

Prepared for Sacramento Suburban Water District

2015 Urban Water Management Plan



June 20, 2016



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June 20, 2016



John Valdes Sacramento Suburban Water District 3701 Marconi Avenue, Suite 100 Sacramento, CA 95821-5346

1017-148171

Subject: 2015 Urban Water Management Plan

Dear Mr. Valdes,

We are pleased to submit to you this 2015 Urban Water Management Plan (UWMP). We have updated your 2010 UWMP to incorporate more recent data and information as well as new requirements in the law and from the California Department of Water Resources (DWR). The new DWR requirements are based on the Final Guidebook for Urban Water Suppliers, January 2016.

Please let me know if you have any questions.

Very truly yours,

Brown and Caldwell, a California Corporation

meEltoch

Melanie Holton, P.E. Project Manager

MH:ds

Enclosure (1):

1. 2015 Urban Water Management Plan for Sacramento Suburban Water District

2015 Urban Water Management Plan

Prepared for Sacramento Suburban Water District Sacramento, CA June 20, 2016



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11020 White Rock Road, Suite 200 Rancho Cordova, CA 95670

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List of Abbreviations

°F	degrees Fahrenheit	NSA	North Service Area
AASA	Arbors at Antelope Service Area	OCAP	Operational Criteria and Plan
ac-ft	acre-feet	RWQCB	Regional Water Quality Control Board
ac-ft/yr	acre-feet per year	SB	Senate Bill
Act	Urban Water Management Act	SGA	Sacramento Groundwater Agency
AFRPA	Air Force Real Property Agency	SGMA	Sustainable Groundwater Management
AWWA	American Water Works Association	00000	Act
BMPs	Best Management Practices	SRCSD	Sacramento Regional County Sanitation District
CASGEM	California Statewide Groundwater Elevation Monitoring	SRWTP	Sacramento Regional Wastewater Treatment Plant
cfs	cubic feet per second	SSA	South Service Area
CII	commercial, industrial, and institutional	SWRCB	State Water Resources Control Board
CIMIS	California Irrigation Management	TBD	to be decided
City (City of Secremente	UAW	unaccounted-for water
	Computerized Maintenance Management	UIFR	unimpaired inflow to Folsom Reservoir
CIVIIVIS	System	ULFTs	ultra low flush toilets
CUWCC	California Urban Water Conservation	USBR	United States Bureau of Reclamation
	Council	UWDF	unit water demand factor
CVP	Central Valley Project	UWMP	Urban Water Management Plan
CWC	California Water Code	WEP	Water Efficiency Program
DMM	Demand Management Measure	WFA	Water Forum Agreement
DWR	Department of Water Resources	WRCC	Western Regional Climate Center
ETo	evapotranspiration	WROS	Water Reuse Opportunity Study
ft	feet/foot	WSCP	Water Shortage Contingency Plan
GIS	Geographic Information System	WTP	water treatment plant
GMP	Groundwater Management Plan	WWTP	wastewater treatment plant
GPCD	gallons per capita per day		
gpd	gallons per day		
GSA	Groundwater Sustainability Agency		
GSP	Groundwater Sustainability Plan		
HET	high efficiency toilet		
ICC	Incident Command Center		
IRWMP	Integrated Regional Water Management Plan		
kW	kilowatt		
MBPSA	McClellan Business Park Service Area		
MCLs	Maximum Contaminant Levels		
MG	million gallons		
mgd	million gallons per day		

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Section 1 Introduction

This Urban Water Management Plan (UWMP) was prepared for the Sacramento Suburban Water District (District). This UWMP includes a description of the water supply sources, projected water use, and a comparison of water supply water demands during normal, single-dry, and multiple-dry years. Also described is the District's water conservation program. This is the year 2015 UWMP as required by the Urban Water Management Planning Act of 1983 (Act).

The remainder of this section provides an overview of the Urban Water Management Planning Act, public participation, agency coordination and outreach, and UWMP organization.

1.1 Urban Water Management Planning Act

The District's UWMP has been prepared in accordance with the Act, as amended, California Water Code, Division 6, Part 2.6, Sections 10610 through 10656. The Act became part of the California Water Code with the passage of Assembly Bill 797 during the 1983–1984 regular session of the California legislature. The Act was amended in November 2009 with the adoption of the Water Conservation Act or SBX 7-7 and was most recently amended in 2014. The Water Conservation Act is described in Division 6, Part 2.55, Section 10608.

The Act requires every urban water supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually to adopt and submit an UWMP every five years to the California Department of Water Resources (DWR). The Act describes the required contents of the UWMP as well as how urban water suppliers should adopt the UWMP.

1.2 Basis for Preparing the Plan

Table 1-1 presents the Public Water System name and number as well as the number of connections and amount of water supplied in 2015.

Table 1-1. Retail: Public Water Systems (DWR Table 2-1)					
Public water system number	Public water system name	Number of municipal connections 2015	Volume of water supplied 2015, ac-ft		
CA3410001	Sacramento Suburban Water District	46,650	27,451 ^(a)		

^(a) Water supplied within retail water system.

The District has selected individual reporting for this UWMP, as identified in Table 1-2. This UWMP is reporting on a calendar year basis using acre-feet (ac-ft) as the unit of measure as noted in Table 1-3.



Table 1-2. Plan Identification (DWR Table 2-2)					
\checkmark	Individual UWMP				
	Regional UWMP				
No	Does this Regional UWMP include a Regional Alliance?				

Table 1-3. Agency Identification(DWR Table 2-3)						
Type of Agency (select one or both)						
	Agency is a wholesaler					
\checkmark	Agency is a retailer					
Fiscal or Calen	Fiscal or Calendar Year (select one)					
✓ UWMP Tables Are in Calendar Years						
UWMP Tables Are in Fiscal Years						
If Using Fiscal Years Provide Month and Day that the Fiscal Year Begins						
Day Month						
Units of Measure Used in UWMP						
Unit acre feet (AF)						

1.3 Coordination and Outreach

The Act requires the District to coordinate the preparation of its UWMP 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. The District has provided water supplier information with wholesale water suppliers as listed in Table 1-4. The District coordinated this UWMP with other agencies and the community as summarized in Table 1-5.

The retail supplier has informed accordance with CWC 10631.	the following wholesale supplier(s) of projected water use in			
Wholesaler water supplier name:				
Placer County Water Agency				
United States Bureau of R	eclamation			
City of Sacramento				

Table 1-5. Coordination with Appropriate Agencies							
Coordinating agencies	Noticed of UWMP update prior to public hearing	Was sent a link or copy of the draft UWMP	Was sent a link or copy of the final UWMP	Participated in UWMP preparation	Retail agency provided wholesale agency with retail agency's projected water use from the source		
California American Water Company	х	х					
City of Citrus Heights	х	х	Х				
Citrus Heights Water District	х	х					
Placer County Water Agency		Х			Х		
City of Sacramento	Х	Х	Х		X		
Sacramento County	Х	Х	X				
Regional Water Authority/Sacramento Groundwater Authority				х			
Sacramento Regional County Sanitation District				X			
United States Bureau of Reclamation		Х			Х		
Sacramento County Public Library - Arcade		х					
Sacramento County Public Library – North Highlands/Antelope		Х					
California Department of Water Resources			X				
California State Library			X				
General public	X	Website	Website				



The District also is a member of the Regional Water Authority (RWA). RWA is a joint powers authority that serves and represents the interests of the water providers in the greater Sacramento, Placer and El Dorado County region. The Authority's primary mission is to help its members protect and enhance the reliability, availability, affordability and quality of water resources. Two of RWA's regional programs in which the District participates are a water efficiency program designed to help local purveyors implement best management practices on a regional basis and implementation of the American River Basin Regional Conjunctive Use Program, utilizing a \$22 million grant from DWR. The District has completed all of its projects under this grant.

1.4 Public Participation and Plan Adoption

The Act requires the encouragement of public participation and a public hearing as part of the UWMP development and approval process. As required by the Act, prior to adopting this UWMP, the District made the UWMP available for public inspection and held a public hearing. The District notified cities and counties within the service area 60 days before the public hearing as shown in Table 1-6. Appendix A provides documentation that the cities and counties within which the District provides water supplies was notified at least 60 days prior to the UWMP public hearing. This hearing provided an opportunity for the District's customers including social, cultural, and economic community groups to learn about the water supply situation and the plans for providing a reliable, safe, high-quality water supply for the future. The hearing was an opportunity for people to ask questions regarding the current situation and the viability of future plans.

Table 1-6. Retail: Notification to Cities and Counties(DWR Table 10-1)									
City/County name 60 day notice Notice of public hearing									
City of Sacramento	Х	Х							
City of Citrus Heights ^(a)	Х	Х							
Sacramento County ^(b)	Sacramento County ^(b) X X								

^(a)The District also provided a notification to Citrus Heights Water District ^(b)Sacramento County Water Agency

Per the requirements of Government Code Section 6066 a Notice of Public Hearing was published twice in the Sacramento Bee newspaper to notify all customers and local governments of the public hearing and copies of the draft UWMP were made available for public inspection at the District's office, at local public libraries within the District's service area, and on the District website, <u>www.sswd.org</u>. A copy of the published Notice of Public Hearing is included in Appendix B. This UWMP was adopted by the Board of Directors on June 20, 2016. A copy of the adopted resolution is provided in Appendix C. The adopted UWMP will be provided to DWR, the California State Library, and the appropriate cities and counties within 30 days of adoption. The adopted UWMP will also be available for public review during normal business hours at the District's office.



1.5 Plan Organization

This section provides a summary of the sections in this UWMP.

- Section 2 provides a description of the service area, climate, and historical and projected population.
- Section 3 presents historical and projected water demands.
- Section 4 describes the SBx7-7 gallons per capita per day (GPCD) analysis.
- Section 5 describes the water supplies.
- Section 6 describes water supply reliability.
- Section 7 describes the water shortage contingency plan (WSCP).
- Section 8 summarizes demand management measures.
- Section 9 provides a list of references.
- Appendices provide relevant supporting documents.

DWR has provided a checklist of the items that must be addressed in each UWMP based upon the Act. This checklist makes it simple to identify exactly where in the UWMP each item has been addressed. The checklist is completed for this Plan and provided in Appendix D. It references the sections in this UWMP where specific items can be found.



Section 2 System Description

This section contains a description of the service area and its climate, and historical and projected population.

2.1 Description of Service Area

The District is located in Sacramento County, north of the American River and serves a large suburban area, the majority of which is in unincorporated Sacramento County, that consists of portions of Arden/Arcade, Foothill Farms between Interstate 80 and the Union Pacific Railroad, with smaller parts of the District within Citrus Heights, Carmichael, Fair Oaks, North Highlands, Sacramento, and Antelope, as well as all of McClellan Business Park. The District is a publicly owned and operated water utility and is governed by a five member Board of Directors. Within the District are four service areas: the North Service Area (NSA), the Arbors at Antelope Service Area (AASA), McClellan Business Park Service Area (MBPSA), and the South Service Area (SSA). The term NSA is also used to describe a larger area consisting of the Arbors at Antelope housing area, McClellan Business Park, and the previously mentioned NSA. The SSA includes the Town and Country service area of the former Arcade Water District. Figure 2-1 illustrates the location of the District and the neighboring water agencies. The service areas within the District are shown on Figure 2-2.

2.2 Service Area Climate

The service area experiences cool and humid winters and hot and dry summers. Based on the historical data obtained from the Western Regional Climate Center, the average monthly temperature ranges from 50 to 73 degrees Fahrenheit, but the extreme low and high daily temperatures have been 18 and 115 degrees Fahrenheit, respectively. The combination of hot and dry weather results in higher water demands during the summer than in winter months.

Table 2-1 summarizes the Sacramento Region's average climate conditions based on the California Irrigation Management Information System (CIMIS) database.

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Table 2-1. Monthly Average Climate Data Summary													
	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Standard average ET ^o , in	1.14	1.76	3.28	4.51	6.46	7.44	7.91	7.02	5.13	3.33	1.59	1.02	50.59
Average rainfall, in	3.1	4.1	2.5	1.8	0.9	0.1	0.0	0.0	0.1	1.1	2.0	4.0	19.7
Average temperature, °F	47.3	50.7	55.2	58.5	65.2	71.9	76.2	75	71.5	62.9	52.9	47.1	

Note: Period of record is 1998 to 2015 from CIMIS Station 131 Fair Oaks. Accessed from CIMIS, water.ca.gov.



2.3 Service Area Population and Demographics

The historical population in the District is based on the 1990, 2000, and 2010 census for the census blocks within the District's service area using the DWR population tool and the District's 1990, 2000, and 2010 boundaries. There are some areas of within the District's service area that are not served by the District but by private wells instead. There is a significant residential area within the southern portion of the SSA that is served by private wells. It is estimated that this private well area consists of approximately 730 people in 2015. This area and the associated population served by private wells are not included in the census analysis.

The DWR population tool utilizes the US Census data and electronic maps of the District's service area to obtain historical population for the census years. Using the number of District residential service connections, the tool calculates the population for the non-census years.

Because the estimated historical population is based on the District's historical connections, any fluctuations occurring in the District's records for number of connections for single family or multi-family result in fluctuations of estimated population. Fluctuations in District records for number of single family and multi family connections by customer sector have occurred due in large part as a result of inconsistent categorizing of residential connections. It is most likely that the fluctuations in the historical number of multi-family connections are due primarily to revised District accounting of the multi-family connection sector, assuming that historically some multi-family connections were accounted-for in the commercial sector or single family sector. The District's accounting (and the variation in accounting from Arcade and Northridge Districts) of single-family connections was adjusted in past years. The District has worked to eliminate these inconsistencies in recent years. For the purposes of the population analysis, the historical multi-family connections are adjusted to eliminate extreme low multi-family connection values.

The historical residential connections and population are presented in Table 2-2 and shown on Figure 2-3. The determination of the projected population on Figure 2-4 is estimated using the projected number of single family and multi family connections combined with the number of people per single family connection (3.06) and the number of people per multi-family connection (14.6), respectively from the 2010 census as determined using the DWR population tool. This results in an overall 4.12 people per residential connection. Because the District is close to buildout it is assumed the people per residential connections at buildout by customer category was developed using a land use based analysis. The number of connections by customer category is projected through 2040 based on this historical growth for each customer sector. The buildout year and the projected number of connections for each year were projected based on the historical rate of increase in connections. The District's average annual connection growth rate occurring from 1995 through 2014 is 0.44 percent. Based on this 20-year historical annual average growth rate, the District is projected to reach buildout by 2031.



and Dwelling Units Served by the District											
Year	R	esidential connection	ns	People pe	People per connection						
	Single family	Multi-family – raw data	Multi-family – adjusted	Single family	Multi-family	Population					
1995	38,232	571	2,150	2.62	22.83	149,375					
1996	38,275	433	2,200	2.65	22.28	150,522					
1997	39,924	443	2,250	2.68	21.73	155,923					
1998	39,589	445	2,300	2.71	21.18	155,988					
1999	39,762	2,318	2,318	2.74	20.63	156,709					
2000	38,035	3,075	3,075	2.77	20.08	167,003					
2001	41,054	1,143	2,500	2.80	19.53	163,738					
2002	41,603	2,000	2,000	2.83	18.98	155,617					
2003	40,290	190	2,500	2.86	18.43	161,191					
2004	35,589	3,268	3,268	2.89	17.88	161,155					
2005	37,164	3,803	3,803	2.92	17.34	174,258					
2006	37,121	3,801	3,801	2.94	16.79	173,088					
2007	37,276	3,812	3,812	2.97	16.24	172,717					
2008	37,095	4,038	4,038	3.00	15.69	174,641					
2009	37,331	3,835	3,835	3.03	15.14	171,175					
2010	37,366	3,831	3,831	3.06	14.59	170,050					
2011	37,034	3,750	3,750	3.09	14.04	167,018					
2012	36,762	3,811	3,811	3.12	13.49	165,976					
2013	38,040	3,899	3,899	3.14	12.95	170,074					
2014	38,447	4,025	4,025	3.17	12.40	171,856					
2015	38,634	4,216	4,216	3.20	11.85	173,380					

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Table 2-3. Retail: Population- Current and Projected (DWR Table 3-1)											
	2015	2020	2025	2030	2035	2040					
Population served	173,380	184,385	187,987	190,319	190,659	190,659					

Other demographic factors that affect water management planning include the uncertainty in estimating future population growth and per capita water use. The recession that started in 2008 and the accompanying slowdown in the construction of dwelling units resulted in population not growing as much as previously estimated. The adoption of per capita demand targets in 2010 along with the mandated demand reductions announced by the Governor in 2015 due to the drought have resulted in a significant decline in per capita water use. It is not known to what extent per capita water use will rebound to pre-drought levels once the drought ends. The uncertainties with both future population and per capita water use are considered in the District's water management planning.



Section 3 System Water Use

This section presents the current and projected retail water demands by sector, distribution system water losses, future passive water savings, and low income household water use.

3.1 Water Uses by Sector

The District currently provides water to 46,650 service connections. The District's water uses include residential, single family and multi-family accounts as well as non-residential, commercial, industrial, institutional (CII) and landscape accounts. Based on the total number of accounts, residential users make up about 90 percent of the total customer base. Non-residential customers make up approximately 10 percent of the total number of connections. Table 3-1 shows the historical number of connections by customer sector.

Table 3-1. Historical Connections by Customer Sector										
Customer type	2010	2011	2012	2013	2014	2015				
Single family										
Single family - unmetered	17,636	15,896	14,065	12,132	10,876	9,669				
Single family - metered	19,730	21,138	22,697	25,908	27,571	28,965				
Total single family	37,366	37,034	36,762	38,040	38,447	38,634				
Multi-family										
Multi-family - unmetered	1,528	1,057	921	879	542	319				
Multi-family - metered	2,303	2,693	2,890	3,020	3,483	3,897				
Total multi-family	3,831	3,750	3,811	3,899	4,025	4,216				
Commercial										
Commercial - unmetered	28	23	19	17	16	7				
Commercial - metered	2,099	2,216	2,379	2,752	2,789	2,636				
Total commercial	2,127	2,239	2,398	2,769	2,805	2,643				
Industrial	13	17	17	17	17	20				
Institutional/Governmental	471	518	531	537	542	543				
Landscape	376	396	453	549	574	594				
Total	44,184	43,954	43,972	45,811	46,410	46,650				



Water use by customer sector for 2015 is based on the District's water sales and production records and is shown in Table 3-2. Because the District is currently 79 percent metered, an estimate of the water use for the unmetered connections is estimated based on the metered water use by customer category and water production data. Historical water use by customer sector from 2010 through 2015 is shown on Figure 3-1.



Figure 3-1. Historical Water Demand by Customer Sector



Table 3-2. Retail: Demands for Potable and Raw Water – Actual (DWR Table 4-1)										
	2015 Actual									
Use type	Additional description	Level of treatment when delivered	Volume, ac-ft/yr							
Single Family		Drinking water	12,972							
Multi-Family		Drinking water	6,580							
Commercial		Drinking water	3,614							
Industrial		Drinking water	32							
Institutional/Governmental		Drinking water	2,020							
Landscape		Drinking water	1,135							
Groundwater recharge			0							
Saline water intrusion barrier			0							
Agricultural irrigation			0							
Wetlands or wildlife habitat			0							
Sales/Transfers/Exchanges to other agencies	Water sold to San Juan Water District	Drinking water	51							
Losses		Drinking water	1,098							
Other			0							
	TOTAL 27,502									

The District's historical water demand, illustrated by surface water and groundwater production in the NSA and SSA, is shown on Figure 3-2. Water use declined in 2014 and 2015 as a result of the Governor's drought declaration. It is assumed that the current decline in water use due to the drought is temporary and will increase back to near 2012 levels. The District's projected water demand is based on the projected number of customers and the projected unit water demand factor (UWDF) by customer category.

UWDFs are developed by reviewing the District's historical water demand by customer category in comparison to the land area served and the number of connections by category. It is recognized that unit water use on a per capita basis has been trending downward for several years. As the District becomes fully metered, active conservation and passive water savings occur, and new development constructs more water efficient structures and landscape, it can be concluded that the UWDFs for buildout should be lower than what has occurred historically, prior to the recent drought. Table 3-3 summarizes the current and buildout UWDFs that are used to project water demands.



Table 3-3. Unit Water Demand Factors										
		Current		Buildout						
Customer category	By land area		By connection	By land	l area	By connection				
	ac-ft/acre/yr	gpd/acre	gpd/connection	ac-ft/acre/yr	gpd/acre	gpd/connection				
Single family										
Existing connections- original devices						380				
Existing connections - retrofitted/updated devices						373				
Future new connections						299				
Total single family	1.96	1,828	445	1.71	1,525	371				
Multi-family										
Existing connections- original devices						1,945				
Existing connections - retrofitted/updated devices						1,892				
Future new connections						1,826				
Total multi-family	4.38	5,443	2,047	5.70	5,088	1,914				
Commercial										
Existing connections						1,471				
Future new connections						1,071				
Total commercial	1.62	1,707	1,471	1.77	1,583	1,365				
Industrial										
Existing connections						1,763				
Future new connections						1,520				
Total industrial	0.03	28	1,763	0.03	27	1,663				
Institutional										
Existing connections						4,797				
Future new connections						4,528				
Total industrial	4.07	3,708	4,797	4.15	3,707	4,796				
Landscape irrigation										
Existing connections						1,909				
Future new connections						1,909				
Total irrigation	3.17	3,591	1,909	4.16	3,712	1,909				

The assumptions used to estimate passive water savings are described in Section 3.3. It is assumed that the District will realize up to 1,100 ac-ft/yr in passive water savings by 2040. This equates to 5 GPCD in 2040.

It is estimated that the District's water conservation program will result in water savings for the single family, multi-family, and commercial customer sectors. The estimated water savings from the District's current water conservation program is expected to be up to 2,200 ac-ft/yr.



The water sales to other agencies are projected to be up to 1,800 ac-ft/yr. In 2001 the District participated in a pilot groundwater banking and exchange program in conjunction with the RWA. This pilot program transferred water to the DWR environmental water account on a short-term basis. It is anticipated that similar transfer opportunities will occur in the future. The District intends to work with the RWA to identify both short-term and long-term water sales opportunities with other RWA members.

Most recently, the District has participated in groundwater substitution transfers in 2009, 2010, and 2013. In 2009, the District transferred approximately 4,900 ac-ft to the DWR Drought Water Bank. The District transferred about 2,800 ac-ft in 2010 and 2,800 ac-ft in 2013 to the State Water Contractors Association. These water sales occurred with the cooperation of the District's contract partners: the City of Sacramento and PCWA. These water sales were both short term one year agreements.

The District has 47 interconnections through which water sales can occur with neighboring water agencies. The regional water master plan developed by the American River Basin Cooperating Agencies identifies several potential projects for transferring water. The District will consider the construction of larger interconnections, pipelines, and pumping stations.

The unit water demand factors are multiplied by the projected number of connections by customer category to project water demands by customer sector as shown in Table 3-4.

The projected water demand results in a per capita demand that is less than the District's 2020 per capita demand target. The District does not anticipate using water for groundwater recharge, saline water intrusion barriers, agricultural irrigation, wetlands, or wildlife habitat. It is assumed that projected water system losses are equal to 8 percent of production for the retail water system.





Figure 3-2. Water System Historical and Projected Water Demand



Table 3-4. Retail: Demands for Potable and Raw Water – Projected (DWR Table 4-2)											
	Additional description	Projecte	Projected water use, ac-ft/yr								
Use type	Additional description	2020	2025	2030	2035	2040					
Single Family		16,665	16,768	16,999	17,007	16,983					
Multi-Family		9,431	9,602	9,589	9,577	9,567					
Commercial		4,805	5,255	5,505	5,505	5,505					
Industrial		48	57	63	63	63					
Institutional/Governmental		2,923	2,928	2,933	2,933	2,933					
Landscape		1,277	1,283	1,292	1,292	1,292					
Groundwater recharge		0	0	0	0	0					
Saline water intrusion barrier		0	0	0	0	0					
Agricultural irrigation		0	0	0	0	0					
Wetlands or wildlife habitat		0	0	0	0	0					
Sales/Transfers/Exchanges to other agencies	Assumed future water sales to others	1,800	1,800	1,800	1,800	1,800					
Losses	Assumed at 8% of production for retail system	3,056	3,121	3,164	3,163	3,160					
Other											
	Total	40,004	40,813	41,345	41,340	41,304					

Table 3-5 summarizes the current and projected demands for potable, recycled, and raw water usage by the District. The District does not currently or project to use recycled water as described in Section 5.

Table 3-5. Retail: Total Water Demands, ac-ft/yr (DWR Table 4-3)											
	2015	2020	2025	2030	2035	2040					
Potable and Raw Water (From DWR Tables 4-1 and 4-2)	27,502	40,004	40,813	41,345	41,340	41,304					
Recycled Water Demand (From DWR Table 6-4)	0	0	0	0	0	0					
Total water demand	27,502	40,004	40,813	41,345	41,340	41,304					



3.2 Distribution System Water Losses

Water losses in the District's water system for 2015 are presented in Table 3-6. The District's water distribution system consists of nearly 700 miles of distribution pipelines and transmission mains. A detailed water loss analysis following the American Water Works Association method is provided in Appendix E. The water audit is an accounting exercise that tracks all sources and uses of water within a water system over a specified period.

Table 3-6. Retail: Water Loss Audit Reporting (DWR Table 4-4)							
Reporting period start date Loss ^(a)							
1/2015	1,440 ac-ft/yr (469 MG/yr)						

^(a)Taken from the field "Water Losses" which is a combination of apparent losses and real losses from the AWWA worksheet provided in Appendix E.

3.3 Estimating Future Water Savings

Water savings from codes, standards, ordinances, or transportation and land use plans are also known as "passive savings". These various factors generally decrease the water use for new and future customers, compared to historical customers. Below is a summary of the applicable state codes and ordinances that could reduce the District's water demand in the future based on information provided in the DWR 2015 UWMP Guidebook (DWR, 2016).

Model Water Efficient Landscape Ordinance – Effective on December 1, 2015, this new ordinance is projected to reduce the typical residential outdoor landscape demands for new construction by up to 20 percent from the estimated demand using the prior ordinance provisions. Commercial landscape for new construction may reduce outdoor water demand by up to 35 percent over the prior ordinance.

California Energy Commission Title 20 appliance standards for toilets, urinals, faucets, and showerheads – This standard will impact both new construction and replacement fixtures in existing homes. This is included in the CALGreen assumption for new construction described below. Assume up to 5 percent reduction in indoor water use of existing homes.

CALGreen Building Code – Requires residential and non-residential water efficiency and conservation measures for new buildings and structures. It is assumed that this code will reduce residential and non-residential indoor water use on new construction by up to 20 percent.

A summary of the estimated future passive water savings for the District's service area is provided in Table 3-7.



Table 3-7. Estimated Future Passive Water Savings from Projected Water Demands											
	2020	2025	2030	2035	2040						
Single family, ac-ft/yr	180	316	413	453	476						
Multi-family, ac-ft/yr	112	137	149	162	172						
Commercial, ac-ft/yr	168	336	430	430	430						
Total, ac-ft/yr	461	789	992	1,044	1,078						
Total, GPCD	2	4	5	5	5						

Based on these assumed reductions in water use by customer sector, it is estimated that the District could realize approximately 1,100 ac-ft/yr passive water savings by 2040. In terms of GPCD this is approximately 5 GPCD in passive water savings by 2040 from these codes and ordinances. The water use projections in this analysis do account for these passive water savings that may be realized from these codes and ordinances, as stated in Table 3-8.

Table 3-8. Retail Only: Inclusion in Water Use Projections (DWR Table 4-5).	
Future Water Savings Included Y/N	Yes
If "Yes" to above, state the section or page number where citations of the codes, ordinances, etc utilized in demand projections are found.	Location in UWMP: Section 3.3
Are lower Income Residential Demands Included in Projections?	Yes

3.4 Water Use for Lower Income Households

The 2013 Update of the Sacramento County General Plan Housing Element was used to estimate the projected water demands for low income single family and multi-family dwelling units. As part of the Housing Element update, Sacramento County estimates the percent of low income households for the various community planning areas within the unincorporated areas of Sacramento County. The percent of low income households is based on households who earned less than 80 percent of Sacramento County's median household income for a family of four (\$48,592) based on the 2010 American Community Survey. For the District's service areas, the percent of low income households in the communities of Arden-Arcade (46.8 percent low income), North Highlands (53.9 percent low income), and Foothills Farms (48.4 percent low income) are used for this Plan. The average percent low income for the District's service area based on these three communities is 50 percent.

These projected low income water demand projections are included in Tables 3-3 and 3-4. Disadvantaged communities within the District's area are shown on Figure 3-2. Although this map cannot be used to quantify the number of low income households in the disadvantaged areas, it provides insight into the location of disadvantaged communities within the District's service area.





Figure 3-2. Disadvantaged Communities Map for District Area


Section 4

SBX7-7 Baseline and Targets

Senate Bill X7-7 (SBX7-7) was enacted in November 2009 requiring all water suppliers to increase water use efficiency. The legislation sets an overall goal of reducing per capita urban water use by 20 percent. Per the law as adopted by SBX7-7, the District must establish per capita water use targets. This section describes the District's SBX7-7 GPCD baseline and targets as updated from the analysis conducted as part of the 2010 UWMP. Compliance with the 2015 interim target is also discussed.

4.1 Updated Calculations from 2010 UWMP

The District's 2010 UWMP provided calculations and a resulting 2015 and 2020 GPCD target based on the DWR methodology (DWR, 2011). Since the adoption of the 2010 UWMP, the 2010 census data is now available at the census block level of detail. Also, since the adoption of the 2010 UWMP, DWR has developed an online population tool and SBX7-7 verification tables that the District is required to complete with the updated census data to determine the updated SBX7-7 baseline and target GPCD. The District's completed verification tables are provided in Appendix F of this UWMP.

4.2 Baseline Periods

In this 2015 UWMP, the District has not changed the years selected for their baseline periods from what was selected in the 2010 UWMP. Two baseline periods must be selected.

4.2.1 10-15 Year Baseline Period (Baseline GPCD)

The District must select either a 10- to 15-year baseline period ending between December 31, 2004 and December 31, 2010 for water use and calculate the average water use, in GPCD, over the selected baseline period. Whether the District uses a 10-year baseline period or 15-year baseline period is dependent upon the amount of recycled water use in 2008. Only water suppliers that have recycled water use greater than 10 percent of their total demand are allowed to select a 15 year baseline period. Because the District did not use recycled water in 2008, the District must use a 10-year baseline period. The District's selected 10-year baseline period is 1995 to 2004, as shown in SBX7-7 Table 1, located in Appendix F as well as in Table 4-1, below. This 10-year baseline period is the same as it was in the 2010 UWMP.

Table 4-1. Baseline Period Analysis								
Year	Population estimate (from Table 2-2)	Historical production, ac-ft/yr	GPCD	10-year average GPCD (average year range)	5-year average GPCD (average year range)			
1995	149,375	41,533	248					
1996	150,522	43,093	256					
1997	155,923	43,533	249					
1998	155,988	40,460	232					



Table 4-1. Baseline Period Analysis							
Year	Population estimate (from Table 2-2)	Historical production, ac-ft/yr	GPCD	10-year average GPCD (average year range)	5-year average GPCD (average year range)		
1999	156,709	45,524	259				
2000	167,003	47,064	252				
2001	163,738	49,123	268				
2002	155,617	48,500	278				
2003	161,191	47,175	261				
2004	161,155	48,480	269	257 (1995-2004) ^(a)			
2005	174,258	40,470	207	253 (1996-2005)			
2006	173,088	39,703	205	248 (1997-2006)			
2007	172,717	44,915	232	246 (1998-2007)	235 (2003-2007) ^(a)		
2008	174,641	37,037	189	242 (1999-2008)	220 (2004-2008)		
2009	171,175	34,525	180	234 (2000-2009)	203 (2005-2009)		
2010	170,050	36,351	191	228 (2000-2010)	199 (2006-2010)		

^(a)Selected year range

4.2.2 5-Year Baseline Period (Target Confirmation)

The District must also calculate water use, in GPCD, for a 5-year baseline period. This is used to confirm that the selected 2020 target meets the minimum water use reduction requirements. This is a continuous 5-year period that ends no earlier than December 31, 2007 and no later than December 31, 2010. The District's selected 5-year baseline period is 2003 to 2007, as shown in SBX7-7 Table 1, located in Appendix F. This is the same period selected in the 2010 UWMP.

4.3 Service Area Population

In order to calculate the annual baseline GPCD, the District must determine the population that was served for each baseline year for both the baseline periods and for the 2015 compliance year. The District conducted this baseline population analysis as part of the 2010 UWMP based on the year 1990 and 2000 census. The year 2010 census data at the block level of detail was not available until after the 2010 UWMP submittal deadline. For this 2015 UWMP, the District is required to recalculate its baseline population using 2010 census data. As a result of this analysis update which is described in Section 2.3, the historical population served by the District is shown in Table SBX7-7 Table 3, located in Appendix F.



4.4 Gross Water Use

Gross water use is the measure of water that enters the District's distribution system over a 12month period with certain allowable exclusions. These allowable exclusions are recycled water delivered within the service area, indirect recycled water, water placed into long term storage, water conveyed to another urban supplier, water delivered for agricultural use, and process water. The District's historical gross water use for the baseline years is shown in Table SBX7-7 Table 4 located in Appendix F.

4.5 Per Capita Water Use

The District's baseline and target per capita water use are described in this section.

4.5.1 Baseline Daily Per Capita Water Use

GPCD water use or daily per capita water use, as defined in this UWMP, is the amount of water used per person per day. The daily per capita water use for each year of the two baseline periods is calculated by dividing the gross water use for each year by the service area population for each year. The District's baseline daily per capita use is presented in Table SBX7-7 Table 5, located in Appendix F and Table 4-1. The resulting 5-year and 10-year baseline per capita demands are shown in Table SBX7-7 Table 6, located in Appendix F and Table 4-1. The updated 10-year baseline period per capita water use is 257 GPCD. The updated 10-year baseline period per capita water use is greater than the 2010 UWMP analysis which developed a baseline per capita water use of 242 GPCD. This change in baseline per capita water use is due to the updated historical population estimates. The updated 5-year base period per capita water use is 235 GPCD, which is the same 5-year baseline per capita water use presented in the 2010 UWMP.

4.5.2 2015 and 2020 GPCD Targets

Per the law as adopted in SBX7-7, the District must establish per capita water use targets using one of four methods, described as follows:

- 1. Method 1 Eighty percent of the urban retail supplier's baseline per capita daily water use.
- 2. Method 2 The per capita daily water use that is estimated using the sum of several defined performance standards.
 - a) 55 gallons per day (gpd) for indoor residential water use.
 - b) Water efficiency equivalent to the standards of the Model Water Efficient Landscape Ordinance for landscape irrigated through dedicated or residential meters or connections.
 - c) A 10 percent reduction in commercial, industrial, and institutional (CII) uses from the baseline CII water use by 2020.
- 3. Method 3 Ninety-five percent of the applicable state hydrologic region target, as outline in the State's draft 20x2020 Water Conservation Plan.
- 4. **Method 4** Calculated water savings based on indoor residential water savings, metering savings, CII savings, and landscape and water loss savings, as outline in DWR's Provisional Method 4 for Calculating Urban Water Use Targets, released February 2011.

Regardless of which of the four methods is adopted by the District, if the five-year baseline water use is more than 100 GPCD, the District must compare two target GPCD values:

- 1. 95 percent of the five-year baseline daily per capita water use and
- 2. The target determined by the target method the District selects from the four methods allowed.

The 2020 GPCD target is the lower of the two values.



In the 2010 UWMP the District selected Method 1 to determine their urban water use target. Based on Method 1 in the 2010 UWMP, the District's 2020 target was 193 GPCD with an interim 2015 target of 218 GPCD. In this 2015 UWMP GPCD analysis, with the updated historical population analysis incorporating the 2010 census data described in Section 2, the District has selected to remain with Method 1, which now provides a 2020 target of 206 GPCD, with an interim 2015 target of 231 GPCD. The District's target has increased due to the adjusted baseline per capita use. A summary of the District's baseline periods and targets is provided in Table 4-2. The District's interim urban water use target is the value halfway between the 10-year baseline GPCD (from Table SBX7-7 Table 5, located in Appendix F) and the confirmed 2020 GPCD target (from Table SBX7-7 Table 7, located in Appendix F).

Table 4-2. Baselines and Targets SummaryRetail Agency or Regional Alliance Only(DWR Table 5-1)							
Baseline period	Start years	End years	Average GPCD	2015 Interim Target, GPCD	Confirmed 2020 Target, GPCD		
10-15 year	1995	2004	257	231	206		
5 Year	2003	2007	235				

4.5.3 Adjustments to 2015 Gross Water Use and 2015 Compliance

There are allowable adjustments that can be made to the District's 2015 gross water use for extraordinary events, economic adjustments, or weather normalization. The District did not adjust their 2015 gross water use, as shown in Table 4-3. Also shown in Table 4-3, the District achieved the targeted GPCD value for 2015. It is expected that the District's GPCD will increase from the 2015 actual values in the future assuming drought conditions do not continue. The District is on track to meet its 2020 target.

Table 4-3. 2015 Compliance <i>Retail Agency or Regional Alliance Only</i> ^(a) (DWR Table 5-2)								
Actual 2015	2015 Interim	Optional Adjustments to 2015 GPCD 015 Enter "0" for adjustments not used erim From Methodology 8						Did supplier achieve targeted
GPCD	target GPCD	Extraordinary events	Economic adjustment	Weather normalization	Total adjustments	Adjusted 2015 GPCD	applicable)	reduction for 2015? Y/N
141	231	0	0	0	0	0	141	Yes

^(a)All values are in gallons per capita per day (GPCD)



Section 5 System Supplies

The District uses both purchased surface water and groundwater as its supply sources. This section describes the District's existing and projected water supplies.

5.1 Purchased Water

The District purchases water from Placer County Water Agency (PCWA), United States Bureau of Reclamation (USBR), and the City of Sacramento (City) as described in this section.

5.1.1 Placer County Water Agency

The District uses surface water purchased from PCWA in the NSA. This water is treated at the Peterson Water Treatment Plan (WTP) and delivered for use within the NSA. The NSA began receiving surface water from PCWA via PCWA's Middle Fork Project in 2000. The former Northridge Water District and PCWA entered into a take or pay agreement for delivery of up to 29,000 ac-ft/yr of PCWA's water right. The agreement increases from 7,000 ac-ft/yr starting in the year 2000 up to 12,000 to 29,000 ac-ft/yr in 2009. The 12,000 to 29,000 ac-ft/yr upper limit will be maintained through the twenty-fifth year of the agreement. The District has agreed to provide up to 2,000 ac-ft/yr of this supply to California American Water Company. The District's agreement with PCWA is provided in Appendix G. Starting in 2010, the supply became available only during Water Forum Agreement (WFA) wet years, when the March through November unimpaired inflow into Folsom reservoir (UIFR) is greater than 1,600,000 ac-ft. The terms of the agreement can be extended by mutual consent of both parties. PCWA can take back the water at any time for their needs. The contract schedule is shown in Table 5-1. PCWA has projected that their supply to the District would be reduced to 12,000 ac-ft/yr in an average year type at buildout of PCWA's service area, which is anticipated to occur after 2024 (Brown and Caldwell, August 2006).



Table 5-1. PCWA Contract Schedule					
Year	Surface water schedule (ac-ft)				
June 1 through December 31, 2000 (a)	7,000				
2001	11,000				
2002	12,000				
2003	14,000				
2004	16,000				
2005	18,000				
2006	20,000				
2007	22,000				
2008	16,000 - 29,000				
2009	12,000 - 29,000 ^(b)				
2010	12,000 - 29,000 ^(b)				
2011	12,000 - 29,000 ^(b)				
2012	12,000 - 29,000 ^(b)				
2013	12,000 - 29,000 ^(b)				
2014 and each year thereafter	12,000 - 29,000 ^(b)				

Note: Effective 2008, the District may request that PCWA make a supply up to the larger surface water schedule value.

^(a) Delivery of PCWA water began June 1, 2000 and was pro-rated to 7,000 ac-ft for the year 2000.

(b) Delivery of PCWA water over 12,000 ac-ft per year requires approval from PCWA.

WFA diversion restrictions for the PCWA surface water are dependent upon the March through November projected flow into the Folsom Reservoir. The District will be able to divert up to 29,000 ac-ft/yr of PCWA American River water when the UIFR is greater than 1,600,000 ac-ft through the year 2025. The contract expires in 2025 and it is assumed for this UWMP that the contract will be extended at 12,000 ac-ft following 2025. Table 5-2 summarizes the WFA year type, the corresponding March through November UIFR, and the PCWA contract supply available in WFA year types.

