actions, targeted at their own unique priorities and vulnerabilities. Each mitigation action identifies the responsible party, time frame, potential funding source, implementation steps and resources needed to implement these priority mitigation actions. As a living document, hazard problem statements and mitigation activities will be updated through MAST. The detail in Table 2-14 meets the regulatory requirements of FEMA and DMA 2000.

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Table 2-14: City of Dixon Mitigation Actions

Mitigation No.	Hazard Type	Mitigation Type	Status	Year	Primary Agency	Title/Description	Responsible Party	Estimated Cost	Estimated Benefit	Time Frame	HMA Activity Type	Potential Grant Source	Priority	Goal	Related Problem Statements
ma-AH-DX-116	All Hazard	ES - Emergency Services	Pending	2021	City of Dixon	Develop an assessment plan to determine railway points of vulnerability to more accurately predict areas of which would be impacted most during railway damage events. The plan can include preparedness plans to quickly initiate detours to maintain a secondary access point to the interstate and operations to activate.	City Public Works in coordination with the railroad entity.	Medium - The project could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.	Medium - Project will have a long-term impact on the reduction of risk exposure for life and property, or project will not provide an immediate reduction in the risk exposure for property.	3-5 Years	N/A	EMPG , Internal Funding	High	Goal 2: Infrastructure	ps-AH-DX-149
ma-AH-DX-117	All Hazard	ES - Emergency Services	Pending	2021	City of Dixon	Assess alert systems in Dixon. Include in the plan researched funding opportunities to procure the alert system and continued coordination with County.	Fire Department	Medium - The project could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.	Medium - Project will have a long-term impact on the reduction of risk exposure for life and property, or project will not provide an immediate reduction in the risk exposure for property.	1-3 Years	N/A	EMPG , Internal Funding	High	Goal 1: People , Goal 4: Resilience	ps-AH-DX-150
ma-CC-DX-215	Climate Change	PE&A - Public Education & Awareness	Ongoing	2021	City of Dixon	Participate in regional climate change vulnerability and adaptation efforts	Planning, all staff	Low - The project could be funded under the existing budget. The project is part of or can be part of an ongoing existing program.	High - Project will provide an immediate reduction of risk exposure for life and property.	Ongoing	Planning	HMGP / BRIC , Internal Funding	Medium	Goal 3: Environment , Goal 4: Resilience	ps-CC-DX-180
ma-DR-DX-118	Drought	PE&A - Public Education & Awareness	Pending	2021	City of Dixon	Develop a public education campaign to encourage water conservation during drought. The intent is to avoid issuance of water restriction emergency declarations.	City Public Works; California Water Service	Low - The project could be funded under the existing budget. The project is part of or can be part of an ongoing existing program.	Medium - Project will have a long-term impact on the reduction of risk exposure for life and property, or project will not provide an immediate reduction in the risk exposure for property.	1-3 Years	5%	HMGP / BRIC , Internal Funding	Medium	Goal 4: Resilience	ps-DR-DX-157
ma-EQ-DX-119	Earthquake	PRV - Prevention	Pending	2021	City of Dixon	Conduct public education campaign(s) on earthquake preparedness and liquefaction.	City of Dixon	Low - The project could be funded under the existing budget. The project is part of or can be part of an ongoing existing program.	Medium - Project will have a long-term impact on the reduction of risk exposure for life and property, or project will not provide an immediate reduction in the risk exposure for property.	1-3 Years	5%	EMPG , Internal Funding	High	Goal 1: People , Goal 4: Resilience	ps-EQ-DX-151
ma-EQ-DX-120	Earthquake	SP - Structural Projects	Pending	2021	City of Dixon	Retrofit City-owned critical facilities and buildings.	City Public Works & Engineering	High - Existing funding will not cover the cost of the project; implementation would require new revenue through an alternative source (for example, bonds, grants, and fee increases).	High - Project will provide an immediate reduction of risk exposure for life and property.	3-5 Years	Project	HMGP / BRIC	High	Goal 2: Infrastructure	ps-EQ-DX-152

