



— Zone 7 Water Agency —

2015 ANNUAL REPORT

Corrected

Protecting the Tri-Valley's Water Resources

OUR MISSION

Zone 7 Water Agency is committed to providing a reliable supply of high-quality water and an effective flood-control system to the Livermore-Amador Valley. In fulfilling our present and future commitments to the community, we will develop and manage our water resources in a fiscally responsible, innovative, proactive and environmentally sensitive way.

VISION STATEMENT

To be recognized as the platinum standard water and flood control district in which to live, work and do business by enhancing the quality of life, economic vitality and environmental health of the communities we serve.

OUR VALUES

1. Open and Transparent

The Board's meetings and communications shall be open and public, except when the Brown Act authorizes otherwise.

2. Customer Service

Our commitment to the community requires prompt, respectful and courteous relations with our customers, both internal and external, as well as pursuing community partnerships and collaboration with other area public agencies when beneficial to the public.

3. Integrity

We practice the highest ethical standards and maintain open, honest communications at all levels of the organization at all times.

4. Fiscally Responsible

We will operate in a productive, cost effective, transparent and efficient manner to ensure sound financial stability.

5. Environmentally Sensitive

In carrying out our mission, we are dedicated to preserving and enhancing the environment while complying with regulations.

6. Innovative/Proactive

We encourage innovation, creativity and ingenuity, seeking constant improvement and keeping up with the latest economical technologies and management practices.

7. Safety

We are committed to public and employee safety to maintain a healthy work environment. We work safely and provide safe products and services.

8. Employee Development

We foster a respect for diversity, equality, a spirit of performance-based accountability and productivity along with personal and professional growth for all team members so as to achieve excellence through the collective energy that comes from a work environment where each employee can flourish and succeed to their highest potential.



BOARD OF DIRECTORS

A Message from the President



Sarah Palmer
President, FY 2015-16

This past year has found us experiencing the old curse of living in interesting times! In 2015, Zone 7 and other water managers across the state were in the unique position of preparing for the possibility of El Niño-related floods and extreme weather events while urging the public to continue conserving water due to four years of drought. While winter and spring precipitation did much to increase our water availability, according to a UCLA study

published by the American Geophysical Union, it could take as many as four years to recover from the drought deficit we have experienced in the last four. Snowpack, groundwater recharge and recovering storage systems are all part of this dynamic. We can't get complacent yet!

Throughout the summer and fall of 2015, Zone 7 worked extensively to prepare the regional flood protection system for the potential of winter storms associated with El Niño. Zone 7 conducted significant amounts of public outreach on how to prepare for a potentially wet winter - including a well-attended open house. Even so, mandatory water conservation remained in effect throughout the year under emergency regulations adopted by the State Water Resources Control Board. We can all be proud of the fact that residents and businesses in Zone 7's service area were among the state's highest water conservation achievers. By December 2015, it was still too early to tell to what extent El Niño might put a dent in the severe drought, and the State Board was poised to extend the drought regulations with potential modifications through 2016. Fortunately for our trees, the State increased our allotment from 5 to 60% of our total requested water amount. The other good news is that from our Agency estimates, Zone 7 will be able to meet both Municipal and Industrial demands for treated water, as well as agricultural demands for untreated water, even assuming the drought continues over the next three years (2017-2019). Zone 7 is encouraging a 10% voluntary water conservation target for this coming year.

The drought underscored the continued threats of climate change and other factors on the reliability of the state's water supply system. Laying the groundwork for the 2015 Urban Water Management Plan, Zone 7 launched an update to its 2011 Water Supply Evaluation to review assumptions about future supply and demand. Our long-term water supply options include desalination, expanded use of recycled water, and potential facilities to help enhance reliability. The updated evaluation is expected to be complete in 2016. Because Zone 7 will always need State Water Project supplies to reliably provide the majority of its water, at this point around 80%, the Agency has been actively involved in the development of the California WaterFix to address the Delta's broken water conveyance. This is aimed at restoring water-supply reliability, while California EcoRestore is aimed at improving the Delta's ecosystem. The Board has not taken an official position on the current version of the California WaterFix, although many of the tenets of the incomplete proposal do correspond to previously adopted Board policy. Stay tuned.