Table 5-2. Water Forum Year Types as Defined by the Water Forum Agreement						
WFA year type	Unimpaired inflow into Folsom Reservoir, March through November, ac-ft	PCWA contract supply, ac-ft/yr				
Wet	Greater than 1,600,000	12,000 - 29,000				
Average	Less than 1,600,000 and greater than 950,000	0				
Drier/wedge	Less than 950,000 and greater than 400,000	0				
Driest/conference (a)	Less than 400,000	0				

^(a) In driest year types, diverters and others confer on how best to meet demands and protect the American River.



5.1.2 United States Bureau of Reclamation

Since 1991, the NSA has received a nominal amount of Section 215 USBR Central Valley Project (CVP) water. Section 215 water is surplus or "spillway" water available typically in winter and spring. This water is treated at the Peterson WTP and delivered for use within the NSA. The District is eligible to purchase this surplus water in average and wet water years. Nothing in the WFA is intended to restrict the District's ability to take delivery of Section 215 water from Folsom Reservoir from the USBR whenever it is available. It is assumed that this supply is not available in dry years.

The District is in the process of obtaining a Long Term Warren Act Contract with the USBR. The process began in November 2015 and anticipated to be approved in August 2016. The District's current Warren Act Contract expires in March 2017.

5.1.3 City of Sacramento

The District has been receiving treated surface water from the City for use within the SSA since 2007. This American River supply is treated at the City's Fairbairn WTP and delivered to the District via the City's Howe Avenue transmission main to an existing interconnection located near Enterprise Drive and Northrop Avenue in the SSA. In January 2004, the District entered into an agreement with the City for up to 20 mgd of surface water supply plus up to 10 mgd of additional water. The District's agreement with the City is provided in Appendix G. A continuous supply of 20 mgd is equivalent to 22,404 ac-ft/yr.

The District's ability to obtain treated surface water from the City of Sacramento is tied to Hodge flow restrictions in the American River which are dependent upon the time of year. Hodge flow restrictions in the American River are as follows:

- October 15th through February 2,000 cubic feet per second (cfs) minimum
- March through June 3,000 cfs minimum
- July through October 15th 1,750 cfs minimum.

The Hodge decision and possible impacts of ongoing efforts such as the Water Forum Flow Management Standard and the Operational Criteria and Plan (OCAP) create uncertainty as to the extent of availability and can legally constrain the surface water used by the District if minimum Hodge flows or other criteria in the Lower American River are not met. For this analysis it is assumed the reasonably available volume to the District is 9,300 ac-ft/yr, based on historical data.

5.2 Groundwater

Groundwater has historically been the primary source of water for both the NSA and SSA. The groundwater use in the NSA has significantly declined since 1998 and has been reduced in the SSA since 2007 due to the availability of surface water as an alternative supply.

5.2.1 Basin Description

The groundwater basin underlying the District is located in the North American Subbasin (5-21.64) which is part of the larger Sacramento Valley Groundwater Basin. The Sacramento Valley Groundwater Basin is not adjudicated. The basin is not identified by DWR Bulletin 118 as being in overdraft.

The Water Forum Agreement divided the groundwater basin in Sacramento County into three portions as shown on Figure 5-1. The District lies within the North Basin which is identified on Figure 5-1 and is the southern portion of the North American Subbasin (5-21.64).









The water-bearing deposits underlying the District include the Miocene/Pliocene volcanic Mehrten Formation. Overlying units known collectively as "older-alluvium" include the Pliocene and Pleistocene, Modesto, Riverbank, and Turlock Lake formations, which were previously referred to as the Fair Oaks, Laguna, and local gravels formations (DWR, 1974). The Mehrten Formation is the most productive fresh water-bearing unit in the eastern Sacramento Valley, though some of the permeable layers of the overlying older alluvium produce moderate amounts of water. Groundwater is generally recharged along the east side of the subbasin and through the younger alluvium of streams and rivers, and flows west/southwest through the subbasin.

The historical use of groundwater in the North American Subbasin (5-21.64) has resulted in a general lowering of groundwater levels that have stabilized in recent years. These depressions have grown and coalesced into a single cone of depression centered in the area of the prior McClellan Air Force Base. Groundwater elevations in the eastern and western areas of the North American Subbasin (5-21.64) have been fairly stable, while the central area (within the cone of depression) experienced continuing decline every year until groundwater levels stabilized and had some recovery starting in the late 1990s. The groundwater level stabilization in the cone of depression was due, at least in part, to expanded conjunctive use operations by water agencies in this area.

Other known groundwater users in the North American Subbasin (5-21.64) are listed in Table 5-3.

Table 5-3. Other Known North American Subbasin Groundwater Users
City of Sacramento
California American Water Company
Rio Linda/Elverta Community Water District
Golden State Water Company
Citrus Heights Water District
Fair Oaks Water District
Orangevale Mutual Water Company
Del Paso Manor Water District
Carmichael Water District
City of Roseville
Natomas Central Mutual Water Company

5.2.2 Groundwater Quality

The groundwater quality in the North American Subbasin (5-21.64) is generally excellent. Most municipal wells do not need any treatment to meet drinking water standards other than disinfection. However, there are some wells that have iron and manganese treatment, as well as locations with elevated levels of arsenic and hexavalent chromium. There are several groundwater contaminant plumes and some point sources of contamination (e.g., leaking underground storage tanks). The three largest groundwater contaminant plumes emanate from source areas at the prior McClellan Air Force Base, the Roseville railroad yard, and Aerojet in Rancho Cordova. The presence of these contaminant plumes has damaged some existing municipal wells and limits the construction of new municipal wells in the vicinity of the contaminant plumes. Significant remediation efforts/programs



by federal, state, and local government agencies are in progress to confine and clean up the contaminated groundwater.

5.2.3 Groundwater Management

This section describes the groundwater management efforts that have been occurring in the North American Subbasin (5-21.64). The subbasin has not been adjudicated. Activities to meet the Sustainable Groundwater Management Act (SGMA) requirements are also described.

5.2.3.1 Groundwater Management Plan

The groundwater in the North Basin portion of the North American Subbasin (5-21.64) is managed by the Sacramento Groundwater Authority (SGA). SGA draws its authority from a joint powers agreement signed by the cities of Citrus Heights, Folsom, and Sacramento and the County of Sacramento to exercise their common police powers to manage the underlying groundwater basin. The goal of the SGA is to ensure a viable groundwater resource for beneficial uses including agricultural, industrial, and municipal supplies that support the Water Forum Agreement's co-equal objectives of providing a reliable and safe water supply and preserving the fishery, wildlife, recreational, and aesthetic values of the lower American River.

The SGA Groundwater Management Plan was first completed in December 2003 and updated in December 2008. The SGA prepares a biannual report to evaluate progress on Groundwater Management Plan (GMP) implementation and to report on basin conditions. The most recent groundwater management plan and biennial report are located at SGA's website at www.sgah2o.org.

5.2.3.2 Sustainable Groundwater Management Act

SGMA was enacted by the legislature in 2014, with subsequent amendments in 2015. SGMA requires groundwater management in priority groundwater basins, which includes the formation of Groundwater Sustainability Agencies (GSAs) and the development of Groundwater Sustainability Plans (GSPs) for groundwater basins or subbasins that are designated by DWR as medium or high priority.

The designation of the priority of groundwater basins was done as part of the California Statewide Groundwater Elevation Monitoring (CASGEM) Program. CASGEM was developed in response to legislation enacted in California's 2009 Comprehensive Water package. The CASGEM Groundwater Basin Prioritization is a statewide ranking of groundwater basin importance that incorporates groundwater reliance and focuses on basins producing greater than 90 percent of California's annual groundwater. The CASGEM Program has ranked the North American Subbasin (5-21.64) as high priority.

SGMA directs DWR to identify groundwater basins and subbasins in conditions of critical overdraft. DWR identified such basins in Bulletin-118, 1980 and Bulletin 118, Update 2003. DWR issued an updated draft list of critically overdrafted basins in July 2015. The North American Subbasin (5-21.64) that supplies the District is not on the list.

Groundwater basins designated as high or medium priority and critically overdrafted must be managed under a GSP by January 31, 2020. All other high and medium priority basins must be managed under a GSP by January 31, 2022. The North American Subbasin (5-21.64) is covered by the latter deadline.



- A single GSP covering the entire basin developed and implemented by one GSA.
- A single GSP covering the entire basin developed and implemented by multiple GSAs.
- Multiple GSPs implemented by multiple GSAs and coordinated pursuant to a single coordination agreement that covers the entire basin.

The various agencies that are located in the North American Subbasin (5-21.64) have been in discussions to explore options for the organization of one or more GSA's. It is likely that the North American Subbasin (5-21.64) will have several GSAs and possibly several GSPs. SGA filed a notice with DWR on October, 20, 2015 that it intends to be the GSA for a portion of the North American Subbasin (5-21.64).

5.2.4 Overdraft Conditions

As mentioned in the previous subsection, the North American Subbasin (5-21.64) is not on the draft list of critically overdrafted basins issued by DWR in July 2015.

In June 2010, the SGA developed Phase III of the Water Accounting Framework which established a combined sustainable pumping estimate of 35,000 ac-ft/yr for the District (SGA, 2010). It is expected that the GSP that will be developed for the North American Subbasin (5-21.64) will establish the safe yields.

5.2.5 Historical Groundwater Pumping

Table 5-4 presents the amount of groundwater pumping by the District that has occurred over the last five years.

Table 5-4. Wholesale: Groundwater Volume Pumped, ac-ft/yr (DWR Table 6-1)									
Supplier does not pump groundwater. The supplier will not complete the table below.									
Groun	dwater type	Location or basin name	2011	2012	2013	2014	2015		
Alluvial Basin		Sacramento Valley Groundwater Basin, North American Subbasin (5-21.64)	19,119	27,530	38,145	32,561	27,422		
		Total	19,119	27,530	38,145	32,561	27,422		

5.3 Surface Water

The District's surface water supply is described in Section 5.1 as purchased water.

5.4 Stormwater

Stormwater is not currently used as an urban water supply source. There are no plans to divert stormwater runoff as a water source.



5.5 Wastewater and Recycled Water

The purpose of this section is to provide information on recycled water and its potential as a resource for the District. The elements of this section include: (1) the quantity of wastewater generated in the service area, (2) description of the collection, treatment, and disposal/reuse of that wastewater, (3) current water recycling systems, and (4) the potential for water recycling in the service area.

5.5.1 Recycled Water Coordination

The Sacramento Regional County Sanitation District (SRCSD) is responsible for the collection, treatment, disposal, and reuse of wastewater throughout most of the urbanized areas of Sacramento County. This includes the area where the District provides retail water service.

In 2007, SRCSD completed the Water Reuse Opportunity Study (WROS) to identify opportunities for water recycling program growth through 2030 (SRCSD, 2007). SRCSD's objective is to increase water recycling usage in the Sacramento region during peak irrigation months to 30 to 40 MGD. Water recycling on this scale will allow SRCSD to better manage its effluent discharge to the Sacramento River and could help Sacramento area water purveyors improve water supply availability and reliability. The WROS effort included significant outreach to stakeholders that could participate in SRCSD's future water recycling plans. The WROS provides the following:

- 1. Studied areas throughout the Sacramento region to identify potential water recycling opportunities,
- 2. Engaged potential water recycling partners and stakeholders,
- 3. Developed, assessed, and prioritized potential water recycling projects, and
- 4. Provided a strategy to further develop and implement the projects initially selected to move forward in achieving the stated goals of a large-scale water recycling program.

The WROS examined and identify potential opportunities to use recycled water for landscape irrigation, agriculture irrigation, commercial irrigation, golf course irrigation, as well as use as industrial processing water. The WROS did not identify any opportunities to use recycled water within the District's service area.

Table 5-5. Participation in Reuse Planning						
Participating agencies	Role					
Sacramento Regional County Sanitation District	As the only agency with wastewater collection and treatment authority, SRCSD developed a Water Recycling Opportunities Study (WROS) to identify reuse supply and projects for implementation. SRCSD is a member of RWA and actively seeks input from water purveyors on reuse supply and planning issues.					
Regional Water Authority	Provides input and review of SRCSD's reuse planning process and recommendations. Updates SRCSD on supply issues and where/how reuse could become part of supply integration.					
Sacramento Central Groundwater Authority	Provides input and review of SRCSD's reuse planning process and recommendations. Updates SRCSD on supply issues and where/how reuse could become part of supply integration.					
Sacramento County Water Agency	Provides input to SRCSD on localized water demands and supply to highlight where reuse is most feasible. Sacramento County Water Agency is responsible for recycled water distribution system operation and maintenance.					

The agencies and their respective roles in water reuse planning are described in Table 5-5.



5.5.2 Wastewater Collection, Treatment, and Disposal

Municipal wastewater is generated from a combination of residential and commercial sources. The quantity of wastewater generated is proportional to the population and water use in the service area. Estimates of wastewater generated within District's service area are presented in Table 5-6.

Wastewater is collected by gravity in a series of main, trunk, and interceptor sewers owned and operated by SRCSD. Collected wastewater is transported to the Sacramento Regional Wastewater Treatment Plant (SRWTP) in Elk Grove. This facility serves the entire Sacramento metropolitan area including the unincorporated county area adjacent to the Cities of Elk Grove, Citrus Heights, Folsom, and Rancho Cordova. The current capacity of the plant to treat dry weather flows is approximately 181 MGD. The plant produces a disinfected secondary effluent that is discharged to the Sacramento River downstream from the community of Freeport. The principal treatment processes are primary sedimentation, pure-oxygen activated sludge, secondary sedimentation, and chlorination/dechlorination.

The SRWTP is currently being upgraded to produce cleaner water for discharge to the Sacramento River and for water reuse. Upgrades to the treatment plant include nutrient removal, filtration, and additional disinfection. Upgrades are planned to be completed by 2023.

Table 5-6. Wastewater Collected Within Service Area in 2015, ac-ft/yr (DWR Table 6-2)									
	There is no wastewa	There is no wastewater collection system. The supplier will not complete the table below.							
100	Percentage of 201	5 service area covered	by wastewater collec	tion system (optiona)				
100	Percentage of 2015 service area population covered by wastewater collection system (optional)								
	Wastewater collec	tion		Recipient of co	ollected wastewate	r			
Name of wastewater collection agency	Wastewater volume metered or estimated?	Volume of wastewater collected in 2015, ac-ft	Name of wastewater treatment agency receiving collected wastewater	Treatment plant name	Is WWTP located within UWMP area? Drop down list	Is WWTP operation contracted to a third party? (optional) Drop down list			
Sacramento Regional County Sanitation District	Estimated	26,000	Sacramento Regional County Sanitation District	Sacramento Regional Wastewater Treatment Plant	No	No			
Total waste	water collected from service area:	26,000							



A summary of wastewater volumes treated, discharged, and recycled by SRCSD in 2015 is provided in Table 5-7.

Table 5-7. Retail: Wastewater Treatment and Discharge Within Service Area in 2015, ac-ft/yr (DWR Table 6-3 R)										
					Does this	Treatment level	2015 volumes (ac-ft)			
Wastewater treatment plant name	Discharge location name or identifier	Discharge location description	Wastewater discharge ID number	Method of disposal	plant treat wastewater generated outside the service area?		Wastewater treated	Discharged treated wastewater	Recycled within service area	Recycled outside of service area
Sacramento Regional Wastewater Treatment Plant	Sacramento River	Near Freeport		River or creek outfall	Yes	Secondary, Disinfected- 23	141,519	118,672	0	0
Sacramento Regional Wastewater Treatment Plant	Zone 40 recycled water system	West part of City of Elk Grove in Laguna- Vineyard system		Other		Tertiary	647	0	0	647
						Total	142,166	119,320	0	647

5.5.3 Recycled Water System

Currently, there are no recycled water uses within the District. The SRCSD has a reclaimed water treatment facility at the SRCSD. The water reclamation plant is designed to treat a maximum of 5 mgd with coagulation, sand filtration, and disinfection of secondary effluent from the SRWTP. SRCSD is currently serving approximately 2 mgd of reclaimed water in the Laguna Creek area, near the SRWTP. Uses of the recycled water include irrigation of parks, schoolyards, and streetscapes in the Laguna West and Lakeside developments and nonpotable uses at the SRWTP. The reclamation plant is capable of being expanded to 10 mgd to serve additional demand for landscape irrigation for the Elliott Ranch South development and future developments in the area. Areas that are intended for use of recycled water are located near the SRWTP, which is 30 miles from the District.

5.5.4 Actions to Encourage and Optimize Future Recycled Water Use

Currently, no recycled water is used in the District's service area. As part of the 1994 Nolte report, the former Arcade and Northridge Water District service areas were investigated for reuse potential along with other urban water districts. The reuse potential in the 2007 WROS was not evaluated for the District's service area. The WROS identified potential recycled water demands for landscape irrigation purposes in five different target areas and not by water supplier service area. The target areas are geographically located and Area 3 covers the District's service area. This section presents the projected potential use of recycled water and methods to optimize reuse in the future. Due to infrastructure limitations it is concluded that the use of recycled water within the District water system will not occur within the planning horizon of this UWMP.

As shown on Table 5-8 the District does not plan to expand recycled water use in the future.



Table 5-8. Retail: 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.						
Section 5.5.4	Provide page location of narrative in UWMP					
Name of action	Description	Planned implementation year	Expected Increase in recycled water use			

5.6 Desalinated Water Opportunities

The District has no sources of ocean water, brackish water, or groundwater that provide opportunities for development of desalinated water as a long term supply. There are no opportunities for the development of desalinated water within the District's service area as a future supply source.

5.7 Exchanges or Transfers

The District does not anticipate additional water supplies through exchanges or transfers.

5.8 Other Water Supplies

In 2014 the District analyzed potential opportunities to assert control of the discharged remediated groundwater currently discharged by the Air Force at McClellan into Magpie Creek (Tully and Young, 2014). The analysis determined there are many unknowns and potential liability with regard to managing the remediate water. The District does not currently anticipate pursuing use of remediated groundwater.

5.9 Future Water Projects

Subject to budget availability and need as being determined currently as the District updates its Water System Master Plan, the District will be constructing additional water supply wells to replace older existing wells and to meet future demands. The District is also in the process of determining its need and role for the Sacramento River diversion project known as River Arc.

Table 5-9 provides a summary and schedule of the future water supply projects.



Table 5-9. Retail: Expected Future Water Supply Projects or Programs (DWR Table 6-7)						
	No expected future wa supply. Supplier will n	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 narrative format. LOCATION OF THE NARRATIVE <u>Section 5-9, page 5-11</u>					
Name of future projects or programs	Joint project with other agencies?	Description	Planned implementation year	Planned for use in year type	Expected increase in water supply to agency	
Groundwater wells	TBD ^(a)	TBD ^(a)	TBD ^(a)	TBD ^(a)	TBD ^(a)	
Sacramento River diversion	TBD ^(a)	TBD ^(a)	TBD ^(a)	TBD ^(a)	TBD ^(a)	

^(a) The District is in the process of updating their Water System Master Plan which includes a determination of the need and scheduling for additional water supply wells as well as the District's need for and role in the Sacramento River Diversion project River Arc.

5.10 Summary of Existing and Planned Sources of Water

A summary of actual supply sources and quantities in 2015 are provided in Table 5-10. The water supplies projected from 2020 through 2040 are provided in Table 5-11. The supply projected to be available from each source in normal years is shown. It should be noted that in normal years the District's objective is to minimize the use of groundwater and maximize the use of surface water as part of their conjunctive use program.

Table 5-10. Water Supplies – Actual, ac-ft/yr (DWR Table 6-8)					
			2015		
Water supply	Additional detail on water supply	Actual volume	Water quality	Total right or safe yield	
Purchased water	PCWA	80	Treated	29,000	
Purchased water	USBR (215)	0	Treated		
Purchased water	City of Sacramento	0	Treated	26,000	
Supply from storage					
Groundwater	Sacramento Valley Groundwater Basin, North American Subbasin (5-21.64)	27,422	Treated ^(a)	35,000	
Surface water					
Recycled water					
Desalinated water					
Stormwater use					
Transfers					
Exchanges					
Total 27,502 90,000					

Note: A normal year is assumed.

^(a) Groundwater is treated to meet public health standards. This includes disinfection for all wells and fluoridation for wells in the SSA. The District also provides groundwater treatment for the removal of iron and/or for specific wells.



Table 5-11. Water Supplies - Projected, ac-ft/yr (DWR Table 6-9)											
		2	020	2	025	2	030	2	035	20)40
Water supply	Additional detail on water supply	Reasonably available volume	Total right or safe yield								
Purchased water	PCWA (a)(b)	16,000	29,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Purchased water	USBR (215) (C)	200	0	200	0	200	0	200	0	200	0
Purchased water	City of Sacramento	9,300	26,000	9,300	26,000	9,300	26,000	9,300	26,000	9,300	26,000
Supply from storage		0	0	0	0	0	0	0	0	0	0
Groundwater	Sacramento Valley Groundwater Basin, North American Subbasin (5- 21.64)	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000
Surface water		0	0	0	0	0	0	0	0	0	0
Recycled water		0	0	0	0	0	0	0	0	0	0
Desalinated water		0	0	0	0	0	0	0	0	0	0
Stormwater use		0	0	0	0	0	0	0	0	0	0
Transfers		0	0	0	0	0	0	0	0	0	0
Exchanges		0	0	0	0	0	0	0	0	0	0
Total		60,500	90,000	56,500	73,000	56,500	73,000	56,500	73,000	56,500	73,000

Note: A normal year is assumed.

(a) The contract schedule is shown in Table 4-1. PCWA has projected that their supply to the District would be reduced to 12,000 acft/yr in an average year type at buildout of PCWA's service area, which is anticipated to occur after 2024 (Brown and Caldwell, August 2006).

(b) PCWA contract is for 12,000 ac-ft/yr minimum, with up to 29,000 ac-ft/yr available in Water Forum wet years if not needed to supply PCWA's needs, and subject to treatment and conveyance capacity limitations.

^(c) 200 ac-ft per year is assumed to be available.



Section 6

Water Supply Reliability Assessment

This section describes factors impacting long term reliability of water supplies and provides a comparison of projected water supplies and demand projections in normal, single dry, and multiple dry years.

6.1 Constraints on Water Sources

Water supply reliability is an important component of the water management planning process. Factors contributing to inconsistency in the District's water supplies include legal limitations due to water contracts limiting the quantity of water available to the District, environmental constraints, and reductions in availability due to climatic factors.

The surface water supplies available to the District are subject to significant reductions during dry years (seasonal and climatic shortages). PCWA, USBR 215 and City of Sacramento water are assumed to not be available in dry years. The District has agreed not to divert any water from the Lower American River in "drier" and "conference" years per the WFA (the District could divert this water from other sources in those years). The only other source of water for the District is groundwater.

Groundwater quantity is generally unaffected by short-term drought conditions. It is assumed that the District's available groundwater supply during multiple dry years is greater than the average annual sustainable yield. Based on the District's conjunctive use strategy, during average and dry years the District can pump higher amounts of groundwater because less groundwater is pumped during wet periods. The objective is that the overall average of the pumping during dry, wet, and average periods does not exceed the District's long-term sustainable pumping target. In single and multiple dry year periods the District's groundwater will be able to meet demands when surface water is reduced or not available. Because the District is able to use more surface water and less groundwater during wet and normal years, they are able to pump more groundwater during dry years and still maintain a groundwater pumping balance within the estimated average annual sustainable target. For this analysis the groundwater volume reasonably available in dry years is 50,000 ac-ft/yr. This is based on the District pumping the groundwater wells eight hours per day.

Water quality issues are not anticipated to have significant impact on water supply reliability. It is assumed that any chemical contamination from the known contaminant plumes and the lowering of MCLs of naturally occurring constituents such as arsenic and radon can be mitigated by constructing new treatment facilities for treatment prior to the waters delivery into the water distribution system. However, these treatment facilities have significant cost.

The factors and constraints specific to each of the District's individual water supplies are further described in Section 5.



6.2 Reliability by Type of Year

The basis of the water year data is provided in Table 6-1 for the PCWA supply and Table 6-2 for the City of Sacramento supply. The definitions of the three water year types as described by DWR (DWR, 2015) are provided below.

- 1. Average year is a year, or an averaged range of years, in the historical sequence that most closely represents median water supply availability to the agency. Normal and average are used interchangeably within the DWR guidebook.
- 2. Single dry year is the year with the lowest water supply availability to the agency.
- 3. Multiple-dry year period is the lowest average water supply availability to the agency for a consecutive multiple year period (three years or more) for a watershed since 1903.

Table 6-1. Retail Basis of Water Year Data - PCWA (DWR Table 7-1)				
Year type	Base year	Volume available, ac-ft/yr	Percentage of average supply	
Average year	2010	15,518	97%(a)	
Single dry year	2015	80	1%	
Multiple-dry years 1 st year	2013	409	3%	
Multiple-dry years 2 nd year	2014	0	0%	
Multiple-dry years 3 rd year	2015	80	1%	

^(a) Average supply assumed to 16,000 ac-ft/yr.

Table 6-2. Retail Basis of Water Year Data – City of Sacramento (DWR Table 7-1)				
Year type	Base year	Volume available, ac-ft/yr	Percentage of average supply	
Average year	2012	6,463	69%	
Single dry year	2015	0	0%	
Multiple-dry years 1 st year	2013	0	0%	
Multiple-dry years 2 nd year	2014	0	0%	
Multiple-dry years 3 rd year	2015	0	0%	

^(a) Average supply assumed to 9,300 ac-ft/yr.

6.3 Supply and Demand Assessment

This section provides a comparison of normal, single dry, and multiple dry water year supply and demand for the District. Water demands are addressed in Section 3 and water supplies are addressed in Section 5.



6.3.1 Current and Projected Normal Year Water Supplies vs. Demand

The normal water year current and projected water supplies are compared to the current and projected demand for the District in Table 6-3.

Table 6-3. Retail: Normal Year Supply and Demand Comparison, ac-ft/yr (DWR Table 7-2)					
	2020	2025	2030	2035	2040
Supply ^(a)					
PCWA	16,000	12,000	12,000	12,000	12,000
USBR (215)	200	200	200	200	200
City of Sacramento	9,300	9,300	9,300	9,300	9,300
Groundwater	35,000	35,000	35,000	35,000	35,000
Recycled water	0	0	0	0	0
Supply total	60,500	56,500	56,500	56,500	56,500
Demand total ^(b)	40,004	40,813	41,345	41,340	41,304
Difference (supply minus demand)	20,496	15,687	15,155	15,160	15,196

^(a) Supply from Table 5-9

(b) Demand from Table 3-3

The current and projected water supplies are compared to the demands for a single dry year for the District in Table 6-4. The groundwater supply is based on pumping the District's wells eight hours per day. This higher groundwater pumping fits within the District's conjunctive use strategy of pumping less groundwater in average and wet years and more groundwater in dry years.

Table 6-4. Single Dry Year Water Supply and Demand Comparison, ac-ft/yr (DWR Table 7-3)					
	2020	2025	2030	2035	2040
Supply					
PCWA	0	0	0	0	0
USBR (215)	0	0	0	0	0
City of Sacramento	0	0	0	0	0
Groundwater ^(a)	50,000	50,000	50,000	50,000	50,000
Recycled water	0	0	0	0	0
Supply total	50,000	50,000	50,000	50,000	50,000
Demand total	40,004	40,813	41,345	41,340	41,304
Difference (supply minus demand)	9,996	9,187	8,655	8,660	8,696

^(a) Groundwater supply volume based on pumping the District's wells eight hours per day.



The projected water supplies are compared to the demands for multiple dry years for the District in Table 6-5.

Table 6-5. Wholesale: Multiple-Dry Years Supply and Demand Comparison, ac-ft/yr (DWR Table 7-4)						
		2020	2025	2030	2035	2040
	Supply					
	PCWA	0	0	0	0	0
	USBR (215)	0	0	0	0	0
	City of Sacramento	0	0	0	0	0
First year	Groundwater ^(a)	50,000	50,000	50,000	50,000	50,000
	Recycled water	0	0	0	0	0
	Supply total	50,000	50,000	50,000	50,000	50,000
	Demand total	40,004	40,813	41,345	41,340	41,304
	Difference	9,996	9,187	8,655	8,660	8,696
	Supply					
	PCWA	0	0	0	0	0
	USBR (215)	0	0	0	0	0
	City of Sacramento	0	0	0	0	0
Second year	Groundwater wells ^(a)	50,000	50,000	50,000	50,000	50,000
	Recycled water	0	0	0	0	0
	Supply total	50,000	50,000	50,000	50,000	50,000
	Demand totals	40,004	40,813	41,345	41,340	41,304
	Difference	9,996	9,187	8,655	8,660	8,696
	Supply					
	PCWA	0	0	0	0	0
	USBR (215)	0	0	0	0	0
	City of Sacramento	0	0	0	0	0
Third year	Groundwater wells ^(a)	50,000	50,000	50,000	50,000	50,000
	Recycled water	0	0	0	0	0
	Supply total	50,000	50,000	50,000	50,000	50,000
	Demand total	40,004	40,813	41,345	41,340	41,304
	Difference	9,996	9,187	8,655	8,660	8,696

^(a) Groundwater supply volume based on pumping the District's wells eight hours per day.



6.4 Regional Supply Reliability

The District does not import water from other watersheds. All water used in the District is from within the District's watershed.

Water management tools have been used by the District to maximize water resources. Programs in which the District participates to maximize water resources are described as follows.

- **Regional Water Authority** As discussed in the previous section, the District is a participant in the RWA IWRMP. The District also participates in the RWA water efficiency program. RWA developed a Regional Water Master Plan in 2003 that reviewed the concepts on how the region could utilize groundwater and surface water conjunctively to meet the objectives set forth in the Water Forum process. In June 2006 RWA developed an Integrated Regional Water Management Plan (IRWMP) that identifies specific projects and implementation programs and agreements between different affected agencies to identify projects to put conjunctive use in place. Conjunctive use is the coordinated management of the water supplies (surface water, groundwater, recycled water, etc.) to maximize the yield of the overall water resource. An intended purpose of this IRWMP is to provide and encourage regional opportunities for water resources planning and project development. A comprehensive update of the IRWMP was completed in 2013. The RWA is currently in the process of developing a Regional Reliability Study to improve water supply reliability in the region by enhancing the sharing of water supplies, promoting conjunctive use operations, and potentially developing a groundwater bank.
- Water Forum Agreement The District is a member and signatory to the WFA, which was developed in an attempt to preserve the fishery, wildlife, recreational, and aesthetic values of the lower American River and in an effort to provide a reliable and safe water supply for the region. The Water Forum finalized the WFA which contains seven major elements to meet its objectives including purveyor specific conservation agreements. This is discussed in Section 6 of this plan.
- Sacramento Groundwater Authority The District is a participating agency in the SGA. The SGA has adopted a regional groundwater management plan.

The benefits of the programs described above and the documents developed as a result of these programs are water management tools that the District uses to maximize their water resources and minimize the need to import water.



Section 7

Water Shortage Contingency Planning

This section describes the District's water shortage contingency planning process and how the District responds to water shortages. The District's water shortage contingency plan is found in Regulation Number 15: Water Conservation of its Regulations Governing Water Service, provided in Appendix H. It was adopted in July 2004 and most recently amended in May 2015.

7.1 Stages of Action

The District will implement an appropriate water shortage contingency stage based on the District's current water supply conditions, as listed for the five stages defined in Table 7-1. Annually, the District Board of Directors determines the water stage applicable based on data from DWR's Bulletin 120 and present water conditions. Regardless of the water supply availability or service conditions within the District, the Board of Directors reserves the right to set water conservation goals and modify stage declarations as necessary to align with regional or state water conservation policies, agreements or declarations, or legal requirements.

Table 7-1. Retail: Stages of Drought Contingency Plan (DWR Table 8-1)				
Stage	Percent supply reduction (numerical value as a percentage)	Water supply condition ^(a) (narrative description)		
Normal water supply	0%	Water supply conditions are adequate to meet the demands of District's customers.		
Stage 1 water alert	Up to 20%	Water supplies are collectively reduced by up to 20 percent from normal, or due to regional circumstances or statewide climate influences.		
Stage 2 water warning	20 - 30%	Water supplies are impeded, or due to regional circumstances or statewide climate influences.		
Stage 3 water crisis	30 - 40%	Purchased water, surface water, and groundwater supplies are significantly impeded, or due to regional emergency, a county emergency, or state mandates		
Stage 4 water emergency	40 to 50%	Water supply conditions are significantly impeded by interruption of available sources, a regional emergency, or state mandates		

^(a) Water supply condition supply ranges are based on current normal year supplies.



7.2 Prohibitions on End Uses

The District's water shortage contingency plan includes mandatory prohibitions on water uses.

DWR categorizes the types of restrictions and prohibitions as landscape irrigation, commercial/ institutional/ industrial (CII), water features and swimming pools, and other. A summary of the District's restrictions and prohibitions are provided in Table 7-2.

Table 7-2. Restrictions and Prohibitions on End Uses (DWR Table 8-2)					
Stage	Restrictions and prohibitions on end users (from drop down list)	Additional explanation	Penalty, charge, or other enforcement?		
Normal	Other - Prohibit use of potable water for washing hard surfaces	No excess water waste. Irrigation system should not apply water on an impervious surface.	Yes		
Normal	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner		Yes		
Normal	Other - Require automatic shut off hoses	Washing of vehicles permitted only with use of a water saver nozzle with shut-off valve and bucket, and minimal runoff.	Yes		
Normal	Other - Require automatic shut of hoses	All water hoses and filling apparatus to be equipped with a control nozzle capable of completely shutting off the flow of water.	Yes		
Normal	Landscape - Limit landscape irrigation to specific times	Prohibit watering 12 noon- 8pm during May to August and 12 noon to 8pm from September to April.	Yes		
Normal	Other water feature or swimming pool restriction	Prohibit backwashing or overfilling. Pool draining and refilling only allowed to health, maintenance, or structural considerations. All pools, spas, and water features to be equipped with a recirculation pump and constructed leak- proof	Yes		
Normal	Other	Use of water from a fire hydrant without District permission prohibited.	Yes		
Normal	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water high pressure/low volume wash systems	New conveyor car washes and commercial laundry systems to have recirculation system.	Yes		
Normal	Landscape - Other landscape restriction or prohibition	Customers enrolled in the Large Irrigation Services Customer (LISC) program to adhere to agreement.	Yes		
Normal (recommended), Stage 1 (mandatory)	Landscape - Limit landscape irrigation to specific days	Not enforced at normal stage, enforced at Stage 1 and greater.	Yes		
Normal (recommended), Stage 1 (mandatory)	CII - Restaurants may only serve water upon request	Not enforced at normal stage, enforced at Stage 1 and greater.	Yes		
Stage 1 (recommended), Stage 2	Landscape - Other landscape restriction or prohibition	Customers with smart irrigation controllers to set to 80% ET, 75% at Stage 2, 70% at Stage 3.	Yes		



Table 7-2. Restrictions and Prohibitions on End Uses(DWR Table 8-2)				
Stage	Restrictions and prohibitions on end users (from drop down list)	Additional explanation	Penalty, charge, or other enforcement?	
Stage 2	Other	Hydrant permits for construction water issues only with the approval of the General Manager.	Yes	
Stage 2	Landscape - Other landscape restriction or prohibition	New and expanded landscape to be drought tolerant trees, shrubs, and ground cover.	Yes	
Stage 2	Water Features - Restrict water use for decorative water features, such as fountains	Decorative fountains that use potable water to be drained and kept dry.	Yes	
Stage 3	Landscape - Prohibit certain types of landscape irrigation	Limitations on planting new and expanding turf, limitations on all large landscape irrigation customers.	Yes	
Stage 3	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water or high pressure/low volume wash systems	Car washing is only permitted at commercial car washes that recirculates water or by high pressure/ low volume systems.	Yes	
Stage 4	Other water feature or swimming pool restriction	Prohibit use of District water to fill pools, ponds or spas.	Yes	
Stage 4	Landscape - Prohibit all landscape irrigation	Outdoor landscape irrigation prohibited.	Yes	
Stage 4	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	Car washing is only permitted at commercial car washes that use recycled water.	Yes	

7.2.1 Landscape Irrigation

Landscape irrigation prohibitions are enforced in all stages and becomes progressively restrictive in terms of allowable watering times, days, types of plants allowed. Runoff and water waste is also prohibited.

7.2.2 Commercial, Industrial, Institutional (CII)

CII water use prohibitions are recommended at the normal stage and enforced in Stage 1 and later. Prohibitions affect restaurants and car and linen wash facilities.

7.2.3 Water Features and Swimming Pools

It is prohibited in all stages to drain or refill existing swimming pools, except for protection of public health and safety. Use of water in ornamental fountains in public and commercial establishments shall be prohibited unless the water is recirculated starting in Stage 2.

7.2.4 Other

In all stages, water use from fire hydrants is prohibited without expressed written permission by the District. In all stages customers must use automatic shutoff hose nozzles and repair leaks, breaks, and malfunctions in a timely manner.

7.3 Penalties, Charges, Other Enforcement

The Water Shortage Contingency Plan outlines the procedure to enforce any violation of the water conservation requirements. Enforcement of the requirements of each water conservation stage is conducted in a progressive manner and could lead to termination of service in cases where the violator refuses to dis-continue activities constituting water waste. Up to a fourth violation may be



issued. At the fourth violation, the District assesses a charge on water service and water use. Service charges are provided in Section L of Regulation 3 of the Water Regulations Governing Water Service.

7.4 Consumption Reduction Methods

Consumption reduction methods are actions taken by the District to reduce water demand within the service area, whereas prohibitions, addressed in Section 7.2 limit specific uses of water. For the 80 percent of connections that are metered, actual reductions in water use can be monitored as necessary to achieve the goals of the demand reduction program implemented during water shortages. Daily production will be monitored with the water production meters on a daily or weekly basis, dependent upon the severity of the water shortage. Table 7-3 summarizes the District's consumption reduction methods to reduce water demand in the service area.

Table 7-3. Retail Only: Stages of Water Shortage Contingency Plan - Consumption Reduction Methods (DWR Table 8-3)				
Stage	Consumption reduction methods by water supplier	Additional explanation or reference		
Stage 1	Expand Public Information Campaign	SSWD will send out mailers explaining the Water Conservation Stage Every year, but will step up public outreach when watering days are restricted beginning in Stage 1.		
Normal Water Supply	Improve Customer Billing	Improving customer billing is an ongoing process and takes place whether the District is in Normal Water Supply conditions or an elevated drought stage.		
Normal Water Supply	Increase Frequency of Meter Reading	The District has AMI meters on 15,000 connections and continually monitors for continuous use. Continuous use may indicate a customer has a leak at which time customers identified with continuous use for 72 consecutive hours will receive notification of the situation via mail.		
Normal Water Supply	Offer Water Use Surveys	The District offers Water-Wise House Calls to all customer classes during all stages.		
Normal Water Supply	Provide Rebates on Plumbing Fixtures and Devices	Plumbing fixtures such as showerheads and faucet aerators are offered to customers complementary during all water stages.		
Normal Water Supply	Provide Rebates for Landscape Irrigation Efficiency	Rebates for Irrigation Efficiency are offered to customers during all water stages.		
Normal Water Supply	Reduce System Water Loss	The District is continually attempting to minimize its system water loss with a robust water loss program that is in place for all stages of the Water Shortage Contingency Plan.		
Stage 1	Increase Water Waste Patrols	The District will increase water waste patrol upon entering a Stage 1 Water Alert.		
Stage 4	Moratorium or Net Zero Demand Increase on New Connections	New connections are impacted during and beyond a Stage 4 Water Emergency.		
Stage 4	Implement or Modify Drought Rate Structure or Surcharge	Additional Drought Rate Structures may be implemented during and beyond a Stage 4 - Water Emergency.		

Note: Stage noted is the stage during which the method is initiated. Method will remain in use during all subsequent stages.



Section 7

7.5 Determining Water Shortage Reductions

For the District's metered connections reductions in water use can be quantified and compared with previous years' water use.

7.6 Revenue and Expenditure Impacts

Revenue impacts from reduced water sales would occur since the quantity charge portion of the bill to metered customers would experience a reduction. Revenues from metered customers would be reduced. Customers with meters currently include multi-family, commercial, industrial, irrigation, institutional, and most single family customers. Expenditures regarding the District's water conservation program increase during a water shortage. The District would primarily rely upon its groundwater supply, which is less expensive per acre-foot of supply than the purchase of surface water. This includes the additional cost of electric power to pump groundwater. The District has a reserve policy (contingency fund) in place to help offset revenue and expenditure impacts during times of emergency.

