

Executive Summary

Rio Linda /Elverta Community Water District 2005 Urban Water Management Plan

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Reason to Prepare the 2005 Urban Water Management Plan

- California Water Code Section 10620 states that every urban water supplier shall prepare and adopt an urban water management plan in years ending in 5 and 0.
- To meet one of the eligibility criteria for State funding. Water Code Section 10656 states that an urban water supplier that does not prepare, adopt and submit its urban water management plan to the Department of Water Resources is ineligible to receive funding or receive drought assistance from the state until the urban water management plan is submitted.

Report Summary

The 80 page draft *2005 Urban Water Management Plan* provides charts, maps, and 57 tables to detail current and future water demands and RLECWD plans for providing future water supplies. Basic to this future are how elements of the Water Forum Agreement that create a regional context for RLECWD's water future supplies:

- Conjunctive use of the groundwater basin consistent with regional sustainable yield objectives - Chapter 3;
- Increased conservation during drier and driest years - Chapter 13;
- Wastewater reuse – Chapter 9;
- Water Conservation - Demand Management Measures (DMM), often called Best Management Practices for Urban Water Conservation (BMPs) are discussed extensively in Chapter 7. Conservation reports are reprinted in Appendix C.

Chapters 3 and 8 describe current water sources and future water supplies, including:

- Approximately 30 wells,
- New storage tanks
- Reuse of treated wastewater from the City of Roseville and Sacramento Regional County Sanitation District, and
- A new regional transmission pipeline providing surface water, initially from Folsom Lake and later from the Sacramento River.

As required by the Water Code, chapter 11 includes a Draft Water Shortage Contingency Ordinance. The plan explores water shortage possibilities due to drought, groundwater contamination and institutional constraints and offers methods for RLECWD to deal with these contingencies. These are quantified in chapter 13.

The Water Code requires water suppliers to provide the *2005 Urban Water Management Plan* to:

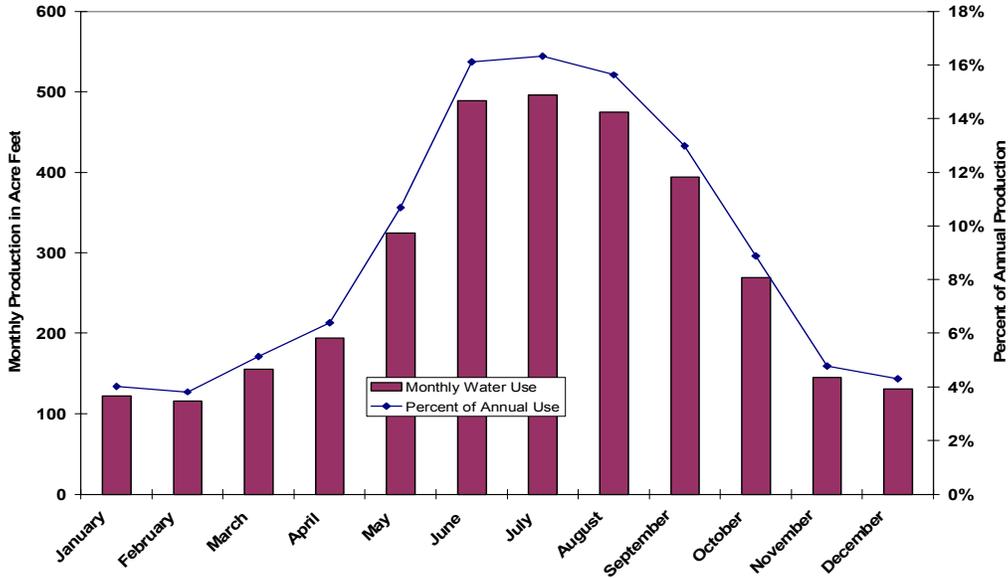
- the California Department of Water Resources and to
 - any city or county within the service area
- within 30 days of being adopted by the Board of Directors.

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Highlights of the draft 2005 Urban Water Management Plan

Water Demand is expected to continue the current demand pattern.

Average 2000-2004 Winter and Summer Water Demand



RLECWD population is projected to reach 30,000 by the year 2030.

Rio Linda /Elverta CWD Population Current and Projected

	2000	2005	2010	2015	2020	2025	2030
Service Area Population	16,800	18,400	20,100	21,700	24,000	27,100	30,800
House Holds	5,500	5,800	6,200	6,900	7,800	9,500	9,900
People per Household	3.1	3.2	3.2	3.1	3.1	2.8	3.1
Employment		2,900	3,400	3,800	4,000	4,000	4,000

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Projected water demands for RLECWD may reach 25,500 AFPY by 2030.

Table 11 - Projected Water Demand for RLECWD in Acre Feet

	2000	2005	2010	2015	2020	2025	2030
Urban w/o Elverta SP (1)			3,500	5,700	7,900	12,600	17,300
Actual Production Urban w/o Elverta SP (2)	3,350	3,400					
Elverta SP Phase 1 (3)			1,140	1,140	1,140	1,140	1,140
Non-Franchised Area Phase 1 (3)			50	50	50	50	50
Elverta SP Phase 2 (3)				1,230	2,460	2,460	2,460
Non-Franchised Area Phase 2 (3)				100	100	100	100
Large Industry - Estimate			500	1,000	1,000	1,000	1,000
RLECWD Customer Subtotal	3,350	3,400	5,190	9,220	12,650	17,350	22,050
System Non-Revenue Water at 9%	included	included	470	830	1,140	1,560	1,980
Cherry Island Golf Course & groundwater recharge	0	0	1,500	1,500	1,500	1,500	1,500
RLECWD Deliveries Subtotal	3,350	3,400	7,160	11,550	15,290	20,410	25,530
Private wells (1)	3,000	3,000	3,000	3,000	3,000	2,650	2,300
Total Demand in RLECWD Service Area	3,350	3,400	7,160	11,550	15,290	20,410	25,530

Projected Water Supplies

Future water supplies are expected to include surface water and recycled wastewater as well as expanded groundwater pumping.