Also in 2015, Zone 7 completed several significant capital projects to improve water reliability and quality. And through adoption of a Nutrient Management Plan and other measures aimed at protecting both groundwater quality and quantity, the Agency made big strides in its longstanding work toward sustainable groundwater management - moving it further toward implementing the state's new Sustainable Groundwater Management Act. The recent decision by the state to leave management of groundwater in local control has been welcome news.

This year also saw Zone 7 start a trial period of recording and televising the monthly Board meetings in order to increase transparency and public awareness. Zone 7 continues to work on several multi-benefit projects that foster environmental stewardship and community partnerships, and has made many important steps to further achieve financial sustainability, cost efficiency and transparency to the public it serves.



Dick Quigley
Vice President, FY 2015-16



Sandy Figuers



John Greci



Jim McGrail



Angela Ramirez Holmes



Bill Stevens

KEY ACCOMPLISHMENTS



WATER SUPPLY, RELIABILITY & QUALITY

- ▶ **Continued wise management of limited supplies:** Zone 7 was able to meet all of its retailers' demands even without state-mandated conservation, but urged the community to conserve at the state-required levels due to the continuing drought. And the community did a great job! Coordinated water conservation outreach with retailers helped residents and businesses reduce water use by roughly 35 percent from 2013 levels -- far exceeding state requirements. Thanks largely to its Out-of-Valley banked drought supplies, Zone 7 met demands and ended the year with an increase in local groundwater storage and enough imported surface water to carry over approximately 13,400 acre-feet into 2016.
- ▶ **Water quality:** Although continuing drought conditions resulted in Delta water quality challenges, the addition of salinity barriers by the state Department of Water Resources and aggressive water treatment by Zone 7 meant that all water delivered by Zone 7 to its customers met drinking water standards set by the state and federal governments and in most cases was better than required.
- ▶ **Capital projects:** Zone 7 completed several significant projects with water supply and water quality benefits, including 1) construction of a valve and vault to help blend groundwater from a high-producing well with high-quality groundwater sources, 2) connecting a future well site to Zone 7's transmission system and preparing the site for a temporary pump station, if needed in an emergency, and 3) completing the second phase of the Superpulsator Rehabilitation Project at the Del Valle Water Treatment Plant.
- ▶ **Delta sustainability:** The Agency continued to actively support the extensive scientific, environmental and public review process approach of the California WaterFix and California EcoRestore (formerly the Bay Delta Conservation Plan, but revised to address permitting issues and reduce impacts), aimed at fixing the Delta's broken water conveyance and restoring its ecosystem. Zone 7 also remained active in the State and Federal Contractors Agency, advancing Delta science and moving toward restoration projects.

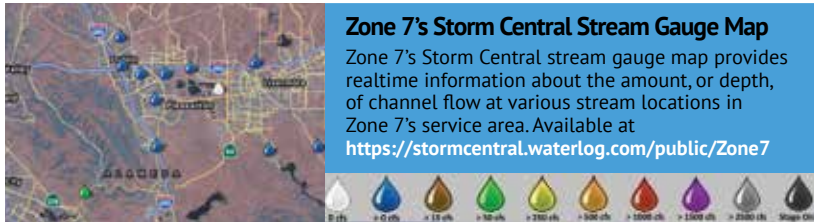


- ▶ **Urban Water Management Plan (UWMP) preparation:** In light of lessons from the drought and other factors, and to provide background for Zone 7's 2015 UWMP that the state requires be done every five years, Zone 7 launched an update to its Water Supply Evaluation to be completed in 2016. In addition to California WaterFix, preliminary results of Zone 7's evaluation in 2015 confirmed that expanded use of recycled water (advanced treatment/potable reuse) and desalination might both be needed to reliably provide adequate water supply in the future.
- ▶ **Sustainable Groundwater Management:** As part of its long-standing, proactive groundwater basin stewardship and in further movement toward implementing the state's new Sustainable Groundwater Management Act, Zone 7's Board adopted the Nutrient Management Plan and following many years of collaboration with Alameda County, the county's new Water Wells Ordinance was adopted and implemented, enhancing groundwater protection.