Mitigation No.	Hazard Type	Mitigation Type	Status	Year	Primary Agency	Title/Description	Responsible Party	Estimated Cost	Estimated Benefit	Time Frame	HMA Activity Type	Potential Grant Source	Priority	Goal	Related Problem Statements
ma-EQ-DX-121	Earthquake	SP - Structural Projects	Pending	2021	City of Dixon	Reinforce the city's well systems including the well pumps to enhance the survivability of the systems during earthquake events, decreasing the chances of experiencing water supply issues or water loss.	City Public Works & Engineering	Medium - The project could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.	High - Project will provide an immediate reduction of risk exposure for life and property.	3-5 Years	Project	HMGP / BRIC , Internal Funding	High	Goal 2: Infrastructure , Goal 4: Resilience	ps-EQ-DX-153
ma-EQ-DX-122	Earthquake	ES - Emergency Services	Pending	2021	City of Dixon	Conduct public outreach to enhance awareness of PGE lines throughout the city and the associated hazards with gas leaks and/or line ruptures.	Fire Department	Low - The project could be funded under the existing budget. The project is part of or can be part of an ongoing existing program.	Medium - Project will have a long-term impact on the reduction of risk exposure for life and property, or project will not provide an immediate reduction in the risk exposure for property.	1-3 Years	5%	EMPG , Internal Funding	High	Goal 1: People , Goal 4: Resilience	ps-EQ-DX-154
ma-EQ-DX-123	Earthquake	SP - Structural Projects	Pending	2021	City of Dixon	Seismic Retrofit of vitrified clay pipes for sewer lines throughout the municipality, to enhance the sewer line's ability to withstand seismic shaking. Enhancements may include complete replacement dependent upon the clay pipe condition.	City Public Works & Engineering	High - Existing funding will not cover the cost of the project; implementation would require new revenue through an alternative source (for example, bonds, grants, and fee increases).	High - Project will provide an immediate reduction of risk exposure for life and property.	3-5 Years	Project	HMGP / BRIC , Internal Funding	High	Goal 2: Infrastructure	ps-EQ-DX-155
ma-EW-DX-124	Extreme Weather	PRV - Prevention	Pending	2021	City of Dixon	Clear right-of-way for utilities that provide power and communication to critical facilities and are at-risk to fire susceptibility.	Fire Department	Medium - The project could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.	High - Project will provide an immediate reduction of risk exposure for life and property.	1-3 Years	N/A	FP&S , Internal Funding	High	Goal 2: Infrastructure	ps-EW-DX-158
ma-EW-DX-125	Extreme Weather	ES - Emergency Services	Pending	2021	City of Dixon	Install backup power generators to support operation of critical facilities during loss of power, such as from heavy rain and high wind events, including water and wastewater systems, emergency services, and cooling and heating centers	Fire Department	Medium - The project could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.	Medium - Project will have a long-term impact on the reduction of risk exposure for life and property, or project will not provide an immediate reduction in the risk exposure for property.	1-3 Years	Project	HMGP / BRIC , EMPG , Internal Funding	High	Goal 1: People , Goal 4: Resilience	ps-EW-DX-160
ma-EW-DX-179	Extreme Weather	PRV - Prevention	Pending	2021	City of Dixon	Develop an annual drainage maintenance plan including assessing high water marks to assess water depth and settling locations. Including in the plan the clearing of inlets annually (or more often as necessary) prior to the monsoon season.	City Public Works & Engineering	Medium - The project could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.	Medium - Project will have a long-term impact on the reduction of risk exposure for life and property, or project will not provide an immediate reduction in the risk exposure for property.	1-3 Years	N/A	Internal Funding	High	Goal 2: Infrastructure , Goal 4: Resilience	ps-EW-DX-159

Mitigation No.	Hazard Type	Mitigation Type	Status	Year	Primary Agency	Title/Description	Responsible Party	Estimated Cost	Estimated Benefit	Time Frame	HMA Activity Type	Potential Grant Source	Priority	Goal	Related Problem Statements
ma-FL-DX-126	Flood	PE&A - Public Education & Awareness	Pending	2021	City of Dixon	Develop a public outreach program that informs property owners located in areas of concern for flood about voluntary flood insurance and preparation tools to help with mitigation of flood events.	Fire Department	Low - The project could be funded under the existing budget. The project is part of or can be part of an ongoing existing program.	Medium - Project will have a long-term impact on the reduction of risk exposure for life and property, or project will not provide an immediate reduction in the risk exposure for property.	1-3 Years	5%	EMPG , Internal Funding	Medium	Goal 4: Resilience	ps-FL-DX-156, ps-CC-DX-180
ma-FL-DX-186	Flood	PRV - Prevention , PPRO - Property Protection	Pending	2021	City of Dixon	Assess areas subject to repeated flooding and increased flooding due to climate change; implement elevations and retrofits for bridges and culverts to allow proper storm water / 100-YR flows.	City Public Works & Engineering	High - Existing funding will not cover the cost of the project; implementation would require new revenue through an alternative source (for example, bonds, grants, and fee increases).	High - Project will provide an immediate reduction of risk exposure for life and property.	3-5 Years	Planning	HMGP / BRIC , FMA	High	Goal 2: Infrastructure , Goal 4: Resilience	ps-FL-DX-156, ps-CC-DX-180

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U.S. Department of Homeland Security
FEMA Region 9
1111 Broadway, Suite 1200
Oakland, CA 94607-4052

FEMA

December 16, 2021

Don Ryan
Director
Solano County Office of Emergency Services
530 Clay St.
Fairfield, CA 94533

Dear Mr. Ryan:

The Federal Emergency Management Agency (FEMA) has completed its review of the *Solano County 2021 Multi-Jurisdictional Hazard Mitigation Plan* and has determined that this plan is eligible for final approval pending its adoption by Solano County and all participating jurisdictions. Please see the enclosed list of approvable pending adoption jurisdictions.

