

# SOLANO COUNTY WATER AGENCY



## URBAN WATER MANAGEMENT PLAN

(Approved by SCWA Board of Directors October 13, 2005)



## **SECTION 1 – AGENCY COORDINATION**

The Solano County Water Agency (SCWA) is wholesale water agency that is required by the Urban Water Management Planning Act to submit an Urban Water Management Plan (UWMP). Retail agencies within Solano County that are required to submit an UWMP will do so individually. Other documents related to the UWMP are the Solano Agencies' Integrated Regional Water Management Plan (February 2005) and the SCWA Water Management Plan (June 2005), the latter prepared to meet the requirements of our federal water supply from the Solano Project. The SCWA Water Management Plan was prepared in conformance with guidelines prepared by the United States Bureau of Reclamation (USBR).

In preparing the UWMP, SCWA coordinated with appropriate agencies. Table 1 lists those agencies.

### **Coordination with Appropriate Agencies (Table 1)**

Check at least one box per row	Participated in UWMP development	Commented on the draft	Attended public meetings	Contacted for assistance	Received copy of draft	Sent notice of intention to adopt	Not Involved /No Information
Vallejo	X		X	X	X	X	
Fairfield	X		X	X	X	X	
Suisun City	X		X	X	X	X	
Benicia	X		X	X	X	X	
Vacaville	X		X	X	X	X	
RioVista			X	X	X	X	
Dixon			X	X	X	X	
Solano County			X	X	X	X	
Solano Irrigation District	X		X	X	X	X	
Suisun Solano Water Authority	X		X	X	X	X	

Dixon Solano Municipal Water Service	X		X	X	X	X	
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Additionally, SCWA participates in San Francisco Bay Area regional water management discussions and is participating in the development of a Bay Area Integrated Regional Water Management Plan.

Extensive discussions were held with SCWA member agencies on the water supply assumptions for the State Water Projects Supply and Solano Project Supply.

SCWA uses a wide variety of water management tools and options to maximize resource and minimize the need to import water. As previously mentioned, SCWA has completed an Integrated Regional Water Management Plan, a USBR Water Management Plan and is participating in a Bay Area Integrated Water Management Plan. The SCWA and its member agencies have comprehensive urban and agricultural water conservation programs. Water exchanges and transfers are documented in the Solano Agencies' Integrated Regional Water Management Plan (See Appendix A for an excerpt from the IRWMP). These exchanges and transfers within Solano County maximize local resources and minimize the need for additional new imported water supplies. However, longer term projections show that there may be a need for additional imported water supplies.

## **SECTION 2 – CONTENTS OF UWMP**

### **Service Area Information with 20 Year Projections**

Table 2 shows current and projected population for the SCWA service area. The SCWA service area includes all of Solano County so these projections are Solano County projections provided by the California Department of Finance.

### **Population – Current and Projected (Table 2)**

	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030/opt</b>
Service Area Population	421,657	455,647	505,455	555,264	616,446	677,628

Table 3 shows climatic information. The average rainfall and average temperature information comes from the National Weather Service from the Vacaville Station (period of record 1948-2004). The evapotranspiration data comes from the Dixon CIMIS Station.

### **Climate (Table 3)**

	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>June</b>	
Standard Monthly Average ETo	0.65	1.37	3.23	5.22	6.27	7.59	
Average Rainfall (inches)	5.71	4.50	3.19	1.42	0.54	0.11	
Average Temperature (Fahrenheit)	46	51	54	59	66	72	
	<b>July</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Annual</b>
Standard Monthly Average ETo	8.24	7.18	5.45	4.25	1.56	1.07	52.08
Average Rainfall (inches)	0.03	0.05	0.34	1.23	3.21	4.84	25.17
Average Temperature (Fahrenheit)	76	75	72	64	53	41	61

There are other demographic features effecting water management such as housing density, future commercial and industrial development, or projected income levels. In Solano County, an initiative (Solano County Orderly Growth Initiative, 1994) requires that any urban development be annexed to a city. There are no urban type populations in the unincorporated areas. The cities of Vallejo and Benicia have limited geographical area to expand and growth in these areas is expected to be small. The other cities, Fairfield, Vacaville, Suisun City, Dixon and Rio Vista are expected to continue to increase in population in the future as there is suitable land available for urban growth. See the UWMP's for these cities for more detail on growth projections and factors that are impacting urban growth. Agricultural water use is expected to be level as there are some new areas coming under irrigated agriculture, but there is an off-setting amount of agricultural land being replaced by urban growth. Agricultural water use is expected to remain stable or to decrease in the future.

### **Water Sources**

Table 4 shows the two water supply sources of SCWA: the USBR Solano Project and the California Department of Water Resources (DWR) State Water Project (SWP). This tables shows contract amounts and do not reflect potential deficiencies in supplies due to drought and other conditions. SCWA does not

provide groundwater supplies nor does it provide any other water supplies beyond the two wholesale sources. See individual city UWMP's for details about other supplies used in Solano County. Another reference is the Solano Agencies' Integrated Regional Water Management Plan (See Appendix A).

**Current and Planned Water Supplies – AF/Y (Table 4)**

Water Supply Sources	2005	2010	2015	2020	2025	2030/opt
Wholesale water providers						
USBR Solano Project	207,350	207,350	207,350	207,350	207,350	207,350
DWR State Water Project	47,256	47,506	47,756	47,756	47,756	47,756
Supplier produced groundwater						
Supplier surface diversions						
Transfers in or out						
Exchanges in or out						
Recycled water (current and projected use)						
Desalination						
Other						

**RELIABILITY OF SUPPLY**

The UWMP Act requires analysis of reliability for an “average water year”, a “single dry water year” and “multiple dry water years”. The nomenclature in the DWR UWMP Guidelines uses “normal water year”, “single dry water year”, and “multiple dry water years”. For the SCWA UWMP we have used the average of all normal years to represent a “normal water year”. For the “single dry water year” we used the average of single dry years and the first year of multiple dry years. For “multiple dry years” we used a definition of “multiple” to mean three or more consecutive dry years and took the average of all such years. Table 5 shows a summary of supply reliability for both supplies. See Appendices B and C for year type designations and percent allocations for SWP and Solano Project supplies.