FLOOD PROTECTION/STREAM MANAGEMENT MASTER PLAN

- ▶ **El Niño preparation:** Extensive work was done throughout the summer to prepare the Agency's regional flood-protection system -- including repairing creek banks, removing debris, managing vegetation, and conducting inspections to ensure the flood-control channels were in good working condition to convey stormwaters. Public outreach included a well-attended flood-preparedness open house at Livermore headquarters with information on what residents and businesses can do to brace for a potentially wet winter.
- ▶ **Stream Management Master Plan update:** Zone 7 continued to plan and implement key aspects of the SMMP and to work on systemwide hydraulic and hydrology models that identify potential problem areas that will be used to prioritize projects in the planned SMMP update.
- ▶ **Arroyo Mocho Floodplain and Riparian Forest Restoration Project (Medeiros Parkway):** Zone 7 began planning this project, which is identified in the SMMP and is located in Livermore, to improve regional flood protection.

- ▶ **Storm Central website:** Zone 7 upgraded and added stream gauges and conducted public outreach to inform the public on how to use the new Storm Central website to obtain real-time stream-flow information. The data also will help Zone 7 staff track flows in the flood-control channels and respond accordingly.

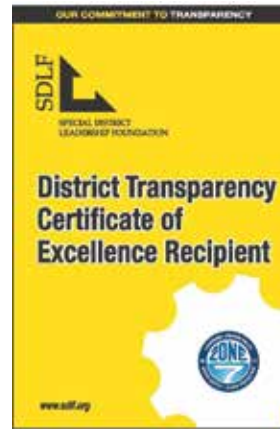


MULTI-BENEFIT PROJECTS, COMMUNITY PARTNERSHIPS

- ▶ **Arroyo Mocho Stanley Reach Riparian Restoration & Channel Enhancement Pilot Project:** The project was a finalist in the Association of California Water Agencies 2015 Clair A. Hill Water Award for Excellence, recognizing innovative projects by ACWA members in water resources management.
- ▶ **Upper Altamont Creek Planting Project:** Zone 7 collaborated with the U.S. Natural Resources Conservation Service and the Alameda County Resource Conservation District on a workday in which 40 volunteers helped plant vegetation along Altamont Creek in Livermore's Springtown area. Among other things, the project helped to improve Zone 7's ability to protect streambanks while enhancing native vegetation and improving instream water quality.

FINANCIAL SUSTAINABILITY, COST EFFICIENCY, TRANSPARENCY

- ▶ **Water rates:** Zone 7 conducted a three-year cost of service study and adopted a three-year treated water rate increase to help the Agency better ensure it has adequate revenues in the future to continue its mission. Rather than take a piecemeal approach, setting basic wholesale rates over a three-year horizon provides greater predictability/stability for Zone 7 and its customers, improves the ability of Zone 7 to plan for and finance deferred and badly needed equipment replacements and capital projects, and streamlines the rate-setting process for improved efficiency. Adopting a temporary surcharge for 12 months that cannot be extended without board action allows the Agency to begin to balance costs and revenues during the continuing drought.

