

5 Sufficiency Analysis

5.1 Introduction

SB 610 requires that the Lead Agency make findings related to supply sufficiency under the normal, single dry and multiple dry year planning scenarios. This Chapter makes the comparisons between water demands and supply based on the supply data and analysis outlined in Chapters 2 and 3 and the demand data and analysis outlined in Chapter 4.

5.2 Summary of Water Supplies

Table 5-1 below, summarizes the water supplies available to the City under a range of hydrologic conditions. This summary presents the City’s Agency supply system in its current condition and without the benefit of the proposed Water Project. The groundwater portion of the WSA (Chapter 3) has analyzed the City’s projected future pumpage and also considered additional pumpage by others in the watershed. Sufficient groundwater supplies occur in the study area to allow City pumpage consistent with the Water Policy Resolution.

Table 5-1

Total Water Supply Available to the City

<i>Total Water Supply Available to City in AFY</i>	<i>Current Water Supply Conditions</i>	<i>Single Dry Year</i>	<i>Multiple Dry Years</i>			<i>Full Agency Allocation</i>
Sonoma County Water Agency	6,476	5,250	6,000	6,000	6,000	7,500
Recycled Water	1,302	1,302	1,302	1,302	1,302	1,302
Groundwater	2,577	2,577	2,577	2,577	2,577	2,577
Totals	10,355	9,129	9,879	9,879	9,879	11,379

5.3 Normal Year Sufficiency Analysis

Table 5-2 provides supply and demand information for the Normal Water Year in 5-year increments from 2005 to 2025. This analysis is presented reflecting the impaired condition of the Agency’s system for the entire planning period. Supply is sufficient to meet demand throughout the planning horizon.

Table 5-2
Normal Year Sufficiency Analysis

Normal Year Supply and Demand Comparison	Current*	2005	2010	2015	2020	2025
Water Demand in AFY						
Total Non-Irrigation Demands	6,591	6,694	7,229	7,702	8,112	8,112
Irrigation from the Potable System	159	159	85	85	85	85
Irrigation from the Recycled Water System	1,040	1,040	1,256	1,302	1,302	1,302
Total	7,789	7,893	8,570	9,088	9,499	9,499
Water Supplies in AFY						
SCWA Supply	3,194	6,476	6,476	6,476	6,476	6,476
Groundwater Supply	3,556	2,577	2,577	2,577	2,577	2,577
Recycled Water Supply	1,040	1,040	1,256	1,302	1,302	1,302
Total	7,790	10,093	10,309	10,355	10,355	10,355
Sufficiency (Supply Less Demand)	0	2,200	1,739	1,267	856	856

* Current Sufficiency Calculation reflects actual demand and actual supply through December 2003.

5.4 Dry Year Sufficiency Analysis

Table 5-3 outlines the supply and demand patterns at buildout under Normal, Single Dry and Multiple Dry Years. Table 5-3 incorporates demand reductions consistent with the City's Water Shortage Emergency Plan during the single and multiple dry years. In all cases, supply is sufficient to meet demand.

Table 5-3

Dry Year Sufficiency Analysis

Dry Year Supply Demand Comparison	Normal	Single Dry	Multiple Dry		
			1	2	3
Water Demand in AFY					
Total Non-Irrigation Demands	8,112	6,490	7,301	7,301	7,301
Irrigation from the Potable System	85	68	76	76	76
Irrigation from the Recycled Water System	1,302	1,302	1,302	1,302	1,302
Total	9,499	7,859	8,679	8,679	8,679
Water Supplies in AFY					
Agency Supply*	6,476	5,250	6,000	6,000	6,000
Groundwater Supply	2,577	2,577	2,577	2,577	2,577
Recycled Water Supply	1,302	1,302	1,302	1,302	1,302
Total	10,355	9,129	9,879	9,879	9,879
Sufficiency (Supply Less Demand)	856	1,269	1,200	1,200	1,200

5.5 Water Resources Management Strategy

The City intends to pursue a conjunctive use strategy with its three supply sources. During Normal and Above Normal Water years, the City would meet demands using its Agency allocation and recycled water first, minimizing its demands on groundwater and allowing the groundwater basin to recharge during these periods.

In dry and multiple dry years, the City will continue to use recycled water to the maximum extent possible. During these periods, the City anticipates some cutbacks in its Agency allocation may occur as provided for under the 11th Amended Agreement. The City will implement demand curtailment measures consistent with its Water Shortage Emergency Plan and the City will utilize its groundwater resources.

5.6 Projects and Permits Necessary to Accomplish the Program

1. The City has adopted a Water Waste Ordinance that prohibits waste of water (consistent with the recommendations of the California Urban Water Conservation Council) and requires the use of recycled water when it is available. The City has also adopted a Water Shortage Emergency Plan Ordinance that gives it the authority to implement demand management. These policy tools are in place and can be used to achieve the demand management and recycled water supplies outlined in this assessment.
2. The City’s water model indicates a need to extend a new water transmission main from the Agency aqueduct to the proposed East-side developments and to make several other modifications to the distribution system to provide adequate water service. These improvements are under design. The City has approved a Public Facilities Finance Plan and adopted Mitigation Fees, as authorized by Government Code Section 66000 et. seq. to fund this construction. Work is expected to be complete in 2006.

3. The Santa Rosa Subregional Water Reclamation System has approved a Programmatic EIR for its long-term Incremental Recycled Water Program (IRWP). Expansion of the recycled water system serving Rohnert Park is included in the IRWP. The City has applied for a State grant to complete the planning of the recycled water system expansion.

The recycled water system expansion will include the construction of a recycled water storage reservoir (with approximately 300 AF of capacity) and extension of the recycled water transmission system to connect the new reservoir to the existing recycled water system. The City is current negotiations with the proponents of the University District Specific Plan and the Subregional system to move forward with the project implementation. The proponents of the University District Specific Plan have acquired and are proposing to contribute a site for the reservoir. Conceptual design has also been completed by the proponents. The conceptual design and siting will be presented to the Subregional System.

The City has approved a Public Facilities Finance Plan and adopted Mitigation Fees to fund this construction. The plan will be revised as necessary to incorporate the full scope of the project. Work is expected to be complete in 2008.

4. The City has initiated a number of activities to manage its groundwater supply and ensure supply sufficiency. These include:
 - Decreased groundwater use and increased use of Agency water;
 - Expansion of its groundwater monitoring program;
 - Expansion of its water conservation program;
 - Continuation and expansion of recycled water use for irrigation;
 - Protection of groundwater recharge areas; and
 - Support of the planned joint USGS and Agency Santa Rosa Plain Subbasin study.

5. The Agency anticipates issuing a new Notice of Preparation for the Water Project EIR in 2005 and anticipates it will release its Draft EIR for public review by May 2006, after completion of its Urban Water Management Plan 2005. A Final EIR is scheduled for completion in May 2007, and EIR certification and project approval could be considered by the Board by the early summer of 2007.

Completion of the Water Project will allow the City to access its full 7,500 AFY allocation of Agency supply. The WSA documents that the City has adequate supply without the completion of the Water Project.

5.7 Regulatory Requirements for Delivery of Water Supply

The City's supply sources comply with all current regulatory standards. The City will continue to monitor its system in accordance with its permit from the Department of Health Services.