**Supply Reliability - % Allocation (Table 5)**

	Normal Water Year	Single Day Water Year	Multiple Dry Water Years
State Water Project (2001)	81%	64%	42%
State Water Project (2020)	90%	61%	39%
Solano Project (current)	99%	99%	96%
Solano Project (ultimate)	99%	98%	91%

**State Water Project Supply**

Information on the reliability of SCWA's SWP supply comes from a “Notice to State Water Project Contractors” dated May 25, 2005, that provides SWP delivery reliability data from the draft 2005 SWP Delivery Reliability Report. DWR recommends that the results of Studies 6 and 7 in the Notice be used for development of 2005 UWMP's. Study 6 is for a 2001 level of development and Study 7 is for a 2020 level of development. The studies show percent allocation of contract amounts for years 1922 through 1993.

In order to categorize the water year type into dry and normal years, the Sacramento Valley Water Year Index, also known as the 40/30/30 index was used. The Sacramento Valley Index uses 40% of April through July runoff, 30% of October through March runoff and 30% of the previous year's index. The Sacramento Valley Index is used to determine water year types in State Water Resources Control Board Decision 1641. We have assigned a Sacramento Valley Index to each of the years that it has hydrologic records.

Appendix B shows the results of assigning a water year types to each of the years in the DWR study. The results are summarized in Table 5.

Note that the SWP also makes available Article 21 water that is available to SWP contractors under specified conditions when the Delta is in excess conditions and there is pumping capacity available. SCWA receives its water from the North Bay Aqueduct (NBA). Current DWR policy is that Article 21 water is available whenever the Delta is in excess (out of balance) conditions. This makes Article 21 water available to NBA users more frequently than SWP contractors relying upon the Banks pumping plant (South Delta SWP export facility) capacity. For the purposes of this UWMP, Article 21 deliveries are not included although they can be a significant additional supply most years.

There are numerous factors that affect the reliability of SWP supplies. Main factor is hydrologic conditions that result in extremely variable runoff conditions. The SWP has storage from Oroville Reservoir, however most of the SWP water supply comes from Sacramento Valley runoff. There are a myriad of environmental, water quality and legal constraints on the SWP that effect water supply reliability. The water rights for the SWP are conditioned upon meeting various water quality and environmental conditions including the Federal Endangered Species Act. The models used to develop the SWP reliability data incorporate these constraints.

The SWP supply is not always available at a consistent level. Plans to replace or supplement the SWP source when there are shortages are the responsibility of SCWA member agencies that contract for SWP supplies. They would typically shift to other supplies such as Solano Project and groundwater (if they have rights to these supplies) or enter into purchase or exchange agreements with other Solano agencies. SCWA would also keep member agencies informed about any SWP collective programs for dry year water purchases, such as a drought water bank. SCWA would also coordinate any joint local efforts to secure short term water supplies under a drought conditions. Increased demand management measures would be the responsibility of the member agencies to implement.

### **Solano Project**

For the Solano Project a similar year type index was developed based upon procedures similar to the Sacramento Valley Index. An existing model exists for the Solano Project that uses hydrologic records from 1906 through 1993. Using similar assumptions as the Sacramento Valley 40/30/30 Index, year types were assigned to each of the years in the Solano Project model resulting in a Lake Berryessa Index that identifies wet, normal and dry years. See Appendix C.

The allocation process for water supplies from the Solano Project is very different than for the SWP. For the Solano Project, the contract between SCWA and USBR calls for the full contract amount to be

delivered to SCWA unless it is physically impossible to deliver the water from Solano Project storage (i.e. reservoir is dry). Therefore, the full contract water supply, 207,350 acre feet per year, is allocated until there is no water available in the reservoir (dead storage is 10,300 AF).

Appendix C shows the results of assigning a water year type to each of the years in the Solano Project study. The results are summarized in Table 5.

The Solano Project member agencies (cities and districts that contract with SCWA for Solano Project water supply) have entered into a separate agreement to reduce deliveries based upon storage levels in Lake Berryessa. Once the storage level drops below 800,000 acre feet, as measured on April 1, 95% of contract amounts are delivered with 5% being stored in the reservoir as carryover. If the reservoir drops below 550,000 acre feet by April 1, 90% can be delivered and 10% is stored as carryover. Member agencies have the ability to carryover more than this amount if they desire. Once the reservoir level is below 400,000 acre feet on April 1, the member agencies can use their full allocation and any stored carryover. For more information see the Drought Measures Agreement in Appendix D. Since all the Solano Project cities are parties to that agreement, the reduction in supplies specified in that agreement are shown in Appendix C and Table 5.

The main factor affecting Solano Project reliability is the frequency of long droughts which could result in major drawdown of Lake Berryessa. Environmental issues have been addressed in a legal settlement regarding downstream flows from the Solano Project and the settlement has been ratified by the State Water Resources Control Board. Limits on upstream depletions have been established through a settlement agreement administered by a court appointed watermaster.

### **Transfer and Exchange Opportunities**

SCWA, as a wholesaler, does not conduct exchanges or transfers on its own. SCWA does facilitate and assist cities and districts in transfers and exchanges.

A thorough discussion of current transfers and exchanges is included in the Appendix of the Solano Agencies' Integrated Regional Water Management Plan (Appendix A).

One program SCWA is directly involved in is the SWP exchange agreement with the Mojave Water Agency. However, these exchanges only take place if a city provides NBA water for exchange. The amount to be exchanged is a maximum of 10,000 acre feet per year. Since this program is a two-for-one exchange, this would result in a maximum return obligation of 5,000 acre feet per year on the part of the Mojave Water Agency. The cumulative limit of the return obligation of the Mojave Water Agency is 20,000 acre feet at any one time. Currently there is a 5,500 acre feet return obligation on behalf of the City of Benicia. This is the only "out of county" exchange of transfer program SCWA is currently involved in.

**Water Use by Customer Type – Past, Current and Future**

SCWA has three categories of customers: cities, agricultural districts and institutions. The institution is California State Prison – Solano that receives an allocation of Solano Project Water that is used mostly for use within the prison, but some is used for agricultural purposes on some surrounding land.

