July 2022

2020 Urban Water Management Plan

for Rio Linda/Elverta Community Water District

Rio Linda Elverta Community Water District

eki environment & water

TABLE OF CONTENTS

TABLES

FIGURES

APPENDICES

ABBREVIATIONS

AB	Assembly Bill
AF	acre-feet
AFY	acre-feet per year
ARB	American River Basin
ARBS	American River Basin Study
AWMPs	and Agricultural Water Management Plan
AWWA	American Water Works Association
ccf	Hundreds of cubic feet
CCR	California Code of Regulations
CCRs	Consumer Confidence Reports
CII	Commercial/Institutional, Industrial
CIMIS	closest California Irrigation Management Information System
CUWCC	California Urban Water Conservation Council
CWC	California Water Code
DDW	Division of Drinking Water
Delta	Sacramento-San Joaquin Delta
District	Rio Linda/Elverta Community Water District
DMM	demand management measure
DOF	California Department of Finance
DRA	Drought Risk Assessment
DRT	Drought Response Tool
DWR	Department of Water Resources
EDWAPA	El Dorado County Water & Power Authority
EKI	EKI Environment & Water, Inc.
ESP	Elverta Specific Plan
ETo	reference evapotranspiration
GMPs	Groundwater Management Plans
GPCD	gallons per capita per day
gpm	gallons per minute
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
IRWMP	Integrated Regional Water Management Plan
kWh	kilowatt-hour
kWh/AF	kilowatt-hours per acre-foot
LHMP	Local Hazard Mitigation Plan
MCL	Maximum Contaminant Levels
MFR	Multi-Family Residential
MTP/SCS	Metropolitan Transportation Plan/Sustainable Communities Strategy
NRW	Non-Revenue Water
PMAs	projects and management actions

PRISM	Parameter-elevation Relationships on Independent Slopes Model
RHNP	Regional Housing Needs Plan
RUWMP	Regional Urban Water Management Plan
RWA	Regional Water Authority
SACOG	Sacramento Area Council of Governments
SASD	The Sacramento Area Sewer District
SB	Senate Bill
SFR	Single Family Residential
SGA	Sacramento Groundwater Authority
SGMA	Sustainable Groundwater Management Act
SMUD	Sacramento Municipal Utility District
SRWWTP	Sacramento Regional Wastewater Treatment Plant
SSWD	Sacramento Suburban Water District
State	State of California
SWRCB	State Water Resources Control Board
U.S.	Unite States
USEPA	United States Environmental Protection Agency
UWMP	Urban Water Management Plan
Water Code	California Water Code
WCC	Water Conservation Coordinator
WSA	Water Supply Assessment
WSCP	Water Shortage Contingency Plan
WSCPs	Water Shortage Contingency Plans
WSCs	Water Shortage Contingencies

1. INTRODUCTION

This chapter discusses the importance and uses of this Urban Water Management Plan (UWMP or Plan), the relationship of this Plan to the California Water Code (CWC or Water Code), the relationship of this Plan to other local and regional planning efforts, and how this Plan is organized and developed in general accordance with the UWMP Guidebook 2020 (Department of Water Resources [DWR], 2021). Specifically, this chapter contains the following sections:

1.1 Background and Purpose

The Rio Linda/Elverta Community Water District (also referred to herein as the "District") was formed in 1948 as an independent publicly-owned special utilities district to serve water to Rio Linda and Elverta communities and relies on groundwater as its sole source of water supply. The District owns and operates 12 active wells, which provide water to the following sectors: Residential (Single-family and Multifamily), Commercial, Industrial, Institutional, and Landscape.

This UWMP is a foundational document and source of information about the District's historical and projected water demands, water supplies, supply reliability and potential vulnerabilities, water shortage contingency planning, and demand management programs. Among other things, it is used as:

- A long-range planning document by the District for water supply and system planning; and
- A source for data on population, housing, water demands, water supplies, and capital improvement projects used in:
  - Regional water resource management plans prepared by wholesale water suppliers and other regional planning authorities (as applicable),
  - General Plans prepared by cities and counties, and
  - Statewide and broad regional water resource plans prepared by the California Department of Water Resources (DWR), the State Water Resources Control Board (State Board), or other state agencies.

The District's last UWMP was completed in 2016 referred to herein as the "2015 UWMP." This Plan is an update to the 2015 UWMP and carries forward information from that plan that remains relevant to this Plan and provides additional information as required by amendments to the UWMP Act (CWC §10610 – 10656 and §10608). Although this Plan is an update to the 2015 UWMP, it was developed to be a self-contained, stand-alone document and does not require readers to reference information contained in previous updates.

1.2 Urban Water Management Planning and the California Water Code

The UWMP Act requires urban water suppliers to prepare an UWMP every five years and to submit this plan to DWR, the California State Library, and any city or county within which the supplier provides water supplies. All urban water suppliers, 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 annually are required to prepare an UWMP (CWC §10617).

The UWMP Act was enacted in 1983. Over the years it has been amended in response to water resource challenges and planning imperatives confronting California. A significant amendment was made in 2009 as a result of the governor's call for a statewide 20 percent reduction in urban water use by 2020, referred to as "20x2020," the Water Conservation Act of 2009, and "SBx7-7." This amendment required urban retail water suppliers to establish water use targets for 2015 and 2020 that would result in statewide per capita water savings of 20 percent by 2020. Beginning in 2016, urban retail water suppliers were required to comply with the water conservation requirements in SBx7-7 in order to be eligible for state water grants or loans. Chapter 5 of this Plan contains the data and calculations used to determine compliance with these requirements.

A subsequent substantial revision to the UWMP Act was made in 2018 through a pair of bills (i.e., Assembly Bill 1668 and Senate Bill 606), referred to as "Making Water Conservation a California Way of Life" or the "2018 Water Conservation Legislation." These changes include, among other things, additional requirements for Water Shortage Contingency Plans (WSCPs), expansion of dry year supply reliability assessments to a five-year drought period, establishment of annual drought risk assessment procedures and reporting, and new conservation targets referred to as "annual water use objectives," which will require retailers to continue to reduce water use beyond the 2020 SBx7-7 targets. The UWMP Act contains numerous other requirements that an UWMP must satisfy. Appendix A to this Plan lists each of these requirements and where in the Plan they are addressed.

1.3 Relationship to Other Planning Efforts

This Plan provides information specific to water management and planning by the District. However, water management does not happen in isolation; there are other planning processes that integrate with the UWMP to accomplish urban planning. Some of these relevant planning documents include relevant county General Plans, Water Master Plans, Water Supply Strategy Plans, Water Supply Assessments, Groundwater Sustainability Plans, and others.

This Plan is informed by and helps to inform these other planning efforts. In particular, this Plan utilizes information contained in the 2014 Rio Linda/Elverta Community Water District Water Master Plan (Affinity Engineering, 2014), 2016 Elverta Specific Plan Water Supply Strategy plan (Affinity Engineering, 2016), 2016 Elverta Specific Plan Water Supply Assessment (Affinity Engineering and J. Crowley Group, 2016), North American Subbasin Groundwater Sustainability Plan (GEI Consultants, 2021), county General and Specific Plans and local and regional water resource plans to the extent data from these plans are relevant.

1.4 Plan Organization

The organization of this Plan follows the same sequence as outlined in the UWMP Guidebook 2020.

Chapter 1 Introduction

Chapter 2 Plan Preparation

Chapter 3 Service Area and System Description

Chapter 4 Water Use Characterization

Chapter 5 Baseline Water Use and Water Conservation Targets

Chapter 6 Water System Supplies

Chapter 7 Water Supply Reliability

Chapter 8 Water Shortage Contingency Planning

Chapter 9 Demand Management Measures

Chapter 10 Plan Adoption and Submittal

Chapter 11 References

In addition to these eleven chapters, this Plan includes a number of appendices providing supporting documentation and supplemental information. Pursuant to CWC §10644(a)(2), this Plan utilizes the standardized forms, tables, and displays developed by DWR for the reporting of water use and supply information required by the UWMP Act. This Plan also includes additional tables, figures, and maps to augment the set developed by DWR, as appropriate. The table headers indicate if the table is part of DWR's standardized set of submittal tables.

1.5 Demonstration of Consistency with the Delta Plan for Participants in Covered Actions

Although not required by the UWMP Act, in the UWMP Guidebook 2020, DWR recommends that all suppliers that are participating in, or may participate in, receiving water from a proposed project that is considered a "covered action" under the Delta Plan—such as a (1) multiyear water transfer; (2) conveyance facility; or (3) new diversion that involves transferring water through, exporting water from, or using water in the Sacramento-San Joaquin Delta (Delta)—provide information in their UWMP to demonstrate consistency with the Delta Plan policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code of Regulations, Title 23, Section 5003).

The District's sole source of water supply is from groundwater, and therefore the District does not receive water or plan to receive water from a "covered action" under the Delta Plan. As such, this requirement is not applicable.

1.6 Lay Description

☑ ***CWC § 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.

This UWMP is prepared for the Rio Linda/Elverta Community Water District, which serves drinking water to a population of approximately 15,071. This UWMP serves as a foundational planning document and includes descriptions of historical and projected water demands, and water supplies and reliability over a 20-year planning horizon. This document also describes the actions the District is taking to promote water conservation, both by the District itself and by its customers (referred to as "demand management measures") and includes a plan to address potential water supply shortages such as drought or other impacts to supply availability (the "Water Shortage Contingency Plan"). This UWMP is updated every five years in accordance with state requirements under the Urban Water Management Planning Act and amendments (Division 6 Part 2.6 of the California Water Code [CWC] §10610 – 10656). Past plans developed for the District are available on the California Department of Water Resources (DWR) Water Use Efficiency Data Portal website: https://wuedata.water.ca.gov/. This document includes 11 chapters, which are summarized below.

Chapter 1 - Introduction

This chapter presents the background and purpose of the UWMP, identifies the Plan organization, and provides this lay description overview of the document. For suppliers that rely on water from the Sacramento-San Joaquin Delta, this section would discuss and demonstrate consistency with the Delta Plan; however, the District does not receive water from a "covered action" under the Delta Plan, and this discussion is not applicable.

Chapter 2 - Plan Preparation

This chapter discusses key structural aspects related to the preparation of the UWMP, and describes the coordination and outreach conducted as part of the preparation of the Plan, including coordination with local agencies (i.e., Groundwater Sustainability Agencies), and the public.

Chapter 3 - Service Area and System Description

This chapter provides a description of the District's water system and the service area, including information related to the climate, population, and demographics. The District supplies water to customers in the District's service area, which includes 4,621 connections. The District is located eight miles north of Sacramento and services the areas in and around the communities of Rio Linda and Elverta. The District has a population of approximately 15,071 and a warm-summer Mediterranean climate. The majority of precipitation falls during late autumn, winter, and spring, averaging 20.6 inches of rainfall annually.

Chapter 4 - Water Use Characterization

This chapter provides a description and quantifies the District's current and projected demands through the year 2045. The District provides drinking water (also referred to as "potable water") to customers.

Water demands refer not only to the water used by customers, but also includes the water used as part of the system maintenance and operation, as well as unavoidable losses inherent in the operation of a water distribution system. Water demand within the District was 2,617 acre-feet per year (AFY) on average between 2017 and 2021. Taking into account historical water use, expected population increase and other growth, climatic variability, and other assumptions, water demand within the District is projected to increase to 3,153 AFY by 2045, an increase of 20 percent compared to the 2017-2021 average.

Chapter 5 - Baseline Water Use and Water Conservation Targets

In this chapter, the District demonstrates compliance with its per capita water use target for the year 2020. The Water Conservation Act of 2009 (Senate Bill X7-7) was enacted in November 2009 and requires the state of California to achieve a 20 percent reduction in urban per capita water use by 31 December 2020. In order to achieve this, each urban retail water supplier was required to establish water use targets for 2015 and 2020 using methodologies established by DWR. The District is in compliance with its 2020 water use target of 181 gallons per capita per day (GPCD), having reduced its water use in 2020 to 170 GPCD.

Chapter 6 - Water System Supplies

This chapter presents an analysis of the District's water supplies, as well as an estimate of water-related energy-consumption. The intent of this chapter is to present a comprehensive overview of the District's water supplies, estimate the volume of available supplies over the 20-year planning horizon, and assess the sufficiency of the District's supplies to meet projected demands under "normal" hydrologic conditions.

The sole source of water supply for the District is groundwater, and there are no new sources of supply currently planned. Water supply for the District is expected to be sufficient to support the District's projected water demand through 2045.

Calculation and reporting of water system energy intensity is a new requirement for the 2020 UWMPs. Energy intensity is defined as the net energy used for water production, treatment, conveyance, and distribution for all water entering the distribution system, less the amount of energy produced within the water system itself. The energy intensity for the District in 2020 is estimated to be 548.4 kilowatt hours per acre-foot of water (kWh/AF).

Chapter 7 - Water Supply Reliability

This chapter assesses the reliability of the District's water supplies, with a specific focus on potential constraints such as water supply availability, water quality, and climate change. The intent of this chapter is to identify any potential constraints that could affect the reliability of the District's supply (such as drought conditions) to support the District's planning efforts to ensure that its customers are well served. Water supply reliability is assessed during normal, single dry-year, and multiple dry-year hydrologic conditions. Based on this analysis, the District expects the available supplies to be sufficient to meet projected demands in all hydrologic conditions, including a five-year drought period, and considering the impacts of climate change.

Further, potential water quality issues are not expected to affect the quality of water served to the District's customers, as water quality is routinely monitored, and the District is able to make all

appropriate adjustments to its treatment and distribution system to ensure only high-quality drinking water is served.

Chapter 8 - Water Shortage Contingency Planning

This chapter describes the Water Shortage Contingency Plan (WSCP) for the District. The WSCP serves as a planning document to be engaged in the case of a water shortage event, such as a drought or supply interruption, and defines specific policies and actions that will be implemented at various shortage level scenarios. For example, implementing customer water budgets and rate increases, or restricting landscape irrigation to specific days and/or times. Consistent with DWR requirements, the WSCP includes six levels to address shortage conditions ranging from up to 10 percent to greater than 50 percent shortage.

Chapter 9 - Demand Management Measures

This chapter includes descriptions of past and planned conservation programs that the District operates within each demand management measure (DMM) category outlined in the UWMP Act, specifically: (1) water waste prevention ordinances, (2) metering, (3) conservation pricing, (4) public education and outreach, (5) distribution system water loss management, (6) water conservation program coordination and staffing support, and (7) "other" DMMs. The District has developed a suite of conservation programs and policies, which address each DMM category.

Chapter 10 - Plan Adoption and Submittal

This chapter provides information on a public hearing, the adoption process for the UWMP, the adopted UWMP submittal process, plan implementation, and the process for amending the adopted UWMP. Prior to adopting the Plan, the District held a formal public hearing to present information on this UWMP at 6:30 PM on 18 July 2022. This UWMP was submitted to DWR within 30 days of adoption.

Chapter 11 - References

This chapter contains key references and sources used throughout the document.

2. PLAN PREPARATION

This chapter discusses the type of Urban Water Management Plan (UWMP or Plan) the District has prepared and includes information that will apply throughout the Plan. Coordination and outreach during the development of the Plan is also discussed. Specifically, this chapter includes the following sections:

2.1 Compliance with the UWMP Act, Including Changes Since 2015

2.2 Coordination and Outreach

2.3 UWMP Structure, Standard Units, and Basis for Reporting

2.1 Compliance with the UWMP Act, Including Changes Since 2015

☑ ***CWC § 10620 (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.

In 1983, the California Legislature enacted the Urban Water Management Planning Act (UWMP Act) (California Water Code [CWC or Water Code] Sections 10610 - 10657). The UWMP Act states that every urban water supplier that provides water to 3,000 or more customers, or that provides over 3,000 acre-feet (AF) of water annually, should make every effort to ensure the appropriate level of water service reliability to meet the needs of its customers during normal, dry, and multiple dry years. Historically, the UWMP Act required urban water suppliers to update their Urban Water Management Plan (UWMP or Plan) for submittal to the Department of Water Resources (DWR) in years ending in five and zero. On behalf of the Rio Linda/Elverta Community Water District (District), EKI Environment & Water, Inc. (EKI) has prepared this 2020 update to the District's UWMP in accordance with the UWMP Act.

As shown in Table 2-1, the District served more than 3,000 connections in 2020 and is therefore subject to requirements of the UWMP Act.

Table 2-1 Public Water Systems (DWR Table 2-1)

Public Water System Number	Public Water System Name	Number of Municipal Connections 2020	Volume of Water Supplied 2020
CA3410018	Rio Linda/Elverta Community Water District	4,621	2,867
	TOTAL	4,621	2,867
NOTES: (a) Volumes are in units of AF and rounded to the nearest AF.			

As indicated in Table 2-2, the District's 2020 UWMP is an individual UWMP that describes how the current and future water resources and demands within the District's service area will be managed to provide an adequate and reliable water supply.

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

Select Only One	Type of Plan		Name of RUWMP or Regional Alliance *if applicable*
X	Individual UWMP		
		Water Supplier is also a member of a RUWMP	
		Water Supplier is also a member of a Regional Alliance	
	Regional Urban Water Management Plan (RUWMP)		
NOTES:			

The District's 2020 UWMP reflects the following significant revisions to the UWMP Act that have been made since 2015.

- ***Five Consecutive Dry-Year Water Reliability Assessment.*** The Legislature modified the dry-year water reliability planning from a "multiyear" time period to a "drought lasting five consecutive water years" designation.
- ***Drought Risk Assessment.*** The Drought Risk Assessment (DRA) requires a supplier to assess water supply reliability over a five-year period from 2021 to 2025 that examines water supplies, water uses, and the resulting water supply reliability under a reasonable prediction for five consecutive dry years.
- ***Seismic Risk.*** The Water Code now requires suppliers to specifically address seismic risk to various water system facilities and to have a mitigation plan.
- ***Water Shortage Contingency Plan.*** In 2018, the Legislature modified the UWMP laws to require a Water Shortage Contingency Plan (WSCP) with specific elements.
- ***Groundwater Supplies Coordination.*** Water Code now requires suppliers' 2020 UWMPs to be consistent with Groundwater Sustainability Plans (GSPs), in areas where those plans have been completed by the Groundwater Sustainability Agencies (GSAs).
- ***Lay Description.*** The Legislature included a new statutory requirement for suppliers to include a lay description of the fundamental determinations of the UWMP, especially regarding water service reliability, challenges ahead, and strategies for managing reliability risks.

2.2 Coordination and Outreach

Coordination with other water users, cities, counties, and other community organizations in the region is an important part of preparing a UWMP and WSCP. This section identifies the agencies and organizations the District sought to coordinate with during preparation of this Plan.

2.2.1 Wholesale Coordination

☑ ***CWC § 10631 (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).

Urban retail water suppliers relying on one or more wholesalers for water supply are required to provide these wholesalers with information regarding projected water supply and demand. The District does not purchase or receive water from a wholesaler and therefore Table 2-3 is not applicable and is left blank.

Table 2-3 Water Supplier Information Exchange (DWR Table 2-4)

The retail Supplier has informed the following wholesale supplier(s) of projected water use in accordance with Water Code Section 10631.
Wholesale Water Supplier Name
NOTES:

2.2.2 Agency Coordination

☑ ***CWC § 10620 (d) (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.

☑ ***CWC § 10631 (a)*** *A plan shall be adopted in accordance with this chapter that shall do all of the following:*

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.

The District coordinated its efforts with relevant agencies and parties. The District is a member of the Sacramento Groundwater Authority (SGA) GSA, which is one of the five GSAs[1] in the North American Subbasin of the Sacramento Valley Groundwater Basin (DWR Basin No. 5-021.64), who are working together to implement a single GSP. The SGA is a Joint Powers Authority (JPA) formed in 1998 to manage the groundwater basin in Sacramento County north of the American River and became the exclusive GSA for its portion of the Basin in 2016. SGA has a governing board of directors comprised of representatives of 14 water agencies and other water users within their jurisdiction: California American Water, Carmichael Water District, Citrus Heights Water District, City of Folsom, City of Sacramento, County of Sacramento, Del Paso Manor Water District, Fair Oaks Water District, Golden State Water Company, Natomas Central Mutual Water Company, Orange Vale Water Company, Sacramento Suburban Water District, San Juan Water District, an Agricultural Representative, a Commercial/Industrial Self-supplied Representative and the District.

The agencies and counties that were notified by the District during the development of this Plan are listed in Table 2-4. A copy of notices sent to these parties is provided in Appendix B.

[1] SGA GSA, Reclamation District 1001 (RD 1001) GSA, South Sutter Water District GSA, Sutter County GSA, and West Placer GSA.

Table 2-4 Notification to Cities and Counties (DWR Table 10-1)

County Name	60 Day Notice	Notice of Public Hearing
Sacramento County	X	X
Other Agency Name	**60 Day Notice**	**Notice of Public Hearing**
Note (a)	X	X

NOTES:
(a) Notification was sent to Sacramento Groundwater Authority (SGA) requesting distribution to SGA member agencies (California American Water, Carmichael Water District, Citrus Heights Water District, City of Folsom, City of Sacramento, County of Sacramento, Del Paso Manor Water District, Fair Oaks Water District, Golden State Water Company, Natomas Central Mutual Water Company, Orange Vale Water Company, Sacramento Suburban Water District, San Juan Water District, Agricultural Representative, and Commercial/Industrial Self-supplied Representative)

2.2.3 Public Participation

☑ ***CWC § 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.

Water suppliers are required by the UWMP Act to encourage active involvement to the community within the service area prior to and during the preparation of its UWMP. The UWMP Act also requires water suppliers to make a draft of the UWMP available for public review and to hold a public hearing regarding the findings of the UWMP prior to its adoption. The District sent a notification of intent to prepare an UWMP, notification that the draft UWMP was available for public review and a notification

of the public hearing to the various agencies listed in Table 2-4. Additionally the District held a Board of Directors meeting on 18 April 2022, which was open to the public, where the Districts water demand projection methodology for this UWMP was discussed. Public participation in the development of the District's 2020 UWMP is summarized in Appendix C.

The Public Review Draft 2020 UWMP was available for public review at the District's office (730 L Street, Rio Linda, CA 95673) and on the District's website (http://www.rlecwd.com/). As discussed in Section 10.2, notice of the public hearing for the UWMP and WSCP was made, consistent with requirements of California Government Code 6066, and the public hearing was held on 18 July 2022.

2.3 UWMP Structure, Standard Units, and Basis for Reporting

The District's 2020 UWMP has been prepared in general accordance with the format suggested in the UWMP Guidebook 2020 (DWR, 2021). Text from the UWMP Act has been included in gray boxes at beginning of relevant sections of this UWMP. The information presented in the respective UWMP sections and the associated text, figures, tables and charts are collectively intended to fulfill the requirements of that sub-section of the UWMP Act. To the extent practicable, supporting documentation has also been provided in Appendix A through Appendix G.

Per CWC Section 10644(a)(2), selected information for the 2020 UWMP updates must be presented in standardized tables for electronic submittal to DWR. As such, tables in the UWMP document follows DWR required format and have been cross-referenced to DWR table numbers. Additionally, per the Guidebook, the UWMP preparer is requested to complete a checklist of specific UWMP requirements to assist the DWR review of the submitted UWMP, which is included in Appendix A. Other sources for the information contained herein are provided in the references section of the document.

As summarized in Table 2-5, the District is a retail water supplier and, unless otherwise indicated, the data included in the following sections are presented in units of acre-feet (AF) or acre-feet per year (AFY) and is reported on a calendar year basis. Further, consistent with the Guidebook, the terms "water use", "water consumption", and "water demand" are used interchangeably in this UWMP.

Table 2-5 Supplier Identification (DWR Table 2-3)

Type of Supplier	
	Supplier is a wholesaler
X	Supplier is a retailer
Fiscal or Calendar Year	
X	UWMP Tables are in calendar years
	UWMP Tables are in fiscal years
Units of measure used in UWMP	
Unit	AF
NOTES:	

3. SERVICE AREA AND SYSTEM DESCRIPTION

☑ ***CWC § 10631 (a)*** *A plan shall be adopted in accordance with this chapter that shall do all of the following:*

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.

As seen in Figure 3-1, the Rio Linda/Elverta Community Water District (District) is located in northern Sacramento County, approximately eight miles north of the City of Sacramento. The District boundary includes areas in and around Rio Linda and Elverta, covering approximately 18 square miles. Not all water users within the District boundary are District customers; non-District costumers rely on private wells as their water supply. The service area consists of small-lot residential development in Rio Linda and large-lot residential, agricultural, and ranch land uses throughout Rio Linda and Elverta.

3.1 Population and Employment Trends Within the Service Area

The historical and projected population data from 2000 through 2045 within the District's service area are shown in Table 3-1 and the associated chart.

3.1.1 Future Population and Employment Growth

Population and employment growth were based on regional growth projections and historical growth within the District. In December 2021, the Sacramento Area Council of Governments (SACOG) released draft growth projections as one of the first steps of the 2024 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS; SACOG, 2021). SACOG (2021) projected population, employment, and household totals for the twenty-year planning horizon based on long-term growth trends across the region, including an annual population growth rate of 0.66 percent and annual employment growth rate of 0.66 percent. This is consistent with the State Department of Finance projection of 0.67 percent population growth (SACOG, 2021). Growth within the District, however, has historically been lower, with annual growth in residential accounts of 0.11 percent per year from 2014 to 2021. Given that historical growth has been much lower than that projected by SACOG, the District conservatively estimates that annual population and employment growth will be 0.38 percent, approximately the average of the regional SACOG projections and the District's historical growth.

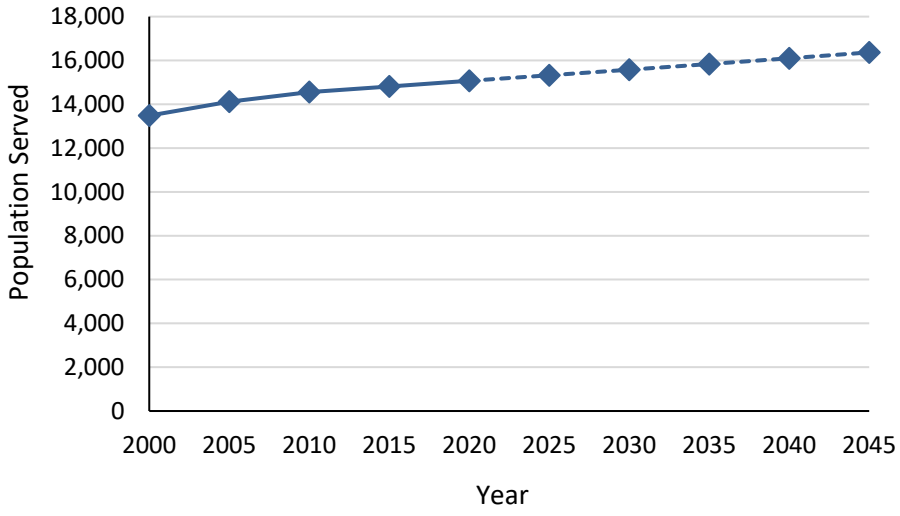
Based on this estimate, the total projected population within the District's service area is projected to be 16,563 by 2045, which represents a 9 percent increase relative to 2020. Table 3-1 and the associated chart shows the projected population for the service area through 2045.

Table 3-1 Population - Current and Projected (DWR Table 3-1)

Population Served	2020	2025	2030	2035	2040	2045
	15,071	15,353	15,647	15,947	16,252	16,563

NOTES:
(a) Historical and current population data are further documented in Table 4-2.
(b) Projected population assumes 0.38 percent annual population growth.
(c) Population in 2020 is estimated from interpolating historical population growth of the District between 2007 and 2015.

Chart 3-1 Current and Projected Population



3.1.2 Service Area Demographics

Demographics for the District's service area are summarized in Table 3-2. These data are from the United States (U.S.) Census American Community Survey 2019 5-Year Estimates for Rio Linda, Elverta, Sacramento County and California. Relative to the rest of California, the District's population has a similar age distribution and is less racially diverse. Educational attainment and median household income in the District is slightly lower than the state as a whole.

Table 3-2 Demographic Characteristics

Demographics (a)	Rio Linda	Elverta	Sacramento County	California
Age and Sex				
Persons under 5 years	6.9%	7.1%	6.3%	6.0%
Persons under 18 years	25.4%	23.5%	23.4%	22.5%
Persons 65 years and older	12.4%	16.3%	14.5%	14.8%
Female persons	50.8%	46.9%	51.1%	50.3%
Race and Hispanic Origin				
White alone	78.7%	84.6%	62.8%	71.9%
Black or African American alone	2.4%	3.1%	10.9%	6.5%
American Indian and Alaska Native alone	0.9%	1.3%	1.5%	1.6%
Asian alone	8.7%	5.0%	17.0%	15.5%
Native Hawaiian and Other Pacific Islander alone	0.1%	3.3%	1.3%	0.5%
Two or More Races	4.0%	1.2%	6.5%	4.0%
Hispanic or Latino	21.0%	16.2%	23.6%	39.4%
White alone, not Hispanic or Latino	64.4%	70.7%	43.8%	36.5%
Families & Living Arrangements				
Persons per household	3.31	3.22	2.77	2.95
Living in same house 1 year ago, percent of persons age 1 year+	89.4%	91.9%	85.4%	87.1%
Language other than English spoken at home, age 5 years+	25.3%	22.3%	32.4%	44.2%
Education				
High school graduate or higher, persons age 25 years+	86.5%	87.6%	87.9%	83.3%
Bachelor's degree or higher, persons age 25 years+	13.7%	16.4%	31.4%	33.9%
Income & Poverty				
Median Household Income (2019 dollars)	$70,825	$73,438	$70,684	$75,235
Per capita income in past 12 months (2019 dollars)	$24,696	$27,964	$34,078	$36,955
Persons in poverty	15.5%	11.6%	12.5%	11.8%

NOTES:
(a) Demographic data per the U.S. Census Bureau QuickFacts website (U.S. Census, 2021).

3.2 Land Uses within Service Area

The largest land use category within the District's service area is Agricultural Residential, many of which rely on private groundwater wells rather than District-supplied water, and Low-Density Residential. Agricultural/Open Space, Commercial/Industrial, and Resource Conservation make up smaller portions of the District's service area (Figure 3-3, Sacramento County General Plan of 2005-2030, amended November 2011; Land Use Diagram updated September 2018]).

3.3 Climate

The District has a Mediterranean-type climate with dry, moderately hot summers and mild winters. Spring, summer, and fall are generally warm, with temperatures often reaching over 90 degrees Fahrenheit (°F) on summer days. As shown in Table 3-3, rainfall in the area averages 20.6 inches per year and is generally confined to the wet season from late October to early May. The average reference evapotranspiration (ETo) for the region is 50.7 inches per year. Data was utilized from the closest California Irrigation Management Information System (CIMIS) Station (Fair Oaks No. 242), which was installed in 1997.

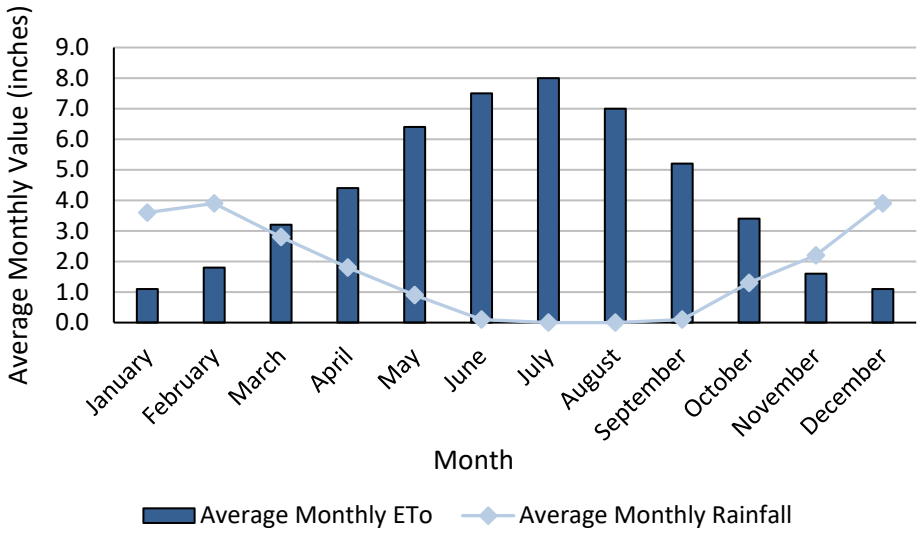
Since the average annual ETo is approximately 30.1 inches more than the average annual precipitation, and because more than 88 percent of the annual precipitation occurs between the months of November and April, growing turf or other plantings in this region requires a significant amount of irrigation during the dry season. This irrigation demand contributes to the overall and observed seasonal variation in water demand throughout the District's service area.

Table 3-3 Climate Characteristics

Month	Average Temperature		Standard Average ETo (inches)	Average Rainfall (inches)
	Min (°F)	Max (°F)		
January	32.9	66.0	1.1	3.6
February	36.5	68.3	1.8	3.9
March	40.3	74.4	3.2	2.8
April	43.8	77.3	4.4	1.8
May	47.6	88.7	6.4	0.9
June	54.8	93.5	7.5	0.1
July	56.7	98.1	8.0	0.0
August	55.9	96.5	7.0	0.0
September	54.2	91.9	5.2	0.1
October	45.2	85.4	3.4	1.3
November	39.2	70.3	1.6	2.2
December	33.1	62.0	1.1	3.9
Annual	**45.0**	**81.0**	**50.7**	**20.6**

NOTES:
(a) Data from CIMIS Station Fair Oaks No. 131.
(b) Data represents monthly averages from 1997 to 2020.

Chart 3-3 Average Monthly Climatic Conditions



3.4 Water Distribution System

The District service area covers approximately 18 square miles and includes areas in and around Rio Linda and Elverta. Not all water users within the District's service area receive District water and instead rely on private wells to meet their water demands. The District owns and maintains 12 wells (Well 2a, 3, 4, 6, 7, 8, 9, 10, 11, 12, 15, and 16), one elevated reservoir, one inline booster station, two pressure reducing valve stations, a reservoir, a pump station and more than 84 miles of distribution piping (Affinity Engineering, 2014 & District Operations Superintendent). Well production capacity ranges from 450 to 900 gallons per minute (gpm) for the older wells and 1,500 to 2,800 gpm for the two newer wells (Well 16 and Well 15, respectively). The District's storage capacity includes one 10,000 gallon elevated reservoir and one 1,200,000 gallon reservoir. The District pumps and delivers water to Residential, Commercial, and Industrial customers within its service area.

Future water supply and infrastructure projects include annual pipeline replacement, one well replacement, updated well treatments as water quality standards changes, temporary use of El Dorado Water and Power Supply surface water rights, and potentially construction of a regional surface water treatment plant, all over the next 25-year period (refer to Chapter 6 for detailed information on future water projects).

Figure 3-1 Regional Vicinity Map

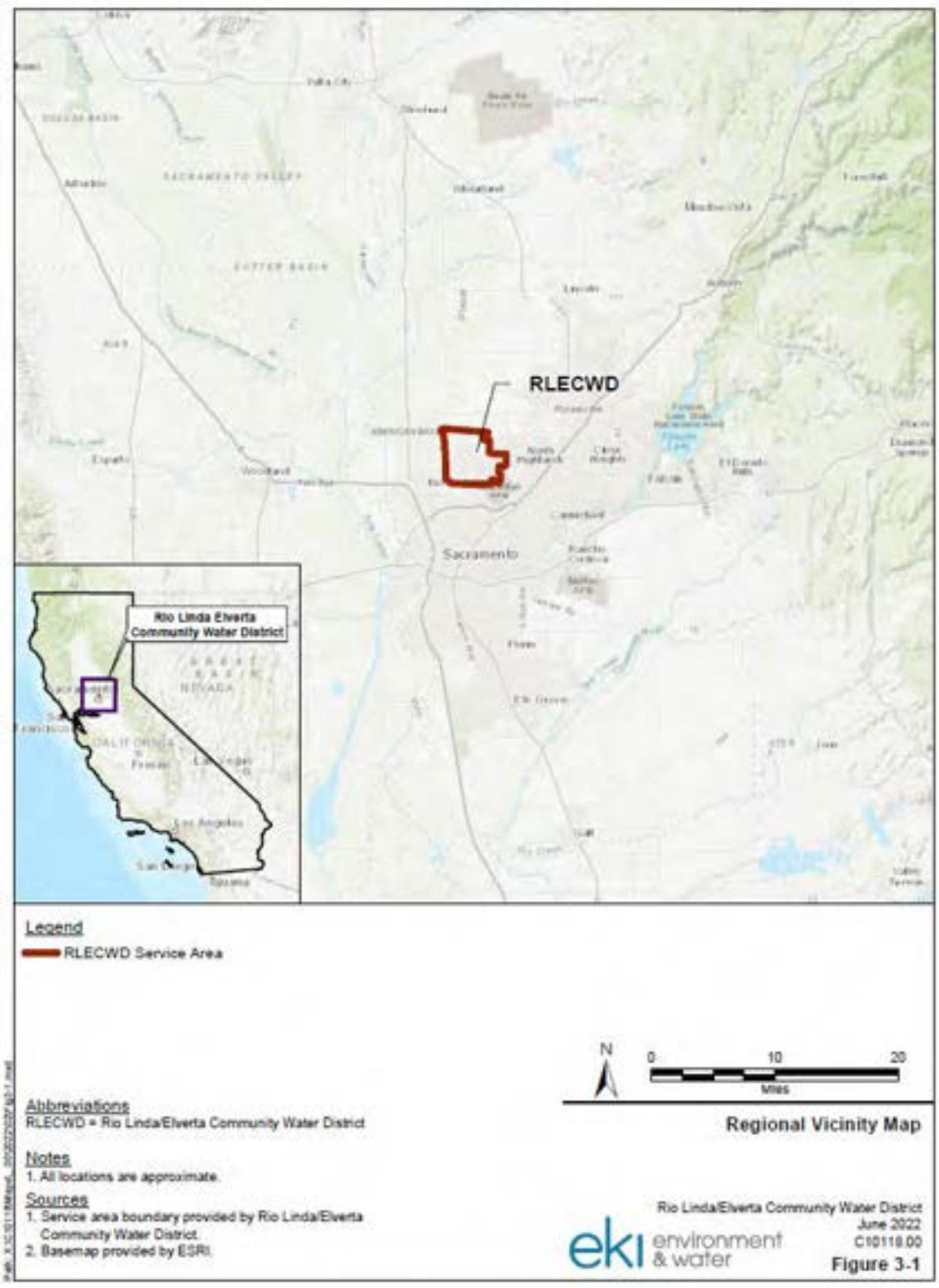


Figure 3-2 Agency Service Area and Water Distribution System Map

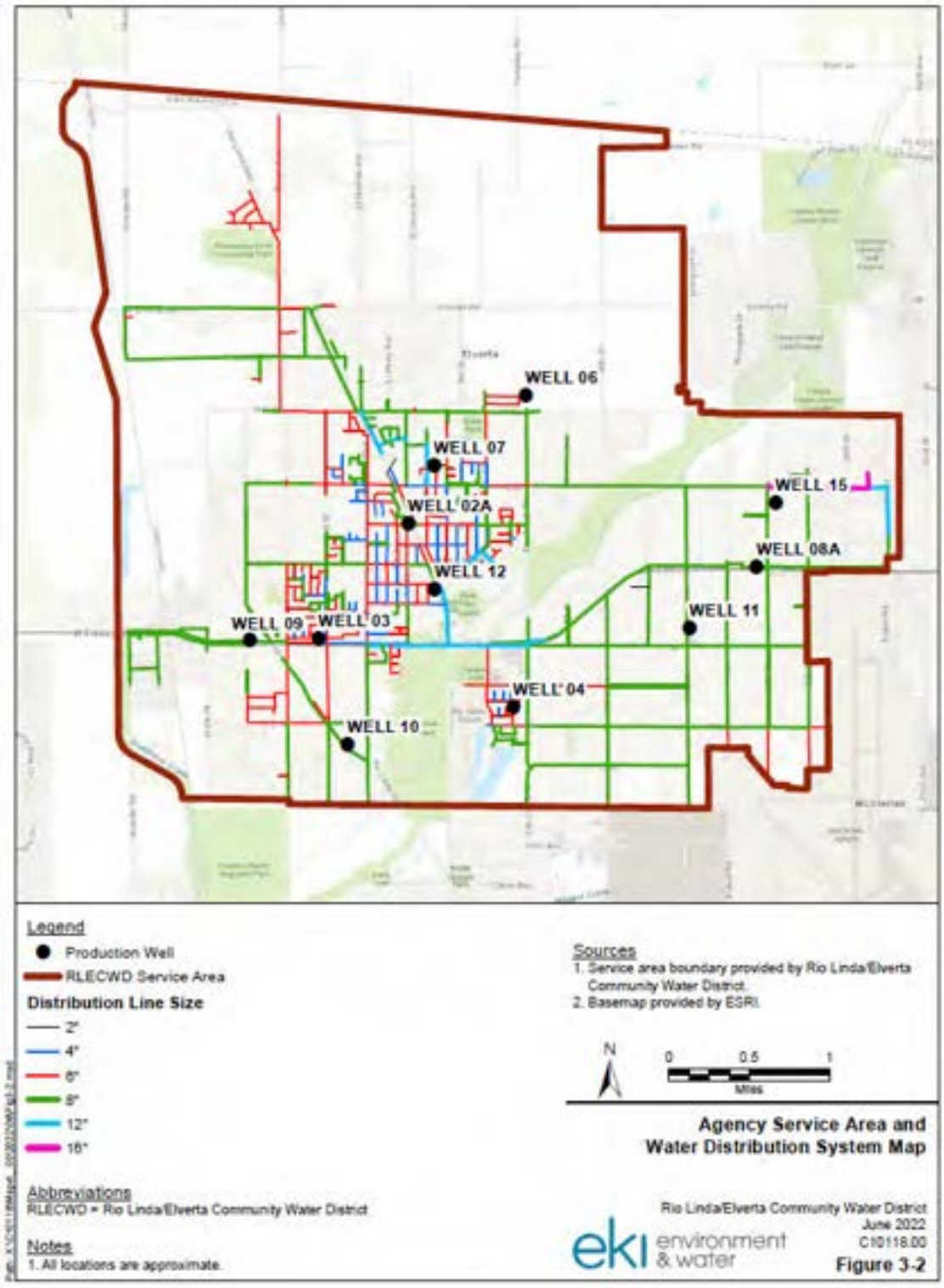
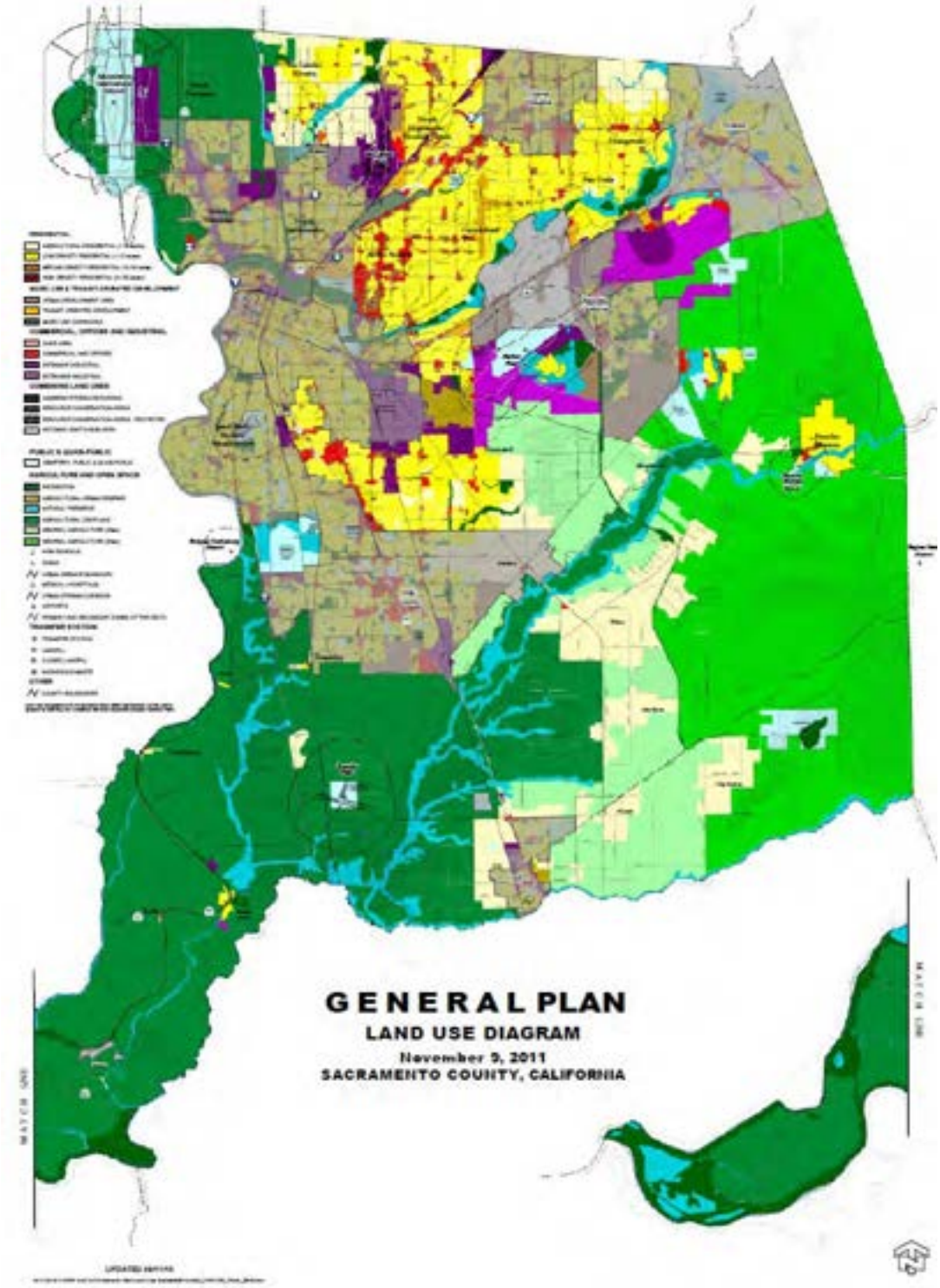


Figure 3-3 Land Use



4. WATER USE CHARACTERIZATION

☑ ***CWC § 10631 (d) (1)*** *A plan shall be adopted in accordance with this chapter that shall do all of the following:*

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).*

For the purposes of this Urban Water Management Plan (UWMP), "water demand" is defined as the volume of water produced by the Rio Linda/Elverta Community Water District's (District's) twelve (12) groundwater wells. Among other factors, water demand is dependent on climate, population, industry, and the types of development present in a community. The water demand projections are presented based on the current best available information and are subject to review and revision every 5 years as part of the UWMP update process.

This chapter includes the following sections that describe historical and projected water demands within the District's service area:

4.1 Current and Historical Total Water Demand

4.2 Projected Total Water Demand

4.3 Water Use Sectors Not Included in the Demand Projections

4.4 Climate Change Impacts to Demand

4.5 Coordinating Water Use Projections

4.6 Urban Water Use Objectives (Future Requirements)

4.1 Current and Historical Total Water Demand

The current and historical total water demands within the District's service area include the water pumped by the 12 active wells and the water that is lost within the distribution system ("losses"). All demands within the District's service area are currently met with potable water.

The following sections discuss and quantify water use for Single-family Residential, Multifamily Residential, Commercial/Institutional, Industrial, and Landscape within the District (Water use sectors A through F, as defined in California Water Code [CWC] §10631(d)(1)). Water use sector J (i.e., distribution system water losses) is discussed in Section 4.1.3.

4.1.1 Current and Historical Potable Water Demand

Table 4-1 and associated charts provide historical context by summarizing the District's potable water use for the years 2017 through 2021. Potable water use was mostly consistent between 2017 and 2019, increased in 2020 and remained elevated in 2021. Total potable water use in 2021 was 2,816 acre-feet (AF), which was 15 percent above 2017 demands.

The District's water demands were quantified for each of the following water use sectors for years 2017 through 2021: Single Family Residential (SFR), Multi-Family Residential (MFR), Commercial/Institutional, Industrial (CII), and Landscape Irrigation. In addition to the metered water consumption described above, the District's water demand also includes Non-Revenue Water (NRW), which is water used for system flushing, leak repair flushing, hydrant leaks, street sweeping, and distribution system water losses. The NRW was estimated by comparing metered water demand (i.e., consumption) against total groundwater production.

As shown in Table 4-1 and associated charts, the residential sector accounted for an average of approximately 75 percent of the water demand in the District's service area between 2017 and 2021 (i.e., SFR demands were approximately 74 percent of the total demand, while MFR demands accounted for the remaining 1 percent). The District has a moderate CII base, which accounted for approximately 11 percent of water demand for the 2017-2021 period. The average NRW over this period was approximately 13 percent. Landscape irrigation (i.e., accounts with dedicated irrigation meters) over this period accounted for 1 percent of the total water demand.

Table 4-1 Demands for Potable and Non-Potable Water - Actual (DWR Table 4-1)

Use Type	Additional Description *(as needed)*	Level of Treatment When Delivered	Volume				
			2017	2018	2019	2020	2021
Single Family		Drinking Water	1,867	1,868	1,833	2,110	1,995
Multi-family		Drinking Water	24	31	37	46	40
Commercial	Institutional	Drinking Water	264	254	269	308	286
Industrial		Drinking Water	1	3	13	6	11
Landscape		Drinking Water	43	20	22	31	63
Losses	Non-Revenue Water	Drinking Water	260	331	265	366	421
		TOTAL	2,459	2,507	2,439	2,867	2,816

NOTES:
(a) Volumes are in units of AF.
(b) Demand data are from the District's monthly production reports, and distributed by sector based on monthly consumption reports.
(c) Losses are calculated from production data as the difference between production and consumption.
(d) Totals may not match due to rounding.

Chart 4-1A Annual Water Demand by Sector: 2017-2021

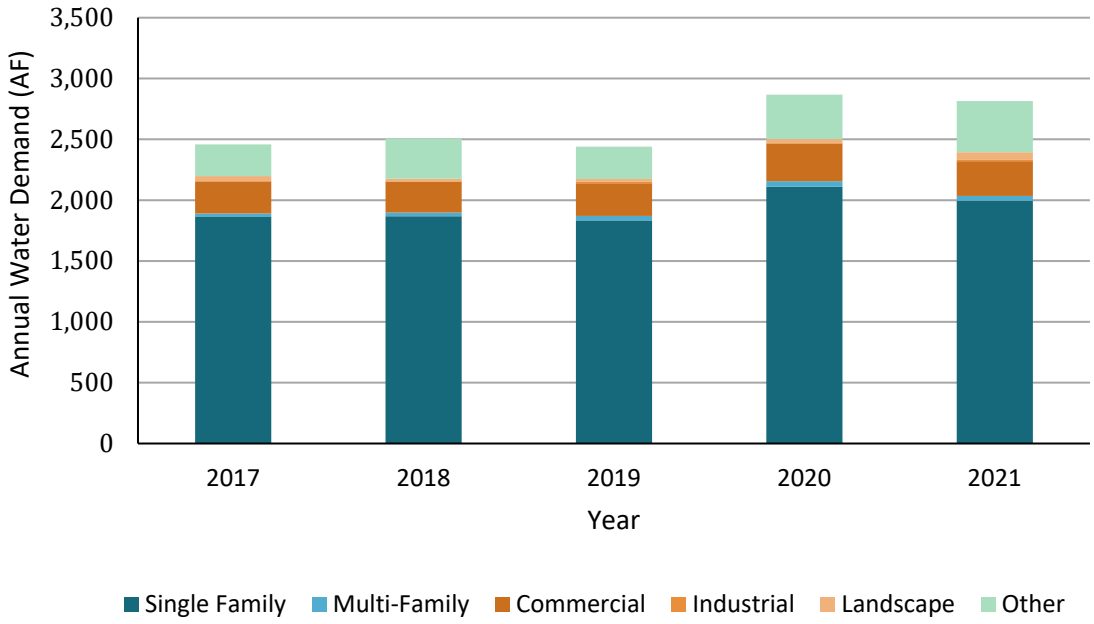
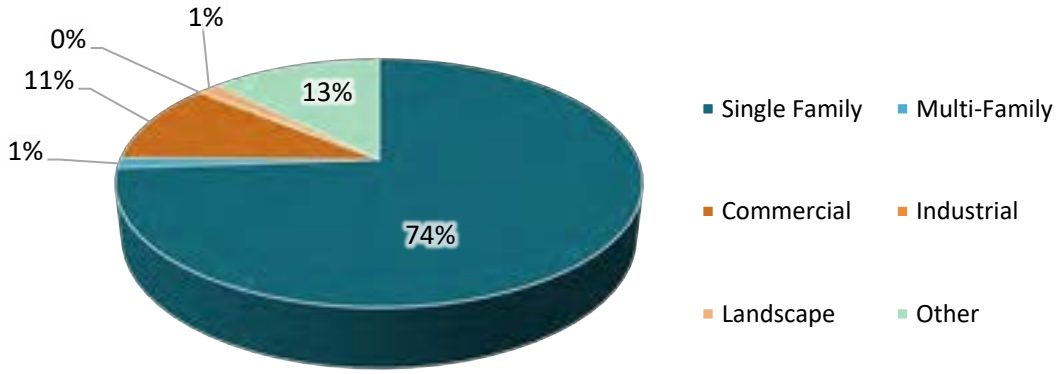


Chart 4-1B Percentage of Total Water Demand by Sector: 2017-2021



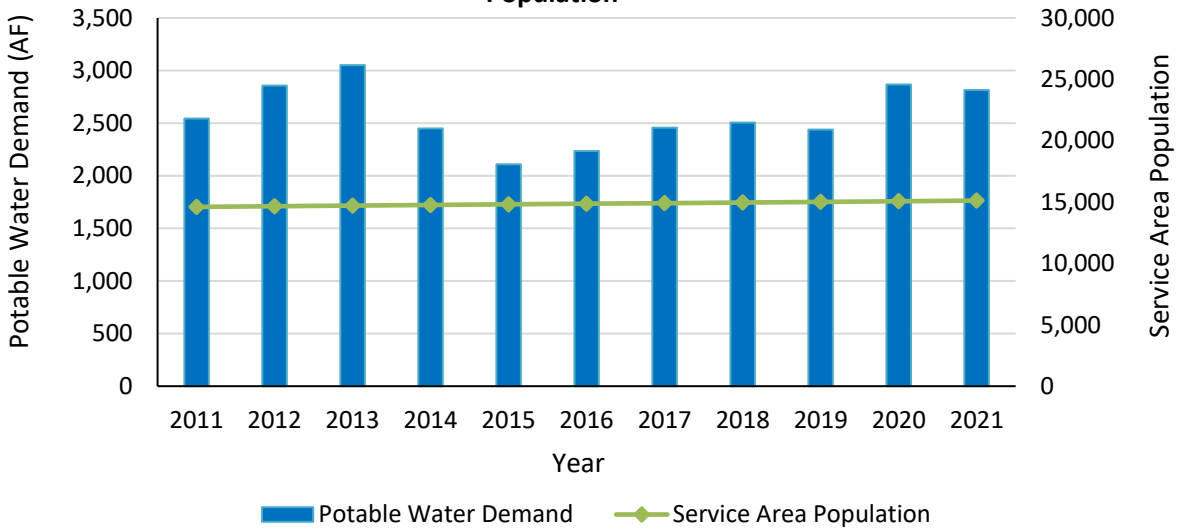
As shown in Table 4-2 and the associated charts, per capita potable water use in the District's service area has shown a constant pre-drought per capita water use of about 171 gallons per capita per day (GPCD) (average from 2011 to 2013), a sharp decrease in water use from 2014 to 2015, a post-drought per capita water use of about 144 GPCD (average from 2016 to 2019) and a current increased water use of about 168 GPCD (average from 2020 to 2021). The highest per capita water use was observed in 2013 at 185 GPCD, whereas the lowest per capita water use was observed in 2015 at 127 GPCD.