7.7 Resolution or Ordinance

The Water Conservation Regulation is found in Regulation 15 of the District's Regulations Governing Water Service.

7.8 Catastrophic Supply Interruption Plan

The District has prepared a security vulnerability assessment and maintains an Emergency Response Plan to address responding to catastrophic supply interruptions as well as other emergencies. The District also has standby power available in the form of stationary diesel, natural gas and propane generator units. This increases the reliability of supply. The Emergency Response Plan is not included in this document due to security reasons.

The District utilizes an emergency organizational structure and chain of command in response to all emergencies within or affecting its service area. The Emergency Response Plan defines the emergency management positions.

The organizational response is divided into two levels of emergency. The two types of emergencies are categorized as follows:

Site emergency - does not exceed the following criteria:

- Limited to one District facility and
- · Incident has no potential for serious impact on the public or
- · Incident has no potential for serious impact on water quality/delivery

District emergency - exceeds site emergency criteria:

- Incident affects multiple District facilities or
- Incident has the potential for serious impact on the public or
- Incident has the potential for serious impact on water quality/delivery

The roles and responsibilities of each individual in the emergency organization are defined for both levels of emergency.



7.9 Three-Year Minimum Water Supply

An estimate of the minimum water supply for 2016, 2017, and 2018 is based on the combined availability of all water sources available during the District's historical multiple-dry year sequence, 2013, 2014, and 2015.

Table 7-4. Retail: Three-Year Minimum Water Supply, ac-ft/yr (DWR Table 8-4)			
	2016	2017	2018
Available water supply	50,000	50,000	50,000



Section 8

Demand Management Measures

The District conducts an ongoing water conservation program. The District is committed to implementing water conservation measures for all customer sectors. This section provides narrative descriptions addressing the nature and extent of each demand management measure (DMM) implemented over the past five years, from 2010 through 2015, as well as the District's planned implementation of each conservation measure. The District is a signatory to the California Urban Water Conservation Council (CUWCC) Memorandum of Understanding. The District is in full compliance with the CUWCC Memorandum of Understanding and is on track with BMP implementation. The District's most recent conservation reports to the CUWCC for 2013/2014 implementation are provided in Appendix I.

8.1 Water Waste Prohibition

The District's Municipal Code, of the District's regulations governing water service, Regulation 15(Appendix H), is the Water Shortage Contingency Plan. Under normal water supply conditions, a water waste ordinance is in effect unless the Board modifies or adds to these restrictions.

The District has set up an online form and phone number to report water waste. Enforcement of water waste is conducted in a progressive manner in which customer's receive a notice of violation, a warning notice of violation, and then up to four violations, leading up to a fine.

Planned Implementation: The implementation of this DMM is ongoing. The District will continue to enforce this regulation.

Method to Estimate Expected Water Savings: Water savings from this program cannot be directly quantified. Water waste complaints and violations are received and investigated by District staff and addressed via door hangers and/or letter to the billing address.

8.2 Metering

The District is in the process of metering all residential connections. Most of the non-residential connections are metered. The District's Water Meter Asset Management Plan was updated in 2015, It updates the plan to install meters on approximately 11,500 remaining unmetered residential services within the District's service area by 2024.

The District requires meters for all new connections and bills by volume of use for residential and non-residential customers.

Planned Implementation: This DMM is on track to meter all municipal and industrial service connections within its service area on, or before January 1, 2025.

Methods to Estimate Expected Water Savings: Meters allow the District to track customer water use and compare current use to historic data. Comparison to water production in similar type years on a per capita basis can allow for estimation of water savings.



8.3 Conservation Pricing

The District currently implements conservation pricing for all its metered customers. A uniform quantity charge is considered to meet the definition of conservation pricing. Increasing block rates are implemented for residential customers as they become metered.

As part of CUWCC compliance, the District conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters. The feasibility study showed that switching to dedicated landscape meters does not have merit.

Planned Implementation: The implementation of this DMM is ongoing. The District plans to continue implementing its increasing block rate structure for residential customers and uniform rate structure for other customer types.

Methods to Estimate Expected Water Savings: Since some of the accounts are unmetered, there are no methods to estimate expected water savings.

8.4 Public Education and Outreach

The current annual budget for the District's public information programs is \$90,000. The public information program includes print and web-based publications, monthly bill inserts and public outreach events. Details about the number and types of programs can be found in the CUWCC BMP Coverage Reports.

In addition to local public education and outreach programs, the District also participates in a regional public education and outreach program through the Regional Water Authority. The RWA is a joint powers authority formed in 2001 to promote collaboration on water management and water supply reliability programs in the greater Sacramento, Placer, El Dorado, Yolo and Sutter counties. In collaboration with 22 water provider members and other wastewater, stormwater and energy partners, RWA formed the Water Efficiency Program (WEP) in 2001 to bring cost effectiveness through economies of scale to public education and outreach activities.

The WEP operates on an average annual budget of \$411,000 and is supplemented by grant funding. In response to the 2015 drought, the WEP collected an additional \$150,000 in funding from participating water providers for additional media and advertising buys to help meet the SWRCB's mandatory conservation targets. Grant funding is an important funding resource for the WEP. Since 2003, the WEP has been awarded \$9.1 million in grant funding for public outreach and education as well as rebate, direct install, water loss, individualized customer usage reports, large landscape budgets and more.

The main function of the WEP is to develop and distribute public outreach messages for customers in the region by collaborating with its water provider members on their outreach activities. The WEP distributes these messages on a regional scale through regional media and advertising buys. From 2010-2015, the WEP created a series of public outreach campaigns. Below is a summary of each campaign and highlighted achievements.

The Blue Thumb campaign ran from 2010-2012 and was focused on reducing outdoor water use. While most people have heard of a "Green Thumb," which describes someone with a skill for gardening, the campaign showcased people who earned their "Blue Thumb" by making a personal commitment to using water wisely outdoors. The iconic blue thumb gardening gloves were given away at public events and were worn by local celebrities like Sacramento's Mayor Johnson during promotional activities.

The Do the Sprinkler campaign launched in 2013 and featured the vintage sprinkler dance from the 1970's as the celebration residents would do after saving water outdoors. This campaign focused



on finding and fixing problems with the customer's sprinkler system to make sure they were running efficiently. The WEP created a public service announcement, mash-up videos and a series of "how to" videos to show residents how to fix their sprinkler systems.

The How Low Can You Go campaign launched in 2014 and asked residents how low they could get their water use down. The campaign focused on providing three water savings tips, each with increasing water savings and then one tip that went "too far" such as having Rover the dog do the dishes. Campaign posters were mounted in all the bathroom stalls at Raley Field.

The Water Myths Busted! campaign was launched in 2015 to challenge residents to decide what water conservation tips were fact or myth. The main message behind this campaign was to communicate that most of a household's water use is used outdoors. Also in 2015, the WEP partnered with Save Our Water to collaborate on campaign messages and advertising buys.

These campaigns are implemented through both paid advertising buys and earned media from public service announcements. Every year the campaigns can be heard on local radio stations such as Capital Public Radio and online (since 2013) through Google, Facebook and YouTube advertisements. Television advertising was also used when funding was available. For example, in 2015, the WEP partnered with News10 to deliver water conservation messages during the weather forecast. From 2010-2015, the WEP public outreach campaigns generated more than 134 million impressions through advertising and public service announcement activities, 617,000 impressions through video views and 82,000 impressions through online clicks. Impressions represent the number of times an advertisement is served, seen or heard.

The WEP also continues messaging through its own Facebook page. From 2012-2015, the WEP has made 350 Facebook posts about water saving tips and other relevant information. In 2014 and 2015, the WEP hosted several sweepstakes contests including Drought Face, where participates had to proudly submit pictures of their fully bearded face in an effort to save water. The winners of the Drought Face sweepstakes had their photo displayed on a prominent billboard near downtown Sacramento that created 773,000 impressions. The other contest was called Naughty or Nice?, where participates took a holiday theme water conservation quiz to determine if they were naughty or nice in terms of saving water.

In 2014, the WEP's website <u>bewatersmart.info</u> was redesigned to simplify use for visitors. The website contains regional and local water provider information on rebates and services, top ways to save, drought information including an interactive drought map, watering day times and restrictions, a water-wise gardening database, recent press releases, the Sacramento Smart Irrigation Scheduler tool, information about RWA's Carwash Program and more. In 2015, the website received 80,000 unique visitors.

Twice a year the WEP distributes an e-newsletter to residents. The e-newsletters are filled with water savings tips, upcoming events and other interesting articles. They are usually timed around changes in the weather to help signal the need for residents to adjust their irrigation systems, such as day light savings coupled with a message to dial back sprinkler systems.

Every year the WEP selects three to five public events to attend and to have a booth for the public to interact with local water conservation staff. This provides an opportunity for the region to communicate its messages. Events have included the Sacramento Home & Garden Show, Creek Week, Harvest Day, Farm-to-Fork Festival and several Earth Day events. From 2010-2015, all the public events that WEP participated in had an estimated attendance of 362,383 people, which represents about 20 percent of the region's total population.

The WEP is also very active in communicating to local media outlets such as the Sacramento Bee. RWA regularly issues press releases on WEP activities and regionally significant news. From 2010-



2015, the RWA and the WEP were mentioned in 569 news articles published by local and regional media outlets both within and outside of the Sacramento region. From 2010-2014, the WEP averaged about 38 media stories per year. However, media coverage dramatically increased in response to the drought in 2014 and 2015 generating about 200 media stories in the last two years.

In addition to public outreach, the WEP also coordinates public education activities in partnership with the Sacramento Bee's Media in Education (MIE) program. Since 2012, the WEP has hosted the Water Spots contest. The contest is for high school and middle school students. The WEP provides a new theme each year and provides the region's teacher and students with relevant facts and images to help with the development of 30 second PSAs. Students submit their videos to a judging panel of local celebrities who decide on a first, second and third place winner. The top 10 videos are posted online for voting through the MIE program to select a "people's choice" winner as well. Both teachers and student receive cash prizes. The winning PSAs are incorporated into the WEP's media activities as well. Past themes include *BET THE LEAK: Find and Fix Leaks Fast!* and *BE A DROUGHT CHAMP: Conserve Water!* Between 2012 and 2015, 352 videos were submitted.

Also in partnership with MIE, the WEP started a new effort in 2015, the Be Water Smart Poster Contest. A theme was chosen focusing on Fix a Leak Week in March and a poster featuring the region's mascot, Les Leaky, fixing leaks on one side and a water conservation infographic on the other side. This double sided poster was included in the Sacramento Bee's paper on March 15, 2015 and distributed to all zip codes within RWA's members' service areas. The contest received 450 entries and the top five winners posters were posted online and received gift cards.

Planned Implementation: The District's public information and school education program is an ongoing, annual program. The District will continue to provide water conservation materials as part of its community and school outreach programs, as well as continue to work cooperatively with RWA to develop and distribute water conservation information.

Methods to Estimate Expected Water Savings: The District has no method to quantify water conservation savings directly as a result of this DMM.

8.5 Programs to Assess and Manage Distribution System Real Loss

The District's progress to asses and manage the system's real losses consists of ongoing leak detection and repair within the system, focused on the high probability leak areas.

The District conducts water audits and leak detection and repair on an ongoing basis. The District conducted a water loss audit for 2015 as described in Section 3.2 and provided in Appendix E. The District maintains records on all leaks repaired on its treated water system. The information is reviewed each year to determine which pipelines should be considered for replacement as part of the annual budgeted project list.

Planned Implementation: This DMM is currently being implemented and will continue to be implemented as part of the District's ongoing operations and maintenance program.

Methods to Estimate Expected Water Savings: The total amount of water conserved over the five-year period by implementing this DMM is directly related to the percentage of system water losses.

8.6 Water Conservation Program Coordination and Staffing Support

The District has a full-time Water Conservation Supervisor and Water Conservation Technician I/II. The Conservation Supervisor establishes an annual program budget based on available funding and resources. Program accomplishments are highlighted and corresponding goals are established for



the upcoming year. The District also has a full time Water Conservation Technician and hires part time staff as needed to aid in water conservation program implementation activities.

The contact information for the water conservation coordinator is: Greg Bundesen at <u>gbundesen@sswd.org</u>.

Planned Implementation: The implementation of this DMM is ongoing.

Methods to Estimate Expected Water Savings: Water savings from this DMM cannot be directly quantified. Effectiveness of this DMM will be evaluated by the success of the District's water conservation program.

8.7 Other Demand Management Measures

The District implements other residential and non-residential demand management measures as described in this section.

8.7.1 Water Wise House Calls for all Customers

The District provides Water Wise House Calls for customers who request it and for customers who have received a notice of violation. As part of the Water Wise House Call, indoor and outdoor water efficiency checks will be made for fixtures and an efficient, custom irrigation watering schedule will be created.

8.7.2 Rebates

The District also provides a menu of rebate options including rebates for replacement of toilets, recirculating hot water pumps, clothes washers, turf grass, irrigation controllers, pool covers, weather-based irrigation controllers, and rain sensors.


Section 9 References

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- Western Regional Climate Center. Web-Site: Western U.S. Climate Historical Summaries, Climatogolical Data Summaries, (www.wrcc.dri.edu). 2015



Appendix A: Documentation of City/County Notification



From:	John Valdes <jvaldes@sswd.org></jvaldes@sswd.org>
Sent:	Friday, March 18, 2016 3:43 PM
То:	Bob Churchill (RChurch@chwd.org)
Cc:	Robert Roscoe; Dan York; Melanie Holton
Subject:	Sacramento Suburban Water District 2015 Urban Water Management Plan Update

Dear Bob,

The Urban Water Management Planning Act (Act) requires that the Sacramento Suburban Water District (District) update its Urban Water Management Plan (UWMP) by July 1, 2016. The District's current plan was last updated in 2011 and is being reviewed and updated per the requirements of the Act.

The District will make proposed revisions to the UWMP available for public review and will hold a public hearing for public review and comment. The public review period will begin Friday, April 29. The public hearing will be proposed to be scheduled for the May 16, 2016, regular Board meeting to receive comments on the UWMP. The meeting will be at the District's Administrative Office, 3701 Marconi Avenue, Suite 100, Sacramento, California. The meeting will start at 6:30 pm. The District will receive written comments up to the end of the public hearing on May 16, 2016.

Copies of the UWMP will be made available during the public review period through the District's web site at <u>sswd.org</u> under Plans and Reports. Written comments may be sent to:

John Valdes, P.E. Sacramento Suburban Water District 3701 Marconi Avenue, Suite 100 Sacramento, CA 95821 E-mail: <u>jvaldes@sswd.org</u>

Should you have any questions, please call me at 916.679.3988. Thank you.

Very truly yours, Sacramento Suburban Water District



From:	John Valdes <jvaldes@sswd.org></jvaldes@sswd.org>
Sent:	Friday, March 18, 2016 3:48 PM
То:	planning@citrusheights.net
Cc:	Robert Roscoe; Dan York; Melanie Holton
Subject:	Sacramento Suburban Water District 2015 Urban Water Management Plan Update

Dear Ms. McDuffee, Planning Manager-

The Urban Water Management Planning Act (Act) requires that the Sacramento Suburban Water District (District) update its Urban Water Management Plan (UWMP) by July 1, 2016. The District's current plan was last updated in 2011 and is being reviewed and updated per the requirements of the Act.

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John Valdes, P.E. Sacramento Suburban Water District 3701 Marconi Avenue, Suite 100 Sacramento, CA 95821 E-mail: <u>jvaldes@sswd.org</u>

Should you have any questions, please call me at 916.679.3988. Thank you.

Very truly yours, Sacramento Suburban Water District



From:	John Valdes <jvaldes@sswd.org></jvaldes@sswd.org>
Sent:	Friday, March 18, 2016 3:48 PM
То:	bewart@cityofsacramento.org
Cc:	Robert Roscoe; Dan York; Melanie Holton
Subject:	Sacramento Suburban Water District 2015 Urban Water Management Plan Update

Dear Brett,

The Urban Water Management Planning Act (Act) requires that the Sacramento Suburban Water District (District) update its Urban Water Management Plan (UWMP) by July 1, 2016. The District's current plan was last updated in 2011 and is being reviewed and updated per the requirements of the Act.

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Copies of the UWMP will be made available during the public review period through the District's web site at <u>sswd.org</u> under Plans and Reports. Written comments may be sent to:

John Valdes, P.E. Sacramento Suburban Water District 3701 Marconi Avenue, Suite 100 Sacramento, CA 95821 E-mail: <u>jvaldes@sswd.org</u>

Should you have any questions, please call me at 916.679.3988. Thank you.

Very truly yours, Sacramento Suburban Water District



From: Sont:	John Valdes <jvaldes@sswd.org> Friday_March 18_2016 3:47 PM</jvaldes@sswd.org>
To:	jpeifer@cityofsacramento.org
Cc:	Robert Roscoe; Dan York; Melanie Holton
Subject:	Sacramento Suburban Water District 2015 Urban Water Management Plan Update

Dear Jim,

The Urban Water Management Planning Act (Act) requires that the Sacramento Suburban Water District (District) update its Urban Water Management Plan (UWMP) by July 1, 2016. The District's current plan was last updated in 2011 and is being reviewed and updated per the requirements of the Act.

The District will make proposed revisions to the UWMP available for public review and will hold a public hearing for public review and comment. The public review period will begin Friday, April 29. The public hearing will be proposed to be scheduled for the May 16, 2016, regular Board meeting to receive comments on the UWMP. The meeting will be at the District's Administrative Office, 3701 Marconi Avenue, Suite 100, Sacramento, California. The meeting will start at 6:30 pm. The District will receive written comments up to the end of the public hearing on May 16, 2016.

Copies of the UWMP will be made available during the public review period through the District's web site at <u>sswd.org</u> under Plans and Reports. Written comments may be sent to:

John Valdes, P.E. Sacramento Suburban Water District 3701 Marconi Avenue, Suite 100 Sacramento, CA 95821 E-mail: <u>jvaldes@sswd.org</u>

Should you have any questions, please call me at 916.679.3988. Thank you.

Very truly yours, Sacramento Suburban Water District



From:	John Valdes <jvaldes@sswd.org></jvaldes@sswd.org>
Sent:	Friday, March 18, 2016 3:46 PM
То:	ZuccaroD@SacCounty.NET
Cc:	Robert Roscoe; Dan York; Melanie Holton
Subject:	Sacramento Suburban Water District 2015 Urban Water Management Plan Update

Dear Dave,

The Urban Water Management Planning Act (Act) requires that the Sacramento Suburban Water District (District) update its Urban Water Management Plan (UWMP) by July 1, 2016. The District's current plan was last updated in 2011 and is being reviewed and updated per the requirements of the Act.

The District will make proposed revisions to the UWMP available for public review and will hold a public hearing for public review and comment. The public review period will begin Friday, April 29. The public hearing will be proposed to be scheduled for the May 16, 2016, regular Board meeting to receive comments on the UWMP. The meeting will be at the District's Administrative Office, 3701 Marconi Avenue, Suite 100, Sacramento, California. The meeting will start at 6:30 pm. The District will receive written comments up to the end of the public hearing on May 16, 2016.

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John Valdes, P.E. Sacramento Suburban Water District 3701 Marconi Avenue, Suite 100 Sacramento, CA 95821 E-mail: <u>jvaldes@sswd.org</u>

Should you have any questions, please call me at 916.679.3988. Thank you.

Very truly yours, Sacramento Suburban Water District



From:	John Valdes <jvaldes@sswd.org></jvaldes@sswd.org>
Sent:	Friday, March 18, 2016 3:45 PM
То:	GrinsteadM@saccounty.net
Cc:	Robert Roscoe; Dan York; Melanie Holton
Subject:	Sacramento Suburban Water District 2015 Urban Water Management Plan Update

Dear Mike,

The Urban Water Management Planning Act (Act) requires that the Sacramento Suburban Water District (District) update its Urban Water Management Plan (UWMP) by July 1, 2016. The District's current plan was last updated in 2011 and is being reviewed and updated per the requirements of the Act.

The District will make proposed revisions to the UWMP available for public review and will hold a public hearing for public review and comment. The public review period will begin Friday, April 29. The public hearing will be proposed to be scheduled for the May 16, 2016, regular Board meeting to receive comments on the UWMP. The meeting will be at the District's Administrative Office, 3701 Marconi Avenue, Suite 100, Sacramento, California. The meeting will start at 6:30 pm. The District will receive written comments up to the end of the public hearing on May 16, 2016.

Copies of the UWMP will be made available during the public review period through the District's web site at <u>sswd.org</u> under Plans and Reports. Written comments may be sent to:

John Valdes, P.E. Sacramento Suburban Water District 3701 Marconi Avenue, Suite 100 Sacramento, CA 95821 E-mail: <u>jvaldes@sswd.org</u>

Should you have any questions, please call me at 916.679.3988. Thank you.

Very truly yours, Sacramento Suburban Water District



From: Sent: To: Subject: Hightail <delivery@yousendit.com> Monday, May 02, 2016 12:42 PM Melanie Holton File Delivered: SSWD 2015 DRAFT UWMP



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To: afecko@pcwa.net, bsmith@pcwa.net, jvaldes@sswd.org

Subject: SSWD 2015 DRAFT UWMP

Message:

Attached is Sacramento Suburban Water District's (District) DRAFT 2015 Urban Water Management Plan (UWMP). The District has completed preparation of its DRAFT UWMP. The UWMP is now available for public review and comment. The District's Board of Directors will conduct a public hearing pursuant to California Water Code Section 10642 regarding the District's proposed 2015 UWMP. The hearing will be held at the following time and place: May 16, 2016, 6:30pm, District's Administrative Office, 3701 Marconi Ave, Suite 100, Sacramento, California. At the hearing, the District's Board of Directors will receive comments from the public regarding the proposed UWMP and will vote whether to adopt the UWMP. The UWMP is available for public review at <u>www.sswd.org</u> and at the District's Administrative Office.

Written comments may be sent to: John Valdes, PE Sacramento Suburban Water District 3701 Marconi Ave, Suite 100 Sacramento, CA 95821 E-mail: <u>jvaldes@sswd.org</u> or contact John Valdes at 916.679.3988 Thank you, Melanie Holton, PE* Principal Engineer *Licensed in California

From: Sent: To: Subject: Hightail <delivery@yousendit.com> Monday, May 02, 2016 12:44 PM Melanie Holton File Delivered: SSWD DRAFT 2015 UWMP



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To: bewart@cityofsacramento.org, bestrada@westyost.com, jvaldes@sswd.org

Subject: SSWD DRAFT 2015 UWMP

Message:

Attached is Sacramento Suburban Water District's (District) DRAFT 2015 Urban Water Management Plan (UWMP). The District has completed preparation of its DRAFT UWMP. The UWMP is now available for public review and comment. The District's Board of Directors will conduct a public hearing pursuant to California Water Code Section 10642 regarding the District's proposed 2015 UWMP. The hearing will be held at the following time and place: May 16, 2016, 6:30pm, District's Administrative Office, 3701 Marconi Ave, Suite 100, Sacramento, California. At the hearing, the District's Board of Directors will receive comments from the public regarding the proposed UWMP and will vote whether to adopt the UWMP. The UWMP is available for public review at <u>www.sswd.org</u> and at the District's Administrative Office.

Written comments may be sent to: John Valdes, PE Sacramento Suburban Water District 3701 Marconi Ave, Suite 100 Sacramento, CA 95821 E-mail: <u>ivaldes@sswd.org</u> or contact John Valdes at 916.679.3988 Thank you, Melanie Holton, PE* Principal Engineer *Licensed in California

From: Sent: To: Subject: Hightail <delivery@yousendit.com> Monday, May 02, 2016 3:10 PM Melanie Holton File Delivered: SSWD DRAFT 2015 UWMP



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To: Ibillingsley@usbr.gov, jvaldes@sswd.org

Subject: SSWD DRAFT 2015 UWMP

Message:

Ms. Billingsley,

Attached is Sacramento Suburban Water District's (District) DRAFT 2015 Urban Water Management Plan (UWMP). The District has completed preparation of its DRAFT UWMP. The UWMP is now available for public review and comment. The District's Board of Directors will conduct a public hearing pursuant to California Water Code Section 10642 regarding the District's proposed 2015 UWMP. The hearing will be held at the following time and place: May 16, 2016, 6:30pm, District's Administrative Office, 3701 Marconi Ave, Suite 100, Sacramento, California. At the hearing, the District's Board of Directors will receive comments from the public regarding the proposed UWMP and will vote whether to adopt the UWMP. The UWMP is available for public review at <u>www.sswd.org</u> and at the District's Administrative Office.

Written comments may be sent to: John Valdes, PE Sacramento Suburban Water District 3701 Marconi Ave, Suite 100 Sacramento, CA 95821 E-mail: <u>ivaldes@sswd.org</u> or contact John Valdes at 916.679.3988 Thank you, Melanie Holton, PE* Principal Engineer *Licensed in California

From: Sent: To: Subject: Hightail <delivery@yousendit.com> Monday, May 02, 2016 3:18 PM Melanie Holton File Delivered: SSWd 2015 DRAFT UWMP



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To: jvaldes@sswd.org, deana.donohue@amwater.com

Subject: SSWd 2015 DRAFT UWMP

Message:

Deana,

Attached is Sacramento Suburban Water District's (District) DRAFT 2015 Urban Water Management Plan (UWMP). The District has completed preparation of its DRAFT UWMP. The UWMP is now available for public review and comment. The District's Board of Directors will conduct a public hearing pursuant to California Water Code Section 10642 regarding the District's proposed 2015 UWMP. The hearing will be held at the following time and place: May 16, 2016, 6:30pm, District's Administrative Office, 3701 Marconi Ave, Suite 100, Sacramento, California. At the hearing, the District's Board of Directors will receive comments from the public regarding the proposed UWMP and will vote whether to adopt the UWMP. The UWMP is available for public review at <u>www.sswd.org</u> and at the District's Administrative Office.

Written comments may be sent to: John Valdes, PE Sacramento Suburban Water District 3701 Marconi Ave, Suite 100 Sacramento, CA 95821 E-mail: <u>jvaldes@sswd.org</u> or contact John Valdes at 916.679.3988 Thank you, Melanie Holton, PE* Principal Engineer *Licensed in California

Appendix B: Notice of Public Hearing



The Sacramento Bee

P.O. Box 15779 • 2100 Q Street • Sacramento, CA 95852

SACRAMENTO SUBURBAN WATER DISTRICT 3701 MARCONI AVE SACRAMENTO, CALIFORNIA 95821

DECLARATION OF PUBLICATION (C.C.P. 2015.5)

COUNTY OF SACRAMENTO STATE OF CALIFORNIA

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interest ed in the above entitled matter. I am the printer and principal clerk of the publisher of The Sacramento Bee, printed and published in the City of Sacramento, County of Sacramento, State of California, daily, for which said newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Sacramento, State of California, under the date of September 26, 1994, Action No. 379071; that the notice of which the annexed is a printed copy, has been published in each issue thereof and not in any supplement thereof on the following dates, to wit:

MAY 2, 9, 2016

I certify (or declare) under penalty of perjury that the foregoing is true and correct and that this declaration was executed at Sacramento, California,

on MAY 9, 2016

(Signature)

NO 331 PUBLIC NOTICE

SACRAMENTO SUBURBAN WATER DISTRICT NOTICE OF PUBLIC HEARING ON URBAN WATER MANAGEMENT PLAN UPDATE

NOTICE IS HEREBY GIVEN THAT PURSUANT TO THE PROVISIONS OF Section 10610 and following of the Water Code, Sacramento Suburban Water District (SSWD) has prepared an Urban Water Management Plan (UWMP) and that the District intends to adopt the proposed plan after a public hearing.

The UWMP brings together important information on water supply and usage, recycled water and conservation programs at SSWD. SSWD is updating its 2010 UWMP to reflect current conditions and legislation including requirements established in SBx7-7, Water Conservation Act of 2009. The UWMP presents SSWD's sefforts to promote efficient water use consistent with the California Urban Water Management Planning Act.

The Plan and the proposed changes and amendments are available for public inspection at the District Administrative Office located at 3701 Marconi Avenue, Suite 100, Sacramento, California. Copies of the Plan can be downloaded from sswd.org or copies may be requested by contacting John Valdes by e-mail at Jvaldes@sswd.org or by mail at Sacramento, Subtran Water District, 3701 Marconi Avenue, Suite 100, Sacramento, California 95821. In addition, copies of the Plan are available for public inspection at the following public libraries: Arcade Library located at 2443 Marconi Avenue, Sacramento, California; and North Highlands/Antelope Library located at 4235 Antelope Road, Antelope, California.

NOTICE IS FUTHER GIVEN that a public hearing will be held on the proposed Plan at a meeting of the Board of Directors to be held on May 16, 2016, at the hour of 6:30 p.m. at the SSWD Administrative Office at the above address.

Upon completion of said public hearing, the Plan will be modified if required and a final draft prepared for adoption at the June 20, 2016, regularly scheduled Board Meeting.

Appendix C: Adoption Resolution



RESOLUTION NO. 16-17

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SACRAMENTO SUBURBAN WATER DISTRICT ADOPTING AN URBAN WATER MANAGEMENT PLAN

WHEREAS, the Urban Water Management Planning Act, Water Code sections 10610 through 10656 (the "Act"), mandates that every supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre feet of water annually is an urban water supplier obligated to prepare an Urban Water Management Plan ("Plan"), the primary objectives of which are to plan for the conservation and efficient use of water;

WHEREAS, the District is an urban water supplier under Water Code section 10617 because it provides approximately 34,507 acre-feet of water (five-year average) to approximately 173,380 people through approximately 46,650 connections;

WHEREAS, the District is required by the Act to adopt a final updated Plan by no later than July 1, 2016, after staff and consultants have reviewed and amended the previous Plan and after the Board holds a public review and hearing on the draft updated Plan;

WHEREAS, as shown in Table 1-1, pages 1-2 and 1-3 and Appendices A and B of the Plan, the District has prepared and circulated a draft Plan for public review and review by the County of Sacramento and other interested agencies, and properly noticed a public hearing concerning the Plan, including publication of notice two times in The Sacramento Bee as required by Government Code section 6066;

WHEREAS, the Board of Directors held the required public hearing on the plan during its regular Board meeting on May 16, 2016, and no written or oral comments concerning the Plan were received from the public or any interested agency;

WHEREAS, in accordance with Water Code section 10652 the preparation of the Plan is deemed not to be a project for purposes of the California Environmental Quality Act ("CEQA") and therefore, no CEQA review of the Plan was required or conducted; and

WHEREAS, after the public review period, District staff and consultants have prepared a final Plan in accordance with comments and direction received from the Board of Directors at the May 16, 2016 public hearing, and with any additional comments and direction from the Board of Directors and any public comments on the final draft Plan at a properly noticed public meeting held on June 20, 2016.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of Sacramento Suburban Water District as follows:

1. The Board finds that the District's updated Urban Water Management Plan, dated June 20, 2016, contains all elements required by the Act and hereby adopts the

Plan. The General Manager is authorized and directed to file the District's 2015 Urban Water Management Plan with the California Department of Water Resources, the California State Library, and the County of Sacramento by no later than July 1, 2016, and to file any plan amendments with those agencies within 30 days of adoption of any such amendment.

- 2. The General Manager is authorized and directed to implement the water conservation programs and other actions described in the Plan, which includes the water shortage contingency analysis and recommendations to the Board of Directors regarding necessary procedures, rules and regulations to carry out effective and equitable water conservation and water recycling programs.
- 3. The General Manager is authorized to update elements of the Plan as necessary, and to file all such updates in the manner provided in Section 1 of this Resolution.
- 4. The General Manager shall recommend to the Board of Directors additional regulations to carry out the effective and equitable allocation of water resources.
- 5. The General Manager or his designee will make a copy of the District's adopted 2015 Urban Water Management Plan available for public review during normal business hours within 30 days of its adoption.

PASSED AND ADOPTED by the Board of Directors of Sacramento Suburban Water District at its regular meeting on June 20, 2016 by the following vote:

AYES: Gayle, Locke, Schild, Thomas and Wichert NOES: None ABSENT: None

By:

Kevin M. Thomas President, Board of Directors Sacramento Suburban Water District

I hereby certify that the foregoing resolution was duly and regularly adopted and passed by the Board of Directors of Sacramento Suburban Water District at a regular meeting hereof held on June 20, 2016.

(SEAL)

By:

not for

Robert S. Roseoe Secretary, Board of Directors Sacramento Suburban Water District

Appendix D: DWR UWMP Checklist



Checklist Arranged by Subject

CWC Section	UWMP Requirement	Subject	Guidebook Location	UWMP Location (Optional Column for Agency Use)
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	Section 1.1
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 2.5.2	Section 1.3
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.	Plan Preparation	Section 2.5.2	Section 1.3
10631(a)	Describe the water supplier service area.	System Description	Section 3.1	Section 2.1
10631(a)	Describe the climate of the service area of the supplier.	System Description	Section 3.3	Section 2.2
10631(a)	Provide population projections for 2020, 2025, 2030, and 2035.	System Description	Section 3.4	Section 2.3
10631(a)	Describe other demographic factors affecting the supplier's water management planning.	System Description	Section 3.4	Section 2.3
10631(a)	Indicate the current population of the service area.	System Description and Baselines and Targets	Sections 3.4 and 5.4	Section 2.3
10631(e)(1)	Quantify past, current, and projected water use, identifying the uses among water use sectors.	System Water Use	Section 4.2	Section 3.1
10631(e)(3)(A)	Report the distribution system water loss for the most recent 12-month period available.	System Water Use	Section 4.3	Section 3.2
10631.1(a)	Include projected water use needed for lower income housing projected in the service area of the supplier.	System Water Use	Section 4.5	Section 3.4
10608.20(b)	Retail suppliers shall adopt a 2020 water use target using one of four methods.	Baselines and Targets	Section 5.7 and App E	Section 4
10608.20(e)	Retail suppliers shall provide baseline daily per capita water use, urban water use target, interim urban water use target, and	Baselines and Targets	Chapter 5 and App E	Section 4/Appendix F

	compliance daily per capita water use, along with the bases for determining those			
	estimates, including references to supporting data.			
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 is the suppliers base GPCD is at or below 100.	Baselines and Targets	Section 5.7.2	Section 4.5.2 Appendix F
10608.24(a)	Retail suppliers shall meet their interim target by December 31, 2015.	Baselines and Targets	Section 5.8 and App E	4.5.3 Appendix F
1608.24(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 5.8.2	N/A 4.5.3 Appendix F
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	Section 5.1	N/A
10608.40	Retail suppliers shall report on their progress in meeting their water use targets. The data shall be reported using a standardized form.	Baselines and Targets	Section 5.8 and App E	4.5.3 Appendix F
10631(b)	Identify and quantify the existing and planned sources of water available for 2015, 2020, 2025, 2030, and 2035.	System Supplies	Chapter 6	Section 5
10631(b)	Indicate whether groundwater is an existing or planned source of water available to the supplier.	System Supplies	Section 6.2	Section 5.2
10631(b)(1)	Indicate whether a 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	Section 5.2
10631(b)(2)	Describe the groundwater basin.	System Supplies	Section 6.2.1	Section 5.2
10631(b)(2)	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 6.2.2	N/A
10631(b)(2)	For unadjudicated basins, indicate whether or not the department has identified the basin as overdrafted, or projected to become overdrafted. Describe efforts by the supplier to eliminate the long-term overdraft condition.	System Supplies	Section 6.2.3	Section 5.2
10631(b)(3)	Provide a detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water	System Supplies	Section 6.2.4	Section 5.2

	supplier for the past five years			
10631(b)(4)	Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped.	System Supplies	Sections 6.2 and 6.9	Section 5.2, Table 5-11
10631(d)	Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.	System Supplies	Section 6.7	Section 5.7
10631(g)	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 multiple-dry years.	System Supplies	Section 6.8	Section 5.8
10631(i)	Describe desalinated water project opportunities for long-term supply.	System Supplies	Section 6.6	N/A, Section 5.6
10631(j)	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 2.5.1	Table 1.5
10631(j)	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	Section 2.5.1	N/A
10633	For wastewater and recycled water, coordinate with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.1	Section 5.5.1
10633(a)	Describe the wastewater collection and treatment systems in the supplier's service area. Include quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.	System Supplies (Recycled Water)	Section 6.5.2	Section 5.5.2
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 6.5.2.2	Section 5.5.2
10633(c)	Describe the recycled water currently being used in the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.3 and 6.5.4	Section 5.5.2
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 6.5.4	N/A Section 5.5.3, Section 5.5.4
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	System Supplies (Recycled Water)	Section 6.5.4	N/A Section 5.5.3, Section

	comparison to uses previously projected.			5.5.4
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 6.5.5	Section 5.5.4
10633(g)	Provide a plan for optimizing the use of recycled water in the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.5	Section 5.5.4
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	Section 6.4
10631(c)(1)	Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage.	Water Supply Reliability Assessment	Section 7.1	Section 5 and Section 6
10631(c)(1)	Provide data for an average water year, a single dry water year, and multiple dry water years	Water Supply Reliability Assessment	Section 7.2	Section 6.2
10631(c)(2)	For any water source that may not be available at a consistent level of use, describe plans to supplement or replace that source.	Water Supply Reliability Assessment	Section 7.1	Section 5 and Section 6
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	Section 6.1
10635(a)	Assess the water supply reliability during normal, dry, and multiple dry 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 7.3	Section 6.3
10632(a) and 10632(a)(1)	Provide an urban water shortage contingency analysis that specifies stages of action and an outline of specific water supply conditions at each stage.	Water Shortage Contingency Planning	Section 8.1	Section 7.1
10632(a)(2)	Provide an estimate of the minimum water supply available during each of the next three water years based on the driest three- year historic sequence for the agency.	Water Shortage Contingency Planning	Section 8.9	Section 7.9
10632(a)(3)	Identify actions to be undertaken by the urban water supplier in case of a catastrophic interruption of water supplies.	Water Shortage Contingency Planning	Section 8.8	Section 7.8
10632(a)(4)	Identify mandatory prohibitions against specific water use practices during water shortages.	Water Shortage Contingency Planning	Section 8.2	Section 7.2
10632(a)(5)	Specify consumption reduction methods in the most restrictive stages.	Water Shortage Contingency Planning	Section 8.4	Section 7.4
10632(a)(6)	Indicated penalties or charges for excessive	Water Shortage	Section 8.3	Section 7.3

	use, where applicable.	Contingency Planning		
10632(a)(7)	Provide an analysis of the impacts of each of the actions and conditions in the water shortage contingency analysis on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts.	Water Shortage Contingency Planning	Section 8.6	Section 7.6
10632(a)(8)	Provide a draft water shortage contingency resolution or ordinance.	Water Shortage Contingency Planning	Section 8.7	Appendix H
10632(a)(9)	Indicate a mechanism for determining actual reductions in water use pursuant to the water shortage contingency analysis.	Water Shortage Contingency Planning	Section 8.5	Section 7.5
10631(f)(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	Sections 9.2 and 9.3	Section 8
10631(f)(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	Sections 9.1 and 9.3	N/A
10631(j)	CUWCC members may submit their 2013- 2014 CUWCC BMP annual reports in lieu of, or in addition to, describing the DMM implementation in their UWMPs. This option is only allowable if the supplier has been found to be in full compliance with the CUWCC MOU.	Demand Management Measures	Section 9.5	Appendix I
10608.26(a)	Retail suppliers shall conduct a public hearing to discuss adoption, implementation, and economic impact of water use targets.	Plan Adoption, Submittal, and Implementation	Section 10.3	Section 1.4
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.	Plan Adoption, Submittal, and Implementation	Section 10.2.1	Section 1.4 Appendix A
10621(d)	Each urban water supplier shall update and submit its 2015 plan to the department by July 1, 2016.	Plan Adoption, Submittal, and Implementation	Sections 10.3.1 and 10.4	Section 1.4
10635(b)	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 60 days after the submission of the plan to DWR.	Plan Adoption, Submittal, and Implementation	Section 10.4.4	Section 1.4
10642	Provide supporting documentation that the urban water supplier made the plan available	Plan Adoption, Submittal, and	Sections 10.2.2, 10.3,	Appendix B

	for public inspection, published notice of the public hearing, and held a public hearing about the plan.	Implementation	and 10.5	
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	Sections 10.2.1	Section 1.4 Appendix A
10642	Provide supporting documentation that the plan has been adopted as prepared or modified.	Plan Adoption, Submittal, and Implementation	Section 10.3.1	Section 1.4 Appendix C
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 10.4.3	Section 1.4
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 10.4.4	Section 1.4
10644(a)(2)	The plan, or amendments to the plan, submitted to the department shall be submitted electronically.	Plan Adoption, Submittal, and Implementation	Sections 10.4.1 and 10.4.2	Section 1.4
10645	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 10.5	Section 1.4