Table 6 shows past, current and projected water deliveries in five year increments from year 2000 to 2030. Table 6 shows contract amounts that do not reflect possible water supply reductions shown in the reliability studies. Year 2000 is based upon actual deliveries. Note that since SCWA is a wholesale supplier, customer cities have other supplies that they can use to meet their future demands. These will be shown in each of their UWMP’s.

**Past, Current and Projected Water Deliveries – All SCWA Supplies are Metered (Table 6)**

<b>Year</b>	<b>Water Use Sectors</b>	<b>Cities</b>	<b>Instit/Gov</b>	<b>Agric</b>	<b>Total</b>
<b>2000</b>	# of accounts	4	1	3	<b>8</b>
	Deliveries AF/Y	84,204	1,147	135,025	<b>220,376</b>
<b>2005</b>	# of accounts	4	1	3	<b>8</b>
	Deliveries AF/Y	94,906	1,200	143,500	<b>239,606</b>
<b>2010</b>	# of accounts	4	1	3	<b>8</b>
	Deliveries AF/Y	95,156	1,200	143,500	<b>239,856</b>
<b>2015</b>	# of accounts	4	1	3	<b>8</b>
	Deliveries AF/Y	95,406	1,200	143,500	<b>240,106</b>
<b>2020</b>	# of accounts	4	1	3	<b>8</b>
	Deliveries AF/Y	95,406	1,200	143,500	<b>240,106</b>
<b>2025</b>	# of accounts	4	1	3	<b>8</b>
	Deliveries AF/Y	95,406	1,200	143,500	<b>240,106</b>
<b>2030</b>	# of accounts	4	1	3	<b>8</b>
	Deliveries AF/Y	95,406	1,200	143,500	<b>240,106</b>

All SCWA water supplies are all metered.

There are no water sales to any entities other than those listed in Table 6.

Table 7 shows additional water uses and losses. The only category currently applicable to SCWA is “Unaccounted for System Losses” that are the losses associated with the Putah South Canal delivery of Solano Project water.

**Additional Water Uses and Losses – AF/Year (Table 7)**

<b>Water Use</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030/opt</b>
Saline barriers							
Groundwater recharge							
Conjunctive use							

Raw Water							
Recycled							
Other (define)							
Unaccounted for system losses	24,472	15,000	15,000	15,000	15,000	15,000	15,000
Total							

Table 8 shows total water use which is the sum of Table 6 and Table 7.

### **Total Water Use – AF/Year (Table 8)**

<b>Water Use</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030/opt</b>
Sum of Tables 6 and 7	244,848	254,606	254,856	255,106	255,106	255,106	255,106

### **Demand Management Measures**

SCWA is a member of the California Urban Water Conservation Council (CUWCC) and submits Best Management Practices (BMP) activity reports (annual reports). Appendix E is copies of annual reports from 2001 through 2004.

Note that SCWA is a wholesale provider of urban water supplies and not all CUWCC BMP's are applicable at the wholesale level. Applicable BMP's are reflected in the annual reports.

### **Planned Water Supply Projects and Programs**

The recently completed (February 2005) Solano Agencies' Integrated Regional Water Management Plan (IRWMP) identifies numerous water supply projects and programs to be considered for implementation. The direction in the IRWMP is to look at groundwater conjunctive use as a potential way of addressing dry year shortages. None of these conjunctive use projects have been developed enough to be classified as a "planned water supply project". SCWA has submitted a Proposition 50 grant application for a pilot conjunctive use project and a groundwater monitoring program that could lead towards a conjunctive use project.

### **Development of Desalinated Water**

There are potential opportunities for development of desalinated water in Solano County including waters from the San Francisco Bay and treated wastewater. Some wastewater in Solano County has a high salt content which makes recycling difficult. A desalination process as part of a wastewater recycling project is being considered.

Currently there are no "planned" desalination projects in Solano County. They could be pursued if grant funding becomes available or other actions are taken to improve the economics of such projects. We do not have any quantification about the volume of desalinated water available from these types of projects.

### **Current or Projected Supply Includes Wholesale Water**

This section is not applicable to SCWA as we are the wholesaling water agency in Solano County.

SCWA has provided information to retail agencies about the availability and reliability of SCWA wholesale supplies: State Water Project and Solano Project.

### **SECTION 3 – DETERMINATION OF DEMAND MANAGEMENT MEASURES IMPLEMENTATION**

Appendix E includes reports sent to the California Urban Water Conservation Council that shows implementation of SCWA demand management measures.

## **SECTION 4 – WATER SHORTAGE CONTINGENCY PLAN**

### **Stages of Action**

SCWA is strictly a wholesale supplier of water. SCWA is not a water utility. It is the responsibility of each of the cities within Solano County to deal with water shortages. SCWA provides coordination assistance but is not responsible for making any decisions regarding water shortages. The only exception is that SCWA retains authority to change allocations of SWP supplies water during shortages.

The contract language is as follows: “If at any time there occurs a shortage from any cause in the quantity of project water made available to Agency so that the total quantity made available to Agency is less than the total of all quantities of project water contracted for by this member unit and other member units, Agency shall portion the project water available among all member units in such a manner as Agency shall determine to be equitable. In making such determination, Agency shall consult with all its member units as shall be guided by, but not limited to, consideration of the following factors with respect to each member unit: other supplies of water available to the member unit; the quantities of water normally used by the member unit for domestic, municipal, industrial, commercial, and other purposes, and the relative ability of the member unit to reduce the quantity of water it uses; and impact various reductions of water supply will have on the economy, public health, and welfare.”

Although there are frequent shortages in the SWP supply, SCWA has never used its authority to allocate SWP supplies during any shortages. SCWA has delivered supplies in proportion to contract amounts.

Table 9 shows a two-stage trigger for contingency actions. Stage 1 is if there is a 25% reduction in either SWP and/or Solano Project supplies. During Stage 1 conditions, SCWA will offer to assist member agencies in any internal exchanges or transfers and also assist in securing additional water supplies from outside sources such as drought water banks or joint efforts with other water agencies to obtain supplies in dry years.

