



*A cooperative effort of
the City of Livermore, the City of Pleasanton,
Dublin San Ramon Services District,
and the California Water Service Company*

TRI-VALLEY WATER RETAILERS ANNUAL REPORT Fiscal Year 2010/11

Final Report
October 26, 2011

Prepared by West Yost Associates
for the Tri-Valley Water Retailers



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EXECUTIVE SUMMARY

This Annual Report has been prepared by the four water retailers in the Tri-Valley area: the Cities of Livermore and Pleasanton, the Dublin San Ramon Services District, and the California Water Service Company-Livermore District. The Tri-Valley Water Retailers Group entered into a contract with West Yost Associates for assistance to prepare this Annual Report. The purpose of the Annual Report is to provide a summary of the condition of the region's water supply and water quality during the previous fiscal year. Also included is an assessment of the extent to which the Tri-Valley's water wholesaler, the Zone 7 Water Agency (Zone 7), is addressing the long-term water needs of the Tri-Valley communities.

In 2002 and 2003, the four Tri-Valley Water Retailers entered into the Tri-Valley Water Retailers Cooperative Agreement (Agreement). The Agreement provided a framework that enhances the ability of the water retailers to provide adequate and reliable water service to their current and future customers, and provides a single forum to more effectively communicate their perspective to Zone 7. The Agreement required the formation of the Committee of Valley Water Retailers (CoVWR), which consists of two representatives appointed from the governing body (in the case of a public agency) or senior staff (in the case of an investor-owned utility) of each water retailer. The Agreement also requires the preparation of this Annual Report.

To administer the actions called for under the Agreement, the Tri-Valley Water Retailers Group (TWRG), made up of senior-level staff and management from each water retailer, meets periodically and is charged with developing consensus positions on matters of mutual concern. The TWRG prepares the TWRG Annual Report and recommends it for consideration and acceptance by the CoVWR.

As described in this Annual Report, even with the above-normal precipitation, increased reservoir levels and an above-normal Sierra snowpack in 2011, 2010/11 continued to present water supply challenges throughout California and in the Tri-Valley area. Continued pumping restrictions on the State Water Project have reduced Zone 7's water supply reliability from the State. The current and future impact of these restrictions, along with new legislation requiring the statewide reduction in water use and the continued economic down-turn, slow recovery, and the related impacts to water supply conditions and operations, are major focuses of this year's Annual Report. Other major efforts over the last year included working with Zone 7 staff on an update of their Asset Management Program and providing comments to the Zone 7 Board on critical aspects of the plan, as well as providing input to Zone 7 staff and the Board on water rates and the use of reserve funds.

At the Annual Meeting held in October 2010, CoVWR directed the TWRG to focus on five key actions that represented the most important issues facing the Tri-Valley's water supplies in 2010/11 and include:

1. Delta water supply availability and reliability;
2. Zone 7's Water Supply Evaluation (previously referred to as the Water System Master Plan Update) and risk-based planning approach;
3. Regional water conservation goals and activities; and

4. Balance between infrastructure reliability and cost in conjunction with Zone 7's Asset Management Plan; and
5. Monitoring operational status of the Zone 7 Mocho Demineralization facility.

It should be noted that while delivered water quality continues to be a concern of the retailers, it was understood by CoVWR and TWRG that overall water supply issues were more pressing for the 2010/2011 year. Therefore, no specific action item related to delivered water quality was included in the recommended focused action items for 2010/11.

The recommended action items for 2011/12 are outlined in the last section of this Annual Report, SECTION IV. Recommended Action Items for FY 2011/12, and are intended to continue to focus CoVWR member agencies on the most important issues facing the Tri-Valley's water supplies. The action items for 2011/12 are designed to assist the CoVWR member agencies in taking a proactive approach to encourage water conservation and wise water use in the Valley, and to assist Zone 7 in continuing to develop a reliable and cost-effective water supply for the Tri-Valley area.

The TWRG recommends that CoVWR approve this Annual Report and adopt the recommended Action Items for 2011/12 described in Section IV to continue to help improve the Tri-Valley's current long-range water supply deficiencies.

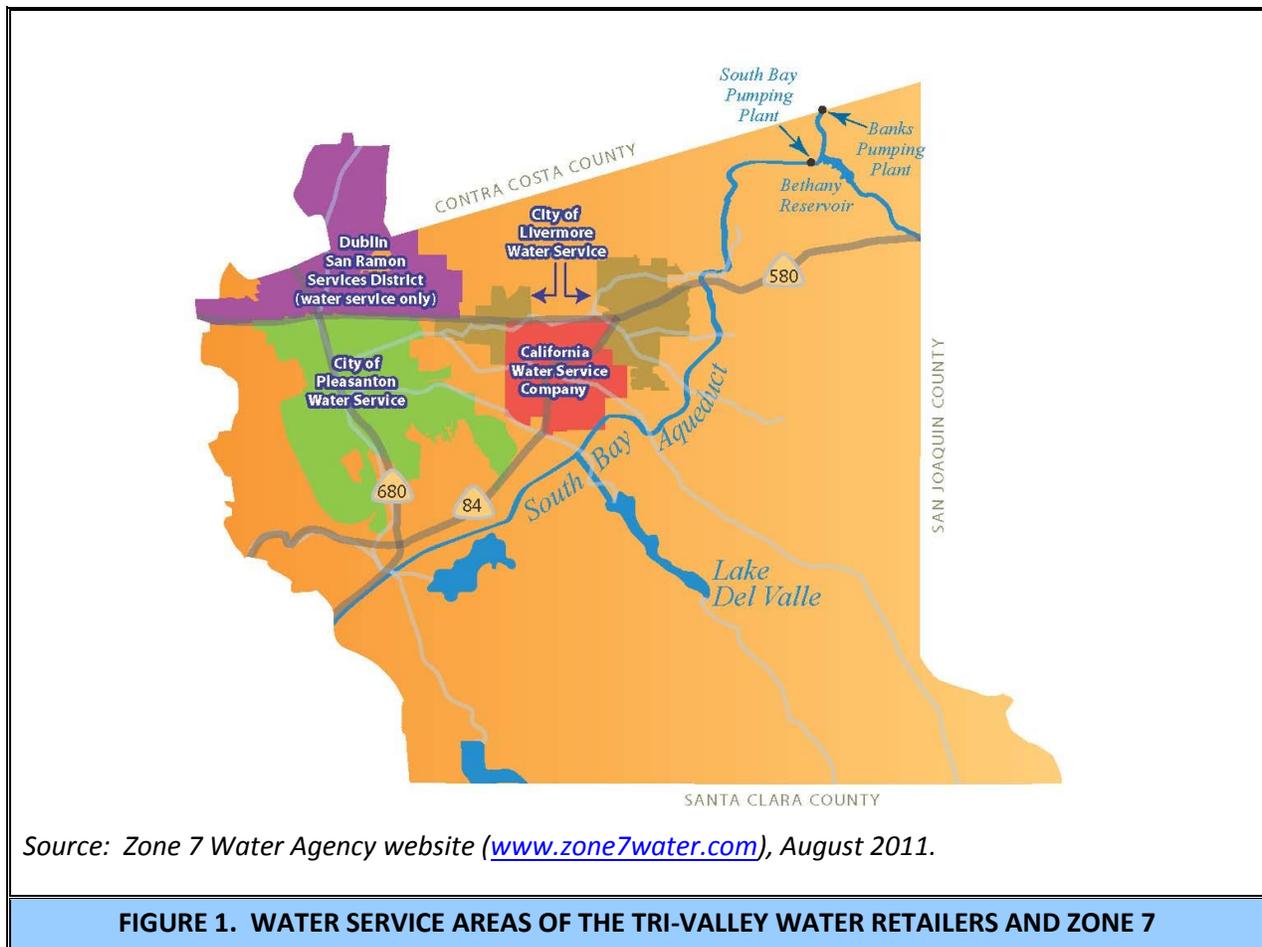
SECTION I. BACKGROUND

Tri-Valley Water Retailers

The four Tri-Valley Water Retailers (the cities of Livermore and Pleasanton, the Dublin San Ramon Services District and the California Water Service Company-Livermore District), provide potable water service to approximately 95 percent of the Valley's municipal and industrial water customers. These agencies receive approximately 85 percent of their potable water supplies through contracts with Zone 7.

Zone 7, in turn, receives approximately 80 percent of its water supply from the State Water Project (SWP), which conveys water from the northern Sierra Nevada through the Sacramento/San Joaquin Delta (Delta) to the Harvey O. Banks Pumping Plant (located in Byron, eight miles northwest of the City of Tracy), where it is pumped into the California Aqueduct for delivery to Zone 7 (through the South Bay Aqueduct) and twenty-eight other SWP contractors.

Figure 1 shows the water service areas of the four Tri-Valley Water Retailers and Zone 7.



Tri-Valley Water Retailer’s Cooperative Agreement

Given the complexities and sophistication of the State’s water supply system and its effect on the Tri-Valley, the water retailers recognize the need to have an effective venue for addressing issues of mutual concern. In August 2002, the City of Livermore and the Dublin San Ramon Services District (DSRSD) entered into the Tri-Valley Water Retailers Cooperative Agreement (Agreement). The City of Pleasanton and the California Water Service Company joined City of Livermore and DSRSD, and entered into the Agreement in April 2003 and September 2003, respectively.

The Agreement provides a framework that enhances the ability of the water retailers to provide adequate and reliable water service to their current and future customers. A key element of the framework is to provide the water retailers a single forum to more effectively communicate their perspective to Zone 7, the wholesaling water agency from which the retailers purchase most of their water. The Agreement requires the preparation of an Annual Report describing the status of the valley water supply and the activities conducted by the retailers.

Committee of Valley Water Retailers

The Agreement also requires the formation of the Committee of Valley Water Retailers (CoVWR), which consists of two representatives appointed from the governing body (in the case of a public agency) or senior staff (in the case of an investor-owned utility) of each water retailer. The CoVWR provides a forum for elected officials and senior staff of the Tri-Valley water retail organizations to come together on an annual basis to discuss matters of mutual concern, and to take actions that are collectively determined to be beneficial to the Tri-Valley communities.

The CoVWR conducts an annual, publicly-noticed meeting to consider approval of the Annual Report, to set priorities and provide additional direction to staff regarding water supply and water quality issues.

The objectives of the CoVWR, which were established in the Agreement adopted on August 29, 2002, are listed in Table 1 below.