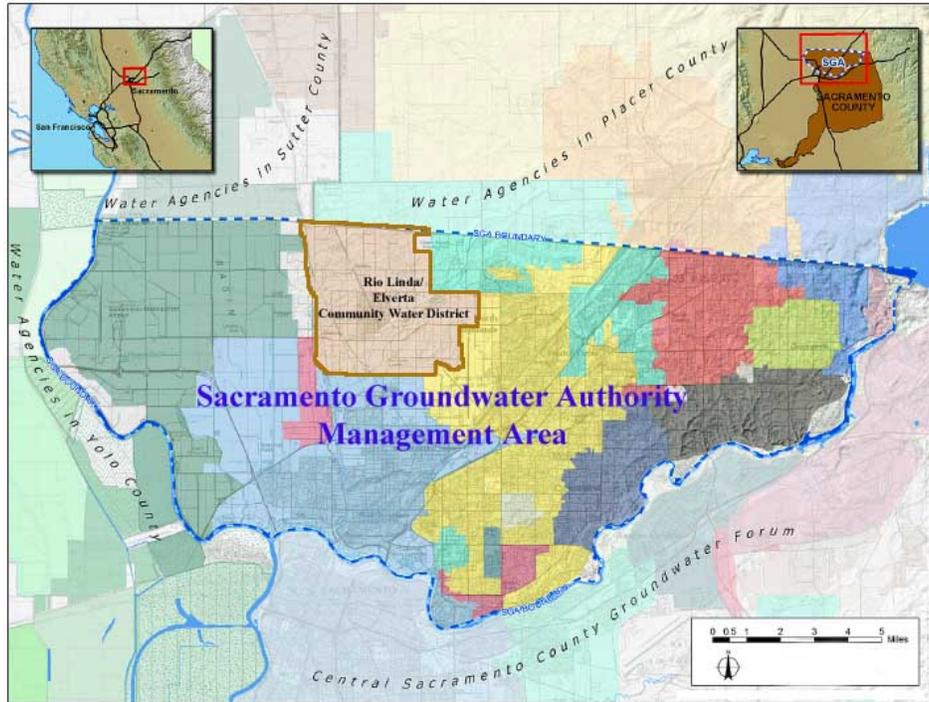
Table 31 - Projected Normal Year Sources for RLECWD Service Area

Source	2010	2015	2020	2025	2030
surface water	1,500	3,000	5,000	5,000	5,000
recycled wastewater - Roseville	1,500	2,000	2,000	2,000	2,000
recycled wastewater - SRCSD	0	0	500	500	500
RLECWD ground water	4,160	6,550	7,790	12,910	18,030
Total RLECWD Supply	7,160	11,550	15,290	20,410	25,530
private groundwater	3,000	3,000	3,000	2,650	2,300
Service area total	10,160	14,550	18,290	23,060	27,830

To meet this demand, RLECWD would develop normal year water supplies of approximately 25,500 AFPY including 18,000 of groundwater (compared with the 17,035 AFPY stipulated in the Water Forum Agreement) and contracts for up to 5,000 AFPY of surface water.

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The Sacramento Groundwater Authority manages the groundwater basin north of the American River as described in the Groundwater Management Plan - Appendix B



Potential Adverse Impacts to Future Water Supplies

- Water Forum Agreement makes surface water unavailable when March-November inflow forecast for Folsom Reservoir is less than 1.6 MAF
 - In most years, RLECWD would pump additional groundwater
 - During prolonged droughts, RLECWD would implement Stage 3 Water Shortage restrictions.
- Groundwater is subject to potential migration of contamination plumes if not adequately managed.
- Future supply of recycled wastewater could be delayed by water rights questions and environmental concerns regarding Dry Creek.

Water Shortage Contingency - Chapter 11

- An extended table provides some impacts and responses for a catastrophe water supply interruption
- Describes existing water waste management tools/regulations
- Offers a draft Ordinance for Water Shortage Contingency
 - 5 stages
 - Zero to 50% reduction in water use
 - Reduction focuses on landscape irrigation
- Notes potential changes in revenues and expenditures due to water shortage

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Review of 2000 Urban Water Management Plan

Comparing RELECWD with the 2000 Urban Water Management Plan indicates that RELECWD has followed the 2000 UWMP. Implementation of demand management measures have exceeded expectations in the plan in large part due to RELECWD participation in the RWA Water Efficiency Program. No recycled water use was anticipated in 2000 and none has been made available. As planned, RELECWD has continued to pump groundwater to supply its slowly growing demand. The districts actions are consistent with the Water Forum Agreement and the Sacramento Groundwater Authority Water Management Plan.

Sources used to develop the 2005 Urban Water Management Plan include:

- Water Forum Agreement
- Groundwater Management Plan of the Sacramento Groundwater Authority
- Population and Economic projections of Sacramento Area Council of Governments
- 2000 Master Plan and 2003 Revision by CDM
- Wastewater Reuse studies by the City of Roseville
- Sacramento Regional County Sanitation District Water Reuse Master Plan
- Groundwater studies by MWH
- 2005 Preliminary Water Supply Master Plan for the Elverta Specific Plan Area by MWH for RELECWD
- RELECWD data for customer demand and groundwater pumping