### **Water Supply Shortage Stages and Conditions (Table 9)**

<b>Stage No.</b>	<b>Water Supply Conditions</b>	<b>% Shortage</b>
1	Reduction in SWP and/or Solano Project	25%
2	Reduction in SWP and/or Solano Project	50%

Stage 2 is invoked if there is a 50% reduction in SWP and/or Solano Project supplies. During Stage 2 conditions SCWA will perform the same functions in Stage 1 and will also state its willingness to consider allocations of shortages in the SWP supply as specified in the member agency agreements.

### **Estimate of Minimum Supply For Next Three Years**

Water Code Section 10632(b) requires that the UWMP estimate the minimum water supply available during each of the next three water years based on the driest three year historic sequence for the agency’s water supply.

SCWA has two water supply sources: the SWP and the Solano Project. These two projects have different historic dry year sequences. The three worst years for the SWP supply are 1990-1993 (See Appendix B). The three worst years for the Solano Project supply are 1929-1931 (See Appendix C, current year study). These are reflected in Table 10. Note that the use of different dry year sequences in Table 10 results in a very conservative depiction of the estimated minimum supply for the next three years as it is unlikely that extreme dry period for both the Solano Project and SWP will coincide, especially since reductions in the Solano Project is based on reservoir levels while reductions in SWP supplies are based on current year hydrologic conditions.

**Three-Year Estimated Minimum Water Supply – AF/Year worst separate 3 year series (Table 10)**

Source	Year 1	Year 2	Year 3	Normal
State Water Project*	12,773	12,313	16,592	38,358
Solano Project	196,983	196,983	186,615	206,240
<b>Total</b>	209,756	209,296	203,207	244,598

**\*does not include Article 21 Water**

Note that Table 10 does not include Article 21 water that could supplement SWP supplies. As mentioned previously, the NBA contractors have access to Article 21 water on a more frequent basis than those SWP contractors relying upon the SWP Banks pumping plant. The 2005 SWP Delivery Reliability Data Report shows no Article 21 supply available during 1990-1993, however is likely that some Article 21 would be available to NBA contractors, but that amount cannot be modeled or quantified.

**Catastrophic Supply Interruption Plan**

The following discusses actions that would take place if there is a catastrophic event on either the SWP or Solano Project supplies.

**Solano Project**

**Earthquake:** in the event of an earthquake, the Solano Project Emergency Response Plan is invoked. The Plan, developed in coordination with the USBR, provides a detailed response for various levels of seismic activities both at the dam site and within a specified geographical area surrounding the Solano Project. The response is first an inspection then an assessment of any potential damage. If water deliveries are unavailable from the Solano Project, water users would shift to SWP supplies and/or invoking emergency exchange agreements with other public agencies.

**Power Outage:** The Solano Project is not dependent upon power to operate. It is a gravity system from Monticello Dam to the end of the Putah South Canal and can be operated manually.

**Contamination:** Any detection of contamination would result in a shut-down of the Solano Project deliveries. Member agencies would switch to the SWP supply.

Landslide: The Putah South Canal is susceptible to a landslide which could either block or damage the Putah South Canal's ability to deliver water. SCWA recently invested in a \$3 million project to provide an underground pipeline bypass of an area most susceptible to a landslide. However, in an event of a landslide that blocks the Putah South Canal, Solano Project city water users would shift to a SWP supply. The SWP supply would not be available to agricultural water users.

#### State Water Project

Earthquake: Should an earthquake result in a disruption of SWP supplies through the NBA, the member agencies would switch to Solano Project Water supplies. All the NBA water users have access to Solano Project supplies in such an emergency.

Power Outage: The NBA relies upon PG&E to provide power to pump water through the NBA. Any power outage of any duration would result in the NBA not being able to provide its water supply except for the amount of water in storage in the pipeline, that is very limited. The NBA water users would shift to Solano Project supplies in this scenario.

Contamination: Should there be a contamination at the intake to the NBA, the NBA would be shut-down and the member agencies would use Solano Project water until the contamination is resolved.

Landslide: The NBA is an underground pipeline and therefore would not be subject to any landslide risks.

### **Prohibitions, Penalties and Consumption Reduction Methods**

SCWA is purely a water wholesaler and does not implement any of the actions contemplated in this subsection. SCWA is contractually committed to provide the available water supply from the SWP and the Solano Project to its member agencies regardless of hydrologic conditions (with the exception of having the authority to allocate NBA water supplies in a manner different than contractual amounts during a water shortage). SCWA does not have the ability to take measures to provide incentives or disincentives for water use from SCWA.

### **Analysis of Revenue Impacts of Reduced Sales During Shortages**

#### Solano Project

In a shortage situation, there would be a reduction in revenue to SCWA from member agencies. However, the amount charged to member agencies for Solano Project water supply is equal to the amount used to purchase the supplies from the U.S. Bureau of Reclamation. Therefore, there would be no net impact to SCWA revenues during a water shortage.

#### State Water Project

The contract between SCWA and its SWP member agencies require full payment of water supply costs regardless of shortages. Therefore, there would be no financial impact to SCWA from shortages.

## **Draft Ordinance and Use Monitoring Procedure**

### **Solano Project**

The Solano Project contract with member agencies requires the full amount allocated by the USBR be provided to the member agencies. The contract between SCWA and the USBR requires allocation of the full amount of contract amounts unless that water is physically unable to be delivered from the Solano Project.

Appendix D is a copy of “The Solano Project Members Agreement As To Drought Measures and Water Allocation”. This is an agreement that provides for a reduction in the use of Solano Project water when reservoir levels are between 800,000 acre feet of storage (approximately half full) and 450,000 acre feet of storage. The Agreement requires a reduction of five to ten percent of Solano Project use during this storage level. The five to ten percent not utilized is stored in the reservoir as carryover to be made available when the storage is above 800,000 acre feet or below 450,000 acre feet.

### **State Water Project**

SCWA does have the ability to allocate SWP water to member agencies during a shortage. SCWA has not invoked this provision to date. SCWA has determined that it will consider invoking this provision at the request of a member agency on a case by case basis. We have not predetermined any shortage allocations.

## **SECTION 5 – RECYCLED WATER PLAN**

### **Coordination**

In Solano County, cities and special wastewater districts are responsible for wastewater treatment. SCWA has no involvement in wastewater treatment or water recycling. Each of the cities and wastewater special districts have their own plans for water recycling. These efforts will be outlined in the individual cities UWMP's. SCWA has no plans to become involved in water recycling. Water recycling is recognized as an important part in the Solano Agencies' Integrated Regional Water Management Plan, but is a city/district responsibility for implementation.