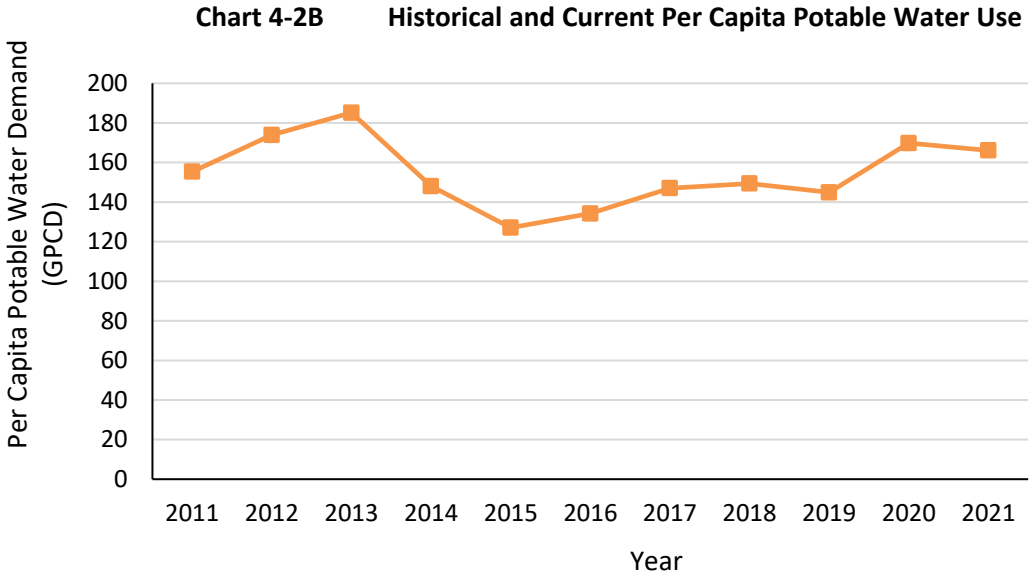
Table 4-2 Current and Historical Potable Water Demand and Population

Year	Potable Water Demand	Service Area Population	Per Capita Potable Water Use (GPCD)
2011	2,544	14,607	155
2012	2,857	14,659	174
2013	3,053	14,710	185
2014	2,450	14,762	148
2015	2,110	14,813	127
2016	2,236	14,865	134
2017	2,459	14,916	147
2018	2,507	14,968	149
2019	2,439	15,019	145
2020	2,867	15,071	170
2021	2,816	15,122	166

NOTES:
(a) Volumes are in units of AF.
(b) 2011 to 2021 historical population estimated from interpolating historical population growth of the District between 2007 and 2015.
(c) Water demand from District's production and consumption data reports.
(d) Per capita potable water use is calculated by dividing the total annual potable water demand by service area population and the number of days in a year.

Chart 4-2A Historical and Current Potable Water Demand and Population





4.1.2 Current and Historical Non-Potable Water Demand

The District does not have a recycled water distribution system that serves recycled water to District customers and therefore does not have a non-potable water demand.

4.1.3 Distribution System Water Loss

☑ ***CWC § 10631 (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.

Distribution system water losses are defined in the Guidebook to be: "the physical water losses from the water distribution system and the supplier's storage facilities, up to the point of customer consumption." The total differential between water supply and metered water use is categorized as "Losses - Non-Revenue Water" in Table 4-1 and associated charts. This category includes unmetered water uses, such as system flushing, leak repair flushing, hydrant leaks, and street sweeping, and distribution system water losses.

Since 2016, urban retail water suppliers have been required under CWC § 10608.34 and California Code of Regulations (CCR) § 638.1 et seq to quantify distribution system water losses using the American Water Works Association (AWWA) Free Water Audit Software (referred to as the "AWWA Water Loss Worksheet"). This analysis separates water loss into "apparent" and "real" losses. Apparent losses include metering inaccuracies, systematic data handling errors, and unauthorized consumption. Real losses represent water loss attributable to the distribution system and include physical water losses from the pressurized system and storage tanks up to the point of customer consumption.

The water losses, including apparent and real losses, calculated in the AWWA Water Loss Worksheets are provided in Table 4-3 and the full analysis is included in Appendix D. The "Losses – Non-Revenue Water" is the total differential between water supply and metered water use (Table 4-1), which includes the apparent and real losses from the AWWA Water Loss Worksheets and unmetered water uses. The NRW (Table 4-1) from 2017 to 2021 ranges from 260 AF to 421 AF, or 10 percent to 15 percent of total demand. Whereas, the volume of water loss reported in the AWWA Water Loss Worksheets (Table 4-3) from 2016 to 2020 ranges from 91 AF to 314 AF, or 4 percent to 12 percent of total demand.

Table 4-3 Last Five Years of Water Loss Reporting (DWR Table 4-4)

Reporting Period Start Date	Volume of Water Loss
01/2016	91
01/2017	294
01/2018	304
01/2019	235
01/2020	314
NOTES: (a) Volumes are in units of AF. (b) Water loss is reported from the AWWA Free Water Audit Software.	

The District actively manages its distribution system to minimize leakage through actions such as managing system-wide pressures to prevent pressure spikes and repairing known leaks immediately. CWC §10631(3)(c) requires that this UWMP demonstrate whether the distribution loss standards enacted by the State Water Resources Control Board (SWRCB) pursuant to § 10608.34 have been met. However, the SWRCB has yet to establish these standards, and thus consistency with these standards cannot be demonstrated herein.

4.2 Projected Total Water Demand

Per CWC Section 10631(d)(1), potable and non-potable water demand projections are discussed in the following sections. This section documents the basis, methodology, and resulting projected total water demands for the District through 2045.

4.2.1 Projected Water Demand Methodology

The future water demands for the District were estimated by:

1. Applying an estimated growth rate to accounts within each water use sector based on projected population and employment growth rates,
2. Reviewing available information regarding known planned developments within the District to verify that account growth projections consider all anticipated growth,
3. Evaluating water demand factors for each appropriate water use sector based on review of recent average per account water use, and
4. Calculating estimated future water demand that incorporates the anticipated account growth, water demand factors, and historical water demand.

The assumptions used as the basis for demand projections were developed in close coordination with the District and reflect a land-use based approach consistent with the District's community planning. Note that the water demand projections are presented based on the current best available information, and are subject to review and revision every five years as part of the UWMP update process.

4.2.1.1 *Basis for Account Growth Projections*

Water demand increases as new accounts are added to the system, among other factors. In order to estimate how accounts will grow within the District, recent historical account growth within the District was considered, as well as projected future growth in population and employment. As described below, it was assumed, that depending on the customer sector, the number of accounts will grow at the same rate as the projected population or employment growth.

Table 3-1 and the discussion in Section 3.1.1 presents the District's historical population/employment and growth projections. The District anticipates an annual growth of 0.38 percent for population and employment, a growth rate that is lower than the regional projections by SACOG, but higher than the District's observed historical growth, and are considered conservative for planning purposes. Since the SACOG population and employment growth rates were projected to be the same, an annual growth of 0.38 percent was applied to the number of connections in all sectors, see Table 4-4.

Table 4-4 Projected Account Growth by Sector

Sector	2020	2025	2030	2035	2040	2045	Basis for Growth
Single Family	4,419	4,495	4,581	4,668	4,758	4,849	Population Growth Rate of 0.38%
Multi-Family	16	16	17	17	17	18	Population Growth Rate of 0.38%
Commercial/ Institution	165	162	166	169	172	175	Employment Growth Rate of 0.38%
Industrial	4	4	4	4	4	4	Employment Growth Rate of 0.38%
Landscape	17	25	26	26	27	27	Population Growth Rate of 0.38%
Notes: (a) Values show total number of accounts.							

4.2.1.2 *Planned Development Within the Service Area*

The District considered all anticipated growth within the District as a part of its demand projections. In order to verify that the selected growth assumptions appropriately include new developments, known planned developments were inventoried. The Elverta Specific Plan (ESP), which falls under the land use authority of Sacramento County, is currently the only known planned development within the District.[2] The ESP is a proposed 1,756-acre development located in the northeastern portion of the District's service area, consisting of residential, agricultural residential, commercial, office/professional, parks, and school land uses (Figure 3-3). In 2016, the District prepared a Water Supply Assessment (WSA) to support the development planning process. At that time, the demand associated with the project was estimated to be 944 AFY by 2017 and 4,303 AFY at full buildout by 2037 (Affinity Engineering and J. Crowley Group, 2016). However, construction of the ESP has not yet begun, and Sacramento County is in the process of updating the ESP. Since the updated land use plans for the ESP are not currently known, the demands associated with the ESP cannot be estimated at this time, and thus are not included in the District's projected water demands (Table 4-7). However, it is noted, that given the scale of the ESP, it is anticipated that the District will be required to prepare a revised WSA for the updated ESP, which will evaluate the availability of supply to meet all demands for the District, inclusive of the ESP and other anticipated growth. Additionally, it is noted that the District has the right to update its UWMP at any point, including outside of the 5-year regulatory-required update cycle, and that depending on the timing of the revised ESP, the District may opt to update or provide an amendment to the 2020 UWMP.

The annual growth rate of 0.38 percent, used as the basis for the growth in District demands, is anticipated to conservatively account for all anticipated growth within the District, outside of the ESP.

4.2.1.3 *Water Demand Factors*

Water use rates are influenced by a variety of factors, including weather, economic recession, and state and local regulations, among other drivers. Given this, selecting a "representative" baseline is important for developing the land-use based water demand factors to estimate baseline water use by existing customers, which can then be extrapolated and applied to future growth within the District.

Table 4-2 provides current and historical potable water demand and Table 4-1 provides historical water use by sector within the District. It is noted that the most recent water demand, for 2020 and 2021 was consistent with the pre-drought conditions of 2011-2013. However, in addition to climate and weather influences, customer water demands over the recent historical period are also influenced by water rates. In 2016, the District adopted a new water rate structure, that eliminated tiered rates and removed the rate-based incentive for customers to conserve water. In 2022, the District again adopted a

[2] Sacramento County Planning and Environmental Review – Elverta Specific Plan: https://planning.saccounty.net/LandUseRegulationDocuments/Pages/ElvertaSpecificPlan.aspx

new rate structure, instituting a revised tiered rate structure, that will provide a financial incentive for customers to conserve water, and is therefore expected to result in reduced water demands.

Water demand factors based on historical use within the District were used as the basis of future demand projections for potable water accounts. In order to select representative water demand factors, the District evaluated a range of water use associated with conditions relative to the recent 2011-2017 drought. Specifically:

1. *Pre-drought demand factors* based on the maximum per account water use by sector for 2011 through 2013, generally representing higher water use before drought restrictions were put in place. Water demand rates within this period are consistent with demands observed in 2020 and 2021.
2. *Post-drought demand factors* based on the maximum per account water use by sector for 2017 through 2019, generally representing lower water use than pre-drought conditions but with some amount of rebound, and reflect the change to a non-tiered rate structure.
3. *Partial rebound demand factors* estimated as the midpoint of the pre-drought and post-drought demand factors, representing an average of the two scenarios. These demand factors are lower than 2020 and 2021 water use, and reflect the expected conservation-effect of the new tiered rate structure.

The water demand factors selected by the District to represent future water use are shown in Table 4-5, and consider both the impacts of water use restrictions during the last drought and the anticipated demand-reducing effect of the new rate structure.

Table 4-5 Water Demand Factors

Use Type	Water Demand Factor (GPD/account)	Basis for Demand Factor
Single Family	419	Partial Rebound
Multi-Family	1,982	Post Drought/Current
Commercial/Institutional	1,558	Partial Rebound
Industrial	2,349	Partial Rebound
Landscape/Irrigation	2,496	Partial Rebound

4.2.1.4 *Calculating Water Demand Projections*

The water demand projections were calculated by applying the sector-specific water demand factors (Table 4-5) to the projected number of accounts in those sectors (Table 4-4). The demand projections consider water savings due to passive conservation amongst the residential sectors(Table 4-6) and include demands associated with lower income households (see Section 4.2.4)

Table 4-6 Inclusion in Water Use Projections (DWR Table 4-5)

Are Future Water Savings Included in Projections?	Yes
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.	Section 4.2.5
Are Lower Income Residential Demands Included In Projections?	Yes
NOTES: Anticipated savings from passive conservation are included in the projected demands.	

4.2.2 Projected Potable Water Demand

Future potable water demands are shown in Table 4-7 and associated chart. Potable water demand is projected to increase to 3,153 AFY in 2045, which represents a 12 percent increase over 2021 water use. Given that there are no plans currently to implement recycled water within the District, Table 4-8 does not include recycled water use projections.

Table 4-7 Use for Potable and Non-Potable - Projected (DWR Table 4-2)

Use Type	Additional Description *(as needed)*	Projected Water Use				
		2025	2030	2035	2040	2045
Single Family		2,196	2,261	2,320	2,374	2,419
Multi-Family		36	37	37	38	39
Commercial	Institutional	284	289	295	300	306
Industrial		11	11	11	11	12
Landscape		71	72	74	75	77
Losses	Non-Revenue Water	278	283	289	294	300
TOTAL		2,876	2,953	3,026	3,092	3,153

NOTES:
(a) Volumes are in units of AF.
(b) Demand projections for Single Family, Commercial, Industrial and Landscape are based on partial rebound demand factors and Multi-Family is based on the average of post-drought and current demand factors. Accounts expected to grow annually at 0.38 percent based on population and employment projections.
(c) Demand projections include passive conservation savings amongst the Single Family and Multi-Family Residential sectors.

Chart 4-7 Projected Potable Water Demand by Sector

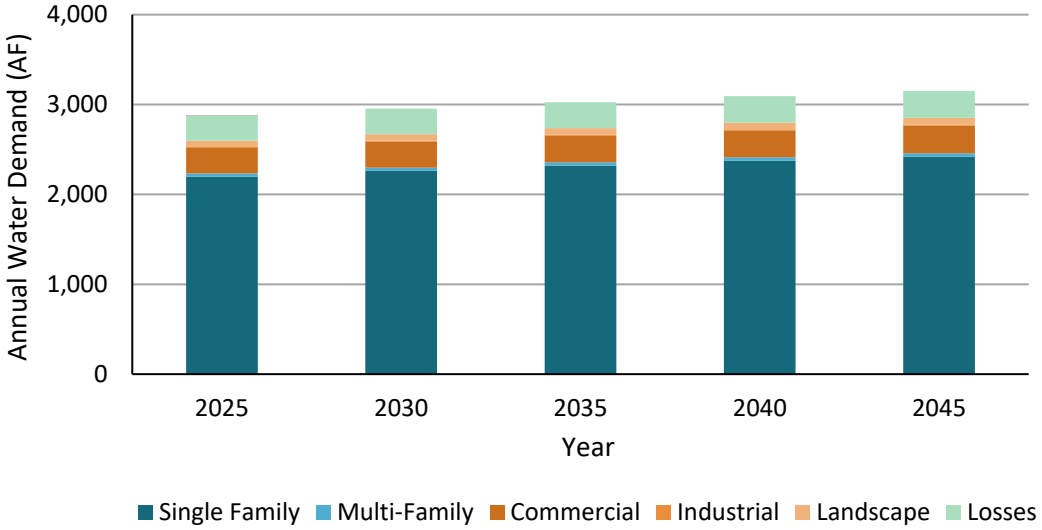


Table 4-8 Total Water Use (Potable and Non-Potable) (DWR Table 4-3)

	2020	2025	2030	2035	2040	2045
Potable Water, Raw, Other Non-potable *From DWR Tables 4-1 and 4-2*	2,867	2,876	2,953	3,026	3,092	3,153
Recycled Water Demand *From DWR Table 6-4*	0	0	0	0	0	0
Optional Deduction of Recycled Water Put Into Long-Term Storage						
TOTAL WATER USE	2,867	2,876	2,953	3,026	3,092	3,153
NOTES: (a) Volumes are in units of AF.						

4.2.3 Projected Non-Potable Water Demand

The District does not currently supply non-potable water to customers.

4.2.4 Water Use for Lower Income Households

☑ ***CWC § 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 requirements 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.

The water demands presented in Section 4.1.2 include projected future water use by lower income households. Per Health and Safety Code 50079.5, a lower income household is defined as a household with lower than 80 percent of the District's median income.

The water demand for lower income households was based on the number of needed extremely-low, very-low, and low-income units for 2021-2029 housing cycle identified in Sacramento County for the Sacramento Area Council of Governments' (SACOG) 2020 Regional Housing Needs Plan (RHNP). As presented in the Sacramento County Housing Element of 2021-2029, the RHNP identified a need for 2,233 extremely-low income, 2,233 very-low income, and 2,692 low-income units by 2029, or approximately 33 percent of households out of the total planned 21,272 units for unincorporated Sacramento County (Sacramento County, 2022). Since the District falls within the unincorporated Sacramento County area it is therefore assumed that approximately 33 percent of SFR and MFR residential water demands within the District's service area will be associated with lower income households.

The projected water demand for lower income households within the District's service area is presented in Table 4-9 for five-year increments between 2020 and 2040, which is estimated as 33 percent of the projected water demands of the associated sectors presented in Table 4-6. The total water demand for lower income households in 2045 is estimated to be 811 AFY.

Table 4-9 Projected Potable Water Demand for Lower-Income Households

Sector	2025	2030	2035	2040	2045
Single Family	725	746	766	783	798
Multi-Family	12	12	12	13	13
TOTAL	737	758	778	796	811

NOTES:
(a) Volumes are in units of AF.
(b) Per the District's 2021-2029 housing cycle identified in Sacramento County for the Sacramento Area Council of Governments' (SACOG) 2020 Regional Housing Needs Plan (RHNP), 33 percent of housing units served lower income households. It is assumed that approximately 33 percent of the future residential water demand will be associated with lower income households.

4.2.5 Water Savings from Codes, Standards, Ordinances, or Transportation and Land Use Plans

☑ ***CWC § 10631 (d) (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.

"Active conservation" refers to water savings resulting from District's implementation of water conservation programs, education programs, and the offering of financial incentives (e.g., rebates). The District's current and planned active conservation programs are discussed in Chapter 9.

"Passive conservation" refers to water savings resulting from actions and activities that do not depend on direct financial assistance or educational programs from the District. These savings result primarily from (1) the natural replacement of existing plumbing fixtures with water-efficient models required under current plumbing code standards, and (2) the installation of water-efficient fixtures and equipment in new buildings and retrofits as required under CalGreen Building Code Standards. The projected water savings associated with passive savings, as summarized in Table 4-10 and associated chart, were estimated using the county-specific multiplier from DWR 2016 Projected Statewide and County-Level Effects of Plumbing Codes and Appliance Standards on Indoor gallon per capita per day (GPCD) for Sacramento County (M.Cubed, 2016). The projected water savings due to passive conservation are estimated to be 139 AFY by 2045, as shown Table 4-10 and associated chart. The water savings estimates incorporate the effects of the following codes and regulations:

- Assembly Bill (AB) 715, enacted in 2007, requires that any toilet or urinal sold or installed in California on or after January 1, 2014 cannot have a flush rating exceeding 1.28 and 0.5 gallons per flush, respectively. AB 715 superseded the state's previous standards for toilet and urinal water use set in 1991 of 1.6 and 1.0 gallons per flush, respectively. On April 8, 2015, in response to the Governor's Emergency Drought Response Executive Order (EO B-29-15), the California Energy Commission approved new standards for urinals requiring that they not consume more than 0.125 gallons per flush, 75 percent less than the standard set by AB 715.
- Water use standards for residential and commercial clothes washers and dishwashers are established by the United States (U.S.) Department of Energy through its authority under the federal Energy Policy and Conservation Act. Water use efficiency is summarized by the water factor for the appliance which measures the gallons of water used per cycle per cubic foot of capacity. A typical top-loading residential clothes washer manufactured in the 1990s had a water factor of around 12. In 2015, the allowable water factor for top- and front-loading residential clothes was reduced to 8.4 and 4.7, respectively. In 2018, the water factor standard

for top-loading residential clothes washers was reduced to 6.5. In 2010, the allowable water factor for top- and front-loading commercial clothes washers were reduced to 8.5 and 5.5, respectively. The maximum water factors for Energy Star compliant top- and front-loading washers are 3.7 and 4.3, respectively. The U.S. Environmental Protection Agency estimates that Energy Star washers comprised at least 60 percent of the residential market and 30 percent of the commercial market in 2011. An Energy Star compliant washer uses about two-thirds less water per cycle than a washer manufactured in the 1990s. Federal dishwasher water use efficiency standards were last updated in 2013. The maximum water uses for standard and compact sized dishwashers are 5.0 and 3.5 gallons per cycle, respectively.

- New construction and renovations in California are now subject to CalGreen Code requirements. CalGreen includes prescriptive indoor provisions for maximum water consumption of plumbing fixtures and fittings in new and renovated properties. CalGreen also allows for an optional performance path to compliance, which requires an overall aggregate 20 percent reduction in indoor water use from a calculated baseline using a set of worksheets provided with the CalGreen guidelines.
- Senate Bill (SB) 407, enacted in 2009, mandates that all buildings in California come up to current State plumbing fixture standards within this decade. This law establishes requirements that residential and commercial property built and available for use on or before January 1, 1994 replace plumbing fixtures that are not water conserving, defined as "noncompliant plumbing fixtures." This law also requires that effective January 1, 2017, a seller or transferor of single-family residential property must disclose to the purchaser or transferee, in writing, the specified requirements for replacing plumbing fixtures and whether the real property includes noncompliant plumbing. Similar disclosure requirements went into effect for multi-family and commercial transactions on January 1, 2019. SB 837, passed in 2011, reinforces the disclosure requirement by amending the statutorily-required transfer disclosure statement to include a disclosure on whether the property is in compliance with SB 407 requirements.

In addition, following the 2014-2016 drought, the State of California (State) developed the "Making Water Conservation a California Way of Life" framework to address the long-term water use efficiency requirements called for in executive orders issued by Governor Brown. In May of 2018, AB 1668 and SB 606 (collectively referred to as the efficiency legislation) went into effect, which built upon the executive orders implementing new urban water use objectives for urban retail water suppliers. These new urban water use objectives are discussed in Section 4.6.

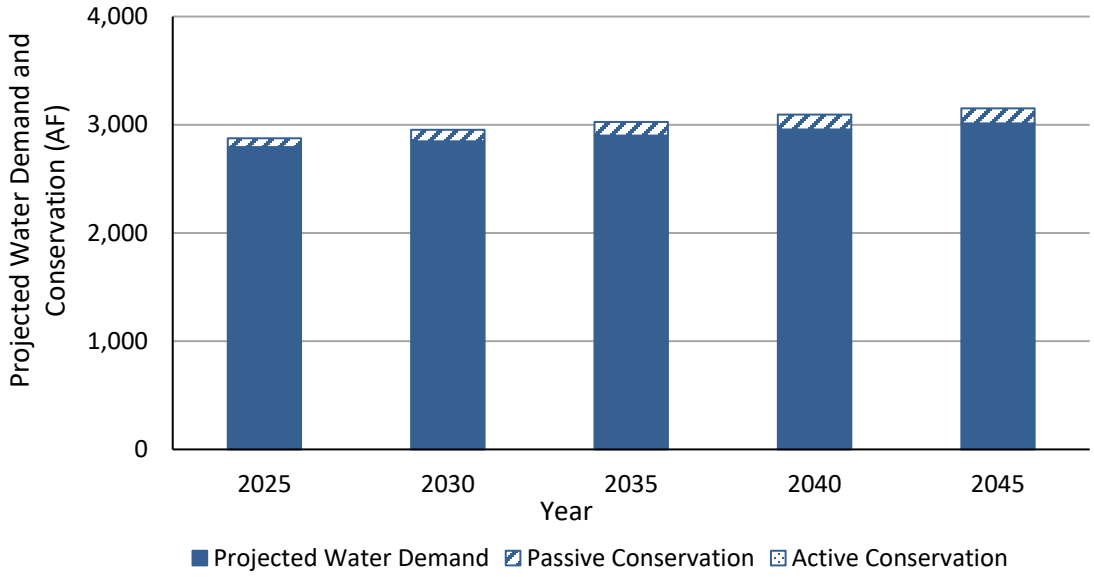
For conservative planning purposes passive conservation savings are included in the total water demand projections but active conservation savings are not included in the total water demand projections. While projections account for passive savings, the District has taken a more conservative approach to demand projections by not accounting for savings associated with future active conservation measures. However, savings associated with all past active conservation efforts are embedded into the demand projections. This approach is conservative, as it projects the highest level of probable demand. Active conservation thus increases resiliency for District customers by further increasing efficient utilization of available supplies. Shown in Table 4-10, by 2045 it is estimated that passive conservation savings will reduce total projected water demand by 139 AFY within the District's service area (i.e., the total 2045 demand will be reduced from 3,153 AF to 3,014 AF).

Table 4-10 Projected Potable Water Demand and Projected Passive and Active Water Conservation

Water Conservation Type	Projected Total Water Demand				
	2025	2030	2035	2040	2045
Projected Water Demand	2,876	2,953	3,026	3,092	3,153
Projected Water Conservation					
Passive Conservation	83	107	125	137	139
Active Conservation	0	0	0	0	0
Projected Water Demand after Passive Conservation Savings	2,793	2,846	2,901	2,955	3,014
Projected Water Demand after Passive and Active Conservation Savings	2,793	2,846	2,901	2,955	3,014

NOTES:
(a) Volumes are in units of AF.
(b) Passive savings estimated using the residential gallons per capita per day [R-GPCD] reductions relative to 2020 for Sacramento County prepared by California Department of Water Resources (2016) in Projected Statewide and County-Level Effects of Plumbing Codes and Appliance Standards on Indoor GPCD.

Chart 4-10 Projected Water Demand and Conservation



4.2.6 Projected Total Water Demand

The District's total projected water demands are summarized in Table 4-8 on page 33.

4.3 Water Use Sectors Not Included in the Demand Projections

Several water use sectors listed in CWC §10631(e)(1) are not included in the water demand projections described in Sections 4.2.2 and Section 4.2.3 because they are not applicable to the District. The following sectors were not included in the demand projections in this Plan:

- Sales to Other Agencies (CWC §10631(e)(1)(G)) – The District does not sell water to other agencies.
- Saline Water Intrusion Barriers, Groundwater Recharge, or Conjunctive Use (CWC §10631(e)(1)(H)) – The District does not currently use, nor does it plan to use, water for saline water intrusion barriers, groundwater recharge, or conjunctive use.
- Agricultural (CWC §10631(e)(1)(I)) – The District does not currently, nor does it plan to, provide water for agricultural uses.

4.4 Climate Change Impacts to Demand

☑ ***CWC § 10635(b)***

(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.

The methodology used to develop demand projections herein considers the impacts of climate change on projected demands. California experienced a historic drought between 2011-2017. In 2014, Governor Brown issued Executive Order B-26-14 declaring a Drought State of Emergency and requested all Californians to voluntarily reduce water use by 20 percent. In 2015, the State Water Resources Control Board implemented emergency conservation regulations that, among other things, required water agencies to reduce their water use and prohibited certain types of water uses. As a result, the District experienced an overall decrease in demands during the historic drought, most significantly during 2015. As discussed in Section 4.2, the demand factors evaluated herein consider both the 2011-2013 period, in which customers increased their water use (in part due to the drought conditions, prior to the imposed restrictions), as well as the observed rebound in demand following the drought (2017-2019). Thus, the periods used to develop the demand projections reflect conditions representative of the hotter, drier weather expected as a result of climate change.

4.5 Coordinating Water Use Projections

☑ ***CWC § 10631 (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 District does not rely upon a wholesale agency for a source of water and therefore does not need to coordinate directly with other urban water suppliers. However, as discussed in Section 1.3, the District is a member of the Sacramento Groundwater Authority (SGA) Groundwater Sustainability Agency (GSA), which is one of the five GSAs in the North American Subbasin of the Sacramento Valley Groundwater Basin (DWR Basin No. 5-021.64) who are working together to implement a single Groundwater Sustainability Plan (GSP). The SGA is a Joint Powers Authority formed in 1998 to manage the groundwater basin in Sacramento County north of the American River and became the exclusive GSA for its portion of the Basin in 2016. The SGA has a governing board of directors comprised of representatives of 14 water agencies and other water users within their jurisdiction: California American Water, Carmichael Water District, Citrus Heights Water District, City of Folsom, City of Sacramento, County of Sacramento, Del Paso Manor Water District, Fair Oaks Water District, Golden State Water Company, Natomas Central Mutual Water Company, Orange Vale Water Company, Sacramento Suburban Water District, San Juan Water District, Agricultural Representative, Commercial/Industrial Self-supplied Representative and the District. The District's water use projections were shared with the other members of SGA and other GSAs.

4.6 Urban Water Use Objectives (Future Requirements)

☑ ***CWC § 10609.20***

(a) Each urban retail water supplier shall calculate its urban water use objective no later than January 1, 2024, and by January 1 every year thereafter.

(b) The calculation shall be based on the urban retail water supplier's water use conditions for the previous calendar or fiscal year.

☑ ***CWC § 10609.22***

(a) An urban retail water supplier shall calculate its actual urban water use no later than January 1, 2024, and by January 1 every year thereafter.

(b) The calculation shall be based on the urban retail water supplier's water use for the previous calendar or fiscal year.

☑ ***CWC § 10609.24***

(a) An urban retail water supplier shall submit a report to the department no later than January 1, 2024, and by January 1 every year thereafter. The report shall include all of the following:

(1) The urban water use objective calculated pursuant to Section 10609.20 along with relevant supporting data.

(2) The actual urban water use calculated pursuant to Section 10609.22 along with relevant supporting data.

(3) Documentation of the implementation of the performance measures for CII water use.

(4) A description of the progress made towards meeting the urban water use objective.

(5) The validated water loss audit report conducted pursuant to Section 10608.34.

(b) The department shall post the reports and information on its internet website.

(c) The board may issue an information order or conservation order to, or impose civil liability on, an entity or individual for failure to submit a report required by this section.

Beginning in 2023, urban water retailers will be required to report on "annual water use objectives" by November 1 of each year and to achieve these objectives by 1 January 2027 (per CWC § 10609). The annual water use objectives will be calculated based on standards for indoor residential water use, outdoor residential water use, and distribution system water loss. Additionally, it is anticipated that performance-based standards for the commercial, industrial, and institutional sectors, separate from the annual water use objectives, will also be developed by Department of Water Resources (DWR) and implemented in the future. However, the specific standards that will be used to determine a retailer's annual urban water use objectives are currently under development by DWR, and thus, the annual urban water use objectives for the District cannot be calculated or estimated at this time. Once the urban water use objectives are released, the District will evaluate its historical and current water use compared to the new objectives, and will evaluate the need to adjust its conservation and water loss management measures to meet the new objectives.

One of the components for calculating the future water use objectives is provided for in CWC § 10609.4.(a), which states "(1) Until January 1, 2025, the standard for indoor residential water use shall be 55 gallons per capita daily. (2) Beginning January 1, 2025, and until January 1, 2030, the standard for

indoor residential water use shall be the greater of 52.5 gallons per capita daily or a standard recommended pursuant to subdivision (b). (3) Beginning January 1, 2030, the standard for indoor residential water use shall be the greater of 50 gallons per capita daily or a standard recommended pursuant to subdivision (b)." Table 4-11 and associated chart shows an estimate of future per capita residential water use, broken out by estimated indoor and outdoor water use[3].

Based on these estimates, per capita indoor residential potable water use may be higher than the indoor use standards presented in the legislation. Although indoor residential water use is not expected to be within the indoor residential water use standard, it should be noted that because standards have not yet been finalized for the outdoor water use or water loss components of the future water use objectives, it cannot be known whether projected demands for the District will be in compliance with the pending requirements.

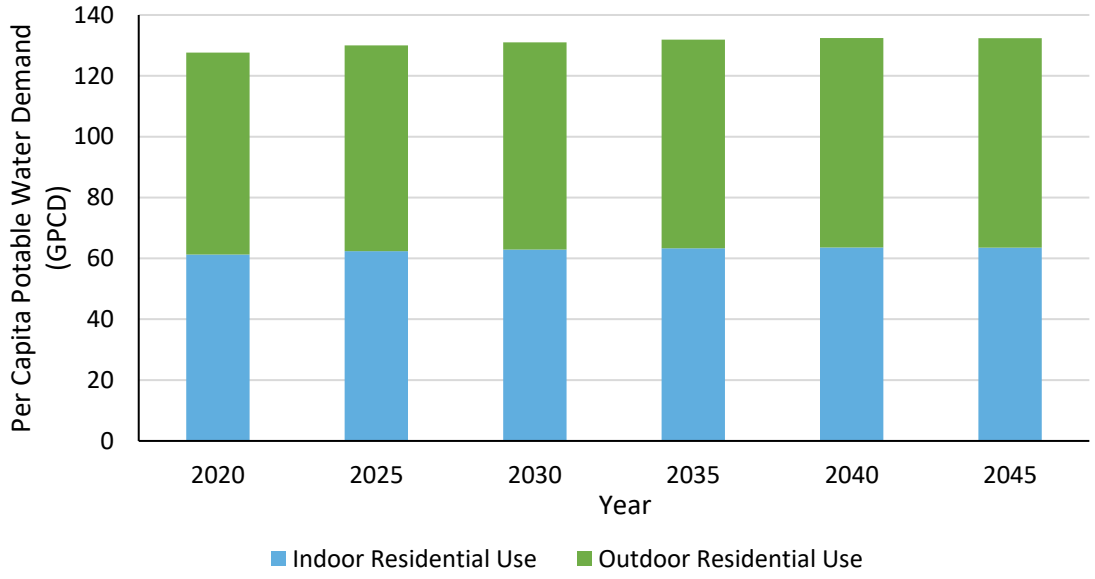
[3] Indoor water use was estimated to be the lowest monthly water use for the residential sector during 2019, accounting for the number of days in each month. Outdoor water use for each sector was estimated to be the difference between the total water use and the estimated indoor water use. The residential indoor water use was estimated to be 48% of the total residential water use.

Table 4-11 Current and Projected Residential Per Capita Water Use

Year	Residential Potable Water Demand	Service Area Population	Per Capita Residential Potable Water Use (GPCD)	Approximate Per Capita Indoor Residential Potable Water Use (GPCD)	Approximate Per Capita Outdoor Residential Potable Water Use (GPCD)
2020	2,156	15,071	128	61	66
2025	2,233	15,353	130	62	68
2030	2,298	15,647	131	63	68
2035	2,358	15,947	132	63	69
2040	2,412	16,252	132	64	69
2045	2,458	16,563	132	64	69

NOTES:
(a) Unless otherwise noted, volumes are in units of AF.
(b) Indoor water use was estimated to be the lowest monthly water use for the residential sector during 2019, accounting for the number of days in each month. Outdoor water use for each sector was estimated to be the difference between the total water use and the estimated indoor water use. The residential indoor water use was estimated to be 48 percent of the total residential water use.
(c) Indoor and Outdoor water use values are rounded and may not add up to the total potable water use.

Chart 4-11 Current and Projected Indoor and Outdoor Residential Per Capita Potable Water Use



5. BASELINE WATER USE AND WATER CONSERVATION TARGETS

☑ ***CWC § 10608.24 (b)***

Each urban retail water supplier shall meet its urban water use target by December 31, 2020.

☑ ***CWC § 10608.28***

(a) An urban retail water supplier may meet its urban water use target within its retail service area, or through mutual agreement, by any of the following:

(1) Through an urban wholesale water supplier.

(2) Through a regional agency authorized to plan and implement water conservation, including, but not limited to, an agency established under the Bay Area Water Supply and Conservation Agency Act (Division 31 (commencing with Section 81300)).

(3) Through a regional water management group as defined in Section 10537.

(4) By an integrated regional water management funding area.

(5) By hydrologic region.

(6) Through other appropriate geographic scales for which computation methods have been developed by the department.

(b) A regional water management group, with the written consent of its member agencies, may undertake any or all planning, reporting, and implementation functions under this chapter for the member agencies that consent to those activities. Any data or reports shall provide information both for the regional water management group and separately for each consenting urban retail water supplier and urban wholesale water supplier.

With the adoption of the Water Conservation Act of 2009, also known as Senate Bill (SB) x7-7, the State is required to reduce urban water use by 20 percent by the year 2020. Each urban retail water supplier was required to develop a baseline daily per capita water use ("baseline water use") in their 2010 Urban Water Management Plan (UWMP) and establish per capita water use targets for 2015 and 2020 in order to help the state achieve the 20 percent reduction.

In support of implementing the requirements of SBx7-7, the California Department of Water Resources (DWR) produced a set of methodologies for developing baseline and compliance water use and targets, which are included in Methodologies for Calculating Baseline and Compliance Urban Per Capita Water, California Department of Water Resources Division of Statewide Integrated Water Management Water Use and Efficiency Branch (Methodologies; DWR, 2016).

Baselines and water use targets for the Rio Linda/Elverta Community Water District (the District) were initially calculated in the 2010 UWMP in response to the Water Conservation Act. Per requirements of the DWR, the 2015 UWMP updated the baseline and water use target calculations using 2010 United States Census (Census) data.

In this chapter, the District demonstrates compliance with its 2020 per capita water use target. As part of the compliance reporting for SBx7-7, water suppliers are required to complete and submit a set of standardized verification tables in their 2020 UWMPs. The information in these tables is discussed and

summarized in the following subsections, and the complete set of SBx7-7 standardized tables, for both individual and regional reporting, is included in Appendix E.

This chapter includes the following sections that describe the District's service area population and water use targets:

5.1 Service Area Population

5.2 Baseline Water Use

5.3 Water Use Targets

5.4 2020 Target Compliance

5.1 Service Area Population

☑ ***CWC § 10608.20 (e)***

An urban retail water supplier shall include in its urban water management plan due in 2010 pursuant to Part 2.6 (commencing with Section 10610) the baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data.

☑ ***CWC § 10608.20 (g)***

An urban retail water supplier may update its 2020 urban water use target in its 2015 urban water management plan required pursuant to Part 2.6 (commencing with Section 10610).

☑ ***Methodology 2 Service Area Population****.*

DWR will examine discrepancy between the actual population estimate and DOF's projections for 2010; if significant discrepancies are discovered, DWR may require some or all suppliers to update their baseline population estimates. (DWR, 2016b)

Per the Methodologies, DWR examined the actual population estimates and the California Department of Finance's (DOF's) projections for 2010 and required that water suppliers calculate their baseline population for the 2015 UWMPs using 2000 and 2010 Census data. In the 2015 UWMP, the District utilized the Persons Per Connection Methodology to calculate baseline and water use targets which satisfied the DWR requirement. These estimates are included in Appendix E. The 2020 compliance year population for the District is 15,071.

5.2 Baseline Water Use

The baseline water use is the water supplier's average gross daily water use per capita measured in gallons. This baseline includes all water entering the delivery system, including water losses. A water supplier may deduct from its gross water use water conveyed to other urban water suppliers, water placed into long-term storage, recycled water delivered within the supplier's service area, water delivered for agricultural use, water conveyed to other urban water suppliers, and water used for industrial processes.

Water suppliers must define a 10- or 15-year base (or baseline) period for water use that is then used to develop their future target per capita water use. Water suppliers must also calculate water use over a 5-

year baseline period and use that value to determine a minimum required reduction in water use by 2020. Utilizing a 15-year baseline period is only allowed for water suppliers that meet at least 10 percent of their 2008 measured retail water demand through recycled water; the District does not meet this criterion and thus selected a 10-year baseline.

The 10-year baseline water use for the District was calculated as 226 gallons per capita per day (GPCD) using gross per capita water usage data (calculated as total water entering the District's water distribution system divided by total population) for the 10-year period between 1995 and 2004. The 5-year baseline water use was calculated as 210 GPCD using per capita water usage data for the 5-year period between 2003 and 2007. The 5- and 10-year baseline water uses are shown in Table 5-1.

Table 5-1 Baselines and Targets Summary (DWR Table 5-1)

Baseline Period	Start Year	End Year	Average Baseline GPCD	Confirmed 2020 Target GPCD
10-15 year	1995	2004	226	181
5 Year	2003	2007	210	
NOTES: (a) Volumes are in units of GPCD.				

5.3 Water Use Targets

☑ ***CWC § 10608.20 (b)***

An urban retail water supplier shall adopt one of the following methods for determining its urban water use target pursuant to subdivision (a):

(1) Eighty percent of the urban retail water supplier's baseline per capita daily water use.

(2) The per capita daily water use that is estimated using the sum of the following performance standards:

(A) For indoor residential water use, 55 gallons per capita daily water use as a provisional standard. Upon completion of the department's 2016 report to the Legislature pursuant to Section 10608.42, this standard may be adjusted by the Legislature by statute.

(B) For landscape irrigated through dedicated or residential meters or connections, water efficiency equivalent to the standards of the Model Water Efficient Landscape Ordinance set forth in Chapter 2.7 (commencing with Section 490) of Division 2 of Title 23 of the California Code of Regulations, as in effect the later of the year of the landscape's installation or 1992. An urban retail water supplier using the approach specified in this subparagraph shall use satellite imagery, site visits, or other best available technology to develop an accurate estimate of landscaped areas.

(C) For commercial, industrial, and institutional uses, a 10-percent reduction in water use from the baseline commercial, industrial, and institutional water use by 2020.

(3) Ninety-five percent of the applicable state hydrologic region target, as set forth in the state's draft 20x2020 Water Conservation Plan (dated April 30, 2009). If the service area of an urban water supplier includes more than one hydrologic region, the supplier shall apportion its service area to each region based on population or area.

(4) A method that shall be identified and developed by the department, through a public process, and reported to the Legislature no later than December 31, 2010. The method developed by the department shall identify per capita targets that cumulatively result in a statewide 20-percent reduction in urban daily per capita water use by December 31, 2020. In developing urban daily per capita water use targets, the department shall do all of the following:

(A) Consider climatic differences within the state.

(B) Consider population density differences within the state.

(C) Provide flexibility to communities and regions in meeting the targets.

(D) Consider different levels of per capita water use according to plant water needs in different regions.

(E) Consider different levels of commercial, industrial, and institutional water use in different regions of the state.

(F) Avoid placing an undue hardship on communities that have implemented conservation measures or taken actions to keep per capita water use low.

☑ ***CWC § 10608.22***

Notwithstanding the method adopted by an urban retail water supplier pursuant to Section 10608.20, an urban retail water supplier's per capita daily water use reduction shall be no less than 5 percent of base daily per capita water use as defined in paragraph (3) of subdivision (b) of Section 10608.12. This section does not apply to an urban retail water supplier with a base daily per capita water use at or below 100 gallons per capita per day.

The Water Conservation Act requires that agencies calculate their 2020 water use targets (2020 Targets) using one of the following four methods:

- Method 1: 80 percent of the water supplier's baseline 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 uses;
- Method 3: 95 percent of the applicable state hydrologic region target as stated in the State's 20x2020 Water Conservation Plan, dated February 2010; or
- Method 4: Total savings subtracted from baseline water use. Savings include metering savings, residential savings, commercial, industrial, and institutional savings, and landscape and water loss savings.

The District's 2020 Target was calculated to be 181 GPCD using Method 1 and is presented in Table 5-1. Under CWC §10608.22, water suppliers must confirm that the 2020 Target will reduce 2020 water use by a minimum of 5 percent from the 5-year base daily per capita water use. As discussed in Section 5.2, the District's 5-year baseline water use is 210 GPCD. The 2020 Target (181 GPCD) is less than 95 percent of the 5-year baseline water use, so the selected 2020 Target is in compliance with the UWMP Act.

5.4 2020 Target Compliance

☑ ***CWC § 10608.24 (b)***

Each urban retail water supplier shall meet its urban water use target by December 31, 2020.

☑ ***CWC § 10608.24 (d)***

(1) When determining compliance daily per capita water use, an urban retail water supplier may consider the following factors:

(A) Differences in evapotranspiration and rainfall in the baseline period compared to the compliance reporting period.

(B) Substantial changes to commercial or industrial water use resulting from increased business output and economic development that have occurred during the reporting period.

(C) Substantial changes to institutional water use resulting from fire suppression services or other extraordinary events, or from new or expanded operations, that have occurred during the reporting period.

(2) If the urban retail water supplier elects to adjust its estimate of compliance daily per capita water use due to one or more of the factors described in paragraph (1), it shall provide the basis for, and data supporting, the adjustment in the report required by Section 10608.40.

☑ ***CWC § 10608.40***

Urban water retail suppliers shall report to the department on their progress in meeting their urban water use targets as part of their urban water management plans submitted pursuant to Section 10631. The data shall be reported using a standardized form developed pursuant to Section 10608.52.

The CWC Section 10608.24 (b) directs that water suppliers must calculate their actual water use in 2020 to determine whether or not they have met their 2020 Target. Per the Methodologies (DWR, 2016),

there are several allowable adjustments that can be made to a supplier's 2020 per capita water use calculations as part of evaluating target compliance. However, no adjustments were made to District's 2020 per capita water use calculations.

As described above, in 2020, actual water demand within the District's service area was 2,867 acre feet (AF) and the service area population was 15,071. As seen in Table 5-2, the calculated per capita water use in 2020 was 170 GPCD, approximately 94 percent of the District's 2020 Target of 181 GPCD. Therefore, the District is in compliance with its 2020 Target.

Table 5-2 2020 Compliance (DWR Table 5-2)

2020 GPCD			2020 Confirmed Target GPCD	Did Supplier Achieve Targeted Reduction for 2020?
Actual 2020 GPCD	2020 TOTAL Adjustments	Adjusted 2020 GPCD *(Adjusted if applicable)*		
170	0	0	181	Yes
NOTES: (a) Volumes are in units of GPCD.				

6. WATER SYSTEM SUPPLIES

☑ ***CWC § 10631 (b)*** *A plan shall be adopted in accordance with this chapter that shall do all of the following:*

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).

This chapter provides a description of the Rio Linda/Elverta Community Water District's (District) current water supplies, including a discussion of the underlying groundwater basin and its management, and an assessment of the energy intensity used to operate the District's treatment and distribution system. This chapter includes the following sections which describe the District's water system supplies:

6.1 Purchased Water

6.2 Groundwater

6.3 Surface Water

6.4 Stormwater

6.5 Wastewater and Recycled Water

6.6 Desalinated Water

6.7 Water Exchanges and Transfers

6.8 Potential Water Supply Projects and Programs

6.9 Summary of Existing and Planned Sources of Water

6.10 Special Conditions

6.11 Energy Consumption

6.1 Purchased Water

Historically the District has purchased water from the Sacramento Suburban Water District (SSWD) through interties for emergency supply purposes and is discussed further in Section 6.3 below. The District has not purchased water from SSWD since 2014 and currently does not plan to purchase any imported water to meet demands in the service area.

6.2 Groundwater

☑ ***CWC § 10631***

(b) (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.

Groundwater is the sole source of potable water supply for the District. This section includes information regarding the underlying groundwater basin description, groundwater management and coordination with the applicable Groundwater Sustainability Agencies (GSAs), followed by a discussion of historical pumping and supply sufficiency, which is further discussed in Chapter 7.

6.2.1 Groundwater Basin Description

As shown on Figure 6-1, the District overlies the North American Subbasin (also referred to herein as the "Basin") of the Sacramento Valley Basin (California Department of Water Resources [DWR] Basin No. 5-021.64). The Basin is not adjudicated, and in its recent evaluation of California groundwater basins, DWR determined that the Basin is not in a condition of critical overdraft.[4]

The Basin is designated as a high priority basin under DWR's 2019 Phase 2 Basin Prioritization and is required to comply with the Sustainable Groundwater Management Act (SGMA).[5] Under this

[4] DWR, 2019. Sustainable Groundwater Management Act 2018 Basin Prioritization, State of California, dated January 2019.

[5] Ibid.

prioritization process, basins are ranked on eight components, and their priority is based on the total number of points assigned. If a basin is assigned more than 21 total points, it is defined as "high priority." In the case of the Basin, a total of 25.5 points were assigned, resulting in a designation as "high priority." The main factors driving the Basin's designation include the total number of public supply wells (4 out of 5 possible points), groundwater reliance (3.5 out of 5 possible points), population (3 out of 5 possible points), population growth (3 out of 5 possible points), total number of wells (3 out of 5 possible points) and the amount of irrigated acres (3 out of 5 possible points).

The Basin includes portions of Sutter, Placer, and Sacramento counties and is bounded by the American, Bear, Feather, and Sacramento Rivers. The Basin is in the Sacramento Valley and is filled with sediments derived from the adjacent Sierra Nevada foothills, which contain fresh water. In general, the fresh-water bearing sediments beneath the Basin are thinnest to the east and thickens to the west (~2,000 feet). The sediments consist of alternating layers of clays, silts, sand and gravel. The sand and gravel layers into which wells are constructed are referred to as aquifers. The sand and gravel layers were deposited by meandering rivers and creeks. Even though the sediments are not present as continuous layers, they are assumed to be interconnected and therefore the Basin is assumed to have one principal aquifer (GEI Consultants, 2021).

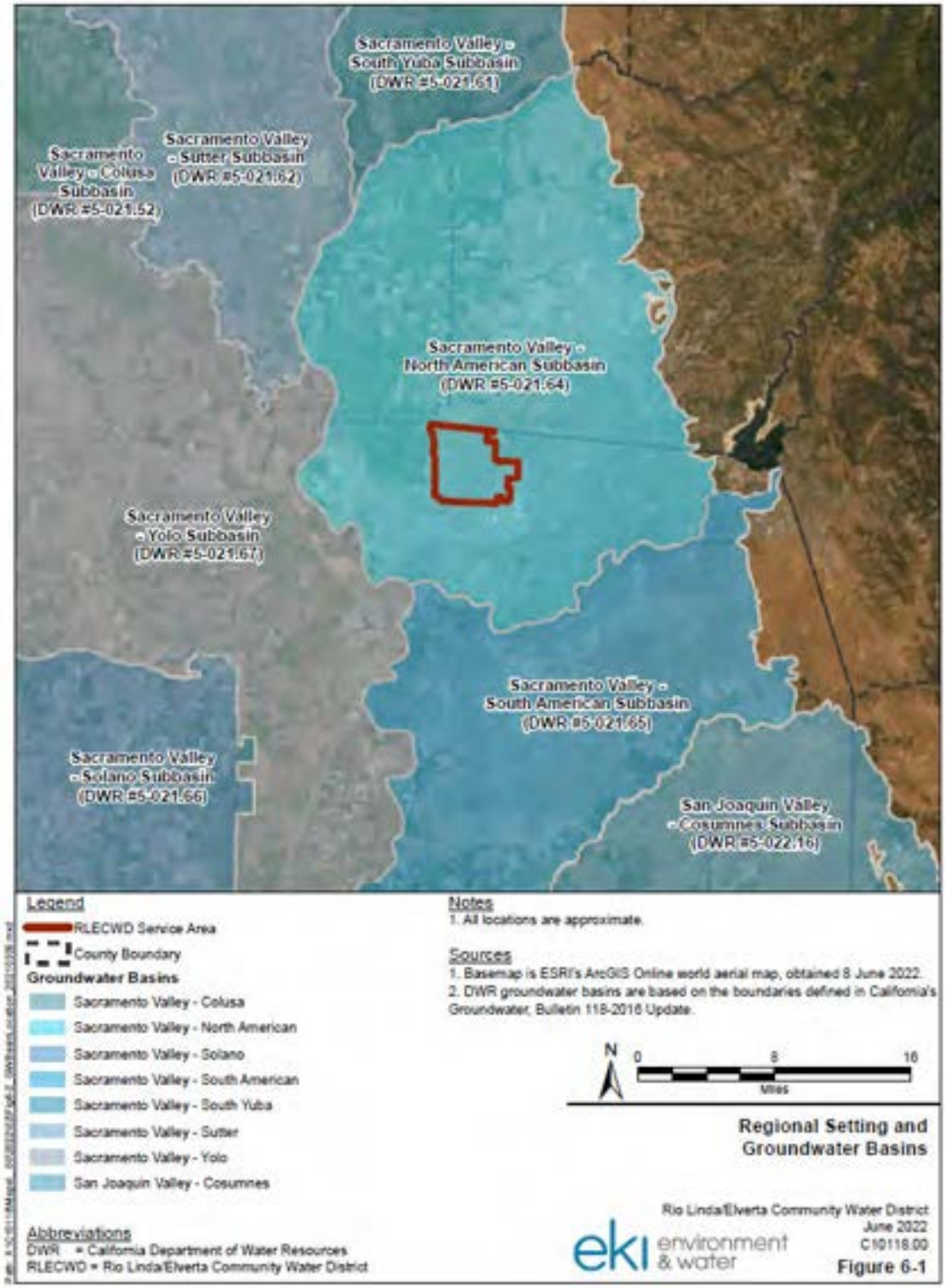
A Groundwater Sustainability Plan (GSP) for the Basin was adopted and submitted to DWR in January 2022. Prior to the GSP adoption the Basin was being managed pursuant to previously adopted Assembly Bill (AB) 3030 Groundwater Management Plans (GMPs). Additionally, the American River Basin Integrated Regional Water Management Plan (IRWMP), which covers some portions of the Basin, was adopted in 2018. Additional details on the Basin are given in the key documents described below related to groundwater management of the Basin, which are incorporated into this Urban Water Management Plan (UWMP or Plan) by reference:

- The Sacramento Groundwater Authority (SGA) GMP provided the current understanding of the underlying basin based on years of ongoing groundwater management and describes past sustainability efforts (SGA, 2014). The SGA GMP is available on the SGA website:
  https://www.sgah2o.org/wp-content/uploads/2016/06/GMP_SGA_2014_Final.pdf

- The American River Basin (ARB) IRWMP is a water resources planning and development program developed with stakeholders' input that identifies and proposed solutions for major water management related issues in the ARB area (Regional Water Authority, 2018). The ARB IRWMP outlines goals, objectives, and proposes action specific strategies to achieve them. The ARB IRWMP is available on the Regional Water Authority (RWA) website:
  https://rwah2o.org/programs/integrated-regional-water-management/american-river-basin-irwmp-2018-update/

- The final GSP for the Basin is available on the DWR website:
  https://sgma.water.ca.gov/portal/gsp/all

Figure 6-1 Groundwater Basins in the Vicinity of the Rio Linda/Elverta Community Water District



6.2.2 Non-SGMA Groundwater Management

Pursuant to CWC § 10750 et seq., § 10753.7, and § 10753.8, the SGA GMP provides a framework that focuses on managing and monitoring some portions of the Basin within Sacramento County to benefit all users within the management area. SGA's core management responsibilities are as follows: (1) To maintain the long-term sustainable yield of the North Basin; (2) To manage the use of groundwater in the North Basin and facilitate implementation of an appropriate conjunctive use program by water purveyors; (3) To coordinate efforts among those entities represented on the governing body of the JPA to devise and implement strategies to safeguard groundwater quality; and (4) to work collaboratively with other entities, including groundwater management agencies formed in other areas of Sacramento County and adjacent political jurisdictions, to promote coordination of policies and activities throughout the region (SGA, 2014).