Appendix E: Distribution System Water Loss Audit



AWWA	Free Water Audit S Reporting Workshe	oftware: <u>et</u>		W/ American Water Wor Copyright © 2014, All Ri	AS v5.0 ks Association ghts Reserved
Click to access definition Glick to add a comment Click to add a comment	nento Suburban Water Distr 5 1/2015 - 12/2015	ict (CA3410001)			
Please enter data in the white cells below. Where available, metered values should be use data by grading each component (n/a or 1-10) using the drop-down list to the left of the inp All volumes to the inp All volumes t	ed; if metered values are unavailabut cell. Hover the mouse over the mouse over the entered as: MILLION GAI	able please estimate a value. Indi e cell to obtain a description of th LONS (US) PER YEAR	cate your confiden e grades	ce in the accuracy of the inpu	ıt
To select the correct data grading for each input, determine	the highest grade where the		Maatar Matar a	ad Supply Error Adjustma	
WATER SUPPLIED	<pre>classify and an grades below it.</pre>	in column 'E' and 'J'>	Pcnt:	Value:	us
Volume from own sources: + ? Water imported: + ?	7 8,935.333 7 26.087	MG/Yr + ? MG/Yr + ?	7 -2.00%		MG/Yr MG/Yr
Water exported: + ?	n/a 0.000	MG/Yr + ?	Enter negative	O O or value for under-regis	MG/Yr tration
WATER SUPPLIED:	9,143.774	MG/Yr	Enter positive %	6 or value for over-registra	tion
AUTHORIZED CONSUMPTION Billed metered: + ? Billed unmetered: + ?	7 7,478.155	MG/Yr MG/Yr		Click here: ? for help using option buttons below	
Unbilled metered: + ?	10 0.012	MG/Yr	Pcnt:	Value:	MONE
Default option selected for Unbilled unmetered	- a grading of 5 is applied I	out not displayed	1.23%	▲	IVIG/ T
AUTHORIZED CONSUMPTION: 2	8,674.464	MG/Yr		E Use buttons to select percentage of water supp	lied
WATER LOSSES (Water Supplied - Authorized Consumption)	469.310	MG/Yr		value	
Apparent Losses]	Pcnt:	▼ Value:	_
Unauthorized consumption: + ?	22.859	MG/Yr	0.25%	• •	MG/Yr
Customer metering inaccuracies: + ?	7 393.588	MG/Yr	5.00%	• •	MG/Yr
Systematic data handling errors: + ? Default option selected for Systematic data handl	ing errors - a grading of 5 is	MG/Yr s applied but not displayed	0.25%	•_C	MG/Yr
Apparent Losses: 2	435.143	MG/Yr			
Real Losses (Current Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: ?	34.167	MG/Yr			
WATER LOSSES:	469.310	MG/Yr			
NON-REVENUE WATER NON-REVENUE WATER: 2	583.619	MG/Yr			_
SYSTEM DATA					_
Length of mains: + ? Number of <u>active AND inactive</u> service connections: + ? Service connection density: ?	9 696.0 9 46,414 67	miles conn./mile main			
Are customer meters typically located at the curbstop or property line?	Yes	(length of service line	beyond the prope	arty boundary	
Average length of customer service line: + ? Average length of customer service line has been set to ze	ero and a data grading score	that is the responsibili e of 10 has been applied	ty of the utility)		
Average operating pressure: + ?	9 50.0	psi			
COST DATA					_
Total annual cost of operating water system: + ?	10 \$24,913,909	\$/Year			
Variable production cost (applied to Apparent Losses): + ?	10 \$278.74	\$/Million gallons Use C	customer Retail Unit	Cost to value real losses	
WATER ALIDIT DATA VALIDITY SCORF					-
*** YOU	R SCORE IS: 75 out of 100 **	*			7
A weighted scale for the components of consumption ar	nd water loss is included in the ca	Iculation of the Water Audit Data	Validity Score		
PRIORITY AREAS FOR ATTENTION:					
Based on the information provided, audit accuracy can be improved by addressing the follo	owing components:				
2: Billed unmetered					
3: Billed metered					

	AWWA Free Water Audit Software: System Attributes and Performance Indicators	WAS v5.0 American Water Works Association. Copyright © 2014, All Rights Reserved.
	Water Audit Report for: Sacramento Suburban Water District (CA3410001) Reporting Year: 2015 1/2015 - 12/2015	
	*** YOUR WATER AUDIT DATA VALIDITY SCORE IS: 75 out of 100 ***	
<u>System Attributes:</u>	Apparent Losses:435.143MG/Yr+Real Losses:34.167MG/Yr	
	= Water Losses: 469.310 MG/Yr	
	Unavoidable Annual Real Losses (UARL): 195.78 MG/Yr	
	Annual cost of Apparent Losses: \$488,629	
	Annual cost of Real Losses: \$9,524 Valued at Vari	able Production Cost
Performance Indicators:	Return to Reporting w	orksheet to change this assumption
	Non-revenue water as percent by volume of Water Supplied: 6.4%	
Financial: -	Non-revenue water as percent by cost of operating system: 2.1% Real Losses value	ed at Variable Production Cost
Γ	Apparent Losses per service connection per day: 25.69 gallons/connection	/day
Operational Efficiency:	Real Losses per service connection per day: 2.02 gallons/connection	/day
	Real Losses per length of main per day*: N/A	
	Real Losses per service connection per day per psi pressure: 0.04 gallons/connection	/day/psi
	From Above, Real Losses = Current Annual Real Losses (CARL): 34.17 million gallons/yea	r
	Infrastructure Leakage Index (ILI) [CARL/UARL]: 0.17	
* This performance indicator applies for s	ystems with a low service connection density of less than 32 service connections/mile of pipeline	

	AWWA Free Water Audit Software:	WAS v5.0
	User Comments	American Water Works Association. Copyright © 2014, All Rights Reserved.
Use this work	sheet to add comments or notes to explain how an input value was calculated, or to document the sources of the inform	ation used.
General Comment:		
Audit Item	Comment	
Volume from own sources:		
Vol. from own sources: Master meter error adjustment:		
Water imported:		
Water imported: master meter error adjustment:		
Water exported:		
Water exported: master meter error adjustment:		
Billed metered:	Total of the Metered Domestic and Transitional Domestic customers.	
Billed unmetered:	Flat rate consumption is based on the average metered consumption of customers with similar lot sizes.	
Unbilled metered:	We only have one account that has a meter and is not charged for it. The ARPF Accout number 046809-00 used 16 CCF's of wat	er in 2015.

Audit Item	Comment					
Unbilled unmetered:						
Unauthorized consumption:						
Customer metering inaccuracies:						
Systematic data handling errors:						
Length of mains:						
Number of active AND inactive service connections:						
Average length of customer service line:						
Average operating pressure:						
Total annual cost of operating water system:						
Customer retail unit cost (applied to Apparent Losses):						
Variable production cost (applied to Real Losses):						
		AW	/WA Free Wa	ter Audit Software: <u>Wate</u>	e r Balance Americ Copyright	WAS v5.0 can Water Works Association. © 2014, All Rights Reserved.
------------------------------------	---------------------------	----------------------	-------------------------------------------------------------------	--------------------------------------------------	-------------------------------------------------------------------------	--------------------------------------------------------------------------
		Wa	ater Audit Report for: Reporting Year: Data Validity Score:	Sacramento Suburban Water District 2015 75	(CA3410001) 1/2015 - 12/2015	
		Water Exported 0.000			Billed Water Exported	Revenue Water 0.000
				Billed Authorized Consumption	Billed Metered Consumption (water exported is removed) 7,478.155	Revenue Water
Own Sources (Adjusted for known			Authorized Consumption	8,560.155	Billed Unmetered Consumption 1,082.000	8,560.155
errors)			8,674.464	Unbilled Authorized Consumption	Unbilled Metered Consumption 0.012	Non-Revenue Water (NRW)
9,117.687				114.309	Unbilled Unmetered Consumption 114.297	
	System Input 9,143.774	Water Supplied		Apparent Losses	Unauthorized Consumption 22.859	583.619
		9,143.774		435.143	Customer Metering Inaccuracies 393.588	
			Water Losses		Systematic Data Handling Errors 18.695	
Water Imported			469.310	Peal Losses	Leakage on Transmission and/or Distribution Mains Not broken down	
26.087				34.167	Leakage and Overflows at Utility's Storage Tanks	
					Leakage on Service Connections Not broken down	



Appendix F: SBX7-7 GPCD Verification Forms



Persons Pe	r SF MF/GC) Connectio	n							
Year	Block Grou	Block Grou	Block Grou	Block Servi	Block Pop	Block Pop	# SF Conne	# MF/GQ (Persons Pe	Persons Pe
1990	100,846	155,838	64.71%	155,164	100,410	54,754			2.48	25.57
1991									2.51	25.02
1992									2.54	24.47
1993									2.57	23.93
1994									2.59	23.38
1995									2.62	22.83
1996									2.65	22.28
1997									2.68	21.73
1998									2.71	21.18
1999									2.74	20.63
2000	106,784	169,432	63.02%	167,003	105,253	61,750	38035	3075	2.77	20.08
2001									2.8	19.53
2002									2.83	18.98
2003									2.86	18.43
2004									2.89	17.88
2005									2.92	17.34
2006									2.94	16.79
2007									2.97	16.24
2008									3	15.69
2009									3.03	15.14
2010	115,800	172,500	67.13%	170,050	114,155	55,895	37366	3831	3.06	14.59
2015									3.2	11.85
Population	Using Pers	ons-per-Co	nnection							
	Year	# SF Conne	# MF/GQ C	Persons Pe	Persons Pe	SF Populat	MF/GQ Po	Total Popu	lation	
10 to 15 Ye	ear Baseline	Populatior	n Calculatio	ns						
Year 1	1995	38232	2150	2.62	22.83	100,297	49,078	149,375		
Year 2	1996	38275	2200	2.65	22.28	101,511	49,011	150,522		
Year 3	1997	39924	2250	2.68	21.73	107,034	48,889	155,923		
Year 4	1998	39589	2300	2.71	21.18	107,275	48,713	155,988		
Year 5	1999	39762	2318	2.74	20.63	108,888	47,821	156,709		
Year 6	2000	38035	3075	2.77	20.08	105,253	61,750	167,003		
Year 7	2001	41054	2500	2.8	19.53	114,910	48,828	163,738		
Year 8	2002	41603	2000	2.83	18.98	117,653	37,964	155,617		
Year 9	2003	40290	2500	2.86	18.43	115.109	46.083	161.191		
Year 10	2004	35589	3268	2.89	17.88	102.710	58,445	161.155		
5 Year Base	eline Popula	ation Calcul	ations		27.000			101/100		
Year 1	2003	40290	2500	2 86	18 43	115 109	46 083	161 191		
Year 2	2003	35580	2300	2.00	17 88	102 710	58 445	161 155		
Vear 2	2004	3716/	2803	2.09	17 2/	102,710	65 025	17/ 252		
Voar /	2003	27104	2003	2.92	16 70	100,333	62 004	172 000		
Voar E	2000	27121	2001	2.94	16.79	110 022	61 005	173,000		
2015 Com	2007	5/2/0	Solution	2.97	10.24	110,022	01,032	1/2,/1/		
2013 COM				נוו ר ר	11 05	172 420	40.040	172 200		
	2013	50054	4210	5.2	11.00	123,439	45,540	1/3,300		
				1	1	İ.	1		İ.	1



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: Ba	seline Period Ranges		
Baseline	Parameter	Value	Units
	2008 total water deliveries	38498	Acre Feet
	2008 total volume of delivered recycled water	0	Acre Feet
10- to 15-year	2008 recycled water as a percent of total deliveries	0.00%	Percent
baseline period	Number of years in baseline period ^{1, 2}	10	Years
	Year beginning baseline period range	1995	
	Year ending baseline period range ³	2004	
Evor	Number of years in baseline period	5	Years
baseline period	Year beginning baseline period range	2003	
baseline period	Year ending baseline period range ⁴	2007	
¹ If the 2008 recycled water delivered in 2008 is 10 perc that the baseline period is b	percent is less than 10 percent, then the first baseline period is a continuous 10 ent or greater, the first baseline period is a continuous 10- to 15-year period. between 10 and 15 years. However, DWR recognizes that some water suppliers of	P-year period. If the amo ² T _. may not have the minim	unt of recycled water he Water Code requires um 10 years of baseline
data.			

³ The ending year must be between December 31, 2004 and December 31, 2010.

⁴ The ending year must be between December 31, 2007 and December 31, 2010.

NOTES:

SB X7-7 Ta	able 2: Method for Population Estimates
	Method Used to Determine Population (may check more than one)
	 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
7	3. DWR Population Tool
	4. Other DWR recommends pre-review
NOTES:	

SB X7-7 Ta	able 3: Servio	ce Area Population		
Y	ear	Population		
10 to 15 Ye	ar Baseline Po	opulation		
Year 1	1995	149,375		
Year 2	1996	150,522		
Year 3	1997	155,923		
Year 4	1998	155,988		
Year 5	1999	156,709		
Year 6	2000	167,003		
Year 7	2001	163,738		
Year 8	2002	155,617		
Year 9	2003	161,191		
Year 10	2004	161,155		
Year 11				
Year 12				
Year 13				
Year 14				
Year 15				
5 Year Base	eline Populatio	on		
Year 1	2003	161,191		
Year 2	2004	161,155		
Year 3	2005	174,258		
Year 4	2006	173,088		
Year 5	2007	172,717		
2015 Comp	liance Year Po	opulation		
2	015	173,380		
NOTES:				

SB X7-7 Ta	able 4: Annua	al Gross Wate	er Use *					
		Volumo Into			Deduction	s		
Basel Fm SB X	ine Year 7-7 Table 3	Distribution System This column will remain blank until SB X7-7 Table 4-A is completed.	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.	Annual Gross Water Use
10 to 15 Ye	ear Baseline - C	Gross Water Us	se					
Year 1	1995	41,533			-		-	41,533
Year 2	1996	43,093			-		-	43,093
Year 3	1997	43,533			-		-	43,533
Year 4	1998	40,460			-		-	40,460
Year 5	1999	45,524			-		-	45,524
Year 6	2000	47,064			-		-	47,064
Year 7	2001	49,276	153		-		-	49,123
Year 8	2002	48,602	102		-		-	48,500
Year 9	2003	47,313	138		-		-	47,175
Year 10	2004	48,597	117		-		-	48,480
Year 11	0	-			-		-	-
Year 12	0	-			-		-	-
Year 13	0	-			-		-	-
Year 14	0	-			-		-	-
Year 15	0	-			-		-	-
10 - 15 yea	r baseline ave	rage gross wat	ter use					45,449
5 Year Bas	eline - Gross W	/ater Use		I	-	F		
Year 1	2003	47,313	138		-		-	47,175
Year 2	2004	48,597	117		-		-	48,480
Year 3	2005	41,190	720		-		-	40,470
Year 4	2006	39,703	-		-		-	39,703
Year 5	2007	45,473	-	l	-		-	45,473
5 year base	eline average g	ross water us	e					44,260
2015 Comp	liance Year - G	iross Water Us	е	I	-	F		
2	2015	27,502	51		-		-	27,451
* NOTE tha	t the units of r	neasure must	remain con	sistent through	nout the UWMF	P, as reported	in Table 2-3	
NOTES:								

SB X7-7 Ta	able 4-A: \	/olume Enter	ing the Distrik	oution
System(s)				
Complete o	one table fo	r each source.		
Name of So	ource	Surface Water		
This water	source is:	Surface Water		
	The supplie	er's own water	source	
	A purchase	d or imported	source	
		·		Corrected
		Volume	Meter Error	Volume
Baselir	ne Year	Entering	Adjustment*	Entering
Fm SB X7-	7 Table 3	Distribution	Optional	Distribution
		System	(+/-)	System
10 to 15 Ye	ar Baseline	- Water into D	istribution Syst	em
Year 1	1995	2,416		2,416
Year 2	1996	2,217		2,217
Year 3	1997	1,268		1,268
Year 4	1998	12,361		12,361
Year 5	1999	8,574		8,574
Year 6	2000	14,988		14,988
Year 7	2001	15,483		15,483
Year 8	2002	17,732		17,732
Year 9	2003	17,000		17,000
Year 10	2004	15,337		15,337
Year 11	0			-
Year 12	0			-
Year 13	0			-
Year 14	0			-
Year 15	0			-
5 Year Base	eline - Wate	r into Distribut	tion System	
Year 1	2003	17,000		17,000
Year 2	2004	15,337		15,337
Year 3	2005	14,363		14,363
Year 4	2006	13,073		13,073
Year 5	2007	7,543		7,543
2015 Comp	liance Year	- Water into D	istribution Syst	em
20	15	80		80
* Mete	r Error Adjustr	nent - See guidan	ce in Methodology	1, Step 3 of
		wiethodologies D	ocument	
NOTES:				

SB X7-7 Ta	able 4-A: \	/olume Enter	ing the Distril	oution
Name of So	ource	Groundwater		
This water	source is:			
	The supplie	er's own water	source	
	A purchase	d or imported	source	
Baselir Fm SB X7-	n e Year -7 Table 3	Volume Entering Distribution System	Meter Error Adjustment* <i>Optional</i> (+/-)	Corrected Volume Entering Distribution System
10 to 15 Ye	ear Baseline	- Water into D	istribution Syst	em
Year 1	1,995	39117.1445		39,117
Year 2	1,996	40875.9277		40,876
Year 3	1,997	42265.4824		42,265
Year 4	1,998	28099.2297		28,099
Year 5	1,999	36950.1114		36,950
Year 6	2,000	32075.3752		32,075
Year 7	2,001	33792.4978		33,792
Year 8	2,002	30870.369		30,870
Year 9	2,003	30313.6458		30,314
Year 10	2,004	33260		33,260
Year 11	-			0
Year 12	-			0
Year 13	-			0
Year 14	-			0
Year 15	-			0
5 Year Base	eline - Wate	r into Distribu	tion System	
Year 1	2,003	30313.6458		30,314
Year 2	2,004	33260		33,260
Year 3	2,005	26827.2		26,827
Year 4	2,006	26629.6		26,630
Year 5	2,007	37929.5		37,930
2015 Comp	oliance Year	- Water into D	Distribution Syst	tem
20	15	27,422		27,422
* Mete	er Error Adjustr	nent - See guidan Methodologies D	ce in Methodology ocument	1, Step 3 of
NOTES:				

SB X7-7 Ta	able 5: Galloi	ns Per Capita Pe	er Day (GPCD)	
Basel Fm SB X	ine Year 7-7 Table 3	Service Area Population <i>Fm SB X7-7</i> <i>Table 3</i>	Annual Gross Water Use <i>Fm SB X7-7</i> Table 4	Daily Per Capita Water Use (GPCD)
10 to 15 Ye	ar Baseline Gl	PCD		
Year 1	1995	149,375	41,533	248
Year 2	1996	150,522	43,093	256
Year 3	1997	155,923	43,533	249
Year 4	1998	155,988	40,460	232
Year 5	1999	156,709	45,524	259
Year 6	2000	167,003	47,064	252
Year 7	2001	163,738	49,123	268
Year 8	2002	155,617	48,500	278
Year 9	2003	161,191	47,175	261
Year 10	2004	161,155	48,480	269
Year 11	0	-	-	
Year 12	0	-	-	
Year 13	0	-	-	
Year 14	0	-	-	
Year 15	0	-	-	
10-15 Year	Average Base	eline GPCD		257
5 Year Bas	eline GPCD			
Basel Fm SB X	ine Year 7-7 Table 3	Service Area Population <i>Fm SB X7-7</i> <i>Table 3</i>	Gross Water Use Fm SB X7-7 Table 4	Daily Per Capita Water Use
Year 1	2003	161,191	47,175	261
Year 2	2004	161,155	48,480	269
Year 3	2005	174,258	40,470	207
Year 4	2006	173,088	39,703	205
Year 5	2007	172,717	45,473	235
5 Year Ave	rage Baseline	GPCD		235
2015 Com	pliance Year G	iPCD		
2	015	173,380	27,451	141
NOTES:				

SB X7-7 Table 6 : Gallons per Ca Summary From Table SB X7-7 Tab	ipita per Day <i>le 5</i>
10-15 Year Baseline GPCD	257
5 Year Baseline GPCD	235
2015 Compliance Year GPCD	141
NOTES:	

SB X7 Select	- 7 Table 7: 202 Only One	0 Target Method
Tar	get Method	Supporting Documentation
\checkmark	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	
257	206	
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 ¹	Calculated 2020 Target ²	Confirmed 2020 Target		
235	224	206	206		
¹ Maximum 2020 Target is 95% of the 5 Year Baseline GPCD ² 2020 Target is calculated based on the selected Target Method, see SB X7-7 Table 7 and corresponding tables for agency's calculated target.					
NOTES:					

SB X7-7 Table 8: 2015 Interim Target GPCD			
Confirmed 2020 Target <i>Fm SB X7-7</i> Table 7-F	10-15 year Baseline GPCD <i>Fm SB X7-7</i> Table 5	2015 Interim Target GPCD	
206	257	231	
NOTES:			

SB X7-7 Table 9: 2015 Compliance								
Actual 2015 201 GPCD Tar		Optional Adjustments (in GPCD)					Did Supplier	
	2015 Interim Target GPCD	Enter "0" if Adjustment Not Used				2015 GPCD		
		Extraordinary Events	Weather Normalization	Economic Adjustment	TOTAL Adjustments	Adjusted 2015 GPCD	(Adjusted if applicable)	Targeted Reduction for 2015?
141	231	From Methodology 8 (Optional)	From Methodology 8 (Optional)	From Methodology 8 (Optional)	-	141	141	YES
NOTES:								

Appendix G: Water Supply Agreements



AMENDMENT NO. 1 TO THE AGREEMENT BETWEEN PLACER COUNTY WATER AGENCY AND SACRAMENTO SUBURBAN WATER DISTRICT FOR A WATER SUPPLY FOR GROUNDWATER STABILIZATION

This Amendment No. 1 ("Amendment") is entered into as of Ot 2, 2008, and amends the water supply agreement entered into on June 1, 2000 ("2000 Water Supply Agreement"), by and between Placer County Water Agency, a public agency (the "Agency"), and Sacramento Suburban Water District, a public agency ("Sacramento Suburban"), in the County of Sacramento, California. The Agency and Sacramento Suburban are collectively referred to as the "Parties." Terms defined in the 2000 Water Supply Agreement will have the same meaning in this Amendment.

Recitals

A. The Agency and Northridge Water District entered into the 2000 Water Supply Agreement, which provided for up to 29,000 acre-feet per year of water that would be made available by the Agency for use by Northridge Water District.

B. Sacramento Suburban is the successor entity to Northridge Water District following the consolidation of Northridge Water District and Arcade Water District, and Sacramento Suburban has succeeded to all the rights and obligations of Northridge Water District under the 2000 Water Supply Agreement.

C. The Parties desire to amend the 2000 Water Supply Agreement as set forth in this Amendment.

In consideration of the mutual covenants contained, herein, the Parties agree as follows:

1. **Recitals Incorporated**. The foregoing recitals are incorporated by reference.

2. Amendment of Section 4. Section 4 of the 2000 Water Supply Agreement is amended to read as follows:

4. Water to be Furnished to Sacramento Suburban.

(a) Each year during the term of this Agreement the Agency will make available to Sacramento Suburban, subject to the water shortage provisions set forth in this Agreement, and the operating criteria set forth in Exhibit A to this Agreement: (1) effective September 1, 2008, 16,000 acre-feet of untreated water; and (2) effective January 1, 2009, 12,000 acre-feet of untreated water, ("Sacramento Suburban Annual Entitlement").

(b) Each year Sacramento Suburban will be required to pay for the Sacramento 7722/A071708pmbPCWA

Suburban Annual Entitlement or surrender its right to some of it so that the Agency will be free to put the water to use elsewhere. In order to do this, if Sacramento Suburban does not take or pay for the Sacramento Suburban Annual Entitlement for any year, the Sacramento Suburban Annual Entitlement for each year thereafter will be reduced by an amount equal to 50% of the amount which Sacramento Suburban did not take or pay for during that year.

(c) In any year during the term of this Agreement, Sacramento Suburban may request that the Agency make available a water supply in addition to the Sacramento Suburban Annual Entitlement up to a total water supply of 29,000 acre-feet in any year, which if approved by the Agency would be made available to Sacramento Suburban under the applicable provisions of this Agreement. Such an approval would not change the amount of the Sacramento Suburban Annual Entitlement (unless the Parties agreed otherwise). Such an approval in one year would not obligate the Agency to approve a request in a subsequent year, and approval in one year would not require Sacramento Suburban to request an increased water supply in a subsequent year.

3. Other Provisions Unaffected. Except as provided in this Amendment, the remaining provisions of the 2000 Water Supply Agreement are unchanged and remain in full force and effect.

The foregoing is hereby agreed to by the Parties.

PLACER COUNTY WATER AGENCY SACRAMENTO SUBURBAN WATER DISTRICT

Bv:

Une Attest:

AGREEMENT BETWEEN PLACER COUNTY WATER AGENCY AND NORTHRIDGE WATER DISTRICT FOR A WATER SUPPLY FOR GROUNDWATER STABILIZATION

This Agreement is entered into as of the 1st day of June, 2000, and amends and supersedes in its entirety the agreement (as amended) entered into on August 21, 1995, by and between Placer County Water Agency, a public agency (the "Agency"), and Northridge Water District, a public agency ("Northridge") in the County of Sacramento, California.

Recitals

A. The Agency is a public agency created and existing under the Placer County Water Agency Act (Statutes 1957, Chapter 1234, as amended), and is authorized to conserve and utilize, within and outside of the Agency, water for any purpose useful to the Agency.

B. The Agency owns and operates the Middle Fork American River Project pursuant to water right permits 13855 through 13858 issued by the State of California ("Agency Water Rights").

C. Northridge is a public agency located in northern Sacramento County, created and existing under the County Water District Law (Division 12 of the Water Code, commencing with section 30,000), and is authorized to acquire water rights and entitlements to provide water service within its service area.

D. Northridge currently provides water for potable use within its service area primarily from groundwater. The groundwater aquifer utilized by Northridge (and other water purveyors) is located in both Placer and Sacramento Counties. This aquifer has experienced a steady decline for many years, and is expected to continue to decline in the future unless surface water is made

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available as a supplemental water source to enable implementation of a conjunctive use program to stabilize the aquifer in Placer and Sacramento Counties.

E. San Juan Water District ("San Juan") diverts water from Folsom Reservoir (including water purchased from the Agency) for treatment and distribution within its service area, which is in both Placer and Sacramento Counties. San Juan has completed a project to increase the capacity of its water conveyance system from its treatment plant ("San Juan Pipeline"), and Northridge has purchased the right to use a portion of the capacity in the San Juan Pipeline for use within Northridge's service area. San Juan has also agreed to give Northridge first priority to use of surplus capacity in San Juan's water treatment facility. Northridge has installed a pipeline to convey treated surface water from the San Juan Pipeline to Northridge's service area to enable Northridge to better conserve and utilize its groundwater resources.

F. The Agency has determined that, subject to the terms and conditions set forth in this Agreement, there will be water available under the Agency's water rights for delivery to Northridge for the purpose of stabilizing the groundwater basin in Placer and Sacramento Counties as provided for in this Agreement.

G. The Agency is willing to deliver to, and Northridge is willing to pay for, water delivered by the Agency under the terms and conditions set forth in this Agreement.

H. The Agency (as lead agency) and Northridge (as a responsible agency) have prepared and approved a final environmental impact report ("EIR") under the California Environmental Quality Act for the sale of water under this agreement.

I. The State Water Resources Control Board ("SWRCB") issued orders on May 24,

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2000 ("SWRCB Orders") that approve a change in the place of use of the Agency Water Rights to include the area served by Northridge, which is described in Article 19 of this Agreement.

J. The Agency and Northridge are signatories to the Water Forum Agreement, which sets forth provisions that are related to the diversion and use of water under this Agreement that are implemented by the EIR and SWRCB Orders.

K. Northridge and the U.S. Bureau of Reclamation ("Reclamation") have entered into an agreement that authorizes Northridge to use Reclamation facilities at Folsom Reservoir to convey water delivered by the Agency under this Agreement (the "Warren Act Contract", including any renewal, extensions or subsequent agreement for that purpose).

Now, therefore, in consideration of the mutual covenants contained, herein, the parties agree as follows:

1. Recitals Incorporated. The foregoing recitals are incorporated by reference.

2. Term of Agreement. This Agreement shall be effective as of June 1, 2000, and shall remain in effect through December 31, 2025, unless terminated earlier under the provisions of this Agreement.

3. Renewals of Term. Renewals of this Agreement may be made for successive periods not to exceed twenty-five years each. The terms and conditions of each renewal shall be agreed upon by the parties not later than one year before the expiration of the then current term of the Agreement.

4. Water to be Furnished to Northridge. Each year during the term of this Agreement the Agency

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shall make available to Northridge, subject to the water shortage provisions set forth in this Agreement, and the operating criteria set forth in Exhibit A to this Agreement, the following amounts of untreated water ("Northridge Annual Entitlement"):

YEAR	NORTHRIDGE ANNUAL ENTITLEMENT
June 1 through December 31, 2000	7,000 acre-feet
2001	11,000 acre-feet
2002	12,000 acre-feet
-2003	14,000 acre-feet
2004	16,000 acre-feet
2005	18,000 acre-feet
2006	20,000 acre-feet
2007	22,000 acre-feet
2008	23,000 acre-feet
2009	24,000 acre-feet
2010	25,000 acre-feet
2011	26,000 acre-feet
2012	27,000 acre-feet
2013	28,000 acre-feet
2014 and each year thereafter	29,000 acre-feet

Each year Northridge shall be required to pay for its Annual Entitlement or surrender its right to some of it so that the Agency will be free to put the water to use elsewhere. In order to do this, if Northridge does not take or pay for the Northridge Annual Entitlement for any year, the Northridge Annual Entitlement for each year thereafter shall be reduced by an amount equal to 50% of the amount which Northridge did not take or pay for during that year.

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5. Water Shortage Provisions.

(a) The Northridge Annual Entitlement shall be subject to temporary or permanent reduction or elimination whenever the Agency notifies Northridge that the Agency has determined that it will not have sufficient water (1) to meet the needs of the Agency's then current customers within Placer County, (2) to meet the contractual entitlement of San Juan under its water supply contract with the Agency, or (3) to meet the Agency's obligations under its April 30, 1963 Middle Fork Project Power Purchase Contract with Pacific Gas and Electric Company ("the Power Purchase Contract"). Such notification shall be provided at the earliest date feasible. The Northridge Annual Entitlement shall not be subject to reduction or elimination because the Agency has insufficient water to meet the needs of other Agency contractors or users whose service areas are outside of Placer County, except for San Juan.

(b) The Agency may temporarily discontinue or reduce the amount of the Northridge Annual Entitlement for the purpose of maintaining, repairing, replacing, investigating or inspecting any of the facilities necessary for the storage or furnishing of water to Northridge. In so far as it is feasible, the Agency will give Northridge due notice in advance of such temporary discontinuances or reductions except in cases of emergency, in which case notice will be provided at the earliest date feasible. In the event of any such discontinuance or reduction, the Agency will, upon the resumption of service, attempt to approximate delivery of the quantity of Northridge Annual Entitlement that would have been furnished to Northridge in the absence of such event.

(c) The Northridge Annual Entitlement shall be subject to reduction in accordance with the provisions of Exhibit A.

(d) In the event of a water shortage as described in subparagraphs (a), (b) or (c) of this 9-13-00 -5- 7722\A090500pmb article, Northridge shall be solely responsible for obtaining alternative supplies of water to meet its customers' needs, and no liability shall accrue against the Agency or any of its directors, officers, agents or employees for any damage, direct or indirect, arising from such shortages. In any year in which less than the Northridge Annual Entitlement from the schedule set forth in Article 4 is available to Northridge, a proportionate adjustment shall be made to the amounts to be paid by Northridge provided for in Article 12. To the extent that there is a deficiency in the availability of the Northridge Annual Entitlement not caused by wrongful conduct of the Agency, such adjustment shall constitute the sole remedy of Northridge or anyone having or claiming to have by, through or under Northridge the right to the use of any of the water supply provided for herein.

6. Delivery of Water. The Agency shall deliver the Northridge Annual Entitlement into Folsom Reservoir, and Northridge shall be responsible for diversion, treatment and conveyance of such water, including without limitation the payment of any charges to Reclamation concerning the diversion of such water from Folsom Reservoir and the cost of any facilities necessary to divert such water from Folsom Reservoir.

7. Commencement of Water Service. Water service to Northridge under this Agreement shall commence on June 1, 2000.

8. Delivery Schedule. Prior to commencement of water service, Northridge shall submit a written schedule to the Agency indicating the time and quantities of the Northridge Annual Entitlement to be diverted from Folsom Reservoir for delivery to Northridge pursuant to this Agreement during the remainder of the year. Thereafter, on or before December 1 of each year, Northridge shall submit a written schedule to the Agency indicating the times and quantities of the Northridge Annual Entitlement to be diverted from Folsom Reservoir for delivery to the times and quantities of the Northridge shall submit a written schedule to the Agency indicating the times and quantities of the Northridge Annual Entitlement to be diverted from Folsom Reservoir for delivery to Northridge pursuant to this Agreement during the following year. The Agency shall, consistent with the Agency Water Rights,

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the Power Purchase Contract and the provisions hereof, furnish the Northridge Annual Entitlement to the maximum extent feasible in accordance with the schedules submitted by Northridge or any revisions thereof that are satisfactory to the Agency. The Agency shall cooperate with Northridge in any revisions to the schedule for water deliveries as necessary to accommodate limitations in the available capacity of water diversion, treatment and conveyance facilities to be utilized by Northridge.

9. Measurement. Northridge shall measure or cause to be measured all water furnished pursuant to this Agreement at the point of diversion at Folsom Reservoir. Such measurement shall be with equipment satisfactory to the Agency and to Northridge, and Northridge shall furnish the Agency written reports quarterly showing the weekly diversions to Northridge. The Agency may inspect such measuring equipment for the purpose of determining the accuracy thereof at any time, and any errors therein will be adjusted.

10. Water Quality. The Agency assumes no responsibility with respect to the quality of the water to be furnished pursuant to this Agreement and does not warrant the quality of any such water.

11. Responsibilities for Delivery and Distribution of Water. Neither the Agency nor its directors, officers, agents or employees shall be liable for the control, carriage, handling, use, disposal or distribution of water furnished to Northridge hereunder outside of facilities then being operated or maintained by the Agency, nor for claims of damages of any nature whatsoever, including but not limited to property damage, personal injury or death, arising out of or connected with the control, carriage, handling, use, disposal or distribution of such water beyond such facilities, and Northridge shall indemnify and hold harmless the Agency and its directors, officers, agents and employees from any such damages or claims of damages.

12. Rate and Method of Payment for Water.

(a) Rate of Payment for Water. Each year Northridge shall pay the Agency for each acrefoot of Northridge Annual Entitlement made available for use in Northridge's service area the highest of the following three rates: (1) Thirty-five dollars (\$35); (2) One hundred seventy-five percent (175%) of the acre-foot price the Agency charges the City of Roseville and San Juan that year for water made available to them in Folsom Reservoir for use within Placer County; or (3) One hundred fifty percent (150%) of the total amount, per acre-foot, including any restoration and other fees and charges, which the Agency is required to pay that year to Reclamation for water to be used within the Agency pursuant to the Agency's September 18, 1970 contract with Reclamation as amended and supplemented or pursuant to any renewals of that contract.

Each year, Northridge shall pay the Agency for each acre-foot of Northridge Annual Entitlement which is sold, leased, transferred or disposed of by Northridge for use outside the authorized service area for Agency water as described in Article 19, either: (1) the price provided for in the previous sentence; or (2) an amount equal to 95% of the value received by Northridge for such water, whichever is higher, and the first water sold, leased, transferred or disposed of by Northridge each year for use outside the authorized service area for Agency water shall be deemed to be the water made available to Northridge by the Agency pursuant to this Agreement. Prior to December 31 each year, the Agency shall confirm and document in writing to Northridge the applicable water rate for the next year.

(b) Time and Method of Payment. Payment shall be made quarterly in advance on or before January 1, April 1, July 1 and October 1 of each year. The amount of the payment shall be based upon the amount of water in the delivery schedule or amendments thereof furnished pursuant to Article 8. At the close of each year, the Agency shall recalculate the amount owing to it for the

previous year based upon the actual deliveries and amounts of water made available to Northridge, and shall thereupon bill Northridge for any underpayments or refund any overpayments. Any amounts due and owing from one party to the other as a result of such recalculation shall be paid within thirty days after the Agency renders a statement to Northridge for such payment.

13. Interest on Overdue Payments. Northridge shall pay the Agency interest at the legal rate for interest on State of California judgments on any charges that remain unpaid after they become due and payable.

14. Obligation of Northridge to Make Payments.

(a) Character of obligation.

The obligations of Northridge arising out of or pursuant or incidental to this Agreement shall constitute general obligations of Northridge, and Northridge shall use all the powers and resources available to it under the law to collect the funds necessary for and to pay its obligations to the Agency under this Agreement. Northridge as a whole is obligated to pay to the Agency the payments coming due under this Agreement, notwithstanding any individual default by its water users, constituents or others in the payment to Northridge of assessments, taxes, tolls or other charges levied by Northridge.

(b) Refusal of Water Does Not Affect Obligation.

Northridge's failure or refusal to accept delivery of any of the Northridge Annual Entitlement in any year shall in no way relieve it of its obligation to make payments to the Agency for that year's Annual Entitlement as provided for herein to the extent the Agency was ready, willing

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and able to supply the Northridge Annual Entitlement that year.

15. Compliance with Provisions of EIR, SWRCB Orders and Warren Act Contract.

(a) The Agency shall not petition the SWRCB for a change in the place of use under the Agency Water Rights to eliminate any of Northridge's service area as of the date of this Agreement, or for any other change to the Agency Water Rights that would adversely affect Northridge's rights under this Agreement.

(b) The Agency and Northridge shall fully comply with (1) the provisions of the EIR that limit the diversion and use of water under this Agreement and (2) the provisions of the SWRCB Orders that limit the diversion and use of water under this Agreement, by complying with the operating criteria set forth in Exhibit A.

16. Remedies Not Exclusive. The use by either party of any remedy specified for the enforcement of this Agreement is not exclusive and shall not deprive the party using such remedy of, or limit the application of, any other remedy provided by law.

17. Waiver of Rights. Any waiver at any time by either party of its rights with respect to a breach or default, or any other matter arising in connection with this Agreement, shall not be deemed to be a waiver with respect to any other breach, default or matter.

18. Assignment. The provisions of this Agreement shall apply to and bind the successors and assigns of the respective parties, but no assignment or transfer of this Agreement, or any part hereof or interest herein, shall be valid until and unless approved by the Agency.

19. Areas Served by Northridge. Water delivered to Northridge pursuant to this Agreement shall not be sold or otherwise disposed of by Northridge for use outside of the service area shown on the map marked Exhibit B, without the prior written consent of the Agency, which consent shall not unreasonably be withheld; provided, however, in no event shall any such water be used outside the place of use described in the Agency's water right permits.

20. Opinions and Determinations. Where the terms of this Agreement provide for action to be based upon judgment, approval, review or determination of either party, such terms are not intended to be and shall never be construed as permitting such opinion, judgment, approval, review or determination to be arbitrary, capricious or unreasonable.

21. Notices. All notices that are required either expressly or by implication to be given by any party to the other under this Agreement shall be signed for the Agency and for Northridge by such officers as they may from time to time authorize to so act. Any notices to parties required by this Agreement shall be delivered or mailed, U.S. first-class postage prepaid, addressed as follows:

To Agency:

General Manager Placer County Water Agency P.O. Box 6570 Auburn, California 95604

<u>To Northridge</u>:

General Manager Northridge Water District P.O. Box 41258 5331 Walnut Avenue Sacramento, California 95841

Either party may change its address for notice by sending notice of such change to the other party.

22. Inspection of Books and Records. The proper officers or agents of Northridge shall have full and free access at all reasonable times to the account books and official records of the Agency in so

9-13-00

far as the same pertain to the matters and things provided for in this Agreement, with the right at any time during office hours to make copies thereof at Northridge's expense, and the proper representative of the Agency shall have similar rights with respect to the account books and records of Northridge.

23. Integration. This is an integrated agreement and contains all of the terms, considerations, understanding and promises of the parties. It shall be read as a whole.