Water Code Section 10620(c) states "An urban water supplier indirectly providing water shall not include planning elements in its water management plan as provided in Article 2 (commencing with Section 10630) that would be applicable to urban water suppliers or public agencies directly providing water, or to their customers, without the consent of those suppliers or public agencies". The Solano agencies have decided that any discussion on recycled water should be done in city urban water management plans.

### **Wastewater Quantity, Quality and Current Uses**

See individual cities UWMP for this information.

### **Potential and Projected Use, Optimization Plan with Incentives**

See individual city UWMP's for this information.

## **SECTION 6 – WATER QUALITY IMPACTS ON RELIABILITY**

### **Solano Project**

Solano Project water quality is excellent for both agricultural and urban uses. We do not project any decline in water quality of Solano Project supplies that would affect its reliability.

### **State Water Project**

SWP water from the NBA is of lesser quality than the Solano Project. SWP water has high turbidity and high organic carbon especially during the winter runoff season. SCWA has implemented land use best management practices in the local watershed and has conducted treatment studies to determine if the water quality can be improved. SCWA has completed a feasibility study to determine if an alternate intake for the NBA can be constructed. We are currently weighing the cost of that project with other measures to reduce water quality impacts. Even with the water quality concerns of NBA water, we do not see any reduction in reliability due to water quality factors in the NBA.

## **SECTION 7 – WATER SUPPLY RELIABILITY**

### **Projected Normal Water Year Supply and Demand**

This section presents a separate analysis of the SWP and Solano Project water supplies. Separate analysis is necessary because member agencies of SCWA do not all have both water supplies, so they will need a separate analysis in order to prepare their UWMP's.

#### **State Water Project**

Tables 11 through 13 show normal year water supply and demand for SWP supplies. The supply number was calculated by multiplying the percentage of SWP supply for a normal year by the SCWA's SWP contract amount. The SWP supply for a normal year was defined as the average of percentage supplies for all the below normal and above normal years in the Sacramento Valley Index from 1922 through 1993 as shown in Table 5. See Appendix B for the analysis. Using DWR Study 6 (2001 level of development) the average is 81% of supply. Using DWR Study 7 (2020 level of development) the average is 90% of supply. Table 11 uses an average of the two: 86% of allocation. This 86% allocation was applied to SCWA SWP contract amounts to determine the normal year supply figures in Table 11.

#### **Projected SWP Normal Water Year Supply – AF/Y (Table 11)**

	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030/opt</b>
Supply <sup>1</sup>	40,855	41,070	41,070	41,070	41,070
% of Normal Year	100%	100%	100%	100%	100%

#### **Projected SWP Normal Water Year Demand – AF/Y (Table 12)**

	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030/opt</b>
Demand <sup>2</sup>	47,506	47,756	47,756	47,756	47,756
% of year 2005	101%	101%	101%	101%	101%

#### **Projected SWP Normal Year Supply and Demand Comparison - AF/Y (Table 13)**

	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030/opt</b>
Supply totals	40,855	41,070	41,070	41,070	41,070
Demand totals	47,506	47,756	47,756	47,756	47,756
Difference (supply minus demand)	(6,651)	(6,686)	(6,686)	(6,686)	(6,686)
Difference as % of Supply	16%	16%	16%	16%	16%
Difference as % of Demand	14%	14%	14%	14%	14%

1. Assumes normal year supply is 86% of SWP contract amount.
2. Assumes demand is equal to contract amounts.

For Table 12 demand was assumed to be the full SWP contract amounts. For a wholesale agency like SCWA, it is not possible to accurately predict the demand of our cumulative member agencies.

Therefore, a simplifying assumption that they would utilize the full amount of their contractual rights was assumed.

Table 13 shows normal year supply and demand comparisons. There is a deficit since the supply was assumed to be 86% of contract amounts and contract amounts we assumed to be the demand.

Tables 14 through 16 show single dry year water supply and demand for SWP supplies. The supply number was calculated by multiplying the percentage of SWP supply for a single dry year by the SCWA's SWP contract amount. The SWP supply for a single dry year was defined as the average of percentage supplies for all single dry and critical years in the Sacramento Valley Index from 1922 through 1993 as shown in Table 5. Single dry years are defined as those dry and critical years that are not consecutive plus the first dry or critical year of consecutive sequences. See Appendix B for the analysis. Using DWR Study 6 (2001 level of development) the average is 64% of supply. Using DWR Study 7 (2020 level of development) the average is 61% of supply. Table 14 uses an average of the two: 63% of allocation. This 63% allocation was applied to SCWA SWP contract amounts to determine the single dry year supply figures in Table 14.

### Projected SWP Single Dry Year Water Supply - AF/Y (Table 14)

	2010	2015	2020	2025	2030/opt
Supply <sup>1</sup>	29,929	30,086	30,086	30,086	30,086
% of projected normal <sup>2</sup>	73%	73%	73%	73%	73%

### Projected SWP Single Dry Year Water Demand - AF/Y (Table 15)

	2010	2015	2020	2025	2030/opt
Demand <sup>3</sup>	47,500	47,756	47,756	47,756	47,756
% of projected normal <sup>2</sup>	100%	100%	100%	100%	100%

### Projected SWP Single Dry Year Supply and Demand Comparison - AF/Y (Table 16)

	2010	2015	2020	2025	2030/opt
Supply totals	29,929	30,086	30,086	30,086	30,086
Demand totals	47,506	47,756	47,756	47,756	47,756
Difference (supply minus demand)	(17,577)	(17,670)	(17,670)	(17,670)	(17,670)
Difference as % of Supply	59%	59%	59%	59%	59%
Difference as % of Demand	37%	37%	37%	37%	37%

1. Assumes single dry year supply is 63% of SWP contract.
2. Projected normal is 86% of SWP contract amount.
3. Assumes demand is equal to contract amounts.

For Table 15 demand was assumed to be the full SWP contract amounts. For a wholesale agency like SCWA, it is not possible to accurately predict the demand of our cumulative member agencies. Therefore, a simplifying assumption that they would utilize the full amount of their contractual rights was assumed.