The Basin falls within the Upper Coon-Upper Auburn and Lower American watersheds and is in the ARB IRWMP region. The ARB IRWMP is a water resources planning and development program developed with stakeholders' input that identifies and proposes solutions for major water management related issues in the ARB area (Regional Water Authority, 2018). The ARB IRWMP outlines goals, objectives, and proposes action specific strategies to achieve them. In addition, the ARB IRWMP ranks water resources projects in the ARB, based on their alignment with regional priorities and implementability, to help prioritize projects that help implement IRWMP. The main goals and objectives for the region, as specified in the ARB IRWMP include: (1) Provide reliable and sustainable water resources, sufficient to meet the existing and future needs of the Region; (2) Protect and enhance the quality of surface water and groundwater; (3) Protect and enhance the environmental resources of the watersheds within the Region; (4) Protect the people, property, and environmental resources of the Region from damaging flooding; (5) Manage the Region's groundwater basin sustainability; and (6) Develop and adopt groundwater sustainability plans or alternative groundwater sustainability plans by 2022.

The above plans served as the groundwater management programs in the Basin prior to the adoption of the North American Subbasin GSP (January 2022).

6.2.3 SGMA Groundwater Management

In 2014, the California State Legislature enacted SGMA with subsequent amendments in 2015. SGMA requires the formation of GSAs and the development and implementation of GSPs for groundwater basins that are designated by DWR as medium or high priority. As a high priority, non-critically overdrafted and non-adjudicated basin, the Basin is subject to the requirements of SGMA, including the requirement to be covered by one or more GSAs and to prepare and submit to DWR one or more GSPs by January 31, 2022.

Pursuant to these SGMA requirements, the District is a member of the SGA Groundwater Sustainability Agency (GSA) which is one of the five GSAs in the North American Subbasin of the Sacramento Valley Groundwater Basin (DWR Basin No. 5-021.64), who are working together to implement a single GSP. The SGA is a Joint Powers Authority (JPA) formed in 1998 to manage the groundwater basin in Sacramento County north of the American River and became the exclusive GSA for its portion of the Basin in 2016. SGA has a governing board of directors comprised of representatives of 14 water agencies and other water users within their jurisdiction: California American Water, Carmichael Water District, Citrus

Heights Water District, City of Folsom, City of Sacramento, County of Sacramento, Del Paso Manor Water District, Fair Oaks Water District, Golden State Water Company, Natomas Central Mutual Water Company, Orange Vale Water Company, Sacramento Suburban Water District (SSWD), San Juan Water District, Agricultural Representative, Commercial/Industrial Self-supplied Representative and the District. The remainder of the Basin is covered by four other GSAs: (1) Reclamation District 1001 (RD1001) GSA; (2) South Sutter Water District GSA; (3) Sutter County GSA; and (4) West Placer County GSA. These five GSAs developed a single GSP for the Basin that was adopted and submitted to DWR by the statutory deadline of January 31, 2022.

The North American Subbasin GSP supersedes the existing groundwater management plans. The GSP development process considered the existing management plans and incorporated them directly or by reference. As part of implementation of the GSP the GSAs will continue coordination with the responsible agencies of the existing plans.

6.2.4 Groundwater Production

This section describes the District's historical and projected uses of groundwater.

6.2.4.1 *Groundwater Supply Wells*

The District currently operates twelve municipal groundwater supply wells, (Well 2a, 3, 4, 6, 7, 8, 9, 10, 11, 12, 15, and 16), one elevated reservoir, one inline booster station, two pressure reducing valve stations, a reservoir and a pump station (Affinity Engineering, 2014 & District Operations Superintendent). As shown on Figure 3-2, these wells are located throughout the District's service area.

Well production capacity ranges from 450 to 900 gallons per minute (gpm) for the older wells and 1,500 to 2,800 gpm for the two newer wells (Well 16 and Well 15, respectively). The District's storage capacity includes one 10,000-gallon elevated reservoir and one 1,200,000-gallon reservoir.

Water quality and well age issues have affected pumping and some wells have been placed offline due to water quality issues and poor performance. Some wells have had treatment added or been modified to improve performance. As seen in Table 6-1, the well depths range from 267 to 590 feet with the oldest well drilled pre-1960s and newest well drilled in 2021, and all wells have a chlorine treatment at the wellhead.

Table 6-1 Rio Linda/Elverta Community Water District Production Wells

Well No.	Depth, feet	Pump Capacity, gpm	Date Drilled	Notes
2a	520	800	1993	Chlorine treatment at wellhead; Well operates based on local system pressure.
3	267	600	1957	Chlorine treatment at wellhead; Well operates based on local system pressure.
4	492	600	Pre-1960	Chlorine treatment at wellhead; Well operates based on local system pressure.
6	570	500	1965	Chlorine treatment at wellhead; Well operates based on local system pressure.
7	356	700	1974	Chlorine treatment at wellhead; Well operates based on local system pressure.
8a	393	600	1987	Chlorine treatment at wellhead; Well operates based on local system pressure.
9	526	600	1978	Chlorine treatment at wellhead; Well operates based on local system pressure.
10	585	800	1979	Chlorine treatment at wellhead; Well operates based on local system pressure.
11	435	900	1987	Chlorine treatment at wellhead; Well operates based on local system pressure.
12	590	450	1987	Chlorine room to chlorinate the well and system water feeding the reservoir; Pumps water into a ground reservoir; Well operates based on the water level in the ground storage reservoir.
15	460	2800	2012	Chlorine treatment at wellhead; Main District supply for the water system and typically runs most of the time.
16	515	1500	2021	Chlorine treatment at wellhead; Main District supply for the water system and typically runs most of the time.

6.2.4.2 *Historical Groundwater Use*

Groundwater production over the period of 2016 through 2020 is presented in Table 6-2. Over this time frame, the District's groundwater production has fluctuated in response to demand. Maximum groundwater production occurred in 2020 (2,867 acre-feet [AF]) and minimum total groundwater production occurred in 2016 (2,236 AF). The available groundwater supply has been sufficient to meet all of the District's groundwater demands in the past five years and all prior years.

Table 6-2 Groundwater Volume Pumped (DWR Table 6-1)

	Supplier does not pump groundwater. The supplier will not complete the table below.					
	All or part of the groundwater described below is desalinated.					
Groundwater Type	Location or Basin Name	2016	2017	2018	2019	2020
Alluvial Basin	Sacramento Valley Groundwater Basin North American Subbasin	2,236	2,459	2,507	2,439	2,867
	TOTAL	2,236	2,459	2,507	2,439	2,867
NOTES: (a) Volumes are in units of AF. (b) Groundwater is pumped from 12 production wells.						

6.2.4.3 *Projected Future Groundwater Use*

Groundwater supply from the District's wells is expected to meet total potable demand for the District through the planning horizon (2045) as discussed further in Section 6.9 and shown on Table 6-10.

6.3 Surface Water

The District constructed an intertie with SSWD to access supplemental water, which could be surface water and/or groundwater. The District has not purchased water from SSWD since 2014 and currently relies on the intertie for emergencies only. The District currently does not impound or divert surface water as a means to meet demands within the service area.

6.4 Stormwater

The District has no current plans to capture stormwater for beneficial use within the service area.

6.5 Wastewater and Recycled Water

☑ ***CWC § 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.

The Sacramento Area Sewer District (SASD) provides wastewater collection services within the District's service area for some of the District customers, while the other customers have private septic systems. The District does not have a recycled water distribution system that serves recycled water to District customers.

6.5.1 Wastewater Collection, Treatment, and Disposal

☑ ***CWC § 10633 (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.

☑ ***CWC § 10633 (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.

☑ ***CWC § 10633 (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.

The SASD provides wastewater collection services within the District's service area. The Sacramento Regional County Sanitation District (Regional San) provides treatment and disposal services for the entire Sacramento metropolitan area and surrounding areas, including the District. The Sacramento Regional Wastewater Treatment Plant (SRWWTP) receives and treats approximately 150 million gallons per day (mgd). The current capacity of the SRWWTP to treat dry weather flows is approximately 181 mgd. The SRWWTP produces a disinfected secondary effluent that is discharged into the Sacramento River downstream from the community of Freeport. The principal treatment processes are primary sedimentation, pure-oxygen activated sludge, secondary sedimentation, and chlorination/de-chlorination. Regional San produces recycled water which meets Title 22 California Code of Regulations recycled water requirements to serve non-potable uses including landscape irrigation, industrial uses, and environmental restoration. There are no recycled water facilities within the District service area.

The SRWWTP is currently being upgraded to meet more stringent discharge requirements to the Sacramento River. These upgrades are part of the EchoWater project and include nutrient removal, filtration, and additional disinfection. Upgrades are expected to be completed by 2023.

Because the SRWTP treats wastewater for a larger population than exists in the RLECWD service area, an estimated per capita wastewater generation factor was used to calculate the volume of wastewater

generated by the customers in the Regional San service area. The wastewater generation factor is based on the total population served and the average daily flow for the SRWWTP. In 2020, the SRWWTP served approximately 1.6 million residents and treated an average daily flow of 136 mgd, making the average per capita wastewater generation factor for SRWWTP 85 gallons per day (gpd)[6].

Table 6-3 summarizes the volume of wastewater collected within the District's service area in 2020. The District currently does not have infrastructure to treat and discharge wastewater within the District's service area, therefore Table 6-4 is not applicable and is left blank.

[6] Data provided by Regional San on 12 May 2022.

Table 6-3 Wastewater Collected Within Area in 2020 (DWR Table 6-2)

	There is no wastewater collection system. The supplier will not complete the table below.
	Percentage of 2020 service area covered by wastewater collection system *(optional)*
	Percentage of 2020 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?	Volume of Wastewater Collected from UWMP Service Area 2020	Name of Wastewater Treatment Agency Receiving Collected Wastewater	Treatment Plant Name	Is WWTP Located Within UWMP Area?	Is WWTP Operation Contracted to a Third Party? *(optional)*
Sacramento Area Sewer District	Estimated	1,435	Sacramento County Regional Sanitation District	Regional San	No	No
Total Wastewater Collected from Service Area in 2020:		1,435				

NOTES:
(a) Volumes are in units of AF. (b) Volume is estimated using an average per capita wastewater generation factor of 85 gallons per day and the 2020 population from Table 3-1.

Table 6-4 Wastewater Treatment and Discharge Within Service Area in 2020 (DWR Table 6-3)

X	No wastewater is treated or disposed of within the UWMP service area. The supplier will not complete the table below.										
Wastewater Treatment Plant Name	Discharge Location Name or Identifier	Discharge Location Description	Wastewater Discharge ID Number *(optional)*	Method of Disposal	Does This Plant Treat Wastewater Generated Outside the Service Area?	Treatment Level	2020 volumes				
							Wastewater Treated	Discharged Treated Wastewater	Recycled Within Service Area	Recycled Outside of Service Area	Instream Flow Permit Requirement
						Total					
NOTES:(a)											

6.5.2 Current and Projected Uses of Recycled Water

☑ ***CWC § 10633 (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.☑ ***CWC § 10633 (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.

☑ ***CWC § 10633 (e)***

The projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years.

The District currently does not have infrastructure to distribute recycled water within the District's service area, therefore Table 6-5 is not applicable and is left blank.

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

X	Recycled water is not used and is not planned for use within the service area of the supplier. The supplier will not complete the table below.									
Name of Supplier Producing (Treating) the Recycled Water:										
Name of Supplier Operating the Recycled Water Distribution System:										
Supplemental Water Added in 2020 (volume)										
Source of 2020 Supplemental Water										
Beneficial Use Type	**Potential** Beneficial Uses of Recycled Water (Describe)	Amount of **Potential** Uses of Recycled Water (Quantity)	General Description of 2020 Uses	Level of Treatment	2020	2025	2030	2035	2040	2045
				Total:						
				2020 Internal Reuse						
NOTES:										

6.5.3 Comparison of Previously Projected Use and Actual Use

☑ ***CWC § 10633 (e)***

A description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision.

☑ ***CWC § 10633 (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.

The District currently does not have infrastructure to distribute recycled water within the District's service area, therefore Table 6-6 is not applicable and is left blank.

Table 6-6 2015 UWMP Recycled Water Use Projection Compared to 2020 Actual (DWR Table 6-5)

X	Recycled water was not used in 2015 nor projected for use in 2020. The supplier will not complete the table below.

Beneficial Use Type	2015 Projection for 2020	2020 Actual Use
Total		
NOTES:		

6.5.4 Promoting Recycled Water Use

☑ ***CWC § 10633 (e-g)***

(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.

At this time, as shown in Table 6-7, the District does not have any plans to initiate the use of recycled water within the District. In the future, the District may participate in studies evaluating the feasibility of adding recycled water to its water supply portfolio. However, any such project must be economically

feasible. If and when recycled water becomes available within the District's service area in the future, appropriate financial incentives would be considered to encourage recycled water use.

Table 6-7 Methods to Expand Future Recycled Water Use (DWR Table 6-6)

X	Supplier does not plan to expand recycled water use in the future. Supplier will not complete the table below but will provide narrative explanation.		
	Provide page location of narrative in UWMP		
Name of Action	Description	Planned Implementation Year	Expected Increase in Recycled Water Use
		Total	
NOTES:			

6.6 Desalinated Water

☑ ***CWC § 10631 (g)*** *A plan shall be adopted in accordance with this chapter and shall do all of the following:*

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

There are no opportunities or plans for the development of desalinated water in the District.

6.7 Water Exchanges and Transfers

☑ ***CWC § 10631 (c)*** *A plan shall be adopted in accordance with this chapter and shall do all of the following:*

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

The District does not hold any surface water rights in the area that could be transferred to other agencies and is not pursuing water transfers or exchanges at this time.

6.8 Potential Water Supply Projects and Programs

☑ ***CWC § 10631*** *A plan shall be adopted in accordance with this chapter and shall do all of the following:*

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

(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.

The District currently has four planned water supply-related improvement projects. However, these projects either do not increase water supply and/or are on hold pending funding availability and are therefore not included in Table 6-8 as expected future water supplies. The projects include:

a. Annual Pipeline Replacement, which includes replacement of approximately 1,100 feet of existing 8-inch diameter pipeline as needed starting in 2022. This project will improve system reliability, but is not expected to increase supplies available to the District.

b. Well 12A Design and Construction, which includes replacing Well 12 with a new well that is more efficient and has an expected capacity of 1,500 gpm. This project is anticipated to improve system reliability, and to increase the operational flexibility of the groundwater supply, but does not constitute an additional source of supply.

c. The District and El Dorado County Water & Power Authority (EDWAPA) have entered into a Memorandum of Understanding with the purpose of the District and EDWAPA to working together to put EDWAPA's surface water rights to use by the District until EDWAPA has a need for them. This project is currently on hold, and at this time it is not known whether the District will obtain temporary access to the surface water rights. Given this uncertainty, this is not considered to be a source of supply for the District at this time.

d. River Arc Participation, which consists of six local water purveyors (District, City of Sacramento, Sacramento County Water Agency, California American Water Company, Placer County Water Agency, and City of Roseville) working together to construct a surface water treatment plant that would treat Sacramento River water and deliver treated water to the Region. This project is currently on hold, and at this time it is not known whether the treatment plant will be constructed or how much water would be available to the District. Given this uncertainty, this is not considered to be a source of supply for the District at this time.

Groundwater will likely continue to be the only potable water supply source for the District over the planning horizon (i.e., through 2045). The District will maintain sufficient wells and distribution facilities to meet the anticipated increases in future demand as needed.

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

	No expected future water supply projects or programs that provide a quantifiable increase to the agency's water supply. Supplier will not complete the table below.					
X	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.					
65	Provide page location of narrative in the UWMP					
Name of Future Projects or Programs	Joint Project with other suppliers?		Description (if needed)	Planned Implementation Year	Planned for Use in Year Type	Expected Increase in Water Supply to Supplier
	Y/N	*If Yes, Supplier Name*				
NOTES:						

6.9 Summary of Existing and Planned Sources of Water

☑ ***CWC § 10631 (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).*

☑ ***CWC § 10631 (b) (4) (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.*

The District's current and potential future water supplies are summarized in Sections 6.1 through 6.8. The District's historical, current and projected water supply (potable water) are summarized in Table 6-9 and Table 6-10. As discussed above, groundwater will be used to serve all projected potable water demand within the District's service area through 2045. Therefore, the supply amounts in Table 6-10 equal the projected demand in each year. The actual availability of this water supply depends on several factors and is discussed in detail in Chapter 7.

It should be noted that the North American Subbasin is not adjudicated, and the projected groundwater supply volumes are not intended to and do not determine, limit or represent the District's water rights or maximum pumping volumes. Any determination of District's water rights, as an overlying owner, appropriator, municipal water purveyor or otherwise, is beyond the scope of this report and the UWMP statutes and regulations.

Table 6-9 Water Supplies - Actual (DWR Table 6-8)

Water Supply	Additional Detail on Water Supply	Actual Volume					Water Quality	Total Right or Safe Yield *(optional)*
		2016	2017	2018	2019	2020		
Groundwater (not desalinated)	From North American Groundwater Principal Aquifer	2,236	2,459	2,507	2,439	2,867	Drinking Water	
Total		2,236	2,459	2,507	2,439	2,867		

NOTES:
(a) Volumes are in units of AF.
(b) Water Supply is from 12 wells and data are from the District's monthly production reports.

Table 6-10 Water Supplies - Projected (DWR Table 6-9)

Water Supply	Additional Detail on Water Supply	Projected Water Supply									
		2025		2030		2035		2040		2045	
		Reasonably Available Volume	Total Right or Safe Yield (optional)	Reasonably Available Volume	Total Right or Safe Yield (optional)	Reasonably Available Volume	Total Right or Safe Yield (optional)	Reasonably Available Volume	Total Right or Safe Yield (optional)	Reasonably Available Volume	Total Right or Safe Yield (optional)
Groundwater (not desalinated)	North American Subbasin	2,876		2,953		3,026		3,092		3,153	
Total		2,876		2,952		3,026		3,092		3,153	

NOTES:
(a) Volumes are in units of AF.

6.10 Special Conditions

6.10.1 Climate Change Effects

The District is committed to incorporating climate change into its ongoing water supply planning. SGMA dictates that GSPs include basin-wide water budget models under various climate change scenarios, including future conditions which account for the effects of estimated climate change. These scenarios and results are discussed in detail in the North American Subbasin GSP.

The final GSP for the North American Subbasin is available on the DWR SGMA Portal:

- https://sgma.water.ca.gov/portal/gsp/all

6.10.2 Regulatory Conditions and Project Development

Emerging regulatory conditions may affect planned future projects and the characterization of future water supply availability and analysis. The District does not have any current plans to develop additional supply sources. If the District does move forward with any plans to develop supply projects, emerging regulatory conditions will be considered, and the associated water supply reliability impacts will be assessed in future UWMP updates.

6.10.3 Other Locally Applicable Criteria

Other locally applicable criteria may affect characterization and availability of an identified water supply. The District does not have any current plans to develop additional supply sources. If the District does move forward with any plans to develop supply projects, locally applicable criteria will be considered, and the associated water supply reliability impacts will be assessed in future UWMP updates.

Under SGMA, GSAs have the authority to implement projects and management actions that help basins reach their sustainability goal, including such actions as setting allocations for groundwater pumping, prohibiting development of new groundwater wells, or implementing fees for pumping volumes. As described in Section 6.2, the North American Subbasin GSP is in the implementation phase and the District (as a GSA) is actively participating in this process. If such actions are implemented within the Basin, the District will consider these actions as a part of its future supply planning efforts.

6.11 Energy Consumption

☑ ***CWC § 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.

The "Total Utility Approach" as defined by DWR in the UWMP Guidebook 2020 is used to report water-related energy consumption data for the District. Calendar year 2020 is selected as the one-year reporting period, and utility bills for the associated reporting period are used as the source for energy consumption data.

Within the service area, the District uses energy to pump groundwater, treat and distribute water supplies through its distribution systems. As discussed earlier in Chapter 6, groundwater is the District's sole source of water supply. The energy used by the treatment and distribution systems, which includes several pump stations, pump booster, and wells, is metered and documented in monthly Sacramento Municipal Utility District (SMUD) bills. In Calendar Year 2020, the District used 1,572,275 kilowatt-hour (kWh) of energy to operate the water supply system and deliver 2,867 AF of water to customers in the service area, or 548.4 kWh/AF (Table 6-11).

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

Urban Water Supplier:	*Rio Linda/Elverta Community Water District*

Water Delivery Product

Retail Potable Deliveries

Enter Start Date for Reporting Period	1/9/2020	Urban Water Supplier Operational Control		
End Date	1/7/2021			
Is upstream embedded in the values reported?	No	Sum of All Water Management Processes	Non-Consequential Hydropower	
Water Volume Units Used	AF	Total Utility	Hydropower	Net Utility
Volume of Water Entering Process (volume unit)		*2,867*	*0*	*2,867*
Energy Consumed (kWh)		*1,572,275*	*0*	*1,572,275*
Energy Intensity (kWh/volume)		*548.4*	*0.0*	*548.4*

Quantity of Self-Generated Renewable Energy

0 kWh

Data Quality

Metered Data

Data Quality Narrative:

Volume of water data is from the District's well production data. Energy usage is for water facilities and is from the District's energy bills.

Narrative:

Total energy consumption represents the energy consumed during pumping, treatment, conveyance, and distribution.

7. WATER SUPPLY RELIABILITY

☑ ***CWC § 10620 (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.

☑ ***CWC § 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.

This chapter describes the reliability of the Rio Linda/Elverta Community Water District's (also referred to herein as "the District") water supplies. Assessment of water supply reliability is complex and dependent upon a number of factors, such as the number of water sources, regulatory and legal constraints, hydrological and environmental conditions, climate change, and expected growth, among others. Based on available historical information and projections of future water uses, regulatory and legal constraints, and hydrological and environmental conditions, including climate change, the District has made its best determination of future water supply reliability of for the District. This chapter includes the following sections:

7.1 Constraints on Water Sources

7.2 Reliability of the Type of Year

7.3 Supply and Demand Assessment

7.4 Water Supply Management Tools and Options

7.5 Drought Risk Assessment

7.1 Constraints on Water Sources

Groundwater is the sole water supply for the District. Several potential constraints on future groundwater supply availability, water quality, and climate change are identified herein. These constraints, along with associated management strategies, are summarized in the following sections.

7.1.1 Supply Availability

Historically, the groundwater supplies available to the District from the underlying North American Subbasin (referred to herein as the "Basin") have always been sufficient to meet the District's demands and District wells have not dewatered, even during historical drought periods.

Due to successful conservation efforts and response to the historic drought, water demand (and thus the District's groundwater pumping volumes) were lower from 2014 through 2019 (i.e., averaging 2,366 acre-feet [AF]) than they had been in the previous three years (i.e., averaging 2,818 AF). Additionally,

the District is actively pursuing a variety of supply reliability planning efforts to reduce the potential for future shortfalls.

The Sustainable Groundwater Management Act (SGMA) requires Groundwater Sustainability Plans (GSPs) to include basin-wide water budget models that consider all projected beneficial uses of groundwater and assess groundwater sustainability under various climate change scenarios, including future conditions, which account for the effects of climate change. The District's projected groundwater demands from the District's 2015 UWMP, which are quite larger than the projected demands in this UWMP, have been incorporated into all of the modeling and water budget scenarios developed for the North American Subbasin GSP. The modeling results do not indicate a shortage of water supply for the Subbasin under current conditions or projected conditions scenarios. Therefore, it is appropriate to assume that the District's groundwater supplies will be 100 percent reliable and equal to projected demands under all conditions (i.e., current and projected, and for normal, single dry, and multiple dry years including a five-year drought period).

It is also important to note that the majority of groundwater pumping in the North American Subbasin is for agricultural use. From a regional and Basin-wide standpoint, the District's pumping is only a small fraction of total groundwater pumping. Based on the water budget modeling, done as part of the North American Subbasin GSP, average annual groundwater pumping from the Basin between 2009 through 2018 totaled approximately 296,400 AFY, including approximately 200,300 AFY for irrigated agriculture and 66,600 AFY for Urban and Industrial use (including all other urban and industrial suppliers, such as the City of Sacramento, California American water, Golden State Water Company, and Sacramento Suburban Water District, among others).[7] These data show that Urban and Industrial pumping accounted for approximately 22 percent of total pumping in the Basin, of which the District's pumping accounts for only a small portion. It is therefore likely that management of agricultural groundwater use, rather than Urban and Industrial use, will be a much larger determining factor in maintaining groundwater sustainability in the Basin in the future.

The District is a member of one of the five Groundwater Sustainability Agencies (GSAs) who developed and are implementing the North American Subbasin GSP. Together, the Basin GSAs identified several projects and management actions (PMAs) to support achievement of the Basin's sustainability goal. One of the projects, Project #1 – Regional Conjunctive Use Expansion – Phase 1, identifies additional conjunctive use that could be implemented in the near-term by reoperating existing water treatment and distribution facilities. The project plans to provide additional surface water during wet years to reduce existing demand on groundwater. The District is one of the agencies expected to participate. The District is committed to doing its part to achieve and maintain groundwater sustainability in the Basin.

[7] Data from Table 6-13. Average Annual Water Budget – Groundwater System, North American Subbasin (AFY), Historical Condition Water Budget.

7.1.2 Water Quality

☑ *CWC § 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.

Impaired water quality has the potential to affect water supply reliability. The District has and will continue to meet all state and federal water quality regulations. All drinking water standards are set by the United States Environmental Protection Agency (USEPA) under the authorization of the Federal Safe Drinking Water Act of 1974. In California, the State Water Resources Control Board (SWRCB), Division of Drinking Water (DDW) can either adopt the USEPA standards or set more stringent standards, which are then codified in Title 22 of the California Code of Regulations. There are two general types of drinking water standards:

- **Primary Maximum Contaminant Levels (MCLs)** are health protective standards and are established using a very conservative risk-based approach for each constituent that takes into account potential health effects, detectability and treatability, and costs of treatment. Public water systems may not serve water that exceeds Primary MCLs for any constituent.
- **Secondary MCLs** are based on the aesthetic qualities of the water such as taste, odor, color, and certain mineral content, and are considered limits for constituents that may affect consumer acceptance of the water.

The District routinely monitors its wells and the water that is treated and served to customers to ensure that water delivered to customers meets these drinking water standards. The results of this testing are reported to the SWRCB DDW following each test and are summarized annually in Water Quality Reports (also known as "Consumer Confidence Reports"), which are provided to customers by mail and made available on the District's website.[8]

A detailed review of the water quality conditions of the Basin are provided in the Basin's GSP, available on Department of Water Resources (DWR) SGMA Portal.[9]

Although there is the potential for some regulated constituents to be present in source water, as documented in the District's Water Quality Reports, the District's monitoring, management, and treatment of its water results in high quality drinking water meeting all drinking water standards being served to customers. The District tracks changes in constituent concentrations to proactively address water quality issues before they impact supply reliability. In the event that water quality constituents are detected in source water at concentrations requiring treatment, the District is able to take impacted wells offline to implement appropriate treatment. Further, as part of the siting process for all new wells,

[8] http://www.rlecwd.com/consumer-confidence-report-ccr/

[9] SGMA Groundwater Management (SGMA) Portal - Department of Water Resources (ca.gov)

the District evaluates the presence of groundwater contamination and avoids placing wells in areas of known contamination.

The SWRCB is currently in the process of updating the MCL for hexavalent chromium. Hexavalent chromium is naturally occurring and is present in some of the groundwater supply accessed by District wells. The District is following the development of the hexavalent chromium, and is planning to implement wellhead treatment for hexavalent chromium, to proactively manage this constituent so that water served to District customers is below MCLs.

Given the District's proactive monitoring and management of water quality in its source water supplies, water quality is not expected to impact the reliability of the District's available supplies within the planning horizon (i.e., through 2045).

7.1.3 Climate Change

☑ ***CWC § 10631 (b) (1)***

…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.

Section 6.10.1 provides a summary of the assessments of the applicable climate change on supplies that the District has previously performed and those planned for the near term, as well as those related to SGMA efforts for the North American Subbasin. As part of the GSP, water budget modeling efforts have incorporated climate change factors for hydrology and surface water supplies in the Basin based on the American River Basin Study (ARBS) Central Tendency 2070 Climate Change Scenario, to obtain estimated climate change impacts through 2042. Section 4.4 presents information on how the impacts of climate change are factored into projected demands in the District. The District is actively working to further quantify and consider future climate change impacts as part of ongoing supply and operations planning.

7.2 Reliability of the Type of Year

☑ ***CWC § 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.

☑ ***CWC § 10631 (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:

☑ ***CWC § 10631 (b)(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.

☑ ***CWC § 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.

Per the UWMP Guidebook 2020, the water service reliability assessment includes three unique year types:

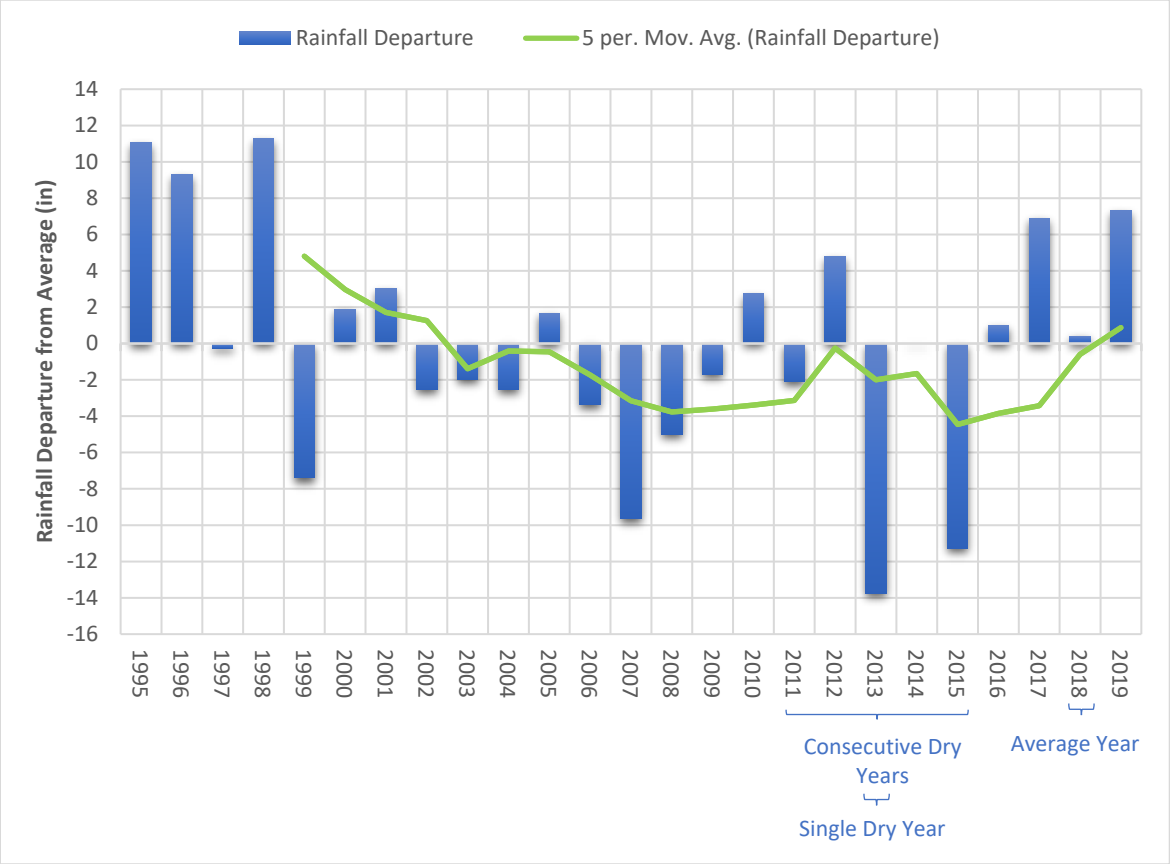
- A normal hydrologic year represents the water supplies available under normal conditions, this could be an averaged range of years or a single representative year,
- A single dry year represents the lowest available water supply, and
- A five-consecutive year drought represents the driest five-year period in the historical record.

Identification of these dry year periods consistent with the UWMP Guidebook 2020 methodology is provided below.

Parameter-elevation Relationships on Independent Slopes Model (PRISM) precipitation data is utilized in Table 7-1 to compare annual rainfall to the historic average (20.0 inches). The designation of Baseline Years for drought planning shown in Table 7-1 below comes from the data underlying this chart.

In the North American Subbasin, a normal hydrologic year occurred in 2018 (20.3 inches) when precipitation was approximately 2 percent above the historic average (20.0 inches) for the period from 1995 to 2019. The driest year occurred in 2013 when the rainfall was approximately 30.9 percent of the average (6.2 inches) and is represented as the single dry year. The multiple dry water years used to represent a five-consecutive year drought are 2011 through 2015. This period represents the driest five-year period on record for the historical period from 1995 to 2019, with an average precipitation of 15.4 inches per year.

Figure 7-1 Deviation of Annual Rainfall from Long-Term Average



Source: PRISM Climate Group, Oregon State University, http://prism.oregonstate.edu

As discussed in Section 7.1.1, the groundwater supply available to the District is expected to be sufficient to meet all projected potable water demands of the District under all hydrologic conditions, including in normal, single dry, and multiple dry years. As such, the projected "volume available" estimates presented in Table 7-1 are equal to the maximum demands across projected years and year types shown in Table 7-2, Table 7-3, and Table 7-4. For example, the assumed volume available in a representative single dry year in Table 7-1 is equal to the projected demand for the year 2045 as shown in Table 7-3.

It should be noted that supply volumes in Table 7-1, Table 7-2, Table 7-3, and Table 7-4 do not represent the total maximum amount supply that may be available to the District in a given year, but rather reflect the fact that the supply has always been sufficient to meet demands, and is projected to continue to be sufficient to meet demands in the future.

Table 7-1 Basis of Water Year Data (Reliability Assessment) (DWR Table 7-1)

Year Type	Base Year	Available Supplies if Year Type Repeats		
			Quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP. Location _____	
		X	Quantification of available supplies is provided in this table as either volume only, percent only, or both.	
		Volume Available		% of Average Supply
Average Year	2018	3,153		100%
Single-Dry Year	2013	3,153		
Consecutive Dry Years 1st Year	2011	3,153		
Consecutive Dry Years 2nd Year	2012	3,153		
Consecutive Dry Years 3rd Year	2013	3,153		
Consecutive Dry Years 4th Year	2014	3,153		
Consecutive Dry Years 5th Year	2015	3,153		

NOTES:
(a) Volumes are in units of AF.
(b) As discussed in Section 7.1, total supplies are considered to be equal to the projected demand under all year types. Therefore, available volumes presented here are the maximum demands across projected years in Table 7-2, Table 7-3, and Table 7-4.

7.3 Supply and Demand Assessment

Water supply and demand patterns change during normal, single dry, and multiple dry years. As described above, the District's groundwater supply are expected to be able to serve those demands in all year types through 2045.[10]

Table 7-2 shows the projected supply and demand totals (potable water and recycled water) for a normal year. The supply and demand totals are consistent with those shown in Table 6-10 and Table 4-7,

[10] The balance between supply and demand totals excludes usage reductions that are not directly a function of the District's supplies, but are externally-imposed by other entities, such as the 2015 State-mandated cutbacks.

respectively. Table 7-3 shows the projected supply and demand for the single dry year and Table 7-4 shows the projected supply and demand for multiple dry year periods extending five years.

It should be noted that the North American Subbasin is not adjudicated, and the projected groundwater supply volumes are not intended to and do not determine, limit or represent the District's water rights or maximum pumping volumes. Any determination of the District's water rights, as an overlying owner, appropriator, municipal water purveyor or otherwise, is beyond the scope of this report and the UWMP statutes and regulations.

Table 7-2 Normal Year Supply and Demand Comparison (DWR Table 7-2)

	2025	2030	2035	2040	2045
Supply totals *From DWR Table 6-9*	2,876	2,953	3,026	3,092	3,153
Demand totals *From DWR Table 4-3*	2,876	2,953	3,026	3,092	3,153
Difference	0	0	0	0	0

NOTES:
(a) Volumes are in units of AF.
(b) The North American Subbasin is not adjudicated, and these projected supply volumes do not comprise a determination of water rights or maximum allowable pumping.

Table 7-3 Single Dry Year Supply and Demand Comparison (DWR Table 7-3)

	2025	2030	2035	2040	2045
Supply totals	2,876	2,953	3,026	3,092	3,153
Demand totals	2,876	2,953	3,026	3,092	3,153
Difference	0	0	0	0	0

NOTES:
(a) Volumes are in units of AF.
(b) The North American Subbasin is not adjudicated, and these projected supply volumes do not comprise a determination of water rights or maximum allowable pumping.

Table 7-4 Multiple Dry Years Supply and Demand Comparison (DWR Table 7-4)

		2025	2030	2035	2040	2045
First year	Supply totals	2,876	2,953	3,026	3,092	3,153
	Demand totals	2,876	2,953	3,026	3,092	3,153
	Difference	0	0	0	0	0
Second year	Supply totals	2,876	2,953	3,026	3,092	3,153
	Demand totals	2,876	2,953	3,026	3,092	3,153
	Difference	0	0	0	0	0
Third year	Supply totals	2,876	2,953	3,026	3,092	3,153
	Demand totals	2,876	2,953	3,026	3,092	3,153
	Difference	0	0	0	0	0
Fourth year	Supply totals	2,876	2,953	3,026	3,092	3,153
	Demand totals	2,876	2,953	3,026	3,092	3,153
	Difference	0	0	0	0	0
Fifth year	Supply totals	2,876	2,953	3,026	3,092	3,153
	Demand totals	2,876	2,953	3,026	3,092	3,153
	Difference	0	0	0	0	0

NOTES:
(a) Volumes are in units of AF.
(b) The North American Subbasin is not adjudicated, and these projected supply volumes do not comprise a determination of water rights or maximum allowable pumping.

7.4 Water Supply Management Tools and Options

☑ ***CWC § 10620 (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.

The District coordinates on an ongoing basis with all relevant agencies in the region to optimize the use of regional water supplies. This includes the Sacramento Groundwater Authority (SGA) members,[11] Reclamation District 1001 GSA, South Sutter Water District GSA, Sutter County GSA, and West Placer County GSA, and relevant GSAs in the neighboring South American, Yolo, Sutter, and South Yuba Subbasins, and other public and private entities with which the District can collaborate to protect and enhance local groundwater and surface water resources.

The North American Subbasin falls within or includes multiple Groundwater Management Plans (GMPs), Integrated Regional Water Management Plans (IRWMPs), and Agricultural Water Management Plan (AWMPs). Plans within the Basin include:

- Sacramento Groundwater Authority (SGA) GMP 2014,
- Sutter County GMP 2012,
- Western Placer County GMP 2007,
- South Sutter Water District GMP 2009,
- American River Basin IRWMP,
- North Sacramento Valley IRWMP,
- Mokelumne/Amador/Calaveras IRWMP,
- South Sutter Water District AWMP,
- Natomas Mutual Water Company AWMP, and
- Nevada Irrigation District AWMP.

Details of each plan as they relate to the Basin are included in the Description of the Plan Area chapter of the North American Subbasin GSP, which is available on the DWR SGMA Portal.[12] Though the above

[11] SGA comprised of 14 water agencies and other water users within their jurisdiction: California American Water, Carmichael Water District, Citrus Heights Water District, City of Folsom, City of Sacramento, County of Sacramento, Del Paso Manor Water District, Fair Oaks Water District, Golden State Water Company, Natomas Central Mutual Water Company, Orange Vale Water Company, Sacramento Suburban Water District, San Juan Water District, Agricultural Representative, Commercial/Industrial Self-supplied Representative and the District.

[12] https://sgma.water.ca.gov/portal/gsp/all

plans provide management direction, the Basin's GSP extends and supersedes the groundwater management efforts listed above.

In addition to the plans listed above, the District implements water conservation programs that have and will continue to reduce per-capita usage and therefore demands on critical water sources. The District is committed to helping its customers use water efficiently and has developed a range of water conservation programs to support this goal. These water conservation programs are discussed further in Chapter 9.

7.5 Drought Risk Assessment

☑ ***CWC § 10635(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.

7.5.1 Data, Methods, and Basis for Water Shortage Condition

This drought risk assessment considers the effects on available water supply sources of a five-year drought commencing the year after the assessment is completed, i.e., from 2021 through 2025. In the District, the sole supply source is groundwater. As such, the same data, methodology, and basis for the conclusions of the above water supply sufficiency analysis for multiple dry year periods through 2045 holds true for purposes of this drought risk assessment (i.e., supply availability through 2025). Accordingly, as shown in Table 7-5, the groundwater supply is expected to be able to meet the projected demands through 2025, even if there is a five-year drought.

7.5.2 Drought Risk Assessment Water Source Reliability

As described in Chapter 6, groundwater is the sole source of potable water supply for the District. Based on discussion in Section 7.1.1, the District's supply is expected to be sufficient to meet demands in all hydrologic conditions, including an extended five-year drought period.

As described in Sections 4.4 and 6.10.1 of this Plan, the impacts on climate change have already been factored into the District's demand projections and the analysis of the near- and longer-term reliability of the groundwater supply source available to the District.

Implementation of SGMA in the North American Subbasin is a locally applicable consideration for the District. As discussed in Section 6.2.3 of this Plan, the long-term impacts of SGMA implementation in the North American Subbasin are still uncertain. However, it is the intent of the Projects and Management Actions (PMAs) planned by the Basin GSAs to stabilize water levels and provide for sustainable management of the groundwater resource.

Table 7-5 provides a comparison of the water supply available to the District with the total projected water demand for an assumed drought period of 2021 through 2025. This includes current climate change conditions. It should be noted that because the District only pumps the amount of groundwater necessary to meet demands in a given year, the supply values shown in the table do not represent the total supply available to the District in a given year, but rather reflect the fact that the available supply is sufficient to meet the demands as needed.

The District has developed a Water Shortage Contingency Plan (WSCP, Appendix F and summarized in Chapter 8) to address potential water shortage conditions resulting from any cause (e.g., droughts, impacted distribution system infrastructure, regulatory-imposed shortage restrictions, etc.). The WSCP identifies a variety of actions that the District will implement to reduce demands and further ensure supply reliability at various levels of water shortage. Among these actions includes implementing increased pricing and restrictions on end uses of water.

Table 7-5 Five-Year Drought Risk Assessment Tables to Address Water Code 10635(b) (DWR Table 7-5)

2021	Total
Total Water Use	2,815
Total Supplies	2,815
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
Resulting % Use Reduction from WSCP action	0%

Table 7-5 Five-Year Drought Risk Assessment Tables to Address Water Code 10635(b) (DWR Table 7-5)

2022	Total
Total Water Use	2,830
Total Supplies	2,830
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
Resulting % Use Reduction from WSCP action	0%

2023	Total
Total Water Use	2,846
Total Supplies	2,846
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
Resulting % Use Reduction from WSCP action	0%

Table 7-5 Five-Year Drought Risk Assessment Tables to Address Water Code 10635(b) (DWR Table 7-5)

2024	Total
Total Water Use	2,861
Total Supplies	2,861
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
Resulting % Use Reduction from WSCP action	0%

2025	Total
Total Water Use	2,876
Total Supplies	2,876
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
Resulting % Use Reduction from WSCP action	0%
NOTES: (a) Volumes are in units of AF. (b) Total water use based on interpolation of water use between 2021 through projected water use in 2025.	

8. WATER SHORTAGE CONTINGENCY PLANNING

☑ ***CWC § 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.

Rio Linda/Elverta Community Water District's (District's) Water Shortage Contingency Plan (WSCP) is included as Appendix F. The WSCP serves as a standalone document to be engaged in the case of a water shortage event, such as a drought or supply interruption, and defines specific policies and actions that will be implemented at various shortage level scenarios. The primary objective of the WSCP is to ensure that the District has in place the necessary resources and management responses needed to protect health and human safety, minimize economic disruption, and preserve environmental and community assets during water supply shortages and interruptions. Consistent with California Water Code (CWC) §10632, the WSCP includes six levels to address shortage conditions ranging from up to 10 percent to greater than 50 percent shortage, identifies a suite of demand mitigation measures for the District to implement at each level, and identifies procedures for the District to annually assess whether a water shortage is likely to occur in the coming year, among other things.

A summary of the key elements of the WSCP including water shortage levels and demand-reduction actions is shown in Table 8-1, Table 8-2, and Table 8-3. Additional details are provided in Appendix F.

Table 8-1 Water Shortage Contingency Plan Levels (DWR Table 8-1)

Shortage Level	Percent Shortage Range	Shortage Response Actions
1	Up to 10%	Minimal Shortage – Up to 10% (Voluntary) Includes implementation of voluntary restrictions on end uses (see Table 8-2) as well as agency actions (see Table 8-3).
2	Up to 20%	Moderate Shortage – 10% to 20% (Mandatory) Includes implementation of mandatory restrictions on end uses (see Table 8-2) as well as agency actions (see Table 8-3).
3	Up to 30%	Severe Shortage – 20% to 30% (Mandatory) Includes implementation of mandatory restrictions on end uses (see Table 8-2) as well as agency actions (see Table 8-3).
4	Up to 40%	Severe Shortage – 30% to 40% (Mandatory) Includes implementation of mandatory restrictions on end uses (see Table 8-2) as well as agency actions (see Table 8-3).
5	Up to 50%	Critical Shortage – 40% to 50% (Mandatory) Includes implementation of mandatory restrictions on end uses (see Table 8-2) as well as agency actions (see Table 8-3).
6	>50%	Critical Shortage – greater than 50% (Mandatory) Includes implementation of mandatory restrictions on end uses (see Table 8-2) as well as agency actions (see Table 8-3).
NOTES: The appropriate Stage will be enacted by the Board of Directors to respond to the corresponding estimated water shortage that may result from the following: droughts, extreme weather events, natural disasters, extended power outages, regulatory droughts, and other water shortage conditions.		

Table 8-2 Demand Reduction Actions (DWR Table 8-2)

Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap? (a)	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement?
Non-Drought	Other	--	1. Hoses must be equipped with a shut-off valve for washing vehicles,sidewalks, walkways, or buildings. 2. Restrict water use for ornamental fountains or recommend the use of re-circulated or recycled water. 3. Potable water shall not be applied in any manner to any driveway, sidewalk, or other hard surface except when necessary to address immediate health or safety concerns. 4. Potable water shall not be used to water outdoor landscapes in a manner that causes more than incidental runoff onto non-irrigated areas, walkways, roadways, parking lots, or other hard surfaces. 5. Potable water cannot be applied to outdoor landscapes during and up to 48 hours after measurable rainfall. 6. Potable water shall not be used to irrigate ornamental turf on public street medians. 7. Encourage restaurants and other food service operations to serve water to customers only upon request during a period for which the Governor has issued a proclamation of a state of emergency. 8. Encourage users to wash only full loads of laundry. 9. Broken or defective plumbing and irrigation systems must be repaired orreplaced within a reasonable period. 10. Recreational water features shall be covered when not in use. 11. Single-pass cooling systems on new construction shall not be allowed. 12. Prohibit unauthorized use of hydrants. 13. All water using equipment must be in working order. 14. Encourage greywater use for irrigating landscape where possible. 15. Other measures as may be approved by the State Water Resources Control Board or the District.	Yes

Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap? (a)	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement?
1	Other	5%	1. Continue with "no drought" restrictions and prohibitions except where superseded by more stringent requirements. 2. Require repair of all leaks within 24 hours. 3. Require covers for all recreational water features such as pools. 4. Prohibit Commercial vehicle washing except with use of recycled water. 5. Other measures as may be approved by the State Water Resources Control Board or the District.	Yes
2	Other	15%	1. Continue with Stage 1 restrictions and prohibitions except where superseded by more stringent requirements. 2. Audit and reduce system water losses. 3. Limit irrigation to 3 days/week, 15 minutes/day, between 8PM and 6AM for Dedicated Irrigation, Residential users, and Commercial users. 4. Prohibit single-pass cooling systems. 5. Other measures as may be approved by the State Water Resources Control Board or the District.	Yes
3	Other	25%	1. Continue with Stage 2 restrictions and prohibitions except where superseded by more stringent requirements. 2. Limit irrigation to 2 days/week, 15 minutes/day, between 9PM and 6AM for Dedicated Irrigation, Residential users, and Commercial users. 3. Prohibit Residential washing of vehicles except with use of recycled water. 4. Other measures as may be approved by the State Water Resources Control Board or the District.	Yes
4	Other	35%	1. Continue with Stage 3 restrictions and prohibitions except where superseded by more stringent requirements. 2. Decrease frequency and length of line flushing. 3. No new connections allowed unless already approved 4. Conduct account surveys for Dedicated Irrigation accounts, high water	Yes

Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap? (a)	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement?
			using Commercial users, and high water using Residential users. 5. Other measures as may be approved by the State Water Resources Control Board or the District.	
5	Other	45%	1. Continue with Stage 4 restrictions and prohibitions except where superseded by more stringent requirements. 2. Moratorium on new connections. 3. Limit irrigation to 1 days/week, 10 minutes/day, between 9PM and 6AM for Dedicated Irrigation accounts, Residential users, and Commercial users. 4. Establish water budget with 50% reduction for Dedicated Irrigation accounts, 10% reductions for Residential and 10% for Commercial Users. 5. Other measures as may be approved by the State Water Resources Control Board or the District.	Yes
6	Other	55%	1. Continue with Stage 5 restrictions and prohibitions except where superseded by more stringent requirements. 2. Establish water budget with 100% reduction for Dedicated Irrigation accounts, 30% reductions for Commercial Users, and 25% reductions for Residential users. 3. Other measures as may be approved by the State Water Resources Control Board or the District.	Yes

NOTES:
(a) The percentages listed in this table are the cumulative savings for each shortage level with implementation of corresponding supply augmentation and other agency actions in Table 8-3. Detailed saving estimates based on end use, response action, and implementation rates can be found in Attachment 1 of Appendix F.
(b) Table 8-2 lists each demand reduction action as "other" because they represent a suite of demand reduction actions for each shortage level that include multiple categories of demand reduction actions provided in the DWR drop down menu.

Table 8-3 Supply Augmentation and Other Actions (DWR Table 8-3)

Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier	How much is this going to reduce the shortage gap? (a)	Additional Explanation or Reference *(optional)*
1	Other	5%	1. The District implement media campaigns, including: • Publicize the water shortage and conservation measures using a media campaign, newspaper articles, and website. • Promote water conservation programs. • Hold water efficiency workshops and public events. • Distribute water bill inserts with information about water shortage and conservation.
2	Other	15%	1. Continue with action and measures from Stage 1 except where superseded by more stringent requirements. 2. Accelerate leak detection and repair program. 3. Suspend routine flushing of water mains except when necessary to address immediate health or safety concerns. 4. Reduce distribution system pressures.
3	Other	25%	1. Continue with action and measures from Stage 2 except where superseded by more stringent requirements.
4	Other	35%	1. Continue with action and measures from Stage 3 except where superseded by more stringent requirements.
5	Other	45%	1. Continue with action and measures from Stage 4 except where superseded by more stringent requirements.
6	Other	55%	1. Continue with action and measures from Stage 5 except where superseded by more stringent requirements.

NOTES:
(a) The percentages listed in this table are the cumulative savings for each shortage level with implementation of corresponding demand reduction actions in Table 8-2. Detailed saving estimates based on end use, response action, and implementation rates can be found in Attachment 1 of Appendix F.
(b) Table 8-3 lists each supply augmentation method or other actions by water supplier action as “other” because they represent a suite of actions by the water supplier for each shortage level that include multiple categories of actions provided in the DWR drop down menu.

9. DEMAND MANAGEMENT MEASURES

☑ ***CWC § 10631 (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.

This section provides an overview of the Rio Linda/Elverta Community Water District's (the District's) current and planned demand management measures (DMMs), which include specific types and groupings of water conservation measures typically implemented by water suppliers; the DMMs are closely aligned with the California Urban Water Conservation Council (CUWCC) Best Management Practices. The District is committed to water conservation and has implemented or plans to implement several policies and on-going programs that promote and encourage water conservation.

9.1 Agency Water Conservation

☑ ***CWC § 10631 (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 District implements all of the DMM's, as described below.

9.1.1 DMM 1 – Water Waster Prevention Ordinances

The District's Ordinance No. 2015-01 prohibits water waste by customers[13]. Specifically, it states that "It is necessary for the District to adopt and implement drought response measures and a water conservation and regulatory program to regulate the water consumption activities within the District and ensure that the water delivered in the District is put to beneficial use of the greatest public benefit, with particular regard to domestic use, including human consumption, sanitation, and fire protection, and that the waste or unreasonable use of water is prevented." The updated Water Shortage Contingency Plan (WSCP) included in Chapter 8 of this Plan further describes the District's current WSCP stages and water waste prohibitions. As discussed in the District's WSCP, the District has the authority to require water rationing and conservation and to enforce penalties.

Prohibitions to prevent water waste are included as the Non-Drought Stage of the District's WSCP, and remain in place at all times, irrespective of water supply conditions. The Non-Drought Stage includes the following water waste prohibitions:

- Hoses must be equipped with a shut-off nozzle for washing vehicles, sidewalks, walkways, or buildings.
- Ornamental fountains shall use only re-circulated or recycled water.
- Potable water shall not be applied in any manner to any driveway, sidewalk, or other hard surface except when necessary to address immediate health or safety concerns.
- Potable water shall not be used to water outdoor landscapes in a manner that causes more than incidental runoff onto non-irrigated areas, walkways, roadways, parking lots, or other hard surfaces.
- Potable water shall not be applied to outdoor landscapes during and up to 48 hours after measurable rainfall.
- Potable water shall not be used to irrigate ornamental turf on public street medians.
- Restaurants and other food service operations shall serve water to customers only upon request during a period for which the Governor has issued a proclamation of a state of emergency.