24. Construction and Interpretation. It is agreed and acknowledged by the parties that this Agreement has been arrived at through negotiation, and that each party has had a full and fair opportunity to revise the terms of this Agreement. Consequently, the normal rule of construction that any ambiguities are to be resolved against the drafting party shall not apply in construing or interpreting this Agreement.

25. Amendment. This Agreement may be modified or amended only by a subsequent written agreement approved by both parties.

26. Attorney's Fees. In any action brought by either party to enforce or construe this Agreement, the prevailing parties shall be entitled to an award of reasonable attorney's fees, expert witness and consulting fees, litigation costs and costs of suit.

27. Counterparts. This Agreement may be executed in counterparts. Northridge shall deliver its counterpart to the Agency, which shall deliver a fully-conformed counterpart to Northridge.

28. Obligations Prior to Termination. The obligations of the parties incurred pursuant to this
Agreement prior to the termination of this Agreement shall survive the termination.

29. Supporting Resolutions. Each party represents that it has legal authority to enter into this Agreement and to perform its obligations hereunder, and shall submit to the other party concurrent with execution of this Agreement a duly-authorized resolution or other document evidencing the authority and authorizing the person executing this Agreement to do so.

30. General Indemnity. Each party agrees to protect, defend, indemnify and hold harmless the other party, its directors, officers, agents, employees and consultants from and against any and all losses, claims, liens, demands and causes of action of every kind and character, without limitation by enumeration, occurring or in any wise incident to, connected with, or arising directly or indirectly out of the negligence or willful misconduct of the indemnifying party hereunder.

31. Severability. The invalidity, illegality or unenforceability of any provision of this Agreement shall not render the other provisions unenforceable, invalid or illegal.

32. No Third Party Beneficiaries. This Agreement shall not be construed to create any third party beneficiaries. This Agreement is for the sole benefit of the parties, their respective successors and permitted transferees and assigns, and no other person or entity shall be entitled to rely upon or receive any benefit from this Agreement or any of its terms.

33. Relationship of Parties. Nothing in this Agreement shall be construed to create an association, joint venture, trust or partnership, or to impose a trust or partnership covenant, obligation or liability on or with regard to anyone or more of the parties.

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34. Additional Documents. Each party agrees to make, execute, acknowledge and deliver any and all documents reasonably required to implement this Agreement.

35. Supersedes prior Agreement. This Agreement supersedes in its entirety the "Agreement between Placer County Water Agency and Northridge Water District for a water supply for groundwater stabilization", as amended, which was entered into as of August 21, 1995.

The foregoing is hereby agreed to by the parties.

PLACER COUNTY WATER AGENCY

By:_____

Attest:

NORTHRIDGE WATER DISTRICT

By:

Attest:

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Exhibit A

Operating Criteria

The diversion and use of water under this Agreement shall be subject to the following operating criteria, in addition to the terms and conditions set forth in the Agreement:

1. The Northridge Annual Entitlement shall not exceed the annual amount of water that is available for diversion by Northridge in accordance with the terms and conditions of the SWRCB Orders, which are attached hereto. Northridge's obligation in Article 4 of the Agreement to take or pay for the Northridge Annual Entitlement shall be based on the Northridge Annual Entitlement as adjusted in this exhibit.

2. Northridge shall compensate the Agency at the rates provided for in Article 12 for water that the Agency would have appropriated to storage but could not (and which results in a net decrease in the amount of water in storage) as a result of application of Article 2.b. of the September 30, 1999 agreement between the Agency and the Department of Water Resources that is referred to in the SWRCB Orders and attached hereto.

3. To account for the conveyance losses provided for in Article 3(b) of the Warren Act Contract, the Agency shall release five percent more than the quantity of water requested for delivery by Northridge.

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STATE OF CALIFORNIA CAIFORNIA ENVIRONMENTAL PROTECTION AGENCY STATE WATER RESOURCES CONTROL BOARD

DIVISION OF WATER RIGHTS

ORDER

Application 18085 Permit 13856

ORDER APPROVING CHANGE IN THE PLACE OF USE, AND AMENDING THE PERMIT

WHEREAS:

- 1. Permit 13856 was issued to Placer County Water Agency on January 10, 1963, pursuant to Application 18085.
- 2. A petition to change the place of use of Permit 13856 was filed with the State Water Resources Control Board (SWRCB) on July 31,1996 and the SWRCB has determined that good cause for such change has been shown. Public notice of the change was issued on October 18, 1996 and protest issues have been resolved. Resultant protest resolution agreements have been incorporated into this order.
- 3. The SWRCB has determined that the petition to change the place of use does not constitute the initiation of a new right nor operate to the injury of any other lawful user of water.
- 4. Fish, wildlife, and plant species have been or may be listed under the federal Endangered Species Act and/or the California Endangered Species Act. A paragraph should be placed in the permit making the permittee aware of possible obligations resulting from these acts.
- 5. The paragraph relating to the continuing authority of the SWRCB should be updated to conform to section 780(a), title 23 of the California Code of Regulations.

NOW, THEREFORE, IT IS ORDERED THAT:

1. The place of use under Permit 13856 shall be amended as follows:

The place of use is situated in portions of Placer and Sacramento counties as shown on the Placer County Water Agency map set dated July 31, 1996, on file with the SWRCB. Application 18085

Permit 13856

2. Paragraph 8, the continuing authority condition, shall be updated to read as follows:

Pursuant to California Water Code sections 100 and 275 and the common law public trust doctrine, all rights and privileges under this permit, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of the SWRCB in accordance with law and in the interest of the public welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of said water.

The continuing authority of the SWRCB may be exercised by imposing specific requirements over and above those contained in this permit with a view to eliminating waste of water and to meeting the reasonable water requirements of licensee without unreasonable draft on the source. Permittee may be required to implement a water conservation plan, features of which may include but not necessarily be limited to: (1) reusing or reclaiming the water allocated; (2) using water reclaimed by another entity instead of all or part of the water allocated; (3) restricting diversions so as to eliminate agricultural tailwater or to reduce return flow; (4) suppressing evaporation losses from water surfaces; (5) controlling phreatophytic growth; and (6) installing, maintaining, and operating efficient water measuring devices to assure compliance with the quantity limitations of this permit and to determine accurately water use as against reasonable water requirement for the authorized project. No action will be taken pursuant to this paragraph unless the SWRCB determines, after notice to affected parties and opportunity for hearing, that such specific requirements are physically and financially feasible and are appropriate to the particular situation.

The continuing authority of the SWRCB also may be exercised by imposing further limitations on the diversion and use of water by the permittee in order to protect public trust uses. No action will be taken pursuant to this paragraph unless the SWRCB determines, after notice to affected parties and opportunity for hearing, that such action is consistent with California Constitution article X, section 2; is consistent with the public interest and is necessary to preserve or restore the uses protected by the public trust. (0000012)

3. An Endangered Species term shall be added to Permit 13856 to read as follows:

This permit does not authorize any act which results in the taking of a threatened or endangered species or any act which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). If a "take" will result from any act authorized under this water right, the permittee shall obtain authorization for an incidental take prior to construction or operation of the project. Permittee shall be responsible for meeting all requirements of the applicable Endangered Species Act for the project authorized under this permit. (0000014)

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Application 18085

Permit 13856

3. The following term shall be added to Permit 13856 to read as follows:

Permittee shall comply with provisions of the following settlement agreements on file with the SWRCB:

- (a) Agreement for Dismissal of Protest by California Department of Water Resources to Placer County Water Agency's Petition before State Water Resources Control SWRCB for Change in Place of Use under Permits Nos. 13856 (App. No. 18085) and 13858 (App. No. 18087) executed on September 30, 1999;
- (b) Stipulated Agreement for Dismissal of Bureau of Reclamation's Protest to Placer County Water Agency's Petition to Expand the Place of Use Under Application 18085 (Permit 13856) and Application 18087 (Permit 13858) executed on September 8, 1998;
- (c) SETTLEMENT AGREEMENT CONCERNING PLACER COUNTY WATER AGENCY'S PETITION TO EXPAND ITS PLACE OF USE UNDER WATER RIGHT PERMITS 13856 AND 13858 executed between Placer County Water Agency and the County of Sacramento (on March 23, 1999); as well as the City of Sacramento (on April 13, 1999); and
- (d) Stipulated Agreement for Dismissal of Protest to Placer County Water Agency's Petition to Expand the Place of Use Under Application 18085 (Permit 13856) and Application 18087 (Permit 13858) executed between the Placer County Water Agency and the Friends of the River, Save the American River Association, and the Sietra Club, Mother Lode Chapter (on September 16, 1999); as well as Mr. William Berry (on November 20, 1999).

Inclusion in this permit of provisions of the referenced agreements shall not be construed as affecting the enforceability, as between the parties, of such provisions insofar as they are not inconsistent with the terms of this permit. (0000024)

Chief Divisio

Dated:

MAY 2 4 2000

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STATE OF CALIFORNIA CAIFORNIA ENVIRONMENTAL PROTECTION AGENCY STATE WATER RESOURCES CONTROL BOARD

DIVISION OF WATER RIGHTS

ORDER

Application 18087 Permit 13858

ORDER APPROVING CHANGE IN THE PLACE OF USE, AND AMENDING THE PERMIT

WHEREAS:

- 1. Permit 13858 was issued to Placer County Water Agency on January 10, 1963, pursuant to Application 18087.
- 2. A petition to change the place of use of Permit 13858 was filed with the State Water Resources Control Board (SWRCB) on July 31,1996 and the SWRCB has determined that good cause for such change has been shown. Public notice of the change was issued on October 18, 1996 and protest issues have been resolved. Resultant protest resolution agreements have been incorporated into this order.
- 3. The SWRCB has determined that the petition to change the place of use does not constitute the initiation of a new right nor operate to the injury of any other lawful user of water.
- 4. Fish, wildlife, and plant species have been or may be listed under the federal Endangered Species Act and/or the California Endangered Species Act. A paragraph should be placed in the permit making the permittee aware of possible obligations resulting from these acts.
- 5. The paragraph relating to the continuing authority of the SWRCB should be updated to conform to section 780(a), title 23 of the California Code of Regulations.

NOW, THEREFORE, IT IS ORDERED THAT:

1. The place of use under Permit 13858 shall be amended as follows:

The place of use is situated in portions of Placer and Sacramento counties as shown on the Placer County Water Agency map set dated July 31, 1996, on file with the SWRCB.

Application 18087

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Permit 13858

2. Paragraph 8, the continuing authority condition, shall be updated to read as follows:

Pursuant to California Water Code sections 100 and 275 and the common law public trust doctrine, all rights and privileges under this permit, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of the SWRCB in accordance with law and in the interest of the public welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of said water.

The continuing authority of the SWRCB may be exercised by imposing specific requirements over and above those contained in this permit with a view to eliminating waste of water and to meeting the reasonable water requirements of licensee without unreasonable draft on the source. Permittee may be required to implement a water conservation plan, features of which may include but not necessarily be limited to: (1) reusing or reclaiming the water allocated; (2) using water reclaimed by another entity instead of all or part of the water allocated; (3) restricting diversions so as to eliminate agricultural tailwater or to reduce return flow; (4) suppressing evaporation losses from water surfaces; (5) controlling phreatophytic growth; and (6) installing, maintaining, and operating efficient water measuring devices to assure compliance with the quantity limitations of this permit and to determine accurately water use as against reasonable water requirement for the authorized project. No action will be taken pursuant to this paragraph unless the SWRCB determines, after notice to affected parties and opportunity for hearing, that such specific requirements are physically and financially feasible and are appropriate to the particular situation.

The continuing authority of the SWRCB also may be exercised by imposing further limitations on the diversion and use of water by the permittee in order to protect public trust uses. No action will be taken pursuant to this paragraph unless the SWRCB determines, after notice to affected parties and opportunity for hearing, that such action is consistent with California Constitution article X, section 2; is consistent with the public interest and is necessary to preserve or restore the uses protected by the public trust. (0000012)

3. An Endangered Species term shall be added to Permit 13858 to read as follows:

This permit does not authorize any act which results in the taking of a threatened or endangered species or any act which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). If a "take" will result from any act authorized under this water right, the permittee shall obtain authorization for an incidental take prior to construction or operation of the project. Permittee shall be responsible for meeting all requirements of the applicable Endangered Species Act for the project authorized under this permit. (0000014)

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Application 18087

Permit 13858

3. The following term shall be added to Permit 13858 to read as follows:

Permittee shall comply with provisions of the following settlement agreements on file with the SWRCB:

- (a) Agreement for Dismissal of Protest by California Department of Water Resources to Placer County Water Agency's Petition before State Water Resources Control SWRCB for Change in Place of Use under Permits Nos. 13856 (App. No. 18085) and 13858 (App. No. 18087) executed on September 30, 1999;
- (b) Stipulated Agreement for Dismissal of Bureau of Reclamation's Protest to Placer County Water Agency's Petition to Expand the Place of Use Under Application 18085 (Permit 13856) and Application 18087 (Permit 13858) executed on September 8, 1998;
- (c) SETTLEMENT AGREEMENT CONCERNING PLACER COUNTY WATER AGENCY'S PETITION TO EXPAND ITS PLACE OF USE UNDER WATER RIGHT PERMITS 13856 AND 13858 executed between Placer County Water Agency and the County of Sacramento (on March 23, 1999); as well as the City of Sacramento (on April 13, 1999); and
- (d) Stipulated Agreement for Dismissal of Protest to Placer County Water Agency's Petition to Expand the Place of Use Under Application 18085 (Permit 13856) and Application 18087 (Permit 13858) executed between the Placer County Water Agency and the Friends of the River, Save the American River Association, and the Sierra Club, Mother Lode Chapter (on September 16, 1999); as well as Mr. William Berry (on November 20, 1999).

Inclusion in this permit of provisions of the referenced agreements shall not be construed as affecting the enforceability, as between the parties, of such provisions insofar as they are not inconsistent with the terms of this permit. (0000024)

deller Division Chief

Dated:

MAY 2 4 2000

Agreement for Dismissal of Protest by California Department of Water Resources to Placer County Water Agency's Petition before State Water Resources Control Board for Change in Place of Use under Permits Nos. 13856 (App. No. 18085) and 13858 (App. No. 18087)

This Agreement is entered into this C day of September, 1999, by and between the California Department of Water Resources, an agency of the State of California, and Placer County Water Agency, a public entity formed under the Placer County Water Agency Act, in the County of Placer, State of California.

Whereas:

- 1. Placer County Water Agency (Agency) has petitioned the State Water Resources Control Board (State Board) for a change in the place of use specified in water rights permits it holds to appropriate water from the Middle Fork of the American River to add and include areas in Sacramento County; and
- 2. The State of California Department of Water Resources (DWR) has protested that petition because of potential impacts to water rights it holds for the operation of the State Water Project (SWP); and
- 3. DWR and Agency desire to resolve DWR's protest through settlement.
- 4. A portion of the expanded place of use includes the service area of the San Juan Water District (District). The change in place of use will not change the total quantity of water that the District diverts from Folsom Lake because its service area is already substantially developed, because the District would be replacing a portion of its existing Central Valley Project water supply with the Agency water, and because the District has agreed to restrict its diversions in dry years under its Water Forum Agreement. The expansion of the Agency's place of use to cover all of the District's service area will not increase the District's diversions from Folsom Lake and will not affect the water supply available to the SWP. Therefore, the Term 91 diversion constraints established by this agreement shall not apply to the District's diversions from Folsom Lake. The exclusion of the District's service area from this agreement is intended to create no precedent in other proceedings as to the applicability of Term 91 to Agency water supplies diverted by the District.

Therefore, the Parties Agree as Follows;

- 1. "Term 91 is in effect" means State Board Standard Permit Term 91 as described in State Board Decision 1594 is in effect as to those water right holders whose permits or licenses contain Term 91.
- 2. If the State Board grants Agency's petition to expand its place of use,
 - a. When Term 91 is in effect, Agency shall deliver to the Northridge Water District service area only water previously appropriated to storage; and
 - b. When Term 91 is in effect, Agency shall not appropriate water to storage to refill any storage in its Middle Fork reservoirs vacated on account of a previous use of stored water in the Northridge Water District service area.
 - c. DWR agrees that, upon request by the Agency, it will consider in good faith an appropriate modification to subsection (b) to provide protection for the SWP alone. The parties understand that, because of the obligations under the Coordinated Operating Agreement (COA) between DWR and USBR to provide storage releases for in-basin uses, DWR will need to first secure the agreement of USBR to keep DWR whole under the COA on account of the modification.
- 3. Upon DWR's request, Agency shall provide DWR all information relevant to the operation of its Middle Fork reservoirs or to any other aspect of its operations as necessary for DWR to monitor Agency's compliance with the provisions of this Agreement.
- 4. Upon execution of this agreement, DWR shall withdraw its protest to Agency's petition for change in place of use pending with the State Board.
- In the event that the State Board shall, in the course of the current Bay-Delta water rights proceedings, enter a final order which expressly addresses and determines Agency's obligations to implement the provisions of the 1995 Water Quality Control Plan for the Bay-Delta Estuary, and for so long as that order is in effect, that order shall supersede the provisions of Section 2 of this agreement.
- 6. Neither party shall use or submit this agreement for any purpose in any proceeding before the State Water Resources Control Board, the Federal Energy Regulatory Commission, or any other regulatory or adjudicatory body, except in

an action to defend its validity or to enforce its terms.

In Witness Whereof, the parties hereto have executed this Agreement for Dismissal of Protest as of the day and year first above written.

CALIFORNIA DEPARTMENT OF WATER RESOURCES

Bv

PLACER COUNTY WATER AGENCY

By: Chair

Attest:

(SEAL)

Secretary 1 as have

Stipulated Agreement for Dismissal of Bureau of Reclamation's Protest to Placer County Water Agency's Petition to Expand the Place of Use Under Application 18085 (Permit 13856) and Application 18087 (Permit 13858)

The United States Bureau of Reclamation (Reclamation) agrees that its protest to Placer County Water Agency's (PCWA) petition for change in place of use may be dismissed if the conditions set forth in paragraph 1 are included in the Board's Order approving the change. These conditions reflect a compromise among the parties to the Water Forum¹ in order to settle disputes among them concerning use of American River water and are not to be construed as evidence that the change in place of use under Permittee's permit will impact prior rights or the environment.

1. Permittee's deliveries of water from the American River to Northridge Water District (Northridge) under the August 21, 1995, PCWA-Northridge Agreement, and any amendments thereto, will be subject to the following restrictions:

a. Permittee shall not deliver any water within the expanded place of use in Sacramento County until the recipient of such water has entered into such contracts with Reclamation as may be necessary for access to and use of Federal facilities needed for rediversion of such water.

b. During the 10-year period following the date when water is first available to Northridge under the Northridge Agreement (the 10-year period):

(1) Water shall be delivered to Northridge only in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 950,000 acre-feet.

(2) Notwithstanding subparagraph (1) above, in December, January, and February following a March through November period when the unimpaired inflow into Folsom Reservoir was less than 950,000 acre-feet, water may be delivered to Northridge when and after water is being released from Folsom Reservoir for flood protection.

¹The Water Forum is a regional group of water purveyors, environmental organizations and business interests interested in the economic and environmental future of the American River watershed as affected by the diversion of water from the American River. Its members include Sacramento County; the cities of Sacramento, Roseville, and Folsom; Sacramento County Water Agency; El Dorado County Water Agency; Placer County Water Agency; San Juan Water District; Northridge Water District; Save the American River Association; the Sierra Club; Friends of the River; and others. - 橋段: 子

(3) PCWA's deliveries of American River water to Northridge in each of these years will be limited to the amounts of water provided in the water use schedule in the Northridge Agreement, which allows annually increasing diversions to a maximum total of 29,000 acre-feet per year under that agreement.

c. After the 10-year period, Permittee may deliver American River water to Northridge only:

(1) In years when the projected March to November unimpaired inflow to Folsom Reservoir is greater than 1,600,000 acre-feet, or

(2) Notwithstanding subparagraph (1) above, in a December, January, and February following a March through November period when the unimpaired inflow into Folsom Reservoir was less than 1,600,000 acre-feet, when and after water is being released from Folsom Reservoir for flood protection, or

(3) As otherwise permitted by the Board pursuant to an Order releasing or modifying the provisions of c(1) and c(2): <u>Provided</u>, That such Order is issued after a hearing before the SWRCB in which Reclamation is afforded the opportunity to participate; and <u>Provided further</u>, That this subparagraph is not interpreted as constituting a waiver by Reclamation of any rights it may have to contest the subject Board Order in a court of competent jurisdiction.

2. Nothing in this stipulation shall affect the right of Permittee to terminate the Northridge agreement if Permittee reasonably determines that any term of the Board Order resulting from the hearing is unacceptable.

3. Nothing in this stipulation is intended to restrict deliveries of water from Folsom Reservoir for use by Northridge under a Section 215 (surplus water) contract with Reclamation, whenever such water may be available.

Date:

ACTING FOR

NOT Roger K. Patterson, Regional Director UNITED STATES BUREAU OF RECLAMATION

Date: 8/24/98

David Breninger, General Manager PLACER COUNTY WAPER AGENCY

SETTLEMENT AGREEMENT CONCERNING PLACER COUNTY WATER AGENCY'S PETITION TO EXPAND ITS PLACE OF USE UNDER WATER RIGHTS PERMITS 13856 AND 13858

This Settlement Agreement is executed on <u>23, March</u>, 1999, by and between the Placer County Water Agency (hereafter referred to as "PCWA") and the County of Sacramento and Sacramento County Water Agency (Collectively referred to as "County").

<u>RECITALS</u>

- A. On July 31, 1996, PCWA filed a petition with the State Water Resources Control Board ("SWRCB") to change the place of use ("POU") authorized under PCWA's water right Application 18085 (Permit 13856) and Application 18087 (Permit 13858). This petition is referred to hereafter as the "POU Petition."
- B. The purpose of the POU Petition is to expand the POU to include a portion of Sacramento County that currently is almost entirely dependent on groundwater for its water supply, to allow surface water that is diverted by PCWA under Permits 13856 and 13858 to be used in lieu of groundwater in the expanded POU. PCWA intends to deliver water to the expanded POU pursuant to agreements with water purveyors whose service areas include portions of the expanded POU, including existing agreements with San Juan Water District ("San Juan") and Northridge Water District ("Northridge").
- C. On December 12, 1996, the County filed a protest based on environmental considerations
 to the POU Petition ("County Protest").
- D. PCWA and the County are members of the ongoing Water Forum, a regional group of water purveyors, environmental organizations, public and business interests interested in the economic and environmental future of the American River watershed as affected by the diversion of water from the American River. Other Water Forum members include the cities of Sacramento, Roseville and Folsom, El Dorado County Water Agency, San Juan Water

District, Northridge Water District, Save the American River Association, the Sierra Club, Friends of the River, and others.

E. The provisions of this Settlement Agreement that pertain to the use of PCWA water in the expanded POU under the Northridge-PCWA Agreement are based on conditions that were negotiated in the Water Forum process.

F. The County and PCWA now desire to resolve their differences regarding the proposed POU expansion, and therefore agree as follows:

Agreement

NOW, THEREFORE, in consideration of the mutual obligations and commitments set forth herein, the parties agree as follows:

I. Withdrawal of County's Protest. Immediately upon execution of this Settlement Agreement by both parties, the County shall withdraw the County's Protest, and the County will support the POU Petition.

II. Use or Delivery of Water in Expanded POU by Northridge.

- A. The County and PCWA agree that diversions or rediversions of PCWA water for use or delivery in the expanded POU by Northridge Pursuant to the PCWA-Northridge Agreement shall be subject to compliance with the following conditions:
 - For the first ten years that water is available for diversion by Northridge Water District ("Northridge") from Folsom Reservoir under the August 21, 1995, Northridge-PCWA Agreement ("Northridge-PCWA Agreement"), but not more than twelve years from the effective date of the Water Forum Agreement, whichever

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occurs first,¹ diversions of PCWA water under the Northridge-PCWA Agreement, for Northridge's own use or delivery to other purveyors, will be subject to the following restrictions:

- a. PCWA water can be diverted only in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 950,000 acre feet.
- In December, January and February following a March through November period when the unimpaired inflow into Folsom Reservoir was less than 950,000 acre feet, PCWA water cannot be diverted until such time as or after water is being released from Folsom Reservoir for flood protection.

In addition to the foregoing, diversions of PCWA water will be limited during the ten-year period pursuant to the water use schedule in the Northridge-PCWA Agreement, which allows annually-increasing diversions of up to 24,000 acre feet per year during the first ten years of water deliveries under that agreement.

 Nothing set forth herein is intended to restrict Northridge's ability to take delivery of Section 215 water from Folsom Reservoir from the Bureau of Reclamation whenever it may be available.

2. If Northridge is able to take delivery of Sacramento river water through the Sacramento River Pipeline (a pipeline that would connect the Sacramento River to the Northridge pipeline), PCWA water will thereafter be diverted under the Northridge-PCWA Agreement for Northridge's own use or delivery to other

¹This time period is hereafter referred as the "ten-year period", and it may be extended for a period of up to two additional years by agreement of the parties to the Water Forum Agreement.

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purveyors, only in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 1,600,000 acre feet (i.e., "above-Hodge").

If Northridge is not able to take delivery of Sacramento River water through the 3. Sacramento River Pipeline within the ten-year period, the SWRCB would hold a hearing "(SWRCB Hearing") if requested by Northridge, the City of Sacramento. County of Sacramento, Friends of the River, Sierra Club or Save the American River Association. The purpose of the SWRCB Hearing will be to determine whether to add or revise conditions to PCWA's water rights for diversion of water from Folsom Reservoir under the Northridge-PCWA Agreement that are necessary to mitigate impacts from such diversions and/or prevent such diversions from adversely impacting diversion of American River water under the City's Rights. Nothing set forth in this section II determines the relative priority of the water rights of the City of Sacramento and PCWA. If Northridge is not able to take delivery of Sacramento River water through the Sacramento River Pipeline within the ten-year period, PCWA water will thereafter be diverted under the Northridge-PCWA Agreement for Northridge's own use or delivery to other purveyors, only in years when the projected March through November unimpaired inflow into Folsom Reservoir was greater than 1,600,000 acre feet (i.e., "above-Hodge") and under the conditions referred to in Section 1.b. above, unless these conditions are revised by a SWRCB order issued following the SWRCB Hearing. In addition, Northridge could divert water under the conditions referred to in Section 1.d. above.

The diversion restrictions set forth above reflect a compromise by the Water Forum parties in order to settle a dispute among them. If there is a SWRCB Hearing, the parties do not intend that the SWRCB consider the existence of this compromise as evidence of appropriate diversion conditions after the conclusion of the ten-year period. It is the intention of the parties that the SWRCB's determination following the SWRCB Hearing be based upon the best available scientific and other evidence available at the time of the SWRCB Hearing. Nothing set forth herein shall affect the right of PCWA to terminate the Northridge-PCWA Agreement if PCWA

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reasonably determines that any term of the SWRCB order resulting from the SWRCB Hearing is unacceptable.

B. The restrictions on diversions of PCWA water pursuant to the Northridge-PCWA Agreement, set forth in subsection A, above, also shall apply to diversions or rediversions of PCWA water for use or delivery in the expanded POU by Northridge pursuant to any other agreement or other arrangement.

C. The diversion restrictions set forth above apply only to the use or delivery of PCWA water in the expanded POU.

III. Use of PCWA Water in Expanded POU By Other Purveyors. The County and PCWA agree to the following condition governing the use of PCWA water in the expanded POU by other purveyors:

The diversion of American River water under Permit 13856 or Permit 13858 for use or delivery in the expanded POU by any purveyor other than Northridge shall be permitted only if either of the following occur: (1) the purveyor has signed and is in compliance with the Purveyor Specific Agreement set forth for the purveyor in the Water Forum Agreement; or (2) there is no Purveyor Specific Agreement for the purveyor in the Water Forum Agreement or the Water Forum Agreement has not been finalized, but (a) the purveyor has formally adopted and is in compliance with a water conservation plan applicable to the area to receive water within the expanded POU that achieves a level of water conservation equal or greater to the level achieved by the water conservation measures included in the Water Forum Action Plan, and (b) the purveyor publicly supports and is participating in, consistent with the purveyor commitments set forth in the Water Forum Action Plan, the implementation of (i) an updated lower American River flow standard and improved pattern of fishery flow releases from Folsom reservoir, (ii) a habitat mitigation program for the lower American River, and (iii) the installation of a temperature control device on the urban water intake at Folsom Dam.

IV. Protest Dismissal Conditions. Immediately upon execution of this Settlement Agreement

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by both parties, the County and PCWA both shall provide written requests to the SWRCB to include all of the conditions set forth in Section II, Section III and Section IV of this Settlement Agreement in the SWRCB's order approving the POU Petition, and both parties shall fully and unconditionally support implementation of those requests. Regardless of whether the SWRCB does or does not comply with these requests, this Settlement Agreement and all of the terms and conditions hereof shall remain in full force and effect between the parties.

V. Future Actions; Binding on Successors. The parties agree to take all actions necessary or convenient to carry out the purposes and intent of this Settlement Agreement. This Settlement Agreement shall inure to the benefit of and be binding upon successors and assigns of the parties.

VI. Miscellaneous. This Settlement Agreement and each provision hereof shall be interpreted as if drafted equally by all parties. Any of the terms or conditions of this Settlement Agreement may be waived at any time by the party entitled to the benefits thereof, but no such waiver shall affect or impair the right of the waiving party to require observance, performance or satisfaction either of that term or condition as it applies on a subsequent occasion or of any other term or condition hereof. This document constitutes the entire agreement between the parties concerning the POU Petition, and may only be amended in a writing signed by authorized representatives of both parties. Each representative signing below warrants and represents that he or she has the full legal authority to bind his or her respective party to all of the provisions of this Settlement Agreement, and that no further approvals or consents are necessary from his or her respective party in connection therewith.

PLACER COUNTY WATER AGENCY

3-19-99 Date:

APPROVED AS TO FORM:

ielema

General Counsel

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COUNTY OF SACRAMENTO

Date: 23rd, March, 1999

Muriel P. Johnson Chairperson By:

SACRAMENTO COUNTY WATER AGENCY

By: <u>Muriel F. Johnson</u> Chaiperson

APPROVED AS TO FORM:

ounty Counsel

MAR 2 3 1999 BOARD OF SUPERVISORS OF THE BOA

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BOARD OF DIRECTORS By.

le accordance with Section 25103 of the Government Co the State of California a copy of this document has definiend to the Chairman of the Board of Sepervisors, G of Sacromonto on

MAR 2 3 1999 Deplety Clerk, Board of Supervisors

SETTLEMENT AGREEMENT CONCERNING PLACER COUNTY WATER AGENCY'S PETITION TO EXPAND ITS PLACE OF USE UNDER WATER RIGHTS PERMITS 13856 AND 13858

This Settlement Agreement is executed on March _____, 1999, by and between the Placer County Water Agency (hereafter referred to as "PCWA") and the City of Sacramento ("City").

<u>RECITALS</u>

- A. On July 31, 1996, PCWA filed a petition with the State Water Resources Control Board ("SWRCB") to change the place of use ("POU") authorized under PCWA's water right Application 18085 (Permit 13856) and Application 18087 (Permit 13858). This petition is referred to hereafter as the "POU Petition."
- B. The purpose of the POU Petition is to expand the POU to include a portion of Sacramento County that currently is almost entirely dependent on groundwater for its water supply, to allow surface water that is diverted by PCWA under Permits 13856 and 13858 to be used in lieu of groundwater in the expanded POU. PCWA intends to deliver water to the expanded POU pursuant to agreements with water purveyors whose service areas include portions of the expanded POU, including existing agreements with San Juan Water District ("San Juan") and Northridge Water District ("Northridge").
- C. City has four water right Permits (nos. 11358, 11359, 11360 and 11361) that authorize diversions of American River water, and one water right Permit (no. 992) and pre-1914 rights that authorize diversions of Sacramento River water, in addition of the City's 1957 water rights settlement contract with the U.S. Bureau of Reclamation (hereafter all collectively referred to as the "City's Rights"). Pursuant to a May 21, 1962 agreement between City and PCWA, PCWA's rights to divert from the American River and any of its tributaries, including its rights pursuant to Permit 13856 and Permit 13858, are and shall be subordinate to the City's prior rights. A copy of the May 21, 1962 agreement is attached hereto as Exhibit A, and incorporated herein.

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- D. On December 18, 1996, City filed a protest based on environmental considerations and a protest based on injury to the City's Rights against the POU Petition, which protests are collectively referred to hereafter as the "City's Protest."
- E. PCWA and City are members of the ongoing Water Forum, a regional group of water purveyors, environmental organizations, public and business interests interested in the economic and environmental future of the American River watershed as affected by the diversion of water from the American River. Other Water Forum members include Sacramento County, the cities of Roseville and Folsom, Sacramento County Water Agency, El Dorado County Water Agency, San Juan Water District, Northridge Water District, Save the American River Association, the Sierra Club, Friends of the River, and others.
- F. The provisions of this Settlement Agreement that pertain to the use of PCWA water in the expanded POU under the Northridge-PCWA Agreement are based on conditions that were negotiated in the Water Forum process.
- G. City and PCWA now desire to resolve their differences regarding the proposed POU expansion, and therefore agree as follows:

Agreement

NOW, THEREFORE, in consideration of the mutual obligations and commitments set forth herein, the parties agree as follows:

I. Withdrawal of City's Protest. Immediately upon execution of this Settlement Agreement by both parties, the City shall withdraw the City's Protest, and the City will support the POU Petition.

II. Use or Delivery of Water in Expanded POU by Northridge.

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a.

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- A. The City and PCWA agree that diversions or rediversions of PCWA water for use or delivery in the expanded POU by Northridge Pursuant to the PCWA-Northridge Agreement shall be subject to compliance with the following conditions:
 - For the first ten years that water is available for diversion by Northridge Water District ("Northridge") from Folsom Reservoir under the August 21, 1995, Northridge-PCWA Agreement ("Northridge-PCWA Agreement"), but not more than twelve years from the effective date of the Water Forum Agreement, whichever occurs first,¹ diversions of PCWA water under the Northridge-PCWA Agreement, for Northridge's own use or delivery to other purveyors, will be subject to the following restrictions:
 - PCWA water can be diverted only in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 950,000 acre feet.
 - In December, January and February following a March through November period when the unimpaired inflow into Folsom Reservoir was less than 950,000 acre feet, PCWA water cannot be diverted until such time as or after water is being released from Folsom Reservoir for flood protection.
 - c. In addition to the foregoing, diversions of PCWA water will be limited during the ten-year period pursuant to the water use schedule in the Northridge-PCWA Agreement, which allows annually-increasing diversions of up to 24,000 acre feet per year during the first ten years of water deliveries under that agreement.

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¹This time period is hereafter referred as the "ten-year period", and it may be extended for a period of up to two additional years by agreement of the parties to the Water Forum Agreement.

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- Nothing set forth herein is intended to restrict Northridge's ability to take delivery of Section 215 water from Folsom Reservoir from the Bureau of Reclamation whenever it may be available.
- 2. If Northridge is able to take delivery of Sacramento river water through the Sacramento River Pipeline (a pipeline that would connect the Sacramento River to the Northridge pipeline), PCWA water will thereafter be diverted under the Northridge-PCWA Agreement for Northridge's own use or delivery to other purveyors, only in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 1,600,000 acre feet (i.e., "above-Hodge").
- 3. If Northridge is not able to take delivery of Sacramento River water through the Sacramento River Pipeline within the ten-year period, the SWRCB would hold a hearing "(SWRCB Hearing") if requested by Northridge, the City of Sacramento, County of Sacramento, Friends of the River, Sierra Club or Save the American River Association. The purpose of the SWRCB Hearing will be to determine whether to add or revise conditions to PCWA's water rights for diversion of water from Folsom Reservoir under the Northridge-PCWA Agreement that are necessary to mitigate impacts from such diversions and/or prevent such diversions from adversely impacting diversion of American River water under the City's Rights. Nothing set forth in this section II determines the relative priority of the water rights of the City of Sacramento and PCWA. If Northridge is not able to take delivery of Sacramento River water through the Sacramento River Pipeline within the ten-year period, PCWA water will thereafter be diverted under the Northridge-PCWA Agreement for Northridge's own use or delivery to other purveyors, only in years when the projected March through November unimpaired inflow into Folsom Reservoir was greater than 1,600,000 acre feet (i.e., "above-Hodge") and under the conditions referred to in Section 1.b. above, unless these conditions are revised by a SWRCB order issued following the SWRCB Hearing. In addition, Northridge could divert water under the conditions referred to in Section 1.d. above.

The diversion restrictions set forth above reflect a compromise by the Water Forum parties in order to settle a dispute among them. If there is a SWRCB Hearing, the parties do not intend that the SWRCB consider the existence of this compromise as evidence of appropriate diversion conditions after the conclusion of the ten-year period. It is the intention of the parties that the SWRCB's determination following the SWRCB Hearing be based upon the best available scientific and other evidence available at the time of the SWRCB Hearing. Nothing set forth herein shall affect the right of PCWA to terminate the Northridge-PCWA Agreement if PCWA reasonably determines that any term of the SWRCB order resulting from the SWRCB Hearing is unacceptable.

- B. The restrictions on diversions of PCWA water pursuant to the Northridge-PCWA Agreement, set forth in subsection A, above, also shall apply to diversions or rediversions of PCWA water for use or delivery in the expanded POU by Northridge pursuant to any other agreement or other arrangement.
- C. The diversion restrictions set forth above apply only to the use or delivery of PCWA water in the expanded POU.

III. Use of PCWA Water in Expanded POU By Other Purveyors. The City and PCWA agree to the following condition governing the use of PCWA water in the expanded POU by other purveyors:

The diversion of American River water under Permit 13856 or Permit 13858 for use or delivery in the expanded POU by any purveyor other than Northridge shall be permitted only if either of the following occur: (1) the purveyor has signed and is in compliance with the Purveyor Specific Agreement set forth for the purveyor in the Water Forum Agreement; or (2) there is no Purveyor Specific Agreement for the purveyor in the Water Forum Agreement or the Water Forum Agreement has not been finalized, but (a) the purveyor has formally adopted and is in compliance with a water conservation plan applicable to the area to receive water within the expanded POU that achieves a level of water conservation equal or greater to the level achieved by the water conservation measures included in the Water Forum

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Action Plan, and (b) the purveyor publicly supports and is participating in, consistent with the purveyor commitments set forth in the Water Forum Action Plan, the implementation of (i) an updated lower American River flow standard and improved pattern of fishery flow releases from Folsom reservoir, (ii) a habitat mitigation program for the lower American River, and (iii) the installation of a temperature control device on the urban water intake at Folsom Dam.

IV. City's Rights. Notwithstanding any other provision hereof, and in accordance with the May 12, 1962, agreement between City and PCWA, PCWA will not divert or redivert water originating in the American River or in any of its tributaries for use in any portion of the POU, including the expanded POU, whenever diversions or rediversions for such purpose, alone or in conjunction with other diversions, would limit or impair surface water diversions or rediversions by the City of Sacramento under the City's Rights.

V. Protest Dismissal Conditions. Immediately upon execution of this Settlement Agreement by both parties, City and PCWA both shall provide written requests to the SWRCB to include all of the conditions set forth in Section II, Section III and Section IV of this Settlement Agreement in the SWRCB's order approving the POU Petition, and both parties shall fully and unconditionally support implementation of those requests. Regardless of whether the SWRCB does or does not comply with these requests, this Settlement Agreement and all of the terms and conditions hereof shall remain in full force and effect between the parties.

VI. Future Actions; Binding on Successors. The parties agree to take all actions necessary or convenient to carry out the purposes and intent of this Settlement Agreement. This Settlement Agreement shall inure to the benefit of and be binding upon successors and assigns of the parties.

VII. Miscellaneous. This Settlement Agreement and each provision hereof shall be interpreted as if drafted equally by all parties. Any of the terms or conditions of this Settlement Agreement may be waived at any time by the party entitled to the benefits thereof, but no such waiver shall affect or impair the right of the waiving party to require observance, performance or satisfaction either of that term or condition as it applies on a subsequent occasion or of any other term or condition hereof. This document constitutes the entire agreement between the parties concerning the POU Petition,

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and may only be amended in a writing signed by authorized representatives of both parties. Each representative signing below warrants and represents that he or she has the full legal authority to bind his or her respective party to all of the provisions of this Settlement Agreement, and that no further approvals or consents are necessary from his or her respective party in connection therewith.