TABLE 1. OBJECTIVES OF THE COMMITTEE OF VALLEY WATER RETAILERS	
❖	Maintain a safe and reliable water supply for the water retailers and their customers
❖	Acknowledge and identify issues that the water retailers have in common
❖	Establish a forum to enhance communication and cooperation among the Tri-Valley water agencies
❖	Initiate a process for mutual and coordinated efforts by the water retailers to review and influence Zone 7 Water Agency’s policies, procedures and actions on water supply issues of mutual concern

The current members of the CoVWR are listed in Table 2. It should be noted that as of July 1, 2011, John Marchand, Vice Mayor of the City of Livermore, will serve as the CoVWR Chair (succeeding John Freeman of the California Water Service Company), and Daniel Scannell, DSRSD Director, will serve as the CoVWR Vice Chair (succeeding John Marchand of the City of Livermore). Both will serve a term of two years (2011/12 and 2012/13).

TABLE 2. CURRENT MEMBERS OF THE COMMITTEE OF VALLEY WATER RETAILERS (CoVWR)	
<u>City of Livermore</u> Vice Mayor John Marchand (CoVWR Chair)* Councilmember Doug Horner	<u>Dublin San Ramon Services District</u> Board President Pat Howard Director Daniel Scannell (CoVWR Vice Chair)*
<u>City of Pleasanton</u> Mayor Jennifer Hosterman Councilmember Matt Sullivan	<u>California Water Service Company</u> Engineering Manager Jim Simunovich District Manager John Freeman
* Term effective July 1, 2011 for two years (2011/12 and 2012/13).	

Tri-Valley Water Retailers Group

To administer the actions called for under the Agreement, the Tri-Valley Water Retailers Group (TWRG), made up of senior-level staff and management from each water retailer, meets periodically and is charged with developing consensus positions on matters of mutual concern. The TWRG also prepares the TWRG Annual Report and recommends it for consideration and acceptance by the CoVWR.

The current TWRG representatives from each retail agency are listed in Table 3. It should be noted that as of July 1, 2011, Darren Greenwood of the City of Livermore will serve as the TWRG Chair for a term of two years (2011/12 and 2012/13) (succeeding John Freeman of the California Water Service Company).

TABLE 3. CURRENT TRI-VALLEY WATER RETAILERS GROUP (TWRG) REPRESENTATIVES	
<u>City of Livermore</u> Randy Werner Darren Greenwood (TWRG Chair)* Dan McIntyre	<u>Dublin San Ramon Services District</u> Bert Michalczyk Dave Requa Judy Zavadil
<u>City of Pleasanton</u> Abbas Masjedi Dan Martin Daniel Smith	<u>California Water Service Company</u> John Freeman Frank Vallejo
* Term effective July 1, 2011 for two years (2011/2012 and 2012/2013).	

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SECTION II. SUMMARY OF 2010/11 MEETINGS & RESOLUTIONS

In 2010/11, the CoVWR held one meeting: the Annual Meeting on October 27, 2010. A description of this meeting and the actions taken are provided below.

October 27, 2010 CoVWR Annual Meeting

The CoVWR held the 2010 Annual Meeting on October 27, 2010. At that meeting, CoVWR adopted Resolution No. 2010-01 accepting the TWRG Annual Report for FY 2009/10 and setting priorities for 2010/11. This action is discussed below.

Also at the 2010 Annual Meeting, the CoVWR approved the new CoVWR Chair and Vice Chair for the next two-year term. As described in Section I, as of July 1, 2011, John Marchand (Vice Mayor of the City of Livermore) will serve as the CoVWR Chair, and Daniel Scannell (DSRSD Director) will serve as the CoVWR Vice Chair. Both will serve a term of two years (2011/12 and 2012/13).

CoVWR Resolution No. 2010-01

The purpose of this resolution was to discuss and accept the Tri-Valley Water Retailers Annual Report for FY 2009/10 and to set priorities and issues to be addressed by TWRG in 2010/11. The resolution was adopted and direction was provided to the TWRG to take the following five actions:

Action #1	Continue to support Zone 7's involvement in Delta water supply issues in fiscal year 2010/11 and beyond, including support of immediate-term projects that could improve the Delta water supply situation.
Action #2	Continue to work closely with Zone 7 to prepare the Water Supply Evaluation (previously referred to as the Water System Master Plan Update) using a risk-based planning approach to address the projected future shortfall in water supplies in the Tri-Valley.
Action #3	Work closely with Zone 7 and with each other to review the current regional water conservation programs and develop new programs and methods for more effective and efficient use of the regional water conservation fund.
Action #4	Continue to work with Zone 7 on the update of the Asset Management Program (AMP), and review and provide comments on the AMP as it is being developed in an effort to sustain a reasonable balance between cost and infrastructure reliability.
Action #5	Develop a process to receive regular operational status updates on the Zone 7 Mocho Demineralization facility, as well as criteria for evaluating the results of the treatment process.

Section III of this 2010/11 Annual Report describes the activities taken by TWRG and Zone 7 related to these action items in FY 2010/11.

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SECTION III. DESCRIPTION OF 2010/11 ACTIONS

This section of the 2010/11 Annual Report focuses on and is organized by five major topics which encompass the five action items adopted by the CoVWR at their October 27, 2010 Annual Meeting. For each major topic, specific action items and key activities being implemented by the TWRG agencies and Zone 7 are described, along with recommendations for improvement for the upcoming year. The following topics are described below:

- Water Supply Conditions and Issues
- Coordination with Zone 7 Water Supply Evaluation
- Water Conservation Activities
- Interrelationship between Water Infrastructure Reliability, Costs and Water Rates
- Water Quality Conditions and Issues

Water Supply Conditions and Issues

2010/11 Action Item #1

Action item #1 for 2010/11 was to continue to support Zone 7's involvement in Delta water supply issues in fiscal year 2010/11 and beyond, including support of immediate-term projects that could improve the Delta water supply situation.

Overview

The most important issue facing the Tri-Valley's water supplies continues to be the curtailment of water diversion from the Sacramento-San Joaquin Delta (Delta) by the State Water Project (SWP) due to environmental mitigation requirements. As discussed below, even though snowfall and rainfall in the spring of 2011 was above normal, and most of the state's major reservoirs are above normal storage levels, deliveries from the SWP in 2011 are still only 80 percent of Table A amounts. The extent and duration of the curtailments is uncertain, and steps necessary to mitigate or offset the effects of curtailment are mired in political stalemates or facing environmental or institutional resistance or opposition. The last 100 percent allocation was in 2006, prior to the implementation of Delta pumping restrictions.

This section of the 2010/11 TWRG Annual Report discusses this issue in the context of the following specific items:

- 2011 Hydrologic Conditions
- DWR's 2011 Water Allocations
- Zone 7's May 2011 Annual Review of Sustainable Water Supply

2011 Hydrologic Conditions

Water Years 2007 through 2009 represented the twelfth driest three-year period in California’s 100-year hydrologic record. Annual statewide precipitation totaled 63 percent, 72 percent and 76 percent of average from Water Years 2007, 2008, and 2009, respectively.

Fortunately, hydrologic conditions improved in both 2010 and 2011. The 2010 Water Year (which began on October 1, 2009) had average precipitation (107 percent of average through May 2010) and an above-average Sierra snowpack¹. While the overall Sierra snowpack was above normal, the critical source for the Tri-Valley is the Feather River Watershed which feeds Lake Oroville. The 2011 Water Year (which began October 1, 2010) had above average precipitation (145 percent of average through May 2011) and an above-average Sierra snowpack². On May 2, 2011, DWR’s final snow survey for the 2010-2011 season indicated that the water content in the mountain snowpack was 144 percent of average for the date.

As a result of the increased precipitation and snowfall in the 2010-2011 season, reservoir levels improved significantly as compared to last year, and are summarized in Table 4.

TABLE 4. STATUS OF STATE WATER PROJECT RESERVOIRS				
Lake/Reservoir	Current Status (as of August 30, 2011)		Last Year (as of August 30, 2010)	
	Percent of Capacity	Percent of Average	Percent of Capacity	Percent of Average
Lake Oroville	94%	139%	58%	86%
Lake Shasta ^(a)	80%	122%	77%	118%
San Luis Reservoir ^(a)	73%	168%	38%	87%

^(a) It should be noted that Zone 7 receives no supplies from Lake Shasta or directly from San Luis Reservoir (although the “carry-over” supplies that Zone 7 receives credit for are stored in San Luis Reservoir).

Source: DWR California Data Exchange Center (www.cdec.water.ca.gov)

¹ Source: California’s Drought Update, June 30, 2010, California Department of Water Resources website (www.water.ca.gov/drought).

² Source: Hydrologic Conditions in California (06/01/11) Executive Update, California Data Exchange Center website (www.cdec.water.ca.gov).

DWR's 2011 Water Allocations

In November 2010, DWR set the initial 2011 SWP allocation at 25 percent of total contracted water deliveries to SWP contractors. The initial allocation was a conservative delivery estimate and was much improved from 2010's initial projection of only 5 percent. In subsequent months, as the State's 2011 water supply status improved with several significant storm events in the winter and spring, DWR increased the allocation. By May 2011, DWR increased the allocation to 80 percent, as a result of above-average rainfall and snowfall which resulted in above-average Sierra snowpack. However, even with above-average precipitation, increased reservoir storage, and an above-average Sierra snowpack, SWP deliveries will remain limited due to current and on-going restrictions in Delta pumping.

Zone 7's May 2011 Annual Review of Sustainable Water Supply

Summary

In April or May of each year, Zone 7 prepares a water supply assessment of the Livermore-Amador Valley sustainable water supply. Sustainable water supply is defined by Zone 7 as the average supply based on hydrologic events (in Zone 7's case, over the past 80 years) and includes the worst single-year drought of record (1977) and the two worst multi-year droughts of record (1928-34 and 1987-92) during this period.

In 2006, prior to the Delta pumping restrictions of 2007, Zone 7 projected that it had sufficient supplies and storage capacity to meet full deliveries through build out of the adopted General Plans of the cities within its service area. However, recent and on-going reductions in Delta pumping and the potential supply reduction impacts of climate change have reduced Zone 7's sustainable water supply.

On May 18, 2011 Zone 7 staff presented its Annual Review of Sustainable Water Supply Report to the Zone 7 Board. The 2011 review compared projected water demands and available water supplies for the next five years and identified programs necessary to meet water demands. The major findings of the 2011 review were as follows:

- Water demands over the next five years are projected to increase from 51,900 to 53,800 acre-feet by 2015 (a 3.7 percent increase) without water conservation, and could decrease pending the success of implementation of the Water Conservation Act of 2009 (SBx7-7);
- Water supply yield in 2011 from existing water supply contracts and Zone 7's existing water right permit is projected at approximately 67,400 acre-feet based on DWR's State Water Project allocation of 80 percent;
- Long-term average water supply available from existing water supply sources has remained constant at approximately 55,050 acre-feet;
- Zone 7 has sufficient water supplies to meet projected water demands over the next five years, with or without water conservation. However, Zone 7's long-term water supply is at risk and subject to an uncertain future due to court rulings and biological opinions associated with the Delta and climate change.