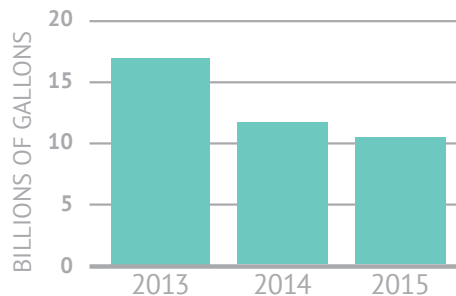


- ▶ **Transparency Certificate of Excellence:** The Agency received the District Transparency Certificate of Excellence from the Special District Leadership Foundation (SDLF) in recognition of Zone 7's outstanding efforts to promote transparency and good governance.
- ▶ **Government Leadership Award:** The California Local Agency Formation Commission (CALAFCO) presented this award to Zone 7 and its partners (Livermore, Pleasanton, Dublin, San Ramon and Dublin San Ramon Services District) for developing the Tri-Valley Intergovernmental Reciprocal Services Master Agreement as an example of working together and furthering good government efforts.
- ▶ **Video recording of board meetings:** In late 2015, the Board of Directors approved a one-year trial for video recording/televising of monthly board meetings on Community television and posting archived video links to the Agency's website. Videotaping was to get under way in 2016.
- ▶ **Comprehensive Annual Financial Report:** For the first time and in conjunction with its 2014-15 fiscal year audited financial statements, Zone 7 completed this report, which provides the public with even more detailed financial information about the Agency as well as comparative analysis from previous years, under guidelines from the Government Finance Officers Association of the United States and Canada.
- ▶ **Budget Book presentation awards:** For the third consecutive year, the Agency received the Government Finance Officers Association (GFOA) Distinguished Budget Presentation Award for the 2015-16 Fiscal Year budget. Additionally, Zone 7 received the "Excellence Award in Operating Budget" for the second time from the California Society of Municipal Finance Officers (CSMFO) for its FY 2014-15 Budget Book.
- ▶ **Energy efficiency:** In continued moves to help save money and protect the environment, Zone 7 further increased its alternative power and renewable energy use portfolio by completing a Power and Water Resources Pooling Authority (PWRPA) project at the Mocho Groundwater Demineralization Plant and at Mocho Wells #3 and #4.

MANAGING RESOURCES IN FOURTH YEAR OF DROUGHT

Despite receiving only 20 percent of its State Water Project contract amount in 2015, Zone 7 was able to again meet demands and end the year with only a modest reduction in overall storage, thanks to prudent management of supplies and to the community's strong conservation efforts. Coordinated water conservation outreach with retailers serving Tri-Valley communities helped the Valley reduce treated water use by about 35 percent from 2013 levels -- far exceeding state requirements. The community had already been well ahead of the curve on conservation in 2014 and, in 2015 when state conservation law went into effect, upped the ante and continued to be among the state's biggest water savers. Though not mandated, Tri-Valley agriculture (primarily vineyards) also pitched in, reducing use of untreated water by 8.7 percent between 2013 and 2015.

**TRI-VALLEY DROUGHT RESPONSE:
CUTTING WATER USE BY OVER A THIRD
BETWEEN 2013 AND 2015**



Includes all potable (drinkable) water delivered to Livermore, Pleasanton, Dublin and Dougherty Valley, mostly supplied by Zone 7 but including some retailer groundwater pumping.

Zone 7 ended the year with an increase in local groundwater storage and enough imported surface water to carry over approximately 13,400 acre-feet into 2016, taking water out of Kern County Groundwater Banks and moving it to State Water Project surface storage reservoirs, thus making it more accessible in future years. Overall, there was only a small reduction in available year-end storage.