PLACER COUNTY WATER AGENCY

Date:

APPROVED AS TO FORM:

cedeman

CITY OF SACRAMENTO

Date:

By:

BΫ:

APPROVED AS TO FORM:

Deputy City Attorney

ATTEST:

City Clerk

AGREEMENT

CITY OF SACRAMENTO, a municipal corporation, hereinafter referred to as "CITY", and PLACER COUNTY WATER AGENCY, a political subdivision of the State of California, hereinafter referred to as "AGENCY", hereby agree as follows:

<u>Recitals</u>

1. AGENCY has filed with the State Water Rights Board of the State of California Applications 18084, 13085, 18086, and 18087 to appropriate unappropriated water from North Fork and Middle Fork American River and from various tributaries thereto for power, irrigation, incidental domestic, municipal, industrial and recreational purposes.

2. CITY diverts water from the Sacramento River below its confluence with the American River, at the intake of its existing Filtration Plant, pursuant to appropriative rights dating from 1849 or 1850, and Permit 992 on Application 1743. CITY will also soon divert or redivert water from the American River at a point near the new Filtration Plant now under construction, pursuant to Permit No. 11358 on Application 12140, Permit No. 11361 on Application 16060, Permit 11359 on Application 12321, and Permit 11360 on Application 12622, under agreements with the U.S. Bureau of Reclamation, and with Sacramento Municipal Utility District, both dated June 28, 1957. All of such diversions are for municipal use of the City of Sacramento and the areas adjacent to said CITY.

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3. CITY has filed with the aforesaid State Water Hights Board a protest against the applications filed by AGENCY and referred to in Paragraph 1 hereinabove on the ground that AGENCY's proposed diversions would interfere with CITY's diversions under prior right.

4. AGENCY has filed with said State Water Rights Board an answer to the aforeseid protest stating, inter alia, that water is available at AGENCY's proposed points of diversion for the uses proposed under its applications without interfering with the reasonable needs of protestant CITY under any prior downstream vested rights.

Agreements

5. CITY and AGENCY hereby agree (a) that the rights of AGENCY to divert water originating in the American River or in any of its tributaries are and shall be subordinate to CITY's rights under the appropriations, permits, and agreements referred to in Paragraph 2 hereinabove, and (b) that this agreement may be incorporated into and made a condition of any permit or permits issued to AGENCY by the aforesaid State Water Rights Board on the applications referred to in Paragraph 1 hereinabove.

6. CITY agrees that the protest referred to in Paragraph 3 hereinabove may be disregarded and dismissed if

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this agreement is incorporated into and made a condition of said permit or permits issued to AGENCY.

Dated: May 21, 1962.

CITY OF SACRAMENTO

E.a. Farba By___

PLACER COUNTY WATER AGENCY

By SI Thomas E. Day 18 After Chauman

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Stipulated Agreement for Dismissal of Protest to Placer County Water Agency's Petition to Expand the Place of Use Under Application 18085 (Permit 13856) and Application 18087 (Permit 13858)

Friends of the River agrees that its protest to Placer County Water Agency's ("PCWA") petition for change in place of use may be dismissed if the conditions set forth below are included in the State Board's order approving the petition:

1. For the first ten years that water is available for diversion by Northridge Water District ("Northridge") from Folsom Reservoir under the August 21, 1995 Northridge-PCWA Agreement ("Northridge-PCWA Agreement"), but not more than twelve years from the effective date of the Water Forum Agreement, whichever occurs first,¹ Northridge's diversions under the Northridge-PCWA Agreement, for its own use or delivery to other purveyors, will be subject to the following restrictions:

a.. Northridge will be able to divert PCWA water only in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 950,000 acre feet.

b. In December, January and February following a March through November period when the unimpaired inflow into Folsom Reservoir was less than 950,000 acre feet, Northridge will not divert PCWA water until such time as or after water is being released from Folsom Reservoir for flood protection.

c. In addition to the foregoing, Northridge's diversions of PCWA water will be limited during the ten-year period pursuant to the water use schedule in the Northridge-PCWA Agreement, which allows annually-increasing diversions of up to 24,000 acre feet per year during the first ten years of water deliveries under that agreement.

d. Nothing in this Agreement is intended to restrict Northridge's ability to take

¹ This time period is hereafter referred to as the "ten-year period," and it may be extended for a period of up to two additional years by agreement of the parties to this Agreement.

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delivery of Section 215 water from Folsom Reservoir from the Bureau of Reclamation whenever it may be available.

2. If Northridge is able to take delivery of Sacramento River water through the Sacramento River Pipeline (a pipeline that would connect to the Northridge pipeline), Northridge will thereafter divert water from Folsom Reservoir under the Northridge-PCWA Agreement, for its own use or delivery to other purveyors, only in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 1,600,000 acre feet (i.e., "above-Hodge").

3. If Northridge is not able to take delivery of Sacramento River water through the Sacramento River Pipeline within the ten-year period, the SWRCB would hold a hearing ("SWRCB" Hearing") if requested by Northridge, the City of Sacramento, County of Sacramento, Friends of the River, Sierra Club or Save the American River Association. The purpose of the SWRCB Hearing will be to determine whether to add or revise conditions to PCWA's water rights for diversion of water from Folsom Reservoir under the Northridge-PCWA Agreement that are necessary to mitigate impacts from such diversions and/or prevent such diversions from adversely impacting diversion of American River water under the City of Sacramento's prior water rights. Nothing in this Agreement determines the relative priority of the water rights of the City of Sacramento and PCWA. If Northridge is not able to take delivery of Sacramento River water through the Sacramento River Pipeline within the ten-year period, Northridge would thereafter divert water from Folsom Reservoir under the Northridge-PCWA Agreement, for its own use or delivery to other purveyors, only in years when the projected March through November unimpaired inflow into Folsom Reservoir was greater than 1,600,000 acre feet (i.e., "above-Hodge") and under the conditions referred to in Section 1.b. of this Agreement unless these conditions are revised by a SWRCB order issued following the SWRCB Hearing. In addition, Northridge could divert water under the conditions referred to in section 1,d. of this Agreement.

The diversion restrictions set forth in this Agreement reflect a compromise by the Water Forum parties in order to settle a dispute among them. If there is a SWRCB Hearing, the parties do not intend that the SWRCB consider the existence of this compromise as evidence of appropriate diversion conditions after the conclusion of the ten-year period. It is the intention of the parties that

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the SWRCB's determination following the SWRCB Hearing be based upon the best available soientific and other evidence available at the time of the SWRCB Hearing. Nothing in this Agreement shall affect the right of PCWA to terminate the Northridge-PCWA Agreement if PCWA reasonably determines that any term of the SWRCB order resulting from the SWRCB Hearing is unacceptable.

4. Northridge will neither divert nor accept diversions of PCWA water from Folsom Reservoir or the American River under the Northridge-PCWA Agreement, for its own use or delivery to other purveyors, whenever such diversions alone or in conjunction with other diversions would limit or impair diversions from the American River by the City of Sacramento under its prior water rights.

Northridge's delivery to other purveyors of water diverted from the American River under the Northridge-PCWA Agreement is subject to those purveyors signing and implementing their commitments under the Water Forum Agreement.

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The foregoing is hereby approved by the parties hereto.

Date: September 1, 1999

Friends of the River

Date:

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Placer County Water Agency

Stipulated Agreement for Dismissal of Protest to Placer County Water Agency's Petition to Expand the Place of Use Under Application 18085 (Permit 13856) and Application 18087 (Permit 13858)

Save the American River Association agrees that its protest to Placer County Water Agency's ("PCWA") petition for change in place of use may be dismissed if the conditions set forth below are included in the State Board's order approving the petition:

1. For the first ten years that water is available for diversion by Northridge Water District ('Northridge') from Folsom Reservoir under the August 21, 1995 Northridge-PCWA Agreement ('Northridge-PCWA Agreement'), but not more than twelve years from the effective date of the Water Forum Agreement, whichever occurs first,¹ Northridge's diversions under the Northridge-PCWA Agreement, for its own use or delivery to other purveyors, will be subject to the following restrictions:

a.. Northridge will be able to divert PCWA water only in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 950,000 acre feet.

b. In December, January and February following a March through November period when the unimpaired inflow into Folsom Reservoir was less than 950,000 acre feet, Northridge will not divert PCWA water until such time as or after water is being released from Folsom Reservoir for flood protection.

c. In addition to the foregoing, Northridge's diversions of PCWA water will be limited during the ten-year period pursuant to the water use schedule in the Northridge-PCWA Agreement, which allows annually-increasing diversions of up to 24,000 acre feet per year during the first ten years of water deliveries under that agreement.

d. Nothing in this Agreement is intended to restrict Northridge's ability to take

¹ This time period is hereafter referred to as the "ten-year period," and it may be extended for a period of up to two additional years by agreement of the parties to this Agreement.

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delivery of Section 215 water from Folsom Reservoir from the Bureau of Reclamation whenever it may be available.

2. If Northridge is able to take delivery of Sacramento River water through the Sacramento River Pipeline (a pipeline that would connect to the Northridge pipeline). Northridge will thereafter divert water from Folsom Reservoir under the Northridge-PCWA Agreement, for its own use or delivery to other purveyors, only in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 1,600,000 acre feet (i.e., "above-Hodge").

If Northridge is not able to take delivery of Sacramento River water through the 3. Sacramento River Pipeline within the ten-year period, the SWRCB would hold a hearing ("SWRCB Hearing") if requested by Northridge, the City of Sacramento, County of Sacramento, Friends of the River, Sierra Club or Save the American River Association. The purpose of the SWRCB Hearing will be to determine whether to add or revise conditions to PCWA's water rights for diversion of water from Folsom Reservoir under the Northridge-PCWA Agreement that are necessary to mitigate impacts from such diversions and/or prevent such diversions from adversely impacting diversion of American River water under the City of Sacramento's prior water rights. Nothing in this Agreement determines the relative priority of the water rights of the City of Sacramento and PCWA. If Northridge is not able to take delivery of Sacramento River water through the Sacramento River Pipeline within the ten-year period, Northridge would thereafter divert water from Folsom Reservoir under the Northridge-PCWA Agreement, for its own use or delivery to other purveyors, only in years when the projected March through November unimpaired inflow into Folsom Reservoir was greater than 1,600,000 acre feet (i.e., "above-Hodge") and under the conditions referred to in Section 1.b. of this Agreement unless these conditions are revised by a SWRCB order issued following the SWRCB Hearing. In addition, Northridge could divert water under the conditions referred to in section 1.d. of this Agreement.

The diversion restrictions set forth in this Agreement reflect a compromise by the Water Forum parties in order to settle a dispute among them. If there is a SWRCB Hearing, the parties do not intend that the SWRCB consider the existence of this compromise as evidence of appropriate diversion conditions after the conclusion of the ten-year period. It is the intention of the parties that

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the SWRCB's determination following the SWRCB Hearing be based upon the best available scientific and other evidence available at the time of the SWRCB Hearing. Nothing in this Agreement shall affect the right of PCWA to terminate the Northridge-PCWA Agreement if PCWA reasonably determines that any term of the SWRCB order resulting from the SWRCB Hearing is unacceptable.

4. Northridge will neither divert nor accept diversions of PCWA water from Folsom Reservoir or the American River under the Northridge-PCWA Agreement, for its own use or delivery to other purveyors, whenever such diversions alone or in conjunction with other diversions would limit or impair diversions from the American River by the City of Sacramento under its prior water rights.

Northridge's delivery to other purveyors of water diverted from the American River under the Northridge-PCWA Agreement is subject to those purveyors signing and implementing their commitments under the Water Forum Agreement.

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The foregoing is hereby approved by the parties hereto.

Date:

Save the American River Association. Inc.

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09/16/99 Date:

Placer County Water Agency

d.

Stipulated Agreement for Dismissal of Protest to Placer County Water Agency's Petition to Expand the Place of Use Under Application 18085 (Permit 13856) and Application 18087 (Permit 13858)

The Sierra Club, Sacramento agrees that its protest to Placer County Water Agency's ("PCWA") petition for change in place of use may be dismissed if the conditions set forth below are included in the State Board's order approving the petition:

1. For the first ten years that water is available for diversion by Northridge Water District ("Northridge") from Folsom Reservoir under the August 21, 1995 Northridge-PCWA Agreement ("Northridge-PCWA Agreement"), but not more than twelve years from the effective date of the Water Forum Agreement, whichever occurs first,¹ Northridge's diversions under the Northridge-PCWA Agreement, for its own use or delivery to other purveyors, will be subject to the following restrictions:

a.. Northridge will be able to divert PCWA water only in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 950,000 acre feet.

b. In December, January and February following a March through November period when the unimpaired inflow into Folsom Reservoir was less than 950,000 acre feet, Northridge will not divert PCWA water until such time as or after water is being released from Folsom Reservoir for flood protection.

c. In addition to the foregoing, Northridge's diversions of PCWA water will be limited during the ten-year period pursuant to the water use schedule in the Northridge-PCWA Agreement, which allows annually-increasing diversions of up to 24,000 acre feet per year during the first ten years of water deliveries under that agreement.

Nothing in this Agreement is intended to restrict Northridge's ability to take

¹ This time period is hereafter referred to as the "ten-year period," and it may be extended for a period of up to two additional years by agreement of the parties to this Agreement.

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delivery of Section 215 water from Folsom Reservoir from the Bureau of Reclamation whenever it may be available.

2. If Northridge is able to take delivery of Sacramento River water through the Sacramento River Pipeline (a pipeline that would connect to the Northridge pipeline), Northridge will thereafter divert water from Folsom Reservoir under the Northridge-PCWA Agreement, for its own use or delivery to other purveyors, only in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 1,600,000 acre feet (i.e., "above-Hodge").

3. If Northridge is not able to take delivery of Sacramento River water through the Sacramento River Pipeline within the ten-year period, the SWRCB would hold a hearing ("SWRCB Hearing") if requested by Northridge, the City of Sacramento, County of Sacramento, Friends of the River, Sierra Club or Save the American River Association. The purpose of the SWRCB Hearing will be to determine whether to add or revise conditions to PCWA's water rights for diversion of water from Folsom Reservoir under the Northridge-PCWA Agreement that are necessary to mitigate impacts from such diversions and/or prevent such diversions from adversely impacting diversion of American River water under the City of Sacramento's prior water rights. Nothing in this Agreement determines the relative priority of the water rights of the City of Sacramento and PCWA. If Northridge is not able to take delivery of Sacramento River water through the Sacramento River Pipeline within the ten-year period, Northridge would thereafter divert water from Folsom Reservoir under the Northridge-PCWA Agreement, for its own use or delivery to other purveyors, only in years when the projected March through November unimpaired inflow into Folsom Reservoir was greater than 1,600,000 acre feet (i.e., "above-Hodge") and under the conditions referred to in Section 1.b. of this Agreement unless these conditions are revised by a SWRCB order issued following the SWRCB Hearing. In addition, Northridge could divert water under the conditions referred to in section 1.d. of this Agreement.

The diversion restrictions set forth in this Agreement reflect a compromise by the Water Forum parties in order to settle a dispute among them. If there is a SWRCB Hearing, the parties do not intend that the SWRCB consider the existence of this compromise as evidence of appropriate diversion conditions after the conclusion of the ten-year period. It is the intention of the parties that

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the SWRCB's determination following the SWRCB Hearing be based upon the best available scientific and other evidence available at the time of the SWRCB Hearing. Nothing in this Agreement shall affect the right of PCWA to terminate the Northridge-PCWA Agreement if PCWA reasonably determines that any term of the SWRCB order resulting from the SWRCB Hearing is unacceptable.

Northridge will neither divert nor accept diversions of PCWA water from Folsom Reservoir or the American River under the Northridge-PCWA Agreement, for its own use or delivery to other purveyors, whenever such diversions alone or in conjunction with other diversions would limit or impair diversions from the American River by the City of Sacramento under its prior water rights.

Northridge's delivery to other purveyors of water diverted from the American River under the Northridge-PCWA Agreement is subject to those purveyors signing and implementing their commitments under the Water Forum Agreement.

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The foregoing is hereby approved by the parties hereto.

9/1/99 Date:

The Sierra Club, Sacramento

Date: OP, 16/29

Placer County Water Agency

Stipulated Agreement for Dismissal of Protest to Placer County Water Agency's Petition to Expand the Place of Use Under Application 18085 (Permit 13856) and Application 18087 (Permit 13858)

William L. Berry, Jr. agrees that his protest to Placer County Water Agency's ("PCWA") petition for change in place of use may be dismissed if the conditions set forth below are included in the State Board's order approving the petition:

1. For the first ten years that water is available for diversion by Northridge Water District ("Northridge") from Folsom Reservoir under the August 21, 1995 Northridge-PCWA Agreement ("Northridge-PCWA Agreement"), but not more than twelve years from the effective date of the Water Forum Agreement, whichever occurs first, ¹ Northridge's diversions under the Northridge-PCWA Agreement, for its own use or delivery to other purveyors, will be subject to the following restrictions:

a.. Northridge will be able to divert PCWA water only in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 950,000 acre feet.

b. In December, January and February following a March through November period when the unimpaired inflow into Folsom Reservoir was less than 950,000 acre feet, Northridge will not divert PCWA water until such time as or after water is being released from Folsom Reservoir for flood protection.

c. In addition to the foregoing, Northridge's diversions of PCWA water will be limited during the ten-year period pursuant to the water use schedule in the Northridge-PCWA Agreement, which allows annually-increasing diversions of up to 24,000 acre feet per year during the first ten years of water deliveries under that agreement.

d. Nothing in this Agreement is intended to restrict Northridge's ability to take

¹ This time period is hereafter referred to as the "ten-year period," and it may be extended for a period of up to two additional years by agreement of the parties to this Agreement.

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delivery of Section 215 water from Folsom Reservoir from the Bureau of Reclamation whenever it may be available.

2. If Northridge is able to take delivery of Sacramento River water through the Sacramento River Pipeline (a pipeline that would connect to the Northridge pipeline), Northridge will thereafter divert water from Folsom Reservoir under the Northridge-PCWA Agreement, for its own use or delivery to other purveyors, only in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 1,600,000 acre feet (i.e., "above-Hodge").

3. If Northridge is not able to take delivery of Sacramento River water through the Sacramento River Pipeline within the ten-year period, the SWRCB would hold a hearing ("SWRCB Hearing") if requested by Northridge, the City of Sacramento, County of Sacramento, Friends of the River, Sierra Club, Save the American River Association or William L. Berry, Jr. The purpose of the SWRCB Hearing will be to determine whether to add or revise conditions to PCWA's water rights for diversion of water from Folsom Reservoir under the Northridge-PCWA Agreement that are necessary to mitigate impacts from such diversions and/or prevent such diversions from adversely impacting diversion of American River water under the City of Sacramento's and Cannichael Water District's ("Carmichael") prior water rights. Nothing in this Agreement determines the relative priority of the water rights of the City of Sacramento, Carmichael and PCWA. If Northridge is not able to take delivery of Sacramento River water through the Sacramento River Pipeline within the ten-year period, Northridge would thereafter divert water from Folsom Reservoir under the Northridge-PCWA Agreement, for its own use or delivery to other purveyors, only in years when the projected March through November unimpaired inflow into Folsom Reservoir was greater than 1,600,000 acre feet (i.e., "above-Hodge") and under the conditions referred to in Section 1.b. of this Agreement unless these conditions are revised by a SWRCB order issued following the SWRCB Hearing. In addition, Northridge could divert water under the conditions referred to in section 1.d. of this Agreement.

The diversion restrictions set forth in this Agreement reflect a compromise by the Water Forum parties in order to settle a dispute among them. If there is a SWRCB Hearing, the parties do not intend that the SWRCB consider the existence of this compromise as evidence of appropriate

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diversion conditions after the conclusion of the ten-year period. It is the intention of the parties that the SWRCB's determination following the SWRCB Hearing be based upon the best available scientific and other evidence available at the time of the SWRCB Hearing. Nothing in this Agreement shall affect the right of PCWA to terminate the Northridge-PCWA Agreement if PCWA reasonably determines that any term of the SWRCB order resulting from the SWRCB Hearing is unacceptable.

4. Northridge will neither divert nor accept diversions of PCWA water from Folsom Reservoir or the American River under the Northridge-PCWA Agreement, for its own use or delivery to other purveyors, whenever such diversions alone or in conjunction with other diversions would limit or impair diversions from the American River by the City of Sacramento or Carmichael under their prior water rights.

Northridge's delivery to other purveyors of water diverted from the American River under the Northridge-PCWA Agreement is subject to those purveyors signing and implementing their commitments under the Water Forum Agreement.

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The foregoing is hereby approved by the parties hereto.

Date: November (1), 1999

Date:

am L. Berry, Jr

Placer County Water Agency



Authorized Service Area For PCWA Water (Exhibit"B")

NOT TO SCALE

WHOLESALE WATER SUPPLY AGREEMENT BETWEEN THE CITY OF SACRAMENTO AND SACRAMENTO SUBURBAN WATER DISTRICT

THIS AGREEMENT is made and entered into this day of ______, 2003, by the CITY OF SACRAMENTO, a charter municipal corporation (hereinafter referred to as "City") and the SACRAMENTO SUBURBAN WATER DISTRICT, a California special district (hereinafter referred to as "District").

RECITALS

- A. On February 13, 1964, the City and Arcade Water District ("Arcade") entered into an agreement, a copy of which is attached to this Agreement as **Exhibit A** (the "1964 Water Supply Agreement"), under which the City granted to Arcade the right to divert up to 26,064 acre feet of water per year from the American River under the City's "Permit Supply," as that term is defined in the 1964 Water Supply Agreement, for use within the service area of Arcade that was within the portion of the authorized place of use ("POU") for the City's American River water right permits, referred to as "Area D" in the 1964 Water Supply Agreement. On September 19, 2001, the City and Arcade entered into an agreement under which the City consented to the transfer by Arcade of all rights and obligations under the 1964 Water Supply Agreement to the District, upon the consolidation of Arcade with Northridge Water District ("Northridge") to form the District. This Agreement does not involve the diversion of water by the District under the 1964 Water Supply Agreement. Except as expressly provided below, nothing in this Agreement affects the rights and obligations of the City and the District under the 1964 Water Supply Agreement.
- **B.** The District owns and operates public utility water systems and provides public utility water service to the public located in Sacramento County, California, for residential and commercial and industrial purposes, pursuant to authority granted to it by the California Legislature.
- C. The District desires to (1) obtain a wholesale supply of treated surface water under this Agreement, and (2) preserve the right of the District to divert untreated water if the District elects to do so, under the 1964 Water Supply Agreement for use within the service area described in the 1964 Water Supply Agreement. The District has capacity in its American River diversion facilities to divert and put to beneficial use within such service area approximately 3,500 acre-feet of water per year under the 1964 Water Supply Agreement.
- D. The City and Arcade previously entered into agreements under which (1) Arcade reimbursed the City for a portion of the costs incurred by the City to construct City water transmission mains, and (2) Arcade acquired ownership rights in a portion of such transmission mains, for the purpose of conveying water from the City's E.A. Fairbairn Water Treatment Plant ("Fairbairn Plant") to Arcade, as shown in Exhibit B. The District is the successor to Arcade's ownership rights.

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CITY AGREEMENT NO. _

- E. The City is expanding the capacity of the Fairbairn Plant. Until such expansion is completed, studies conducted by the City indicate that the City's Fairbairn Plant, storage facilities and transmission mains have adequate Non-Firm Capacity (as defined below) as of the date of this Agreement to supply the District a maximum of up to ten million gallons per day ("mgd") of treated water. After the City's planned expansion of the Fairbairn Plant and improvement of transmission main capacities, the City expects to have adequate Firm Capacity (as defined below) to supply the District additional treated water, as provided herein. The maximum day flows specified herein for the use of Non-Firm and Firm Capacity are hereafter collectively referred to as the "District Water Requirements".
- **F.** The City has completed environmental review for the expansion of the Fairbairn Plant, and the expansion project currently is under construction.
- **G.** The City and the District are both signatories to the Sacramento Water Forum Agreement, and this Agreement is consistent with that agreement.
- **H.** Subject to the terms and conditions contained herein, the City is willing to provide a wholesale supply of treated surface water to meet the District Water Requirements.
- I. The City entered into an agreement with Northridge's predecessor, the Northridge Park County Water District, dated January 31, 1980 (the "1980 Water Supply Agreement"), under which the City granted to Northridge Park County Water District the right, subject to specified conditions, to divert up to 9,023 acre-feet per year from the American River under the City's Permit Supply for use within the service area of Northridge Park County Water District that was within that portion of the POU referred to as "Area D" in the 1980 Water Supply Agreement. The conditions specified for the 1980 Water Supply Agreement to be effective were not fulfilled. The parties agree that this Agreement does not constitute, and will not be interpreted as, an acknowledgment or admission by the City that the 1980 Water Supply Agreement remains a valid or binding agreement, nor does this Agreement involve any diversion of water by the District (as successor to Northridge) under the 1980 Water Supply Agreement.

In consideration of the foregoing and of the mutual covenants herein contained, the parties hereto agree as follows:

1. <u>Recitals Incorporated</u>:

The foregoing recitals are incorporated by reference.

2. <u>Purpose</u>:

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The purpose of this Agreement is to establish the conditions under which the City will divert, treat, convey and sell surface water to the District on a wholesale basis to meet the District Water Requirements, for use within the District Service Area, both before and after expansion of the

Page 2

Fairbairn Plant and the completion of improvements to the City's water transmission facilities. Nothing in this Agreement affects the right of the District to divert and put to beneficial use within the District Service Area untreated surface water under the 1964 Water Supply Agreement if the District so elects, subject to the provisions of Section 4, below.

3. <u>Definitions</u>:

1 I I I

- a. Arcade: Arcade Water District, one of the predecessor entities of the District.
- b. Capital Costs: Costs incurred by the City to design and construct diversion, pumping, treatment, storage and transmission facilities used to provide treated water to the District under this Agreement, including reasonable administrative costs.
- c. City: The City of Sacramento.
- d. City Transmission Facilities: All facilities, including transmission mains, storage facilities and all appurtenances that are owned and operated by the City to supply water from the City Treatment Facilities, as they exist today and as they may be modified and expanded in the future.
- e. City Treatment Facilities: All facilities that are owned and operated by the City to divert and process water to meet the requirements established for drinking water by the California Department of Health Services and the United States Environmental Protection Agency, including the Fairbairn Plant, groundwater wells, and the Sacramento River Water Treatment Plant, as they exist today and as they may be modified and expanded in the future.
- f. City Water Rights and Entitlements: The City's surface water rights and entitlements, including pre-1914 rights, five water right permits issued by the State Water Resources Control Board and a water rights settlement contract entered into in 1957 with the United States Bureau of Reclamation.
- g. Connection Fee: The fee(s) paid by the District for its share of Capital Costs for Non-Firm and Firm Capacity used to provide treated water to the District under this Agreement, as provided in Section 9.b., below.
- *h.* Delivery Criteria: The operating guidelines and criteria governing the delivery of treated water under this Agreement.
- *i. District:* The Sacramento Suburban Water District.
- *j.* District Water Facilities: All facilities, including transmission mains, storage facilities and all appurtenances, which are owned and operated by the District to supply water. The District Water Facilities to be used to obtain water under this Agreement are shown on **Exhibit B**.

- k. District Water Requirements: The maximum-day flow amounts specified for the delivery to the District of treated water utilizing Non-Firm and Firm Capacity in accordance with the provisions of this Agreement.
- *l.* District Service Area: Those lands served by the District, as may change from time to time, within the POU. The current District Service Area is shown on **Exhibit C** to this Agreement.
- *m.* Expanded Fairbairn Plant: The City's E.A. Fairbairn Water Treatment Plant (Fairbairn Plant) after the current projects to expand the Fairbairn Plant's treatment capacity to 200 mgd and to modify the water intake to comply with current fish screening requirements are completed, and the modified water intake and expanded treatment capacity are fully operational.
- *n.* Fairbairn Plant: The City's E.A. Fairbairn Water Treatment Plant located on the south bank of the Lower American River downstream of Howe Avenue.
- o. *Firm Capacity*: Capacity in the City Treatment and Transmission Facilities that is available to divert, treat and deliver water to the District on an equal priority to the use of such capacity to meet the demands of the City's other water supply customers, except as provided otherwise in this Agreement.
- *p.* 1964 Water Supply Agreement: The February 13, 1964 agreement between the City and Arcade Water District, attached hereto as **Exhibit A**.
- *q.* Non-Firm Capacity: Capacity in the City Treatment and Transmission Facilities that is available to divert, treat and deliver water to the District in accordance with the provisions of this Agreement after the capacity demands of the City's other water supply customers are fully met.
- *r.* Northridge: Northridge Water District, one of the predecessor entities of the District.
- s. *POU*: All lands where the City is authorized to use surface water pursuant to the City's four American River water right permits.
- t. Service Charge: A monthly fee for fixed administrative costs billed to the District, as provided in Section 9.a., below.
- *u.* Service Connection: A point of connection for delivery of treated water from the City Transmission Facilities to the District Water Facilities pursuant to this Agreement, of which there may be more than one as determined by the parties from time to time.
- v. Transmission Main Improvements: Planned improvements to the City Transmission

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Facilities that will assist in providing adequate Firm Capacity for the delivery of treated water to the District in accordance with Section 6.b., below, as shown on **Exhibit B** to this Agreement.

- *w.* Treated water or treated surface water: Water that is treated to meet the requirements established for drinking water by the California Department of Health Services and the United States Environmental Protection Agency.
- x. Unit Rate: The charge billed to the District at a cost per unit quantity of treated water delivered under this Agreement, as provided in Section 9.a., below.
- *y.* Water Forum Agreement: The Sacramento Water Forum Agreement dated January 2000 and any subsequent amendments or supplements thereto, including the Purveyor Specific Agreement signed by the District on June 5, 2003.
- z. Wholesale Water Rate: The Unit Rate and Service Charge billed to the District, as provided in Section 9.a., below.

4. Diversion of Untreated Water by the District:

Nothing in this Agreement affects the right of the District under the 1964 Water Supply Agreement to divert untreated water for use within the portion of the District Service Area located within "Area D," in accordance with the terms of the 1964 Water Supply Agreement, provided that (a) the District complies with all applicable legal, regulatory and contractual requirements, including applicable provisions of the Water Forum Agreement, and (b) notwithstanding any provision of this Agreement to the contrary, the City may deduct any amount of untreated water diverted by the District under the 1964 Water Supply Agreement from the amount of water otherwise required to be diverted, treated and delivered to the District under this Agreement.

5. Delivery Criteria for Treated Water:

The delivery of treated water under this Agreement will be governed by the operating guidelines and criteria set forth in the Delivery Criteria attached hereto as **Exhibit D**. The Delivery Criteria may be modified from time to time by the mutual written agreement of the City's Director of Utilities and the District's General Manager, provided that such modifications are consistent with the provisions of this Agreement.

6. Maximum Treated Water Diversions and Deliveries:

a. <u>Pre-Fairbairn Plant Expansion</u>. Prior to the completion and commencement of operation of the Fairbairn Plant Expansion and Transmission Main Improvements, only Non-Firm Capacity will be available to divert, treat and deliver water to the District in accordance with the provisions of this Agreement. The water diverted, treated and delivered to the District utilizing Non-Firm Capacity, prior to the completion and commencement of operation of the Fairbairn Plant Expansion and

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Transmission Main Improvements, will not exceed a maximum amount of ten million gallons per day (mgd), and will not exceed the maximum instantaneous rate specified in the Delivery Criteria.

- b. <u>Post-Fairbairn Plant Expansion</u>. After the completion and commencement of operation of the Fairbairn Plant Expansion and Transmission Main Improvements, Firm Capacity will be available to divert, treat and deliver water to the District in accordance with the provisions of this Agreement. The water diverted, treated and delivered to the District utilizing Firm Capacity, after the completion and commencement of operation of the Fairbairn Plant Expansion and Transmission Main Improvements, will not exceed a maximum amount of twenty mgd, and will not exceed the maximum instantaneous rate specified in the Delivery Criteria.
- Additional Water. At any time during the term of this Agreement after the c. completion and commencement of operation of the Fairbairn Plant Expansion and Transmission Main Improvements, District may request that the City divert, treat and deliver additional water to the District utilizing up to ten mgd of Non-Firm and/or Firm Capacity beyond the twenty mgd maximum specified in subsection b, above (hereafter referred to as "Additional Water"). To the extent that the City determines in its sole discretion that adequate Non-Firm Capacity and/or Firm Capacity is available in the City Treatment and Transmission Facilities, up to such additional ten mgd, the City will utilize Non-Firm Capacity and/or Firm Capacity, as determined by City, to divert, treat and deliver Additional Water to District on the same terms and conditions as provided in this Agreement, including the Delivery Criteria, except that the Wholesale Water Rate and Connection Fee for Capital Costs paid by District for the diversion, treatment and delivery of Additional Water will be determined by mutual agreement of the City and District at that time. No Additional Water will be diverted, treated or delivered hereunder until the parties have agreed upon such Wholesale Water Rate and Connection Fee to be paid by the District.
- d. Notwithstanding any other provision of this Agreement to the contrary, the City will not be required to divert, treat or deliver any water to the District under this Agreement if any City facility(ies) necessary to do so are shut down for maintenance or repair, provided that such shut down also prevents the use of such facilities for the City's retail water customers.
- e. Water treated and delivered to the District under this Agreement may only be used by the District to provide municipal and industrial water service within the District Service Area, and will not be used by the District for any other purpose.
- f. Notwithstanding any other provision of this Agreement to the contrary, no water diverted and treated at the Fairbairn Plant, utilizing either Non-Firm or Firm Capacity, will be delivered to District under this Agreement at any time when the City's diversions at the Fairbairn Plant are restricted or limited, or the diversion of water for the District would cause the City's diversions to be restricted or limited, by

the Water Forum diversion restrictions incorporated in the City's four American River water right permits, which diversion restrictions are shown on **Exhibit E** to this Agreement.

- g. The limitation specified in subsection f., above, will not prevent the delivery by the City to the District of treated water diverted from the Sacramento River, utilizing Non-Firm and/or Firm Capacity, provided that facilities and capacity to divert, treat and deliver such water are available and the parties agree in writing upon, or amend this Agreement to set forth, the terms and conditions for the diversion, treatment and delivery of such water to the District, consistent with all applicable legal, regulatory and contractual requirements, including applicable provisions of the Water Forum Agreement.
- h. The parties acknowledge and agree that the City (1) does not lose or otherwise forfeit or abandon its rights to any quantity of water that is not diverted at the Fairbairn Plant by operation of the Water Forum diversion restrictions shown on **Exhibit E**, and (2) retains its rights to divert or redivert such water for municipal and industrial use at or downstream of the confluence of the American River and the Sacramento River, as well as any rights City may have to transfer that water for other beneficial uses. The City and the District intend that, (1) in the event that water deliveries to the District under this Agreement are curtailed pursuant to subsection f., above, and (2) the City receives revenues for a transfer of water that would have been delivered to the District but for such curtailment, the City will consult with the District for the purpose of providing to the District a credit against payments due from the District to the City under this Agreement in an amount that reflects an equitable sharing between the City and the District of net revenues received by the City for such transfer.

7. <u>Services Performed by the City</u>:

The City will supply treated surface water to the District in accordance with the terms of this Agreement. The City will provide District with the City's water quality testing data on an annual basis or on such other schedule as may be agreed to by the parties.

8. **Obligations of the District**:

- a. The District will take delivery of the treated surface water made available by the City pursuant to the Delivery Criteria.
- b. The District will pay any and all costs associated with diverting, treating and delivering water to the District pursuant to this Agreement, as set forth in Sections 9 and 10 of this Agreement. In addition, the District will be wholly responsible for its pro rata share (comparing the quantities of water that the City delivers to the District and to other City retail and wholesale customers) of any and all costs reasonably incurred by the City in order to comply with all laws and regulations that may apply

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to the diversion, treatment and delivery of water to the District hereunder, including but not limited to, the California Environmental Quality Act, the National Environmental Policy Act, the Federal and State Endangered Species Acts, the Federal Reclamation Laws, the Clean Water Act and the Porter-Cologne Water Quality Control Act. Further, the District will be wholly responsible for its pro rata share (comparing the quantities of water that the City delivers to the District and to other City retail and wholesale customers) of any and all costs associated with any other requirements and/or conditions that are or may be imposed on the diversion, treatment and/or delivery of water to the District by any federal, state or local agency, including but not limited to the U.S. Bureau of Reclamation, the California Department of Water Resources, the State Water Resources Control Board, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service or the California Department of Fish and Game.

c. Any deliveries of water to the District will be subject to any and all requirements and/or conditions contained in or in the future imposed on any of the City Water Rights and Entitlements.

9. Cost Allocation and Payment:

The cost allocations and payment for any water delivered pursuant to this Agreement will be governed by the following paragraphs.

a. **Operations and Maintenance**

The District will be charged a Wholesale Water Rate for diversion, treatment (1)and conveyance of water. The Wholesale Water Rate shall consist of a Unit Rate calculated on a cost-per-unit quantity basis for water actually delivered, plus a monthly Service Charge for fixed administrative costs incurred irrespective of the quantity of water delivered. The Wholesale Water Rate will be determined by the City in an equitable manner such that the District neither subsidizes nor is subsidized by any other City customer or contractor. In no event, however, will the unit cost of water delivered exceed the City's annual operating, maintenance and applicable capital improvement costs (excluding Capital Costs included in the Connection Fees described in Section 9.b., below) for surface water treatment and conveyance divided by the number of gallons produced. Operating, maintenance and capital improvement costs included in the Unit Rate will include but not be limited to costs for operating, maintenance, personnel, services and supplies, and an equitable proration of appropriate overhead distribution. Operating, maintenance and capital improvement costs included in the Unit Rate will also include any costs attributable to any limitation, requirement, modification or other condition that applies, or that may in the future be applied, to any of the City Water Rights and Entitlements, but will exclude those costs that have no relationship to diverting, treating and delivering water to the District, such as unrelated distribution system expenses or capital improvement costs. The initial Wholesale Water Rate (consisting of a Unit Rate plus a monthly Service Charge) is shown on **Exhibit F** to this Agreement.

- (2) The City may adjust the Wholesale Water Rate on an annual basis to reflect actual or anticipated cost increases.
- (3) Billing procedures and payment for water will be in accordance with the City's standard practice. The Wholesale Water Rate will be in addition to the Connection Fee(s) described in subsection b., below.
- (4) The Wholesale Water Rate for water diverted, treated and delivered using Non-Firm Capacity and Firm Capacity will be the same.

b. Connection Fees for Use of Non-Firm and Firm Capacity

- (1) The District will pay a Connection Fee for its share of Capital Costs for diversion, pumping, treatment, storage and transmission facilities, which fee will include reasonable administrative costs. The initial Connection Fee for use of Non-Firm Capacity in the City's existing facilities to divert, treat and deliver water to the District up to the maximum amount and rate specified in Section 6.a., above, is shown on Exhibit G to this Agreement.
- (2) The District will pay City the initial Connection Fee specified in **Exhibit G** in a single payment not later than thirty days after the City's completion and commencement of operation of the Fairbairn Plant Expansion, or prior to receiving any water diverted, treated and delivered under this Agreement, whichever occurs first.
- Although the initial Connection Fee described in subsection b(1), above, is (3) based on the use of Non-Firm Capacity, the initial Connection Fee specified in Exhibit G is the same as the Connection Fee that would be charged for the use of Firm Capacity. This is because the City's preliminary studies show that adequate Non-Firm Capacity is likely to be available in the City's existing facilities for the delivery of treated water, in accordance with the provisions of this Agreement, up to the maximum amount and rate specified in Section 6.a., above, at all times. If Non-Firm Capacity is not available in the City's existing facilities for the delivery of treated water, in accordance with the provisions of this Agreement, up to the maximum amount and rate specified in Section 6.a., above, for a cumulative total amount of thirty or more days prior to the City's completion and commencement of operation of the Fairbairn Plant Expansion and Transmission Main Improvements, the City will provide the District a credit against payments due from the District to the City under this Agreement in the amount specified in Exhibit H.

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- (4) In the event that the City completes and commences operation of the Fairbairn Plant Expansion and Transmission Main Improvements, thereby making available Firm Capacity to divert, treat and deliver water to the District up to the maximum amount and rate specified in Section 6.b., above, the District will pay an additional Connection Fee for the District's share of Capital Costs for Firm Capacity in such expanded and improved diversion and treatment facilities, based on the difference between the maximum amounts specified in Section 6.b. and Section 6.a. of this Agreement. The additional Connection Fee will use the same unit cost fee that is specified for the initial Connection Fee in Exhibit G, except that such unit cost fee will include annual adjustments to reflect increases in the construction cost index in the same manner that the amount of the City's water system development fee is adjusted pursuant to Section 13.04.820(C) of the Sacramento City Code. The District will have the option of paying the additional Connection Fee (i) in a single payment prior to receiving any water diverted, treated and delivered using Firm Capacity as specified in Section 6.b., above, or (ii) in the form of an annual capital recovery charge payable upon such terms and conditions as may be reasonably determined by the City.
- (5) The Connection Fees specified above shall be in addition to the District's payment of a portion of the City's cost to design and construct the Transmission Main Improvements, pursuant to the Agreement for Payment of Cost Share between the District and the City, dated October 1, 2003.