[13] Ordinance No. 2015-01 available here: http://www.rlecwd.com/wp-content/uploads/2014/09/2015-01-Water-Shortages-Ordinances.pdf

- Broken or defective plumbing and irrigation systems must be repaired or replaced within a reasonable period.
- Recreational water features, such as pools and spas, shall be covered when not in use.
- Single-pass cooling systems on new construction shall not be allowed.

In subsequent stages of the WSCP, the water waste prohibitions become increasingly restrictive to respond to water shortages.

9.1.2 DMM 2 – Metering

☑ ***CWC § 526 (a)***

Notwithstanding any other provision of law, an urban water supplier that, on or after January 1, 2004, receives water from the federal Central Valley Project under a water service contract or subcontract … shall do both of the following:

(1) On or before January 1, 2013, install water meters on all service connections to residential and nonagricultural commercial buildings constructed prior to January 1, 1992, located within its service area.

(2) On and after March 1, 2013, or according to the terms of the Central Valley Project water contract in operation, charge customers for water based on the actual volume of deliveries, as measured by a water meter.

☑ ***CWC § 527 (a)***

(a) An urban water supplier that is not subject to Section 526 shall do both of the following:

(1) Install water meters on all municipal and industrial service connections located within its service area on or before January 1, 2025.

All District customer connections are metered and billed based on volume of usage, in addition to fixed fees and capital recovery fees. The District also conducts a meter maintenance and replacement plan to ensure long-term meter accuracy. The implementation of meters allows the District to automate meter reading and provide real-time water use data to District staff and customers that can be used to aggressively target leaks and atypically high water use during normal years and periods of water shortage.

9.1.3 DMM 3 – Conservation Pricing

The District's current water rate structure consists of two components: (1) a bi-monthly service charge based on meter size, to recover the fixed cost associated with meter reading and billing, customer service, meter replacement and repair, and a portion of the costs for maintaining the water system; and (2) a volumetric charge for all water consumed, or a commodity rate charge based on the actual amount of water used, measured in hundreds of cubic feet (ccf). The conservation-oriented, commodity rate charge was implemented in 2021, when the District adopted an inclining block, two-tier rate structure for residential customers. In the event that the District experiences a water supply shortage and Stage 3

of the WSCP is implemented, the District may implement water shortage contingencies (WSC) (see Section 8 and Appendix F.).

9.1.4 DMM 4 – Public Education and Outreach

The District implements a number of public education and outreach initiatives.

Initiatives include:

- Programs Promoting Water Conservation: Educate public on water regulations and water conservation education via website, social media and billing inserts.
- Informative website, online tools, or social media: The District maintains a conservation section of its website (http://www.rlecwd.com/conservation/) that includes water use, irrigation, and water conservation information and links to other sites for additional information. The District also utilizes this platform to inform the public of pending worsening drought conditions.
- Media campaigns and other outreach: The District encourages water conservation in the quarterly The Rio Linda/Elverta WaterWays residential newsletter. Additionally, the District provides monthly, quarterly, and annual updates on water conservation related issues on a routine basis through District General Manager reports, Board of Directors updates, newsletters, and the Consumer Confidence Reports (CCRs).

9.1.5 DMM 5 – Programs to Assess and Manage Distribution System Real Loss

As discussed in Section 4.1.3, distribution system water loss ranged from 4 to 12 percent of total water demand between 2017 and 2021. All District customer connections are metered. The District's water loss control program is designed to minimize water loss and increase understanding of all water uses. The program is divided into leak repair and data analysis. The leak detection and repair program identifies and repairs distribution system leaks. The data analysis program collects leak and water use data to run the AWWA Water Loss model. Results from the Water Loss model are used to inform and support additional efforts to reduce water loss. Additionally, as discussed in Section 6.8 the District has an Annual Pipeline Replacement improvement project planned to replace approximately 1,100-feet of existing old 8-inch diameter pipeline.

9.1.6 DMM 6 – Water Conservation Program Coordination and Staffing Support

The District maintains a conservation coordinator position. The conservation coordinator ensures the program's DMMs are implemented, tracks progress and results, follows the CUWCC guidelines, and is responsible for budgeting and maintaining the conservation program.

Coordination of water conservation needs are directed by the District General Manager with help from District employees, who responds to any related water conservation issue and works directly with the customers as needed.

Contact information for the District's Conservation Coordinator is listed below:

Phone: (916) 991-1000

Email: questions@rlecwd.com

9.1.7 DMM 7 – Other DMMs

At this time, the District does not foresee future implementation of additional DMMs. Through implementation of the DMMs, the District has been able to considerably reduce water demands in its service area and help its customers to achieve water and cost savings.

9.2 Planned Implementation to Achieve Water Use Years

☑ ***CWC § 10631 (e)***

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

(1) (A) … 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.

The District implemented all of the DMMs described in Section 9.2 to achieve its Senate Bill (SB) X7-7 water use targets. As shown in Chapter 5, the District's water use in 2020 was 170 gallons per capital per day (GPCD), which is lower than its SBx7-7 water use target of 181 GPCD.

9.3 Urban Water Use Objectives (Future Requirement)

Beginning in 2023, urban water retailers will be required to report on "annual water use objectives" by November 1 of each year and to achieve these objectives by 1 January 2027 (per CWC § 10609). The annual water use objectives will be calculated based on standards for indoor residential water use, outdoor residential water use, and distribution system water loss. Additionally, it is anticipated that performance-based standards for the commercial, industrial, and institutional sectors, separate from the annual water use objectives, will also be developed by DWR and implemented in the future. However, the specific standards that will be used to determine a retailer's annual urban water use objectives are have not been finalized by DWR, and thus, the annual urban water use objectives for the District cannot be calculated or estimated. Therefore, the District intends to continue implementing DMMs and will evaluate potential adjustments needed to these programs as the annual water use objective standard methodologies are developed in the coming years.

Until such requirements are fully developed and implemented, the District does not anticipate the necessity of implementing other DMMs. Furthermore, as required the District will comply with any future regulations and develop internal processes as needed.

10. PLAN ADOPTION AND SUBMITTAL

This chapter provides information on a public hearing, the adoption process for the Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP), the adopted UWMP and WSCP submittal process, plan implementation, and the process for amending the adopted UWMP or WSCP.

10.1 Notification of UWMP Preparation

☑ ***CWC § 10621 (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.

On 11 March 2022, the Rio Linda/Elverta Community Water District (the District) sent a letter to Regional Water Authority (RWA) to distribute amongst the North American Subbasin Groundwater Sustainability Agencies (GSAs), which includes Sacramento County, and other local agencies, informing them that District was in the process of updating its UWMP and WSCP and soliciting their input in the update process. A listing of the entities contacted is provided in Table 2-4 and Appendix B. The letter was sent more than 60 days before the public hearing as required by code. A sample outreach letter is included in Appendix B.

10.2 Notification of Public Hearing

☑ ***CWC § 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.

10.2.1 Notice to Cities and Counties

On 1 July 2022, the District sent a letter to each of the above-mentioned entities informing them of the locations the Public Review Draft 2020 UWMP and the updated WSCP would be available for review and welcoming their input and comments on the document. The Public Review Draft 2020 UWMP and the WSCP was available for public review on the District's website. The letter also informed the agencies that the UWMP and WSCP public hearing would be held at 6:30pm on 18 July 2022. A sample copy of the notification letters is included in Appendix B.

10.2.2 Notice to the Public

The District issued public notifications soliciting public input during the preparation of 2020 UWMP and the WSCP.

On 1 July 2022 and 8 July 2022, the District published a notice in The Rio Linda News newspaper informing the public that the 2020 UWMP and the WSCP would be available for public review on the District's website, consistent with requirements of California Government Code 6066. The notice also informed the public that the 2020 UWMP and WSCP public hearing would be held at 6:30pm on 18 July 2022. Copies of the newspaper announcements are included in Appendix C.

10.3 Public Hearing and Adoption

☑ ***CWC § 10608.26***

(a) In complying with this part, an urban retail water supplier shall conduct at least one public hearing to accomplish all of the following:

(1) Allow community input regarding the urban retail water supplier's implementation plan for complying with this part.

(2) Consider the economic impacts of the urban retail water supplier's implementation plan for complying with this part.

(3) Adopt a method, pursuant to subdivision (b) of Section 10608.20, for determining its urban water use target.

As described above, the District informed the public and the appropriate agencies of (1) its intent to prepare a UWMP and the associated WSCP, (2) where the UWMP and WSCP were available for public review, and (3) when the public hearing regarding the UWMP and WSCP would be held. All notifications were completed in compliance with the stipulations of Section 6066 of the Government Code.

Pursuant to CWC § 10608.26(a), as part of the public hearing, the District provided the audience with information on compliance with the Senate Bill (SB) X7-7, including its baseline daily per capita water use, water use targets, implementation plan, and 2020 compliance.

This UWMP was adopted by Board action at the Public Hearing during its 18 July 2022 Board of Directors meeting. The WSCP was adopted by Board action at the Public Hearing during its 15 August 2022 Board of Directors meeting. Copies of the adoptions are included in Appendix F and Appendix G.

10.4 Plan Submittal

☑ ***CWC § 10621***

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

☑ ***CWC § 10635 (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.

☑ ***CWC § 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.

A copy of the adopted 2020 UWMP and associated WSCP will be provided to the Department of Water Resources (DWR), the California State Library and Sacramento County within 30 days of the adoption. An electronic copy of the adopted 2020 UWMP will be submitted to the DWR using the DWR online submittal tool.

10.5 Public Availability

☑ ***CWC § 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.

A copy of the adopted 2020 UWMP and associated WSCP will be available for public review in the District Office (730 L Street, Rio Linda, CA 95673) during normal business hours and on the District's website (http://www.rlecwd.com/) within 30 days of filing the plan with DWR.

10.6 Amending an Adopted UWMP or Water Shortage Contingency Plan

☑ ***CWC § 10644 (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.

If the Plan is amended, each of the steps for notification, public hearing, adoption, and submittal will also be followed for the amended document within 30 days of adoption.

11. REFERENCES

Affinity Engineering, 2014, Rio Linda/Elverta Community Water District Water Master Plan, Final, dated April 2014.

Affinity Engineering, 2016, Rio Linda/Elverta Community Water District Elverta Specific Plan Water Supply Strategy, Final, dated January 2016.

Affinity Engineering and J. Crowley Group, 2016, Rio Linda/Elverta Community Water District Elverta Specific Plan Water Supply Assessment, Final, dated January 2016.

DWR, 2016. Methodologies for Calculating Baseline and Compliance Urban Per Capita Water, California Department of Water Resources Division of Statewide Integrated Water Management Water Use and Efficiency Branch, updated March 2016.

DWR, 2019. Sustainable Groundwater Management Act 2018 Basin Prioritization, State of California, dated January 2019.

DWR, 2021. Guidebook for Urban Water Suppliers, 2020 Urban Water Management Plan, dated March 2021.

GEI Consultants, 2021, North American Subbasin Groundwater Sustainability Plan, dated December 2021

M.Cubed, 2016, Projected Statewide and County-Level Effects of Plumbing Codes and Appliance Standards on Indoor GPCD, Draft.

Regional Water Authority, 2018, American River Basin Integrated Regional Water Management Plan 2018 Update, dated July 2018.

Sacramento Area Council of Governments (SACOG), 2021, Attachment A Sacramento Region Draft Growth Projections Technical Memo, presented at December 2021 SACOG board committee meeting.

Sacramento County, 2022, 2021-2029 Housing Element Sacramento County of Sacramento, adopted March 8, 2022.

Sacramento Groundwater Authority (SGA), 2014, Groundwater Management Plan, Sacramento County-North Basin, dated December 2014.

Appendix A

Completed UWMP Checklist

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location
x	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	Section 1 and Section 1.6
x	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.	Summary	Section 1.6
x	x	Section 2.2	10620(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.	Plan Preparation	Section 2.1 and Table 2-1
x	x	Section 2.6	10620(d)(2)	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.	Plan Preparation	Section 1.3, Section 2.2.2, and Table 2-4

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location
x	x	Section 2.6.2	10642	Provide supporting documentation that the water 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	Section 1.3, Section 2.2.3, and Chapter 10
x		Section 2.6, Section 6.1	10631(h)	Retail suppliers will include documentation that they have provided their wholesale supplier(s) - if any - with water use projections from that source.	System Supplies	Section 2.2.1 and Table 2-3
	x	Section 2.6	10631(h)	Wholesale suppliers will include documentation that they have provided their urban water suppliers with identification and quantification of the existing and planned sources of water available from the wholesale to the urban supplier during various water year types.	System Supplies	N/A
x	x	Section 3.1	10631(a)	Describe the water supplier service area.	System Description	Chapter 3
x	x	Section 3.3	10631(a)	Describe the climate of the service area of the supplier.	System Description	Section 3.3 and Table 3-3
x	x	Section 3.4	10631(a)	Provide population projections for 2025, 2030, 2035, 2040 and optionally 2045.	System Description	Section 3.1.1 and Table 3-1

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location
x	x	Section 3.4.2	10631(a)	Describe other social, economic, and demographic factors affecting the supplier's water management planning.	System Description	Section 3.1.2, and Table 3-2.
x	x	Sections 3.4 and 5.4	10631(a)	Indicate the current population of the service area.	System Description and Baselines and Targets	Section 3.1, Section 5.1, and Table 3-1
x	x	Section 3.5	10631(a)	Describe the land uses within the service area.	System Description	Section 3.2 and Figure 3-3.
x	x	Section 4.2	10631(d)(1)	Quantify past, current, and projected water use, identifying the uses among water use sectors.	System Water Use	Chapter 4, Table 4-1, Table 4-2, Table 4-7 and Table 4-8
x	x	Section 4.2.4	10631(d)(3)(C)	Retail suppliers shall provide data to show the distribution loss standards were met.	System Water Use	Section 4.1.3 and Table 4-3
x	x	Section 4.2.6	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	Section 4.2.5 and Table 4-11
x	x	Section 4.2.6	10631(d)(4)(B)	Provide citations of codes, standards, ordinances, or plans used to make water use projections.	System Water Use	Section 4.2.5
x	optional	Section 4.3.2.4	10631(d)(3)(A)	Report the distribution system water loss for each of the 5 years preceding the plan update.	System Water Use	Section 4.1.3 and Table 4-3

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location
x	optional	Section 4.4	10631.1(a)	Include projected water use needed for lower income housing projected in the service area of the supplier.	System Water Use	Section 4.2.4 and Table 4-9
x	x	Section 4.5	10635(b)	Demands under climate change considerations must be included as part of the drought risk assessment.	System Water Use	Section 4.4, Section 6.10.1, Section 7.1.3, and Section 7.5.2
x		Chapter 5	10608.20(e)	Retail suppliers shall provide baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data.	Baselines and Targets	Chapter 5
x		Chapter 5	10608.24(a)	Retail suppliers shall meet their water use target by December 31, 2020.	Baselines and Targets	Section 5.4 and Table 5-2
	x	Section 5.1	10608.36	Wholesale suppliers shall include an assessment of present and proposed future measures, programs, and policies to help their retail water suppliers achieve targeted water use reductions.	Baselines and Targets	N/A

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location
x		Section 5.2	10608.24(d)(2)	If the retail supplier adjusts its compliance GPCD using weather normalization, economic adjustment, or extraordinary events, it shall provide the basis for, and data supporting the adjustment.	Baselines and Targets	Section 5.4 and Table 5-2
x		Section 5.5	10608.22	Retail suppliers' per capita daily water use reduction shall be no less than 5 percent of base daily per capita water use of the 5-year baseline. This does not apply if the suppliers base GPCD is at or below 100.	Baselines and Targets	Section 5.3
x		Section 5.5 and Appendix E	10608.4	Retail suppliers shall report on their compliance in meeting their water use targets. The data shall be reported using a standardized form in the SBX7-7 2020 Compliance Form.	Baselines and Targets	Section 5.4, and Appendix E
x	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.	System Supplies	Section 7.2, Section 7.3, and Section 7.5
x	x	Sections 6.1	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	Section 6.10.1 and Section 7.2

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location
x	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	Chapter 6
x	x	Section 6.1.1	10631(b)(3)	Describe measures taken to acquire and develop planned sources of water.	System Supplies	Section 6.8
x	x	Section 6.2.8	10631(b)	Identify and quantify the existing and planned sources of water available for 2020, 2025, 2030, 2035, 2040 and optionally 2045.	System Supplies	Section 6.9 and Table 6-10
x	x	Section 6.2	10631(b)	Indicate whether groundwater is an existing or planned source of water available to the supplier.	System Supplies	Section 6.2
x	x	Section 6.2.2	10631(b)(4)(A)	Indicate whether a groundwater sustainability plan or groundwater management plan has been adopted by the water supplier or if there is any other specific authorization for groundwater management. Include a copy of the plan or authorization.	System Supplies	Section 6.2.2 and Section 6.2.3
x	x	Section 6.2.2	10631(b)(4)(B)	Describe the groundwater basin.	System Supplies	Section 6.2.1

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location
x	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	Section 6.2.1
x	x	Section 6.2.2.1	10631(b)(4)(B)	For unadjudicated basins, indicate whether or not the department has identified the basin as a high or medium priority. Describe efforts by the supplier to coordinate with sustainability or groundwater agencies to achieve sustainable groundwater conditions.	System Supplies	Section 6.2.1
x	x	Section 6.2.2.4	10631(b)(4)(C)	Provide a detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years	System Supplies	Section 6.2, Table 6-1, Table 6-2 and Figure 3-2.
x	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	Section 6.2.4, Table 6-10, and Figure 3-2
x	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	Section 6.7

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location
x	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)	Section 6.5.1 and Table 6-4
x	x	Section 6.2.5	10633(c)	Describe the recycled water currently being used in the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.2 and Table 6-5
x	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)	Section 6.5.2 and Table 6-5
x	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 a description of the actual use of recycled water in comparison to uses previously projected.	System Supplies (Recycled Water)	Section 6.5.2, Section 6.5.3, Table 6-5, and Table 6-6
x	x	Section 6.2.5	10633(f)	Describe the actions 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.	System Supplies (Recycled Water)	Section 6.5.4 and Table 6-7
x	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)	Section 6.5.4

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location
x	x	Section 6.2.6	10631(g)	Describe desalinated water project opportunities for long-term supply.	System Supplies	Section 6.6
x	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)	Section 6.5.1, Table 6-3, and Table 6-4
x	x	Section 6.2.8, Section 6.3.7	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 5 consecutive water years.	System Supplies	Section 6.8 and Table 6-8
x	x	Section 6.4 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	Section 6.11 and Table 6-11
x	x	Section 7.2	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	Section 7.1.1 and Section 7.1.2
x	x	Section 7.2.4	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	Section 7.4

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location
x	x	Section 7.3	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 water supplier with the total projected water use over the next 20 years.	Water Supply Reliability Assessment	Section 7.2 and Section 7.3
x	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	Section 7.5
x	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 5 consecutive years.	Water Supply Reliability Assessment	Section 7.5.1
x	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	Section 7.5.2, Table 7-2, Table 7-3, Table 7-4, and Table 7-5
x	x	Section 7.3	10635(b)(3)	Include a comparison of the total water supply sources available to the water supplier with the total projected water use for the drought period.	Water Supply Reliability Assessment	Section 7.5.2, Table 7-2, Table 7-4, and Table 7-5

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location
x	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	Section 6.10.1, Section 7.5.1, and Section 7.5.2
x	x	Chapter 8	10632(a)	Provide a water shortage contingency plan (WSCP) with specified elements below.	Water Shortage Contingency Planning	Chapter 8, and Appendix F
x	x	Chapter 8	10632(a)(1)	Provide the analysis of water supply reliability (from Chapter 7 of Guidebook) in the WSCP	Water Shortage Contingency Planning	Chapter 8, and Appendix F
x	x	Section 8.10	10632(a)(10)	Describe reevaluation and improvement procedures for monitoring and evaluation the water shortage contingency plan to ensure risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented.	Water Shortage Contingency Planning	Chapter 8, and Appendix F
x	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	Chapter 8, and Appendix F
x	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	Chapter 8, and Appendix F

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location
x	x	Section 8.3	10632(a)(3)(A)	Define six standard water shortage levels of 10, 20, 30, 40, 50 percent shortage and greater than 50 percent 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	Chapter 8, Table 8-1, and Appendix F
x	x	Section 8.3	10632(a)(3)(B)	Suppliers with an existing water shortage contingency plan that uses different water shortage levels must cross reference their categories with the six standard categories.	Water Shortage Contingency Planning	Chapter 8, and Appendix F
x	x	Section 8.4	10632(a)(4)(A)	Suppliers with water shortage contingency plans that align with the defined shortage levels must specify locally appropriate supply augmentation actions.	Water Shortage Contingency Planning	Chapter 8, Table 8-3, and Appendix F
x	x	Section 8.4	10632(a)(4)(B)	Specify locally appropriate demand reduction actions to adequately respond to shortages.	Water Shortage Contingency Planning	Chapter 8, Table 8-2, and Appendix F
x	x	Section 8.4	10632(a)(4)(C)	Specify locally appropriate operational changes.	Water Shortage Contingency Planning	Chapter 8 and Appendix F

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location
x	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	Chapter 8, Table 8-2, and Appendix F
x	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	Chapter 8, Table 8-2, and Appendix F
x	x	Section 8.4.6	10632.5	The plan shall include a seismic risk assessment and mitigation plan.	Water Shortage Contingency Plan	Chapter 8, and Appendix F
x	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	Chapter 8, and Appendix F
x	x	Section 8.5 and 8.6	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	Chapter 8, and Appendix F
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	Chapter 8, and Appendix F
x	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	Chapter 8, and Appendix F

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location
x	x	Section 8.7	10632(a)(7)(B)	Provide a statement that the supplier will declare a water shortage emergency Water Code Chapter 3.	Water Shortage Contingency Planning	Chapter 8, and Appendix F
x	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	Chapter 8, and Appendix F
x	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	Chapter 8, and Appendix F
x	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	Chapter 8, and Appendix F
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	Chapter 8, and Appendix F
x		Section 8.9	10632(a)(9)	Retail suppliers must describe the monitoring and reporting requirements and procedures that ensure appropriate data is collected, tracked, and analyzed for purposes of monitoring customer compliance.	Water Shortage Contingency Planning	Chapter 8, and Appendix F

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location
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	Chapter 8, and Appendix F
x	x	Sections 8.12 and 10.4	10635(c)	Provide supporting documentation that Water Shortage Contingency Plan has been, or will be, provided to any city or county within which it provides water, no later than 30 days after the submission of the plan to DWR.	Plan Adoption, Submittal, and Implementation	Section 8.13
x	x	Section 8.14	10632(c)	Make available the Water Shortage Contingency Plan to customers and any city or county where it provides water within 30 after adopted the plan.	Water Shortage Contingency Planning	Section 8.13
	x	Sections 9.1 and 9.3	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
x		Sections 9.2 and 9.3	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	Chapter 9

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location
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	Section 10.3
x	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 urban water supplier will be reviewing the plan and considering amendments or changes to the plan. Reported in Table 10-1.	Plan Adoption, Submittal, and Implementation	Section 10.1
x	x	Section 10.4	10621(f)	Each urban water supplier shall update and submit its 2020 plan to the department by July 1, 2021.	Plan Adoption, Submittal, and Implementation	N/A
x	x	Sections 10.2.2, 10.3, and 10.5	10642	Provide supporting documentation that the urban water supplier made the plan and contingency plan available for public inspection, published notice of the public hearing, and held a public hearing about the plan and contingency plan.	Plan Adoption, Submittal, and Implementation	Section 10.5
x	x	Section 10.2.2	10642	The water 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	Section 10.2.1
x	x	Section 10.3.2	10642	Provide supporting documentation that the plan and contingency plan has been adopted as prepared or modified.	Plan Adoption, Submittal, and Implementation	Section 10.3

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location
x	x	Section 10.4	10644(a)	Provide supporting documentation that the urban water supplier has submitted this UWMP to the California State Library.	Plan Adoption, Submittal, and Implementation	Section 10.4
x	x	Section 10.4	10644(a)(1)	Provide supporting documentation that the urban water supplier has submitted this UWMP to any city or county within which the supplier provides water no later than 30 days after adoption.	Plan Adoption, Submittal, and Implementation	Section 10.4
x	x	Sections 10.4.1 and 10.4.2	10644(a)(2)	The plan, or amendments to the plan, submitted to the department shall be submitted electronically.	Plan Adoption, Submittal, and Implementation	Section 10.4
x	x	Section 10.5	10645(a)	Provide supporting documentation that, not later than 30 days after filing a copy of its plan with the department, the supplier has or will make the plan available for public review during normal business hours.	Plan Adoption, Submittal, and Implementation	Section 10.4, and Section 10.5
x	x	Section 10.5	10645(b)	Provide supporting documentation that, not later than 30 days after filing a copy of its water shortage contingency plan with the department, the supplier has or will make the plan available for public review during normal business hours.	Plan Adoption, Submittal, and Implementation	Section 10.5
x	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

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location
x	x	Section 10.7.2	10644(b)	If revised, submit a copy of the water shortage contingency plan to DWR within 30 days of adoption.	Plan Adoption, Submittal, and Implementation	Chapter 8 and Section 10.4

Appendix B

UWMP Agency Notification Letter

RIO LINDA ELVERTA

RLECWD
730 L Street
Rio Linda, CA 95673-3433

WWW.RLECWD.COM
QUESTIONS@RLECWD.COM

Telephone:
(916) 991-1000

COMMUNITY WATER DISTRICT

March 11, 2022

Cecelia Partridge, Executive Assistant
Regional Water Authority
5620 Birdcage Street, Suite 180
Citrus Heights, CA 95610

RE: Notice of Preparation of Urban Water Management Plan and Water Shortage Contingency Plan - 2020 Update

To Whomever It May Concern:

The Urban Water Management Planning Act (California Water Code §10608–10656) requires the Rio Linda Elverta Community Water District (RLECWD) to update its Urban Water Management Plan (UWMP) and associated Water Shortage Contingency Plan (WSCP) every 5 years. RLECWD is currently reviewing its existing UWMP and associated WSCP, which were updated in 2016, and considering revisions to the documents. We invite your agency's participation in this revision process.

A draft of the 2020 UWMP and WSCP will be made available for public review and a public hearing will be scheduled in the second quarter of 2022. In the meantime, if you would like more information regarding the RLECWD's 2015 UWMP and WSCP and the schedule for updating these documents, or if you would like to participate in the preparation of the 2020 UWMP and WSCP, please contact District Contact at:

Rio Linda Elverta Community Water District
730 L Street
Rio Linda, CA 95673
Phone: (916) 991-8891
District Contact Email

Sincerely,

Timothy R. Shaw
General Manager

Appendix C

UWMP Public Hearing Notice

PUBLIC NOTICE

Notice of Public Hearing Urban Water Management Plan and Water Shortage Contingency Plan – 2020 Update

The Urban Water Management Planning Act (California Water Code §10608–10656) requires the Rio Linda/Elverta Community Water District (RLECWD) to update its Urban Water Management Plan (UWMP) and associated Water Shortage Contingency Plan (WSCP) every 5 years. RLEWCD must also make the draft documents available for public review and hold a public hearing before adopting its UWMP and associated WSCP.

This is to notify you that RLECWD will hold a public hearing on July 18, 2022 at 6:30 p.m. during the RLECWD Board Meeting at the Visitors Depot Center (6730 Front Street, Rio Linda, CA 95673) to consider proposed revisions and updates to the 2020 UWMP and associated WSCP. We invite your agency's participation in the process. In conjunction with the update to the UWMP, the public may also provide input on the urban water use target included in the UWMP, any impacts to the local economy, and RLECWD's method of determining its urban water use target.

The UWMP and associated WSCP will be made available for public review by July 1, 2022 at **http://www.rlecwd.com/.**

Visit http://www.rlecwd.com/board-of-directors/board-documents/ for the Board Meeting agenda for the public hearing.

If you have any questions about the 2020 UWMP or WSCP or the process for updating these documents, please contact RLECWD at:

Rio Linda Elverta Community Water District
730 L Street
Rio Linda, CA 95673
Phone: (916) 991-8891
Questions@RLECWD.com

The Rio Linda News 7-1 and 7-8-22

Appendix D

AWWA Water Loss Reports

AWWA Free Water Audit Software:
Reporting Worksheet

WAS v5.0

? Click to access definition
\+ Click to add a comment

Water Audit Report for: Rio Linda/Elverta Community Water District
Reporting Year: 2016 1/1/2016 - 12/2016

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (n/a or 1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades

All volumes to be entered as: MILLION GALLONS (US) PER YEAR

To select the correct data grading for each input, determine the highest grade where the utility meets or exceeds all criteria for that grade and all grades below it.

Master Meter and Supply Error Adjustments

WATER SUPPLIED

<---------- Enter grading in column 'E' and 'J' ---------->

					Pcnt:	Value:	
Volume from own sources:	4	687.368	MG/Yr	5		-2.418	MG/Yr
Water imported:	n/a	0.000	MG/Yr				MG/Yr
Water exported:	n/a	0.000	MG/Yr				MG/Yr

Enter negative % or value for under-registration
Enter positive % or value for over-registration

WATER SUPPLIED: 689.786 MG/Yr

AUTHORIZED CONSUMPTION

Click here: ? for help using option buttons below

				Pcnt:	Value:	
Billed metered:	9	658.355	MG/Yr			
Billed unmetered:	10	0.050	MG/Yr			
Unbilled metered:	n/a	0.000	MG/Yr			
Unbilled unmetered:	5	1.819	MG/Yr		1.819	MG/Yr

Use buttons to select percentage of water supplied **OR** value

AUTHORIZED CONSUMPTION: 660.224 MG/Yr

WATER LOSSES (Water Supplied - Authorized Consumption) 29.562 MG/Yr

Apparent Losses

				Pcnt:	Value:	
Unauthorized consumption:		1.724	MG/Yr	0.25%		MG/Yr

Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

Customer metering inaccuracies:	1	1.650	MG/Yr	0.25%		MG/Yr
Systematic data handling errors:		1.646	MG/Yr	0.25%		MG/Yr

Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed

Apparent Losses: 5.020 MG/Yr

Real Losses (Current Annual Real Losses or CARL)

Real Losses = Water Losses - Apparent Losses: 24.542 MG/Yr

WATER LOSSES: 29.562 MG/Yr

NON-REVENUE WATER

NON-REVENUE WATER: 31.381 MG/Yr

= Water Losses + Unbilled Metered + Unbilled Unmetered

SYSTEM DATA

Length of mains:	5	62.2	miles
Number of active AND inactive service connections:	7	4,627	
Service connection density:		74	conn./mile main

Are customer meters typically located at the curbstop or property line? Yes

(length of service line, beyond the property boundary, that is the responsibility of the utility)

Average length of customer service line:

Average length of customer service line has been set to zero and a data grading score of 10 has been applied

Average operating pressure: 5 55.9 psi

COST DATA

Total annual cost of operating water system:	10	$2,070,610	$/Year
Customer retail unit cost (applied to Apparent Losses):	9	$0.51	$/100 cubic feet (ccf)
Variable production cost (applied to Real Losses):	5	$287.06	$/Million gallons

☐ Use Customer Retail Unit Cost to value real losses

WATER AUDIT DATA VALIDITY SCORE:

*** YOUR SCORE IS: 59 out of 100 ***

A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score

PRIORITY AREAS FOR ATTENTION:

Based on the information provided, audit accuracy can be improved by addressing the following components:

1: Volume from own sources
2: Customer metering inaccuracies
3: Variable production cost (applied to Real Losses)

AWWA Free Water Audit Software:
Reporting Worksheet

WAS v5.0

American Water Works Association.

? Click to access definition

\+ Click to add a comment

Water Audit Report for: Rio Linda/ Elverta Community Water District (3410018)

Reporting Year: 2017 | 1/2017 - 12/2017

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (n/a or 1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades

All volumes to be entered as: MILLION GALLONS (US) PER YEAR

To select the correct data grading for each input, determine the highest grade where the utility meets or exceeds all criteria for that grade and all grades below it.

Master Meter and Supply Error Adjustments

WATER SUPPLIED

<---------- Enter grading in column 'E' and 'J' ---------->

					Pcnt:	Value:	
Volume from own sources:	5	800.882	MG/Yr	3	-3.17%		MG/Yr
Water imported:	n/a	0.000	MG/Yr				MG/Yr
Water exported:	n/a	0.000	MG/Yr				MG/Yr

Enter negative % or value for under-registration

Enter positive % or value for over-registration

WATER SUPPLIED: 827.101 MG/Yr

AUTHORIZED CONSUMPTION

Click here: ? for help using option buttons below

				Pcnt:	Value:	
Billed metered:	4	598.587	MG/Yr			
Billed unmetered:	n/a	0.000	MG/Yr			
Unbilled metered:	4	122.400	MG/Yr			
Unbilled unmetered:	5	10.339	MG/Yr	1.25%		MG/Yr

Default option selected for Unbilled unmetered - a grading of 5 is applied but not displayed

AUTHORIZED CONSUMPTION: 731.326 MG/Yr

Use buttons to select percentage of water supplied **OR** value

WATER LOSSES (Water Supplied - Authorized Consumption) 95.775 MG/Yr

Apparent Losses

				Pcnt:	Value:	
Unauthorized consumption:		2.068	MG/Yr	0.25%		MG/Yr

Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

Customer metering inaccuracies:	3	10.979	MG/Yr	1.50%		MG/Yr
Systematic data handling errors:	5	1.496	MG/Yr	0.25%		MG/Yr

Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed

Apparent Losses: 14.544 MG/Yr

Real Losses (Current Annual Real Losses or CARL)

Real Losses = Water Losses - Apparent Losses: 81.232 MG/Yr

WATER LOSSES: 95.775 MG/Yr

NON-REVENUE WATER

NON-REVENUE WATER: 228.514 MG/Yr

= Water Losses + Unbilled Metered + Unbilled Unmetered

SYSTEM DATA

Length of mains:	5	61.7	miles
Number of active AND inactive service connections:	6	4,631	
Service connection density:		75	conn./mile main

Are customer meters typically located at the curbstop or property line? Yes

(length of service line, beyond the property boundary, that is the responsibility of the utility)

Average length of customer service line:

Average length of customer service line has been set to zero and a data grading score of 10 has been applied

Average operating pressure: 5 | 52.0 psi

COST DATA

Total annual cost of operating water system:	10	$1,749,483	$/Year
Customer retail unit cost (applied to Apparent Losses):	9	$0.55	$/100 cubic feet (ccf)
Variable production cost (applied to Real Losses):	9	$417.18	$/Million gallons

☐ Use Customer Retail Unit Cost to value real losses

WATER AUDIT DATA VALIDITY SCORE:

*** YOUR SCORE IS: 57 out of 100 ***

A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score

PRIORITY AREAS FOR ATTENTION:

Based on the information provided, audit accuracy can be improved by addressing the following components:

1: Volume from own sources

2: Billed metered

3: Customer metering inaccuracies

AWWA Free Water Audit Software:
Reporting Worksheet

WAS v5.0

American Water Works Association.

? Click to access definition

\+ Click to add a comment

Water Audit Report for: Rio Linda/ Elverta Community Water District (3410018)

Reporting Year: 2018 | 1/2018 - 12/2018

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (n/a or 1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades

All volumes to be entered as: MILLION GALLONS (US) PER YEAR

To select the correct data grading for each input, determine the highest grade where the utility meets or exceeds all criteria for that grade and all grades below it.

Master Meter and Supply Error Adjustments

WATER SUPPLIED

<---------- Enter grading in column 'E' and 'J' ---------->

					Pcnt:	Value:	
Volume from own sources:	5	816.546	MG/Yr	3	-0.53%		MG/Yr
Water imported:	n/a	0.000	MG/Yr				MG/Yr
Water exported:	n/a	0.000	MG/Yr				MG/Yr

Enter negative % or value for under-registration

Enter positive % or value for over-registration

WATER SUPPLIED: 820.897 MG/Yr

AUTHORIZED CONSUMPTION

Click here: ? for help using option buttons below

			Pcnt:	Value:	
Billed metered:	4	587.333	MG/Yr		
Billed unmetered:	n/a	0.000	MG/Yr		
Unbilled metered:	4	124.084	MG/Yr		
Unbilled unmetered:	5	10.261	MG/Yr	1.25%	MG/Yr

Use buttons to select percentage of water supplied **OR** value

Default option selected for Unbilled unmetered - a grading of 5 is applied but not displayed

AUTHORIZED CONSUMPTION: 721.678 MG/Yr

WATER LOSSES (Water Supplied - Authorized Consumption) 99.219 MG/Yr

Apparent Losses

			Pcnt:	Value:	
Unauthorized consumption:	2.052	MG/Yr	0.25%		MG/Yr

Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

Customer metering inaccuracies:	3	10.834	MG/Yr	1.50%	MG/Yr
Systematic data handling errors:	5	1.468	MG/Yr	0.25%	MG/Yr

Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed

Apparent Losses: 14.354 MG/Yr

Real Losses (Current Annual Real Losses or CARL)

Real Losses = Water Losses - Apparent Losses: 84.864 MG/Yr

WATER LOSSES: 99.219 MG/Yr

NON-REVENUE WATER

NON-REVENUE WATER: 233.564 MG/Yr

= Water Losses + Unbilled Metered + Unbilled Unmetered

SYSTEM DATA

Length of mains:	5	61.7	miles
Number of active AND inactive service connections:	6	4,637	
Service connection density:		75	conn./mile main

Are customer meters typically located at the curbstop or property line? Yes

(length of service line, beyond the property boundary, that is the responsibility of the utility)

Average length of customer service line:

Average length of customer service line has been set to zero and a data grading score of 10 has been applied

Average operating pressure: 5 | 52.0 psi

COST DATA

Total annual cost of operating water system:	10	$1,919,677	$/Year
Customer retail unit cost (applied to Apparent Losses):	9	$0.66	$/100 cubic feet (ccf)
Variable production cost (applied to Real Losses):	9	$425.35	$/Million gallons

☑ Use Customer Retail Unit Cost to value real losses

WATER AUDIT DATA VALIDITY SCORE:

*** YOUR SCORE IS: 57 out of 100 ***

A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score

PRIORITY AREAS FOR ATTENTION:

Based on the information provided, audit accuracy can be improved by addressing the following components:

1: Volume from own sources

2: Billed metered

3: Customer metering inaccuracies

AWWA Free Water Audit Software:
Reporting Worksheet

WAS v5.0

American Water Works Association.

? Click to access definition

\+ Click to add a comment

Water Audit Report for: Rio Linda/ Elverta Community Water District (3410018)

Reporting Year: 2019 | 1/2019 - 12/2019

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (n/a or 1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades

All volumes to be entered as: MILLION GALLONS (US) PER YEAR

To select the correct data grading for each input, determine the highest grade where the utility meets or exceeds all criteria for that grade and all grades below it.

Master Meter and Supply Error Adjustments

WATER SUPPLIED

<---------- Enter grading in column 'E' and 'J' ---------->

					Pcnt:	Value:	
Volume from own sources:	5	794.860	MG/Yr	3	-0.53%		MG/Yr
Water imported:	n/a	0.000	MG/Yr				MG/Yr
Water exported:	n/a	0.000	MG/Yr				MG/Yr

Enter negative % or value for under-registration

Enter positive % or value for over-registration

WATER SUPPLIED: 799.095 MG/Yr

AUTHORIZED CONSUMPTION

Click here: ? for help using option buttons below

			Pcnt:	Value:	
Billed metered:	4	588.791	MG/Yr		
Billed unmetered:	n/a	0.000	MG/Yr		
Unbilled metered:	4	123.600	MG/Yr		
Unbilled unmetered:	5	9.989	MG/Yr	1.25%	MG/Yr

Use buttons to select percentage of water supplied **OR** value

Default option selected for Unbilled unmetered - a grading of 5 is applied but not displayed

AUTHORIZED CONSUMPTION: 722.380 MG/Yr

WATER LOSSES (Water Supplied - Authorized Consumption) 76.716 MG/Yr

Apparent Losses

			Pcnt:	Value:	
Unauthorized consumption:	1.998	MG/Yr	0.25%		MG/Yr

Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

Customer metering inaccuracies:	3	10.849	MG/Yr	1.50%	MG/Yr
Systematic data handling errors:	5	1.472	MG/Yr	0.25%	MG/Yr

Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed

Apparent Losses: 14.318 MG/Yr

Real Losses (Current Annual Real Losses or CARL)

Real Losses = Water Losses - Apparent Losses: 62.397 MG/Yr

WATER LOSSES: 76.716 MG/Yr

NON-REVENUE WATER

NON-REVENUE WATER: 210.304 MG/Yr

= Water Losses + Unbilled Metered + Unbilled Unmetered

SYSTEM DATA

Length of mains:	5	61.7	miles
Number of active AND inactive service connections:	6	4,640	
Service connection density:		75	conn./mile main

Are customer meters typically located at the curbstop or property line? Yes

(length of service line, beyond the property boundary, that is the responsibility of the utility)

Average length of customer service line:

Average length of customer service line has been set to zero and a data grading score of 10 has been applied

Average operating pressure: 5 | 52.0 psi

COST DATA

Total annual cost of operating water system:	10	$2,762,288	$/Year
Customer retail unit cost (applied to Apparent Losses):	9	$0.66	$/100 cubic feet (ccf)
Variable production cost (applied to Real Losses):	9	$289.29	$/Million gallons

☐ Use Customer Retail Unit Cost to value real losses

WATER AUDIT DATA VALIDITY SCORE:

*** YOUR SCORE IS: 57 out of 100 ***

A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score

PRIORITY AREAS FOR ATTENTION:

Based on the information provided, audit accuracy can be improved by addressing the following components:

1: Volume from own sources

2: Billed metered

3: Customer metering inaccuracies

AWWA Free Water Audit Software:
Reporting Worksheet

WAS v5.0

American Water Works Association.

? Click to access definition

\+ Click to add a comment

Water Audit Report for: Rio Linda/ Elverta Community Water District (3410018)

Reporting Year: 2020 | 1/2020 - 12/2020

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (n/a or 1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades

All volumes to be entered as: MILLION GALLONS (US) PER YEAR

To select the correct data grading for each input, determine the highest grade where the utility meets or exceeds all criteria for that grade and all grades below it.

<---------- Enter grading in column 'E' and 'J' ---------->

Master Meter and Supply Error Adjustments

WATER SUPPLIED

					Pcnt:		Value:	
Volume from own sources:	5	934.400	MG/Yr	3	0.41%	◉ ○		MG/Yr
Water imported:	n/a	0.000	MG/Yr			◉ ○		MG/Yr
Water exported:	n/a	0.000	MG/Yr			◉ ○		MG/Yr

Enter negative % or value for under-registration

Enter positive % or value for over-registration

WATER SUPPLIED: 930.585 MG/Yr

AUTHORIZED CONSUMPTION

Click here: ? for help using option buttons below

				Pcnt:		Value:	
Billed metered:	4	693.700	MG/Yr				
Billed unmetered:	n/a	0.000	MG/Yr				
Unbilled metered:	4	122.800	MG/Yr				
Unbilled unmetered:	5	11.632	MG/Yr	1.25%	◉ ○		MG/Yr

Default option selected for Unbilled unmetered - a grading of 5 is applied but not displayed

AUTHORIZED CONSUMPTION: 828.132 MG/Yr

Use buttons to select percentage of water supplied **OR** value

WATER LOSSES (Water Supplied - Authorized Consumption) 102.452 MG/Yr

Apparent Losses

				Pcnt:		Value:	
Unauthorized consumption:		2.326	MG/Yr	0.25%	◉ ○		MG/Yr

Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

Customer metering inaccuracies:	3	12.434	MG/Yr	1.50%	◉ ○	MG/Yr
Systematic data handling errors:	5	1.734	MG/Yr	0.25%	◉ ○	MG/Yr

Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed

Apparent Losses: 16.495 MG/Yr

Real Losses (Current Annual Real Losses or CARL)

Real Losses = Water Losses - Apparent Losses: 85.958 MG/Yr

WATER LOSSES: 102.452 MG/Yr

NON-REVENUE WATER

NON-REVENUE WATER: 236.885 MG/Yr

= Water Losses + Unbilled Metered + Unbilled Unmetered

SYSTEM DATA

Length of mains:	5	61.7	miles
Number of active AND inactive service connections:	6	4,642	
Service connection density:		75	conn./mile main

Are customer meters typically located at the curbstop or property line? Yes

(length of service line, beyond the property boundary, that is the responsibility of the utility)

Average length of customer service line:

Average length of customer service line has been set to zero and a data grading score of 10 has been applied

Average operating pressure: 5 | 52.0 psi

COST DATA

Total annual cost of operating water system:	10	$3,060,185	$/Year
Customer retail unit cost (applied to Apparent Losses):	9	$0.81	$/100 cubic feet (ccf)
Variable production cost (applied to Real Losses):	9	$289.29	$/Million gallons

☐ Use Customer Retail Unit Cost to value real losses

WATER AUDIT DATA VALIDITY SCORE:

*** YOUR SCORE IS: 57 out of 100 ***

A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score

PRIORITY AREAS FOR ATTENTION:

Based on the information provided, audit accuracy can be improved by addressing the following components:

1: Volume from own sources

2: Billed metered

3: Customer metering inaccuracies

Appendix E

SBx7-7 Compliance Tables

SB X7-7 Table 0: Units of Measure Used in 2020 UWMP* *(select one from the drop down list)*
Acre Feet
**The unit of measure must be consistent throughout the UWMP, as reported in Submittal Table 2-3.*
NOTES:

SB X7-7 Table 2: Method for 2020 Population Estimate	
Method Used to Determine 2020 Population (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:	

SB X7-7 Table 3: 2020 Service Area Population	
2020 Compliance Year Population	
2020	15,071
NOTES:	

SB X7-7 Table 4: 2020 Gross Water Use							
Compliance Year 2020	**2020 Volume Into Distribution System** *This column will remain blank until SB X7-7 Table 4-A is completed.*	**2020 Deductions**					**2020 Gross Water Use**
		Exported Water *	**Change in Dist. System Storage*** (+/-)	**Indirect Recycled Water** *This column will remain blank until SB X7-7 Table 4-B is completed.*	**Water Delivered for Agricultural Use***	**Process Water** *This column will remain blank until SB X7-7 Table 4-D is completed.*	
	2,867	-	-	-	-	-	**2,867**
*** Units of measure (AF, MG , or CCF)** must remain consistent throughout the UWMP, as reported in SB X7-7 Table 0 and Submittal Table 2-3.							
NOTES:							

SB X7-7 Table 5: 2020 Gallons Per Capita Per Day (GPCD)		
2020 Gross Water *Fm SB X7-7 Table 4*	**2020 Population** *Fm SB X7-7 Table 3*	**2020 GPCD**
2,867	15,071	**170**
NOTES:		

SB X7-7 Table 9: 2020 Compliance							
Actual 2020 GPCD[1]	Optional Adjustments to 2020 GPCD Enter "0" if Adjustment Not Used Extraordinary Events[1]	Weather Normalization[1]	Economic Adjustment[1]	TOTAL Adjustments[1]	Adjusted 2020 GPCD [1] *(Adjusted if applicable)*	2020 Confirmed Target GPCD [1, 2]	**Did Supplier Achieve Targeted Reduction for 2020?**
170	-	-	-	-	170	181	**YES**

[1] *All values are reported in GPCD*

[2] ***2020 Confirmed Target GPCD*** *is taken from the Supplier's SB X7-7 Verification Form Table SB X7-7, 7-F.*

NOTES:

SB X7-7 Table 0: Units of Measure Used in UWMP* *(select one from the drop down list)*
Acre Feet
**The unit of measure must be consistent with Table 2-3*
NOTES:

SB X7-7 Table-1: Baseline Period Ranges			
Baseline	**Parameter**	**Value**	**Units**
10- to 15-year baseline period	2008 total water deliveries	3,342	Acre Feet
	2008 total volume of delivered recycled water	0	Acre Feet
	2008 recycled water as a percent of total deliveries	0.00%	Percent
	Number of years in baseline period[1]	10	Years
	Year beginning baseline period range	1995	
	Year ending baseline period range[2]	2004	
5-year baseline period	Number of years in baseline period	5	Years
	Year beginning baseline period range	2003	
	Year ending baseline period range[3]	2007	

[1] *If the 2008 recycled water percent is less than 10 percent, then the first baseline period is a continuous 10-year period. If the amount of recycled water delivered in 2008 is 10 percent or greater, the first baseline period is a continuous 10- to 15-year period.*

[2] *The ending year must be between December 31, 2004 and December 31, 2010.*

[3] *The ending year must be between December 31, 2007 and December 31, 2010.*

NOTES:

SB X7-7 Table 2: Method for Population Estimates	
Method Used to Determine Population (may check more than one)	
☐	**1. Department of Finance** (DOF) DOF Table E-8 (1990 - 2000) and (2000-2010) and DOF Table E-5 (2011 - 2015) when available
☐	**2. Persons-per-Connection Method**
☐	**3. DWR Population Tool**
☒	**4. Other** DWR recommends pre-review
NOTES: Capita per dwelling unit methodology priliminary approved with	

SB X7-7 Table 3: Service Area Population		
Year		**Population**
10 to 15 Year Baseline Population		
Year 1	1995	11,612
Year 2	1996	11,920
Year 3	1997	12,351
Year 4	1998	12,878
Year 5	1999	13,137
Year 6	2000	13,482
Year 7	2001	13,565
Year 8	2002	13,714
Year 9	2003	14,039
Year 10	2004	13,665
Year 11		
Year 12		
Year 13		
Year 14		
Year 15		
5 Year Baseline Population		
Year 1	2003	14,039
Year 2	2004	13,665
Year 3	2005	14,119
Year 4	2006	14,207
Year 5	2007	14,401
2015 Compliance Year Population		
2015		14,813
NOTES:		

SB X7-7 Table 4: Annual Gross Water Use *								
	Baseline Year *Fm SB X7-7 Table 3*	**Volume Into Distribution System** *Fm SB X7-7 Table(s) 4-A*	**Deductions**					**Annual Gross Water Use**
			Exported Water	Change in Dist. System Storage (+/-)	Indirect Recycled Water *Fm SB X7-7 Table 4-B*	Water Delivered for Agricultural Use	Process Water *Fm SB X7-7 Table(s) 4-D*	
10 to 15 Year Baseline - Gross Water Use								
Year 1	1995	2976.979			0		0	2,977
Year 2	1996	3315.6			0		0	3,316
Year 3	1997	3518.834			0		0	3,519
Year 4	1998	3013.549147			0		0	3,014
Year 5	1999	3526.03008			0		0	3,526
Year 6	2000	3335.550088			0		0	3,336
Year 7	2001	3269.320978			0		0	3,269
Year 8	2002	3387.851836			0		0	3,388
Year 9	2003	3164.272946			0		0	3,164
Year 10	2004	3407.930864			0		0	3,408
Year 11	0	0			0		0	0
Year 12	0	0			0		0	0
Year 13	0	0			0		0	0
Year 14	0	0			0		0	0
Year 15	0	0			0		0	0
10 - 15 year baseline average gross water use								**2,194**
5 Year Baseline - Gross Water Use								
Year 1	2003	3,164			0		0	3,164
Year 2	2004	3,408			0		0	3,408
Year 3	2005	3,210			0		0	3,210
Year 4	2006	3,379			0		0	3,379
Year 5	2007	3,407			0		0	3,407
5 year baseline average gross water use								**3,314**
2015 Compliance Year - Gross Water Use								
2015		2,109			0		0	2,109
* NOTE that the units of measure must remain consistent throughout the UWMP, as reported in Table 2-3								
NOTES:								

SB X7-7 Table 4-A: Volume Entering the Distribution System(s)
Complete one table for each source.