In response to these findings, Zone 7 has recently completed a detailed evaluation of Zone 7's water supplies that will make recommendations to help minimize near-term risks of water supply shortages while maximizing long-term flexibility until more information is known regarding a fix in the Delta (see discussion of Zone 7 Water Supply Evaluation beginning on page III-8).

Projected Water Demands for the Next Five Years

Every year Zone 7 obtains water demand projections from all of its customers for the next five years. Table 5 summarizes these projections for 2011 to 2015, with and without additional water conservation.

TABLE 5. PROJECTED ZONE 7 WATER DEMAND FOR THE NEXT FIVE YEARS, ACRE-FEET					
Type	2011	2012	2013	2014	2015
M&I	47,400	47,800	48,100	48,600	49,300
Untreated	4,500	4,500	4,500	4,500	4,500
Total	51,900	52,300	52,600	53,100	53,800
Additional Water Conservation Savings ^(a)	(600)	(1,200)	(1,800)	(2,400)	(3,000)
Revised Total Water Demand	51,300	51,100	50,800	50,700	50,800
<p>^(a) For purposes of the May 2011 Annual Review of Sustainable Water Supply Report, Zone 7 prepared preliminary estimates of additional water conservation savings for each of the retailers using demand and population data provided by the retailers; the preliminary estimates were shared with the retailers in early 2011; these estimates will likely change as the Retailers better refine their own estimates.</p> <p><i>Source: Tables 1 and 2, Annual Review of Sustainable Water Supply for Zone 7 Water Agency, May 18, 2011.</i></p>					

As shown, Zone 7's total water demands without additional water conservation are projected to increase by 3.7 percent between 2011 and 2015, while water demands for Zone 7's untreated customers are expected to remain constant. However, with the additional water conservation estimated by Zone 7 (and shared with the retailers), the projected water demands could remain relatively constant between 2011 and 2015 depending on the success of the regional water conservation efforts and compliance with SBx7-7.

Projected Yield from Existing Contracted Water Supplies

Zone 7 has developed a water supply system consisting of imported surface water, local runoff, groundwater recharge activities, and non-local storage. This diverse water supply system allows Zone 7 to store excess water during average and wet years, and draw on these reserves during dry years to create a sustainable and reliable water supply for the Livermore-Amador Valley.

Each year Zone 7 receives water supply from its water rights permit for diversions from Arroyo del Valle, and its contracts with DWR for SWP water, Byron Bethany Irrigation District (BBID), and DWR for Yuba Accord Water. The exact quantity of water supply available through these contracts is unknown at the beginning of the year because the yield depends on many factors, including local precipitation and

snowfall in the Sierras. For planning-level purposes, Zone 7 staff estimates the projected yield from these water supplies at the beginning of the year, along with an estimate of the long-term average yield.

Table 6 presents Zone 7's projected yield in 2011 and the long-term average yield based on a review of actual deliveries, rainfall, DWR projections, and DWR's Draft 2009 Reliability Report. Table 6 also includes the long-term operational losses associated with artificial recharge in the local groundwater basin and participation in non-local groundwater banking programs.

TABLE 6. PROJECTED YIELD FROM EXISTING CONTRACTED WATER SUPPLIES, ACRE-FEET				
Source	Available in 2011		Long-term Average	
	Yield	% of Total	Yield	% of Total
Arroyo de Valle Runoff	9,500	12.7%	7,300 ^(a)	12.6%
Byron Bethany Irrigation District (BBID)	600 ^(b)	0.8%	2,000	3.5%
State Water Project	64,500 ^(c)	86.5%	48,400 ^(d)	83.5%
Yuba Accord (via DWR)	0	0%	250	0.4%
Subtotal	74,600	100.0%	57,950	100.0%
Operational Losses ^(e)	(7,100)	9.5%	(2,900)	(5.0%)
Total	67,400	90.5%	55,050	95.0%

^(a) Long-term average yield from Arroyo Valle was reduced to 7,300 acre-feet from 9,300 acre-feet to better account for required allocations between Zone 7 and Alameda County Water District.

^(b) Although Zone 7 has up to 5,000 acre-feet available for purchase, only about 600 acre-feet will be purchased in 2011 due to increased yield from other water supply sources.

^(c) 2011 Yield is based on 80% of Zone 7's Table A amount of 80,619 acre-feet (based on DWR's 2011 water allocations).

^(d) Per the DWR Draft 2009 Reliability Report, long-term average yield is based on 60% of Zone 7's Table A amount of 80,619 acre-feet.

^(e) Operational losses include the losses associated with artificial recharge in the groundwater basin, groundwater demineralization brine losses, and putting water in either Semitropic or Cawelo.

Source: Table 3, Annual Review of Sustainable Water Supply for Zone 7 Water Agency, May 18, 2011.

As shown in Table 6, the projected yield in 2011 from Zone 7's existing contracted water supplies is approximately 67,400 acre-feet, while the long-term average yield is projected to be approximately 55,050 acre-feet after considering operational losses. The total projected supply of 67,400 acre-feet in 2011 is 50 percent higher than the total projected supply estimated in 2010, primarily as a result of the increase in the SWP allocation for 2011.

Available Storage

Zone 7 currently stores water in various groundwater storage programs to help meet water demands during acute or prolonged droughts. Table 7 summarizes the storage available for use over the next five years.

TABLE 7. STORAGE AVAILABLE FOR USE (2011 TO 2015), ACRE-FEET			
Storage Facility or Program	Estimated Total Available Water in Storage ^(a)	Maximum Storage Available for Use in 2011	Minimum Annual Storage Available for Use in Each Year between 2012 and 2015 ^(b)
Main Groundwater Basin	80,000 (total)	20,200 ^(c)	14,000
Lake Del Valle Carryover	7,700 (annual)	7,700	10,000
State Water Project Carryover	19,000 (annual)	11,000 ^(d)	
Semitropic	80,800 (total)	15,700 ^(e)	9,100
Cawelo	10,000 (total)	0 ^(f)	2,500 ^(f)
Total	197,500	54,600	35,600

^(a) The estimate of total available water in storage is through April 2011. For the Main Groundwater Basin, the amount shown (80,000 acre-feet) is the volume of groundwater available in storage above the historical low groundwater storage volume of 128,000 acre-feet.

^(b) The Minimum Storage Available for Use between 2012 and 2015 is based on a certain level of management, including artificial recharge of the Main Groundwater Basin and decisions to carry over water in both the SWP and within Lake Del Valle.

^(c) As the available storage decreases in the Main Basin, the amount of groundwater available in any given year also decreases due to well locations and defined historic lows. For 2011, 20,200 acre-feet was used as a conservative estimate for planning-level purposes in the Annual Review of Sustainable Water Supply Report.

^(d) Zone 7 lost approximately 8,000 acre-feet of SWP carryover this year when San Luis Reservoir filled.

^(e) 2011 availability of Semitropic includes pump back of 9,100 acre-feet, and potential exchange water of approximately 6,600 af (this assumes a SWP delivery allocation of 80% of Zone 7's Table A amount).

^(f) Zone 7 plans to send water to Cawelo in 2011; therefore, no water would likely be pumped back. For comparative purposes in the 2011 Annual Review, Zone 7 staff assumed that water stored in Cawelo storage could be used in equal amounts between 2012 and 2015, or about 2,500 acre-feet per year over four years.

Source: Table 4, Annual Review of Sustainable Water Supply for Zone 7 Water Agency, May 18, 2011.

Comparison of Supply and Demand for the Next Five Years

Table 8 compares available water supplies to projected water demands over the next five years.

TABLE 8. COMPARISON OF ZONE 7 SUPPLY AND DEMAND FOR THE NEXT FIVE YEARS, ACRE-FEET						
	Component	2011	2012	2013	2014	2015
Without Conservation	Water Supply ^(a)	67,400	55,050	55,050	55,050	55,050
	Available Storage ^(b)	54,600	35,600	35,600	35,600	35,600
	Water Demand ^(c)	(51,900)	(52,300)	(52,600)	(53,100)	(53,800)
	Total Surplus Supply	70,100	38,350	38,050	37,550	36,850
With Conservation	Water Supply ^(a)	67,400	55,050	55,050	55,050	55,050
	Available Storage ^(b)	54,600	35,600	35,600	35,600	35,600
	Water Demand ^(c)	(51,900)	(51,100)	(50,800)	(50,700)	(50,800)
	Total Surplus Supply	70,100	39,550	39,850	39,950	39,850
<p>^(a) See Table 6; 2011 supply based on an 80% allocation from DWR (see Table 6 footnote (c)); 2012-2015 supplies based on long-term average allocation of 60%.</p> <p>^(b) See Table 7.</p> <p>^(c) See Table 5.</p> <p><i>Source: Table 5, Annual Review of Sustainable Water Supply for Zone 7 Water Agency, May 18, 2011.</i></p>						

As shown, Zone 7's existing water supply exceeds projected water demands over the next five years, with or without water conservation. Additional analysis by Zone 7 also demonstrated that Zone 7 can meet projected water demands during Single Dry Year and Multiple Dry Year conditions over this same time period.

TWRG Recommendation for the Upcoming Year

TWRG should continue to support Zone 7's involvement in Delta water supply issues in fiscal year 2011/12 and beyond, including support of immediate-term projects that could improve the Delta water supply situation. TWRG would like to receive regular updates from Zone 7 on Zone 7's involvement in statewide water issues, and will plan to invite Zone 7 to attend TWRG meetings on approximately a quarterly basis to report on Zone 7's activities related to statewide water issues.

Coordination with Zone 7 Water Supply Evaluation

2010/11 Action Item #2

Action item #2 for 2010/11 was to continue to work closely with Zone 7 to prepare the 2011 Water Supply Evaluation (previously referred to as the Zone 7 Water System Master Plan Update) using a risk-based planning approach to address the projected future shortfall in water supplies in the Tri-Valley.

Overview

This section of the 2010/11 Annual Report provides information on Zone 7's recently completed 2011 Water Supply Evaluation (2011 WSE), as well as related topics including coordination of the preparation of the 2010 UWMPs and compliance with the Water Conservation Act of 2009 (SBx7-7).

Zone 7 Water Supply Evaluation

As described under Action item #1, as the reliability of the SWP declines due to court rulings and biological opinions, so has Zone 7's long-term water supply. In response to this future water supply uncertainty, Zone 7 recently completed its 2011 WSE to help identify operational improvements and additional studies that will minimize near-term risks of water supply shortages and maximize long-term flexibility by evaluating potential new supply sources. Due to the future uncertainty of the Delta, Zone 7 staff also evaluated the ability of various mixes of water supplies to meet different reliability targets.