10. <u>Service Connections</u>:

- a. Treated water delivered to the District under this Agreement will be provided from the City Transmission Facilities to the District at the Service Connection to be designed and constructed by the District at the location shown on **Exhibit B**. Additional Service Connections may be established by mutual written agreement of the City's Director of Utilities and the District's General Manager, provided that the City will determine whether an additional Service Connection will be designed and constructed by the District or by the City.
- b. If a Service Connection is designed and constructed by the City, subject to review and comment by the District, the District will pay all direct and indirect costs incurred by the City to design, bid and construct the Service Connection, including all reasonable costs of administering design and construction contracts, as well as the cost of preparing all environmental documents and obtaining all permits, property rights or other approvals required for the installation, operation, maintenance and repair of the Service Connection in compliance with all applicable laws and regulations. Such payments will be in addition to the charges, costs and fees set forth in Section 9, above, and will be made in the following manner:
 - (1) After performing a preliminary design of the Service Connection, the City

Director of Utilities will estimate all costs described herein, and such preliminary design and estimate will be provided to the District for approval. Such approval will not be unreasonably withheld.

- (2) During the design phase and the construction phase, the City will bill the District at regular intervals for reasonable costs incurred by the City during the billing cycle. The District will pay each invoice within six weeks.
- Upon completion of construction of the Service Connection, and the (3) resolution of any claims, disputes or litigation related to its design or construction, including claims or litigation related to the acquisition of permits, property rights or other approvals, claims or litigation related to the preparation or approval of environmental documents, stop notice claims or litigation, and contract claims or litigation, the City will provide the District with a statement of any and all costs actually incurred by the City. Such statement will include any and all costs reasonably incurred by the City with regard to any of the claims, disputes or litigation described above, including any and all costs related to the settlement of any such claims, disputes or litigation. If such costs exceed the amount of money theretofore paid by the District to the City, the District will pay to the City the amount by which such actual costs exceed the amount already paid. Any payments made by the District pursuant to this provision will be made no later than six weeks after the statement of costs actually incurred by the City is provided to the District.
- (4) Notwithstanding anything contained herein to the contrary, the District will reimburse the City for any and all reasonable preliminary design costs incurred by the City in connection with any proposed Service Connection, even if such preliminary design or any cost estimate based on such design is not accepted or approved by the District.
- c. If a Service Connection is designed and constructed by the District, the District will be wholly responsible for designing, bidding and constructing the Service Connection, as well as preparing all environmental documents and obtaining all permits, property rights or other approvals required for the installation, operation, maintenance and repair of the Service Connection in compliance with all applicable laws and regulations. Such activities will be paid for entirely by the District, and will be subject to the following requirements:
 - (1) Prior to the construction of any Service Connection by the District, both the preliminary design and the final design must be approved in writing by the City Director of Utilities. Such approval will not be unreasonably withheld. If either or both the preliminary design or final design is not approved by the City Director of Utilities, the City will notify the District in writing of the reason or reasons why such design is not acceptable, and the District will perform such revisions as may be necessary to obtain the approval of the

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- In addition to paying its own costs, the District will reimburse the City for (2)reasonable costs incurred by the City during the design and construction of the Service Connection by the District. Upon completion of construction of the Service Connection, and the resolution of any claims, disputes or litigation related to its design or construction, including claims or litigation related to the acquisition of permits, property rights or other approvals, claims or litigation related to the preparation or approval of environmental documents, stop notice claims or litigation, and contract claims or litigation, the City will provide the District with a statement of any and all costs actually incurred by the City to review, inspect or otherwise participate in the design and construction of the Service Connection. Such statement will also include any and all costs reasonably incurred by the City with regard to any of the claims, disputes or litigation described above, including any and all costs related to the settlement of any such claims, disputes or litigation, provided that any such settlement was approved in advance by the District staff, and provided further that such approval will not be unreasonably withheld. The District will pay the costs identified on such statement no later than 6 weeks after the City provides such statement to the District.
- (3) Notwithstanding anything contained herein to the contrary, the District will reimburse the City for any and all reasonable costs incurred by the City in connection with the design of any proposed Service Connection by the District, even if the preliminary or final design is not approved or if such Service Connection is not constructed.
- d. The City will own, operate, maintain and repair all facilities associated with the Service Connection, including flowmeter, flow transmitter, pressure transmitter, motor operated valve (M.O.V.), S.C.A.D.A. and electrical pedestal. As part of such operation, maintenance and repair, the City will calibrate instrumentation at reasonable scheduled intervals, at least annually, and will report such calibration as requested by the District. If such facilities are constructed by the District, upon the completion and City acceptance of such facilities, the District will convey to the City (1) title to such facilities, and (2) permanent access rights to operate, maintain and repair such facilities, at no cost to the City. All operation, maintenance and repair costs incurred by the City will be reimbursed by the District by including such costs in the Wholesale Water Rate paid by the District under Section 9, above. For metering errors in excess of 2 percent, Wholesale Water Rates may be adjusted upward or downward, as appropriate.
- e. The District will design, construct, own, operate and maintain all facilities downstream of the Service Connection, including surge control facilities to mitigate the effects of flow stoppage. The District will submit plans for surge control facilities for review and approval of the City prior to construction, which approval

will not be unreasonably withheld.

- f. Unless required by the City's Director of Utilities or otherwise required by law or regulation, backflow prevention devices will not be required at the Service Connections provided that (i) the District has a backflow prevention program meeting State regulations, and (ii) all facilities within the District Service Area meet the standards of the California Department of Health Services and U.S. EPA.
- g. Delivery pressure will be a minimum of 30 pounds per square inch ("psi"), but in no event will it be greater than 80 psi. The City will not be obligated to supply water to any or all Service Connection points at an aggregate rate exceeding the maximums set forth in Section 6, above.

11. <u>Term of Agreement</u>:

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This Agreement will become effective as of the date it is signed by the last signatory and is approved by the Board of Directors of the District and the City Council, and will continue in full force and effect unless terminated by mutual written agreement of the parties hereto or by operation of law.

12. Failure to Deliver Water:

It is understood and agreed that, while the City will make every reasonable effort to treat and convey water pursuant to the terms of this Agreement, the City is not warranting or guaranteeing that it will be able to divert, treat, store and/or deliver water, nor will the City be liable for any failure to deliver water to the District hereunder, provided such failure is caused in whole or in part by an emergency condition or other factors beyond the direct control of the City. It is further understood and agreed that City will not be liable for any failure to deliver water to the District hereunder, prior to completion of the Fairbairn Plant Expansion project and/or Fairbairn intake modification project, that is caused in whole or in part by any construction conditions or requirements or other actions or omissions occurring in the course of project construction, whether or not beyond the direct control of the City.

13. The City Water Rights and Entitlements:

This Agreement will not affect or limit in any way the City Water Rights and Entitlements. Notwithstanding anything herein to the contrary, it is understood and agreed that the District's rights hereunder will at all times be subject to, and exercised in accordance with, any limitation, requirement, modification or other condition that applies, or that may in the future be applied, to any of the City Water Rights and Entitlements.

14. Fluoridation:

The District acknowledges that treated water delivered to the District may contain fluoride, and agrees that, in the event that the City treats water with fluoride, the District will be

solely responsible for: (1) any public notification to all or any portion of the District Service Area that the water provided hereunder has been treated with fluoride; and (2) for all costs associated with or resulting from the introduction of fluoridated water into the District facilities, including monitoring and testing costs. In the event that the City treats water delivered to the District hereunder with fluoride, the District will comply, at no cost to the City, with any requirements pertaining to such fluoridation imposed by any governmental agencies with jurisdiction, including without limitation, the Department of Health Services. The District's failure to comply with any such requirements applicable to the wholesale of water hereunder will relieve the City of any responsibility to deliver water pursuant to this Agreement, until such requirements are fulfilled.

15. Notices:

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Unless indicated otherwise herein, all notices, invoices, payments, statements or other writing authorized or required by this Agreement may be delivered personally, or sent in the United States mail, postage prepaid, or sent by electronic mail if the recipient confirms receipt, and addressed to the respective parties as follows:

The City:

Director, Department of Utilities City of Sacramento 1395 35th Avenue Sacramento, CA 95822 Electronic mail:greents@cityofsacramento.org

The District:

General Manager Sacramento Suburban Water District 3701 Marconi Avenue, Suite 100 Sacramento, CA 95881 Electronic mail: rroscoe@sswd.org

All notices, invoices, payments or other writings will be deemed served on the day that they are personally served, deposited, postage prepaid, in the United States mail, or if served electronically, on the day that the recipient acknowledges receipt. A party may change the above designations by providing notice thereof to the other party.

16. Indemnification and Defense:

a. <u>By The District</u>: The District will fully indemnify, hold harmless and defend the City, its officers and employees, from any claims, actions or liability for any damages, any injury to persons or property, or any violation of any law or regulation, occurring by reason of anything done or omitted to be done by the District, its officers or employees, under this Agreement. Except as specified in subsection b., below, the District will fully indemnify, hold harmless and defend the City, its officers and employees from any claims, actions or liability for any damages, any injury to persons or property, or any violation of any law or regulation, occurring by reason of any action taken by the City, its officers or employees, if such action is required or authorized under this Agreement, unless such damages, injury, or violation result solely from the willful or intentional acts of the City.

b. <u>By The City</u>: Notwithstanding anything to the contrary herein, the City will fully indemnify, hold harmless and defend the District, its officers and employees, from any claims, actions or liability for any damages, any injury to persons or property, or any violation of any law or regulation, occurring by reason of anything done or omitted to be done by the City, its officers or employees in connection with the processing, treating or conveyance of water by the City Treatment and Transmission Facilities. Such duty to indemnify, hold harmless and defend will include all claims, actions or liability occurring by reason of anything done or omitted to be done by the City of water that fails to comply with the definition of Treatment contained herein.

17. Dispute Resolution:

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- a. <u>Disputes</u>: If a dispute arises concerning any controversy or claim arising out of or relating to this Agreement or the breach thereof, or relating to its application or interpretation, the aggrieved party will notify the other party of the dispute in writing within twenty days after such dispute arises. If the parties fail to resolve the dispute within thirty days after delivery of such notice, each party will promptly nominate a senior officer of its organization to meet at any mutually-agreed time and location to resolve the dispute. The parties agree to use their best efforts to reach a just and equitable solution satisfactory to both parties. Should the parties be unable to resolve the dispute to their mutual satisfaction within thirty days thereafter, the dispute will be subject to arbitration, pursuant to subsection b., below. The time periods set forth in this section are subject to extension as agreed to by the parties.
- b. <u>Arbitration</u>: A dispute that is not resolved in accordance with subsection a., above, will be subject to arbitration by an arbitrator in Sacramento, California, provided, however, that each party reserves the right to file with a court of competent jurisdiction an application for temporary or preliminary injunctive relief on the grounds that the arbitration award to which the applicant may be entitled may be rendered ineffectual in the absence of such relief. Except as otherwise provided herein, the arbitration will be conducted under and will be subject to the provisions of the California Arbitration Act (Code of Civil Procedure sections 1280 through 1294.2). The parties in the arbitration will select a single, qualified, neutral arbitrator. If they cannot agree on an arbitrator, or an alternative selection process, the parties will request that the Presiding Judge of the Sacramento County Superior Court select an arbitrator in accordance with the provisions of section 1281.6 of the Code of Civil Procedure.

A hearing on the matter to be arbitrated will take place before the arbitrator in the

County of Sacramento at a time and place selected by the arbitrator. However, the hearing will take place no later than sixty days after selection of the arbitrator. The arbitrator will select the time and place for the hearing, and will give the parties written notice of the time and place at least twenty days before the date of the hearing. At the hearing, any relevant evidence may be presented by the parties, and the formal rules of evidence applicable to judicial proceedings will not apply. The arbitrator will hear and determine the matter. The arbitration award may include an award of damages and/or an award or decree of specific performance or declaratory or injunctive relief, will be in writing and will specify the factual and legal bases for the award. An award rendered pursuant hereto may be confirmed, corrected or vacated by a court of competent jurisdiction in accordance with the provisions of the California Arbitration Act. The arbitrator will have no authority, power or right to award punitive or other damages not measured by the prevailing party's actual damages, and will not make any ruling, finding or award that is inconsistent with or which alters, changes, amend, modifies, waives, adds to or deletes from any of the provisions of this Agreement.

The ongoing cost of the arbitration, including the arbitrator's fees, will be borne equally by the parties. Each party will also pay the costs of its own counsel, experts, witnesses and preparation and presentation of proofs. Additional incidental costs of arbitration may be allocated by the arbitration award.

c. <u>Defense to Suit</u>: The parties agree that the failure to comply with the provisions of this Section will be a complete defense to any suit, action or proceeding instituted in any federal or state court, or before any administrative body, with respect to any dispute that is subject to arbitration hereunder, provided, however, that this subsection c. will not apply to any application for temporary or preliminary injunctive relief authorized under this Section.

18. Records Inspection:

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Each party will be entitled to inspect and photocopy the records of the other party that pertain to this Agreement, upon providing reasonable notice to such other party of its intent to do so. Each party may also appoint an auditor or auditors to examine the financial records of the other party to determine the adequacy of cost accumulation and billing information maintained by each party. After reasonable notice, each party will make available to the other party's auditor or auditors all requested records, and will assist and cooperate with such auditors. Each party will keep its accounting and financial records in accordance with generally-accepted accounting principles and any applicable laws or regulations.

19. <u>Amendments</u>:

No amendment or modification to this Agreement will be valid unless executed in writing and approved by the governing bodies of the parties, provided, however, that the Delivery Criteria may be modified by mutual written agreement of the City Director of Utilities and the District General Manager without obtaining approvals from the governing bodies of the parties hereto, as specified in Section 5, above.

20. No Third-Party Beneficiary:

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This Agreement is not intended to, and will not be interpreted as conferring, any benefit or right whatsoever upon any person or entity that is not a party hereto.

21. Exhibits Incorporated:

All Exhibits referred to herein and attached hereto are fully incorporated into this Agreement as if such Exhibits were set forth in their entirety at this place.

22. General Provisions:

- a. This Agreement will be construed in accordance with, and governed by, the laws of the State of California. The place where this Agreement is to be performed and its situs or forum will at all times be in the County of Sacramento.
- b. The headings of the sections and paragraphs in this Agreement are inserted for convenience only. They do not constitute part of this Agreement and will not be used in its construction.
- c. This Agreement is the result of the joint efforts and negotiations of both parties, and both parties agree that this Agreement will be interpreted as though each of the parties participated equally in the drafting and composition of this Agreement and each and every part hereof.
- d. This Agreement may not be assigned by either party without the written consent of the non-assigning party, and any purported assignment without such consent will be void.
- e. The provisions of this Agreement shall bind the parties' successor entities and authorized assigns.
- f. Neither party nor its agents, consultants or contractors are or shall be considered to be agents of the other party in connection with the performance of this Agreement. Nothing in this Agreement shall be construed to create a joint venture, partnership or other relationship between the parties, other than the City acting in its municipal capacity with respect to the provision of wholesale water service to the District.
- g. The waiver by either party to this Agreement of a breach of any provision of this Agreement shall not be deemed a continuing waiver or a waiver of any subsequent breach of that or any other provision of the Agreement.

Attest: By: City Cler

Approved as to Form:

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By Attorney

CITY OF SACRAMENTO By:

Thomas Lee For: Robert Thomas, City Manager

SACRAMENTO SUBURBAN WATER DISTRICT S. EGGENT By: resident

Attest:

By: Secretary

2004-013 CITY AGREEMENT NO._

List of Exhibits:

- Exhibit A: 1964 Water Supply Agreement
- Exhibit B: Map Showing City and District Facilities, with Detail of Service Connection
- Exhibit C: District Service Area within POU
- Exhibit D: Delivery Criteria
- Exhibit E: Water Forum Diversion Restrictions in City's American River Water Right Permits
- Exhibit F: Initial Wholesale Water Rate
- Exhibit G: Initial Connection Fee
- Exhibit H: Formula for Interest on Portion of District's Initial Connection Fee Payment (Section 9.b.(3))

Exhibit A

1964 Water Supply Agreement

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AGREEMENT BETWEEN CITY OF SACRAMENTO AND ARCADE COUNTY WATER DISTRICT

City of Sacramento, a municipal corporation, hereinafter called Sacramento, and Arcade County Water District, a county water district, hereinafter called Arcade, jointly recite the following:

- A. Sacramento has the right to a water supply from the American River under Permits Nos. 11358, 11359, 11360, and 11361 on Applications 12140, 12321, 12622, and 16060, as they now exist or may hereafter be amended, as such permits are supplemented by an agreement between Sacramento and the United States Bureau of Reclamation dated June 28, 1957. Such water supply is hereafter referred to as the Permit Supply; the said agreement is sometimes referred to as the Bureau Agreement.
- B. The quantity of the Permit Supply was based upon serving the area shown as "Potential Water Service Areas" on Sacramento's Exhibit 3 to the State Water Rights Board introduced in the proceedings before that Board which resulted in Decision D 893. Said Exhibit 3 is attached hereto, marked Exhibit A and made a part of this agreement. Said Exhibit A also delineates the area to be served by water from Applications 12321

-1-

and 12662, above referred to, which were the applications assigned to Sacramento by the Sacramento Municipal Utility District with the express provision of such limitation in Only Area D of such Potential Water Seruse. vice Areas as shown by said Exhibit A is involved in this agreement. The Permit Supply equals 1.133 cubic feet per second per 100 gross acres of the Potential Water Service Areas, and this figure is the basis for the water supply provided by this agreement to The use basis shall be 50% as estab-Arcade. lished before the State Water Rights Board and by the Bureau Agreement, that is to say, the annual use of such supply shall not exceed a quantity equal to 50% of the quantity which would be produced if such supply ran continuously throughout the year. Therefore, the water supply provided to Arcade by this agreement shall be 410.146 acre-feet of annual use for each 100 gross acres of the Potential Water Service Area served by Arcade.

E.

C. Arcade now serves 5988 acres of Area D as shown on Exhibit A which is also within the boundaries of Arcade, and 373 acres of Area D which is outside Arcade's boundaries, or a total of 6361

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acres, which at the rate of 1.133 cfs per 100 acres equals 72 cfs, which is the maximum diversion allowable under this agreement at its date. As is provided by Paragraph 11 of the Bureau Agreement, the City is entitled to reasonable flexibility in its demands based on maximum daily requirements and maximum peaks during such days. Arcade shall be entitled to this same flexibility with the limiting provision that during any twenty-four hour period a quantity of water at the rate set forth, maintained for the full twenty-four hour period, shall not be exceeded. The maximum quantity to be diverted in any year shall be 26,064 acre feet allowable under this agreement at its date. During the life of this agreement it shall be the intent that Arcade will be provided water to serve its customers in such parts of Area D as shown on Exhibit A that Arcade may serve and should the areas being so served vary from the figures used in this agreement at its date then the maximum diversion allowable and the maximum permissible quantity to be diverted shall be proportionately adjusted in accordance with the diversion and quantity criteria set forth in this paragraph above.

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Increases in the size of Area D as shown on Exhibit A which Arcade serves shall be agreed upon in advance, provided however that nothing in this agreement shall be construed as limiting or affecting the power of Arcade to conduct and act on any annexation or inclusion proceedings which may hereafter be brought. Hereafter in this agreement the permissible quantity which Arcade may divert, as established by this paragraph, shall be sometimes referred to as Arcade's Permissible Annual Diversion. NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

1. Sacramento grants to Arcade the right to divert from the American River that portion of its Permit Supply which Arcade requires for serving any portion of Area D as shown on Exhibit A which Arcade may actually serve from time to time, not to exceed the rate of diversion and annual quantity diverted as determined by Paragraph C of the recitals in this agreement. Arcade shall meter such diversions continuously and keep the original records thereof subject to inspection by Sacramento, and shall report in writing to Sacramento at least twice each year, and oftener if required, both the maximum diversion rates and the quantities of such

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diversion, on a monthly basis.

- 2. The diversion of American River water by Arcade under this agreement shall be from a facility which serves area only within Area D as shown on Exhibit A. If Arcade wishes to construct facilities which will also divert water to serve outside of Area D as shown on Exhibit A, then Arcade must have suitable agreements with the U.S. Bureau of Reclamation for the furnishing of the additional water to be diverted by that facility and be used outside of Area D as shown on Exhibit A. Arcade shall furnish proof to Sacramento that either the diversion facility to be built will serve only area within Area D as shown on Exhibit A or that a combination diversion which may be built is the subject of separate agreement with the U.S. Bureau of Reclamation.
- 3. The operative date of this agreement shall be the first day of the calendar year in which Arcade diverts any water under this agreement, but in no event later than January 1, 1966.
- 4. Payment for water by Arcade to Sacramento under this agreement is intended to be on the same basis of actual cost of the water as represented by payments to the Bureau by Sacramento, plus

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possible future additional costs as set forth in this paragraph. Definitions and methods of payment computation are as follows:

a. Arcade's Permissible Annual Diversion is
as defined in recital "C" of this agreement.
b. Sacramento's Maximum Permissible Diversion
shall be defined as the figure shown in Schedule "B" of the Bureau Agreement for the year
2030 or a reduced figure if such is ever established under the provisions of paragraph 13 of
the Bureau Agreement.

c. Sacramento's Unit Cost of water in any year
shall be the amount of money paid to the U. S.
Bureau of Reclamation under the Bureau Agreement divided by the maximum quantity of water
which Sacramento may divert from the American
River under the Bureau Agreement for said payment.
d. Arcade's actual diversion shall be the annual
quantity of water diverted by Arcade in accordance
with the terms of this agreement and measured as
provided by this agreement.

e. Arcade's Minimum Quantity for payment in any year shall be determined by computing the ratio between Arcade's Permissible Diversion and Sacramento's Maximum Permissible Diversion and multiplying this ratio by the Diversion permissible under

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Schedule B of the Bureau Agreement as it is printed without modification by other terms of the Bureau Agreement.

f. Payment by Arcade to Sacramento in any year shall be Sacramento's Unit Cost of water multiplied by either "Arcade's actual diversion" or "Arcade's Minimum Quantity for payment", whichever shall be the greater.

g. If in the future the City of Sacramento shall be assessed taxes by any public agency on water rights or diversions which comprise any part of the Permit Supply then this shall constitute an "additional cost" and this shall be charged to Arcade on the same pro rated basis of computation as was used to charge Arcade for payments made by Sacramento under its Bureau Agreement.

5. Payments for water to Sacramento by Arcade shall be made twice annually, immediately after July 1st of any year for the payments due for the first six months of that year, and immediately after January 1st of each year for payments due for the second six months of the preceding year.

6. All diversions and deliveries by Arcade under this agreement are subject to all of the

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provisions of Decision D 893 of the State Water Rights Board and the conditions of Sacramento permits, including releases and flows for fish life, including protection of fish life, and to Sacramento's "Agreement of Assignment" with Sacramento Municipal Utility District dated June 28, 1957.

- 7. This Agreement shall not take effect until it has been approved in writing by the U.S. Bureau of Reclamation and until the State Water Rights Board has approved Arcade's points of diversion as an addition to those specified in Sacramento's permits. The parties will cooperate to obtain such approval.
- 8. This Agreement shall be in effect concurrent with, and at all times consonant with, the American River diversion permits, and State regulations or State laws relating thereto, held by Sacramento and with all terms of the Bureau Agreement. For reference, the Bureau Agreement shall be considered as an appendix to this agreement.
- 9. Arcade shall hold Sacramento harmless and indemnify it for any loss or damage resulting from any act or occurrence in any way

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related to this agreement.

Dated this 13th day of February, 1964.

CITY OF SACRAMENTO

By /s/ JAMES B. MC KINNEY Mayor

ATTEST:

/s/ Reginald H. Boggs City Clerk

ARCADE COUNTY WATER DISTRICT, a county water district

(seal)

By/s/N. B. KELLER President

and <u>/s/ NANCY ROSS</u> Secretary

Approved as to form

/s/ WILLIAM T. SWEIGERT

Attorney for Arcade County Water District.

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RESOLUTION NO. 43

Adopted by The Sacramento City Council on date of FEB. 13 1964

BE IT RESOLVED BY THE COUNCIL OF THE CITY OF SACRAMENTO:

That the Mayor and City Clerk are hereby authorized and directed to sign and execute on behalf of the City of Sacramento that certain agreement by and between the CITY OF SACRAMENTO, a municipal corporation, therein called SACRAMENTO, and ARCADE COUNTY WATER DISTRICT, a county water district, therein called ARCADE, covering the selling of certain quantities of water under the terms of the City's agreement with the United States Bureau of Reclamation.

JAMES B. MCKINNEY

MAYOR

ATTEST:

REGINALD H. BOGGS

CITY CLERK

CERTIFIED AS TRUE COPY OF RESOLUTION NO. 43 February 14, 1964 Date Certified /s/ REGINALD H. BOGGS City Clerk, City of Sacramento

(SEAL)

Exhibit B

Map Showing City and District Facilities, with Detail of Service Connection





Sacramento Suburban Water District/City of Sacramento Wholesale Water Supply Service Connection



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Exhibit C

District Service Area within POU

10-14-03 Final

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Exhibit "C"



0.1250.25 0.5 0.75 Miles

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Sacramento Suburban Water District Within American River Place of Use



Exhibit D

Delivery Criteria

10-14-03 Final

EXHIBIT D

CITY / SACRAMENTO SUBURBAN ENTERPRISE DRIVE SERVICE CONNECTION

DELIVERY CRITERIA

This document outlines the general delivery guidelines and criteria for the operation of service connections between the City of Sacramento (City) and the Sacramento Suburban Water District (District). The initial wholesale water service connection is located on Enterprise Drive between Northrop Avenue and Venture Court.

LIST OF CONTACTS:

The following listing of City and District contact names and phone numbers is provided in order of contact priority.

VORK
79-2892 (Cell-869-7359)
72-7171
79-2884 (Cell-416-5468)
72-7171
79-2880 (Cell-869-7349)
79-3987 (Cell-416-5467)
umber to answering service.

City of Sacramento:	WORK
E.A. Fairbairn WTP Control Room	382-3106
E.A. Fairbairn WTP Hotline	383-1516
Steve Willey, Plant Operator Supervisor	382-3712
Mike Yee, Plant Service Division Manager	264-5583
Kathy Mullen, Water Superintendent	382-3105
Roland Pang, Water Superintendent	382-3119

OPERATIONAL PARAMETERS:

Per the agreement the following operational parameters shall be maintained by the City and District operators controlling the service connection.

District Delivery Criteria Document

October 9, 2003

<u>Pre-Fairbairn Plant Expansion/Howe Avenue Transmission Main Construction</u> Instantaneous maximum flow rate = 10 mgd (6,950 gpm)* Maximum daily volume = 10 mg

<u>Post-Fairbairn Plant Expansion/Howe Avenue Transmission Main Construction</u> Instantaneous maximum flow rate = 20 mgd (13,900 gpm)* Maximum daily volume = 20 mg * A10% tolerance shall be allowed due to operational variations.

Per the operational requirements of the City supply and distribution system, the following additional operational parameters shall be maintained.

Minimum Pump Start Service Connection Pressure	= 35 psi
Minimum Service Connection Operation Pressure	= 30 psi

OPERATIONAL PROCEDURES:

- 1. For initial start-up, and for subsequently significant shut-down periods, District will call the E.A. Fairbairn Water Treatment Plant (FWTP) Control Room to communicate delivery status.
- 2. The FWTP Operator will check the system pressure at the service connection using the City's Supervisory Control and Data Acquisition (SCADA) system. If the pressure equals or exceeds 35 psi, the FWTP Operator will use the SCADA system to open the motor operated valve (MOV) located at the service connection. If the system pressure at the service connection is less than 35 psi, or the FWTP Operator has reason to suspect that the pressure shall fall to or below 35 psi within a short period from the call for delivery (based on historic demand trends), the FWTP Operator will deny District's request for delivery and not open the valve.

The SCADA system shall enunciate visually and audibly a low pressure condition (35 psi) and a low-low pressure condition (30 psi) in the FWTP Control room, and at the District control station. Should the low-low pressure condition remain in effect for 90 seconds, the District's booster pump station control logic shall initialize booster pump station shut-down. Should the District's booster pump station control logic fail to perform shut-down of the booster pumps, the City shall be obligated to close the service connection MOV.

3. When a request for delivery is authorized by the FWTP Operator, and the service connection MOV has been opened, the District Operator shall receive a fully open valve position signal through the pump station SCADA system. The District can then start the

District Delivery Criteria Document

first pump at the pump station using the VFD to ramp up flow while the FWTP Operator and the District monitors system pressure on the City side of the service connection. If the pressure falls to or below 35 psi the District shall adjust the flow to retain suction side pressure at or above 35 psi. The District shall strive to set stabilized operation of the pump station to maintain service connection pressure at or above 35 psi. If at any time the suction side pressure should fall to or below 30 psi the District's booster pump station control logic shall initiate booster pump station shut down.

- 4. If the system pressure remains above 35 psi the District shall be authorized to start additional pumps while monitoring service connection pressure to ensure that pressure does not fall below 35 psi. The District shall control the booster pump station control logic to maintain the service connection pressure at or above 35 psi. At no time shall the service connection pressure drop below 30 psi.
- 5. The City shall be responsible for reading and recording the time and flow quantities.
- 6. District can take a daily flow rate of up to 6,950 gpm (within a 10% tolerance due to operational variations) as measured by the City maintained service connection flowmeter as long as service connection pressures and conditions in paragraphs 2, 3, and 4 are met prior to completion of the FWTP expansion and construction of the Howe Avenue Transmission Main.
- 7. District can take a daily flow rate of up to 13,900 gpm (within a 10% tolerance due to operational variations) as measured by the City maintained service connection flowmeter as long as the service connection pressures and conditions in paragraphs 2, 3, and 4 are met once expansion of the FWTP and construction of the Howe Avenue Transmission Main have been completed.
- 8. If the District encounters an emergency situation that requires additional water for their system for a short duration, the City may allow the District to take water even though the system pressure at the service connection is below 30 psi. In the event of an emergency, the District may request the FWTP Operator to over ride the service connection MOV.
- 9. If the City encounters an emergency situation that requires additional water for their system, the City may close the service connection MOV even though the system pressure at the service connection is at or above 30 psi. In the event of an emergency, the FWTP Operator shall notify the District before closing the service connection MOV.
- 10. The aforementioned delivery criteria can be modified at the discretion of the City.

District Delivery Criteria Document

AGREEMENT:

Both parties agree to the procedures and conditions set forth in this document to deliver City water to the Service connection, by and between the CITY OF SACRAMENTO and the District.

Dated: _____, 2003

CITY OF SACRAMENTO

Mike Yee, Plant Services Manager By:

DISTRICT

By:

20 tomore

Ed Formosa, Assistant General Manager

District Delivery Criteria Document

October 9, 2003

Exhibit E

Water Forum Diversion Restrictions in City's American River Water Right Permits

The City of Sacramento's American River water right permits contain the following condition:

"At such time as the additional water treatment capacity to be provided by the City's Water Facility Expansion project (as described in the final Environmental Impact Report, SCH # 1998032046) is available for use by the City, the following terms shall go into effect.

In extremely dry years (i.e., years in which the State of California Department of Water Resources [DWR] annual projected unimpaired inflow into Folsom Reservoir would be 550,000 acre-feet annually [afa] or less; also referenced as the March through November projected unimpaired flow into Folsom Reservoir being less than 400,000 acre feet [af]) the City would limit its diversions of City water (i.e., water diverted pursuant to the City's water rights and entitlements) at the Fairbairn Water Treatment Plant (FWTP) to not greater than 155 cubic feet per second (cfs) and not greater than 50,000 afa. Any additional water needs would be met by diversions at other locations and/or other sources.

In all other years (i.e. when the DWR annual projected unimpaired runoff into Folsom Reservoir is greater than 550,000 af, or the March through November projected unimpaired inflow into Folsom Reservoir is greater than 400,000 af) the City may divert City water at the FWTP in accordance with the following criteria:

- (1) Diversion up to 310 cfs (200 million gallons per day [mgd]) so long as the flow bypassing the diversion at the FWTP is greater than the Hodge Flow Criteria. (The Hodge Flow Criteria refers to the following minimum Lower American River flows established by Judge Hodge in the *EDF v. EBMUD* case: October 15 through February 2,000 cfs; March through June 3,000 cfs; July through October 15 1,750 cfs.)
- (2) Whenever flow bypassing the diversion at the FWTP is less than the Hodge Flow Criteria, City of Sacramento diversions at the FWTP may not be greater than the following: January through May - 120 cfs; June through August -155 cfs; September - 120 cfs; October through December - 100 cfs."

Exhibit F

Initial Wholesale Water Rate

SACRAMENTO SUBURBAN WATER DISTRICT WHOLESALE WATER RATE FISCAL YEAR 2003-2004

Exhibit F Initial Wholesale Water Rate

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SACRAMENTO SUBURBAN WATER DISTRICT WHOLESALE WATER - UNIT COST CALCULATION FISCAL YEAR 2003-2004

4	FY 2004 Operating/CIP Budget: (a)	\$53,744,362	FY 2003 Water Producti	on (AF): (b)	135,537
•		BUDGET	UNIT COST	ELEMENTS	
	OPERATING				
	LABOR				
2	Employee Services	14,928,745		\$110.15	
3	Cost Reimb-Credit	(1,887,983)		(\$13.93)	
4	Cost Reimb-Charge	1,897,859		\$14.00	
5	CIP Reimbursement	(684,743)		(\$5.05)	
6		\$14,253,878		\$105.17	
	OPERATIONS				
7	Utilities	2,797,513		\$20.64	
8	Operations Equipment	1,434,727		\$10.59	
9	Direct Operations Supplies	1,524,615		\$11.25	
10	Chem & Gases	803,425		\$5.93	
11		\$6,560,280		\$48.40	
	ADMINISTRATION/OVERHEAD			6 0 4 5	
12	Office/Admin	1,239,658		\$9.15	
13	Interdepartmental Allocation/Taxes	7,143,237		\$52.70	
14	Comp Liability Exp	514,649		\$3.80	
15	Water Rights/Supply	207,000		\$ 1.53	
16	Professional Services	545,660		\$4.03	
17		\$9,650,204		\$71.20	
17					
18	TOTAL OPERATING	\$30,464,362		\$224.77	
	CAPITAL IMPROVEMENT PROGRAM				
19	CIP	\$10,140,000		\$74.81	
20	Debt Service	\$13,140,000		\$96.95	
				8474 76	
21	TOTAL CIP	\$23,280,000		4 171.70	
~	TOTAL OPERATING/CIP COSTS	\$53,744,362		\$396.53	
4		••••••			
	EXCLUDED COSTS (SSWD only)				
23	Unrelated Energy Costs	(\$1,8 11,581)		(\$13.37)	
24	Unrelated Distribution Costs	(\$6,307,883)		(\$46.54)	
25	Unrelated Dist Overhead	(\$2,731,704)		(\$20.15)	
26	Unrelated Water Rights Costs	(\$207,000)		(\$1.53)	
27	Unrelated CIPs	(\$7,690,000)		(\$50./4)	
28	Unrelated Debt Svc	(\$13,140,000)		(\$90.95)	
29	Non-operating Revenues	(\$6,891,000)	_	(\$50.84)	
	TOTAL EVOLUDED COSTS	(\$38,779,169)		(\$286.11)	
30	IVIAL EXCLUDED COSIS	(400)			
				\$140 44	per AF
31	TOTAL COST	\$14,965,193	UNITRAIL	\$0.2535	per CCF
326			SERVICE CHARGE	\$150.00	per month
33Ь			JOERVICE CHARGE	¥100.00	

Note: Unit Rate is adjusted annually to reflect current costs.

SACRAMENTO SUBURBAN WATER DISTRICT WHOLESALE WATER - UNIT COST CALCULATION FISCAL YEAR 2003-2004

1	FY 2004 Operating/CIP Budget: (a)	\$53,744,362	FY 2003 Water Producti	on (AF): (b)	135,537
•		BUDGET	UNIT COST	ELEMENTS	
	OPERATING				
	LABOR				
2	Employee Services	14,928,745		\$110.15	
3	Cost Reimb-Credit	(1,887,983)		(\$13.93)	
4	Cost Reimb-Charge	1,897,859		\$14.00	
5	CIP Reimbursement	(684,743)		(\$5.05)	
6		\$14,253,878		\$105.17	
Ŭ	OPERATIONS				
7	Utilities	2,797,513		\$20.64	
8	Operations Equipment	1,434,727		\$10.59	
9	Direct Operations Supplies	1,524,615		\$11.25	
10	Chem & Gases	803,425		\$5.93	
11		\$6,560,280		\$48.40	
••	ADMINISTRATION/OVERHEAD				
17	Office/Admin	1,239,658		\$9.15	
12	Interdepartmental Allocation/Taxes	7,143,237		\$52.70	
14	Comp Liability Exp	514,649		\$3.80	
14	Water Rights/Supply	207,000		\$1.53	
10	Professional Services	545,660		\$4.03	
10		\$9.650,204		\$71.20	
17					
18	TOTAL OPERATING	\$30,464,362		\$224.77	
	CAPITAL IMPROVEMENT PROGRAM				
10	CIP	\$10,140,000		\$74.81	
20	Debt Service	\$13,140,000		\$96.95	
20					
21	TOTAL CIP	\$23,280,000		\$171.76	
••			,		
				\$206 5 2	
22	TOTAL OPERATING/CIP COSTS	\$53,744,362		\$380.00	
	EXCLUDED COSTS (SSWD only)	(64 044 504)		(\$13.37)	
23	Unrelated Energy Costs	(31,011,001) (CC 207 002)		(\$46.54)	
24	Unrelated Distribution Costs	(\$0,301,003) (\$2,724,704)		(\$20.15)	
25	Unrelated Dist Overhead	(\$2,731,704) (\$207.000)		(\$1.53)	
26	Unrelated Water Rights Costs	(\$207,000)		(\$56.74)	
27	Unrelated CIPs	(\$7,090,000)		(\$96.95)	
28	Unrelated Debt Svc	(\$13,140,000)		(\$50.84)	
29	Non-operating Revenues	(\$6,891,000)		(+00.04)	•
30	TOTAL EXCLUDED COSTS	(\$38,779,169)		(\$286.11)	
		· · · · · · · · · · · ·	LANT DATE	\$140.44	ner AF
31	TOTAL COST	\$14,965,193	UNITRATE	4110.41 CO 2525	Por CCE
32b				₹12030 \$120 AA	per cor
33b			SERVICE CHARGE	\$150.00	Permonu

Note: Unit Rate is adjusted annually to reflect current costs.