Name of Source	groundwater
This water source is:	
☒	The supplier's own water source
☐	A purchased or imported source

Baseline Year *Fm SB X7-7 Table 3*		Volume Entering Distribution System	Meter Error Adjustment* *Optional (+/-)*	Corrected Volume Entering Distribution System
10 to 15 Year Baseline - Water into Distribution System				
Year 1	1995	2976.979		2,977
Year 2	1996	3315.6		3,316
Year 3	1997	3518.834		3,519
Year 4	1998	3013.549147		3,014
Year 5	1999	3526.03008		3,526
Year 6	2000	3335.550088		3,336
Year 7	2001	3269.320978		3,269
Year 8	2002	3387.851836		3,388
Year 9	2003	3164.272946		3,164
Year 10	2004	3407.930864		3,408
Year 11	0			0
Year 12	0			0
Year 13	0			0
Year 14	0			0
Year 15	0			0
5 Year Baseline - Water into Distribution System				
Year 1	2003	3164.272946		3,164
Year 2	2004	3407.930864		3,408
Year 3	2005	3210.229618		3,210
Year 4	2006	3379.354076		3,379
Year 5	2007	3406.784219		3,407
2015 Compliance Year - Water into Distribution System				
2015		2109		2,109

** Meter Error Adjustment - See guidance in Methodology 1, Step 3 of Methodologies Document*

NOTES:

SB X7-7 Table 4-C.3: Process Water Deduction Eligibility							
Criteria 3 Non-industrial use is equal to or less than 120 GPCD							
Baseline Year *Fm SB X7-7 Table 3*		Gross Water Use Without Process Water Deduction *Fm SB X7-7 Table 4*	Industrial Water Use	Non-industrial Water Use	Population *Fm SB X7-7 Table 3*	Non-Industrial GPCD	**Eligible for Exclusion Y/N**
10 to 15 Year Baseline - Process Water Deduction Eligibility							
Year 1	1995	2,977		2,977	11,612	229	NO
Year 2	1996	3,316		3,316	11,920	248	NO
Year 3	1997	3,519		3,519	12,351	254	NO
Year 4	1998	3,014		3,014	12,878	209	NO
Year 5	1999	3,526		3,526	13,137	240	NO
Year 6	2000	3,336		3,336	13,482	221	NO
Year 7	2001	3,269		3,269	13,565	215	NO
Year 8	2002	3,388		3,388	13,714	221	NO
Year 9	2003	3,164		3,164	14,039	201	NO
Year 10	2004	3,408		3,408	13,665	223	NO
Year 11	0	0		0	0		NO
Year 12	0	0		0	0		NO
Year 13	0	0		0	0		NO
Year 14	0	0		0	0		NO
Year 15	0	0		0	0		NO
5 Year Baseline - Process Water Deduction Eligibility							
Year 1	2003	3,164		3,164	14,039	201	NO
Year 2	2004	3,408		3,408	13,665	223	NO
Year 3	2005	3,210		3,210	14,119	203	NO
Year 4	2006	3,379		3,379	14,207	212	NO
Year 5	2007	3,407		3,407	14,401	211	NO
2015 Compliance Year - Process Water Deduction Eligiblity							
2015		2,109		2,109	14,813	127	NO

SB X7-7 Table 5: Gallons Per Capita Per Day (GPCD)				
Baseline Year *Fm SB X7-7 Table 3*		Service Area Population *Fm SB X7-7 Table 3*	Annual Gross Water Use *Fm SB X7-7 Table 4*	Daily Per Capita Water Use (GPCD)
10 to 15 Year Baseline GPCD				
Year 1	1995	11,612	2,977	229
Year 2	1996	11,920	3,316	248
Year 3	1997	12,351	3,519	254
Year 4	1998	12,878	3,014	209
Year 5	1999	13,137	3,526	240
Year 6	2000	13,482	3,336	221
Year 7	2001	13,565	3,269	215
Year 8	2002	13,714	3,388	221
Year 9	2003	14,039	3,164	201
Year 10	2004	13,665	3,408	223
Year 11	0	0	0	
Year 12	0	0	0	
Year 13	0	0	0	
Year 14	0	0	0	
Year 15	0	0	0	
10-15 Year Average Baseline GPCD				**226**
5 Year Baseline GPCD				
Baseline Year *Fm SB X7-7 Table 3*		Service Area Population *Fm SB X7-7 Table 3*	Gross Water Use *Fm SB X7-7 Table 4*	Daily Per Capita Water Use
Year 1	2003	14,039	3,164	201
Year 2	2004	13,665	3,408	223
Year 3	2005	14,119	3,210	203
Year 4	2006	14,207	3,379	212
Year 5	2007	14,401	3,407	211
5 Year Average Baseline GPCD				**210**
2015 Compliance Year GPCD				
2015		14,813	2,109	127
NOTES:				

SB X7-7 Table 6: Gallons per Capita per Day *Summary From Table SB X7-7 Table 5*	
10-15 Year Baseline GPCD	226
5 Year Baseline GPCD	210
2015 Compliance Year GPCD	127
NOTES:	

SB X7-7 Table 7: 2020 Target Method *Select Only One*		
Target Method		Supporting Documentation
☒	Method 1	SB X7-7 Table 7A
☐	Method 2	SB X7-7 Tables 7B, 7C, and 7D *Contact DWR for these tables*
☐	Method 3	SB X7-7 Table 7-E
☐	Method 4	Method 4 Calculator
NOTES:		

SB X7-7 Table 7-A: Target Method 1 20% Reduction	
10-15 Year Baseline GPCD	2020 Target GPCD
226	181
NOTES:	

SB X7-7 Table 7-F: Confirm Minimum Reduction for 2020 Target			
5 Year Baseline GPCD *From SB X7-7 Table 5*	Maximum 2020 Target*	Calculated 2020 Target *Fm Appropriate Target Table*	Confirmed 2020 Target
210	200	181	181
** Maximum 2020 Target is 95% of the 5 Year Baseline GPCD*			
NOTES:			

SB X7-7 Table 8: 2015 Interim Target GPCD		
Confirmed 2020 Target *Fm SB X7-7 Table 7-F*	10-15 year Baseline GPCD *Fm SB X7-7 Table 5*	2015 Interim Target GPCD
181	226	204
NOTES:		

SB X7-7 Table 9: 2015 Compliance								
Actual 2015 GPCD	2015 Interim Target GPCD	Optional Adjustments *(in GPCD)*				Adjusted 2015 GPCD	2015 GPCD *(Adjusted if applicable)*	Did Supplier Achieve Targeted Reduction for 2015?
		Extraordinary Events	Weather Normalization	Economic Adjustment	TOTAL Adjustments			
127	204	*From Methodology 8 (Optional)*	*From Methodology 8 (Optional)*	*From Methodology 8 (Optional)*	0	127.1041558	127.1041558	YES
NOTES:								

Appendix F

Water Shortage Contingency Plan, 2020 Update

ORDINANCE NO. 2022-01

AN ORDINANCE OF THE RIO LINDA/ELVERTA
COMMUNITY WATER DISTRICT
ADOPTING A WATER SHORTAGE CONTINGENCY PLAN RESCINDING ORDINANCE 2015-01 AND TAKING RELATED ACTIONS

WHEREAS, California Constitution article X, section 2 provides that because of conditions prevailing in the state of California (the "State"), the water resources of the State shall be put to beneficial use to the fullest extent of which they are capable, the waste or unreasonable use of water shall be prevented, and the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and the public welfare; and

WHEREAS, pursuant to California Water Code Section 31026, Rio Linda/Elverta Community Water District (the "District") may restrict the use of water that the District provides during any emergency caused by drought, or other threatened or existing water shortage, and prohibit the wastage of water or the use of water the District provides during such periods, for any purpose other than domestic uses or such other restricted uses as may be determined to be necessary by the District, and may prohibit use of water the District provides during such periods for specific uses that the District may from time to time find to be non-essential; and

WHEREAS, pursuant to California Water Code section 106, it is the declared policy of the State that the use of water for domestic use is the highest use of water and that the next highest use is for irrigation; and

WHEREAS, Chapter 3.3 of Division 1 of California Water Code ("the Excessive Water Use Law") prohibits excessive water use by a residential customer in a single-family residence or by a customer in a multiunit housing complex in which each unit is individually metered or sub-metered by the urban water supplier during time periods specified in that statute; and

WHEREAS, in compliance with the requirements of the Excessive Water Use Law and because of the declared policy of the State, the District hereby finds and determines that it is necessary and appropriate for the District to adopt, implement, and enforce the Ordinance defining, prohibiting, and penalizing excessive water use to reduce the quantity of

discretionary water use withing the District to ensure that there is sufficient water for non-discretionary needs; and

WHEREAS, it has been estimated that more than half of residential water use in many parts of California is used to irrigate lawns and outdoor landscaping; and

WHEREAS, the Board of Directors hereby finds and determines that it is desirable to codify the rules and regulations governing its actions, and the actions of persons within the District during declared water shortages, the current Water Shortage, and any future Water Shortage; and

WHEREAS, the District has determined that during water shortages, the use of outdoor water for irrigating lawns and outdoor landscaping is not essential to public health and safety, and may be an unreasonable use, an unreasonable method of use, or a waste of water; and

WHEREAS, the District recommends prioritizing outdoor water uses to irrigating trees during water shortages; and

WHEREAS, during a water shortage, the greatest reductions in water usage may best be achieved by single family residential customers by reducing the amount of discretionary, nonessential use of potable water to irrigate lawns and landscaping; and

WHEREAS, the current Statewide statutory standard for indoor residential water use is 55 gallons per person day, equivalent to approximately nine hundred cubic feet per month for a four-person household and said standard is expected to become more stringent over time; and

WHEREAS, the District's water shortage contingency plan ("Contingency Plan") provides for a staged system of planned water shortage response actions and includes guidelines which recommend mandatory water use reductions during Stage 1, Stage 2, Stage 3, Stage 4, Stage 5, or Stage 6 drought; and

WHEREAS, the Governor of the State of California may from time to time issue a proclamation of a state of emergency under the California Emergency Services Act based on local drought conditions; and

WHEREAS, because the Excessive Water Use Law applies when either (i) the District has moved to a stage of action under its Contingency Plan that requires mandatory water use reductions, or (ii) the District is affected during a period for which the Governor has issued a proclamation of a state of emergency based on local drought conditions, it is necessary and appropriate that this Ordinance's prohibitions, requirements, and penalties be enforceable when the Board of Directors finds either condition to exist; and

WHEREAS, it is infeasible to predict the water supply conditions likely to prevail during a State-proclaimed local drought emergency, as such proclamations are not within the

District's control and may be based on factors other than the District's water supply conditions, and accordingly it is appropriate to defer quantifications of excessive water use thresholds applicable during such a proclamation until the Board has an opportunity to assess the District's water supply conditions and other relevant information; and

WHEREAS, because it is the District's experience that a customer's first exceedance of an excessive water use threshold sometimes results from a previously undetected leak rather than willfully excessive water use, and because the purposes of this Ordinance are better served by allowing reasonable opportunity to address leaks rather than penalizing non-willful water use, and to avoid incurring unnecessarily transactional costs to handle potentially meritorious penalty appeals, it is appropriate to deem a single-family residential customer to be in violation of this Ordinance and subject to penalties only upon the second or subsequent exceedance during a drought cycle; and

WHEREAS, to achieve District compliance with the Excessive Water Use Law, and to secure the public's compliance with the excessive water use prohibition imposed by that statute and by this Ordinance, and to assure important public policy objectives are achieved for the reduction of water usage during significant water shortages, the District shall establish and impose water use restrictions and penalties for excessive water usage by single-family residential customers as provided by this Ordinance when the above-described circumstances exist; and

WHEREAS, prior to the adoption of this Ordinance, the District has conducted a properly noticed public hearing to receive public comments concerning the subject matter hereof;

NOW, THEREFORE, BE IT ORDAINED by the Board of Directors of the Rio Linda/Elverta Community Water District as follows:

Section 1. Recitals. The foregoing recitals are true and correct and are incorporated herein by this reference.

Section 2. Findings. The Board hereby finds and determines as follows:

a. A reliable minimum supply of potable water is essential to the public health, safety, and welfare of the people, and economy of the southern California region.

b. Water management that includes active water use efficiency measures not only in times of drought, but at all times, is essential to ensure a reliable minimum supply of water to meet current and future water supply needs.

c. California Water Code Section 375 authorizes water suppliers to adopt and enforce a comprehensive water conservation program to reduce water consumption and conserve supplies.

d. The District has the authority, pursuant to California Water Code Sections 353-355, 31000, 31001 and 31026-31029, inclusive, to take action(s) relative to the use and conservation of water within The District's service area.

e. The adoption and enforcement of a permanent Water Shortage Response Ordinance is necessary to help manage the District's potable water supply in the short and long-term and to avoid or minimize the effects of periodic drought and shortage conditions within or affecting its service area and potable water supplies. Such ordinance is essential to ensure a reliable and sustainable minimum supply of water for the public health, safety and welfare.

f. The Board does hereby find that the following circumstances may constitute an emergency condition or a threatened or existing water shortage conditions within or affecting the District.

Section 3. Ordinance Designation; Purpose; Intent and Integration.

a. This Ordinance establishes water management requirements necessary to conserve water, enables effective water supply planning, assures reasonable and beneficial use of water, prevents waste of water, prevents unreasonable use of water, prevents unreasonable methods of use of water within the boundaries of The District in order to assure adequate supplies of water to meet the needs of the public, and further the public health, safety and welfare, recognizing that water is a scarce natural resource that requires careful management not only in times of drought, but at all times.

b. This Ordinance establishes regulations to be implemented during times of declared water shortages or declared water shortage emergencies.

c. This Ordinance establishes six Water Shortage Levels that are most often triggered due to drought or water shortage conditions to provide defined response actions to be implemented during times of declared water shortage or declared water shortage emergency, with increasing restrictions on water use in response to worsening drought or emergency conditions and decreasing supplies.

d. This Ordinance is intended solely to further the conservation of water. It is not intended to implement any provision of federal, State, or local statutes, ordinances, or regulations relating to protection of water quality or control of drainage or runoff. This Ordinance shall not act to repeal, supersede or amend any federal, State or local law, ordinance or regulation relating to protection of water quality or control of drainage or runoff (including, but not limited to, any and all National Pollution Discharge Elimination System (NPDES) permits or requirements which may be applicable in such instance) or exempt any person or party from compliance therewith.

e. The District's prior Water Conservation Programs, and Ordinance No. 2015-01, as adopted and supplemented, as applicable, are rescinded and superseded upon this Ordinance becoming effective.

Section 4. Water Shortage Response Ordinance Provisions.

a. The Water Shortage Response Ordinance provisions are set forth in Exhibit A to this Ordinance and are incorporated herein by this reference.
b. The Water Shortage Response Ordinance shall be referred to in The District's Rules and Regulations for Water Service.

c. The Board reserves the right to amend, revise, and/or supplement this Ordinance in the future based upon the District's needs, circumstances and requirements.

d. This Ordinance is adopted by this Board pursuant to the provisions and authority set out in the California Constitution and California law as referenced herein.

e. All penalties set forth in the Water Shortage Response Ordinance are administrative and regulatory penalties and are not fees or charges for water service or water capacity.

Section 5. California Environmental Quality Act (CEQA) Exemption.

The Board finds that this Ordinance, the Water Shortage Response Ordinance and actions taken hereafter pursuant to the Ordinance, are exempt from the California Environmental Quality Act as specific actions necessary to prevent or mitigate an emergency pursuant to 14 California Code of Regulations, Sections 15269, 15273, and 15321, and the applicable statutes of the Public Resources Code.
The General Manager / District Secretary is hereby authorized and directed to file a Notice of Exemption as soon as possible following the adoption of this Ordinance.

Section 6. Terms and Provisions. The terms and provisions of this Ordinance enacted hereby, shall be subject to, and shall be interpreted pursuant to, State law.

Section 7. Notice and Provisions. Notice of the adoption of this Ordinance, and the provisions hereof, have been, and shall be, as applicable, provided as set out in State law, including, but not limited to, the requirements of Water Code Section 31027.

Section 8. Other Actions. The District staff and officers are hereby authorized and directed to take such other and further action(s) as may be reasonably necessary to carry out the determinations, findings and directives set forth herein, within the limits set forth by, and in accordance with, direction of the Board.

Section 9. Effective Date. This Ordinance No. 2022-01 shall take effect, and Ordinance 2015-01 shall be superseded on the 31st day following the adoption of this Ordinance.

APPROVED AND ADOPTED by the Board of Directors of the Rio Linda/Elverta Community Water District on this 15th day of August 2022.

AYES, in favor hereof: Gifford, Green, Harris, Ridilla
NOES: None
ABSTAIN: None
ABSENT: None

_____
Jason Green, President
Board of Directors

Attest: _____
Board Secretary

Exhibit A

Water Shortage Contingency Plan
2020 Update
Rio Linda/Elverta Community Water District

August 2022

TABLE OF CONTENTS

TABLES

ATTACHMENTS

1 INTRODUCTION

☑ *CWC § 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.

Rio Linda Elverta Community Water District's (District's) Water Shortage Contingency Plan (WSCP) has been developed to serve as a flexible framework of planned response measures to mitigate future water supply shortages. This WSCP builds upon and supersedes the WSCP that was presented in the 2015 Urban Water Management Plan (UWMP).

The WSCP includes the stages of response to a water shortage caused by drought or by supply interruptions caused by infrastructure failure, regulatory mandate, or catastrophic human-caused or natural events. The primary objective of the WSCP is to ensure that the District has in place the necessary resources and management responses needed to protect health and human safety, minimize economic disruption, and preserve environmental and community assets during water supply shortages and interruptions. The WSCP also includes procedures to conduct an annual assessment of water supply and demand in order to determine whether water shortage conditions are likely to exist in the forthcoming year, and to proactively begin the process of implementing WSCP stages of action, as appropriate.

This WSCP has been prepared in accordance with California Water Code (CWC) § 10640 and CWC § 10632 of the UWMP Act. Text from the UWMP Act has been included in grey text boxes with italicized font at beginning of relevant sections of this WSCP. The information presented in the respective WSCP sections and the associated text and tables are collectively intended to fulfill the requirements of that sub-section of the UWMP Act.

2 WATER SUPPLY RELIABILITY ANALYSIS

☑ *CWC § 10632 (a) (1) The analysis of water supply reliability conducted pursuant to Section 10635.*

This section provides a summary of the water supply reliability analysis in Chapter 8 of the District's 2020 UWMP, recognizing that the WSCP is intended to be a standalone document that can be adopted and amended independently.

The District overlies the North American Subbasin of the Sacramento Valley Basin, which is ranked as high priority basin.[1] The District is completely reliant on groundwater to meet its water demands and to date the reliability of the District's water supply has largely been insulated from long periods of drought. Similarly, through implementation of the North American Groundwater Sustainability Plan (GSP), the District's supply reliability is expected to be sufficient to meet all projected demands through the planning horizon of this UWMP (i.e., through 2045).

The District is not anticipated to experience supply shortfall in either single dry years or multiple dry years by 2045 based on past and projected reliability of groundwater supply even during drought years. Additionally, as part of the supply reliability analysis, the District has conducted a Drought Risk Assessment (DRA), which evaluates the effects on available water supply sources of an assumed five-year drought commencing the year after the assessment is completed (i.e., from 2021 through 2025). The District's supply is expected to be sufficient to meet demands in all five years of the assumed drought (i.e., from 2021 through 2025).

The District has developed this WSCP to address water shortage conditions resulting from any cause (e.g., droughts, impacted distribution system infrastructure, regulatory-imposed shortage restrictions, etc.). The WSCP identifies a variety of actions that the District will implement to reduce demands and further ensure supply reliability at various levels of water shortage.

[1] Basin prioritizations and break down up priority points are available here: https://gis.water.ca.gov/app/bp-dashboard/final/

3 PRIOR DROUGHT ACTIONS

The District has historically developed different strategies for reducing water demand during water shortages. The District's actions in response to the recent severe drought that occurred in California between 2014 and 2017 are discussed below.

On 1 April 2015, Governor Brown issued the fourth in a series of Executive Orders regarding actions necessary to address California's severe drought conditions. Executive Order B-29-15 directed the State Water Resources Control Board (SWRCB) to impose the first ever mandatory restrictions on urban water suppliers to achieve a statewide 25 percent reduction in potable urban water usage through February 2016. The Executive Order also required commercial, industrial, and institutional (CII) users to implement water efficiency measures, prohibited irrigation with potable water of ornamental turf in public street medians, and prohibited irrigation with potable water outside newly constructed homes and buildings that is not delivered by drip or microspray systems, along with numerous other directives.

On 5 May 2015, the SWRCB adopted Resolution 2015-0032 that mandated minimum actions by water suppliers and their customers to conserve water supplies into 2016 and assigned a mandatory water conservation savings goal to each water supplier based on their residential gallons per capita per day (R-GPCD) water use. The Office of Administrative Law approved the regulations and modified the CWC on 18 May 2015. On 2 February 2016, the SWRCB voted to extend the emergency regulations until October 2016 with some modifications. On 9 May 2016, the Governor issued Executive Order B-37-16, which directed the SWRCB to extend the emergency regulations through the end of January 2017 as well as make certain water use restrictions permanent. On 18 May 2016, the SWRCB adopted Resolution 2016-0029 that adjusted the water conservation savings goal and replaced the February 2016 emergency regulation. The SWRCB is expected to take separate action to make some of the requirements of the regulations permanent in response to the Executive Order.

The mandatory conservation standards included in CWC § 865(c) ranged from 8 percent for suppliers with an R-GPCD below 65 R-GPCD, up to 36 percent for suppliers with water use of greater than 215 R-GPCD. As with previous emergency drought regulations adopted by the SWRCB in 2014, the new water conservation regulation was primarily intended to reduce outdoor urban water use. Based on their R-GPCD, the District was required to reduce water use by 33 percent relative to its 2013 water use. Through enactment of its WSCP, the District met this reduction target. During the June 2015 through May 2016 compliance period, the District reached a cumulative savings of 33.1 percent relative to its 2013 use[2]. In June 2016, the District adopted its 2015 UWMP and associated WSCP update. In April 2017, the Governor Brown ended the drought State of Emergency.

[2] Data from May 2016 Supplier Conservation Compliance table (suppliercompliance_070616.pdf (ca.gov))

4 ANNUAL WATER SUPPLY AND DEMAND ASSESSMENT PROCEDURES

☑ ***CWC § 10632 (a) (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 decision-making 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.
☑ ***CWC § 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.
☑ ***CWC § 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.

On an annual basis, the District will conduct a Supply-Demand Assessment (Annual Assessment) to identify whether there is likely to be a water shortage condition in the following year. For purposes of this assessment, a water shortage condition is defined as an anticipated supply shortfall of 40 percent, corresponding to Water Shortage Level 4. Each element of the Annual Assessment is described below, along with the key data inputs and methodologies for determining these elements.

1. Evaluation Criteria
   The evaluation criteria that will be used to identify whether the District is likely to experience a water shortage in the coming year include:

   - **Groundwater Supply –** A comparison of groundwater level elevations to well operational depths to identify any constraints on accessing the groundwater supply (e.g., dropping water levels due to limited rainfall/runoff) and to identify any potential needs to (1) lower pump depths, (2) deepen existing wells, or (3) site and drill additional supply wells.

- **Local Regulatory Conditions –** Evaluation of (1) any new Groundwater Sustainability Agency (GSA) policies (e.g., pumping allocations) or sustainability criteria that could trigger a change in groundwater volume available for pumping, and (2) any new limitations on well permitting that could limit the ability to deepen existing supply wells or drill new supply wells.

- **State Regulatory Conditions -** Evaluation of any state-mandated drought or water use restrictions known during preparation of the Annual Assessment.

These criteria will be assessed by District staff with detailed knowledge of District operations. The data used to support these assessments may include, but are not limited to, groundwater level elevations of District wells, groundwater conditions as described in the North American Subbasin GSP and associated groundwater modeling, and system demand.

2. Water Supply

   On the basis of the evaluation criteria above and available supporting data, the District will quantify the projected available supply over the forthcoming year. This quantification will likely be a range, and subject to revision as new data are available and as conditions evolve.

3. Unconstrained Customer Demand

   Unconstrained customer demands (i.e., the expected water use in the absence of shortage-caused reductions in water use) will be evaluated and estimated for the forthcoming year based on:

   - A comparison of monthly customer demands relative to prior years (e.g., last 3 years),
   - Evaluation of current and anticipated weather conditions,
   - New demands anticipated during the coming year (e.g., new accounts coming online), and
   - Any other potentially pertinent factors identified by the District (e.g., pandemic-related stay-at-home orders).

4. Planned Water Use for Current Year Considering Dry Subsequent Year

   The District will compare the estimated unconstrained demands to the anticipated supplies for the current year, assuming that the following year will be dry using the Evaluation Criteria identified above.

5. Infrastructure Considerations

   The District will evaluate how infrastructure capabilities and constraints may affect its ability to deliver supplies to meet expected customer water demands in the coming year. The constraints and capabilities are expected to include, among other things:

   - Anticipated capital projects and upgrades,
   - Anticipated maintenance and repairs.

6. Team Members and Decision Makers

   - District General Manager (Team Members)

- Executive Committee (Team Members)
- Board of Directors (Team Members and Decision Makers)

7. Timeline

Table 4-1 shows the timeline for preparing the annual assessment.

Table 4-1 Annual Assessment Procedures Decision-Making Timeline

Decision - Making Step	Start Date	End Date
Convening Team members	March 1	April 1
Determining water supplies by source for the current year	March 1	April 1
Calculating the water supply reliability using spreadsheet, computer model, or other method	March 1	May 1
Determining shortages and response actions	March 1	May 1
Preparing and presenting preliminary report to Board of Directors	April 15	May 15
Updating assessment based on final water supplies	April 15	May 15
Using the WSCP to activate the appropriate protocols	As needed	--
Preparing annual water shortage assessment report	As needed	--
Preparing decision-making documents for approval	June 1	June 1
Implementing WSCP actions as approved	June 1	June 1
Sending final annual water shortage assessment report to the State	July 1	July 1[(a)]
NOTES: (a) No later than July 1st of each year, beginning in 2022 (b) All actions listed above are under the responsibility of the District General Manager.		

Consistent with California Water Code (CWC) § 10632.1, the District will perform and submit an Annual Assessment to DWR by July 1st of each year beginning in 2022.

5 WATER SHORTAGE LEVELS

Consistent with the requirements of CWC § 10632(a)(3), this WSCP is based on the six water shortage levels (also referred to as "stages") shown in Table 5-1. The previous WSCP categories are cross referenced to the existing six standard categories as follows:

- 2015 WSCP Stage 1 = 2020 WSCP Shortage Level 2;
- 2015 WSCP Stage 2 = 2020 WSCP Shortage Level 3;
- 2015 WSCP Stage 3 = 2020 WSCP Shortage Level 4; and
- 2015 WSCP Stage 4 = 2020 WSCP Shortage Level 5.

The six water shortage stages are intended to address shortage caused by any condition, including the catastrophic interruption of water supplies. Table 5-1 also summarizes the water supply reductions and supply conditions associated with each stage of action.

Table 5-1 describes the customer restrictions and prohibitions and consumption reduction methods (i.e., the actions to be taken by District staff) associated with each stage of action. Specific prohibitions and consumption reduction methods are discussed in more detail below. The monthly and cumulative annual water savings impacts associated with each restriction, prohibition and consumption reduction method were quantitatively estimated using the Drought Response Tool (DRT) for each stage of action. The DRT is a spreadsheet model used to identify water saving opportunities by customer sector and major end-use and to quantify and compare potential water saving benefits of implementing various suites of drought response actions.

Table 5-1 Water Shortage Contingency Plan Levels (DWR Table 8-1)

Shortage Level	Percent Shortage Range	Shortage Response Actions
1	Up to 10%	Minimal Shortage – Up to 10% (Voluntary) Includes implementation of voluntary restrictions on end uses (see Table 6-1) as well as agency actions (see Table 6-2).
2	10% to 20%	Moderate Shortage – 10% to 20% (Mandatory) Includes implementation of mandatory restrictions on end uses (see Table 6-1) as well as agency actions (see Table 6-2).
3	20% to 30%	Severe Shortage – 20% to 30% (Mandatory) Includes implementation of mandatory restrictions on end uses (see Table 6-1) as well as agency actions (see Table 6-2).
4	30% to 40%	Severe Shortage – 30% to 40% (Mandatory) Includes implementation of mandatory restrictions on end uses (see Table 6-1) as well as agency actions (see Table 6-2).
5	40% to 50%	Critical Shortage – 40% to 50% (Mandatory) Includes implementation of mandatory restrictions on end uses (see Table 6-1) as well as agency actions (see Table 6-2).
6	>50%	Critical Shortage – greater than 50% (Mandatory) Includes implementation of mandatory restrictions on end uses (see Table 6-1) as well as agency actions (see Table 6-2).
NOTES: The appropriate Stage will be enacted by the Board of Directors to respond to the corresponding estimated water shortage that may result from the following: droughts, extreme weather events, natural disasters, extended power outages, regulatory droughts, and other water shortage conditions.		

6 SHORTAGE RESPONSE ACTIONS

This section describes the response actions the District will take to deal with the shortages associated with each of the six stages enumerated in Section 5. Demand reduction measures, supply augmentation, and other actions are discussed below and in Table 6-1 and Table 6-2. The monthly and cumulative annual water savings impacts associated with each restriction, prohibition and consumption reduction method were quantitatively estimated using the DRT for each stage of action described further in Section 6.7 and included in Attachment 1.

6.1 Supply Augmentation

The District relies exclusively on groundwater to meet its water needs and does not have access to surface water or water supply augmentation through other means. Existing wells could be modified or new wells could be drilled to increase pumping capacity.

6.2 Demand Reduction

Consumption reduction methods are actions that are taken by the District to reduce water demand within the service area. As shown in Table 6-1 below, the WSCP lists the demand reduction actions that the District will implement during each stage of action, to reduce the District's own water consumption and encourage reduction in water use by its customers. A main focus of the District's planned demand reduction measures is to increase public outreach and keep customers informed of the water shortage emergency and actions they can take to reduce consumption. The public outreach efforts that the District will implement to respond to a water shortage are described in Section 7.

Table 6-1 Demand Reduction Actions (DWR Table 8-2)

Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap? (a)	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
Non-Drought	Other	--	1. Hoses must be equipped with a shut-off valve for washing vehicles,sidewalks, walkways, or buildings. 2. Restrict water use for ornamental fountains or recommend the use of re-circulated or recycled water. 3. Potable water shall not be applied in any manner to any driveway, sidewalk, or other hard surface except when necessary to address immediate health or safety concerns. 4. Potable water shall not be used to water outdoor landscapes in a manner that causes more than incidental runoff onto non-irrigated areas, walkways, roadways, parking lots, or other hard surfaces. 5. Potable water cannot be applied to outdoor landscapes during and up to 48 hours after measurable rainfall. 6. Potable water shall not be used to irrigate ornamental turf on public street medians. 7. Encourage restaurants and other food service operations to serve water to customers only upon request during a period for which the Governor has issued a proclamation of a state of emergency. 8. Encourage users to wash only full loads of laundry. 9. Broken or defective plumbing and irrigation systems must be repaired orreplaced within a reasonable period. 10. Recreational water features shall be covered when not in use. 11. Single-pass cooling systems on new construction shall not be allowed. 12. Prohibit unauthorized use of hydrants. 13. All water using equipment must be in working order. 14. Encourage greywater use for irrigating landscape where possible. 15. Other measures as may be approved by the State Water Resources Control Board or the District.	Yes

Table 6-1 Demand Reduction Actions (DWR Table 8-2)

Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap? (a)	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
1	Other	5%	1. Continue with "no drought" restrictions and prohibitions except where superseded by more stringent requirements. 2. Require repair of all leaks within 24 hours. 3. Require covers for all recreational water features such as pools. 4. Prohibit Commercial vehicle washing except with use of recycled water. 5. Other measures as may be approved by the State Water Resources Control Board or the District.	Yes
2	Other	15%	1. Continue with Stage 1 restrictions and prohibitions except where superseded by more stringent requirements. 2. Audit and reduce system water losses. 3. Limit irrigation to 3 days/week, 15 minutes/day, between 8PM and 6AM for Dedicated Irrigation, Residential users, and Commercial users. 4. Prohibit single-pass cooling systems. 5. Other measures as may be approved by the State Water Resources Control Board or the District.	Yes
3	Other	25%	1. Continue with Stage 2 restrictions and prohibitions except where superseded by more stringent requirements. 2. Limit irrigation to 2 days/week, 15 minutes/day, between 9PM and 6AM for Dedicated Irrigation, Residential users, and Commercial users. 3. Prohibit Residential washing of vehicles except with use of recycled water. 4. Other measures as may be approved by the State Water Resources Control Board or the District.	Yes
4	Other	35%	1. Continue with Stage 3 restrictions and prohibitions except where superseded by more stringent	Yes

Table 6-1 Demand Reduction Actions (DWR Table 8-2)

Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap? (a)	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
			requirements. 2. Decrease frequency and length of line flushing. 3. No new connections allowed unless already approved 4. Conduct account surveys for Dedicated Irrigation accounts, high water using Commercial users, and high water using Residential users. 5. Other measures as may be approved by the State Water Resources Control Board or the District.	
5	Other	45%	1. Continue with Stage 4 restrictions and prohibitions except where superseded by more stringent requirements. 2. Moratorium on new connections. 3. Limit irrigation to 1 days/week, 10 minutes/day, between 9PM and 6AM for Dedicated Irrigation accounts, Residential users, and Commercial users. 4. Establish water budget with 50% reduction for Dedicated Irrigation accounts, 10% reductions for Residential and 10% for Commercial Users. 5. Other measures as may be approved by the State Water Resources Control Board or the District.	Yes
6	Other	55%	1. Continue with Stage 5 restrictions and prohibitions except where superseded by more stringent requirements. 2. Establish water budget with 100% reduction for Dedicated Irrigation accounts, 30% reductions for Commercial Users, and 25% reductions for Residential users. 3. Other measures as may be approved by the State Water Resources Control Board or the District.	Yes

Table 6-1 Demand Reduction Actions (DWR Table 8-2)

Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap? (a)	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
NOTES: (a) The percentages listed in this table are the cumulative savings for each shortage level with implementation of corresponding supply augmentation and other agency actions in Table 6-2. Detailed saving estimates based on end use, response action, and implementation rates can be found in Attachment 1 (b) Table 6-1 lists each demand reduction action as "other" because they represent a suite of demand reduction actions for each shortage level that include multiple categories of demand reduction actions provided in the DWR drop down menu.				

Table 6-2 Supply Augmentation and Other Actions (DWR Table 8-3)

Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier	How much is this going to reduce the shortage gap?	Additional Explanation or Reference *(optional)*
1	Other	5%	1. The District implement media campaigns, including: • Publicize the water shortage and conservation measures using a media campaign, newspaper articles, and website. • Promote water conservation programs. • Hold water efficiency workshops and public events. • Distribute water bill inserts with information about water shortage and conservation.
2	Other	15%	1. Continue with action and measures from Stage 1 except where superseded by more stringent requirements. 2. Accelerate leak detection and repair program. 3. Suspend routine flushing of water mains except when necessary to address immediate health or safety concerns. 4. Reduce distribution system pressures.
3	Other	25%	1. Continue with action and measures from Stage 2 except where superseded by more stringent requirements.
4	Other	35%	1. Continue with action and measures from Stage 3 except where superseded by more stringent requirements.
5	Other	45%	1. Continue with action and measures from Stage 4 except where superseded by more stringent requirements.
6	Other	55%	1. Continue with action and measures from Stage 5 except where superseded by more stringent requirements.

NOTES:
(a) The percentages listed in this table are the cumulative savings for each shortage level with implementation of corresponding demand reduction actions in Table 6-1. Detailed saving estimates based on end use, response action, and implementation rates can be found in Attachment 1
(b) Table 6-2 lists each supply augmentation method or other actions by water supplier action as "other" because they represent a suite of actions by the water supplier for each shortage level that include multiple categories of actions provided in the DWR drop down menu.

6.2.1 Prohibitions on End Uses

Restrictions and prohibitions associated with each stage of action are presented in Table 6-1. As discussed above, these responses focus on the reduction of non-essential water uses such as ornamental landscape irrigation, and preserve water uses that are essential to the health, safety, welfare, and economic vitality of the District's customers.
In addition, several mandatory prohibitions are enforced at all times as part of the Non-Drought Stage to eliminate water waste, which include each of the prohibitions on end uses that are anticipated to be mandated by the SWRCB in response to Executive Order B-37-16. Prohibitions in subsequent stages go beyond the SWRCB requirements and become increasingly restrictive. Should mandatory State regulations overlap or conflict with the District's stage of actions, the more stringent regulations will be enforced.

6.2.2 Defining Water Features

☑ *CWC § 10632 (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.

As required by CWC Section 10632, the District distinguishes between "decorative water features" such as ponds, lakes, and fountains that are artificially supplied with water and "recreational water features" such as swimming pools and spas. Prohibitions on water use for decorative water features are listed separately from those for recreational water features (see Table 6-1).

6.3 Operational Changes

The WSCP lists the operational changes that the District will implement during each stage of action including measures to: (1) reduce system losses through a reduction in line flushing and fire training exercises, (2) increase enforcement and patrols, (3) develop water budgets, and in certain conditions, (4) implement a moratorium on new services.

6.4 Mandatory Restrictions

The water shortage response actions included in Table 6-1 include a variety of mandatory customer water use restrictions that will be necessary to achieve the targeted demand reductions for the different shortage stages. The types of restrictions and the manner and degree of enforcement for these restrictions vary by stage and are discussed in Section 8.

6.5 Catastrophic Supply Interruption Plan

Catastrophic supply interruptions may be caused by a regional power outage, an earthquake, or other disaster. The District includes a system-wide Catastrophic Supply Interruption Plan in the current policy and procedure manual. Potential catastrophic events and responses are summarized below:

- Localized short-term power failure - Emergency generators at selected well start up to maintain system pressure. Request customers to reduce water uses with announcements via radio, television and internet. Coordinate with Sacramento Municipal Utility District (SMUD).
- Regional long-term power failure - Emergency generators at selected wells operate until fuel supply is exhausted. Back up fuel requested. Order customers to curtail water uses with direct phone calls, and announcements via radio, television and internet. Issue boil water order. Coordinate with SMUD.
- Malicious Act or Major explosion near facilities - Valve off tank or pipelines. Utilize additional wells to maintain system pressure. Request use of emergency connection with neighboring utilities. Request customers to reduce water uses with announcements via radio, television and internet. Request assistance from Office of Emergency Services.
- Flood from Dry Creek or breach of levee along Natomas East Main Drainage Canal - Wells removed from service. Other wells used to pump water. Possible "boil water" order. Order customers to curtail water use. Request use of emergency connection with neighboring utilities. Alert customers with direct phone calls, and announcements via radio. Coordinate with Sacramento Area Flood Control Agency (SAFCA).

Earthquake – in most earthquakes, only weaker masonry buildings would be damaged – District staff would be responsible for control and repair of damage. Help from Northern California utilities is unlikely since they would be responding to their own situations and aiding water suppliers closest to the epicenter.

6.6 Seismic Risk and Mitigation Plan

☑ ***CWC § 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.

Per the CWC§ 10632.5, suppliers are required to include a seismic risk assessment and mitigation plan as part of their WSCP. The District is located within Sacramento County, which is in a limited seismic risk area per the 2016 Sacramento Countywide Local Hazard Mitigation Plan Update (LHMP).[3] The District is at minimal risk of an earthquake per the LHMP; as such, no actions are planned to mitigate such an event.

[3] The Sacramento County LHMP could be found on the County's Water Resources website: https://waterresources.saccounty.net/Local%20Hazard%20Mitigation%20Plan%202017/Executive%20Summary.pdf

6.7 Shortage Response Action Effectiveness

In order to evaluate and ensure that effective actions will be implemented with the proper level of intensity, the District employed the DRT, an Excel spreadsheet model developed by EKI Environment and Water, Inc. The DRT model calculates monthly savings anticipated by implementing each stage of action as detailed below.

6.7.1 Baseline Water Use Profile

Using the DRT, the District developed a baseline water use profile that reflected usage patterns within the District's service area by major water use sector during 2019 that was used to guide development of the WSCP. Key findings from this analysis are presented below.

Residential Per Capita Demand

The District's baseline R-GPCD in 2019 was approximately 111 R-GPCD. As shown in Table 6-3, this R-GPCD is significantly greater than the statewide average of 85 R-GPCD.

Proportion of Outdoor Water Use

As shown in Table 6-3 and associated charts, outdoor water use, which can generally be considered as a "discretionary water use", was estimated to be approximately 52 percent of the District's consumption during this time period.

The DRT estimates indoor water use to be equivalent to the lowest monthly water use for each sector, accounting for the number of days in each month. Outdoor water use for each sector was estimated to be the difference between the total water use and the estimated indoor water use. If District customers tend to irrigate more heavily during winter months, an underestimation of the proportion of outdoor water use would occur.

The proportion of outdoor water use within both residential and commercial sectors (52 percent and 54 percent, respectively) indicates that there is a potential to achieve significant potable water savings across these sectors, simply by focusing on outdoor uses. As further shown in Table 6-4 and its associated charts, the seasonal variation in baseline potable water use reflects increased irrigation demands during the summer and fall months. Therefore, the greatest potential for reductions in non-essential water use are expected during these months.

Table 6-3 Baseline Residential Per Capita Water Demand

	Baseline Residential Per Capita Water Demand (R-GPCD)
Rio Linda/Elverta Community Water District (a)	111
Statewide Average (b)	85
NOTES: (a) District R-GPCD calculated using 2019 production data. (b) State-wide R-GPCD for 2019 obtained from data provided at California State Water Resources Control Board Water Conservation Portal - Conservation Reporting, http://www.waterboards.ca.gov/water_issues/programs/conservation_portal/conservation_reporting.shtml, accessed March 2021.	

Table 6-4 Baseline Water Use Profile

Sector	End-Use	Baseline (2019) Water Use													Annual percent of Total by Sector
		January	February	March	April	May	June	July	August	September	October	November	December	Annual	
Residential	Indoor	14	11	12	16	23	33	38	45	39	26	23	15	293	48%
	Outdoor	15	12	13	17	25	35	42	48	43	28	25	16	318	52%
	Subtotal Residential	*28*	*22*	*25*	*33*	*47*	*68*	*80*	*93*	*82*	*54*	*47*	*31*	*611*	*77%*
CII	Indoor	2	2	2	2	3	5	6	7	6	4	3	2	42	46%
	Outdoor	2	2	2	2	3	6	7	8	7	4	4	2	50	54%
	Subtotal CII	*4*	*3*	*4*	*4*	*6*	*11*	*13*	*15*	*13*	*8*	*7*	*4*	*92*	*12%*
Dedicated Irrigation	Outdoor	0	0	0	0	0	1	1	2	1	1	1	0	7	1%
Non-Revenue	Non-Revenue	4	5	6	9	14	18	21	-1	-1	3	2	4	84	11%
Total	Indoor	15	12	14	18	25	38	45	52	45	30	26	17	336	42%
	Outdoor	17	14	15	19	28	42	50	58	51	34	29	18	375	47%
	Non-Revenue	4	5	6	9	14	18	21	-1	-1	3	2	4	84	11%
	Total	35	31	35	46	67	97	115	109	96	66	58	39	795	100%

NOTES:
(a) Volumes are in units of MG.
(b) Indoor water use was estimated to be the lowest monthly water use for each sector, accounting for the number of days in each month. Outdoor water use for each sector was estimated to be the difference between the total water use and the estimated indoor water use.

6.7.2 Shortage Response Action Effectiveness

The DRT provides a quantitative framework that allows the District to systematically estimate the monthly and cumulative annual demand reductions expected to result from particular combinations of drought response actions and associated implementation rates. Data inputs to the DRT include total production, class-specific water use, population, and assumptions regarding the split between indoor and outdoor water use for each customer class.

For each drought response action, the user specifies:

- The customer class(es) and end use(s) that are affected;
- The percent savings for that end use for each account that implements the action. These are based on evaluations reported in the literature, or where such studies are not available, on best estimates based on the District's experience; and
- The percentage of accounts assumed to implement the action, which is presumed to be the result of the intensity level of the District's program implementation, including but not limited to, marketing and enforcement activities.

An additional critical DRT user input is a set of constraints on demand reductions to ensure that usage levels do not endanger health and safety or result in unacceptable economic impacts. The DRT will not permit estimated usage reductions to violate these constraints, regardless of the demand reduction actions selected. The constraints are:

- A minimum residential indoor per capita daily usage of 25 gallons,
- A maximum residential outdoor usage reduction of 100 percent,
- A maximum Commercial, industrial, and institutional (CII) indoor usage reduction of 30 percent, and
- A maximum CII outdoor usage reduction of 100 percent.

Based on the foregoing data, the DRT model calculates the resulting monthly savings. The District adjusted the combination of actions and implementation levels to achieve the targeted savings levels at each of the six stages of action.

For each stage of action, the modeling targeted the mid-range of the required demand reduction range, ergo:

- 5 percent for Stage 1,
- 15 percent for Stage 2,
- 25 percent for Stage 3,
- 35 percent for Stage 4,
- 45 percent for Stage 5, and
- 55 percent for Stage 6.

The key DRT inputs and outputs for each of the stages of action are reproduced in Attachment 1.

Table 6-1 shows the water shortage reduction actions, savings assumptions, and implementation rates that are required for the District to achieve the required annual demand reductions for each of the six stages of action. At each stage, there are two types of demand-reduction actions identified:

- Restrictions on customer water usage; and
- Consumption reduction actions by the District to encourage decreased water usage.

Many actions are implemented across a number of stages, some at increasing implementation levels. Therefore the actions in Table 6-1 and Table 6-2 are listed as a row under the first stage at which they are implemented. The percentages shown in the tables represent savings of the end uses.

7 COMMUNICATION PROTOCOLS

☑ *CWC § 10632 (a) (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.

The District General Manager will recommend to the Board of Directors the extent of the conservation required through the implementation and/or termination of particular water conservation stages and the Board will order implementation or termination of the appropriate water conservation stage. The District customers will be notified of any upgrade or downgrade in water use policy stage by public announcement.

The provisions of each water shortage stage of action are triggered upon the Board of Directors determination that a Governing Authority has required the District to achieve a voluntary or mandatory reduction in water use because of water shortage conditions.

The stage of action will become effective after the Broad of Directors declares a particular stage of action and the District has published notice of this determination. Once effective, the provisions of a water shortage stage of action will stay in effect until: (1) a different stage of action is declared; or (2) the Board of Directors determine that the water shortage condition no longer exists and the District has published notice of this determination.

After the termination of the water shortage conditions, District will oversee any remaining termination and WSCP review activities. These activities could include:

- Publicize gratitude for the community's cooperation.
- Restore water utility operations, organization, and services to pre-event levels.
- Document the event and response and compile applicable records for future reference.
- Collect cost accounting information, assess revenue losses and financial impact, and review deferred projects or programs.
- Debrief staff to review effectiveness of actions, to identify the lessons learned, and to enhance response and recovery efforts in the future.
- Update the WSCP, as needed.

8 COMPLIANCE AND ENFORCEMENT

☑ *CWC § 10632 (a) (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.*

The District is authorized to enforce the requirements of the WSCP. Enforcement of the District's water use restrictions and prohibitions is focused on soliciting cooperation from water customers who are unaware of the restrictions or have failed to comply with the provisions of the WSCP.

The following section discusses penalties associated with excessive water use. The penalties discussed herein do not repeal any power granted under state law, federal law, or municipal ordinances. The following penalties discussed in Table 8-1 shall be issued along with written notification to the occupant of the site, or to any person in control of said site, or posted at the site in an easily visible location. Each day the violation is delinquent shall result in a separate offense and fully punishable.

The District General Manager, or their appointed representative, may issue waivers pursuant to the requirements of the WSCP on the basis of hardship, health and safety matters, unjustifiable repair costs, overall benefit to the public, protection of sensitive or endangered plant species or habitats, or compliance with other state, federal or local laws.

Table 8-1 Procedure for Imposing Administrative Fees

Offense within a 12-month period	Administrative Fee
First	No Fee
Second	$50
Third	$75
Additional Offenses	$125; if appropriate installation of flow restrictor.

9 LEGAL AUTHORITIES

☑ *CWC § 10632 (a) (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.

As discussed above, the District has authority to require water rationing and conservation and to enforce penalties. The District General Manager will notify the Board of Directors the need to upgrade or downgrade in water use policy stages and the Board of Directors will declare a water shortage emergency. The District General Manager is legally authorized to enforce the Water Shortage Contingency Plan (WSCP). Appropriate District staff will also coordinate with Sacramento County and appropriate agencies (e.g., Groundwater Sustainability Agencies in the North American Subbasin) about any possible proclamation of a local emergency.

The District's WSCP update was adopted by ordinance at the Public Hearing during the District's 15 August 2022 Board of Directors meeting. Copy of the adoption is included in Attachment 4.

10 FINANCIAL CONSEQUENCES OF WSCP

☑ ***CWC § 10632 (a) (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.

The District employs a two-tiered, conservation-oriented, inclining block water rate structure for residential customers. The District's current tiered water rate structure is designed to encourage efficient water use, even during normal water supply conditions. Since the District bills its customers per unit volume of water consumed, the District would experience a reduction in revenue upon implementation of the Water Shortage Contingency Plan (WSCP). To compensate for the expected revenue reduction caused by water conservation, the District reserves the authority to implement temporary water rate increases, as adopted by ordinance by the District's Board of Directors. Additionally, the District's Board of Directors may adopt an ordinance to establish a water rate structure, including excess water use surcharges, that provides incentives to conserve water. Individual customers may seek a waiver of excess water use surcharges through a variance process.

The District also reserves the authority to reduce expenses during implementation of the WSCP, using the following potential mitigation actions:

- Reducing or deferring operation and maintenance expenses; and
- Deferring capital improvement projects.

Other potential actions to mitigate revenue impacts of the WSCP include:

- Increasing any fixed readiness-to-serve charges; and
- Using financial reserves.

11 MONITORING AND REPORTING

☑ *CWC § 10632 (a) (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.*

The District monitors water use through production data at each well and customer meter readings. Each customer account is metered.

Pursuant to California Code of Regulations (CCR) Title 23 §991, the District reports monthly water use and production to the SWRCB.[4] Effective October 1, 2020, during a governor declared drought emergency or when an urban water supplier invokes a water shortage level to respond to a drought greater than 10 percent, each supplier is required to submit an expanded report that contains the supplier's actions and statistics in achieving planning reductions. During a supply shortage, the District will continue to monitor water use on this schedule to determine the effectiveness of the customer response to the implementation of the WSCP. Actual water savings achieved by implementing the WSCP will be determined by comparing water consumption records while the WSCP is in place with an appropriate baseline consumption.

[4] Water supplier monthly reports can be accessed at https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/conservation_reporting.html

12 WSCP REFINEMENT PROCEDURES

☑ *CWC § 10632 (a) (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.*

As part of the Annual Assessment, the District's team members will review the results of prior monitoring and reporting to determine the effectiveness of the WSCP. If modifications to shortage response actions are needed, the District General Manager will present the proposed modifications to the District's Board of Directors and request changes to the WSCP by resolution.

The WSCP is implemented as an adaptive management plan. The District will evaluate the need to revise its WSCP every year after performing its Annual Assessment. The evaluation will consider effectiveness of WSCP actions and any anticipated water supply shortages assessed by the Annual Assessment. If the WSCP is revised, the District's Board of Directors will adopt a new ordinance adopting the revised WSCP, and if necessary, declare a water shortage level to implement.

13 PLAN ADOPTION, SUBMITTAL, AND AVAILABILITY

☑ *CWC § 10632 (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.*

The District informed the public and the appropriate agencies of: (1) its intent to prepare a WSCP, (2) where the WSCP was available for public review, and (3) when the public hearing regarding the WSCP would be held. All notifications were completed in compliance with the stipulations of Section 6066 of the Government Code and are included in Attachment 2 and Attachment 3.

The District's WSCP update was adopted by ordinance at the Public Hearing during the District's 15 August 2022 Board of Directors meeting.

A copy of the adopted 2020 WSCP including any amendments will be provided to the Department of Water Resources (DWR), and the California State Library within 30 days of the adoption. An electronic copy of the adopted 2020 WSCP will be submitted to the DWR using the DWR online submittal tool.

A copy of the adopted 2020 WSCP will be available for public review in the District office (730 L Street, Rio Linda, CA 95673) during normal business hours and on the Rio Linda/Elverta Community Water District website (http://www.rlecwd.com/) within 30 days after filing the plan with DWR.

Attachment 1

Drought Response Tool Quantitative Assessment

Drought Response Tool

1 - Home

Rio Linda/Elverta Community Water District

Enter Agency Information	
Agency Name	Rio Linda/Elverta Community Water District
Total Population Served	15,071
Conservation Goal (%)	5%
Drought Stage	Stage 1
Number of Residential Accounts	4,435
Number of Commercial, Industrial, and Institutional (CII) Accounts	169
Number of Dedicated Irrigation Accounts	17
Baseline Year(s)	2019
Percentage of Residential Indoor Use During Minimum Month (%)	100%
Percentage of CII Indoor Use During Minimum Month (%)	100%
Comments	

Navigation	
USER'S GUIDE	Download and read the guide before using this Tool
1 - HOME	Enter agency information
2 - INPUT BASELINE YEAR WATER USE	Enter Baseline Year production and use
3 - BASELINE YEAR WATER USE	Review and confirm entered information
4 - DROUGHT RESPONSE ACTIONS	Select Drought Response Actions and input estimated water savings and implementation rates.
5 - ESTIMATED WATER SAVINGS	Review estimated water production and compare estimated savings to conservation target.

Drought Response Tool

1 - Home

Rio Linda/Elverta Community Water District

6 - DROUGHT RESPONSE TRACKING	**Track production and water savings against the conservation target.**

1 - Home

Rio Linda/Elverta Community Water District

For questions about this tool or for additional information, contact:

Anona Dutton, P.G., C.Hg.
adutton@ekiconsult.com
(650) 292-9100

2 - Input Baseline Year (2019) Water Use

Rio Linda/Elverta Community Water District

Input Baseline Year (2019) Production and Water Use

Units: (gal)

Select the units to input monthly production and use data. Enter the total monthly potable water production for the Baseline Year. Next, enter monthly water use data by sector for the Baseline Year. If you bill on a bi-monthly basis, divide your billing data between the months that the billing cycle includes. If your single-family and multi-family accounts are tracked separately, enter the combined water use for both sectors in the Residential Water Use column. If your commercial, industrial, and institutional (CII) accounts are tracked separately, enter the combined water use for each sector in the CII Water Use column. Your non-revenue water use is calculated by subtracting your monthly residential, CII, and dedicated irrigation water uses from your monthly production. Your monthly residential gallons per capita per day (R-GPCD) is calculated by dividing your monthly residential water use by your population entered in Worksheet 1 - Home.

Date	Total Production (gal)	Residential Water Use (gal)	CII Water Use (gal)	Dedicated Irrigation Water Use (gal)	Non-Revenue Water Use (gal)	Total R-GPCD	Comments
January	35,329,525	28,125,471	3,568,094	76,899	3,559,061	60	
February	31,146,049	22,459,817	3,383,348	29,913	5,272,971	53	
March	35,054,556	25,278,291	3,807,924	33,667	5,934,674	54	
April	46,348,893	32,685,746	4,053,749	167,847	9,441,550	72	
May	66,841,098	47,137,074	5,846,031	242,057	13,615,937	101	
June	97,476,534	67,738,662	11,058,220	703,577	17,976,074	150	
July	115,381,642	80,181,330	13,089,464	832,815	21,278,034	172	
August	108,930,566	93,229,990	14,851,340	1,619,366	-770,130	200	
September	96,056,970	82,211,914	13,096,184	1,427,986	-679,114	182	
October	65,833,796	53,870,980	8,199,888	1,070,105	2,692,823	115	
November	57,769,522	47,272,084	7,195,448	939,023	2,362,967	105	
December	38,691,244	31,060,647	3,731,662	152,862	3,746,072	66	

3 - Baseline Year (2019) Water Use Profile

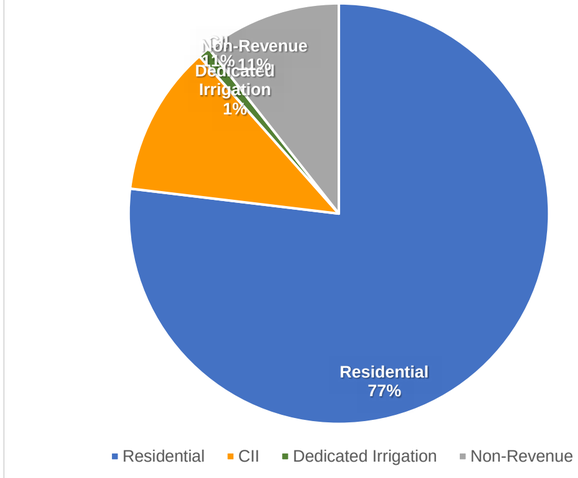
Rio Linda/Elverta Community Water District

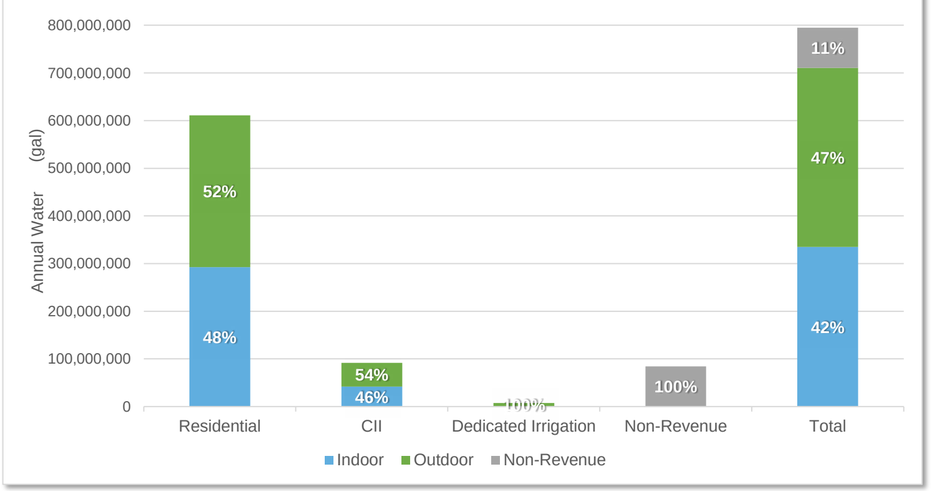
Baseline Year (2019) Annual Water Use Summary

Units: (gal)

A summary of your Baseline Year water use by sector and major end use category is shown below. Select the units in which your production and use data are displayed.