Table 16 shows single dry year supply and demand comparisons. There is a deficit since the supply was assumed to be 63% of contract amounts and contract amounts we assumed to be the demand.

Tables 17 through 18 show multiple dry year water supply and demand for SWP supplies from 2006-2010. The supply number was calculated by multiplying the percentage of SWP supply for multiple dry years by the SCWA's SWP contract amount. The SWP supply for multiple dry years was defined as the average of percentage supplies for all dry and critical years occurring in three or more consecutive years in the Sacramento Valley Index from 1922 through 1993 as shown in Table 5. See Appendix B for the analysis. Using DWR Study 6 (2001 level of development) the average is 42% of supply. Using DWR Study 7 (2020 level of development) the average is 39% of supply. Table 17 uses an average of the two: 41% of allocation. This 41% allocation was applied to SCWA SWP contract amounts to determine the single dry year supply figures in Table 17.

**Projected SWP Supply During Multiple Dry Year Period Ending in 2010 - AF/Y (Table 17)**

	2006	2007	2008	2009	2010
Supply <sup>1</sup>	19,395	19,416	19,436	19,457	19,477
% of projected normal <sup>2</sup>	48%	48%	48%	48%	48%

**Projected SWP Demand Multiple Dry Year Period Ending in 2010 - AF/Y (Table 18)**

	2006	2007	2008	2009	2010
Demand <sup>3</sup>	47,306	47,356	47,406	47,456	47,506
% of projected normal <sup>2</sup>	100%	100%	100%	100%	100%

**Projected SWP Supply and Demand Comparison During Multiple Dry Year Period Ending in 2010 - AF/Y (Table 19)**

	2006	2007	2008	2009	2010
Supply totals	19,395	19,416	19,436	19,457	19,477
Demand totals	47,306	47,356	47,406	47,456	47,506
Difference (supply minus demand)	(27,911)	(27,940)	(27,970)	(27,999)	(28,029)
Difference as % of Supply	144%	144%	144%	144%	144%
Difference as % of Demand	59%	59%	59%	59%	59%

1. Assumes multiple dry year supply is 41% of SWP contract amount.
2. Projected normal is 86% of SWP contract amount.
3. Assumes demand is equal to contract amounts.

For Table 18 demand was assumed to be the full SWP contract amounts. For a wholesale agency like SCWA, it is not possible to accurately predict the demand of our cumulative member agencies. Therefore, a simplifying assumption that they would utilize the full amount of their contractual rights was assumed.

Table 19 shows multiple dry year supply and demand comparisons. There is a deficit since the supply was assumed to be 41% of contract amounts and contract amounts we assumed to be the demand.

Tables 20-22 show the same analysis for years 2011- 2015. Tables 23-25 show the same analysis for years 2016- 2020. Tables 26-28 show the same analysis for years 2021- 2025. The numbers do not change after 2015 since SWP contract amounts do not change after 2015, and that is the only variable in this analysis.

**Projected SWP Supply During Multiple Dry Year Period Ending in 2015 - AF/Y  
(Table 20)**

	2011	2012	2013	2014	2015
Supply <sup>1</sup>	19,498	19,518	19,539	19,559	19,580
% of projected normal <sup>2</sup>	48%	48%	48%	48%	48%

**Projected SWP Demand Multiple Dry Year Period Ending in 2015 - AF/Y (Table 21)**

	2011	2012	2013	2014	2015
Demand <sup>3</sup>	47,556	47,606	47,656	47,706	47,756
% of projected normal <sup>2</sup>	100%	100%	100%	100%	100%

**Projected SWP Supply and Demand Comparison During Multiple Dry Year Period  
Ending in 2015 - AF/Y (Table 22)**

	2011	2012	2013	2014	2015
Supply totals	19,498	19,518	19,539	19,559	19,580
Demand totals	47,556	47,606	47,656	47,706	47,756
Difference (supply minus demand)	(28,058)	(28,088)	(28,117)	(28,147)	(28,176)
Difference as % of Supply	144%	144%	144%	144%	144%
Difference as % of Demand	59%	59%	59%	59%	59%

1. Assumes multiple dry year supply is 41% of SWP contract amount.

2. Projected normal is 86% of SWP contract amount.

3. Assumes demand is equal to contract amounts.

**Projected SWP Supply During Multiple Dry Year Period Ending in 2020 - AF/Y  
(Table 23)**

	2016	2017	2018	2018	2020
Supply <sup>1</sup>	19,498	19,518	19,539	19,559	19,580
% of projected normal <sup>2</sup>	48%	48%	48%	48%	48%

**Projected SWP Demand Multiple Dry Year Period Ending in 2020 - AF/Y (Table 24)**

	2016	2017	2018	2019	2020
Demand <sup>3</sup>	47,556	47,606	47,656	47,706	47,756
% of projected normal <sup>2</sup>	100%	100%	100%	100%	100%

**Projected SWP Supply and Demand Comparison During Multiple Dry Year Period Ending in 2020 - AF/Y (Table 25)**

	2016	2017	2018	2019	2020
Supply totals	19,498	19,518	19,539	19,559	19,580
Demand totals	47,556	47,606	47,656	47,706	47,756
Difference (supply minus demand)	(28,058)	(28,088)	(28,117)	(28,147)	(28,176)
Difference as % of Supply	144%	144%	144%	144%	144%
Difference as % of Demand	59%	59%	59%	59%	59%

4. Assumes multiple dry year supply is 41% of SWP contract amount.

5. Projected normal is 86% of SWP contract amount.

6. Assumes demand is equal to contract amounts.

**Projected SWP Supply During Multiple Dry Year Period Ending in 2025 - AF/Y (Table 26)**

	2021	2022	2023	2024	2025
Supply <sup>1</sup>	19,498	19,518	19,539	19,559	19,580
% of projected normal <sup>2</sup>	48%	48%	48%	48%	48%

**Projected SWP Demand Multiple Dry Year Period Ending in 2025 - AF/Y (Table 27)**

	2021	2022	2023	2024	2025
Demand <sup>3</sup>	47,556	47,606	47,656	47,706	47,756
% of projected normal <sup>2</sup>	100%	100%	100%	100%	100%