2015 Supply & Demand for Zone 7 Water Supplies (in acre-feet, where one acre-foot equals 326,000 gallons)

Supply	2014	2015
State Water Project deliveries (into Valley)		
From Table A (contract) deliveries	600	4,400
From carryover (stored) reserves	17,500	8,800
Pumping from local groundwater storage	7,600	2,000
Local surface water (Del Valle Reservoir)	600	2,900
Supplemental water purchases BBID/Yuba	400	400
Surface water from offsite banking	10,000	16,500
Total Supply	36,700	35,000
Demand		
Municipal (drinking) water	28,800	25,500
Untreated irrigation water	5,000	5,600
Released for local groundwater recharge	1,400	3,900
Total Demand*	36,700	35,000

Available Year-End Storage

State Water Project water sent to offsite banking	0	0
Local groundwater basin (above historic lows)**	80,000***	85,000
Offsite banking programs	92,400	74,400
Del Valle Reservoir storage	2,300	100
State Water Project carryover	9,000	13,400
Total Year-End Storage	183,700	172,900

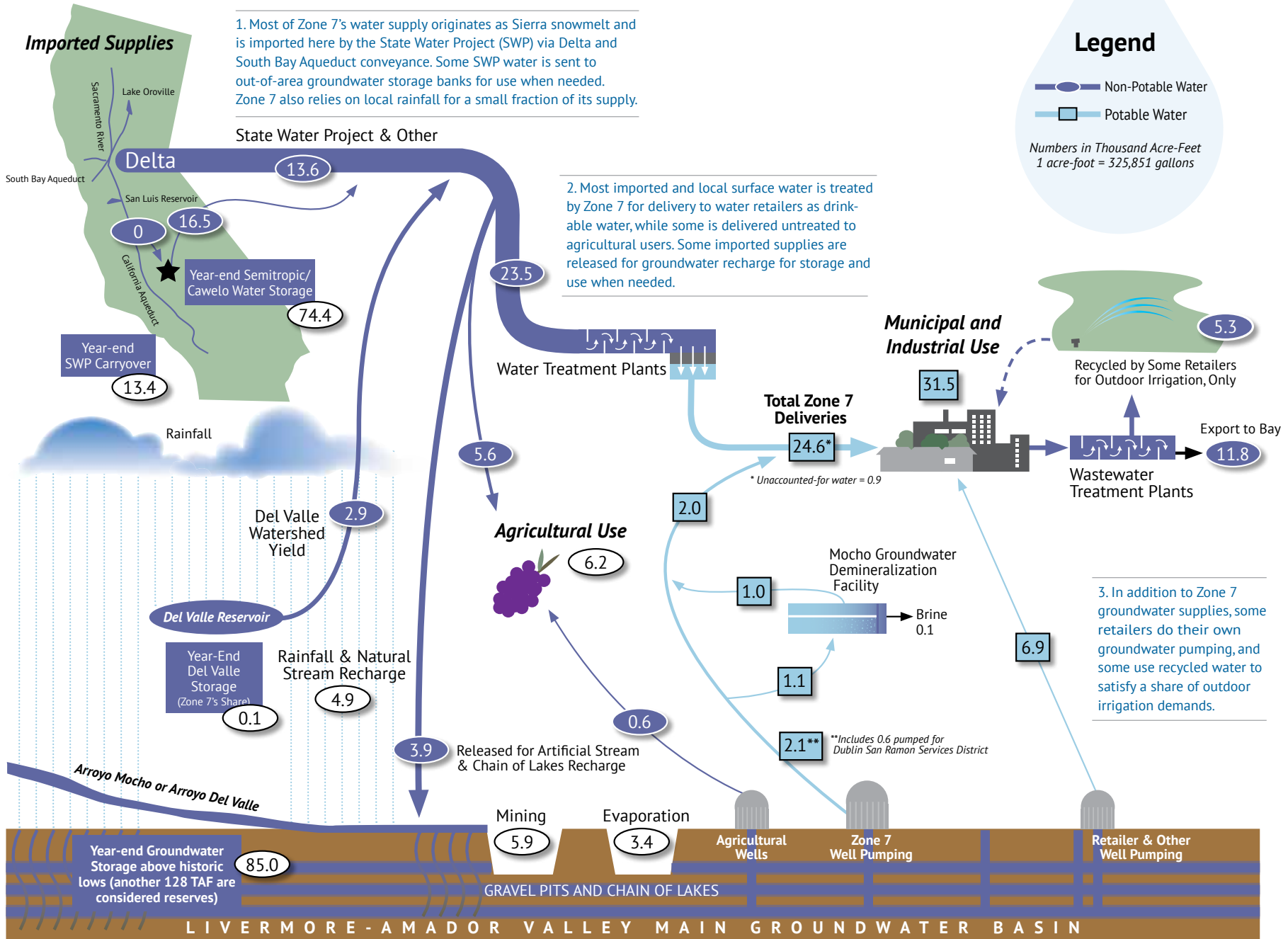
*Demand totals include a small amount of unaccounted-for water typical for water systems of this size.