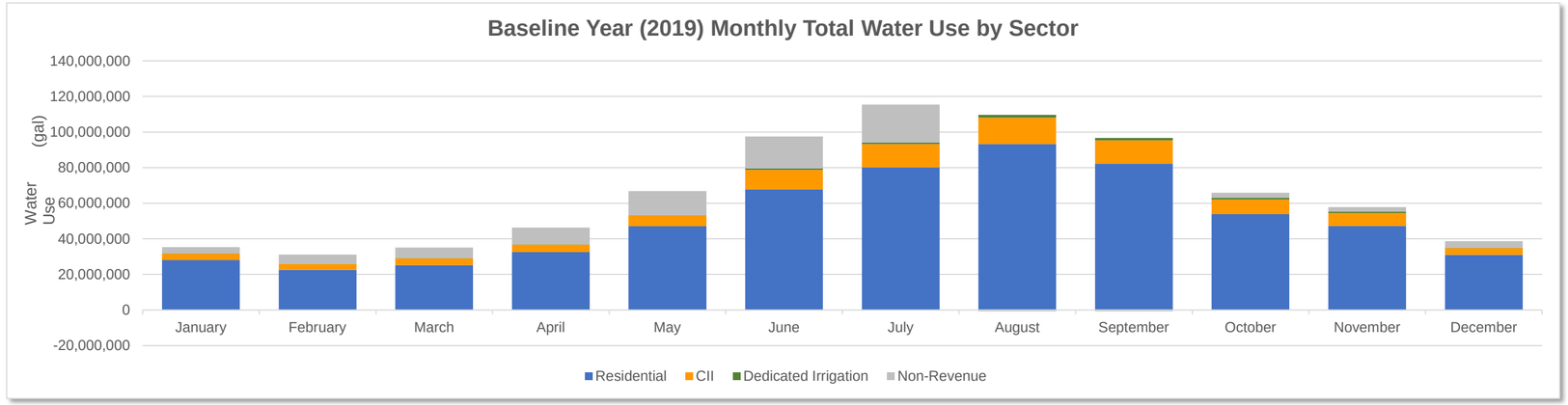
Water Use	Total Production (gal)	Water Use (gal)				Comments
		Residential	CII	Dedicated Irrigation	Non-Revenue	
Total	794,860,395	611,252,006	91,881,352	7,296,117	84,430,919	
Total Indoor	334,791,182	292,779,753	42,011,429	--	--	
Total Outdoor	375,638,294	318,472,253	49,869,924	7,296,117	--	
Total Non-Revenue	84,430,919	--	--	--	84,430,919	
Total Indoor %	42%	48%	46%	0%	--	
Total Outdoor %	47%	52%	54%	100%	--	
Total Non-Revenue %	11%	--	--	--	100%	

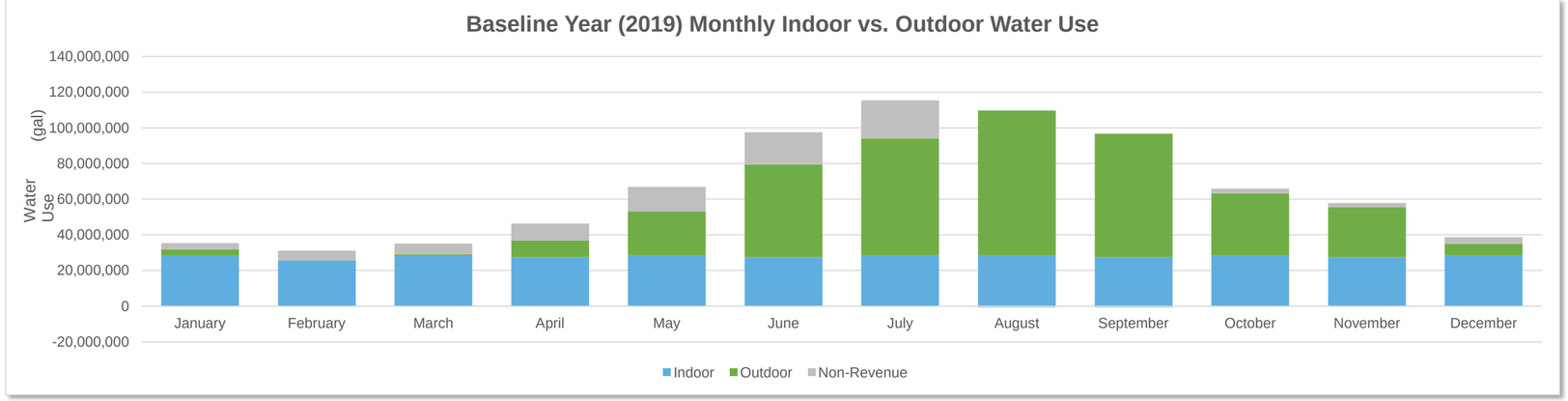




3 - Baseline Year (2019) Water Use Profile

Rio Linda/Elverta Community Water District



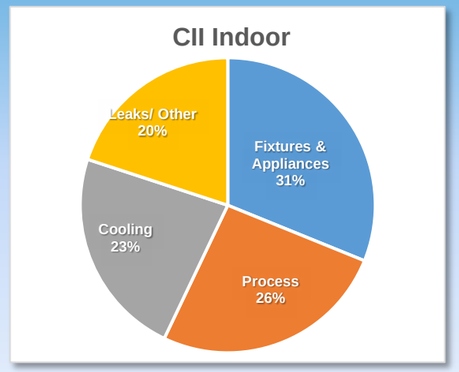


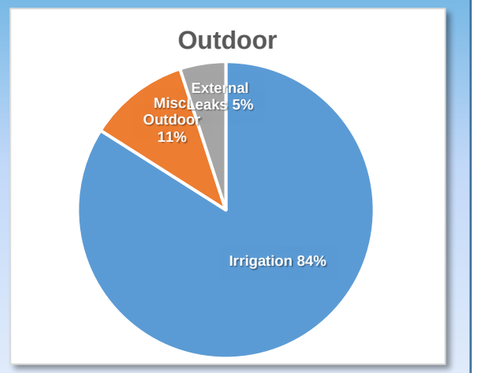
4 - Drought Response Actions - Stage 1

Rio Linda/Elverta Community Water District

Maximum Savings Potential		
Use the default values or enter your own criteria for the maximum savings potential. Estimated water savings within each sector will not exceed the maximum savings criteria.		
Minimum Residential Indoor GPCD	25	R-GPCD
Maximum Residential Outdoor Savings	100%	of Baseline Residential Outdoor Water Use
Maximum CII Indoor Savings	30%	of Baseline CII Indoor Water Use
Maximum CII Outdoor Savings	100%	of Baseline CII Outdoor Water Use
Maximum Dedicated Irrigation Account Savings	100%	of Baseline Dedicated Irrigation Water Use
Maximum Non-Revenue Water Savings	50%	of Baseline Non-Revenue Water Use
Resulting Total Maximum Annual Savings Potential	**74%**	of Total Baseline Production

Assumed Proportion of Water Use by End Uses and Sector





4 - Drought Response Actions - Stage 1

Rio Linda/Elverta Community Water District

Drought Response Actions

Select the Drought Response Actions you would like to include in your estimated savings calculations. For each selected action, use the default end use savings estimates and implementation rates or input your own values. The "End Use Savings" estimates the percent water use reduction that could occur at a particular end use as a result of a specific action. The "Implementation Rate" refers to the estimated percentage of accounts that will implement a specific action. The water savings potential at each end use is capped based on the assumed distribution of end use water demands shown in the pie charts above. A dash (--) indicates that professional judgement was used to establish the default value, or that savings are expected to be accounted for as part of a Public Information Program; additional basis for the default values are included in the User Manual.

Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Possible Mandatory Prohibitions**	All Outdoor	☑	14%	50%	--	--
Prohibit Irrigation with Potable Water Outside of Newly Constructed Homes and Buildings that is not Delivered by Drip or Microspray Systems	Irrigation	☐			--	--
Require Shut-Off Nozzles on Hoses for Vehicle Washing	Misc. Outdoor	☑	17%	50%	See Appendix D of the DRP	--
Prohibit Use of Potable Water to Wash Sidewalks and Driveways	Misc. Outdoor	☑	17%	50%		--
Prohibit the Use of Potable Water for Street Washing	Misc. Outdoor	☑	17%	50%		--
Prohibit Irrigation with Potable Water in a Manner that causes Runoff	Irrigation	☑	3%	50%	DeOreo et al., 2011	--
Prohibit Irrigation with Potable Water within 48 Hours following Measurable Rainfall	Irrigation	☑			--	--
Prohibit Irrigation of Ornamental Turf with Potable Water on Street Medians	Irrigation	☐			--	--
Prohibit Potable Water Use for Decorative Water Features that do not Recirculate Water	Misc. Outdoor	☐	50%	50%	EBMUD, 2008	--
Provide Linen Service Opt Out Options	Fixtures & Appliances	☑	0.5%	50%	EBMUD, 2011	--
Prohibit Serving Drinking Water other than upon Request in Eating or Drinking Establishments	Fixtures & Appliances	☑	0.5%	50%	EBMUD, 2011	--

4 - Drought Response Actions - Stage 1

Rio Linda/Elverta Community Water District

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Agency Drought Actions / Restrictions**						
► **Agency Actions**						
Media Campaign, Newspaper Articles, Website	All	☑	0.5%	50%	EBMUD, 2011	--
Promote Water Conservation / Rebate Programs	All	☑		50%	--	--
Water Efficiency Workshops, Public Events	All	☑	0.5%	25%	EBMUD, 2011	--
Water Bill Inserts	All	☑	0.5%	100%	EBMUD, 2011	--
Promote / Expand Use of Recycled Water	Irrigation	☐	100%		--	--
Home or Mobile Water Use Reports	All	☐	5%	10%	WaterSmart Software, 2015	--
Decrease Frequency and Length of Line Flushing	Non Revenue Water	☐	25%	50%	See Appendix D of the DRP	Reduced flushing by 50%.
Audit and Reduce System Water Loss	Non Revenue Water	☐	45%	50%	DWR, 2015	Target 50% of leakage.
Implement Drought Rate Structure / Water Budgets	All	☐	1%	100%	CUWCC, 2015	--
Establish Retrofit on Resale Ordinance	All Residential Indoor	☐	21%	6%	SFPUC, 2004	First Tuesday, 2015
Require Net Zero Demand Increase on New Connections	All	☐			--	--
Moratorium on New Connections	All	☐			--	--
Move to Monthly Metering / Billing	All	☐	5%	10%	See Appendix D of the DRP	--
Increase Water Waste Patrols / Enforcement	All	☐			--	--
Establish Drought Hotline	All	☐			--	--
Reduce Distribution System Pressures	Non Revenue Water	☐	4.5%	100%	CUWCC, 2010; DWR, 2015	--
► **Dedicated Irrigation**						
Conduct Irrigation Account Surveys	Irrigation	☐	30%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	38%	50%	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	79%	50%		
Prohibit use of Potable Water for Irrigation	Irrigation	☐	100%	50%		
Require Repair of all Leaks within 24 hours	External Leaks	☑	100%	5%	--	--
Customer Water Budgets						
Establish Water Budget - 25% Reduction	Irrigation	☐	25%	50%	--	--
Establish Water Budget - 50% Reduction	Irrigation	☐	50%	50%	--	--
Establish Water Budget - 75% Reduction	Irrigation	☐	75%	50%	--	--

4 - Drought Response Actions - Stage 1

Rio Linda/Elverta Community Water District

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Agency Drought Actions / Restrictions**						
► **Residential**						
Conduct Water Use Surveys Targeting High Water Users	All Residential Uses	☐	10%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	38%	50%	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	79%	50%		
Prohibit use of Potable Water for Irrigation	Irrigation	☐	100%	50%		
Prohibit Vehicle Washing Except with Recycled Water	Misc. Outdoor	☐	50%	50%	EBMUD, 2008	--
Require Repair of all Leaks within 24 hours	Leaks	☑	100%	5%	--	--
Require Pool Covers	Misc. Outdoor	☑	28%	25%	Maddaus & Mayer, 2001	--
Prohibit Filling of Pools	Misc. Outdoor	☐	55%	25%	DeOreo et al., 2011	--
Customer Water Budgets						
Establish Water Budget - 10% Reduction	All Residential Uses	☐	10%	50%	--	--
Establish Water Budget - 20% Reduction	All Residential Uses	☐	20%	50%	--	--
► **CII**						
Conduct CII Surveys Targeting High Water Users	All CII uses	☐	10%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	38%	50%	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	79%	50%		
Prohibit Use of Potable Water for Construction and Dust Control	Misc. Outdoor	☐		100%	--	--
Prohibit Single-Pass Cooling Systems	Cooling	☑	80%	1%	Vickers, 2001	--
Require Repair of all Leaks within 24 hours	Leaks	☑	100%	5%	--	--
Prohibit Vehicle Washing Except with Recycled Water	Misc. Outdoor	☐	50%	50%	EBMUD, 2008	--
Require Water-Efficient Pre-Rinse Spray Valves	Fixtures & Appliances	☐	0.8%	50%	EPA, 2015; Pacific Institute, 2003	--
Customer Water Budgets						
Establish Water Budget - 10% Reduction	All CII uses	☐	10%	50%	--	--
Establish Water Budget - 20% Reduction	All CII uses	☐	20%	50%	--	--
Establish Water Budget - 30% Reduction	All CII uses	☐	30%	50%	--	--

4 - Drought Response Actions - Stage 1

Rio Linda/Elverta Community Water District

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
▶ **Residential Customer Actions to Encourage**						
Install Bathroom Faucet Aerators	Faucets and Dishwashers	☐			--	--
Install a Water-Efficient Showerhead	Showers/Baths	☐			--	--
Turn Off Water when Brushing Teeth, Shaving, Washing Dishes, or Cooking	Faucets and Dishwashers	☐			--	--
Fill the Bathtub Halfway	Showers/Baths	☐			--	--
Wash Only Full Loads of Clothes	Clothes Washers	☐			--	--
Install a High-Efficiency Toilet	Toilets	☐			--	--
Take Shorter Showers	Showers/Baths	☐			--	--
Run Dishwasher Only When Full	Faucets and Dishwashers	☐			--	--
Reduce Outdoor Irrigation	Irrigation	☐			--	--
Install Drip-Irrigation	Irrigation	☐			--	--
Use Mulch	Irrigation	☐			--	--
Plant Drought Resistant Trees and Plants	Irrigation	☐			--	--
Use a Broom to Clean Outdoor Areas	Misc. Outdoor	☐			--	--
Flush Less Frequently	Toilets	☐			--	--
Re-Use Shower or Bath Water for Irrigation	Irrigation	☐			--	--
Wash Car at Facility that Recycles the Water	Misc. Outdoor	☐			--	--

5 - Estimated Water Savings - Stage 1

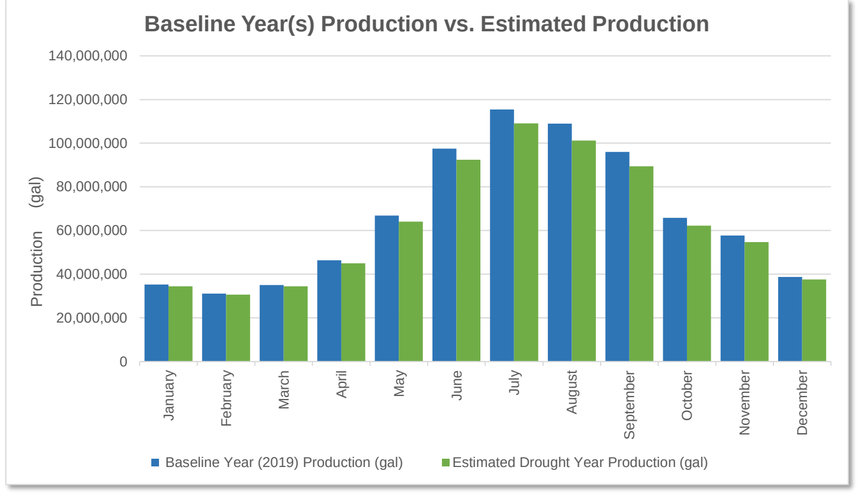
Rio Linda/Elverta Community Water District

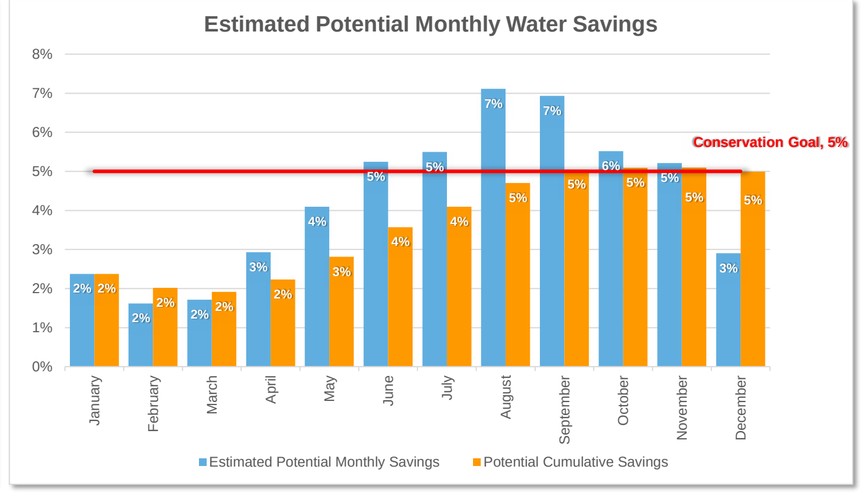
Estimated Monthly Water Use and Savings Summary

Units: (gal)

This provides a summary of the estimated production relative to Baseline Year production and potential water savings, assuming implementation of selected actions at the water savings and implementation rates indicated in the Drought Response Actions worksheet. Select the units that your production data are displayed in.

Month	Baseline Year (2019) Production (gal)	Estimated Drought Year Production (gal)	Estimated Potential Monthly Savings	Potential Cumulative Savings	Conservation Goal	Comments
January	35,329,525	34,489,943	2%	2%	5%	
February	31,146,049	30,641,617	2%	2%	5%	
March	35,054,556	34,454,311	2%	2%	5%	
April	46,348,893	44,989,216	3%	2%	5%	
May	66,841,098	64,104,088	4%	3%	5%	
June	97,476,534	92,360,811	5%	4%	5%	
July	115,381,642	109,040,756	5%	4%	5%	
August	108,930,566	101,184,581	7%	5%	5%	
September	96,056,970	89,394,999	7%	5%	5%	
October	65,833,796	62,199,943	6%	5%	5%	
November	57,769,522	54,757,838	5%	5%	5%	
December	38,691,244	37,567,508	3%	5%	5%	





Drought Response Tool

1 - Home

Rio Linda/Elverta Community Water District

Enter Agency Information	
Agency Name	Rio Linda/Elverta Community Water District
Total Population Served	15,071
Conservation Goal (%)	15%
Drought Stage	Stage 2
Number of Residential Accounts	4,435
Number of Commercial, Industrial, and Institutional (CII) Accounts	169
Number of Dedicated Irrigation Accounts	17
Baseline Year(s)	2019
Percentage of Residential Indoor Use During Minimum Month (%)	100%
Percentage of CII Indoor Use During Minimum Month (%)	100%
Comments	

Navigation	
USER'S GUIDE	Download and read the guide before using this Tool
1 - HOME	Enter agency information
2 - INPUT BASELINE YEAR WATER USE	Enter Baseline Year production and use
3 - BASELINE YEAR WATER USE	Review and confirm entered information
4 - DROUGHT RESPONSE ACTIONS	Select Drought Response Actions and input estimated water savings and implementation rates.
5 - ESTIMATED WATER SAVINGS	Review estimated water production and compare estimated savings to conservation target.

Drought Response Tool

1 - Home

Rio Linda/Elverta Community Water District

6 - DROUGHT RESPONSE TRACKING	**Track production and water savings against the conservation target.**

1 - Home

Rio Linda/Elverta Community Water District

For questions about this tool or for additional information, contact:

Anona Dutton, P.G., C.Hg.
adutton@ekiconsult.com
(650) 292-9100

2 - Input Baseline Year (2019) Water Use

Rio Linda/Elverta Community Water District

Input Baseline Year (2019) Production and Water Use

Units: (gal)

Select the units to input monthly production and use data. Enter the total monthly potable water production for the Baseline Year. Next, enter monthly water use data by sector for the Baseline Year. If you bill on a bi-monthly basis, divide your billing data between the months that the billing cycle includes. If your single-family and multi-family accounts are tracked separately, enter the combined water use for both sectors in the Residential Water Use column. If your commercial, industrial, and institutional (CII) accounts are tracked separately, enter the combined water use for each sector in the CII Water Use column. Your non-revenue water use is calculated by subtracting your monthly residential, CII, and dedicated irrigation water uses from your monthly production. Your monthly residential gallons per capita per day (R-GPCD) is calculated by dividing your monthly residential water use by your population entered in Worksheet 1 - Home.

Date	Total Production (gal)	Residential Water Use (gal)	CII Water Use (gal)	Dedicated Irrigation Water Use (gal)	Non-Revenue Water Use (gal)	Total R-GPCD	Comments
January	35,329,525	28,125,471	3,568,094	76,899	3,559,061	60	
February	31,146,049	22,459,817	3,383,348	29,913	5,272,971	53	
March	35,054,556	25,278,291	3,807,924	33,667	5,934,674	54	
April	46,348,893	32,685,746	4,053,749	167,847	9,441,550	72	
May	66,841,098	47,137,074	5,846,031	242,057	13,615,937	101	
June	97,476,534	67,738,662	11,058,220	703,577	17,976,074	150	
July	115,381,642	80,181,330	13,089,464	832,815	21,278,034	172	
August	108,930,566	93,229,990	14,851,340	1,619,366	-770,130	200	
September	96,056,970	82,211,914	13,096,184	1,427,986	-679,114	182	
October	65,833,796	53,870,980	8,199,888	1,070,105	2,692,823	115	
November	57,769,522	47,272,084	7,195,448	939,023	2,362,967	105	
December	38,691,244	31,060,647	3,731,662	152,862	3,746,072	66	

3 - Baseline Year (2019) Water Use Profile

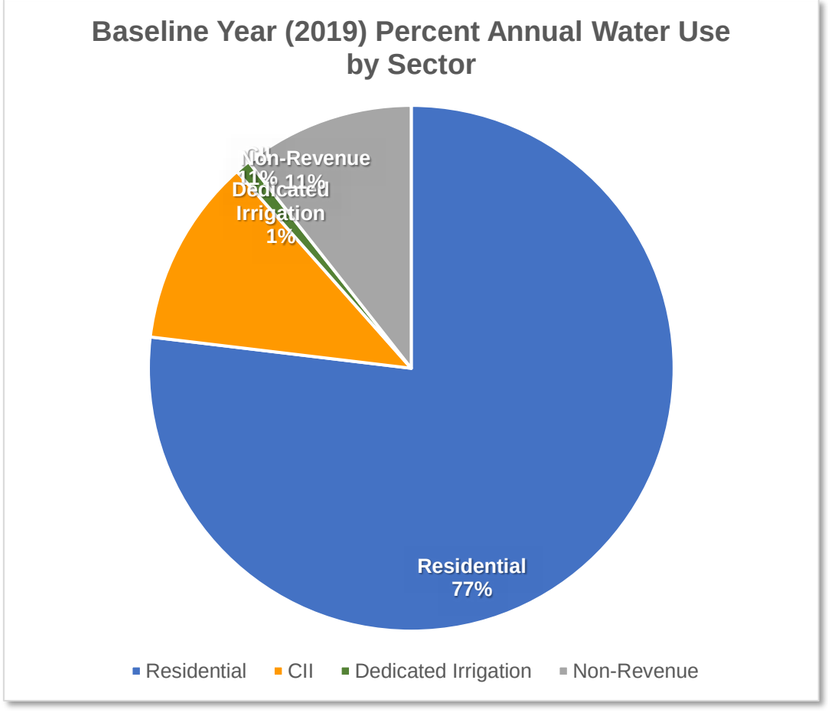
Rio Linda/Elverta Community Water District

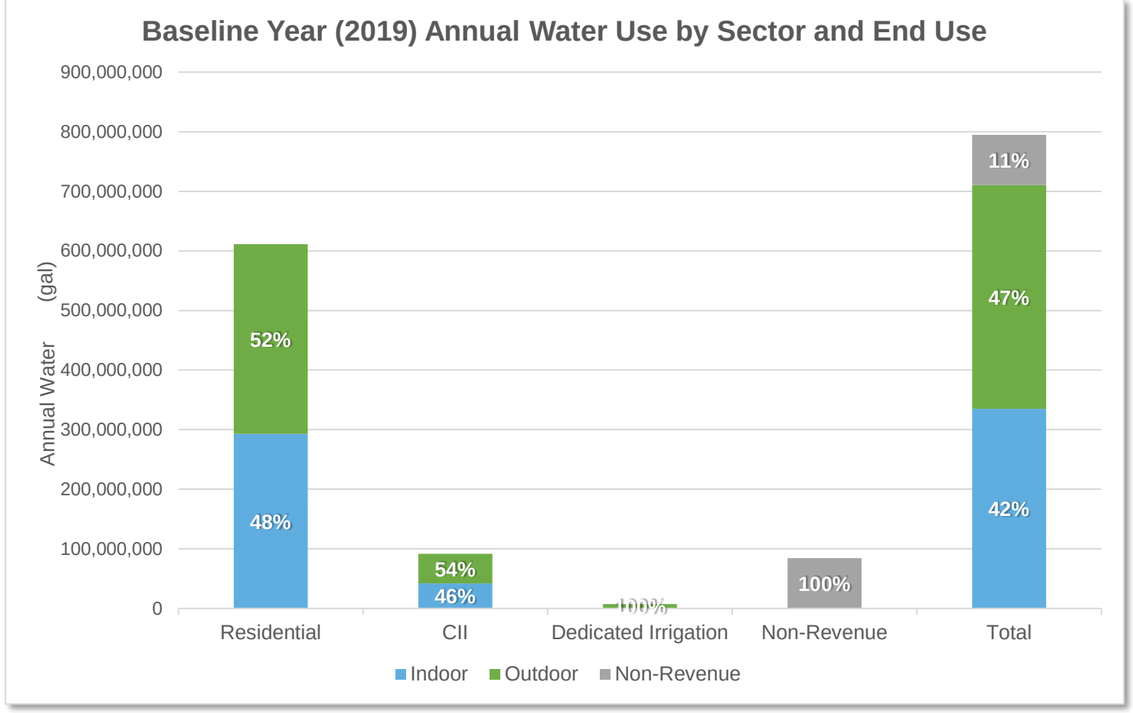
Baseline Year (2019) Annual Water Use Summary

Units: (gal)

A summary of your Baseline Year water use by sector and major end use category is shown below. Select the units in which your production and use data are displayed.

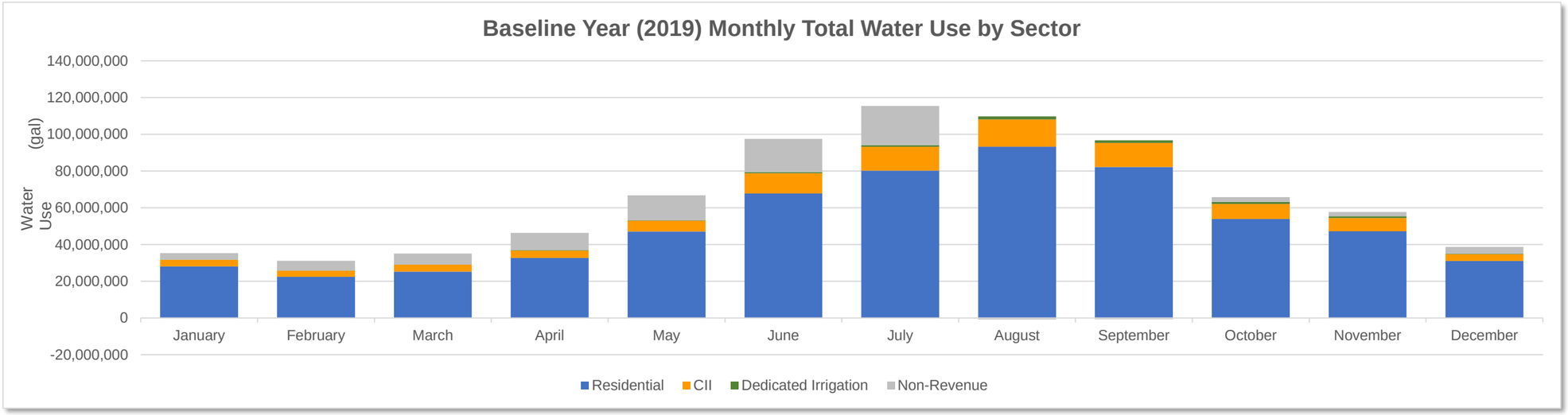
Water Use	Total Production (gal)	Water Use (gal)				Comments
		Residential	CII	Dedicated Irrigation	Non-Revenue	
Total	794,860,395	611,252,006	91,881,352	7,296,117	84,430,919	
Total Indoor	334,791,182	292,779,753	42,011,429	--	--	
Total Outdoor	375,638,294	318,472,253	49,869,924	7,296,117	--	
Total Non-Revenue	84,430,919	--	--	--	84,430,919	
Total Indoor %	42%	48%	46%	0%	--	
Total Outdoor %	47%	52%	54%	100%	--	
Total Non-Revenue %	11%	--	--	--	100%	

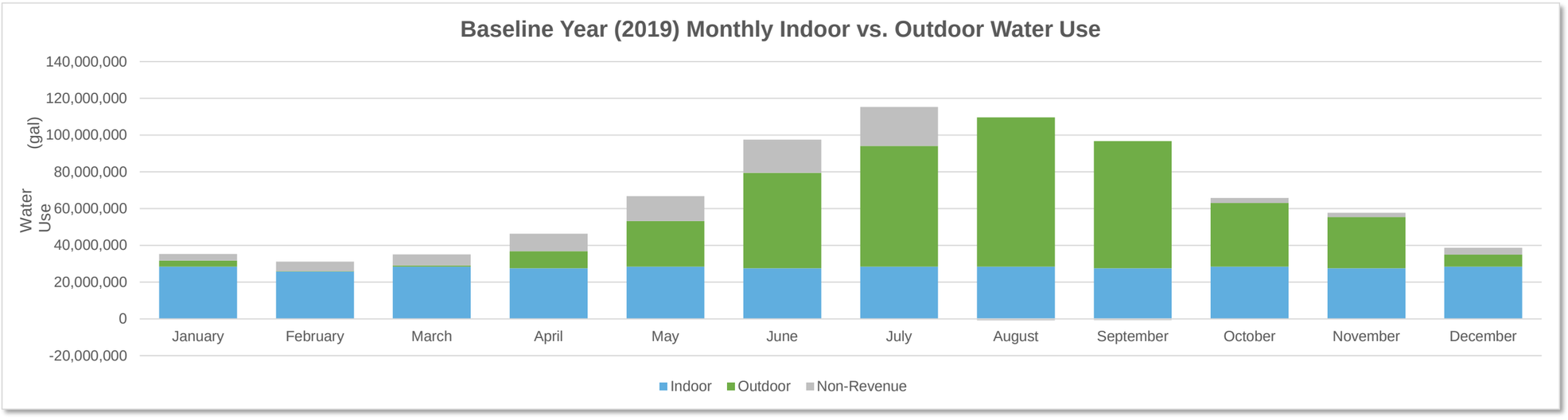




3 - Baseline Year (2019) Water Use Profile

Rio Linda/Elverta Community Water District





4 - Drought Response Actions - Stage 2

Rio Linda/Elverta Community Water District

Maximum Savings Potential		
Use the default values or enter your own criteria for the maximum savings potential. Estimated water savings within each sector will not exceed the maximum savings criteria.		
Minimum Residential Indoor GPCD	25	R-GPCD
Maximum Residential Outdoor Savings	100%	of Baseline Residential Outdoor Water Use
Maximum CII Indoor Savings	30%	of Baseline CII Indoor Water Use
Maximum CII Outdoor Savings	100%	of Baseline CII Outdoor Water Use
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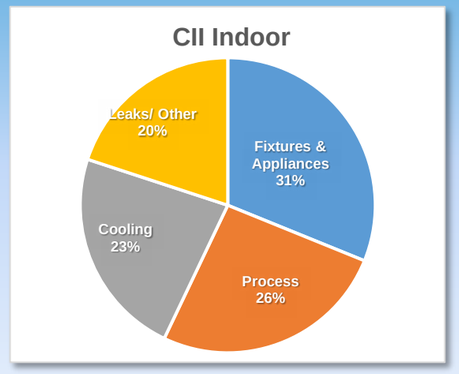
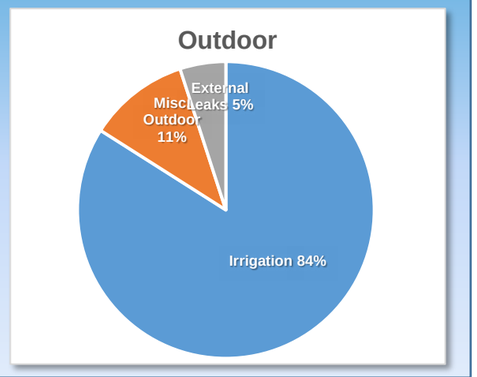
Resulting Total Maximum Annual Savings Potential	**74%**	of Total Baseline Production

Assumed Proportion of Water Use by End Uses and Sector





4 - Drought Response Actions - Stage 2

Rio Linda/Elverta Community Water District

Drought Response Actions

Select the Drought Response Actions you would like to include in your estimated savings calculations. For each selected action, use the default end use savings estimates and implementation rates or input your own values. The "End Use Savings" estimates the percent water use reduction that could occur at a particular end use as a result of a specific action. The "Implementation Rate" refers to the estimated percentage of accounts that will implement a specific action. The water savings potential at each end use is capped based on the assumed distribution of end use water demands shown in the pie charts above. A dash (--) indicates that professional judgement was used to establish the default value, or that savings are expected to be accounted for as part of a Public Information Program; additional basis for the default values are included in the User Manual.

Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Possible Mandatory Prohibitions**	All Outdoor	☑	14%	50%	--	--
Prohibit Irrigation with Potable Water Outside of Newly Constructed Homes and Buildings that is not Delivered by Drip or Microspray Systems	Irrigation	☐			--	--
Require Shut-Off Nozzles on Hoses for Vehicle Washing	Misc. Outdoor	☑	17%	50%	See Appendix D of the DRP	--
Prohibit Use of Potable Water to Wash Sidewalks and Driveways	Misc. Outdoor	☐	17%	50%		--
Prohibit the Use of Potable Water for Street Washing	Misc. Outdoor	☐	17%	50%		--
Prohibit Irrigation with Potable Water in a Manner that causes Runoff	Irrigation	☑	3%	50%	DeOreo et al., 2011	--
Prohibit Irrigation with Potable Water within 48 Hours following Measurable Rainfall	Irrigation	☐			--	--
Prohibit Irrigation of Ornamental Turf with Potable Water on Street Medians	Irrigation	☐			--	--
Prohibit Potable Water Use for Decorative Water Features that do not Recirculate Water	Misc. Outdoor	☑	50%	50%	EBMUD, 2008	--
Provide Linen Service Opt Out Options	Fixtures & Appliances	☑	0.5%	50%	EBMUD, 2011	--
Prohibit Serving Drinking Water other than upon Request in Eating or Drinking Establishments	Fixtures & Appliances	☑	0.5%	50%	EBMUD, 2011	--

4 - Drought Response Actions - Stage 2

Rio Linda/Elverta Community Water District

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Agency Drought Actions / Restrictions**						
► **Agency Actions**						
Media Campaign, Newspaper Articles, Website	All	☑	0.5%	**55%**	EBMUD, 2011	--
Promote Water Conservation / Rebate Programs	All	☑		50%	--	--
Water Efficiency Workshops, Public Events	All	☐	0.5%	25%	EBMUD, 2011	--
Water Bill Inserts	All	☑	0.5%	100%	EBMUD, 2011	--
Promote / Expand Use of Recycled Water	Irrigation	☐	100%		--	--
Home or Mobile Water Use Reports	All	☑	5%	10%	WaterSmart Software, 2015	--
Decrease Frequency and Length of Line Flushing	Non Revenue Water	☐	25%	50%	See Appendix D of the DRP	Reduced flushing by 50%.
Audit and Reduce System Water Loss	Non Revenue Water	☑	45%	**30%**	DWR, 2015	Target 30% of leakage.
Implement Drought Rate Structure / Water Budgets	All	☐	**2%**	100%	CUWCC, 2015	--
Establish Retrofit on Resale Ordinance	All Residential Indoor	☐	21%	6%	SFPUC, 2004	First Tuesday, 2015
Require Net Zero Demand Increase on New Connections	All	☐			--	--
Moratorium on New Connections	All	☐			--	--
Move to Monthly Metering / Billing	All	☐	5%	10%	See Appendix D of the DRP	--
Increase Water Waste Patrols / Enforcement	All	☐			--	--
Establish Drought Hotline	All	☑			--	--
Reduce Distribution System Pressures	Non Revenue Water	☐	4.5%	100%	CUWCC, 2010; DWR, 2015	--
► **Dedicated Irrigation**						
Conduct Irrigation Account Surveys	Irrigation	☐	30%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 3 Days/Week, 15 Minutes/Day, Between 8PM and 6AM	Irrigation	☑	**17%**	**80%**	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	79%	50%		
Prohibit use of Potable Water for Irrigation	Irrigation	☐	100%	50%		
Require Repair of all Leaks within 24 hours	External Leaks	☑	100%	5%	--	--
Customer Water Budgets						
Establish Water Budget - 25% Reduction	Irrigation	☐	25%	50%	--	--
Establish Water Budget - 50% Reduction	Irrigation	☐	50%	50%	--	--
Establish Water Budget - 75% Reduction	Irrigation	☐	75%	50%	--	--

4 - Drought Response Actions - Stage 2

Rio Linda/Elverta Community Water District

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Agency Drought Actions / Restrictions**						
► **Residential**						
Conduct Water Use Surveys Targeting High Water Users	All Residential Uses	☐	10%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	38%	**55%**	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	79%	50%		
Prohibit use of Potable Water for Irrigation	Irrigation	☐	100%	50%		
Prohibit Vehicle Washing Except with Recycled Water	Misc. Outdoor	☐	50%	50%	EBMUD, 2008	--
Require Repair of all Leaks within 24 hours	Leaks	☑	100%	5%	--	--
Require Pool Covers	Misc. Outdoor	☑	28%	25%	Maddaus & Mayer, 2001	--
Prohibit Filling of Pools	Misc. Outdoor	☐	55%	25%	DeOreo et al., 2011	--
Customer Water Budgets						
Establish Water Budget - 10% Reduction	All Residential Uses	☐	10%	50%	--	--
Establish Water Budget - 20% Reduction	All Residential Uses	☐	20%	50%	--	--
► **CII**						
Conduct CII Surveys Targeting High Water Users	All CII uses	☐	10%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	38%	**55%**	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	79%	50%		
Prohibit Use of Potable Water for Construction and Dust Control	Misc. Outdoor	☐		100%	--	--
Prohibit Single-Pass Cooling Systems	Cooling	☑	80%	1%	Vickers, 2001	--
Require Repair of all Leaks within 24 hours	Leaks	☑	100%	5%	--	--
Prohibit Vehicle Washing Except with Recycled Water	Misc. Outdoor	☐	50%	50%	EBMUD, 2008	--
Require Water-Efficient Pre-Rinse Spray Valves	Fixtures & Appliances	☐	0.8%	50%	EPA, 2015; Pacific Institute, 2003	--
Customer Water Budgets						
Establish Water Budget - 10% Reduction	All CII uses	☐	10%	50%	--	--
Establish Water Budget - 20% Reduction	All CII uses	☐	20%	50%	--	--
Establish Water Budget - 30% Reduction	All CII uses	☐	30%	50%	--	--

4 - Drought Response Actions - Stage 2

Rio Linda/Elverta Community Water District

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
▶ **Residential Customer Actions to Encourage**						
Install Bathroom Faucet Aerators	Faucets and Dishwashers	☐			--	--
Install a Water-Efficient Showerhead	Showers/Baths	☐			--	--
Turn Off Water when Brushing Teeth, Shaving, Washing Dishes, or Cooking	Faucets and Dishwashers	☐			--	--
Fill the Bathtub Halfway	Showers/Baths	☐			--	--
Wash Only Full Loads of Clothes	Clothes Washers	☐			--	--
Install a High-Efficiency Toilet	Toilets	☐			--	--
Take Shorter Showers	Showers/Baths	☐			--	--
Run Dishwasher Only When Full	Faucets and Dishwashers	☐			--	--
Reduce Outdoor Irrigation	Irrigation	☐			--	--
Install Drip-Irrigation	Irrigation	☐			--	--
Use Mulch	Irrigation	☐			--	--
Plant Drought Resistant Trees and Plants	Irrigation	☐			--	--
Use a Broom to Clean Outdoor Areas	Misc. Outdoor	☐			--	--
Flush Less Frequently	Toilets	☐			--	--
Re-Use Shower or Bath Water for Irrigation	Irrigation	☐			--	--
Wash Car at Facility that Recycles the Water	Misc. Outdoor	☐			--	--

5 - Estimated Water Savings - Stage 2

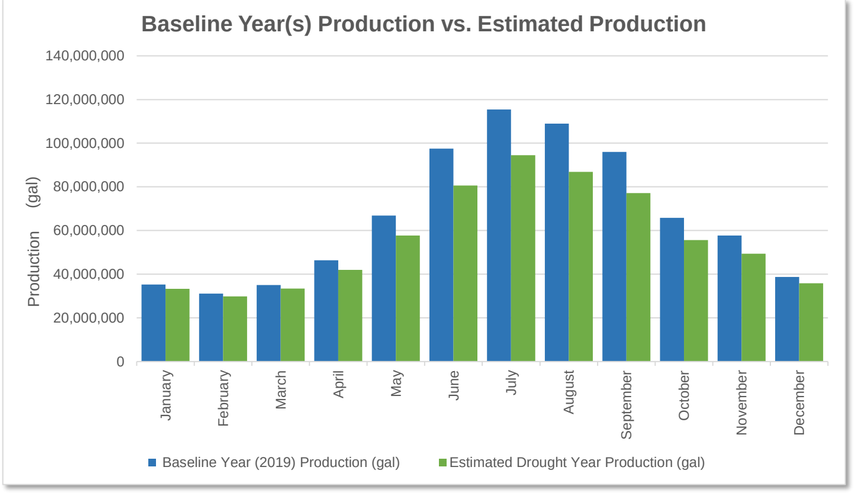
Rio Linda/Elverta Community Water District

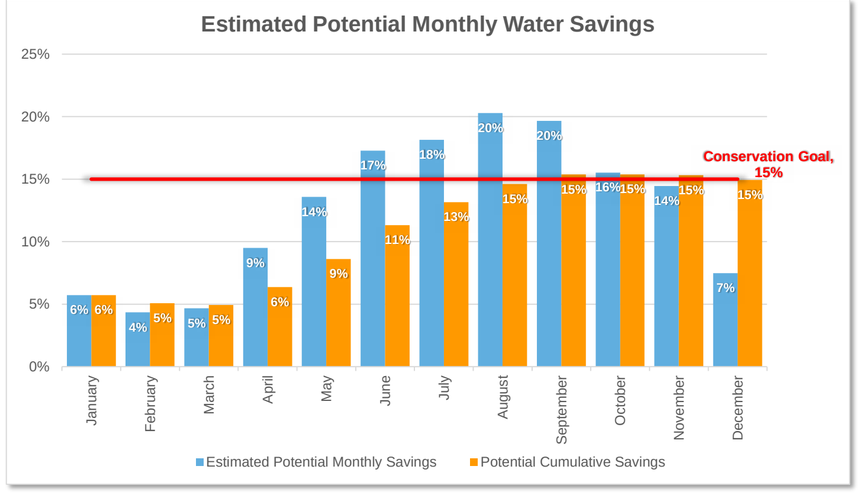
Estimated Monthly Water Use and Savings Summary

Units: (gal)

This provides a summary of the estimated production relative to Baseline Year production and potential water savings, assuming implementation of selected actions at the water savings and implementation rates indicated in the Drought Response Actions worksheet. Select the units that your production data are displayed in.

Month	Baseline Year (2019) Production (gal)	Estimated Drought Year Production (gal)	Estimated Potential Monthly Savings	Potential Cumulative Savings	Conservation Goal	Comments
January	35,329,525	33,307,237	6%	6%	15%	
February	31,146,049	29,794,364	4%	5%	15%	
March	35,054,556	33,419,102	5%	5%	15%	
April	46,348,893	41,946,339	9%	6%	15%	
May	66,841,098	57,767,010	14%	9%	15%	
June	97,476,534	80,636,100	17%	11%	15%	
July	115,381,642	94,445,597	18%	13%	15%	
August	108,930,566	86,830,639	20%	15%	15%	
September	96,056,970	77,160,708	20%	15%	15%	
October	65,833,796	55,610,753	16%	15%	15%	
November	57,769,522	49,420,311	14%	15%	15%	
December	38,691,244	35,799,668	7%	15%	15%	





Drought Response Tool

1 - Home

Rio Linda/Elverta Community Water District

Enter Agency Information	
Agency Name	Rio Linda/Elverta Community Water District
Total Population Served	15,071
Conservation Goal (%)	25%
Drought Stage	Stage 3
Number of Residential Accounts	4,435
Number of Commercial, Industrial, and Institutional (CII) Accounts	169
Number of Dedicated Irrigation Accounts	17
Baseline Year(s)	2019
Percentage of Residential Indoor Use During Minimum Month (%)	100%
Percentage of CII Indoor Use During Minimum Month (%)	100%
Comments	

Navigation	
USER'S GUIDE	Download and read the guide before using this Tool
1 - HOME	Enter agency information
2 - INPUT BASELINE YEAR WATER USE	Enter Baseline Year production and use
3 - BASELINE YEAR WATER USE	Review and confirm entered information
4 - DROUGHT RESPONSE ACTIONS	Select Drought Response Actions and input estimated water savings and implementation rates.
5 - ESTIMATED WATER SAVINGS	Review estimated water production and compare estimated savings to conservation target.

Drought Response Tool

1 - Home

Rio Linda/Elverta Community Water District

6 - DROUGHT RESPONSE TRACKING	**Track production and water savings against the conservation target.**

1 - Home

Rio Linda/Elverta Community Water District

For questions about this tool or for additional information, contact:

Anona Dutton, P.G., C.Hg.
adutton@ekiconsult.com
(650) 292-9100

2 - Input Baseline Year (2019) Water Use

Rio Linda/Elverta Community Water District

Input Baseline Year (2019) Production and Water Use

Units: (gal)

Select the units to input monthly production and use data. Enter the total monthly potable water production for the Baseline Year. Next, enter monthly water use data by sector for the Baseline Year. If you bill on a bi-monthly basis, divide your billing data between the months that the billing cycle includes. If your single-family and multi-family accounts are tracked separately, enter the combined water use for both sectors in the Residential Water Use column. If your commercial, industrial, and institutional (CII) accounts are tracked separately, enter the combined water use for each sector in the CII Water Use column. Your non-revenue water use is calculated by subtracting your monthly residential, CII, and dedicated irrigation water uses from your monthly production. Your monthly residential gallons per capita per day (R-GPCD) is calculated by dividing your monthly residential water use by your population entered in Worksheet 1 - Home.

Date	Total Production (gal)	Residential Water Use (gal)	CII Water Use (gal)	Dedicated Irrigation Water Use (gal)	Non-Revenue Water Use (gal)	Total R-GPCD	Comments
January	35,329,525	28,125,471	3,568,094	76,899	3,559,061	60	
February	31,146,049	22,459,817	3,383,348	29,913	5,272,971	53	
March	35,054,556	25,278,291	3,807,924	33,667	5,934,674	54	
April	46,348,893	32,685,746	4,053,749	167,847	9,441,550	72	
May	66,841,098	47,137,074	5,846,031	242,057	13,615,937	101	
June	97,476,534	67,738,662	11,058,220	703,577	17,976,074	150	
July	115,381,642	80,181,330	13,089,464	832,815	21,278,034	172	
August	108,930,566	93,229,990	14,851,340	1,619,366	-770,130	200	
September	96,056,970	82,211,914	13,096,184	1,427,986	-679,114	182	
October	65,833,796	53,870,980	8,199,888	1,070,105	2,692,823	115	
November	57,769,522	47,272,084	7,195,448	939,023	2,362,967	105	
December	38,691,244	31,060,647	3,731,662	152,862	3,746,072	66	

3 - Baseline Year (2019) Water Use Profile

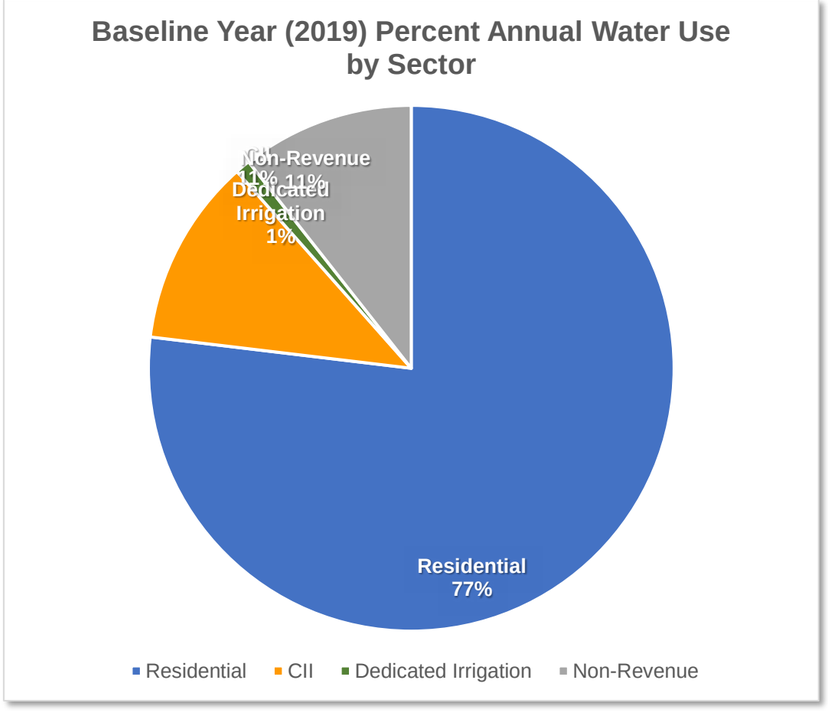
Rio Linda/Elverta Community Water District

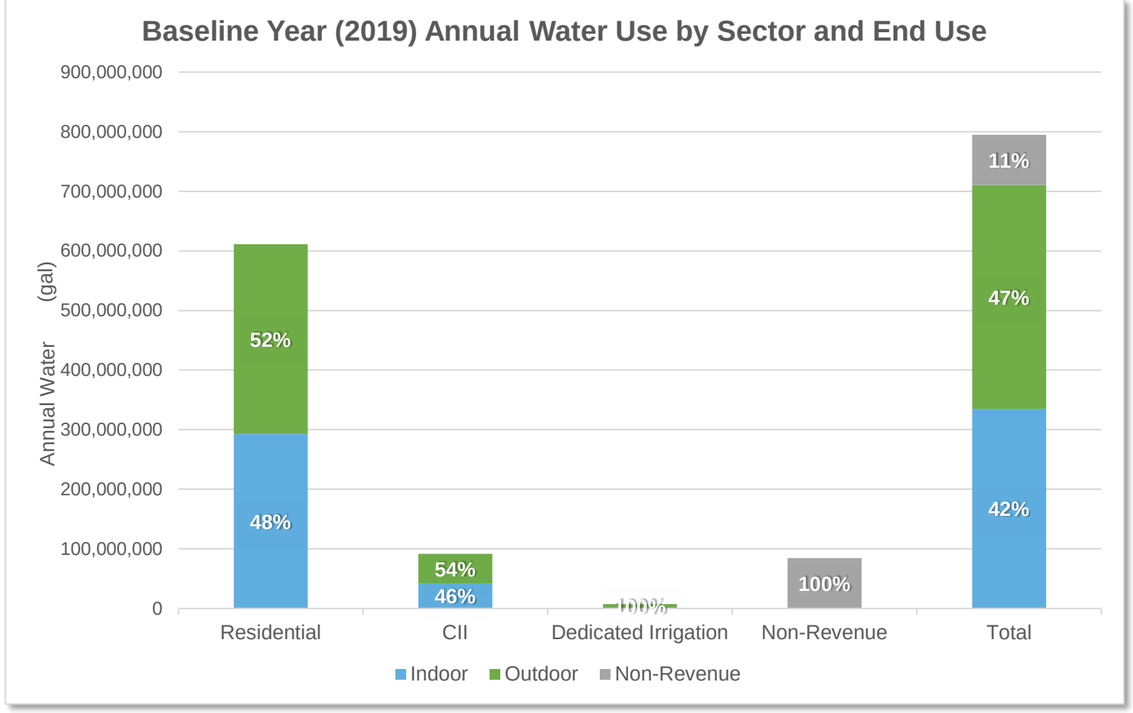
Baseline Year (2019) Annual Water Use Summary

Units: (gal)

A summary of your Baseline Year water use by sector and major end use category is shown below. Select the units in which your production and use data are displayed.