As demonstrated by the legal and environmental constraints placed on SWP diversions in the Delta, the sustainability and reliability of long-term water supplies for the Livermore-Amador Valley face an uncertain future. Consequently, in 2009, Zone 7 staff developed a risk-based water supply model to help incorporate and evaluate key uncertainties (e.g., estimated number of wet years between droughts, the probability of experiencing a 90 percent supply delivery year, timing of potential solutions, or future adjustments to projected demands by Zone 7 retailers) influencing the existing water supply system. The risk-based long-term water supply model uses Monte Carlo analysis to assess the ability of Zone 7's water supply system to manage non-sequential allocations of SWP water (as predicted by DWR's CALSIM modeling) and other water supplies. Zone 7 used this new model to quantify the risk to key elements in the system, including the probability of having a water supply shortage, or having to draw the Main Basin storage levels down to historic lows. The analysis included evaluating Zone 7's existing water supply system, collecting key information on potential solutions, developing water supply portfolios that minimize risk and maximize flexibility, and recommending a preferred path to secure a sustainable and reliable water supply for the Livermore-Amador Valley.

During the first part of 2010, Zone 7, in conjunction with the water retailers, developed an extensive list of potential water supply options to create a diverse set of water supply portfolios. Zone 7's 2011 WSE considered water supply, facility needs, salt balance, and delivered water quality while evaluating what is referred to as the "Current Plan" and two backup water supply portfolios. The "Current Plan" assumes that the State will implement a Delta Fix that restores the reliability of the SWP and that Zone 7 will successfully implement its existing Capital Improvement Program (CIP). The two backup portfolios included the following:

- In-Valley Portfolio: This portfolio focused mainly on recycled water supplies and acquisition of other local water rights.
- Intertie Portfolio: This portfolio focused mainly on the lowest unit cost and highest quality water supplies.

In July 2011, Zone 7 completed the 2011 WSE and recommended a series of “No Regret” actions that will help minimize near-term risks of water supply shortages, and several additional studies necessary to confirm key assumptions made for both the In-Valley and Intertie Portfolios. The “No Regret” actions are defined as those actions that will provide benefits regardless of the water supply alternatives, options or scenarios selected. Several of these actions involve the retailers.

All of the following “No Regret” Actions are lowest-cost alternatives and within local control (i.e., either Zone 7 or the retailers):

- Reducing Unaccounted-for Water;
- Minimizing demineralization brine losses;
- Confirming available supply under existing contract with BBID;
- Enhancing existing in-lieu recharge program;
- Continued support of the Water Conservation Act of 2009;
- Working with retailers to develop a water conservation tracking methodology; and
- Continuing to implement the Well Master Plan and Chain of Lakes projects.

The 2011 WSE further recommends the following studies under each plan/portfolio:

- Current Plan
 - Continuing participation in any studies and other efforts potentially leading toward increased reliability of the SWP and sustainability of the Delta.
- In-Valley Portfolio
 - Refining potential water quality assumptions as part of the GWMP/SMP update,
 - Identifying or linking feasible potable demand reduction using recycled water irrigation, and
 - Identifying feasible recycled water storage options – both local and non-local.
- Intertie Portfolio
 - Identifying feasible options for a new intertie with another water agency,
 - Continuing to participate in studies for the Bay Area Regional Desalination Project, and
 - Confirming available water supplies.

The 2011 WSE analysis indicated that demand hardening and uncertainty could drive changes in the reliability policy. Zone 7 staff therefore recommended working with the retailers to develop several proposals for changing the existing reliability policy for the Zone 7’s Board of Directors to consider.

Coordination of 2010 Urban Water Management Plans

2010 Urban Water Management Plans (UWMPs) were required to be adopted by July 1, 2011. The due date for adoption of 2010 UWMPs would normally have been December 31, 2010. However, the due date for the 2010 UWMPs for urban water retailers was extended by DWR to accommodate the release

of methodologies associated with the Water Conservation Act of 2009 (SBx7-7) in October 2010 and December 2010, and the delayed release of the DWR Guidebook for preparing 2010 UWMPs in early 2011. The due date for 2010 UWMPs for wholesale water retailers was also eventually extended to July 1, 2011 with the passage of SB 1478 on September 23, 2010.

There were a number of new and revised requirements for the 2010 UWMPs, primarily related to compliance with SBx7-7. As a wholesaler, Zone 7 is not required to comply with SBx7-7 and therefore was able to complete its 2010 UWMP in December 2010 with input from each of the retailers. Zone 7's 2010 UWMP was adopted on December 15, 2010. The completed Zone 7 2010 UWMP served as a basis for much of the information in the retailer's 2010 UWMPs and was critical to the retailers being able to complete and submit their 2010 UWMPs on schedule.

Adoption of the 2010 UWMPs by each retailer occurred as follows:

- DSRSD: 2010 UWMP adopted on June 7, 2011
- City of Livermore: 2010 UWMP adopted on June 13, 2011
- City of Pleasanton: 2010 UWMP adopted on June 21, 2011
- California Water Services Company-Livermore District: 2010 UWMP adopted in June 2011

TWRG Recommendation for the Upcoming Year

TWRG should continue to be involved and provide input to Zone 7 on the implementation of the recommendations of Zone 7's 2011 WSE to ensure that the retailers' needs are adequately addressed. In particular, the retailers should be actively involved in developing proposals and evaluating options for changing the existing Zone 7 reliability policy and should advocate the adoption of an appropriate policy by the Zone 7 Board.

Water Conservation Activities

2010/11 Action Item #3

Action item #3 for 2010/11 was for the retailers to work closely with Zone 7 and with each other to review the current regional water conservation programs and develop new regional programs and methods.

Overview

Each of the retailers has implemented successful water conservation programs which have resulted in significant water use reductions in each of their respective service areas. Even though the recent drought conditions have ended, continuation of these programs is essential to the overall water supply reliability in the Tri-Valley area and for each retailer's compliance with SBx7-7. The following describes the on-going water conservation activities by each of the TWRG agencies as well as their proposed compliance with SBx7-7.

Compliance with the Water Conservation Act of 2009 (SBx7-7)

In November 2009, the California legislature passed the Water Conservation Act of 2009 (SBx7-7). SBx7-7 created a framework for future planning and actions by urban water retailers and agricultural water

suppliers to reduce California’s water use. Specifically, SBx7-7 requires urban water retailers to reduce statewide per capita water consumption by 20 percent by 2020. Each of the Tri-Valley water retailers are required to comply with the requirements of SBx7-7 and incorporate adopted per capita water use targets into their 2010 UWMPs.

Each of the retailers conducted an extensive evaluation of historical per capita water use within their respective service areas to establish their baseline and target per capita water use. Table 9 provides a summary of each retailer’s baseline and target per capita water use as determined using the SBx7-7 methodologies and as reported in their respective 2010 UWMPs.

TABLE 9. RETAILER COMPLIANCE WITH SBX7-7				
	City of Livermore	City of Pleasanton	DSRSD	California Water Service Company- Livermore District
10-Year Baseline Period Selected ^(a)	1999-2008	1996-2005	1996-2005	1999-2008
10-Year Baseline Per Capita Water Use, gpcd	194.6	244	204	198
5-Year Baseline Period Selected ^(b)	2004-2008	2004-2008	2003-2007	2003-2007
5-Year Baseline Per Capita Water Use, gpcd	195.4	244	185	200
Target Method Used to Set 2015 and 2020 Targets ^(c)	Method 1	Method 1	Method 1	Method 1
2015 Per Capita Water Use Target, gpcd	175.1	220	183	178
2020 Per Capita Water Use Target, gpcd	155.7	195	163	158
Actual “Overall” 2010 Per Capita Water Use, gpcd ^(d)	170	208	121	161
Actual “Residential Only” 2010 Per Capita Water Use, gpcd ^(e)	89	118	86	119
^(a) 10-year baseline period is required to end between December 31, 2004 and December 31, 2010. ^(b) 5-year baseline period is required to end between December 31, 2007 and December 31, 2010. ^(c) Retailers were allowed to choose one of four target methods to determine the 2015 and 2020 targets. Under Method 1, the 2015 target is 90% of the 10-year baseline and the 2020 target is 80% of the 10-year baseline. Under all methods a minimum reduction of 5% of the 5-year baseline is required. ^(d) Based on total (gross) water use in 2010. ^(e) Based on only residential water uses in 2010 (includes single family and multi-family residential water use). Included for informational purposes only. Compliance with SBx7-7 targets is based on total (gross) water use.				
<i>Source: 2010 UWMPs for City of Livermore, City of Pleasanton, DSRSD, and California Water Service Company—Livermore District.</i>				

Also shown in Table 9 is each retailer's actual 2010 per capita water use, both for overall water use and residential only water use. It should be noted that per capita water use in each of the retailer's service areas is a reflection of the unique characteristics and mix of water users (e.g., residential, commercial, industrial) in each service area, and therefore cannot be directly compared to one another. Furthermore, as evidenced by the "Residential Only" per capita water use, residential water use varies by retailer based on types of residential development in each service area (including age, home square footage, lot square footage, ratio of single family to multi-family units, etc.).

As shown, each retailer's 2010 overall per capita water use is already in compliance with the 2015 targets, and DSRSD's 2010 overall per capita water use is also well below its 2020 target. However, it should be noted that 2010 per capita water uses were likely significantly influenced by water conservation measures implemented in response to the recent multiple-year drought, and reductions in demand as a result of the current economic downturn. As a result, future per capita water uses may increase as customers revert to some of their pre-drought water use habits and economic conditions improve. Thus, compliance with SBx7-7 will require continued water conservation efforts into the future. The following describes each retailer's proposed water use reduction plan to ensure compliance with SBx7-7.

City of Livermore Water Use Reduction Plan

City of Livermore Water Resources Division staff has developed a Water Use Reduction Plan to ensure compliance with SBx7-7. The plan involves a combination of public education and outreach, demand management measures, monitoring and tracking and a review and analysis procedure to refine and target additional use reduction efforts.

Public Education/Outreach

Water Resources Division staff will conduct water conservation outreach efforts both individually, in conjunction with other retailers through the Tri-Valley Water Retailers Group, and regionally, through projects funded by the retailers through Zone 7. The initial emphasis of public outreach efforts will be on continuing to use water wisely, given the very wet winter of 2010 and the excellent progress Livermore residents and businesses have made towards meeting the 2015 interim water use target. City staff will gauge public education messages in subsequent years to ensure consistent and complementary messages according to local and state-wide water conditions, as well as progress towards meeting the water use targets. For example, in very wet years when the Livermore Municipal Water service area is on-track or ahead of schedule in meeting interim and final water use targets, conservation messages will likely be less aggressive than they would be in dry or drought years or if the service area were not on track to meet the use targets.

In addition to general outreach activities, the Water Resources Division staff would conduct targeted outreach efforts if monitoring indicates that a particular use sector is not meeting reduction goals. For example, if usage were to increase in the commercial sector while overall usage is declining, staff would develop additional targeted outreach for commercial customers. Education/outreach will be one important method of targeting use reductions to ensure that no one sector is unfairly burdened.