** An additional 128,000 acre-feet (AF) of water was in storage at the end of 2015, for a total of 213,000 AF.

*** Revised from previous estimate.

LIVERMORE-AMADOR VALLEY WATER SUPPLY & USE

Supplying Water Reliably – 2015 Operations



ADDRESSING LONG-TERM RELIABILITY

Zone 7 continued in 2015 to evaluate options for long-term water-supply reliability on multiple fronts in light of lessons learned from the drought and continuing concerns about the dependability of the Delta's broken water-conveyance system. Providing background for its 2015 Urban Water Management Plan, which is submitted to the state every five years, the Agency launched an update to its Water Supply Evaluation. Though it wouldn't be completed until 2016, preliminary WSE Update results confirmed that – in addition to Delta conveyance improvements in the California WaterFix -- expanded use of recycled water and desalination might both be needed to reliably provide adequate water supply in the future.

As a member of the Bay Area Regional Reliability (BARR) Partnership, Zone 7 also approved participation in an evaluation of near- and long-term joint projects that contribute to a regional approach for achieving water supply reliability in the Bay Area. Certain projects already being explored, such as the Zone 7/East Bay Municipal Utility District Reliability Intertie and the Bay Area Regional Desalination Project, were to proceed in parallel to the BARR Plan efforts.

California Water Fix: The Agency continued to actively support the extensive scientific, environmental and public review process approach of the California WaterFix and California EcoRestore (formerly the Bay Delta Conservation Plan, but substantially revised to minimize impacts and address permitting issues), aimed at fixing the Delta's broken water conveyance and restoring its ecosystem. Environmental review was expected to be finalized in 2016.

About 80 percent of the water delivered by Zone 7 to Livermore, Pleasanton, Dublin and Dougherty Valley in San Ramon is Sierra snowmelt captured by the State Water Project in Lake Oroville and conveyed through aging, vulnerable, non-ecofriendly facilities in the Delta. California WaterFix seeks to achieve the co-equal goals of increasing statewide water supply reliability and, in coordination with California EcoRestore, enhancing the ecologically fragile Delta. It would modernize the nearly 60-year-old State Water Project conveyance infrastructure that takes water released from the Oroville Reservoir through the Delta by replacing the most vulnerable section of the conveyance infrastructure with two 30-mile-long tunnels linking the Sacramento River to existing pump facilities in the South Delta. The California WaterFix seeks to improve reliability by:

- ▶ reducing the vulnerability of the SWP to earthquakes, climate change, sea level rise and outages due to maintenance and environmental impacts,
- ▶ preserving the reliability of existing supplies and restoring supplies lost due to regulatory rulings that limit pumping due to potential impacts on endangered species of fish in the Delta, and
- ▶ improving the water quality of SWP deliveries, which should reduce treatment costs.

The California WaterFix has taken over ten years to develop, undergoing an unprecedented level of public engagement with more than 600 public meetings conducted and allowing more than 300 days of public comment on related environmental documents. The project has been developed based on the best science available; for example, the intakes have been sited so that they avoid the highest densities of sensitive fish species and are designed with state-of-the-art screening facilities.