SACRAMENTO SUBURBAN WATER DISTRICT ITEMIZED COST DESCRIPTION FOR WHOLESALE UNIT COST ALLOCATION

1A	FY2004 Operating/CIP Budget:	Total Operation Budget from line 11 below.
18	EV03 Water Production	Total Water Production: Acre feet delivered.
10		
2	Employee Services	Water related labor costs, including insurance and social security.
~	Linployde connect	A reimbursement to the water fund -payments from other City departments for actual work done by
3	Cost Reimb-Credit	Utilities staff.
	Cost Reimb Charge	A cost to the water fund - payments to other City departments for work done by non-Utilities staff.
4	Cost Reimo-Charge	A work of the state of the state of the state of maintenance (ORM) labor costs absorbed
5	CIP Reimbursement	A reimbursement to the water fund -operations and maintenance (outry labor costs associated through work performed on a Capital Improvement Project (CIP).
Ţ		Total Labor Costs - add lines 2 thm 5.
6	Total Labor	I Otal Labor Costs - add ands 2 data of
_	6 441144	Facility Fremy costs - Smild
7	Utilities	raciny Lindy cost - circu
8	Operations Equipment	Major operating equipment costs - Vehicle/equipment purchase, rental, and maintenance.
	-	Standard O & M equipment costs - Mech parts, small tools, constr, elect, welding, paint, safety,
9	Direct Operations Supplies	misc, supplies, plumbing, hose fittings, asphalt, lube/oils, clothes, etc.
10	Chem & Gases	Primarily water treatment chemicals.
11	Total Operations	Total Operations - add lines 7 thru 10.
12	Office/Admin	Office supplies, postage, property insurance, data lines, janitonal, etc.
42	Interdepartmental Allocation & Taxes	Cost Plan which reflects use of Attorney, City Manager, and Facility Maintenance, etc., & voter
13	Niterooperational Parocation a factor	approved general tax paid to general runo.
-14	Comp Liability Exp	Comprehensive liability insurance on facilities.
15	Water Rights/Supply	Annual fee for water rights
16	Professional Services	Specialized legal fees, lobbing, educational consultants, etc.
17	Total Admin/Overhead	Total of lines 12 thru 16.
18	TOTAL OPERATING	Total Operating - add lines 6, 11 & 17.
		the statistic ten Constant framewoment Plan
19	CIP	Adopted water Capital Improvement Field
20	Debt Service	Principal and Interest on bonded deol.
21	TOTAL CIP	Total CIP - add lines 19 & 20.
		and the state and lines 18 \$ 21
22	TOTAL OPERATING/CIP COSTS	Total Operating/Cip costs - add lines to a 21.
		Demonstrate energy operators for Wells and Sac River Water Treatment Plant.
23	Unrelated Energy Costs	Remove energy charges for treas and odd furth transfer for the second
24	Unrelated Distribution Costs	Remove operating distribution costs.
25	Unrelated Dist Overhead	Remove Admin / overnead related to distribution.
26	Unrelated Water Rights Costs	Remove water Rights Costs
27	Unrelated CIPs	Automatic Meter Reading, Fire Hydrant Repl, etc. See Water Fund CIP Listing.
-	timelated Dabt Sig	Remove debt related to financing all all facilities.
28	Unrelated Debt Svc	Remove non-user fee revenues: interest on investments, revenues from other agencies, water tap
29	Non-operating Revenues	sales, other departmental services, misc revenues.
30	TOTAL EXCLUDED COSTS	Total Excluded Costs - add lines 23 thru 29.
31a	TOTAL COST	Total Cost - add lines 22 & 30.
31b	UNIT RATE PER AF	Unit Cost: Total cost (line 31a) divided by Water production (AF, line 1b)
32b	UNIT RATE PER CCF	Unit Rate per hundred cubic feet.
		Monthly basic service charge for 12" meter size.
330	SERVICE OFFICE	

2003/2004 WATER FUND CIP

<u>CIP#</u>	CIP PROJECT NAME	TYPE	FY 03/04 CIP	UNRELATED	RELATED
7046	WATER METER RETOREIT	G	250,000.00	250,000.00	
7021		G	200,000.00	200,000.00	
7036	WATER SUPPLY MASTER PLAN	G	100,000.00		100,000.00
7536	RISK MANAGEMENT PREVENTION	G	100,000.00		100,000.00
7606	MAINTENANCE MANAGEMENT	G	50,000.00		50,000.00
7686	ITILITIES ADA IMPROVEMENT	G	5,000.00		5,000.00
7106	WATER FACILITIES SECURITY	G	100,000.00		100,000.00
7 121	FIFI D SERVICE BLD INTERIOR	G	400,000.00		400,000.00
2.121	SUB-TOTAL GENERAL CIP		\$1,205,000.00	450,000.00	\$755,000.00
ZD51	FIRE HYDRANT REPLACEMENT	н	\$90,000.00	\$90,000.00	\$0.00
ZJ36	ELKHORN 3MG RESERVOIR	S	\$1,750,000.00	\$1,750,000.00	\$0.00
7071	WATER PROD MISC IMPV	т	100,000.00		100,000.00
7521	SACE RIVER SOURCE WATER QUALITY	т	70,000.00		70,000.00
7561	AMER RIVER SOURCE WATER QUALITY	т	65,000.00		65,000.00
7444	DRINKING WATER QUALITY	т	60,000.00		60,000.00
7 158	SRWTP PROP ACQ	т	400,000.00		400,000.00
2300	SUB-TOTAL TREATMENT CIP		\$695,000.00	\$0.00	\$695,000.00
7144	DESIDENTIAL WATER METERS	D	250,000.00	250,000.00	
2011	ECONOMIC DEVELOP PGM	D	400,000.00	400,000.00	
7821	WATER SYSTEM MISC IMPROVEMENT	D	250,000.00	250,000.00	
7548	BASE CIP RESERVE-WATER	D	400,000.00	400,000.00	
7526	BACKELOW PREVENTION	D	250,000.00	250,000.00	
7171	DEFBLE/28TH STREET MAIN REPL	D	850,000.00	850,000.00	
7 126	WOODLAKE MAIN REPL. PH2	D	850,000.00	850,000.00	
7 131	FRUITRIDGE MNR STL R	D	850,000.00	850,000.00	
7141	POWER INN T-MAIN RELOCATE	D	100,000.00	100,000.00	
7 146	IIBBOOM ST REHAB/PARK	D	250,000.00	250,000.00	
7.166	WOODLAKE MN RPL PH3	D	850,000.00	850,000.00	
2000	SUB-TOTAL DISTRIBUTION CIP		\$5,300,000.00	\$5,300,000.00	\$0.00
ZJ51	H ST RV ST MN REPL 5-10 ST	тм	\$1,000,000.00	0.00	\$1,000,000.00
ZD26	WELL SYSTEM MISC IMPV	w	\$100,000.00	100,000.00	\$0.00
	TOTAL CIP		\$10,140,000.00	\$7,690,000.00	\$2,450,000.00

	LEGEND
D	DISTRIBUTION
G	GENERAL
н	HYDRANT
Ρ	PUMPING
S	STORAGE
т	TREATMENT
TM	TRANSMISSION
w	WELLS

Exhibit G

Initial Connection Fee

SACRAMENTO SUBURBAN WATER DISTRICT WHOLESALE WATER - INITIAL CONNECTION FEE

FISCAL YEAR 2003-2004

Exhibit G Connection Fee

SACRAMENTO SUBURBAN WATER DISTRICT WHOLESALE WATER - CONNECTION FEE

DESCRIPTION	NET REPL COST 6/30/2004	CAPACITY mgd	WHOLESALE UNIT COST FY 03/04
T&D	143,250,772	310	n/a
Hydrants	968,892	310	n/a
Storage	25,837,126	310	n/a
Wells	6,919,872	310	n/a
Treatment	190,143,487	310	\$ 613,366
Pumping	23,688,189	310	76,414
General	14,371,753	310	46,360
Total	\$405,180,092	310	\$ 736,140

UNIT COST	MGD	TOTAL FEE
\$736,140	10	\$7,361,140

WHOLESALE CAPACITY CHARGE CALCULATION - 09/25/02 Completed in October, 1998 by Brown & Caldwell Water Utility System Development Fee Study Extrapolation of figures developed from the

SACRAMENTO SUBURBAN WATER DISTRICT

	(a) REPL	(b) CAPITAL		REPL	OUTSTDNG	NET REPL		WHOI ESAI E
	COST	ADDITIONS	(c) INFLATION	COST	DEBT	COST	AL CAPACITY	LINIT COST
DESCRIPTION	6/30/2003	FY 03/04		6/30/2004	FY 03/04	6/30/2004		EV 03/04
T&D	132,870,167	6,300,000	4.080.605	143.250.772		143.250.772		10100
Hydrants	851,983	000'06	26,909	968,892		968,892		
Storage	23,360,074	1,750,000	727,052	25.837.126		25.837.126		
Wells	6,619,779	100,000	200,093	6.919.872		6.919.872		
Treatment	271,314,574	695,000	8,149,862	280,159,436	90,015,949	190,143,487	310	613.366
Pumping	56,596,428	•	1,697,893	58,294,321	34,606,132	23,688,189	310	76.414
General	13,209,153	755,000	407,600	14,371,753		14,371,753	310	46,360
Total	504,822,158	9,690,000	15,290,015	529,802,173	124,622,081	405,180,092	(e)	736,140

(a) Repl Cost = Water System value net of contributions and assessments.

(b) Repl cost inflated by 3% per year.
(c) Capital additions are inflated one half years interest in year they are added.
(d) 310 capacity mgd includes 90 mgd EAF existing, 110 mgd EAF new expansion & 110 mgd Sac existing.

(e) Excludes Distribution, Transmission, Hydrants, Storage & Wells.

14-1-1-Ċ -1-41-Ciel C 1 Ċ VAVL -1-

Wholesalé 1 T & D 2 Hydrants 3 Storage 4 Wells 5 Treatment 6 Pumping 7 General	 Capacity Calculation Description Transmission & Distribution. Fire Hydrants. Storage reservoirs plus booster pump stations. Potable water wells only. Two water treatment plants: EAF & Sacramento River Water Treatment Plants. Intakes at EAFWTP & SRWTP. Includes misc. capital improvement, Utilities ADA Improvement, Water Facilities Security.
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Appendix H: Regulation 15



Regulation No. 15 Water Conservation Water Shortage Contingency Plan

Adopted: July 19, 2004 Amended: November 17, 2008; March 16, 2009; April 20, 2009; December 21, 2009; April 19, 2010; December 20, 2010; May 14, 2015

A. Water Conservation Stage Declaration

Each year, the District Board of Directors shall determine, based on data in the California Department of Water Resource's (DWR) Bulletin #120 and present water conditions, the water stage applicable to the District. The declaration shall consist of "normal water supply", or one of the four (4) stages of varying water conservation measures. The applicable stage determined by the District shall be effective upon adoption by the Board of Directors each water year and shall remain in effect until changed by the Board based on updated data from DWR, past water usage within the District, and existing water supply and use conditions. The water year shall be defined as the period starting October 1 and lasting until September 30 of the following year.

Regardless of water supply availability or service conditions within the District, the Board of Directors reserves the right to set water conservation goals and modify stage declarations as necessary to align with regional or state water conservation policies, agreements or declarations, or legal requirements. All wasteful practices or unreasonable uses of District water, whether willful or negligent, are always prohibited. The General Manager, following the guidelines set forth in this Regulation and other relevant Board policies, state laws and regulations, shall determine what constitutes a wasteful practice or unreasonable use of water.

In addition to Normal Water Supply Conditions, the following four stages, including their conservation requirements, shall be observed by all water users within the District:

NORMAL WATER SUPPLY

Water supply conditions are adequate to meet the demands of the District's Customers. The goal of this stage is the use of water efficiently in conformance with the water conservation Best Management Practices (BMPs) specified in the District's Urban Water Management Plan. Requirements specified in this stage are applicable to and in force at all times and in all other stages of this regulation. The following requirements shall be in force during Normal Water Supply and in all subsequent stage declarations unless the Board modifies or adds to these restrictions:

1. Water must not be permitted to discharge, flow, or run to waste into any gutter, sanitary sewer, water course, or storm drain, or to any adjacent lot, from any tap, hose, faucet, pipe, sprinkler, or nozzle. In the case of irrigation, "discharge," "flow," or "run to waste" means that the earth intended to be irrigated has been saturated

with water to the point that excess water flows over the earth to waste. In the case of washing, "discharge," "flow," or "run to waste" means the water in excess of that which is necessary to wash, wet or clean the dirty or dusty object, such as an automobile or boat, flows to waste.

- 2. Washing of vehicles is permitted only with the use of a water saver nozzle equipped with automatic shut-off and bucket, provided minimal runoff occurs on sidewalks or street.
- 3. The use of water for washing down sidewalks, walkways, driveways, parking lots or buildings, except as necessary for health, sanitary, or fire protection purposes, is prohibited. When used for these exceptions, high-pressure washers shall be used.
- 4. All water hoses or filling apparatus shall be equipped with a control nozzle capable of completely shutting off the flow of water except when positive pressure to the nozzle is applied.
- 5. All water fixtures or heating or cooling devices must not be allowed to leak or discharge. All known leaks must be repaired within seven (7) days or less depending on the severity of the leak.
- 6. The operation of an irrigation system that applies water to an impervious surface (example: concrete or asphalt) or that is in disrepair is prohibited.
- 7. Water during cooler morning and evening hours to reduce evaporation and avoid peak energy demand times. Outdoor watering from 12:00 noon to 8:00 p.m. during the months of May August is prohibited; & watering from 12:00 noon to 6:00 p.m. during the months of September April is prohibited.
- 8. Irrigation of landscaping during rainfall is prohibited.
- 9. Backwashing or overfilling, so as to discharge water to waste, swimming pools, decorative basins, or ponds in excess of the frequency reasonably necessary to maintain the clarity or cleanliness of the water is prohibited. Pool draining and refilling will be allowed only for health, maintenance, or structural considerations upon submittal of a written report by a health official or pool consultant and approval provided by the District.
- 10. All pools, spas, decorative or ornamental fountains, ponds and waterways must be equipped with a recirculation pump and must be constructed to be leak-proof.
- 11. The use of water from a fire hydrant without the expressed written permission from the District is prohibited.
- 12. The use of water in new conveyer car washes and new commercial laundry systems that do not use a recirculation system shall be prohibited.
- 13. Customers enrolled in the Large Irrigation Services Customer (LISC) program will adhere to the LISC Agreement, as signed by both the customer and the District.

The following are recommended practices for this stage:

- 1. Watering three (3) days or less per week is encouraged. Customers whose address ends with an odd number are encouraged to only water on Tuesdays, Thursdays and Saturdays. Customers whose address ends with an even number are encouraged to only water on Sundays, Wednesdays and Fridays. Watering on Mondays is not recommended.
- 2. Pool covers for swimming pools and spas are recommended to reduce evaporation.
- 3. Customers are encouraged to wash only full loads of laundry and dishes.

- 4. Restaurants are encouraged to service water only upon customer request.
- 5. District Customers are encouraged to take advantage of the District's conservation programs and rebates.

STAGE 1 – WATER ALERT

Water supply conditions may be impeded by lack of available sources including surface water supplies conjunctively used by the District, regional circumstances or statewide climate influences. The goal of this stage is to reduce District-wide consumption of water by up to 20% in order to meet the needs of District Customers, comply with State mandates, cooperate with regional programs and/or comply with County regulations declaring water shortages. The following requirements shall be in force during Stage 1 and all subsequent increases in stage declarations:

- 1. All requirements of Normal Water Supply Conditions except that the District will make mandatory and will enforce the following:
 - a. Three (3) day per week Odd/Even outdoor watering shall be followed.
 - a. Odd addresses water on Tuesday, Thursday, and Saturday.
 - b. Even addresses water on Wednesday, Friday, and Sunday.
 - c. Watering on Monday is prohibited.
 - b. Restaurants shall serve water only upon customer request.

The following are recommended practices for this stage:

- 1. All recommendations of Normal Water Supply Conditions unless modified to mandatory requirements.
- 2. District Customers with "smart" irrigation timers are encouraged to set their controllers to achieve watering efficiency equal to no more than 80% of the evapotranspiration (ET) rate for the Sacramento area.
- 3. New or expanded landscaping should be limited to drought tolerant trees, shrubs and ground cover. The planting of new turf or grass, whether hydro-seeded or laid, is discouraged.

STAGE 2 – WATER WARNING

Water supply conditions may be impeded by lack of available sources including surface water supplies conjunctively used by the District, regional circumstances or statewide climate influences. The goal of this stage is to reduce District-wide consumption of water by up to 30% in order to meet the needs of District Customers, comply with State mandates, cooperate with regional programs and/or comply with County regulations declaring water shortages. The following requirements shall be in force during Stage 2 and all subsequent increases in stage declarations:

- 1. All requirements of the previous stages unless further modified below.
- 2. Outdoor watering shall be limited to no more than two days per week, as determined by the Board of Directors at the time of a Stage 2 declaration.
- 3. Hydrant permits for construction water will be issued only with the approval of the General Manager. A construction water use plan must be submitted to the District for review that addresses how impacts to existing water users will be mitigated (such as dust control).

- 4. A County or State health official must verify all health and emergency conditions requiring potable water use for the purpose of any washing of sidewalks, walkways, streets, parking lots, driveways. An industry professional must verify all health and emergency conditions requiring potable water use for the purpose of any washing of buildings.
- 5. New or expanded landscaping shall be limited to drought tolerant trees, shrubs and ground cover. No new turf or grass shall be planted, hydro-seeded or laid without prior approval of the General Manager.
- 6. Decretive fountains that use potable water will be drained and kept dry.

The following are recommended practices for this stage:

- 1. All recommendations of the previous stages unless modified to requirements.
- 2. District Customers with "smart" irrigation timers are encouraged to set their controllers to achieve watering efficiency equal to no more than 75% of the evapotranspiration (ET) rate for the Sacramento area.
- 3. Washing of vehicles and other mobile equipment should be conducted at commercial establishments that use fully recycled water.

STAGE 3 – WATER CRISIS

Water supply conditions are significantly impeded by interruption of available sources, a regional emergency, a county emergency or state mandates. The goal of this stage is to reduce District-wide consumption of water by up to 40% in order to meet the needs of District Customers. A declaration of this stage will be in conformance with the activation of the District's Emergency Response Plan and/or Water Shortage Contingency Plan. The following requirements shall be in force during Stage 3 and any subsequent increase in stage declaration:

- 1. All requirements of the previous stages unless further modified below.
- 2. Outdoor landscape irrigation shall be limited to one day, as determined by the Board of Directors at the time of a Stage 3 declaration.
- 3. The planting of new or expanded landscaping is prohibited, unless it is demonstrated that the new landscaping will result in a decrease in water use.
- 4. Watering restriction exemptions for new turf or hydro-seed will be revoked.
- 5. Except where non-potable water is used, all Large Landscape Irrigation Customers (CII) must cease all turf irrigation. Non-ornamental turf, such as active playing surfaces of sports fields, may be irrigated provided the overall system water use is reduced by 40%.
- 6. Car washing is only permitted using a commercial carwash that recirculates water or by high pressure/low volume wash systems.

The following are recommended practices for this stage:

- 1. All recommendations of the previous stages unless modified to requirements.
- 2. District Customers with "smart" irrigation timers are encouraged to set their controllers to achieve watering efficiency equal to no more than 70% of the evapotranspiration (ET) rate for the Sacramento area.

STAGE 4 – WATER EMERGENCY (Public Health and Safety Only)

Water supply conditions are significantly impeded by interruption of available sources, a regional emergency, a county emergency or state mandates. The goal of this stage is to reduce District-wide consumption of water by greater than 50% in order to meet the needs of District Customers. A declaration of this stage will be in conformance with the activation of the District's Emergency Response Plan. The following requirements shall be in force during Stage 4:

- 1. All requirements of the previous stages unless further modified below.
- 2. Any use of water for washing down sidewalks and driveways is prohibited. Unless a condition of health and/or safety is verified by a Sacramento County Health Official.
- 3. Use of District water is prohibited for filling pools, ponds or spas.
- 4. Outdoor landscape irrigation is prohibited.
- 5. All washing of vehicles and other mobile equipment is prohibited unless conducted at a commercial establishment that uses fully recycled water.
- 6. All metered services will be subject to additional tiered rates approved by the District Board of Directors.
- 7. No commitments will be provided for new water service connections until the District has returned, at a minimum, to Stage 3 restrictions. The District reserves the right to limit or refuse new service connections until Stage 2 conditions exist.

Recommended practices identified in previous stages are not applicable in Stage 4.

WATER USE PERMITTED

Water used for the following purposes is considered essential for public health and safety and is therefore permitted during all stage declarations:

- A. Water use for firefighting or routine inspection of fire hydrants or from fire training activities.
- B. Water applied to abate spills of flammable or other hazardous materials, where water is an appropriate abatement methodology.
- C. Water applied to prevent or abate imminent health, safety, or accident hazards when alternate methods are not available.

B. ENFORCEMENT

Enforcement of any violation of the water conservation requirements provided in this Regulation No. 15, as they may be amended from time to time by the District Board of Directors, is provided in this section. Service charges will be assessed for a violation of the District's conservation rules in accordance with the following provisions. A Customer will be notified when violations may result in service charges. The service charges that may be assessed are provided in Section L of Regulation No. 3. In cases of tenant occupancy, landowners retain full responsibility for the use of water by their tenants, including payment of any service charges imposed for violations of this Regulation 15.

Enforcement of the requirements of each water conservation stage will be conducted in a progressive manner and may ultimately lead to termination of service in cases where a violator refuses to discontinue activities constituting water waste. The enforcement steps are as follows:

Notice of Violation: Upon observation by authorized District personnel, or demonstrated to the District's satisfaction, of the existence of a violation, the District shall request Customer compliance with this Regulation via a notice of violation delivered in person.

Warning Notice of Violation: Upon observation by authorized District personnel, or demonstrated to the District's satisfaction, of the existence of a violation, the District shall request Customer compliance with this Regulation via a Warning Notice of Violation delivered in person.

First Violation: Upon observation by authorized District personnel, or demonstrated to the District's satisfaction, of the existence of the next violation after a Warning was issued, the District shall request Customer compliance with this Regulation via a notice delivered in person by District personnel, and/or by certified mail to the billing address of the Parcel upon which the 1st violation has occurred.

The first violation charged to a Parcel will begin the District's monitoring of that Parcel for water waste. Should there be no additional violations on the Parcel prior to the conclusion of the current water year, then that Parcel's violation from the previous year will be expunged and the Parcel will be deemed to be free of violations and the counting of any violations incurred in the new water year will begin on a clean record. The District shall keep on file copies of all violations of the District's water conservation requirements that were incurred in the same water year.

For one time only, and upon request, a Customer may participate in a Water-Wise House Call to remove a first violation from the customer's record for the current water year.

Second Violation: Upon observation by authorized District personnel, or demonstrated to the District's satisfaction, of a second water conservation violation of any kind on the same Parcel, the Customer and Landowner shall be notified of the 2nd violation in writing at the established billing address by District personnel and/or via certified mail. The District will assess a service charge for the violation, which will be added to the Customer's next bill. The second violation service charge will be billed in accordance with Regulation 3, Section L.1.

If a second violation occurs at a Stage 2 or higher water conservation stage in this Regulation on any non-metered service, the District shall install a permanent water meter on any existing Service Connection on the Parcel where the violation occurred and/or the District may impose an additional service charge as approved by the District Board of Directors. Metered rate billing will be initiated on the account at the next billing period following the meter installation.

A Customer may avoid paying a service charge for a second violation by attending a water conservation awareness workshop, at the customer's expense, and participating in a Water-Wise House Call if not completed following the first violation.

Third Violation: Upon observation by authorized District personnel, or demonstrated to the District's satisfaction, of a third water conservation violation of any kind on the same Parcel, the Customer and Landowner shall be notified of the violation in writing at the established billing address by District personnel and/or via certified mail. The District will assess a service charge for the violation, which will be added to Customer's next bill in accordance to Regulation 3, Section L.2. The notice of violation also will state that a subsequent violation may result in disconnection or reduction of service.

Fourth Violation: Upon observation by authorized District personnel, or demonstrated to the District's satisfaction, of a fourth water conservation violation of any kind on the same Parcel, the Customer and Landowner shall be notified of the violation in writing at the established billing address by District personnel or via certified mail. The District will assess a charge for the fourth violation as follows:

<u>Flat Rate Services</u>: Upon the fourth water conservation violation of a non-metered account, the District may discontinue or reduce the water supply to the Parcel where the violation occurred. The District shall, in its sole discretion, decide whether to terminate or reduce service based on all of the facts and circumstances of the violation and the Customer's past water use history. The Landowner shall be notified in writing by District personnel and/or via certified mail of the violation that a water meter shall be installed on that Parcel. The Landowner shall bear the cost of installing the meter, which shall be based on the cost of the District's time and materials. The installation of this meter shall cause the billing for the Parcel to be changed from a flat rate to a metered rate. The monthly charge for a metered service will be computed on the current metered rate as more specifically set forth in the District's Regulation No. 3 and any additional tiered water conservation rates adopted by the Board. The installation of this Meter shall be deemed permanent.

<u>Metered Services</u>: Upon the fourth water conservation violation on an existing metered service, the District will notify the Landowner of the violation in writing at the established billing address by District personnel and/or via certified mail. The Landowner will be informed that an additional charge for servicing the violation will be included in his/her next billing. The amount of the charge is as follows:

(i) 1-inch or smaller service: 25% of the amount of the water bill for the month in which the violation occurs.

(ii) $1\frac{1}{2}$ inch or larger service: 50% of the amount of the water bill for the month in which the violation occurs.

In addition, the District may discontinue or reduce the water supply to the Parcel where the violation occurred. The District shall, in its sole discretion, decide whether to terminate or reduce service based on all of the facts and circumstances of the violation and the Customer's past water use history. To restore service or full flow capabilities, the affected Customer will be required to request a hearing of the District Board of Directors, where the Customer may present evidence to the Board concerning the violation and request the restoration of water service. At its next regular meeting after the hearing, the District Board shall enter into the record its findings and decision concerning the service restoration request and each issue there under. The Board's decision will be final. The Secretary of the Board will mail the Board's written findings and decision to the Customer within thirty days (30) after the date that the Board renders its decision.

Where compliance with the requirements of this Regulation 15 are beyond the control of the Customer or Landowner and written justification and supporting evidence has been provided by the Customer or Landowner and verified by a District representative, the General Manager may excuse the violation. Approval of such a variance by the General Manager shall be conditioned on the Customer's or Landowner's cooperation with the District in resolving the violation.

Where a water conservation violation occurs on a Parcel improved with multiple family units, and it is not practical to determine which unit is responsible for the violation, the District will assess the service charge described above for existing metered rates.

Where water is wastefully or negligently used on a water user's premises to the extent that the violation seriously affects the District's general service capability, the District may discontinue service to the premises if the water waste conditions causing the general service disruption are not corrected within twenty-four (24) hours after the District provides the water user with the violation notice. A door hanger (notice) shall be deemed sufficient written notice for this purpose.

When encountered in the course of routine daily activity, District personnel have the responsibility and authority to control leaks on any Premises at the point of connection or at the valve controlling the Customer's System. When water is shut off for control of a leak, the District will provide the Customer with notice of the condition.

Appendix I: CUWCC Online Reports 2013/2014





CUWCC BMP Retail Coverage Report 2013

Foundational Best Managemant Practices for Urban Water Efficiency

BMP 1.1 Operation Practices

ON TRACK

7049 Sacramento Suburban Water District

1. Conservation Coordinator Name: provided with necessary resources to implement BMPs?

Title: Email: Greg Bundesen Water Conservation Supervisor gbundesen@sswd.org

2. Water Waste Prevention Documents

WW Document Name	WWP File Name	WW Prevention URL	WW Prevention Ordinance Terms Description
Option A Describe the ordinances or terms of service adopted by your agency to meet the water waste prevention requirements of this BMP.		http://www.sswd.org/modul es/showdocument.aspx? documentid=7083	Water Conservation Regulation and Water Shortage Contingency Plan
Option B Describe any water waste prevention ordinances or requirements adopted by your local jurisdiction or regulatory agencies within your service area.			
Option C Describe any documentation of support for legislation or regulations that prohibit water waste.			
Option D Describe your agency efforts to cooperate with other entities in the adoption or enforcement of local requirements consistent with this BMP.			
Option E Describe your agency support positions with respect to adoption of legislation or regulations that are consistent with this BMP.			
Option F Describe your agency efforts to support local ordinances that establish permits requirements for water efficient design in new development.			
At Least As effective As	No		
Exemption	No		

Exemption

Comments:



CUWCC BMP Retail Coverage Report 2013 Foundational Best Managemant Practices for Urban Water Efficiency

BMP 1.1 Operation Practices

ON TRACK



CUWCC BMP Coverage Report 2013

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.2 Water Loss Control

ON TRACK

Yes

7049 Sacramento Suburban Water District

Completed Standard Water Audit Using AWWA Software?		
AWWA File provided to CUWCC?	Yes	
BMP 1.2 - 2013.xls		
AWWA Water Audit Validity Score?	70	
Complete Training in AWWA Audit Method	Yes	
Complete Training in Component Analysis Process?	Yes	
Component Analysis?	Yes	
Repaired all leaks and breaks to the extent cost effective?	Yes	
Locate and Repar unreported leaks to the extent cost effective?	Yes	

Maintain a record keeping system for the repair of reported leaks, including time of report, leak location, type of leaking pipe segment or fitting, and leak running time from report to repair.

Provided 7 Types of Water Loss Control Info

Leaks Repairs	Value Real Losses	Value Apparent Losses	Miles Surveyed	Press Reduction	Cost Of Interventions	Water Saved (AF)
147	349181	133949	15.8	False		8.06

At Least As effective As

Exemption

No

No

Comments:



CUWCC BMP Coverage Report 2013

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.3 Metering With Commodity

ON TRACK

7049 Sacramento Suburban Water District

Numbered Unmetered Accounts				
Metered Accounts billed by volume of use				
Number of CII Accounts with Mixed Use Meters				
Conducted a feasibility study to assess merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters?				
Feasibility Study provided to CUWCC?				
Date: 10/30/2013				
Uploaded file name:				
Completed a written plan, policy or program to test, repair and replace meters				
At Least As effective As No				
Exemption No				
Comments:				


Foundational Best Management Practices For Urban Water Efficiency

BMP 1.4 Retail Conservation Pricing

Exempt

7049 Sacramento Suburban Water District

Implementation (Water Rate Structure)

	Customer Class	Water Rate Type	Conserving Rate?	(V) Total Revenue Comodity Charges	(M) Total Revenue Fixed Carges
	Single-Family	Increasing Block	Yes	6440393.76	17820685.3
	Multi-Family	Increasing Block	Yes	648653.63	1538200.82
	Commercial	Other	No	3710825.33	5182452.94
	Industrial	Other	No	15999.43	30727.78
	Institutional	Other	No	965802.43	1063519
	Dedicated Irrigation	Other	No	669609.47	738161.47
				12451284.05	26373747.31
		Calcu	late: V / (V + M)	32 %	

Calculate: V / (V + M)

Implementation

Use Canadian Water Wastewater Association Rate Design Model Option:

Use 3 years average instead of most recent year

No

Canadian Water and Wastewater Association

Upload file:

Agency Provide Sewer Service: No

At	Least /	As eff	ective	As

Exemption	Yes	Legal

Comments:

Sacramento Suburban Water District is exempt in accordance with MOU, BMP 1.4, Part 1 - B, Agencies with Partially metered service areas, subsection 2. SSWD is scheduled to be fully metered by 2025.



Foundational Best Management Practices For Urban Water Efficiency

BMP 2.1 Public Outreach

ON TRACK

Yes

Retail

7049 Sacramento Suburban Water District

Does your agency perform Public Outreach programs?

The list of wholesale agencies performing public outreach which can be counted to help the agency comply with the BMP

The name of agency, contact name and email address if not CUWCC Group 1 members

Did at least one contact take place during each quater of the reporting year? Yes

Public Outreach Program List	Number
Newsletter articles on conservation	178000
Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets	552000
Website	166197
Email Messages	6875
Total	903072

Did at least one contact take place during each quater of the reporting year?	Yes
Number Media Contacts	Number
News releases	10
Television contacts	5
Radio contacts	6
Articles or stories resulting from outreach	9
Newspaper contacts	2
Total	32

Did at least one website update take place during each quater of the reporting year? Yes

Public Information Program Annual Budget

Annual Budget Category	Annual Budget Amount			
Public Outreach	113000			
Total Amount	113000			
Public Outreah Additional Programs				
Landscape Water Conservation Media Campaigns				
Webiste Links				
Dedicated Phone Line				
Booths at Local Events				
Adult Education/Training				



Foundational Best Management Practices For Urban Water Efficiency

BMP 2.1 Public Outreach

ON TRACK

Description of all other Public Outreach programs Sacramento Kings and Sacramento River Cats

Г	
At Least As effective As	No
Exemption INO	



Foundational Best Management Practices For Urban Water Efficiency

BMP 2.2 School Education Programs	S ON TRACK
7049 Sacramento Suburban Water Distric	t Retail
Does your agency implement School Education pr	rograms? Yes
The list of wholesale agencies performing public or with the BMP	utreach which can be counted to help the agency comply
Materials meet state education framework requirer	nents? Yes
Student news paper supplement, Be Water Smart paper.	Teachers Guide, Living Rivers of the Sacramento Valley news
Materials distributed to K-6? Yes	5
Student newspaper supplement called Be Water S Sacramento Bee to all (K-12) past participants of th subscribed.	mart News, Water, the Never Ending Cycle is distributed by the he Media in Education Program and to teachers that have
Materials distributed to 7-12 students?	Yes (Info Only)
Living Rivers of the Sacramento Valley is distribut subscribed for this particular water supplement or	ed by the Sacramento Bee to all (9-12) teachers that have chose to participate in the Water Spots Video Contest
Annual budget for school education program:	31000.00
Description of all other water supplier education pr	ograms
The Be Water Smart News teaches kids to practice supplement, now entitled Water, the Never Ending Sacramento Bee's Media in Education	e water efficiency in every-day activities. This newspaper Cycle, is presented by the Regional Water Authority and The
Comments:	
At Least As effective As No	
Exemption No	0



CUWCC BMP Retail Coverage Report 2014

Foundational Best Managemant Practices for Urban Water Efficiency

BMP 1.1 Operation Practices

ON TRACK

7049 Sacramento Suburban Water District

1. Conservation Coordinator Name: provided with necessary resources to implement BMPs?

Title: Email:

gbundesen@sswd.org

Greg Bundesen

Water Conservation Supervisor

2. Water Waste Prevention Documents

WW Document Name	WWP File Name	WW Prevention URL	WW Prevention Ordinance Terms Description
Option A Describe the ordinances or terms of service adopted by your agency to meet the water waste prevention requirements of this BMP.		http://www.sswd.org/modul es/showdocument.aspx? documentid=7083	Water Conservation Regulation & Water Shortage Contingency Plan
Option B Describe any water waste prevention ordinances or requirements adopted by your local jurisdiction or regulatory agencies within your service area.		http://www.sswd.org/modul es/showdocument.aspx? documentid=7083	Water Conservation Plan / Water Shortage Contingency Plan.
Option C Describe any documentation of support for legislation or regulations that prohibit water waste.			
Option D Describe your agency efforts to cooperate with other entities in the adoption or enforcement of local requirements consistent with this BMP.			
Option E Describe your agency support positions with respect to adoption of legislation or regulations that are consistent with this BMP.			
Option F Describe your agency efforts to support local ordinances that establish permits requirements for water efficient design in new development.			
At Least As effective As	No		
Exemption	No		



CUWCC BMP Retail Coverage Report 2014 Foundational Best Managemant Practices for Urban Water Efficiency

BMP 1.1 Operation Practices

ON TRACK



Foundational Best Management Practices For Urban Water Efficiency

BMP 1.2 Water Loss Control

ON TRACK

Yes

7049 Sacramento Suburban Water District

Completed Standard Water Audit Using AWWA Software?	Yes
AWWA File provided to CUWCC?	Yes
Copy_of_BMP_1.22014.xls	
AWWA Water Audit Validity Score?	81
Complete Training in AWWA Audit Method	Yes
Complete Training in Component Analysis Process?	Yes
Component Analysis?	Yes
Repaired all leaks and breaks to the extent cost effective?	Yes
Locate and Repar unreported leaks to the extent cost effective?	Yes

Maintain a record keeping system for the repair of reported leaks, including time of report, leak location, type of leaking pipe segment or fitting, and leak running time from report to repair.

No

No

Provided 7 Types of Water Loss Control Info

Leaks Repairs	Value Real Losses	Value Apparent Losses	Miles Surveyed	Press Reduction	Cost Of Interventions	Water Saved (AF)
186	89958	102583	17.8	False		1

At Least As effective As

Exemption



Foundational Best Management Practices For Urban Water Efficiency

BMP 1.3 Metering With Commodity

ON TRACK

7049 Sacramento Suburban Water District

Numbered Unmetered Accounts				
Metered Accounts billed by volume of use	Yes			
Number of CII Accounts with Mixed Use Meters				
Conducted a feasibility study to assess merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters?				
Feasibility Study provided to CUWCC? Yes				
Date: 10/21/2015				
Uploaded file name: BMP 1.3 Fesability Study 12-2013.xls				
Completed a written plan, policy or program to test, Yes repair and replace meters				
At Least As effective As No				
Exemption				



Foundational Best Management Practices For Urban Water Efficiency

BMP 1.4 Retail Conservation Pricing

Exempt

7049 Sacramento Suburban Water District

Implementation (Water Rate Structure)

Customer Class	Water Rate Type	Conserving Rate?	(V) Total Revenue Comodity Charges	(M) Total Revenue Fixed Carges
Single-Family	Increasing Block	Yes	5466990.37	17399434.2
Multi-Family	Increasing Block	Yes	2036661.23	3119385.14
Commercial	Other	No	1624893.56	3702593.77
Industrial	Other	No	10586.16	25245.05
Institutional	Other	No	881091.22	1100234.85
Dedicated Irrigation	Other	No	806376.62	857567.4
			10826599.16	26204460.41
	Calcu	ulate: V / (V + M)	29 %	

Calculate: V / (V + M)

Implementation

Use Canadian Water Wastewater Association Rate Design Model Option:

Use 3 years average instead of most recent year

No

Canadian Water and Wastewater Association

Upload file:

Agency Provide Sewer Service: No

Exemption	Yes	Legal

Comments:

Sacramento Suburban Water District is exempt in accordance with MOU, BMP 1.4, Part 1 - B, Agencies with Partially metered service areas, subsection 2. SSWD is scheduled to be fully metered by 2025.



Foundational Best Management Practices For Urban Water Efficiency

BMP 2.1 Public Outreach

ON TRACK

Yes

7049 Sacramento Suburban Water District Retail

Does your agency perform Public Outreach programs?

The list of wholesale agencies performing public outreach which can be counted to help the agency comply with the BMP

The name of agency, contact name and email address if not CUWCC Group 1 members

Did at least one contact take place during each quater of the reporting year? Yes

Public Outreach Program List	Number
Landscape water conservation media campaigns	178000
Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets	552000
Website	166197
Email Messages	6875
Total	903072

Did at least one contact take place during each quater of the reporting year?	Yes
Number Media Contacts	Number
News releases	11
Television contacts	40
Radio contacts	24
Articles or stories resulting from outreach	9
Newspaper contacts	40
Written editorials	1
Тс	otal 125

Did at least one website update take place during each quater of the reporting year? Yes

Public Information Program Annual Budget

Annual Budget Category	Annual Budget Amount			
Public Outreach	113000			
Τα	tal Amount: 113000			
Public Outreah Additional Programs				
Landscape Water Conservation Media Campaigns				
Webiste Links				
Dedicated Phone Line				
Booths at Local Events				



Foundational Best Management Practices For Urban Water Efficiency

BMP 2.1 Public Outreach

ON TRACK

Public Outreah Additional Programs

Adult Education/Training

Description of all other Public Outreach programs

Sacramento River Cats promoting Blue Thumb Branding.

At Least As effective As	No	
Exemption No	0	



Foundational Best Management Practices For Urban Water Efficiency

BMP 2.2 School Education Programs	S ON TRACK			
7049 Sacramento Suburban Water Distric	ct Retail			
Does your agency implement School Education p	rograms? Yes			
The list of wholesale agencies performing public of with the BMP	utreach which can be counted to help the agency comply			
Materials meet state education framework requirer	nents? Yes			
Student news paper supplement, Be Water Smart paper.	Teachers Guide, Living Rivers of the Sacramento Valley news			
Materials distributed to K-6? Yes	5			
Student newspaper supplement called Be Water S Sacramento Bee to all (K-12) past participants of the subscribed.	Student newspaper supplement called Be Water Smart News, Water, the Never Ending Cycle is distributed by the Sacramento Bee to all (K-12) past participants of the Media in Education Program and to teachers that have subscribed.			
Materials distributed to 7-12 students?	Yes (Info Only)			
Living Rivers of the Sacramento Valley is distributed by the Sacramento Bee to all (9-12) teachers that have subscribed for this particular water supplement or chose to participate in the Water Spots Video Contest				
Annual budget for school education program: 31000.00				
Description of all other water supplier education programs				
The Be Water Smart News teaches kids to practice water efficiency in every-day activities. This newspaper supplement, now entitled Water, the Never Ending Cycle, is presented by the Regional Water Authority and The Sacramento Bee's Media in Education				
Comments:				
At Least As effective As No				
Exemption No	0			



7049 Sacramento Suburban Water District

Baseline	GPCD	240.09
Dascille	GI GD.	240.03

GPCD in 2014 168.77

GPCD Target for 2018: 196.90

Biennial GPCD Compliance Table

ON TRACK

		Target		Highest Acceptable Bound	
Year	Report	% Base	GPCD	% Base	GPCD
2010	1	96.4%	231.40	100%	240.10
2012	2	92.8%	222.80	96.4%	231.40
2014	3	89.2%	214.20	92.8%	222.80
2016	4	85.6%	205.50	89.2%	214.20
2018	5	82.0%	196.90	82.0%	196.90





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