Demand Management Measures

Implementation of the Demand Management Measures will be an important component of the Water Use Reduction Plan. Demand Management Measures will assist Water Resources Division staff in reducing overall system demands as well as targeting high-use sectors or customers for potential reductions. For example, the use of residential surveys and large landscape audits are two targeted methods that staff might utilize in response to elevated or excessive use by individual customers. Consistent implementation of Demand Management Measures will also be an important tool in ensuring that use reductions are spread evenly over the Livermore Municipal Water customer base, and that a disproportionate burden is not placed on any customer sector.

Monitoring and Tracking

Water Resources Division staff will monitor and track the progress of the Water Use Reduction Plan on a quarterly basis to ensure the Livermore Municipal Water system is on-schedule to meet the 2015 interim and 2020 final water use targets. Monitoring will include tracking of overall water use; use by different customer sectors; calculation of daily per capita consumption; and a review of the status of Demand Management Measure implementation.

Monitoring data will be used in the Analysis/Plan Revision process to identify additional measures or strategies to meet use targets, or to ensure all customer sectors are contributing to required reductions. Also, monitoring data may be used in Public Outreach/Education component to publicize the status of conservation efforts or to remind customers where additional targeted efforts are needed.

Analysis and Plan Revision

As noted above, Water Resources Division staff will evaluate water use data on at least an annual basis and propose modifications to existing conservation strategies as necessary to achieve compliance with the Water Conservation Act of 2009. Based on the reductions achieved at the time of the review, staff might target individual customer sectors for additional reductions and identify best management practices or expanded demand management efforts for those sectors. If the Livermore Municipal Water system is on-track to meet the interim and final water use targets, and the data does not indicate that a significantly disproportionate burden is being placed on any customer section, no changes to the plan would be made.

A complete description of the City of Livermore's Water Use Reduction Plan is included in the City's 2010 UWMP.

City of Pleasanton Water Use Reduction Plan

The City of Pleasanton's implementation plan for achieving compliance with SBx7-7 includes the development of Pleasanton's Recycled Water System and the expansion of the City's current Water Conservation Program.

The development of Pleasanton's Recycled Water System will reduce potable water use by converting a portion of irrigation connections serviced currently by potable water, to recycled water. By 2020 Pleasanton's Recycled Water System is projected to service major commercial irrigation customers in Pleasanton, as well as numerous City parks.

The second component, expansion of the City's Water Conservation Program, will be a collaborative effort including internal operations, program partnerships with Zone 7, City program development, and the community's continual cooperation. Details are discussed below.

The commitment to working towards achieving the City's 2020 Target begins with improving water use efficiency in City operations and City landscaping. The City routinely monitors for water loss from leaks or meter failures. On a bi-monthly basis, the City's billing software monitors for abnormal consumption pattern, which may result in the early detection of leaks and meter failures. All leaks and meter failures are promptly repaired.

The City has also recently optimized its distribution system flushing program. Within the past five years, water-sampling data is used to specifically target areas in need of flushing, rather than flushing the entire system, therefore reducing the amount of water used annually for system flushing.

Lastly, the City has begun to reduce the turf-footprint on City property. Areas of turf removal are then re-landscaped with a deep level of mulch and where needed, utilizing climate-adapted plants. Approximately 159,000 square feet have already been converted to lower water-use landscape, and an estimated 75,000 square feet of turf removal is planned within the next twelve months.

Pleasanton strives to meet the needs of its customers. As a direct response to customer inquiry for assistance, in 2010 the City launched its Controller Assistance Program. The aim of this program is to assist residents in the proper programming of their current irrigation controller and install at no charge rain sensors to help residential customers water their landscapes more efficiently.

Programs or actions that may be considered for implementation in the future include:

- A commercial turf replacement program, which would enhance the City's current Commercial Irrigation Equipment Rebate Program; and
- Updating City Ordinances to elicit greater water efficiency in landscaping and expand on water waste prohibitions.

Continual public outreach is a vital component of Pleasanton's Water Conservation Program expansion. Educating all water customer sectors on water-efficient alternatives, both behavioral and technological, will help influence customer habits and decisions in the direction of greater water-efficiency.

A complete description of the City of Pleasanton's Water Use Reduction Plan is included in the City's 2010 UWMP.

Dublin San Ramon Services District Water Use Reduction Plan

DSRSD's strategy for complying with the Water Conservation Act of 2009 is woven into its *Strategic Plan FY 2010-2014, Second Edition*, a top level planning document that sets a clear direction over all operational aspects of the agency's mission and serves as a framework for decision making. DSRSD developed a five-year Strategic Plan in 2008 and reviews and updates it annually. The DSRSD Board adopted the latest version of the Plan on March 16, 2010. In this plan, DSRSD identifies current and

future actions, activities, and planning that are needed for continued success in operations and management. These elements are incorporated in DSRSD's programs and policies.

Specific water conservation programs, currently in progress, are described below.

Recycled Water

DSRSD is seeking to expand its recycled water distribution system to established, developed areas of Dublin. DSRSD has included the Central Dublin Recycled Water Distribution and Retrofit Project in its Capital Improvement Program (CIP) as one of several projects created to meet this goal. This project is under design and the District is guardedly optimistic that a \$1.13 million Proposition 84 Implementation Grant will be awarded in 2011. The grant may be used to fund up to 25 percent of the project cost. When built, the project will reduce demand by an additional 240 acre-feet per year.

Several other recycled water distribution projects are planned in DSRSD's CIP. The District recently received a planning grant in the amount of \$253,000 from the U.S. Bureau of Reclamation (USBR) to extend recycled water distribution to western Dublin and Camp Parks. The goal is to bring these projects in service by 2020. These projects represent another 245 acre-feet per year in demand reduction.

Zone 7 Rebate Program

Zone 7 currently supports a number of rebate programs that the District advertises and manages within its service area. The current programs are as follows:

- High efficiency toilet replacement in residential, multifamily, and commercial locations;
- High efficiency urinal replacement in commercial locations;
- High efficiency clothes washing machine replacement in residential locations;
- Large landscape irrigation equipment replacement for audited sites; and
- Commercial Ecoblue Cube program.

Several upcoming regional programs facilitated by Zone 7 will offer various customer sectors additional methods to achieve greater water efficiency (see further discussion below).

Smart Irrigation Controllers

The District has installed 17 smart irrigation controllers as a test program. While it will take some time to develop an adequate use history to fully evaluate the success, a 9 percent decrease in water use was documented between 2009 and 2010. The benefits of this program probably outweigh the risks associated with customer influence and Zone 7 is planning to add smart irrigation controllers to the rebate program.

Efficient Urinals

District staff has been promoting one type of low-water-using urinal system as marketed by Ecoblue as a pilot test. Staff has concluded that it is a low cost way to save water. The Ecoblue Cube product, and potentially other similar products, also provides a strong conservation message on a regular basis to the male population. Zone 7 also provides rebates for high efficiency urinals.

Landscape Audits

District staff performs residential landscape audits when requested and Zone 7 funded two large landscape audits in the District service area. Residential landscape audits do not directly return a large water use reduction, but audits are excellent customer outreach opportunities for water conservation in general and should be undertaken to the limit of staff availability. Many of the large landscape irrigators already practice good demand management.

The following programs may be considered for implementation in the future.

Turf Replacement

Review of turf replacement programs in the Bay Area indicates that they are a reasonably cost-effective way to reduce water use. Replacement would require water-wise planting, mulching, and drip irrigation. While there is some customer influence (the turf could be replaced by the owner at some future date), the risk is low enough to consider this structural reduction in water use. The risk can be partially mitigated through recorded deed restrictions. Zone 7 launched a new residential and commercial turf replacement rebate program on July 1, 2011.

City Ordinances

The District may partner with the cities of Dublin and San Ramon to enact other water saving ordinances. One example is replacement of fixtures with high-efficiency fixtures upon sale of property. Another is updating landscape ordinances to reduce demand, such as by minimizing turf, and requiring water wise planting, mulching, and drip irrigation.

Water Budgets

One BMP is to establish water budgets for landscape accounts. Customers would be surcharged for exceeding their water budget, and any funds collected could be used to support other conservation activities.

Residential Recycled Irrigation

Irrigation of front landscaping with recycled water on residential lots can be permitted and is practiced in a few locations around the state. In general, unless recycled water is already adjacent to the neighborhood, the demand may not be adequate to justify the capital investment. However, where it is available, it is cost effective. It may be much more cost effective to retrofit areas of the District with larger lots. The FYE 2012 CIP budget contains funds to develop a pilot single family recycled water program.

Graywater

Regulations and standards are in place for graywater systems and a number of companies now sell graywater systems for homes. These systems are very expensive for the quantity of water saved. The systems are maintained by the homeowner; if maintenance is not done properly, the systems can become a health risk. Because of the high risk and low economic return, staff recommends that the District not invest in graywater systems. However, the District should make available information on the proper installation and maintenance of graywater systems to any interested customers.

Rain Water Capture

A number of companies now install rain water capture systems. Given the local climate and cost of these systems, the unit cost of water is extremely high. These systems also need a high level of customer monitoring for proper operation. Because of the low economic return, staff recommends that the District not invest in rain water capture systems. However, the District should make available information regarding the proper installation and operation of rain water capture systems to any interested customers.

A complete description of the DSRSD Water Use Reduction Plan is provided in the District's 2010 UWMP.

California Water Service Company—Livermore District Water Use Reduction Plan

Cal Water has developed Conservation Master Plans for each of its service districts. These Conservation Master Plans are designed to provide a framework for meeting SBx7-7 requirements and to chart a course for Cal Water's conservation programs over the next five years. Cal Water identified five core programs that it would run in every district over the next five years. In addition to the core programs, an additional set of non-core programs was selected.

Core Programs selected for the Livermore District include the following:

- Provide customer rebates for high-efficiency toilets and clothes washers;
- Provide residential surveys to low-income customers, high-bill customers, and upon customer request or as pre-screen for participation in direct install programs;
- Provide residential showerhead/water conservation kits to customers upon request, as part of residential surveys, and as part of school education curriculum;
- Offer high-efficiency pop-up irrigation nozzles through customer vouchers or direct install; and
- Provide conservation messaging via radio, bill inserts, direct mail, and other appropriate methods. Provide schools with age-appropriate educational materials and activities. Continue sponsorship of Disney Planet Challenge program.

Non-core programs selected for the Livermore District include the following:

- Offer direct installation programs for replacement of non-HE toilets and urinals;
- Offer contractor incentives for installation of smart irrigation controllers;
- Expand existing Cal Water Large Landscape Water Use Report Program providing large landscape customers with monthly water use reports and budgets; and
- Provide surveys and irrigation system upgrade financial incentives to large landscape customers participating in the Large Landscape Water Use Reports programs and other targeted customers.

Cal Water will monitor programs on an on-going basis and will make necessary adjustments to program design and activity levels to ensure that water savings are maximized. In addition to reporting to the CUWCC, Cal Water prepares an annual report that is submitted to the California Public Utilities Commission detailing conservation activities.