Formal adoption documentation must be submitted to FEMA Region 9 by at least one participating jurisdiction within one calendar year of the date of this letter, or the entire plan must be updated and resubmitted for review. FEMA will approve the plan upon receipt of the documentation of formal adoption.

Once the plan is approved, each participating jurisdiction must adopt the plan within five calendar years of the date of the approval. The adoption of the plan by each jurisdiction ensures that jurisdiction's continued eligibility for funding under FEMA's Hazard Mitigation Assistance (HMA) programs. All requests for funding, however, will be evaluated individually according to the specific eligibility, and other requirements of the particular program under which applications are submitted.

If you have any questions regarding the planning or review processes, please contact the FEMA Region 9 Hazard Mitigation Planning Team at fema-r9-mitigation-planning@fema.dhs.gov.

Sincerely,

for Alison Kearns
Risk Analysis Branch Chief
Mitigation Division
FEMA Region 9

Enclosure (2)
Solano County Plan Review Tool, dated December 16, 2021
Status of Participating Jurisdictions, dated December 16, 2021

cc: Mark Shugart, Acting Risk Analysis Branch Chief, FEMA
Victoria LaMar-Haas, Hazard Mitigation Planning Chief, California Governor's Office of Emergency Services
Jennifer Hogan, State Hazard Mitigation Officer, California Governor's Office of Emergency Services

Status of Participating Jurisdictions as of December 16, 2021

Jurisdictions – Adopted and Approved

#	Jurisdiction	Date of Adoption

Jurisdictions – Approvable Pending Adoption

#	Jurisdiction
1	Solano County
2	Benicia, City of
3	Dixon, City of
4	Fairfield, City of
5	Rio Vista, City of
6	Suisun City, City of
7	Vacaville, City of
8	Vallejo, City of
9	Vallejo Flood and Wastewater District

APPENDIX G

Water Conservation Ordinance

Title 14. Water and Sewers

Chapter 14.02. WATER

Article IX. Water Conservation

§ 14.02.900. Requirements.

The City's water efficiency and conservation measures are provided in Chapter **16.17** DMC, Green Building Code, which adopts by reference the 2010 California Green Building Code and its water efficiency and conservation measures.
(Ord. 14-008 § 1)

§ 14.02.905. Water conservation and irrigation restrictions.

To prevent waste and unreasonable use of water and to promote water conservation, the following water use restrictions shall be enforced in accordance with **Cal. Code Regs.** tit. 23, §§ 863, 864, 864.5, 865, and 866:

A. Each of the following actions is prohibited, except where necessary to address an immediate health and safety need or to comply with a term or condition in a permit issued by a State or Federal agency:

    1. The application of potable water to outdoor landscapes in a manner that causes runoff such that water flows onto adjacent property, nonirrigated areas, private and public walkways, roadways, parking lots, or structures; and

    2. The use of a hose that dispenses potable water to wash a motor vehicle, except where the hose is fitted with a shut-off nozzle or device attached to it that causes it to cease dispensing water immediately when not in use; and

    3. The application of potable water to driveways and sidewalks; and

    4. The use of potable water in a fountain or other decorative water feature, except where the water is part of a recirculation system; and

    5. The use of potable water to irrigate outdoor landscapes within forty-eight (48) hours of a measurable rainfall; and

    6. Serving drinking water at any eating or drinking establishment, unless it is requested.

B. To promote water conservation, operators of hotels or motels shall provide guests with the option of choosing not to have towels and linens laundered daily. The hotel or motel shall prominently display notice of this option in each guestroom using clear and easily understood language.

C. Turf areas located on public right-of-way medians shall no longer be watered to sustain the turf. Where those medians include trees or other outdoor landscape, watering shall take place to maintain the trees or other outdoor landscape.

D. The taking of any action prohibited by this chapter or the failure to take any action required by this chapter may be cited as a code violation. The Community Development Director, Building Official, code enforcement personnel and other personnel as designated by the City Council may issue administrative citation to any person, firm or corporation for violations of this section. This may include penalties of up to five hundred dollars ($500.00) for each day in which the violation occurs, pursuant to Article VI of Chapter **9.01** DMC.

E. The City Council may, by resolution or ordinance, adjust the restrictions under this section as needed to comply with regulations adopted by the State Water Resources Control Board.

F. As required under **Cal. Code Regs.** tit. 23, § 865, the City Engineer/Public Works Director or designee shall submit a report to the State Water Resources Control Board annually, on a form provided by the State Water Resources Control Board.

(Ord. 16-008 § 1)

§ 14.02.910. Enforcement.

The taking of any action prohibited by this chapter or the failure to take any action required by this chapter may be cited as a code violation. The Community Development Director, Building Official, code enforcement personnel and other personnel as designated by the City Council may issue administrative citation to any person, firm or corporation for violations of this section, which may include penalties of up to five hundred dollars ($500.00) for each day in which the violation occurs, pursuant to Article VI of Chapter **9.01** DMC.

(Ord. 16-008 § 1)

§ 14.02.915. Enforcement.

Repealed by Ord. 16-008.

(Ord. 15-009 § 1)

APPENDIX H

UWMP Adoption Resolution