**Projected SWP Supply and Demand Comparison During Multiple Dry Year Period Ending in 2025 - AF/Y (Table 28)**

	2021	2022	2023	2024	2025
Supply totals	19,498	19,518	19,539	19,559	19,580
Demand totals	47,556	47,606	47,656	47,706	47,756
Difference (supply minus demand)	(28,058)	(28,088)	(28,117)	(28,147)	(28,176)
Difference as % of Supply	144%	144%	144%	144%	144%
Difference as % of Demand	59%	59%	59%	59%	59%

7. Assumes multiple dry year supply is 41% of SWP contract amount.

8. Projected normal is 86% of SWP contract amount.

9. Assumes demand is equal to contract amounts.

## Solano Project

Tables 29 through 31 show normal year water supply and demand for Solano Project supplies. The supply number was calculated by multiplying the percentage of Solano Project supply for a normal year by the Solano Project contract amount. The Solano Project supply for a normal year was defined as the average of percentage supplies for all the below normal and above normal years in the Lake Berryessa Index from 1906 through 1992. The ultimate level of upstream development (for depletions in the upstream watershed) was used for these tables, not the current level of development. See Appendix C for the analysis. A normal year is a supply of 206,240 AF or 99% of contract amounts as shown in Table 5.

### Projected Solano Project Normal Water Year Supply - AF/Y (Table 29)

	2010	2015	2020	2025	2030/opt
Supply <sup>1</sup>	206,240	206,240	206,240	206,240	206,240
% of Normal Year	100%	100%	100%	100%	100%

### Projected Solano Project Normal Water Year Demand - AF/Y (Table 30)

	2010	2015	2020	2025	2030/opt
Demand <sup>2</sup>	207,350	207,350	207,350	207,350	207,350
% of year 2005	100%	100%	100%	100%	100%

### Projected Solano Project Normal Year Supply and Demand Comparison - AF/Y (Table 31)

	2010	2015	2020	2025	2030/opt
Supply totals	206,240	206,240	206,240	206,240	206,240
Demand totals	207,350	207,350	207,350	207,350	207,350
Difference (supply minus demand)	(1,111)	(1,111)	(1,111)	(1,111)	(1,111)
Difference as % of Supply	0.54%	0.54%	0.54%	0.54%	0.54%
Difference as % of Demand	0.54%	0.54%	0.54%	0.54%	0.54%

1 Assumes normal year supply is 99% of Solano Project contract amount.

2. Assumes demand is equal to contract amounts.

For Table 30 demand was assumed to be the full Solano Project contract amounts. For a wholesale agency like SCWA, it is not possible to accurately predict the demand of our cumulative member agencies. Therefore, a simplifying assumption that they would utilize the full amount of their contractual rights was assumed.

Table 31 shows normal year supply and demand comparisons. There is a deficit since the supply was assumed to be 99% of contract amounts and contract amounts we assumed to be the demand.

Tables 32 through 34 show single dry year water supply and demand for Solano Project supplies. The supply number was calculated by multiplying the percentage of Solano Project supply for a single dry year by the Solano Project contract amount. The Solano Project supply for a single dry year was defined

as the average of percentage supplies for all single dry and critical years below normal and above normal years in the Lake Berryessa Index from 1906 through 1992. Single dry years are defined as those dry and critical years that are not consecutive plus the first dry or critical year of consecutive sequences. The ultimate level of upstream development (for depletions in the upstream watershed) was used for these tables, not the current level of development. See Appendix C for the analysis. A single dry year is a supply of 203,894 AF or 98% of contract amount as shown in Table 5.

**Projected Solano Project Single Dry Year Water Demand Water Year Supply - AF/Y (Table 32)**

	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030/opt</b>
Supply <sup>1</sup>	203,894	203,894	203,894	203,894	203,894
% of Projected Normal <sup>2</sup>	99%	99%	99%	99%	99%

**Projected Solano Project Single Dry Year Water Year Demand - AF/Y (Table 33)**

	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030/opt</b>
Demand <sup>3</sup>	207,350	207,350	207,350	207,350	207,350
% of Projected Normal <sup>2</sup>	100%	100%	100%	100%	100%

**Projected Solano Project Single Dry Year Supply and Demand Comparison – AF/Y (Table 34)**

	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030/opt</b>
Supply totals	203,894	203,894	203,894	203,894	203,894
Demand totals	207,350	207,350	207,350	207,350	207,350
Difference (supply minus demand)	(3,456)	(3,456)	(3,456)	(3,456)	(3,456)
Difference as % of Supply	1.69%	1.69%	1.69%	1.69%	1.69%
Difference as % of Demand	1.67%	1.67%	1.67%	1.67%	1.67%

1. Assumes single dry year supply is 98% of Solano Project contract amount.
2. Projected normal is 99% of contract amount.
3. Assumes demand is equal to contract amounts.

For Table 33 demand was assumed to be the full Solano Project contract amounts. For a wholesale agency like SCWA, it is not possible to accurately predict the demand of our cumulative member agencies. Therefore, a simplifying assumption that they would utilize the full amount of their contractual rights was assumed.

Table 34 shows single dry year supply and demand comparisons. There is a deficit since the supply was assumed to be 98% of contract amounts and contract amounts we assumed to be the demand.

Tables 35 through 37 show multiple dry years water supply and demand for Solano Project supplies. The supply number was calculated by multiplying the percentage of Solano Project supply for multiple dry years by the Solano Project contract amount. The Solano Project supply for multiple dry years was

defined as the average of percentage supplies for all dry and critical years occurring in three or more consecutive years in the Lake Berryessa Index from 1906 through 1992. The ultimate level of upstream development (for depletions in the upstream watershed) was used for these tables, not the current level of development. See Appendix C for the analysis. The multiple dry years supply is 188,178 AF or 91% of contract amounts as shown in Table 5.