A complete description of the Livermore District's Water Use Reduction Plan is provided in the Livermore District's 2010 UWMP.

Coordination with Zone 7

As discussed above, the retailers are partnered with Zone 7 on a number of the on-going regional water conservation efforts. Also, the retailers participate in the Water Conservation Task Force with Zone 7 on a monthly basis. Zone 7 staff provides technical support, program management, support and information, workshops, a schools program with strong water conservation messaging and support advice addressing conservation program planning, design, implementation and evaluation. Zone 7 also spearheaded the Water-Wise gardening website, which was developed in conjunction with and made available to the retailers.

Several upcoming regional programs facilitated by Zone 7 will offer various customer sectors additional methods to achieve greater water efficiency. Zone 7 launched the following programs on July 1, 2011 are:

- Residential and commercial turf replacement program;
- Residential and commercial rebate on spray irrigation replacement with drip irrigation;
- Commercial and residential weather-based irrigation controller rebate;
- Direct install high-efficiency toilets and urinals for commercial customers; and
- Direct install high-efficiency toilets for residential customers.

Zone 7 will also work with the retailers to develop a water conservation tracking methodology (one of the recommendations of Zone 7's 2011 WSE).

Zone 7, as one of a number of Bay Area clean water agencies included in San Francisco Bay Area Region 1, was recently awarded a grant through the Integrated Regional Water Management Plan (IRWMP) Grant Program funded by Proposition 84, The Safe Drinking Water, Water Quality and Supply, Flood Control, River, and Coastal Protection Bond Act of 2006. Water conservation was one of the five projects submitted in the grant application package to DWR and includes water use efficiency, water conservation, recycling and reuse to help meet future water demands. The Zone 7 water conservation program will receive approximately \$567,000 from this grant (requires 25% matching fund of \$189,000) for use for expansion of existing and development of new regional water conservation incentive programs.

TWRG Recommendation for the Upcoming Year

Compliance with SBx7-7 is a responsibility of retailers, while Zone 7, as a wholesale water agency, is exempt from SBx7-7. However, Zone 7 implements a fairly comprehensive water conservation program that maintains a significant budget and staffing. TWRG should continue to coordinate with Zone 7 to obtain the maximum benefit from regional conservation programs implemented by Zone 7.

The TWRG must increase its level of interface with Zone 7 and be more directly involved in the development and implementation of regional water conservation programs since those regional programs are directly funded by the retailer's water rates. Maximizing the use of Zone 7's water

conservation resources that are funded from retailer water rates will be critical to achieving compliance with SBx7-7 in the most cost-effective and fiscally responsible manner for the valley ratepayers.

The retailer's involvement in Zone 7's conservation efforts should include reviewing the current regional water conservation programs for effectiveness and developing new methods for more efficient and coordinated use of available water conservation resources. If the TWRG identifies Zone 7 conservation activities that do not support or enhance the retailer's compliance with SBx7-7, it should recommend that those programs be eliminated and that the funding be redirected to other efforts or returned to the retailers to help fund implementation of local conservation activities.

Interrelationship between Water Infrastructure Reliability, Costs and Water Rates

2010/11 Action Item #4

Action item #4 for 2010/11 was to continue to work with Zone 7 on the update of the Asset Management Program (AMP), and review and provide comments on the AMP as it is being developed in an effort to sustain a reasonable balance between cost and infrastructure reliability.

Overview

The balance between treated water rates and water infrastructure reliability continues to be a very important issue for the Tri-Valley retailers. This section of the 2010/11 TWRG Annual Report describes the following programs and studies related to treated water rates:

- Asset Management Program Update
- Zone 7's Capital Improvement Program for Water Supply Facilities Projects
- Zone 7's Treated Water Rates for 2011 and 2012

Asset Management Plan (AMP)

In February 2010, Zone 7 hired HDR Engineering, Inc., to assist Zone 7 in preparing the update to Zone 7's Asset Management Plan (AMP). A Technical Review Committee, consisting of Zone 7 staff and retailer representatives, was involved in the project scoping and the consultant selection process, and provided input throughout the project by reviewing technical memorandums and participating in stakeholder workshops.

Zone 7 staff provided an AMP Update status report at the March 2011 Zone 7 Board meeting and, on May 4, 2011, Zone 7 staff presented the AMP findings and recommendations, and Zone 7 staff's response to retailer comments on the funding analysis were presented to the Finance Committee. The Finance Committee recommended that the AMP Update be brought to the full Zone 7 Board for acceptance, and on June 15, 2011, the findings and recommendations of Zone 7's AMP Update were presented to the Zone 7 Board and the AMP Update Report and its recommendations were accepted.

The retailers appreciated the opportunity to be involved in the AMP Update process and provide recommendations for consideration. The method used in the AMP Update to evaluate the remaining

useful life of an asset and to evaluate the revenue necessary to maintain existing assets was greatly improved over the previous AMP.

However, the retailers were disappointed that the primary recommendations made by the retailers during the AMP Update process were not reflected in the adopted AMP Update. The retailers consistently commented that while they supported comprehensive renewal/replacement funding, there were serious and on-going concerns over the level of future System-Wide Improvement (SWI) project funding contained in the AMP. The AMP was expanded during this update to include the planning, design and construction of as-yet undefined future facilities that should have been documented in the Zone 7 Capital Improvement Program prior to being funded from water rates. Also, some of these future facilities should be partially funded from connection fees. And finally, a financial study should have been undertaken to identify the best method of funding the projects included in the Zone 7 CIP, including the possibility of the increased use of debt-financing. Despite uniform comments from the TWRG and many of the individual retailers expressing opposition to the SWI component of the AMP, the Zone 7 Board adopted the AMP with no modifications or qualifications.

Status of Zone 7's Water Supply Facilities Projects

As described in the May 2011 AMP Update, Zone 7 must construct capital facilities including treatment plants, wells and distribution pipelines to meet future demands. DWR must also expand conveyance for SWP supplies (e.g., South Bay Aqueduct Enlargement). These facilities are either under design or have been planned and are included in Zone 7's Capital Improvement Program (CIP) and Asset Management Plan.

Zone 7's last CIP was published in October 2009 and is updated every two years. The latest update of the CIP, currently being developed, is scheduled to be presented to the Zone 7 Board in September 2011 and considered for possible adoption in October 2011. In general, the proposed 2011 CIP currently being developed has deferred most of the proposed expansion projects (i.e., those proposed to support new development) about 10 years or so due to the economic slowdown in the Tri-Valley area and the corresponding reduced water demand.

The current status and anticipated completion dates for Zone 7's major capital improvement projects to increase treated water capacity and transmission are listed in Table 10.

TABLE 10. STATUS OF PROPOSED MAJOR CAPITAL IMPROVEMENT PROJECTS (AS OF AUGUST 2011)

Project	Current Status	Scheduled Completion Date
South Bay Aqueduct Enlargement	Currently under construction	Mid 2012
Altamont Water Treatment Plant (Phase 1 = 24 MGD)	Peer review completed in December 2009; Zone 7 is evaluating the merits of either building the new Altamont WTP or expanding the existing PPWTP.	Per proposed 2011 CIP ^(a) , new treatment plant capacity (either at Altamont or PPWTP) would be completed by 2025
Altamont Water Pipeline, County Reach (Phase II)	Construction not started yet	TBD (see Altamont Water Treatment Plant above)
Chain of Lakes Mocho Diversion for Recharge	Permit negotiations with regulatory agencies are on-going	Per Zone 7 2011 WSE, expected to be on-line sometime after 2014
Chain of Lakes Arroyo Valle Diversion	To be constructed by CEMEX	Per Zone 7 2011 WSE, expected to be in service by 2030
New Production Wells Chain of Lakes Wells Phase 2, Well Master Plan Wells Phase 3	Additional wells are planned to be constructed over the next 20 years or so	Per proposed 2011 CIP ^(a) : Chain of Lakes Well Nos. 3, 4 and 5 would be completed by 2019; Busch Valley Well No. 1 would be completed by 2024 Bernal Well Nos. 1 and 2 would be completed by 2030
Chain of Lakes Master Plan	Not yet started	Per proposed 2011 CIP ^(a) , the Chain of Lakes Master Plan will be completed in FY 2015/16 with CEQA in 2016/17. A plan for the use of Lakes H, I and Cope will be developed in 2012/13

^(a) Information regarding proposed 2011 CIP obtained during August 16, 2011 meeting with Zone 7 staff.

Zone 7's Adopted Treated Water Rates for 2011

On October 20, 2010, the Zone 7 Board of Directors approved an increase of the wholesale treated water rate for 2011 to \$900 per acre-foot, a 2.5 percent increase over the calendar year 2010 rate of \$878 per acre-foot. The 2011 treated water rate became effective on January 1, 2011.

Prior to the adoption of the 2011 rates, on August 17, 2010, Zone 7 staff held a meeting with the retailers to discuss rate setting for 2011. Zone 7 staff presented the following three water rate scenarios for treated water:

- Scenario 1: Provided Zone 7 with a steady incremental adjustment (4.5 percent in 2011) of future water rates sufficient to meet the anticipated volume of water sales and projected expenditures.
- Scenario 2: Strive to maximize the use of projected available funds (available reserves) with minimal rate adjustments (2 percent increase in 2011) only sufficient to meet projected sales and expenditures needs.
- Scenario 3: Aimed to minimize the rate increase for 2011 by deferring the increase to subsequent years (0 percent in 2011)

The Zone 7 Finance Committee had discussed the three water rate scenarios at a meeting on August 25, 2010, and directed Zone 7 staff to forward for the Board's discussion a recommendation of no increase in the treated water rates for 2011 (Scenario 3). The retailers endorsed and were pleased with this recommendation as it acknowledged the need to minimize the rate increases and be sensitive to the poor economic conditions facing residents and businesses in the Tri-valley area.

The Zone 7 Board considered the three rate options presented by Zone 7 staff, but instead adopted a 2.5 percent increase. The retailers were disappointed in this action by the Zone 7 Board as it was a rate increase that was not among the researched options of 0, 2, and 4.5 percent, and the action was contrary to the Zone 7 Finance Committee's recommendation for a 0 percent increase which the retailers had endorsed.

Table 11 provides a summary of the Zone 7 treated water rates in recent years.

TABLE 11. SUMMARY OF ZONE 7 TREATED WATER RATES (2003-2011)

Calendar Year	Adopted Treated Water Rate	Percent Increase over Previous Calendar Year
2003	\$548/af	1.7%
2004	\$562/af	2.5%
2005	\$562/af	0%
2006	\$591/af	5.16%
2007	\$635/af	7.45%
2008	\$689/af	8.5%
2009	\$804/af	16.2%
2010	\$878/af	9.25%
2011	\$900/af	2.5%

Figure 2 presents the historical Zone 7 treated water rates along with their compounded percentage increase since 2003.