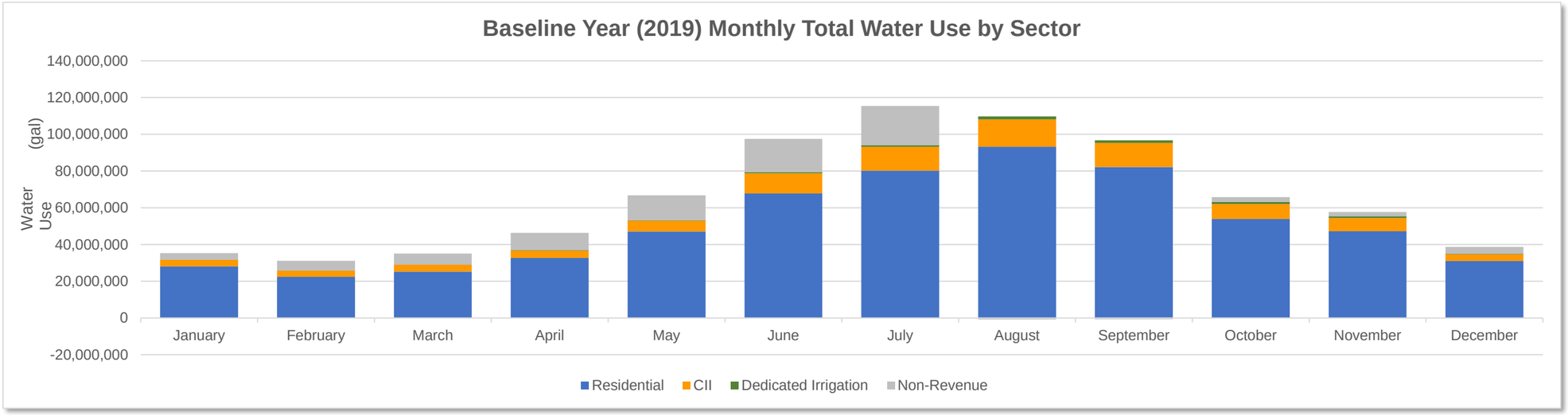
Water Use	Total Production (gal)	Water Use (gal)				Comments
		Residential	CII	Dedicated Irrigation	Non-Revenue	
Total	794,860,395	611,252,006	91,881,352	7,296,117	84,430,919	
Total Indoor	334,791,182	292,779,753	42,011,429	--	--	
Total Outdoor	375,638,294	318,472,253	49,869,924	7,296,117	--	
Total Non-Revenue	84,430,919	--	--	--	84,430,919	
Total Indoor %	42%	48%	46%	0%	--	
Total Outdoor %	47%	52%	54%	100%	--	
Total Non-Revenue %	11%	--	--	--	100%	

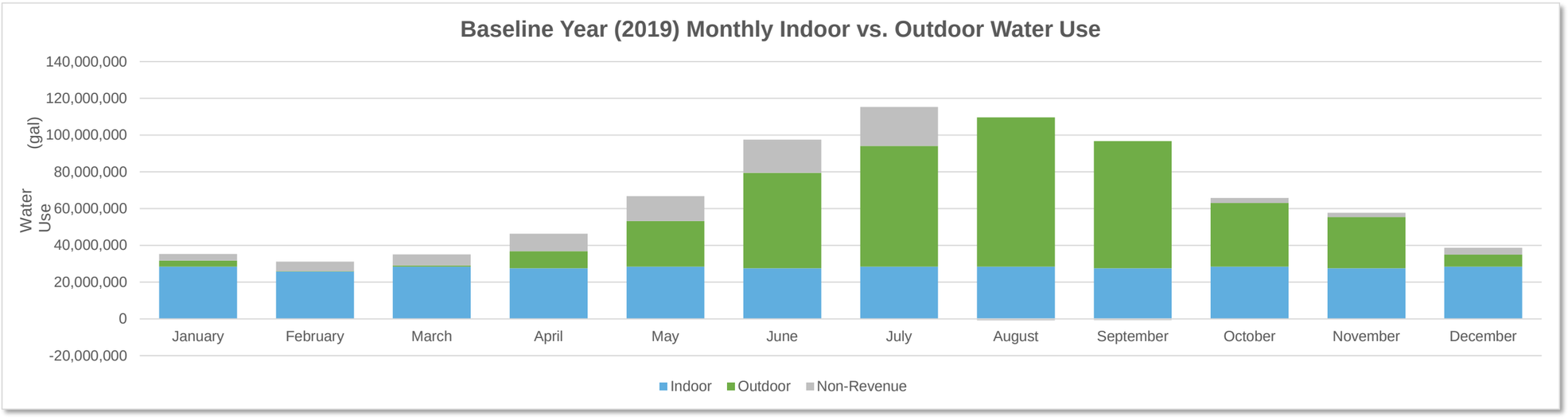




3 - Baseline Year (2019) Water Use Profile

Rio Linda/Elverta Community Water District



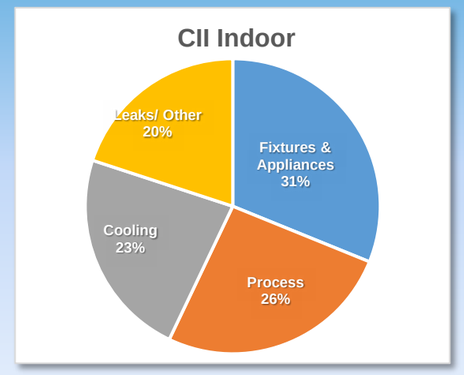


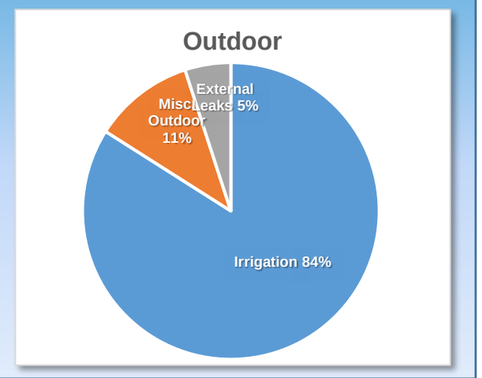
4 - Drought Response Actions - Stage 3

Rio Linda/Elverta Community Water District

Maximum Savings Potential		
Use the default values or enter your own criteria for the maximum savings potential. Estimated water savings within each sector will not exceed the maximum savings criteria.		
Minimum Residential Indoor GPCD	25	R-GPCD
Maximum Residential Outdoor Savings	100%	of Baseline Residential Outdoor Water Use
Maximum CII Indoor Savings	30%	of Baseline CII Indoor Water Use
Maximum CII Outdoor Savings	100%	of Baseline CII Outdoor Water Use
Maximum Dedicated Irrigation Account Savings	100%	of Baseline Dedicated Irrigation Water Use
Maximum Non-Revenue Water Savings	50%	of Baseline Non-Revenue Water Use
Resulting Total Maximum Annual Savings Potential	**74%**	of Total Baseline Production

Assumed Proportion of Water Use by End Uses and Sector





4 - Drought Response Actions - Stage 3

Rio Linda/Elverta Community Water District

Drought Response Actions

Select the Drought Response Actions you would like to include in your estimated savings calculations. For each selected action, use the default end use savings estimates and implementation rates or input your own values. The "End Use Savings" estimates the percent water use reduction that could occur at a particular end use as a result of a specific action. The "Implementation Rate" refers to the estimated percentage of accounts that will implement a specific action. The water savings potential at each end use is capped based on the assumed distribution of end use water demands shown in the pie charts above. A dash (--) indicates that professional judgement was used to establish the default value, or that savings are expected to be accounted for as part of a Public Information Program; additional basis for the default values are included in the User Manual.

Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Possible Mandatory Prohibitions**	All Outdoor	☑	14%	**85%**	--	--
Prohibit Irrigation with Potable Water Outside of Newly Constructed Homes and Buildings that is not Delivered by Drip or Microspray Systems	Irrigation	☐			--	--
Require Shut-Off Nozzles on Hoses for Vehicle Washing	Misc. Outdoor	☑	17%	50%	See Appendix D of the DRP	--
Prohibit Use of Potable Water to Wash Sidewalks and Driveways	Misc. Outdoor	☐	17%	50%		--
Prohibit the Use of Potable Water for Street Washing	Misc. Outdoor	☐	17%	50%		--
Prohibit Irrigation with Potable Water in a Manner that causes Runoff	Irrigation	☑	3%	50%	DeOreo et al., 2011	--
Prohibit Irrigation with Potable Water within 48 Hours following Measurable Rainfall	Irrigation	☐			--	--
Prohibit Irrigation of Ornamental Turf with Potable Water on Street Medians	Irrigation	☐			--	--
Prohibit Potable Water Use for Decorative Water Features that do not Recirculate Water	Misc. Outdoor	☑	50%	50%	EBMUD, 2008	--
Provide Linen Service Opt Out Options	Fixtures & Appliances	☑	0.5%	50%	EBMUD, 2011	--
Prohibit Serving Drinking Water other than upon Request in Eating or Drinking Establishments	Fixtures & Appliances	☑	0.5%	50%	EBMUD, 2011	--

4 - Drought Response Actions - Stage 3

Rio Linda/Elverta Community Water District

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Agency Drought Actions / Restrictions**						
► **Agency Actions**						
Media Campaign, Newspaper Articles, Website	All	☑	0.5%	**75%**	EBMUD, 2011	--
Promote Water Conservation / Rebate Programs	All	☑		50%	--	--
Water Efficiency Workshops, Public Events	All	☑	0.5%	**40%**	EBMUD, 2011	--
Water Bill Inserts	All	☑	0.5%	100%	EBMUD, 2011	--
Promote / Expand Use of Recycled Water	Irrigation	☐	100%		--	--
Home or Mobile Water Use Reports	All	☑	5%	10%	WaterSmart Software, 2015	--
Decrease Frequency and Length of Line Flushing	Non Revenue Water	☐	25%	50%	See Appendix D of the DRP	Reduced flushing by 50%.
Audit and Reduce System Water Loss	Non Revenue Water	☑	45%	**30%**	DWR, 2015	Target 30% of leakage.
Implement Drought Rate Structure / Water Budgets	All	☐	**4%**	100%	CUWCC, 2015	--
Establish Retrofit on Resale Ordinance	All Residential Indoor	☐	21%	6%	SFPUC, 2004	First Tuesday, 2015
Require Net Zero Demand Increase on New Connections	All	☐			--	--
Moratorium on New Connections	All	☐			--	--
Move to Monthly Metering / Billing	All	☐	5%	10%	See Appendix D of the DRP	--
Increase Water Waste Patrols / Enforcement	All	☑			--	--
Establish Drought Hotline	All	☑			--	--
Reduce Distribution System Pressures	Non Revenue Water	☐	4.5%	100%	CUWCC, 2010; DWR, 2015	--
► **Dedicated Irrigation**						
Conduct Irrigation Account Surveys	Irrigation	☑	30%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	38%	**80%**	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	79%	50%		
Prohibit use of Potable Water for Irrigation	Irrigation	☐	100%	50%		
Require Repair of all Leaks within 24 hours	External Leaks	☑	100%	5%	--	--
Customer Water Budgets						
Establish Water Budget - 25% Reduction	Irrigation	☐	25%	50%	--	--
Establish Water Budget - 50% Reduction	Irrigation	☐	50%	**75%**	--	--
Establish Water Budget - 75% Reduction	Irrigation	☐	75%	50%	--	--

4 - Drought Response Actions - Stage 3

Rio Linda/Elverta Community Water District

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Agency Drought Actions / Restrictions**						
► **Residential**						
Conduct Water Use Surveys Targeting High Water Users	All Residential Uses	☑	10%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	38%	**85%**	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	79%	50%		
Prohibit use of Potable Water for Irrigation	Irrigation	☐	100%	50%		
Prohibit Vehicle Washing Except with Recycled Water	Misc. Outdoor	☑	50%	**70%**	EBMUD, 2008	--
Require Repair of all Leaks within 24 hours	Leaks	☑	100%	5%	--	--
Require Pool Covers	Misc. Outdoor	☑	28%	25%	Maddaus & Mayer, 2001	--
Prohibit Filling of Pools	Misc. Outdoor	☑	55%	25%	DeOreo et al., 2011	--
Customer Water Budgets						
Establish Water Budget - 10% Reduction	All Residential Uses	☐	10%	50%	--	--
Establish Water Budget - 20% Reduction	All Residential Uses	☐	20%	50%	--	--
► **CII**						
Conduct CII Surveys Targeting High Water Users	All CII uses	☐	10%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	38%	**85%**	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	79%	50%		
Prohibit Use of Potable Water for Construction and Dust Control	Misc. Outdoor	☐		100%	--	--
Prohibit Single-Pass Cooling Systems	Cooling	☑	80%	1%	Vickers, 2001	--
Require Repair of all Leaks within 24 hours	Leaks	☑	100%	5%	--	--
Prohibit Vehicle Washing Except with Recycled Water	Misc. Outdoor	☑	50%	50%	EBMUD, 2008	--
Require Water-Efficient Pre-Rinse Spray Valves	Fixtures & Appliances	☐	0.8%	50%	EPA, 2015; Pacific Institute, 2003	--
Customer Water Budgets						
Establish Water Budget - 10% Reduction	All CII uses	☐	10%	50%	--	--
Establish Water Budget - 20% Reduction	All CII uses	☐	20%	50%	--	--
Establish Water Budget - 30% Reduction	All CII uses	☐	30%	50%	--	--

4 - Drought Response Actions - Stage 3

Rio Linda/Elverta Community Water District

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
▶ **Residential Customer Actions to Encourage**						
Install Bathroom Faucet Aerators	Faucets and Dishwashers	☐			--	--
Install a Water-Efficient Showerhead	Showers/Baths	☐			--	--
Turn Off Water when Brushing Teeth, Shaving, Washing Dishes, or Cooking	Faucets and Dishwashers	☐			--	--
Fill the Bathtub Halfway	Showers/Baths	☐			--	--
Wash Only Full Loads of Clothes	Clothes Washers	☐			--	--
Install a High-Efficiency Toilet	Toilets	☐			--	--
Take Shorter Showers	Showers/Baths	☐			--	--
Run Dishwasher Only When Full	Faucets and Dishwashers	☐			--	--
Reduce Outdoor Irrigation	Irrigation	☐			--	--
Install Drip-Irrigation	Irrigation	☐			--	--
Use Mulch	Irrigation	☐			--	--
Plant Drought Resistant Trees and Plants	Irrigation	☐			--	--
Use a Broom to Clean Outdoor Areas	Misc. Outdoor	☐			--	--
Flush Less Frequently	Toilets	☐			--	--
Re-Use Shower or Bath Water for Irrigation	Irrigation	☐			--	--
Wash Car at Facility that Recycles the Water	Misc. Outdoor	☐			--	--

5 - Estimated Water Savings - Stage 3

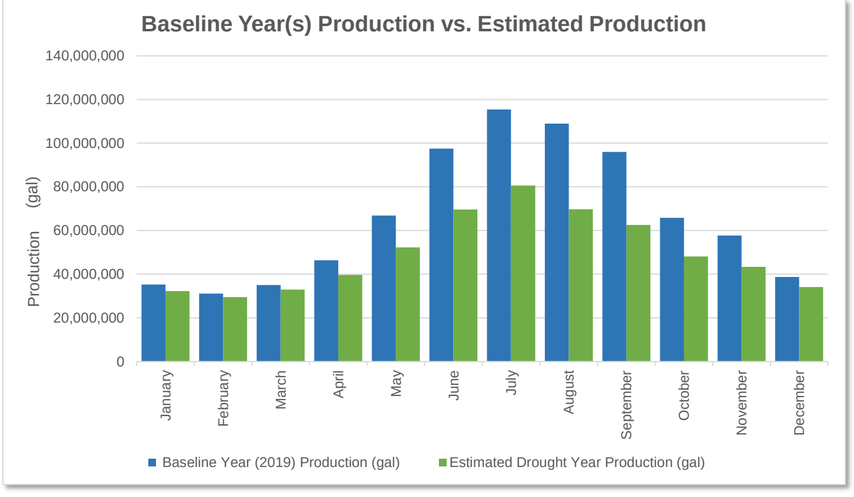
Rio Linda/Elverta Community Water District

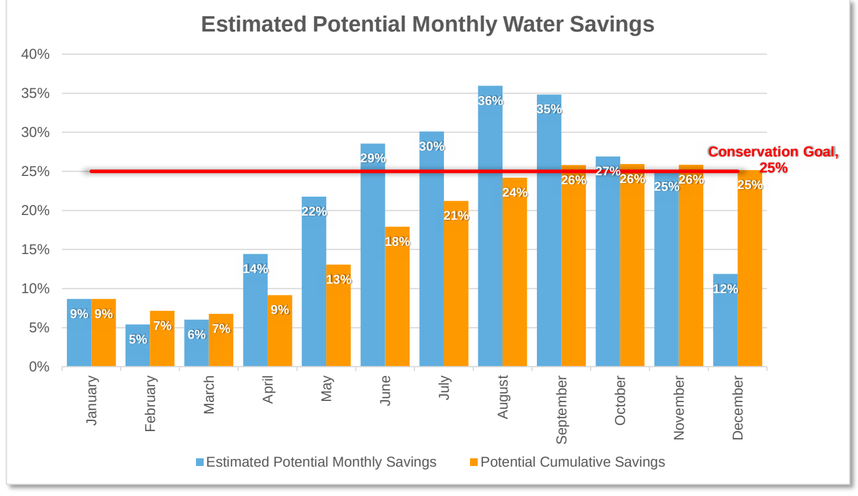
Estimated Monthly Water Use and Savings Summary

Units: (gal)

This provides a summary of the estimated production relative to Baseline Year production and potential water savings, assuming implementation of selected actions at the water savings and implementation rates indicated in the Drought Response Actions worksheet. Select the units that your production data are displayed in.

Month	Baseline Year (2019) Production (gal)	Estimated Drought Year Production (gal)	Estimated Potential Monthly Savings	Potential Cumulative Savings	Conservation Goal	Comments
January	35,329,525	32,269,484	9%	9%	25%	
February	31,146,049	29,457,404	5%	7%	25%	
March	35,054,556	32,948,518	6%	7%	25%	
April	46,348,893	39,665,679	14%	9%	25%	
May	66,841,098	52,297,455	22%	13%	25%	
June	97,476,534	69,639,378	29%	18%	25%	
July	115,381,642	80,626,933	30%	21%	25%	
August	108,930,566	69,770,067	36%	24%	25%	
September	96,056,970	62,589,984	35%	26%	25%	
October	65,833,796	48,112,964	27%	26%	25%	
November	57,769,522	43,338,332	25%	26%	25%	
December	38,691,244	34,098,014	12%	25%	25%	





Drought Response Tool

Home | Input Baseline Year Water Use | Baseline Year Water Use Profile | Drought Response Actions | Estimated Water Savings | Drought Response Tracking

1 - Home

Rio Linda/Elverta Community Water District

Enter Agency Information	
Agency Name	Rio Linda/Elverta Community Water District
Total Population Served	15,071
Conservation Goal (%)	35%
Drought Stage	Stage 4
Number of Residential Accounts	4,435
Number of Commercial, Industrial, and Institutional (CII) Accounts	169
Number of Dedicated Irrigation Accounts	17
Baseline Year(s)	2019
Percentage of Residential Indoor Use During Minimum Month (%)	100%
Percentage of CII Indoor Use During Minimum Month (%)	100%
Comments	

Navigation	
USER'S GUIDE	Download and read the guide before using this Tool
1 - HOME	Enter agency information
2 - INPUT BASELINE YEAR WATER USE	Enter Baseline Year production and use
3 - BASELINE YEAR WATER USE	Review and confirm entered information
4 - DROUGHT RESPONSE ACTIONS	Select Drought Response Actions and input estimated water savings and implementation rates.
5 - ESTIMATED WATER SAVINGS	Review estimated water production and compare estimated savings to conservation target.

Drought Response Tool

1 - Home

Rio Linda/Elverta Community Water District

6 - DROUGHT RESPONSE TRACKING	**Track production and water savings against the conservation target.**

1 - Home

Rio Linda/Elverta Community Water District

For questions about this tool or for additional information, contact:

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adutton@ekiconsult.com
(650) 292-9100

2 - Input Baseline Year (2019) Water Use

Rio Linda/Elverta Community Water District

Input Baseline Year (2019) Production and Water Use

Units: (gal)

Select the units to input monthly production and use data. Enter the total monthly potable water production for the Baseline Year. Next, enter monthly water use data by sector for the Baseline Year. If you bill on a bi-monthly basis, divide your billing data between the months that the billing cycle includes. If your single-family and multi-family accounts are tracked separately, enter the combined water use for both sectors in the Residential Water Use column. If your commercial, industrial, and institutional (CII) accounts are tracked separately, enter the combined water use for each sector in the CII Water Use column. Your non-revenue water use is calculated by subtracting your monthly residential, CII, and dedicated irrigation water uses from your monthly production. Your monthly residential gallons per capita per day (R-GPCD) is calculated by dividing your monthly residential water use by your population entered in Worksheet 1 - Home.

Date	Total Production (gal)	Residential Water Use (gal)	CII Water Use (gal)	Dedicated Irrigation Water Use (gal)	Non-Revenue Water Use (gal)	Total R-GPCD	Comments
January	35,329,525	28,125,471	3,568,094	76,899	3,559,061	60	
February	31,146,049	22,459,817	3,383,348	29,913	5,272,971	53	
March	35,054,556	25,278,291	3,807,924	33,667	5,934,674	54	
April	46,348,893	32,685,746	4,053,749	167,847	9,441,550	72	
May	66,841,098	47,137,074	5,846,031	242,057	13,615,937	101	
June	97,476,534	67,738,662	11,058,220	703,577	17,976,074	150	
July	115,381,642	80,181,330	13,089,464	832,815	21,278,034	172	
August	108,930,566	93,229,990	14,851,340	1,619,366	-770,130	200	
September	96,056,970	82,211,914	13,096,184	1,427,986	-679,114	182	
October	65,833,796	53,870,980	8,199,888	1,070,105	2,692,823	115	
November	57,769,522	47,272,084	7,195,448	939,023	2,362,967	105	
December	38,691,244	31,060,647	3,731,662	152,862	3,746,072	66	

3 - Baseline Year (2019) Water Use Profile

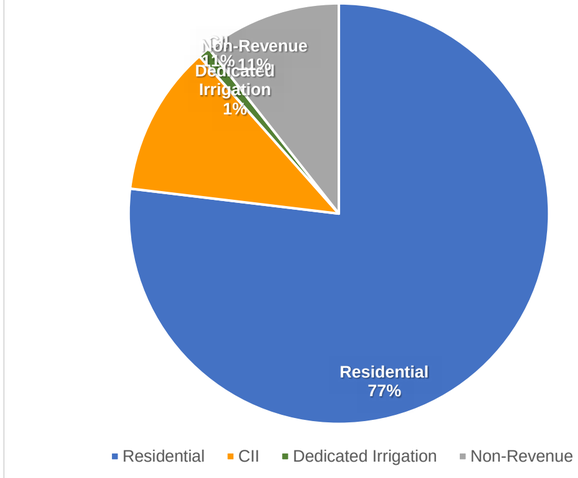
Rio Linda/Elverta Community Water District

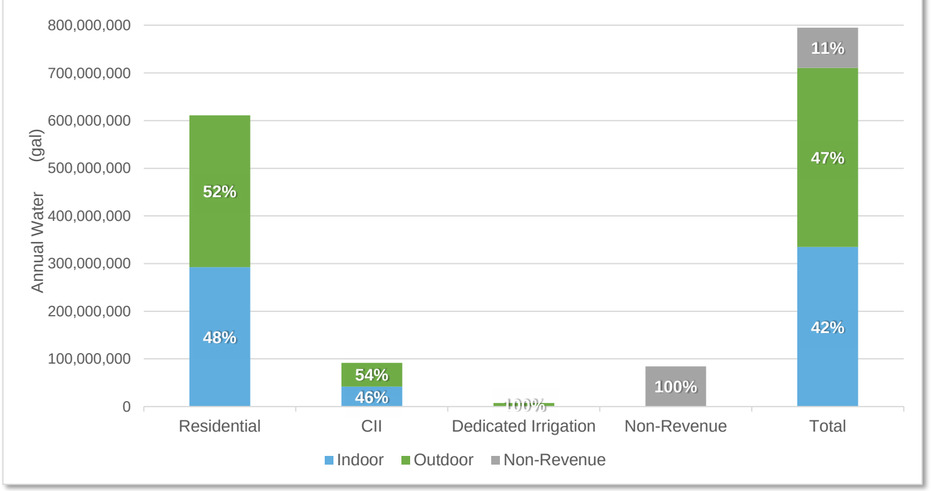
Baseline Year (2019) Annual Water Use Summary

Units: (gal)

A summary of your Baseline Year water use by sector and major end use category is shown below. Select the units in which your production and use data are displayed.

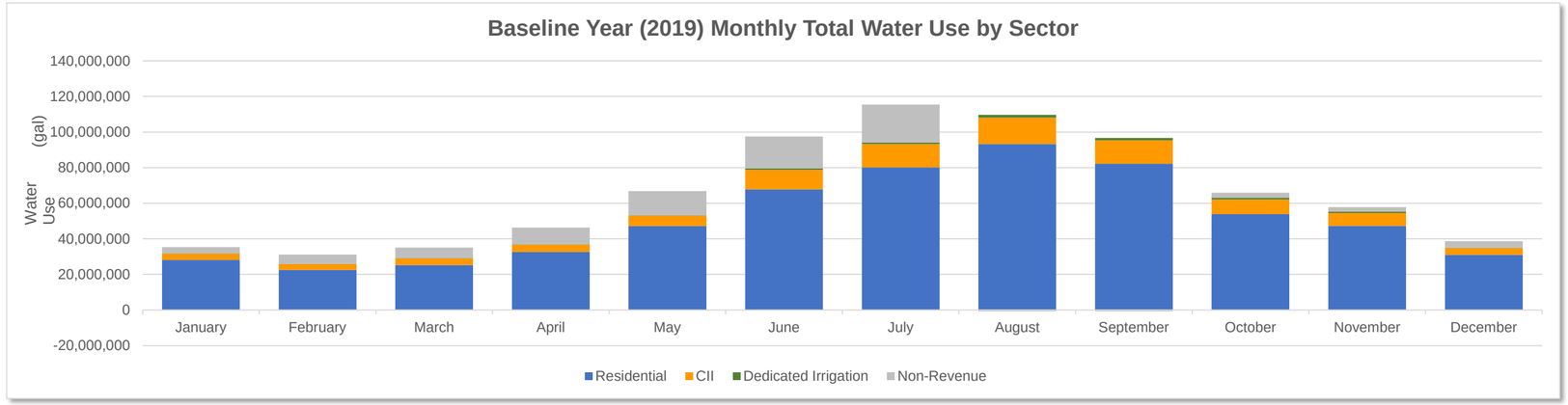
Water Use	Total Production (gal)	Water Use (gal)				Comments
		Residential	CII	Dedicated Irrigation	Non-Revenue	
Total	794,860,395	611,252,006	91,881,352	7,296,117	84,430,919	
Total Indoor	334,791,182	292,779,753	42,011,429	--	--	
Total Outdoor	375,638,294	318,472,253	49,869,924	7,296,117	--	
Total Non-Revenue	84,430,919	--	--	--	84,430,919	
Total Indoor %	42%	48%	46%	0%	--	
Total Outdoor %	47%	52%	54%	100%	--	
Total Non-Revenue %	11%	--	--	--	100%	

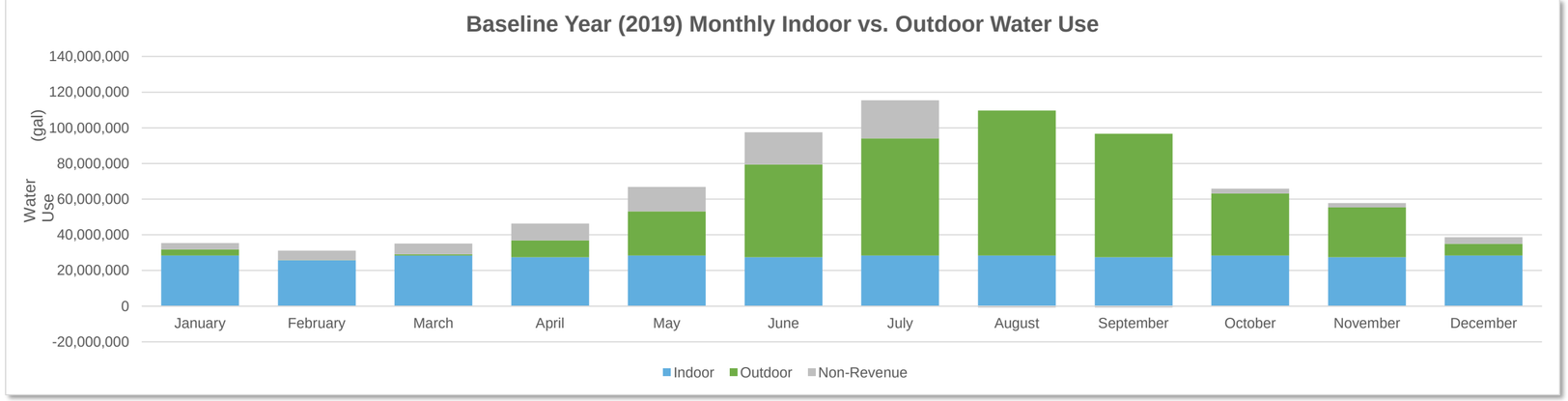




3 - Baseline Year (2019) Water Use Profile

Rio Linda/Elverta Community Water District



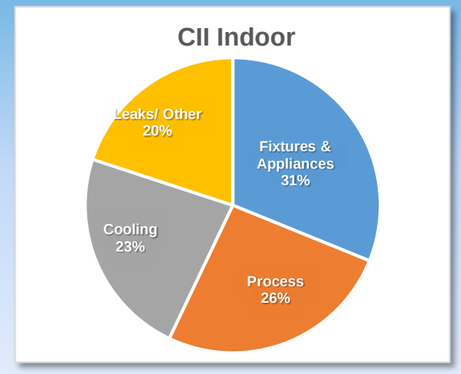


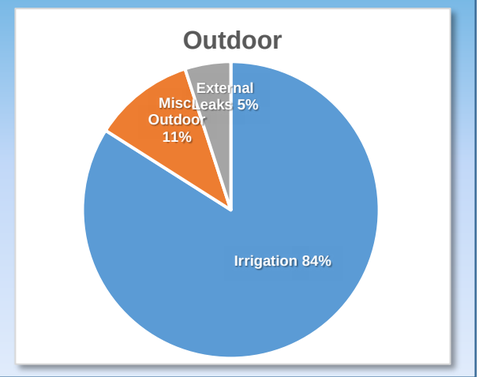
4 - Drought Response Actions - Stage 4

Rio Linda/Elverta Community Water District

Maximum Savings Potential		
Use the default values or enter your own criteria for the maximum savings potential. Estimated water savings within each sector will not exceed the maximum savings criteria.		
Minimum Residential Indoor GPCD	25	R-GPCD
Maximum Residential Outdoor Savings	100%	of Baseline Residential Outdoor Water Use
Maximum CII Indoor Savings	30%	of Baseline CII Indoor Water Use
Maximum CII Outdoor Savings	100%	of Baseline CII Outdoor Water Use
Maximum Dedicated Irrigation Account Savings	100%	of Baseline Dedicated Irrigation Water Use
Maximum Non-Revenue Water Savings	50%	of Baseline Non-Revenue Water Use
Resulting Total Maximum Annual Savings Potential	**74%**	of Total Baseline Production

Assumed Proportion of Water Use by End Uses and Sector





4 - Drought Response Actions - Stage 4

Rio Linda/Elverta Community Water District

Drought Response Actions

Select the Drought Response Actions you would like to include in your estimated savings calculations. For each selected action, use the default end use savings estimates and implementation rates or input your own values. The "End Use Savings" estimates the percent water use reduction that could occur at a particular end use as a result of a specific action. The "Implementation Rate" refers to the estimated percentage of accounts that will implement a specific action. The water savings potential at each end use is capped based on the assumed distribution of end use water demands shown in the pie charts above. A dash (--) indicates that professional judgement was used to establish the default value, or that savings are expected to be accounted for as part of a Public Information Program; additional basis for the default values are included in the User Manual.

Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Possible Mandatory Prohibitions**	All Outdoor	☑	14%	**85%**	--	--
Prohibit Irrigation with Potable Water Outside of Newly Constructed Homes and Buildings that is not Delivered by Drip or Microspray Systems	Irrigation	☐			--	--
Require Shut-Off Nozzles on Hoses for Vehicle Washing	Misc. Outdoor	☑	17%	50%	See Appendix D of the DRP	--
Prohibit Use of Potable Water to Wash Sidewalks and Driveways	Misc. Outdoor	☐	17%	50%		--
Prohibit the Use of Potable Water for Street Washing	Misc. Outdoor	☐	17%	50%		--
Prohibit Irrigation with Potable Water in a Manner that causes Runoff	Irrigation	☑	3%	50%	DeOreo et al., 2011	--
Prohibit Irrigation with Potable Water within 48 Hours following Measurable Rainfall	Irrigation	☐			--	--
Prohibit Irrigation of Ornamental Turf with Potable Water on Street Medians	Irrigation	☐			--	--
Prohibit Potable Water Use for Decorative Water Features that do not Recirculate Water	Misc. Outdoor	☑	50%	50%	EBMUD, 2008	--
Provide Linen Service Opt Out Options	Fixtures & Appliances	☑	0.5%	50%	EBMUD, 2011	--
Prohibit Serving Drinking Water other than upon Request in Eating or Drinking Establishments	Fixtures & Appliances	☑	0.5%	50%	EBMUD, 2011	--

4 - Drought Response Actions - Stage 4

Rio Linda/Elverta Community Water District

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Agency Drought Actions / Restrictions**						
► **Agency Actions**						
Media Campaign, Newspaper Articles, Website	All	☑	0.5%	**65%**	EBMUD, 2011	--
Promote Water Conservation / Rebate Programs	All	☑		50%	--	--
Water Efficiency Workshops, Public Events	All	☑	0.5%	**30%**	EBMUD, 2011	--
Water Bill Inserts	All	☑	0.5%	100%	EBMUD, 2011	--
Promote / Expand Use of Recycled Water	Irrigation	☐	100%		--	--
Home or Mobile Water Use Reports	All	☑	5%	10%	WaterSmart Software, 2015	--
Decrease Frequency and Length of Line Flushing	Non Revenue Water	☐	25%	50%	See Appendix D of the DRP	Reduced flushing by 50%.
Audit and Reduce System Water Loss	Non Revenue Water	☑	45%	**30%**	DWR, 2015	Target 30% of leakage.
Implement Drought Rate Structure / Water Budgets	All	☐	5%	100%	CUWCC, 2015	--
Establish Retrofit on Resale Ordinance	All Residential Indoor	☐	21%	6%	SFPUC, 2004	First Tuesday, 2015
Require Net Zero Demand Increase on New Connections	All	☐			--	--
Moratorium on New Connections	All	☐			--	--
Move to Monthly Metering / Billing	All	☐	5%	10%	See Appendix D of the DRP	--
Increase Water Waste Patrols / Enforcement	All	☑			--	--
Establish Drought Hotline	All	☑			--	--
Reduce Distribution System Pressures	Non Revenue Water	☐	4.5%	100%	CUWCC, 2010; DWR, 2015	--
► **Dedicated Irrigation**						
Conduct Irrigation Account Surveys	Irrigation	☑	30%	10%	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	38%	**90%**	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	79%	**90%**		
Prohibit use of Potable Water for Irrigation	Irrigation	☐	100%	50%		
Require Repair of all Leaks within 24 hours	External Leaks	☑	100%	5%	--	--
Customer Water Budgets						
Establish Water Budget - 25% Reduction	Irrigation	☐	25%	50%	--	--
Establish Water Budget - 50% Reduction	Irrigation	☐	50%	**90%**	--	--
Establish Water Budget - 75% Reduction	Irrigation	☐	75%	**55%**	--	--

4 - Drought Response Actions - Stage 4

Rio Linda/Elverta Community Water District

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► Agency Drought Actions / Restrictions						
► Residential						
Conduct Water Use Surveys Targeting High Water Users	All Residential Uses	☑	10%	**20%**	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	38%	**60%**	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	79%	**70%**		
Prohibit use of Potable Water for Irrigation	Irrigation	☐	100%	50%		
Prohibit Vehicle Washing Except with Recycled Water	Misc. Outdoor	☑	50%	50%	EBMUD, 2008	--
Require Repair of all Leaks within 24 hours	Leaks	☑	100%	5%	--	--
Require Pool Covers	Misc. Outdoor	☑	28%	25%	Maddaus & Mayer, 2001	--
Prohibit Filling of Pools	Misc. Outdoor	☑	55%	25%	DeOreo et al., 2011	--
Customer Water Budgets						
Establish Water Budget - 10% Reduction	All Residential Uses	☐	10%	**75%**	--	--
Establish Water Budget - 25% Reduction	All Residential Uses	☐	**25%**	**55%**	--	--
► CII						
Conduct CII Surveys Targeting High Water Users	All CII uses	☑	10%	**20%**	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	**38%**	**85%**	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	79%	**70%**		
Prohibit Use of Potable Water for Construction and Dust Control	Misc. Outdoor	☐		100%	--	--
Prohibit Single-Pass Cooling Systems	Cooling	☑	80%	1%	Vickers, 2001	--
Require Repair of all Leaks within 24 hours	Leaks	☑	100%	5%	--	--
Prohibit Vehicle Washing Except with Recycled Water	Misc. Outdoor	☑	50%	**75%**	EBMUD, 2008	--
Require Water-Efficient Pre-Rinse Spray Valves	Fixtures & Appliances	☐	0.8%	50%	EPA, 2015; Pacific Institute, 2003	--
Customer Water Budgets						
Establish Water Budget - 10% Reduction	All CII uses	☐	10%	**75%**	--	--
Establish Water Budget - 25% Reduction	All CII uses	☐	**25%**	**60%**	--	--
Establish Water Budget - 35% Reduction	All CII uses	☐	**35%**	**55%**	--	--

4 - Drought Response Actions - Stage 4

Rio Linda/Elverta Community Water District

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
▶ **Residential Customer Actions to Encourage**						
Install Bathroom Faucet Aerators	Faucets and Dishwashers	☐			--	--
Install a Water-Efficient Showerhead	Showers/Baths	☐			--	--
Turn Off Water when Brushing Teeth, Shaving, Washing Dishes, or Cooking	Faucets and Dishwashers	☐			--	--
Fill the Bathtub Halfway	Showers/Baths	☐			--	--
Wash Only Full Loads of Clothes	Clothes Washers	☐			--	--
Install a High-Efficiency Toilet	Toilets	☐			--	--
Take Shorter Showers	Showers/Baths	☐			--	--
Run Dishwasher Only When Full	Faucets and Dishwashers	☐			--	--
Reduce Outdoor Irrigation	Irrigation	☐			--	--
Install Drip-Irrigation	Irrigation	☐			--	--
Use Mulch	Irrigation	☐			--	--
Plant Drought Resistant Trees and Plants	Irrigation	☐			--	--
Use a Broom to Clean Outdoor Areas	Misc. Outdoor	☐			--	--
Flush Less Frequently	Toilets	☐			--	--
Re-Use Shower or Bath Water for Irrigation	Irrigation	☐			--	--
Wash Car at Facility that Recycles the Water	Misc. Outdoor	☐			--	--

5 - Estimated Water Savings - Stage 4

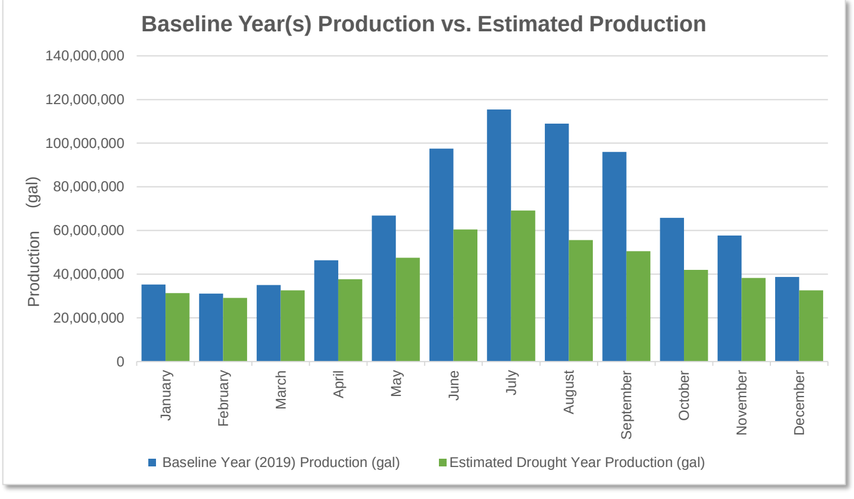
Rio Linda/Elverta Community Water District

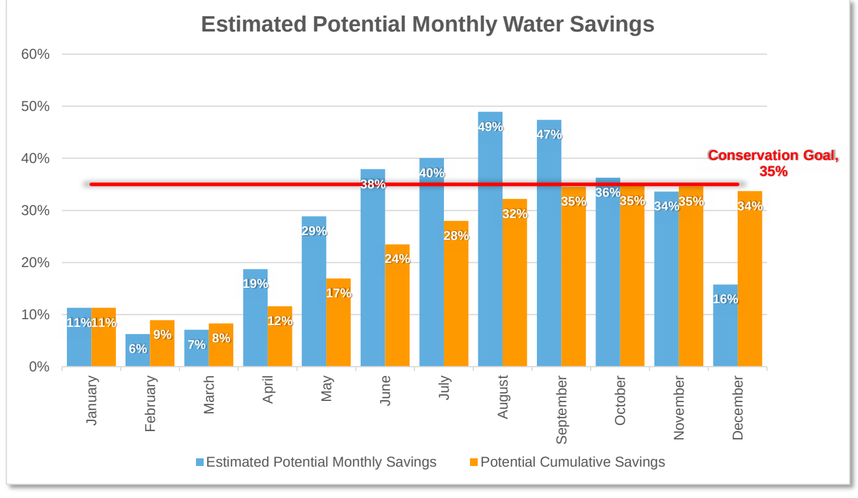
Estimated Monthly Water Use and Savings Summary

Units: (gal)

This provides a summary of the estimated production relative to Baseline Year production and potential water savings, assuming implementation of selected actions at the water savings and implementation rates indicated in the Drought Response Actions worksheet. Select the units that your production data are displayed in.

Month	Baseline Year (2019) Production (gal)	Estimated Drought Year Production (gal)	Estimated Potential Monthly Savings	Potential Cumulative Savings	Conservation Goal	Comments
January	35,329,525	31,336,955	11%	11%	35%	
February	31,146,049	29,186,987	6%	9%	35%	
March	35,054,556	32,566,191	7%	8%	35%	
April	46,348,893	37,667,729	19%	12%	35%	
May	66,841,098	47,554,641	29%	17%	35%	
June	97,476,534	60,505,863	38%	24%	35%	
July	115,381,642	69,131,062	40%	28%	35%	
August	108,930,566	55,627,221	49%	32%	35%	
September	96,056,970	50,522,870	47%	35%	35%	
October	65,833,796	41,936,272	36%	35%	35%	
November	57,769,522	38,342,852	34%	35%	35%	
December	38,691,244	32,582,210	16%	34%	35%	





Drought Response Tool

1 - Home

Rio Linda/Elverta Community Water District

Enter Agency Information	
Agency Name	Rio Linda/Elverta Community Water District
Total Population Served	15,071
Conservation Goal (%)	45%
Drought Stage	Stage 5
Number of Residential Accounts	4,435
Number of Commercial, Industrial, and Institutional (CII) Accounts	169
Number of Dedicated Irrigation Accounts	17
Baseline Year(s)	2019
Percentage of Residential Indoor Use During Minimum Month (%)	100%
Percentage of CII Indoor Use During Minimum Month (%)	100%
Comments	

Navigation	
USER'S GUIDE	Download and read the guide before using this Tool
1 - HOME	Enter agency information
2 - INPUT BASELINE YEAR WATER USE	Enter Baseline Year production and use
3 - BASELINE YEAR WATER USE	Review and confirm entered information
4 - DROUGHT RESPONSE ACTIONS	Select Drought Response Actions and input estimated water savings and implementation rates.
5 - ESTIMATED WATER SAVINGS	Review estimated water production and compare estimated savings to conservation target.

Drought Response Tool

1 - Home

Rio Linda/Elverta Community Water District

6 - DROUGHT RESPONSE TRACKING	**Track production and water savings against the conservation target.**

1 - Home

Rio Linda/Elverta Community Water District

For questions about this tool or for additional information, contact:

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adutton@ekiconsult.com
(650) 292-9100

2 - Input Baseline Year (2019) Water Use

Rio Linda/Elverta Community Water District

Input Baseline Year (2019) Production and Water Use

Units: (gal)

Select the units to input monthly production and use data. Enter the total monthly potable water production for the Baseline Year. Next, enter monthly water use data by sector for the Baseline Year. If you bill on a bi-monthly basis, divide your billing data between the months that the billing cycle includes. If your single-family and multi-family accounts are tracked separately, enter the combined water use for both sectors in the Residential Water Use column. If your commercial, industrial, and institutional (CII) accounts are tracked separately, enter the combined water use for each sector in the CII Water Use column. Your non-revenue water use is calculated by subtracting your monthly residential, CII, and dedicated irrigation water uses from your monthly production. Your monthly residential gallons per capita per day (R-GPCD) is calculated by dividing your monthly residential water use by your population entered in Worksheet 1 - Home.

Date	Total Production (gal)	Residential Water Use (gal)	CII Water Use (gal)	Dedicated Irrigation Water Use (gal)	Non-Revenue Water Use (gal)	Total R-GPCD	Comments
January	35,329,525	28,125,471	3,568,094	76,899	3,559,061	60	
February	31,146,049	22,459,817	3,383,348	29,913	5,272,971	53	
March	35,054,556	25,278,291	3,807,924	33,667	5,934,674	54	
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June	97,476,534	67,738,662	11,058,220	703,577	17,976,074	150	
July	115,381,642	80,181,330	13,089,464	832,815	21,278,034	172	
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November	57,769,522	47,272,084	7,195,448	939,023	2,362,967	105	
December	38,691,244	31,060,647	3,731,662	152,862	3,746,072	66	

3 - Baseline Year (2019) Water Use Profile

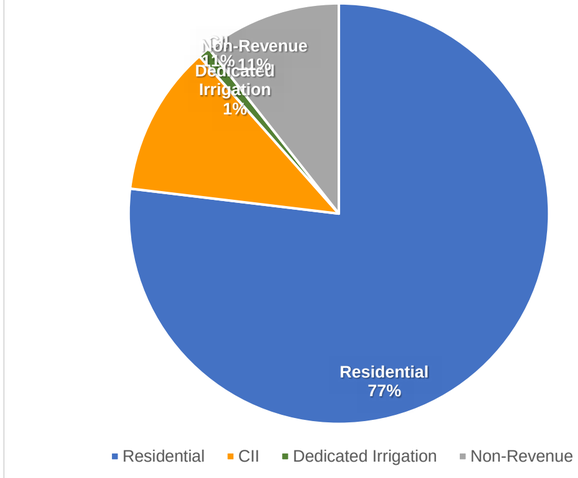
Rio Linda/Elverta Community Water District

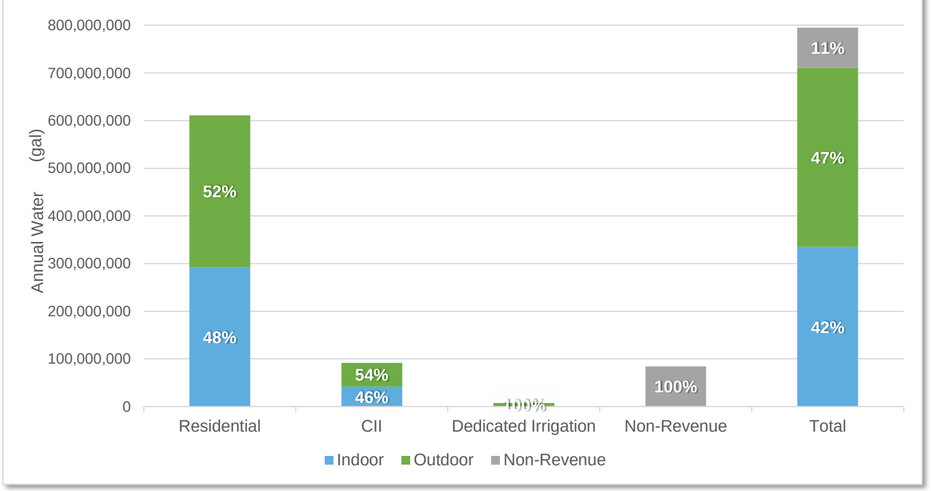
Baseline Year (2019) Annual Water Use Summary

Units: (gal)

A summary of your Baseline Year water use by sector and major end use category is shown below. Select the units in which your production and use data are displayed.

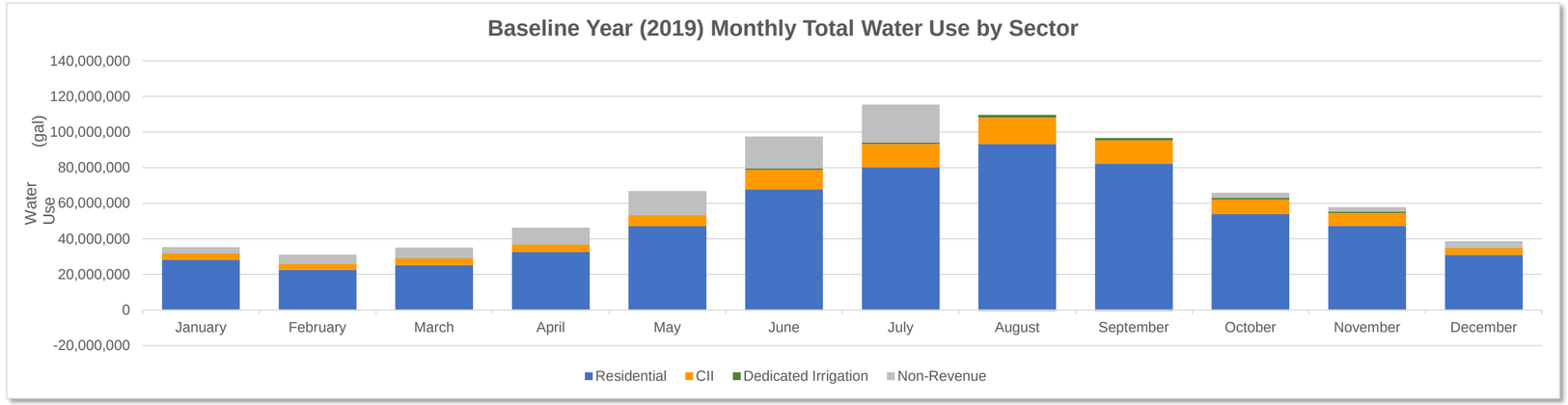
Water Use	Total Production (gal)	Water Use (gal)				Comments
		Residential	CII	Dedicated Irrigation	Non-Revenue	
Total	794,860,395	611,252,006	91,881,352	7,296,117	84,430,919	
Total Indoor	334,791,182	292,779,753	42,011,429	--	--	
Total Outdoor	375,638,294	318,472,253	49,869,924	7,296,117	--	
Total Non-Revenue	84,430,919	--	--	--	84,430,919	
Total Indoor %	42%	48%	46%	0%	--	
Total Outdoor %	47%	52%	54%	100%	--	
Total Non-Revenue %	11%	--	--	--	100%	

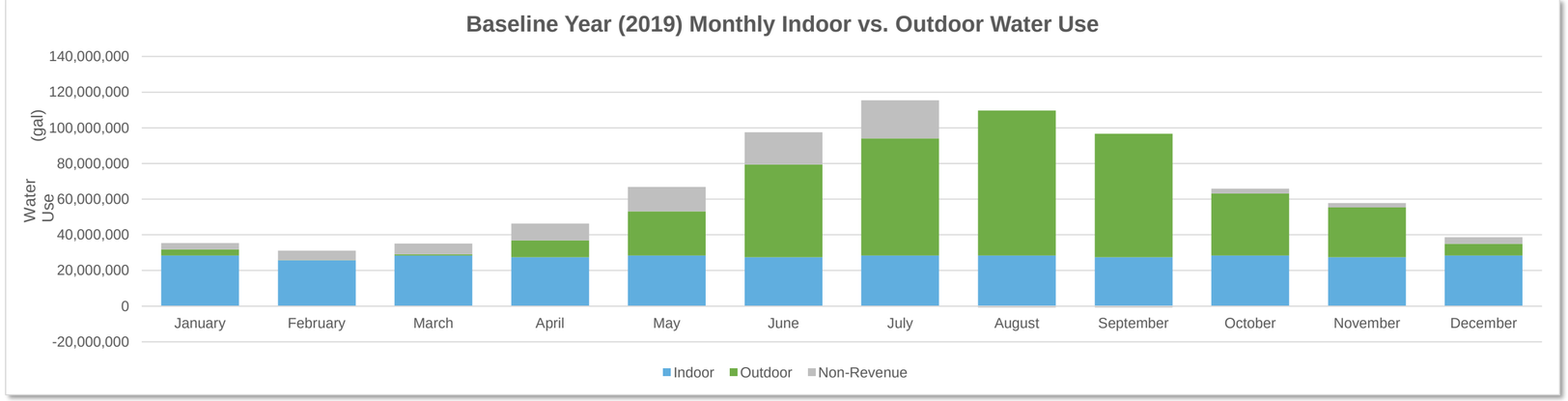




3 - Baseline Year (2019) Water Use Profile

Rio Linda/Elverta Community Water District



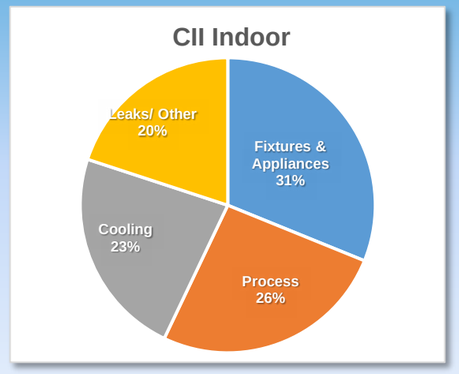


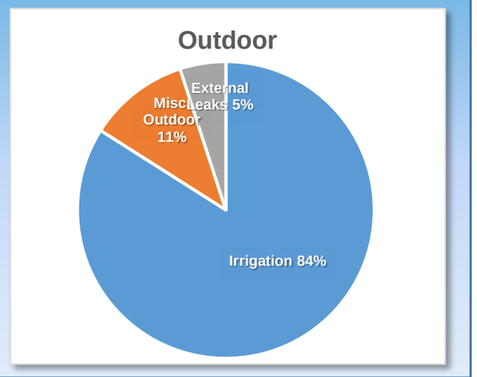
4 - Drought Response Actions - Stage 5

Rio Linda/Elverta Community Water District

Maximum Savings Potential		
Use the default values or enter your own criteria for the maximum savings potential. Estimated water savings within each sector will not exceed the maximum savings criteria.		
Minimum Residential Indoor GPCD	46	R-GPCD
Maximum Residential Outdoor Savings	75%	of Baseline Residential Outdoor Water Use
Maximum CII Indoor Savings	30%	of Baseline CII Indoor Water Use
Maximum CII Outdoor Savings	75%	of Baseline CII Outdoor Water Use
Maximum Dedicated Irrigation Account Savings	90%	of Baseline Dedicated Irrigation Water Use
Maximum Non-Revenue Water Savings	50%	of Baseline Non-Revenue Water Use
Resulting Total Maximum Annual Savings Potential	**47%**	of Total Baseline Production

Assumed Proportion of Water Use by End Uses and Sector





4 - Drought Response Actions - Stage 5

Rio Linda/Elverta Community Water District

Drought Response Actions

Select the Drought Response Actions you would like to include in your estimated savings calculations. For each selected action, use the default end use savings estimates and implementation rates or input your own values. The "End Use Savings" estimates the percent water use reduction that could occur at a particular end use as a result of a specific action. The "Implementation Rate" refers to the estimated percentage of accounts that will implement a specific action. The water savings potential at each end use is capped based on the assumed distribution of end use water demands shown in the pie charts above. A dash (--) indicates that professional judgement was used to establish the default value, or that savings are expected to be accounted for as part of a Public Information Program; additional basis for the default values are included in the User Manual.

Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Possible Mandatory Prohibitions**	All Outdoor	☑	14%	**75%**	--	--
Prohibit Irrigation with Potable Water Outside of Newly Constructed Homes and Buildings that is not Delivered by Drip or Microspray Systems	Irrigation	☐			--	--
Require Shut-Off Nozzles on Hoses for Vehicle Washing	Misc. Outdoor	☑	17%	50%	See Appendix D of the DRP	--
Prohibit Use of Potable Water to Wash Sidewalks and Driveways	Misc. Outdoor	☐	17%	50%		--
Prohibit the Use of Potable Water for Street Washing	Misc. Outdoor	☐	17%	50%		--
Prohibit Irrigation with Potable Water in a Manner that causes Runoff	Irrigation	☑	3%	50%	DeOreo et al., 2011	--
Prohibit Irrigation with Potable Water within 48 Hours following Measurable Rainfall	Irrigation	☐			--	--
Prohibit Irrigation of Ornamental Turf with Potable Water on Street Medians	Irrigation	☐			--	--
Prohibit Potable Water Use for Decorative Water Features that do not Recirculate Water	Misc. Outdoor	☑	50%	50%	EBMUD, 2008	--
Provide Linen Service Opt Out Options	Fixtures & Appliances	☑	0.5%	50%	EBMUD, 2011	--
Prohibit Serving Drinking Water other than upon Request in Eating or Drinking Establishments	Fixtures & Appliances	☑	0.5%	50%	EBMUD, 2011	--

4 - Drought Response Actions - Stage 5

Rio Linda/Elverta Community Water District

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Agency Drought Actions / Restrictions**						
► **Agency Actions**						
Media Campaign, Newspaper Articles, Website	All	☑	0.5%	**70%**	EBMUD, 2011	--
Promote Water Conservation / Rebate Programs	All	☑		50%	--	--
Water Efficiency Workshops, Public Events	All	☑	0.5%	**30%**	EBMUD, 2011	--
Water Bill Inserts	All	☑	0.5%	100%	EBMUD, 2011	--
Promote / Expand Use of Recycled Water	Irrigation	☐	100%		--	--
Home or Mobile Water Use Reports	All	☑	5%	10%	WaterSmart Software, 2015	--
Decrease Frequency and Length of Line Flushing	Non Revenue Water	☑	25%	50%	See Appendix D of the DRP	Reduced flushing by 50%.
Audit and Reduce System Water Loss	Non Revenue Water	☑	45%	**30%**	DWR, 2015	Target 30% of leakage.
Implement Drought Rate Structure / Water Budgets	All	☑	5%	100%	CUWCC, 2015	--
Establish Retrofit on Resale Ordinance	All Residential Indoor	☐	21%	6%	SFPUC, 2004	First Tuesday, 2015
Require Net Zero Demand Increase on New Connections	All	☐			--	--
Moratorium on New Connections	All	☑			--	--
Move to Monthly Metering / Billing	All	☐	5%	10%	See Appendix D of the DRP	--
Increase Water Waste Patrols / Enforcement	All	☑			--	--
Establish Drought Hotline	All	☑			--	--
Reduce Distribution System Pressures	Non Revenue Water	☐	4.5%	100%	CUWCC, 2010; DWR, 2015	--
► **Dedicated Irrigation**						
Conduct Irrigation Account Surveys	Irrigation	☑	30%	**30%**	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	38%	**60%**	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	79%	**70%**		
Prohibit use of Potable Water for Irrigation	Irrigation	☐	100%	50%		
Require Repair of all Leaks within 24 hours	External Leaks	☑	100%	5%	--	--
Customer Water Budgets						
Establish Water Budget - 25% Reduction	Irrigation	☐	25%	50%	--	--
Establish Water Budget - 50% Reduction	Irrigation	☑	50%	**90%**	--	--
Establish Water Budget - 75% Reduction	Irrigation	☐	75%	**55%**	--	--

4 - Drought Response Actions - Stage 5

Rio Linda/Elverta Community Water District

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► Agency Drought Actions / Restrictions						
► Residential						
Conduct Water Use Surveys Targeting High Water Users	All Residential Uses	☑	10%	**30%**	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	38%	**60%**	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	79%	**70%**		
Prohibit use of Potable Water for Irrigation	Irrigation	☐	100%	50%		
Prohibit Vehicle Washing Except with Recycled Water	Misc. Outdoor	☑	50%	50%	EBMUD, 2008	--
Require Repair of all Leaks within 24 hours	Leaks	☑	100%	5%	--	--
Require Pool Covers	Misc. Outdoor	☑	28%	25%	Maddaus & Mayer, 2001	--
Prohibit Filling of Pools	Misc. Outdoor	☑	55%	25%	DeOreo et al., 2011	--
Customer Water Budgets						
Establish Water Budget - 10% Reduction	All Residential Uses	☑	10%	**75%**	--	--
Establish Water Budget - 25% Reduction	All Residential Uses	☐	25%	55%	--	--
► CII						
Conduct CII Surveys Targeting High Water Users	All CII uses	☑	10%	**30%**	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	38%	**60%**	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	79%	**70%**		
Prohibit Use of Potable Water for Construction and Dust Control	Misc. Outdoor	☐		100%	--	--
Prohibit Single-Pass Cooling Systems	Cooling	☑	80%	1%	Vickers, 2001	--
Require Repair of all Leaks within 24 hours	Leaks	☑	100%	5%	--	--
Prohibit Vehicle Washing Except with Recycled Water	Misc. Outdoor	☑	50%	**75%**	EBMUD, 2008	--
Require Water-Efficient Pre-Rinse Spray Valves	Fixtures & Appliances	☐	0.8%	50%	EPA, 2015; Pacific Institute, 2003	--
Customer Water Budgets						
Establish Water Budget - 10% Reduction	All CII uses	☑	10%	**75%**	--	--
Establish Water Budget - 25% Reduction	All CII uses	☐	25%	60%	--	--
Establish Water Budget - 35% Reduction	All CII uses	☐	35%	55%	--	--

4 - Drought Response Actions - Stage 5

Rio Linda/Elverta Community Water District

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
▶ **Residential Customer Actions to Encourage**						
Install Bathroom Faucet Aerators	Faucets and Dishwashers	☐			--	--
Install a Water-Efficient Showerhead	Showers/Baths	☐			--	--
Turn Off Water when Brushing Teeth, Shaving, Washing Dishes, or Cooking	Faucets and Dishwashers	☐			--	--
Fill the Bathtub Halfway	Showers/Baths	☐			--	--
Wash Only Full Loads of Clothes	Clothes Washers	☐			--	--
Install a High-Efficiency Toilet	Toilets	☐			--	--
Take Shorter Showers	Showers/Baths	☐			--	--
Run Dishwasher Only When Full	Faucets and Dishwashers	☐			--	--
Reduce Outdoor Irrigation	Irrigation	☐			--	--
Install Drip-Irrigation	Irrigation	☐			--	--
Use Mulch	Irrigation	☐			--	--
Plant Drought Resistant Trees and Plants	Irrigation	☐			--	--
Use a Broom to Clean Outdoor Areas	Misc. Outdoor	☐			--	--
Flush Less Frequently	Toilets	☐			--	--
Re-Use Shower or Bath Water for Irrigation	Irrigation	☐			--	--
Wash Car at Facility that Recycles the Water	Misc. Outdoor	☐			--	--

5 - Estimated Water Savings - Stage 5

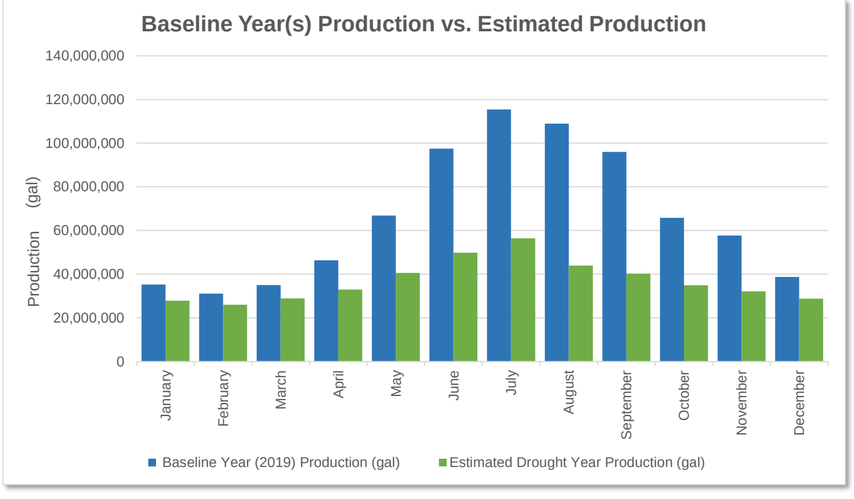
Rio Linda/Elverta Community Water District

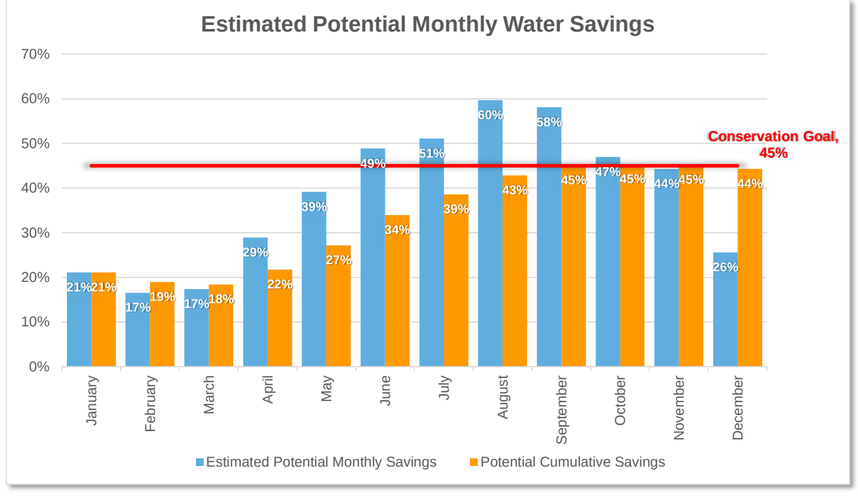
Estimated Monthly Water Use and Savings Summary

Units: (gal)

This provides a summary of the estimated production relative to Baseline Year production and potential water savings, assuming implementation of selected actions at the water savings and implementation rates indicated in the Drought Response Actions worksheet. Select the units that your production data are displayed in.

Month	Baseline Year (2019) Production (gal)	Estimated Drought Year Production (gal)	Estimated Potential Monthly Savings	Potential Cumulative Savings	Conservation Goal	Comments
January	35,329,525	27,865,511	21%	21%	45%	
February	31,146,049	25,992,242	17%	19%	45%	
March	35,054,556	28,967,304	17%	18%	45%	
April	46,348,893	32,931,043	29%	22%	45%	
May	66,841,098	40,646,500	39%	27%	45%	
June	97,476,534	49,814,510	49%	34%	45%	
July	115,381,642	56,447,449	51%	39%	45%	
August	108,930,566	43,913,098	60%	43%	45%	
September	96,056,970	40,209,915	58%	45%	45%	
October	65,833,796	34,918,141	47%	45%	45%	
November	57,769,522	32,202,018	44%	45%	45%	
December	38,691,244	28,786,182	26%	44%	45%	





Drought Response Tool

1 - Home

Rio Linda/Elverta Community Water District

Enter Agency Information	
Agency Name	Rio Linda/Elverta Community Water District
Total Population Served	15,071
Conservation Goal (%)	55%
Drought Stage	Stage 6
Number of Residential Accounts	4,435
Number of Commercial, Industrial, and Institutional (CII) Accounts	169
Number of Dedicated Irrigation Accounts	17
Baseline Year(s)	2019
Percentage of Residential Indoor Use During Minimum Month (%)	100%
Percentage of CII Indoor Use During Minimum Month (%)	100%
Comments	

Navigation	
USER'S GUIDE	Download and read the guide before using this Tool
1 - HOME	Enter agency information
2 - INPUT BASELINE YEAR WATER USE	Enter Baseline Year production and use
3 - BASELINE YEAR WATER USE	Review and confirm entered information
4 - DROUGHT RESPONSE ACTIONS	Select Drought Response Actions and input estimated water savings and implementation rates.
5 - ESTIMATED WATER SAVINGS	Review estimated water production and compare estimated savings to conservation target.

Drought Response Tool

1 - Home

Rio Linda/Elverta Community Water District

6 - DROUGHT RESPONSE TRACKING	**Track production and water savings against the conservation target.**

1 - Home

Rio Linda/Elverta Community Water District

For questions about this tool or for additional information, contact:

Anona Dutton, P.G., C.Hg.
adutton@ekiconsult.com
(650) 292-9100

2 - Input Baseline Year (2019) Water Use

Rio Linda/Elverta Community Water District

Input Baseline Year (2019) Production and Water Use

Units: (gal)

Select the units to input monthly production and use data. Enter the total monthly potable water production for the Baseline Year. Next, enter monthly water use data by sector for the Baseline Year. If you bill on a bi-monthly basis, divide your billing data between the months that the billing cycle includes. If your single-family and multi-family accounts are tracked separately, enter the combined water use for both sectors in the Residential Water Use column. If your commercial, industrial, and institutional (CII) accounts are tracked separately, enter the combined water use for each sector in the CII Water Use column. Your non-revenue water use is calculated by subtracting your monthly residential, CII, and dedicated irrigation water uses from your monthly production. Your monthly residential gallons per capita per day (R-GPCD) is calculated by dividing your monthly residential water use by your population entered in Worksheet 1 - Home.

Date	Total Production (gal)	Residential Water Use (gal)	CII Water Use (gal)	Dedicated Irrigation Water Use (gal)	Non-Revenue Water Use (gal)	Total R-GPCD	Comments
January	70,119,300	44,417,278	10,696,089	1,266,647	13,739,286	95	
February	67,866,686	50,340,439	9,809,016	1,140,740	6,576,491	119	
March	74,104,957	55,060,658	11,231,043	883,478	6,929,777	118	
April	88,742,205	64,173,294	14,876,213	1,618,712	8,073,986	142	
May	141,310,603	97,895,008	25,919,681	9,049,406	8,446,508	210	
June	169,194,742	118,651,633	30,363,652	12,406,728	7,772,728	262	
July	193,818,658	141,249,365	34,694,617	6,789,528	11,085,147	302	
August	186,601,380	115,573,191	35,915,156	13,783,281	21,329,751	247	
September	162,043,440	112,161,531	30,400,946	11,666,801	7,814,161	248	
October	136,391,063	93,006,502	24,694,240	8,589,401	10,100,921	199	
November	95,240,191	62,087,345	19,661,393	2,859,296	10,632,157	137	
December	72,045,089	49,844,740	12,073,881	648,087	9,478,381	107	

3 - Baseline Year (2019) Water Use Profile

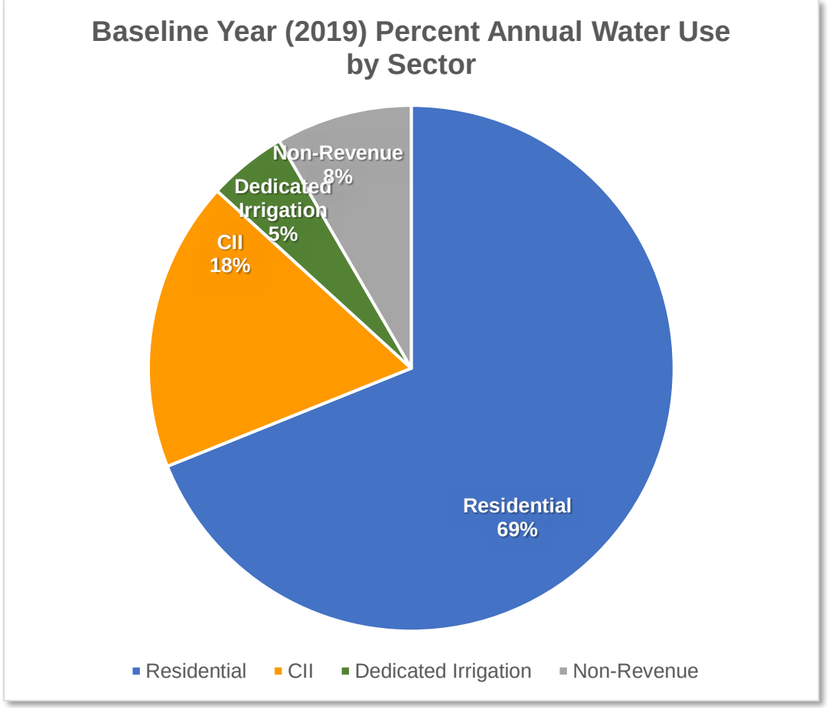
Rio Linda/Elverta Community Water District

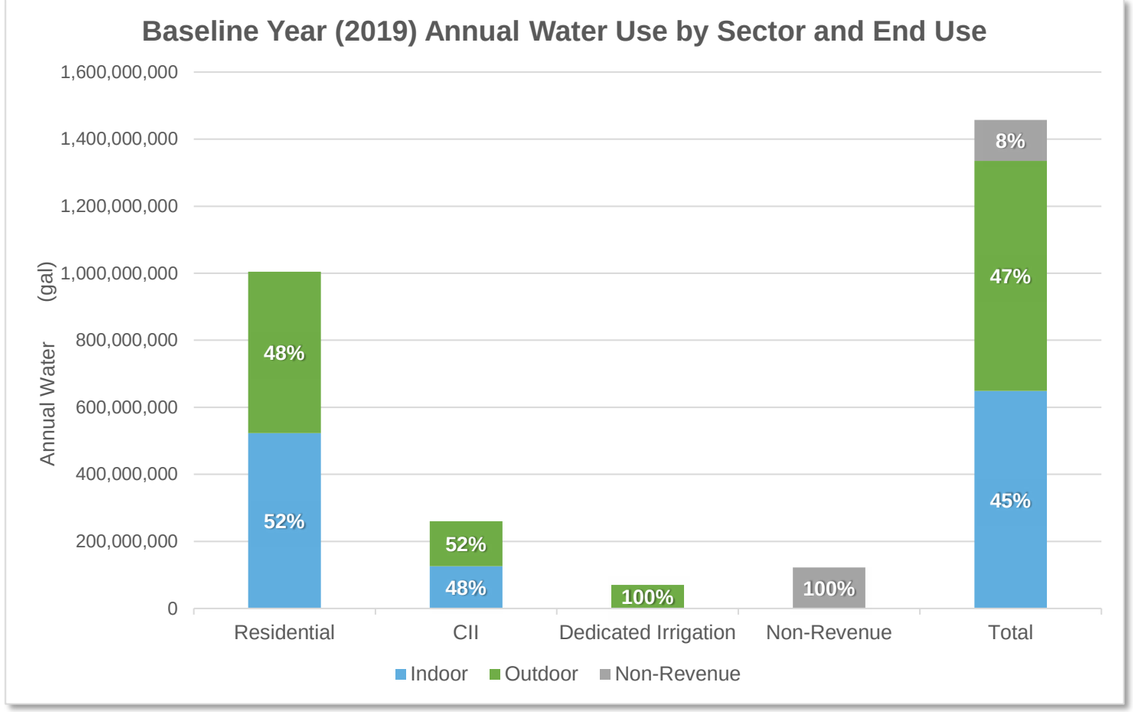
Baseline Year (2019) Annual Water Use Summary

Units: (gal)

A summary of your Baseline Year water use by sector and major end use category is shown below. Select the units in which your production and use data are displayed.

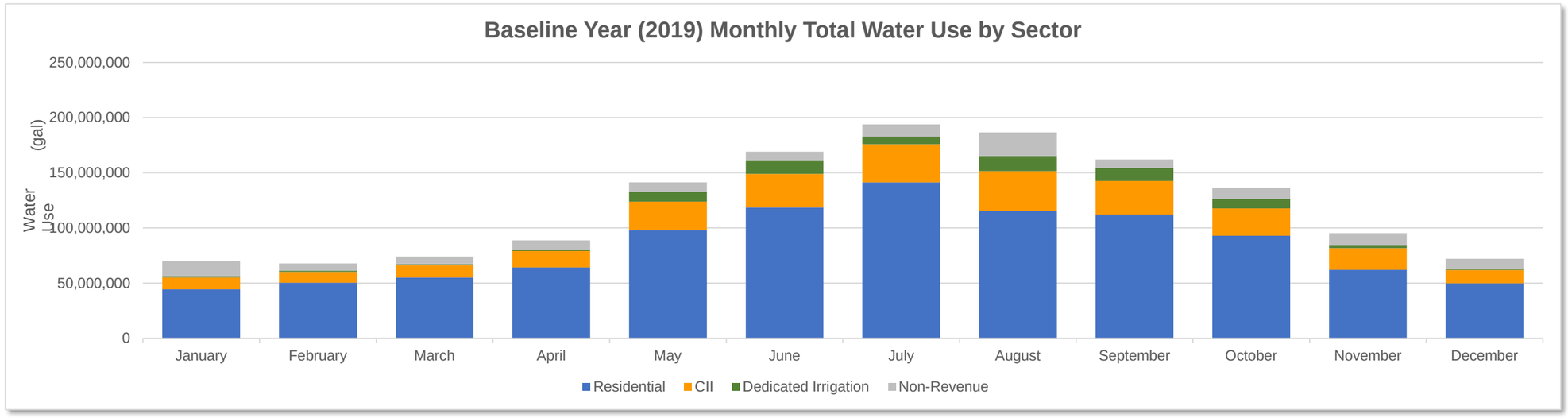
Water Use	Total Production (gal)	Water Use (gal)				Comments
		Residential	CII	Dedicated Irrigation	Non-Revenue	
Total	1,457,478,314	1,004,460,983	260,335,928	70,702,106	121,979,295	
Total Indoor	648,915,446	522,977,628	125,937,819	--	--	
Total Outdoor	686,583,571	481,483,356	134,398,110	70,702,106	--	
Total Non-Revenue	121,979,295	--	--	--	121,979,295	
Total Indoor %	45%	52%	48%	0%	--	
Total Outdoor %	47%	48%	52%	100%	--	
Total Non-Revenue %	8%	--	--	--	100%	

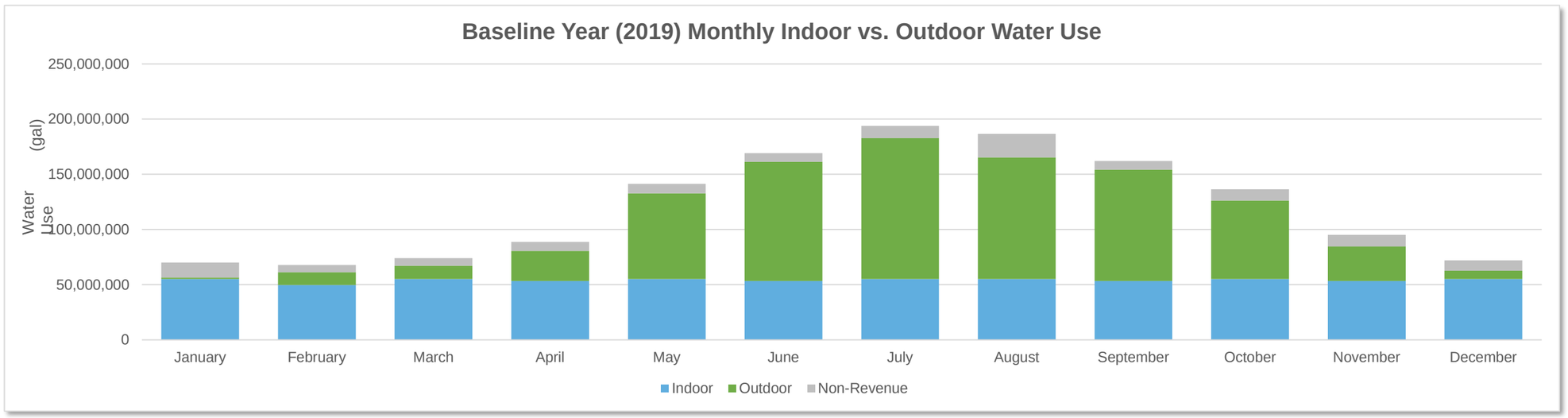




3 - Baseline Year (2019) Water Use Profile

Rio Linda/Elverta Community Water District



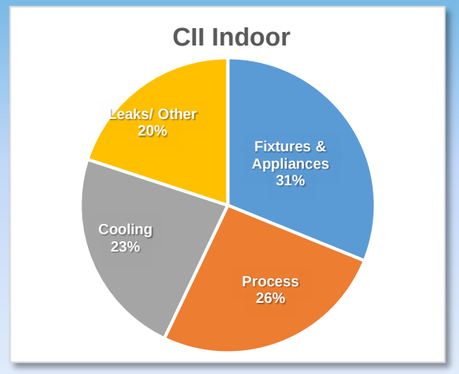


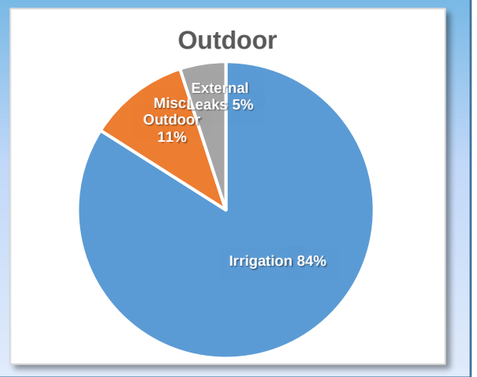
4 - Drought Response Actions - Stage 6

Rio Linda/Elverta Community Water District

Maximum Savings Potential		
Use the default values or enter your own criteria for the maximum savings potential. Estimated water savings within each sector will not exceed the maximum savings criteria.		
Minimum Residential Indoor GPCD	45	R-GPCD
Maximum Residential Outdoor Savings	95%	of Baseline Residential Outdoor Water Use
Maximum CII Indoor Savings	35%	of Baseline CII Indoor Water Use
Maximum CII Outdoor Savings	95%	of Baseline CII Outdoor Water Use
Maximum Dedicated Irrigation Account Savings	95%	of Baseline Dedicated Irrigation Water Use
Maximum Non-Revenue Water Savings	50%	of Baseline Non-Revenue Water Use
Resulting Total Maximum Annual Savings Potential	**71%**	of Total Baseline Production

Assumed Proportion of Water Use by End Uses and Sector





4 - Drought Response Actions - Stage 6

Rio Linda/Elverta Community Water District

Drought Response Actions

Select the Drought Response Actions you would like to include in your estimated savings calculations. For each selected action, use the default end use savings estimates and implementation rates or input your own values. The "End Use Savings" estimates the percent water use reduction that could occur at a particular end use as a result of a specific action. The "Implementation Rate" refers to the estimated percentage of accounts that will implement a specific action. The water savings potential at each end use is capped based on the assumed distribution of end use water demands shown in the pie charts above. A dash (--) indicates that professional judgement was used to establish the default value, or that savings are expected to be accounted for as part of a Public Information Program; additional basis for the default values are included in the User Manual.

Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Possible Mandatory Prohibitions**	All Outdoor	☑	14%	**75%**	--	--
Prohibit Irrigation with Potable Water Outside of Newly Constructed Homes and Buildings that is not Delivered by Drip or Microspray Systems	Irrigation	☐			--	--
Require Shut-Off Nozzles on Hoses for Vehicle Washing	Misc. Outdoor	☑	17%	50%	See Appendix D of the DRP	--
Prohibit Use of Potable Water to Wash Sidewalks and Driveways	Misc. Outdoor	☐	17%	50%		--
Prohibit the Use of Potable Water for Street Washing	Misc. Outdoor	☐	17%	50%		--
Prohibit Irrigation with Potable Water in a Manner that causes Runoff	Irrigation	☑	3%	50%	DeOreo et al., 2011	--
Prohibit Irrigation with Potable Water within 48 Hours following Measurable Rainfall	Irrigation	☐			--	--
Prohibit Irrigation of Ornamental Turf with Potable Water on Street Medians	Irrigation	☐			--	--
Prohibit Potable Water Use for Decorative Water Features that do not Recirculate Water	Misc. Outdoor	☑	50%	50%	EBMUD, 2008	--
Provide Linen Service Opt Out Options	Fixtures & Appliances	☑	0.5%	50%	EBMUD, 2011	--
Prohibit Serving Drinking Water other than upon Request in Eating or Drinking Establishments	Fixtures & Appliances	☑	0.5%	50%	EBMUD, 2011	--

4 - Drought Response Actions - Stage 6

Rio Linda/Elverta Community Water District

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Agency Drought Actions / Restrictions**						
► **Agency Actions**						
Media Campaign, Newspaper Articles, Website	All	☑	0.5%	**70%**	EBMUD, 2011	--
Promote Water Conservation / Rebate Programs	All	☑		50%	--	--
Water Efficiency Workshops, Public Events	All	☑	0.5%	**30%**	EBMUD, 2011	--
Water Bill Inserts	All	☑	0.5%	100%	EBMUD, 2011	--
Promote / Expand Use of Recycled Water	Irrigation	☐	100%		--	--
Home or Mobile Water Use Reports	All	☑	5%	10%	WaterSmart Software, 2015	--
Decrease Frequency and Length of Line Flushing	Non Revenue Water	☑	25%	50%	See Appendix D of the DRP	Reduced flushing by 50%.
Audit and Reduce System Water Loss	Non Revenue Water	☑	45%	**30%**	DWR, 2015	Target 30% of leakage.
Implement Drought Rate Structure / Water Budgets	All	☑	5%	100%	CUWCC, 2015	--
Establish Retrofit on Resale Ordinance	All Residential Indoor	☐	21%	6%	SFPUC, 2004	First Tuesday, 2015
Require Net Zero Demand Increase on New Connections	All	☐			--	--
Moratorium on New Connections	All	☑			--	--
Move to Monthly Metering / Billing	All	☐	5%	10%	See Appendix D of the DRP	--
Increase Water Waste Patrols / Enforcement	All	☑			--	--
Establish Drought Hotline	All	☑			--	--
Reduce Distribution System Pressures	Non Revenue Water	☐	4.5%	100%	CUWCC, 2010; DWR, 2015	--
► **Dedicated Irrigation**						
Conduct Irrigation Account Surveys	Irrigation	☑	30%	**40%**	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	38%	**60%**	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	79%	**70%**		
Prohibit use of Potable Water for Irrigation	Irrigation	☐	100%	50%		
Require Repair of all Leaks within 24 hours	External Leaks	☑	100%	5%	--	--
Customer Water Budgets						
Establish Water Budget - 25% Reduction	Irrigation	☐	25%	50%	--	--
Establish Water Budget - 50% Reduction	Irrigation	☐	50%	50%	--	--
Establish Water Budget - 75% Reduction	Irrigation	☑	**100%**	50%	--	--

4 - Drought Response Actions - Stage 6

Rio Linda/Elverta Community Water District

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
► **Agency Drought Actions / Restrictions**						
► **Residential**						
Conduct Water Use Surveys Targeting High Water Users	All Residential Uses	☑	10%	**40%**	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	38%	**60%**	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	79%	**70%**		
Prohibit use of Potable Water for Irrigation	Irrigation	☐	100%	50%		
Prohibit Vehicle Washing Except with Recycled Water	Misc. Outdoor	☑	50%	50%	EBMUD, 2008	--
Require Repair of all Leaks within 24 hours	Leaks	☑	100%	5%	--	--
Require Pool Covers	Misc. Outdoor	☑	28%	25%	Maddaus & Mayer, 2001	--
Prohibit Filling of Pools	Misc. Outdoor	☑	55%	25%	DeOreo et al., 2011	--
Customer Water Budgets						
Establish Water Budget - 10% Reduction	All Residential Uses	☐	10%	50%	--	--
Establish Water Budget - 25% Reduction	All Residential Uses	☑	**25%**	**85%**	--	--
► **CII**						
Conduct CII Surveys Targeting High Water Users	All CII uses	☑	10%	**40%**	EBMUD, 2011	--
Limit Irrigation Days, Time and Duration (Select One)						
Limit Irrigation to 2 Days/Week, 15 Minutes/Day, Between 9PM and 6AM	Irrigation	☐	38%	**60%**	UC IPM, 2014	--
Limit Irrigation to 1 Day/Week, 10 Minutes/Day, Between 9PM and 6AM	Irrigation	☑	79%	**70%**		
Prohibit Use of Potable Water for Construction and Dust Control	Misc. Outdoor	☐		100%	--	--
Prohibit Single-Pass Cooling Systems	Cooling	☑	80%	1%	Vickers, 2001	--
Require Repair of all Leaks within 24 hours	Leaks	☑	100%	5%	--	--
Prohibit Vehicle Washing Except with Recycled Water	Misc. Outdoor	☑	50%	**75%**	EBMUD, 2008	--
Require Water-Efficient Pre-Rinse Spray Valves	Fixtures & Appliances	☐	0.8%	50%	EPA, 2015; Pacific Institute, 2003	--
Customer Water Budgets						
Establish Water Budget - 10% Reduction	All CII uses	☐	10%	50%	--	--
Establish Water Budget - 25% Reduction	All CII uses	☐	**25%**	**60%**	--	--
Establish Water Budget - 35% Reduction	All CII uses	☑	30%	**75%**	--	--

4 - Drought Response Actions - Stage 6

Rio Linda/Elverta Community Water District

Drought Response Actions						
Action Description	End Use(s)	Implement Program	End Use Savings (%)	Implementation Rate	Source of Default Savings Estimate	Source of Default Implementation Rate
▶ **Residential Customer Actions to Encourage**						
Install Bathroom Faucet Aerators	Faucets and Dishwashers	☐			--	--
Install a Water-Efficient Showerhead	Showers/Baths	☐			--	--
Turn Off Water when Brushing Teeth, Shaving, Washing Dishes, or Cooking	Faucets and Dishwashers	☐			--	--
Fill the Bathtub Halfway	Showers/Baths	☐			--	--
Wash Only Full Loads of Clothes	Clothes Washers	☐			--	--
Install a High-Efficiency Toilet	Toilets	☐			--	--
Take Shorter Showers	Showers/Baths	☐			--	--
Run Dishwasher Only When Full	Faucets and Dishwashers	☐			--	--
Reduce Outdoor Irrigation	Irrigation	☐			--	--
Install Drip-Irrigation	Irrigation	☐			--	--
Use Mulch	Irrigation	☐			--	--
Plant Drought Resistant Trees and Plants	Irrigation	☐			--	--
Use a Broom to Clean Outdoor Areas	Misc. Outdoor	☐			--	--
Flush Less Frequently	Toilets	☐			--	--
Re-Use Shower or Bath Water for Irrigation	Irrigation	☐			--	--
Wash Car at Facility that Recycles the Water	Misc. Outdoor	☐			--	--

5 - Estimated Water Savings - Stage 6

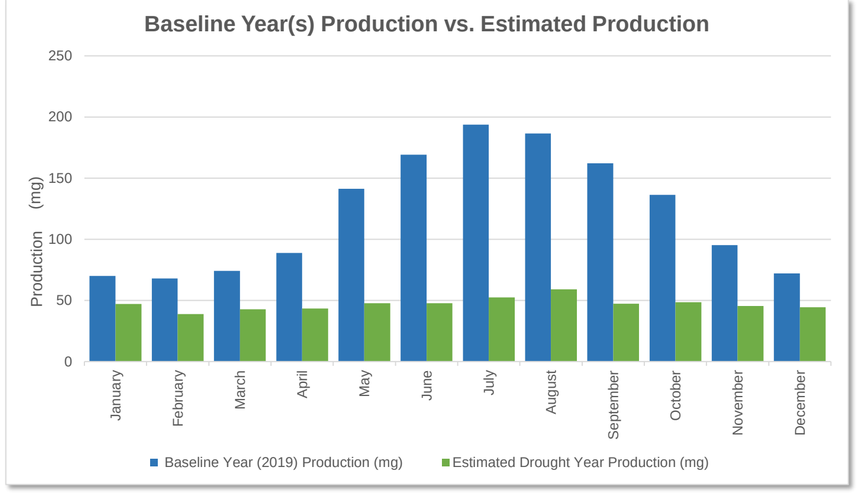
Rio Linda/Elverta Community Water District

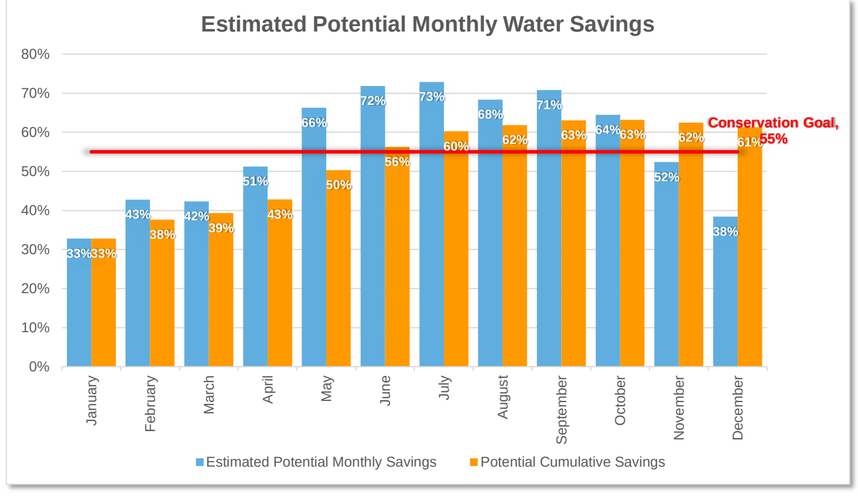
Estimated Monthly Water Use and Savings Summary

Units: (mg)

This provides a summary of the estimated production relative to Baseline Year production and potential water savings, assuming implementation of selected actions at the water savings and implementation rates indicated in the Drought Response Actions worksheet. Select the units that your production data are displayed in.

Month	Baseline Year (2019) Production (mg)	Estimated Drought Year Production (mg)	Estimated Potential Monthly Savings	Potential Cumulative Savings	Conservation Goal	Comments
January	70	47	33%	33%	55%	
February	68	39	43%	38%	55%	
March	74	43	42%	39%	55%	
April	89	43	51%	43%	55%	
May	141	48	66%	50%	55%	
June	169	48	72%	56%	55%	
July	194	53	73%	60%	55%	
August	187	59	68%	62%	55%	
September	162	47	71%	63%	55%	
October	136	48	64%	63%	55%	
November	95	45	52%	62%	55%	
December	72	44	38%	61%	55%	





Attachment 2

WSCP Agency Notification Letter

RIO LINDA ELVERTA

RLECWD
730 L Street
Rio Linda, CA 95673-3433

WWW.RLECWD.COM
QUESTIONS@RLECWD.COM

Telephone:
(916) 991-1000

COMMUNITY WATER DISTRICT

March 11, 2022

Cecelia Partridge, Executive Assistant
Regional Water Authority
5620 Birdcage Street, Suite 180
Citrus Heights, CA 95610

RE: Notice of Preparation of Urban Water Management Plan and Water Shortage Contingency Plan - 2020 Update

To Whomever It May Concern:

The Urban Water Management Planning Act (California Water Code §10608–10656) requires the Rio Linda Elverta Community Water District (RLECWD) to update its Urban Water Management Plan (UWMP) and associated Water Shortage Contingency Plan (WSCP) every 5 years. RLECWD is currently reviewing its existing UWMP and associated WSCP, which were updated in 2016, and considering revisions to the documents. We invite your agency's participation in this revision process.

A draft of the 2020 UWMP and WSCP will be made available for public review and a public hearing will be scheduled in the second quarter of 2022. In the meantime, if you would like more information regarding the RLECWD's 2015 UWMP and WSCP and the schedule for updating these documents, or if you would like to participate in the preparation of the 2020 UWMP and WSCP, please contact District Contact at:

Rio Linda Elverta Community Water District
730 L Street
Rio Linda, CA 95673
Phone: (916) 991-8891
District Contact Email

Sincerely,

Timothy R. Shaw
General Manager

Attachment 3

WSCP Public Hearing Notice

RIO LINDA / ELVERTA COMMUNITY WATER DISTRICT
BOARD OF DIRECTORS
CONSIDERATION OF RESOLUTION NO. 2022-07 APPROVING THE FY 2022-23 OPERATING AND CAPITAL IMPROVEMENT BUDGETS FOR THE RIO LINDA / ELVERTA COMMUNITY WATER DISTRICT

This meeting will be physically open to the public with some reasonable limitations pursuant to current state and county guidelines. all in-person attendees are required to wear masks pursuant to the Sacramento County Public Health order.

NOTICE IS HEREBY GIVEN that a Public Hearing will be held by the Board of Directors of the Rio Linda/Elverta Community Water District (the "District") at its regularly scheduled meeting on **Monday, August 15, 2022** at **6:30 PM**, at Depot / Visitors Center located at 6730 Front Street, Rio Linda, California to consider the adoption of proposed Resolution No. 2022-07 Establishing Fiscal Year 2022-23 Operating and Capital Improvement Budgets ("Budgets"). The budgets will become effective immediately upon adoption of the District Board of Directors.

ALL INTERESTED PARTIES are invited to attend the August 15, 2022, public hearing to express opinions or submit evidence for or against the approval of the Budgets. At the above noted time and place, testimony from interested persons will be heard and considered by the District Board of Directors prior to taking action or making any recommendation on the Budgets. Upon request, the agenda and the documents in the hearing agenda packet can be made available to persons with a disability. In compliance with the Americans with Disabilities Act, the District encourages those with disabilities to participate fully in the public hearing process. Any person requiring special assistance to participate in the meeting should call (916) 991-1000 or email questions@rlecwd.com at least forty-eight (48) hours prior to the meeting.

Written comments are also accepted, prior to the hearing by the District, at: 730 L Street, Rio Linda, CA, 95673. Information regarding the hearing is on file and may be viewed by interested individuals by contacting the District by phone at (916) 991-1000. If a challenge to the above proposed actions is made in court, persons may be limited to raising only those issues they or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the District Board of Directors.

Copies of the proposed Budgets are available for the public by calling the District Office at (916) 991-1000 or via the District's website www.rlecwd.com.

The Rio Linda News 8-5-2022

PUBLIC NOTICE

Notice of Public Hearing Water Shortage Contingency Plan – 2020 Update

The Urban Water Management Planning Act (California Water Code §10608–10656) requires the Rio Linda/Elverta Community Water District (RLECWD) to update its Water Shortage Contingency Plan (WSCP) every 5 years. RLEWCD must also make the draft documents available for public review and hold a public hearing before adopting its WSCP.

This is to notify you that RLECWD will hold a public hearing on August 15, 2022 at 6:30 p.m. during the RLECWD Board Meeting at the Visitors Depot Center (6730 Front Street, Rio Linda, CA 95673) to consider proposed revisions and updates to the 2020 WSCP. We invite your participation in the process.

The WSCP will be made available for public review by August 5, 2022 at **http://www.rlecwd.com/. Visit http://www.rlecwd.com/board-of-directors/board-documents/** for the Board Meeting agenda for the public hearing.

If you have any questions about the 2020 WSCP or the process for updating this document, please contact RLECWD at:

Rio Linda Elverta Community Water District
730 L Street
Rio Linda, CA 95673
Phone: (916) 991-8891

Attachment 4

Public Hearing WSCP 2020 Update Adoption

RIO LINDA / ELVERTA COMMUNITY WATER DISTRICT
PUBLIC HEARING AND REGULAR MEETING OF THE BOARD OF DIRECTORS

August 15, 2022 (6:30 p.m.)

Visitor's / Depot Center
6730 Front Street
Rio Linda, CA 95673

THIS MEETING WILL BE PHYSICALLY OPEN TO THE PUBLIC WITH SOME REASONABLE LIMITATIONS PURSUANT TO CURRENT STATE AND COUNTY GUIDELINES.
Our Mission is to provide a safe and reliable water supply in a cost-effective manner.

AGENDA

The Board may discuss and take action on any item listed on this agenda, including items listed as information items. The Board may also listen to the other items that do not appear on this agenda, but the Board will not discuss or take action on those items, except for items determined by the Board pursuant to state law to be of an emergency or urgent nature requiring immediate action. The Board may address any item(s) in any order as approved by the Board.

The public will be given the opportunity to directly address the Board on each listed item during the Board's consideration of that item. Public comment on items within the jurisdiction of the Board is welcomed, subject to reasonable time limitations for each speaker. Public documents relating to any open session item listed on this agenda that are distributed to all or any majority of the members of the Board of Directors less than 72 hours before the meeting are available for public inspection at the District office at 730 L Street, Rio Linda, CA 95673. In compliance with the Americans with Disabilities Act, if you have a disability and need a disability-related modification or accommodation to participate in this meeting, please contact the District office at (916) 991-1000. Requests must be made as early as possible, and at least one full business day before the start of the meeting.

1. CALL TO ORDER, ROLL CALL, & PLEDGE OF ALLEGIANCE

2. PUBLIC COMMENT

2.1. *Members of the public are invited to speak to the Board regarding items within the subject matter jurisdiction of the District that are not on the agenda or items on the consent agenda. Each speaker may address the Board once under Public Comment for a limit of 2 minutes. (Policy Manual § 2.01.160).*

3. PUBLIC HEARING to adopt the 2020 update to the Water Shortage Contingency Plan

3.1. Open Public Hearing

3.2. 2020 Water Shortage Contingency Plan

3.3. Public Comment

3.4. Close Public Hearing

3.5. Consider Adoption of Ordinance 2022-01 to approve the 2020 Update to the Water Shortage Contingency Plan (WSCP)

4. PUBLIC HEARING to adopt the Fiscal Year 2022-23 Operating and Capital Improvements Budgets

4.1. Open Public Hearing

4.2. FY 2022-23 Operating and Capital Improvement Budgets

4.3. Public Comment

4.4. Close Public Hearing

4.5. Consider Adoption of Resolution No. 2022-07 to approve the Fiscal Year 2022-23 Operating and Capital Improvement Budgets

5. CONSENT CALENDAR (*Action items: Approve Consent Calendar Items*)

5.1. Minutes

July 18, 2022

The Board is being asked to approve the Minutes from the July 18, 2022 Regular Board Meeting.

5.2. Expenditures

The Executive Committee recommends the Board approve the June 2022 Expenditures.

5.3. Financial Reports

The Executive Committee recommends the Board approve the June 2022 Financial Report.

6. REGULAR CALENDAR

ITEMS FOR DISCUSSION AND ACTION

6.1. GM Report.

6.1.1. *The General Manager will provide his monthly report to the Board of Directors*

6.2. District Engineer's Report.

6.2.1. *The Contract District Engineer will provide his monthly report to the Board of Directors.*

6.3. Consider Approving a Professional Services Agreement (small scope) with Johnson Construction Company for raising valve boxes at Elkhorn and Rio Linda Blvd.

6.4. Consider Adopting New Policy 2.01.155, which would provide computer tablets to Board Members to digitally review board meeting document packets prior to and during board meetings.

6.5. Consider Customer Requests for Board Review of Billing Issues (3 separate requests).

6.6. Authorize any New Board Member Assignments (committees and other) Proposed by the Chair Pursuant to District Policy 2.01.065.

7. INFORMATION ITEMS

7.1. District Activities Reports

7.1.1. Water Operations Report
7.1.2. Completed and Pending Items Report
7.1.3. Conservation Report
7.1.4. Leak Repair Report

7.2. Board Member Reports

7.2.1. Report any ad hoc committees dissolved by requirements in Policy 2.01.065
7.2.2. Sacramento Groundwater Authority – Harris (primary)
7.2.3. Executive Committee – Gifford, Ridilla
7.2.4. ACWA/JPIA – Ridilla

8. **Public Comment Prior to Closed Session**

9. **CLOSED SESSION - The Board of Directors will meet in closed session to discuss the following item:**

   9.1. PUBLIC EMPLOYEE PERFORMANCE EVALUATION – General Manager: The Board will conduct a performance evaluation of the General Manager pursuant to subdivision (b) of California Government Code Section 54957.

10. **RECONVENE IN OPEN SESSION**

   10.1. Announce any reportable actions authorized in closed session**.**

11. **DIRECTORS' AND GENERAL MANAGER COMMENTS**

12. **ADJOURNMENT –**

Upcoming meetings:

Executive Committee
September 6, 2022, Monday, 6:00 pm. New Beginnings Fellowship Church, 7008 10th St. Rio Linda, CA

Board Meeting
September 19, 2022, Monday, 6:30 pm. Visitors / Depot Center, 6730 Front St. Rio Linda, CA

Appendix G

Public Hearing 2020 Urban Water Management Plan Adoption

RIO LINDA / ELVERTA COMMUNITY WATER DISTRICT
PUBLIC HEARING AND REGULAR MEETING OF THE BOARD OF DIRECTORS

July 18, 2022 (6:30 p.m.)

Visitor's / Depot Center
6730 Front Street
Rio Linda, CA 95673

THIS MEETING WILL BE PHYSICALLY OPEN TO THE PUBLIC WITH SOME REASONABLE LIMITATIONS PURSUANT TO CURRENT STATE AND COUNTY GUIDELINES.
Our Mission is to provide a safe and reliable water supply in a cost-effective manner.

AGENDA

The Board may discuss and take action on any item listed on this agenda, including items listed as information items. The Board may also listen to the other items that do not appear on this agenda, but the Board will not discuss or take action on those items, except for items determined by the Board pursuant to state law to be of an emergency or urgent nature requiring immediate action. The Board may address any item(s) in any order as approved by the Board.

The public will be given the opportunity to directly address the Board on each listed item during the Board's consideration of that item. Public comment on items within the jurisdiction of the Board is welcomed, subject to reasonable time limitations for each speaker. Public documents relating to any open session item listed on this agenda that are distributed to all or any majority of the members of the Board of Directors less than 72 hours before the meeting are available for public inspection at the District office at 730 L Street, Rio Linda, CA 95673. In compliance with the Americans with Disabilities Act, if you have a disability and need a disability-related modification or accommodation to participate in this meeting, please contact the District office at (916) 991-1000. Requests must be made as early as possible, and at least one full business day before the start of the meeting.

1. CALL TO ORDER, ROLL CALL, & PLEDGE OF ALLEGIANCE

2. PUBLIC COMMENT

2.1. *Members of the public are invited to speak to the Board regarding items within the subject matter jurisdiction of the District that are not on the agenda or items on the consent agenda. Each speaker may address the Board once under Public Comment for a limit of 2 minutes. (Policy Manual § 2.01.160).*

3. PUBLIC COMMENT PRIOR TO CLOSED SESSION

4. CLOSED SESSION - The Board of Directors will meet in Closed Session to discuss the following item

4.1. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION: (Pursuant to paragraph (1) of subsection (d) of Government Code Section 54956.9)

One Case:

Rio Linda Elverta Community Water District v. United States, Case No. 2:17-cv-01349

5. RETURN TO OPEN SESSION, REPORT OF ACTIONS TAKEN IN CLOSED SESSION.

6. CONSENT CALENDAR (*Action items: Approve Consent Calendar Items*)

6.1. Minutes

June 29, 2022

The Board is being asked to approve the Minutes from the June 29, 2022 Regular Board Meeting.

6.2. Expenditures

The General Manger and the Board President recommend the Board approve the May 2022 Expenditures.

6.3. Financial Reports

The General Manager and the Board President recommend the Board approve the May 2022 Financial Report.

7. PUBLIC HEARING to adopt the RLECWD 2020 Urban Water Management Plan

7.1. Open Public Hearing

7.2. 2020 Urban Water Management Plan

7.3. Public Comment

7.4. Close Public Hearing

7.5. Consider Adoption of the 2020 Urban Water Management Plan (URMP)

8. REGULAR CALENDAR

ITEMS FOR DISCUSSION AND ACTION

8.1. GM Report.

8.1.1.*The General Manager will provide his monthly report to the Board of Directors*

8.2. District Engineer's Report.

8.2.1. *The Contract District Engineer will provide his monthly report to the Board of Directors.*

8.3. Consider authorizing Board Member Compensation for an existing Board Member's attendance at Sacramento Groundwater Authority special meetings.

8.4. Consider adopting proposed revisions to RLECWD policy 2.20.140, Board Member Compensation.

8.5. Consider authorizing an extension of time for responses to the independent auditing services Request for Proposals.

8.6. Consider adopting Resolution 2022-06, authorizing direct assessments for qualifying delinquent accounts.

8.7. Authorize any New Board Member Assignments (committees and other) Proposed by the Chair Pursuant to District Policy 2.01.065.

9. INFORMATION ITEMS

9.1. District Activities Reports

9.1.1.Water Operations Report
9.1.2.Completed and Pending Items Report
9.1.3.Conservation Report
9.1.4.Leak Repair Report
9.1.5.Confirmation of Water Supply / Demand Assessment

9.2. Board Member Reports

9.2.1.Report any ad hoc committees dissolved by requirements in Policy 2.01.065
9.2.2.Sacramento Groundwater Authority – Harris (primary)
9.2.3.Sacramento Groundwater Authority 3 X 3 Ad Hoc - Harris
9.2.4.Executive Committee – Gifford, Ridilla
9.2.5.ACWA/JPIA – Ridilla

10. DIRECTORS' AND GENERAL MANAGER COMMENTS

11. ADJOURNMENT –

Upcoming meetings:

Executive Committee

August 1, 2022, Monday, 6:00 pm. Visitors / Depot Center, 6730 Front St. Rio Linda, CA

Board Meeting

August 15, 2022, Monday, 6:30 pm. Visitors / Depot Center, 6730 Front St. Rio Linda, CA