**Projected Solano Project Supply During Multiple Dry Year Period Ending in 2010 – AF/Y (Table 35)**

	2006	2007	2008	2009	2010
Supply <sup>1</sup>	188,178	188,178	188,178	188,178	188,178
% of Projected Normal <sup>2</sup>	91%	91%	91%	91%	91%

**Projected Solano Project Multiple Dry Year Demand - AF/Y (Table 36)**

	2006	2007	2008	2009	2010
Demand <sup>3</sup>	207,350	207,350	207,350	207,350	207,350
% of Projected Normal <sup>2</sup>	100%	100%	100%	100%	100%

**Projected Solano Project Supply and Demand Comparison During Multiple Dry Year Period Ending in 2010 – AF/Y (Table 37)**

	2006	2007	2008	2009	2010
Supply totals	188,178	188,178	188,178	188,178	188,178
Demand totals	207,350	20,350	207,350	207,350	207,350
Difference (supply minus demand)	(19,172)	(19,172)	(19,172)	(19,172)	(19,172)
Difference as % of Supply	10%	10%	10%	10%	10%
Difference as % of Demand	9%	9%	9%	9%	9%

1. Assumes single dry year supply is 91% of Solano Project contract amount.
2. Projected normal is 99% of contract amount.
3. Assumes demand is equal to contract amounts.

For Table 36 demand was assumed to be the full Solano Project contract amounts. For a wholesale agency like SCWA, it is not possible to accurately predict the demand of our cumulative member agencies. Therefore, a simplifying assumption that they would utilize the full amount of their contractual rights was assumed.

Table 37 shows multiple dry year supply and demand comparisons. There is a deficit since the supply was assumed to be 91% of contract amounts and contract amounts we assumed to be the demand.

Tables 38-40 show the same analysis for years 2011- 2015. Tables 41-43 show the same analysis for years 2016- 2020. Tables 44-46 show the same analysis for years 2021- 2025. The numbers do not change since Solano Project contract amounts and demands do not change.

**Projected Solano Project Supply During Multiple Dry Year Period Ending in 2015 – AF/Y (Table 38)**

	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Supply <sup>1</sup>	188,178	188,178	188,178	188,178	188,178
% of Projected Normal <sup>2</sup>	91%	91%	91%	91%	91%

**Projected Solano Project Multiple Dry Year Demand - AF/Y (Table 39)**

	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Demand <sup>3</sup>	207,350	207,350	207,350	207,350	207,350
% of Projected Normal <sup>2</sup>	100%	100%	100%	100%	100%

**Projected Solano Project Supply and Demand Comparison During Multiple Dry Year Period Ending in 2015 – AF/Y (Table 40)**

	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Supply totals	188,178	188,178	188,178	188,178	188,178
Demand totals	207,350	20,350	207,350	207,350	207,350
Difference (supply minus demand)	(19,172)	(19,172)	(19,172)	(19,172)	(19,172)
Difference as % of Supply	10%	10%	10%	10%	10%
Difference as % of Demand	9%	9%	9%	9%	9%

4. Assumes single dry year supply is 91% of Solano Project contract amount.

5. Projected normal is 99% of contract amount.

6. Assumes demand is equal to contract amounts.

**Projected Solano Project Supply During Multiple Dry Year Period Ending in 2020 – AF/Y (Table 41)**

	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
Supply <sup>1</sup>	188,178	188,178	188,178	188,178	188,178
% of Projected Normal <sup>2</sup>	91%	91%	91%	91%	91%

**Projected Solano Project Multiple Dry Year Demand - AF/Y (Table 42)**

	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
Demand <sup>3</sup>	207,350	207,350	207,350	207,350	207,350
% of Projected Normal <sup>2</sup>	100%	100%	100%	100%	100%

**Projected Solano Project Supply and Demand Comparison During Multiple Dry Year Period Ending in 2020 – AF/Y (Table 43)**

	2016	2017	2018	2019	2020
Supply totals	188,178	188,178	188,178	188,178	188,178
Demand totals	207,350	20,350	207,350	207,350	207,350
Difference (supply minus demand)	(19,172)	(19,172)	(19,172)	(19,172)	(19,172)
Difference as % of Supply	10%	10%	10%	10%	10%
Difference as % of Demand	9%	9%	9%	9%	9%

7. Assumes single dry year supply is 91% of Solano Project contract amount.

8. Projected normal is 99% of contract amount.

9. Assumes demand is equal to contract amounts.

**Projected Solano Project Supply During Multiple Dry Year Period Ending in 2025 – AF/Y (Table 44)**

	2021	2022	2023	2024	2025
Supply <sup>1</sup>	188,178	188,178	188,178	188,178	188,178
% of Projected Normal <sup>2</sup>	91%	91%	91%	91%	91%

**Projected Solano Project Multiple Dry Year Demand - AF/Y (Table 45)**

	2021	2022	2023	2024	2025
Demand <sup>3</sup>	207,350	207,350	207,350	207,350	207,350
% of Projected Normal <sup>2</sup>	100%	100%	100%	100%	100%

**Projected Solano Project Supply and Demand Comparison During Multiple Dry Year Period Ending in 2025 – AF/Y (Table 46)**

	2021	2022	2023	2024	2025
Supply totals	188,178	188,178	188,178	188,178	188,178
Demand totals	207,350	20,350	207,350	207,350	207,350
Difference (supply minus demand)	(19,172)	(19,172)	(19,172)	(19,172)	(19,172)
Difference as % of Supply	10%	10%	10%	10%	10%
Difference as % of Demand	9%	9%	9%	9%	9%

10. Assumes single dry year supply is 91% of Solano Project contract amount.

11. Projected normal is 99% of contract amount.

12. Assumes demand is equal to contract amounts.

## **SECTION 8 – ADOPTION AND IMPLEMENTATION OF UWMP**

Exhibit F is a copy of the action of the Board of Directors of the Solano County Water Agency adopting the UWMP.

Regarding demand management measures in the 2000 UWMP, SCWA reports annually to the California Urban Water Conservation Council on the status of implementation of Best Management Practices appropriate for wholesale water agency. We continue to implement Demand Management Measures identified by the CUWCC for Urban Wholesale Water Agencies. SCWA also reports annually on demand management measures to the USBR as part of the requirements for a USBR Water Management Plan.

Regarding recycled water in the 2000 UWMP, the 2000 UWMP recognizes that SCWA has no responsibility for wastewater treatment or wastewater recycling. That is a function of retail agencies.

A62.SCWA 2005 UWMP2.DOC