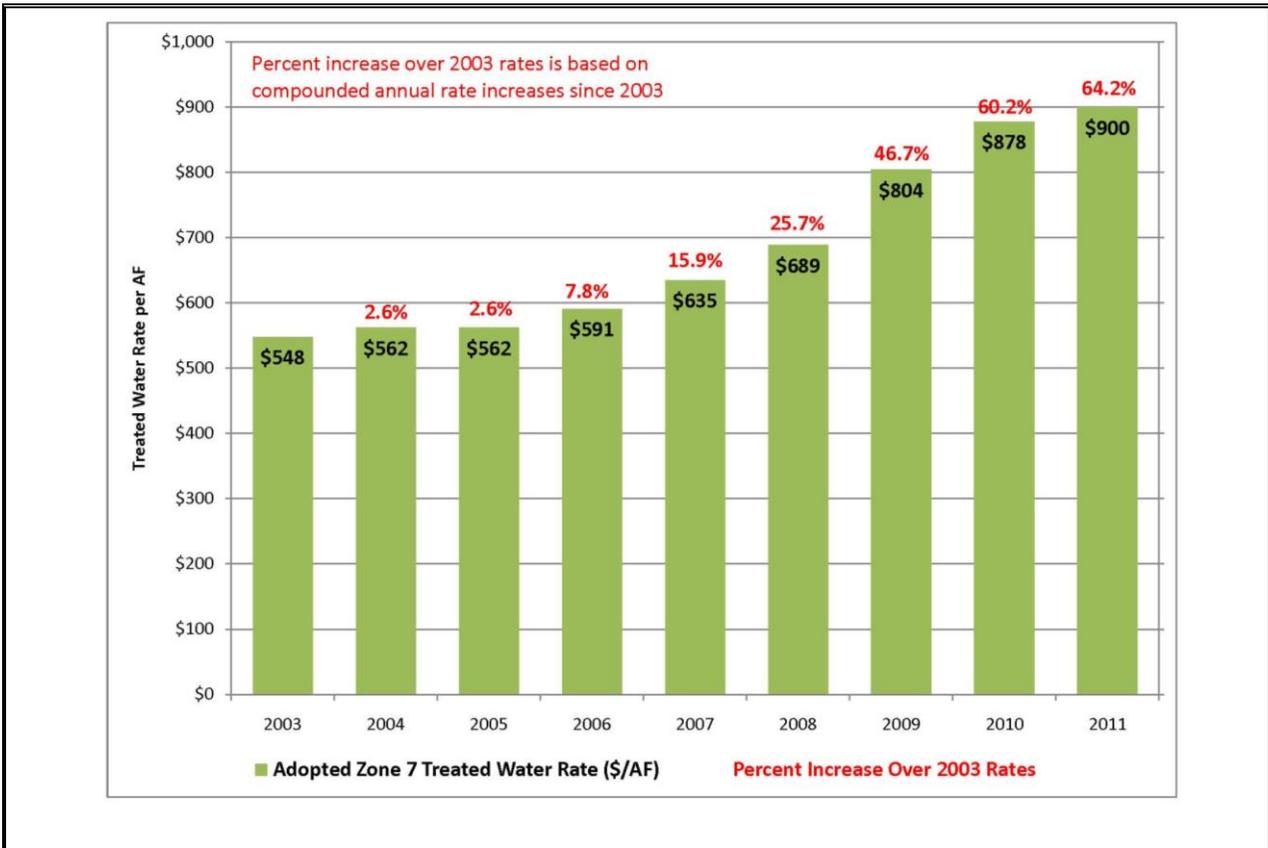


FIGURE 2. ZONE 7 HISTORICAL TREATED WATER RATE PER ACRE-FOOT

Zone 7's Proposed Treated Water Rates for 2012

On August 22, 2011, retailers were invited to meet with Zone 7 staff to discuss options being evaluated by Zone 7 staff for 2012 treated water rates. Rate increase options presented by Zone 7 staff ranged from 5 to 10 percent and were based on compliance with Zone 7's adopted reserve policies and varied based on use of available reserves to meet operating expenses and fund renewal/replacement and system-wide improvement projects as outlined in the recently completed AMP Update. During the August 22, 2011 meeting, the retailers expressed concern that Zone 7 staff was proposing additional rate increases despite the fact that Zone 7 reserve funds exceeded the reserve policy levels set by the Board. Based on the Zone 7 staff presentation at the August 22, 2011 meeting, water fund reserves were approximately \$7.5 million over the Operating and Rate Stabilization Fund reserve policy targets.

On August 29, 2011, the Zone 7 Finance Committee considered the following options:

- Alternative 1: Revenue covers Operating Expenses and AMP Funding Level – 10 percent water rate increase;
- Alternative 2: Use of Reserves – 5 percent water rate increase as projected;
- Alternative 3: Midpoint between Alternative 1 and Alternative 2 – 7.5 percent water rate increase.

During the staff presentation, some Finance Committee members raised questions regarding the use of reserves in the various Alternatives, as well as overall reserve fund policy targets previously established by the Zone 7 Board. After Zone 7 staff presented the 2012 treated water rate alternatives, the retailers requested that they be allowed to make a presentation to the Zone 7 Finance Committee.

The retailers presented an alternative for a 0 percent rate increase in 2012 to reduce the pressure on valley water ratepayers during difficult economic times, and to allow time to review and confirm the continued economic viability of rate-funded CIP projects. The scenario presented by the retailers is summarized below:

- No rate increase in 2012;
- Review proposed Ozone Taste and Odor Project to confirm economic viability and need for the project;
- If the proposed Ozone project is removed from the CIP, substitute \$10 million renewal/replacement project for Del Valle and Patterson Pass disinfection system, lowering CIP costs from \$119 million to about \$86 million.
- Reduce Fund 72 AMP transfer to \$4 million for FY 11/12 and ramp up to \$8.5 million over five years.

Based on the above parameters, the retailer presentation showed how Zone 7 could avoid a rate increase in 2012 while still meeting all of its funding needs.

At the conclusion of the retailer presentation the Finance Committee members expressed concern with the three alternatives presented by Zone 7 staff and asked staff if there was sufficient time for the Finance Committee to meet again before making a recommendation to the full Zone 7 Board. Staff indicated there was additional time and the Committee voted to table the item until a subsequent

meeting could be held. Finance Committee members also again expressed their concerns with the Zone 7 reserve target levels and the lack of a policy regarding how and when reserves should be used. One of the Finance Committee members suggested he might recommend an Ad Hoc Reserve Subcommittee be established to examine this issue, and asked if one of the retailers would be willing to sit on the committee as an advisory role. The retailers indicated a willingness to participate in such a subcommittee if established.

A second Finance Committee meeting was held on September 13, 2011. Zone 7 staff summarized the three alternatives presented at the August 29, 2011 meeting, and again recommended Alternative 3 which includes a 7.5 percent water rate increase. Staff also reviewed the issues raised by the Retailers and Finance Committee members at the August 29, 2011 Finance Committee Meeting, including the reserve levels and policies, and what cuts would be necessary to have a 0 percent increase in the 2012 water rate. The Zone 7 staff presentation reviewed the Zone 7 Reserve Fund Policy adopted on February 16, 2005, which includes three designated reserves as follows:

- Operating/Emergency Reserve – 20 percent of operating expenses. To provide for emergencies and cash-flow requirements;
- Rate Stabilization Reserve - \$5 million. To provide funds in case of an unforeseen event such as a natural disaster, water shortage or other catastrophic event;
- Designated Reserve - \$0. To provide for increases in operating expenses in excess of target established by Board.

Finance Committee members noted that all of the reserve funds are for use in “emergency” situations and are not intended to reduce rate increases during normal conditions. The Retailers noted that California had just emerged from a three-year drought and that some of the shortfall in Zone 7 revenue over this period was due to reduced water sales. Finance Committee members commented that while the Operating and Rate Stabilization reserve funds are intended for use in emergency situations, the “undesignated” reserves above Board Policy levels were not restricted and are available to be used to reduce the magnitude of rate increases.

Zone 7 staff reviewed projections for fiscal year 11/12 and 12/13 reserve levels based on the staff recommendation for Alternative 3, which includes a 7.5 percent water rate increase. If Alternative 3 were implemented, Zone 7 would have about \$17.7 million remaining in reserves at the end of FY 11/12, including \$6.0 million in undesignated reserves.

At the conclusion of the staff presentation, Finance Committee members indicated that they were comfortable using more of the undesignated reserves than recommended by staff since those reserves were over and above policy levels. The Finance Committee voted to recommend Alternative 2 with a 5 percent increase in 2012 treated water rates to the full Zone 7 Board.

Zone 7 staff will take the Finance Committee’s 2012 treated water rate recommendation to the Zone 7 Board for consideration and possible adoption in October 2011. The adopted 2012 treated water rate would go into effect on January 1, 2012.

TWRG Recommendation for the Upcoming Year

As described above, in 2010, the TWRG had the opportunity to meet with Zone 7 in advance of the Zone 7 Finance Committee meeting to discuss proposed treated water rates. The TWRG appreciated this increased involvement in the 2011 rate setting process, but was disappointed in the Zone 7 Board action which was contrary to the Zone 7 Finance Committee recommendation.

The retailers would like to continue to be more involved in the overall rate setting process, from the beginning of the process through review and adoption of new treated water rates, so that they have a much better understanding of the assumptions and elements affecting the proposed rate increase, and can be more responsive to questions and concerns from their policy makers and customers. Also, as discussed at the Zone 7 Finance Committee meeting, the retailers would like to revisit some of the rate-funded projects like the proposed Ozone Taste and Odor project that have significant impacts on water rates due to the continued poor economic conditions. This project is not currently mandated by any regulatory requirement and was approved at a fundamentally different economic time. Therefore, both the retailers and Zone 7 staff should review and confirm that this project is still necessary, viable and supported by ratepayers given the drastic shift in economic conditions since it was approved. Also, given the extensive discussion of Zone 7 reserve funds during the two Finance Committee meetings, the Retailers support the development and adoption of an updated Reserves Policy by the Zone 7 Board.

Water Quality Conditions and Issues

2010/11 Action Item #5

Action item #5 for 2010/11 was to develop a process to receive regular operational status updates on the Zone 7 Mocho Demineralization facility, as well as criteria for evaluating the results of the treatment process. However, no specific action items related to delivered water quality were identified for 2010/2011.

Overview

Overall water quality and the consistency of delivered water quality throughout the Tri-Valley area continue to be important issues for the Tri-Valley retailers. This section of the 2010/11 Annual Report describes the current status of reports and studies related to water quality including the following:

- Zone 7's Water Quality Management Program Report Card
- Zone 7's Groundwater Influence Study on Delivered Water Quality
- Zone 7's Ozone and Peroxone Study
- Zone 7's Salt Management Plan
- Zone 7's Water Quality Improvement Projects

Zone 7's Water Quality Management Program

Water Quality Management Program Report Card

As reported in Zone 7's 2010 Water Quality Management Program Report (sometimes referred to as the Water Quality Management Program Report Card) dated May 2011, in 2010 Zone 7 met all of its primary

drinking water standards in the water it provided to its retailers. However, some of the water quality operational targets were not met consistently, including those for drinking water hardness, total dissolved solids, chloride, and free ammonia. Zone 7 continued to work on and support operational and planning activities to help meet the water quality targets.

2011 Water Quality Management Program Update

Zone 7 held a workshop on August 25, 2011 for its 2011 Water Quality Management Program Update. The Update focused on reviewing the Zone 7 Implementation Plan and Water Quality Targets, as well as receiving input from the retailers regarding some emerging contaminants. The retailers attended the workshop and provided feedback to Zone 7 staff regarding the implementation of water quality programs and targets given current economic conditions. In accordance with the TWRG priorities for 2010/11 regarding water quality, the retailers provided feedback to Zone 7 staff during the workshop indicating that while water quality is still an important concern, water supply and supply reliability issues should take priority at this time. The workshop minutes will constitute the 2011 WQMP Implementation Plan Update which will be presented to the Zone 7 Board later this year. A summary of the final recommendations made at the August 25, 2011 WQMP Update Workshop is included below:

- Revised the target for free ammonia;
- Removed the targets for radon and THM/HAA5 at retailer turnouts;
- Monitor and track regulatory developments on emerging contaminants;
- Dublin San Ramon Services District and the City of Pleasanton staff agreed to review and discuss the Joint Water Quality Resolution to determine whether it is possible to sunset/amend the resolution or possibly to incorporate provisions of the resolution into the larger Water Quality Management Program.

Mocho Groundwater Demineralization Plant

The Mocho Groundwater Demineralization Plant (Phase 1 with a production capacity of 6.1 mgd) was operated intermittently during 2010 to remove salt from the groundwater basin per the Salt Management Plan (SMP), while improving delivered water quality. As reported in Zone 7's May 2011 Water Quality Management Program Report Card, TDS were reduced from approximately 600 to 1,150 milligrams per liter (mg/L) in the groundwater, to approximately 300 mg/L after reverse osmosis (RO) permeate was blended with bypassed groundwater. Similarly, water hardness was reduced from approximately 400 to 650 mg/L to approximately 230 mg/L after blending with bypassed groundwater.

Groundwater Influence Study on Delivered Water Quality

One of the mitigation measures included in Zone 7's Well Master Plan EIR was the development of a "Groundwater Influence Study on Delivered Water Quality." This study was intended to examine if there would be any changes in the water quality delivered at the retailer's turnouts, as a result of Zone 7's increased groundwater production from the Main Basin from the two new Chain of Lakes wells constructed as part of Zone 7's Well Master Plan program. The water quality constituents of concern were aesthetic parameters such as TDS, hardness, and other taste and odor constituents. In accordance with the adopted mitigation measure, the study was to be completed before any more than two new wells were constructed under Zone 7's Well Master Plan. Phase 1 of the Chain of Lakes well project

included the construction of Wells No. 1 and 2, and these wells were completed in May 2010; therefore, the study was required before proceeding with Phase 2 of the Chain of Lakes well construction project.

The Zone 7 Board accepted the study in October 2009 with the finding that no new significant environmental effects or no substantial increase in previously identified significant effects would result, and therefore a subsequent EIR is not required for additional Chain of Lakes wells. However, there is still concern amongst some of the retailers that delivered water quality is not consistent throughout the Tri-Valley area. Therefore, discussions between Zone 7 and the retailers should continue to address on-going operational issues and concerns.

Ozone and Peroxone Study

As reported in the 2008/09 TWRG Annual Report, in August 2009, Zone 7 completed an evaluation and pilot testing of ozone and peroxone for water quality enhancement at the Del Valle and Patterson Pass Water Treatment Plants.

Results of the evaluation were presented to the Zone 7 Board in September 2009, with completion of the final report in October 2009. Improvements to both plants have been deferred due to funding issues and are currently scheduled to begin in FY 2017/18 and be completed in FY 2020/21 per Zone 7's 2011 Asset Management Plan. As noted previously, the proposed Ozone Taste and Odor improvement project is one of the System-Wide Improvement projects that the retailers have expressed growing concern over in recent years due to the lack of a regulatory driver for the project, as well as the impact on water rates. The retailers have recommended to Zone 7 that this project be specifically reviewed and confirmed prior to further increasing water rates to complete this project.

Salt Management Plan

Zone 7's Salt Management Plan (SMP) goal is the long-term stabilization of salt loading to the groundwater basin to 1998 TDS concentrations, which equates to 6,000 tons of salt removal per year from the Main Basin. To reduce the hardness of the water being pumped from the local groundwater basins, Zone 7 has determined that demineralization at the groundwater production wellhead is the most viable option, in that it provides a dual benefit of salt (mineral) removal and higher delivered water quality.

In August 2009, Zone 7 completed the first of three potential phases of groundwater demineralization projects (the Mocho Groundwater Demineralization Facility) that will help reduce salt buildup in the local groundwater basin, and improve Zone 7's delivered groundwater quality. However, to date the Mocho Groundwater Demineralization Facility has only been operated at minimum capacity.

A Phase 2 groundwater demineralization facility is included in Zone 7's current Capital Improvement Program. Similar to Phase 1, Phase 2 is expected to remove salt from the Main Basin and have the added benefit of providing water with lower hardness and TDS levels, in accordance with Zone 7's Water Quality Management Program. Zone 7 staff is recommending that the timing and sizing of Phase 2 be evaluated as part of the Salt and Nutrient Management Plan update, which will be part of the Groundwater Management Plan update, underway now and planned to be completed by May 2014. The need for a future Phase 3 groundwater demineralization facility will also be evaluated.

Status of Zone 7's Water Quality Improvement Projects

Zone 7's Water Quality Management Program is intended to address taste, odor and hardness problems and includes increasing the surface water supply, providing wellhead demineralization to reduce hardness, and providing taste and odor treatment at the two surface water treatment plants (WTPs).

A critical capital project which addresses water quality issues is the recently completed Mocho Groundwater Demineralization Facility. Other key improvement projects are Taste and Odor Treatment at the Del Valle and Patterson Pass Water Treatment Plants and the Phase 2 Groundwater Demineralization Program. In the interim, Zone 7 is utilizing temporary powdered activated carbon (PAC) feed units at Del Valle and Patterson Pass conventional water treatment plants to assist in reducing levels of earthy-musty taste and odor compounds.

Zone 7's FY 2010/11 Ten-Year Water System CIP (adopted in October 2009) and recently completed Asset Management Plan reflected a deferral of many of Zone 7's CIP projects due to a combination of reduced demands and reduced revenues, which will not provide Zone 7 with sufficient funds to construct the proposed improvement projects on a "pay as you go" basis. Zone 7's proposed 2011 CIP, currently being developed, includes additional deferrals of most of the proposed expansion projects due to continuing poor economic conditions and the resulting slowdown in new development. As shown in Table 12, these deferrals have impacted most of the proposed water quality improvement projects.

TABLE 12. STATUS OF PROPOSED WATER QUALITY IMPROVEMENT PROJECTS (AS OF AUGUST 2011)		
Project	Current Status	Scheduled Completion Date
Phase 2 Groundwater Demineralization Facility	Construction not started yet	Per Zone 7's 2011 WSE, Zone 7 staff is recommending that the timing and sizing of Phase 2 be evaluated as part of the Salt and Nutrient Management Plan update, which will be part of the Groundwater Management Plan update planned to be completed over the next several years. Per the proposed 2011 CIP ^(a) , the Phase 2 facility would be in service by 2028
Phase 3 Groundwater Demineralization Facility	Construction not started yet	Not included in proposed 2011 CIP ^(a)
Taste & Odor Treatment at Del Valle WTP (36 MGD) and Patterson Pass WTP (20 MGD)	Pilot testing and preliminary studies completed in August 2009	Per proposed 2011 CIP ^(a) , to be completed by 2024
^(a) Information regarding proposed 2011 CIP obtained during August 16, 2011 meeting with Zone 7 staff.		

TWRG Recommendation for the Upcoming Year

The TWRG understands that in these challenging economic times available funding for delivered water quality improvement projects is limited, and that Zone 7 needs to focus its efforts and resources on the more important issue of water supply and supply reliability. However, TWRG continues to have concerns regarding delivered water quality in the Tri-Valley area, and will continue to work with Zone 7 to resolve these operational issues. In addition, TWRG will continue to monitor the operation of the Mocho Groundwater Demineralization Plant and would like to work with Zone 7 to establish meaningful monitoring and reporting parameters to evaluate the effectiveness of the treatment process.

SECTION IV. RECOMMENDED ACTION ITEMS FOR FY 2011/12

The recommended action items for FY 2011/12 listed below reflect a further refinement of the five actions adopted for 2010/11 (discussed in Section III of this 2010/11 TWRG Annual Report).

Action #1	Continue to stay informed and be supportive of Zone 7's involvement in Delta water supply issues in fiscal year 2011/12 and beyond, including support of immediate-term projects that could improve the Delta water supply situation.
Action #2	Continue to work closely with Zone 7 to implement the recommendations of the 2011 Water Supply Evaluation to address the projected future short- and long-term shortfalls in water supplies in the Tri-Valley. Focus specifically on the adoption of an appropriate reliability policy by the Zone 7 Board.
Action #3	Work closely with Zone 7 to review the current regional water conservation programs and to redirect funding as necessary to programs that meet the specific needs of the retailers in achieving and/or maintaining compliance with SBx7-7.
Action #4	Continue to work with Zone 7 in regard to revising the recommendations of the Asset Management Program (AMP) and Capital Improvement Program (CIP) project planning to sustain a reasonable balance between cost, rates and infrastructure reliability. Focus specifically on confirming the economic viability of System Wide Improvement Projects budgeted in the CIP and on adoption of updated reserve policies by the Zone 7 Board.
Action #5	Continue to monitor operation of the Zone 7 Mocho Demineralization facility and work with Zone 7 to establish meaningful monitoring and reporting parameters to evaluate the cost and effectiveness of the treatment process.
Action #6	Work with Zone 7 to study the equity of the cost to ratepayers of pay-as-you-go financing versus debt financing of future projects.

It should be noted that while delivered water quality continues to be a concern of the retailers, it is understood that overall water supply issues, including the economic impact of any planned improvements, continue to be more pressing in the upcoming year. Therefore, a specific action related to delivered water quality is not included in the recommended actions for 2011/12.

A continued focus on these key water supply issues will help to ensure a coordinated approach to understanding and addressing the water supply issues facing the Tri-Valley area.

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