WATER DELIVERY UPGRADE			IMPROVED RIVER FLOWS		
<p>2 tunnels up to 150' below ground designed to protect California's water supplies</p>	<p>3 new intakes, each with 3,000 cubic-feet per second (cfs) capacity. Average annual yield of 4.9 million acre-feet.</p>	<p>Protection against water supply disruption from failure of aging levees due to sea-level rise, earthquakes and flood events</p>	<p>Reinstate a more natural direction of river flows in the South Delta</p>	<p>New criteria to protect spring outflow to San Francisco Bay</p>	<p>Criteria to protect Sacramento River flows and fish</p>

INVESTING IN INFRASTRUCTURE

In 2015, Zone 7 completed several significant projects with water supply and water quality benefits.



Stoneridge Cross-Valley Isolation Valve: A new valve and vault were installed to help direct groundwater pumped from Stoneridge Well, a high-production well, westerly to improve blending with higher-quality groundwater production and demineralized groundwater production at the Mocho Groundwater Demineralization Plant.

Bacon Island Levee Rehabilitation Project: Zone 7 and several water agency partners were awarded a state Department of Water Resources grant covering most of the \$10 million cost to fortify levees supporting critical water conveyance, and to make landslide habitat enhancements, along the Delta's Old River. Zone 7's contribution amounted to \$30,000.

Del Valle Superpulsator Rehabilitation Project: This project involved replacing 25-year-old superpulsator equipment, rehabilitating the superpulsator concrete basins, and improving access to the basins for safety and maintenance purposes. The project was done in two phases. Phase 1, to rehabilitate two superpulsators, was done in 2014 and Phase 2, to rehabilitate the remaining two superpulsators, was completed in 2015, marking an important reliability upgrade to water-treatment infrastructure.

Busch Valley Well, Phase 1: This project involved connecting the future well site to Zone 7's transmission system. Pending the new well being constructed, this connection enables Zone 7 to install a temporary booster pump station, if needed, to get well water from the western part of Zone 7's system in Pleasanton to the eastern part of the system in Livermore during potential raw-surface-water or conveyance-system emergencies.



SUSTAINABLE GROUNDWATER MANAGEMENT



Zone 7 has actively managed the groundwater in the Livermore Valley for more than 50 years. The Agency began importing State Water Project water into the watershed in 1962 to begin artificially recharging the basin in wet years with imported water to augment supplies in dry years and in summer when seasonal demands are highest. A few years later, the first surface water treatment plant was constructed to reduce demands on the groundwater basin. Since then, a series of further proactive actions have been taken toward sustainable groundwater management. The Agency continues to manage the basin conjunctively through a comprehensive Groundwater Management Plan that incorporates salinity and nutrient management to offset the addition of salts from recycled water.

Zone 7 took another big step in 2015 to protect groundwater quality when it adopted a Nutrient Management Plan (NMP), to go with the existing Salt Management Plan; adoption of these Plans also allows for expansion of recycled water use as a local water supply. Additionally in 2015, Zone 7's collaboration with Alameda County resulted in county adoption of a well permitting ordinance and Memorandum of Understanding for implementing that ordinance in Eastern Alameda County for more robust groundwater resource protection.

These and other measures Zone 7 has taken over the years move the Agency further toward implementing the state's New Sustainable Groundwater Management Act, landmark legislation passed in 2014 that empowered local agencies to better manage the state's groundwater basins. In recognition of Zone 7's active and longstanding groundwater management program, the legislation specifically named the Agency as the exclusive Groundwater Sustainability Agency for the groundwater basins within Zone 7's service area. The California Water Commission was set in 2016 to adopt regulations to guide development of sustainability plans to be prepared by local groundwater agencies throughout the state.

More About the Nutrient Management Plan

The state's recycled water policy, among other things, requires salt and nutrient management plans for groundwater basins using recycled water. Zone 7 already had a Salt Management Plan (a component of its Groundwater Management Plan) and, in 2015, the NMP was added to it.

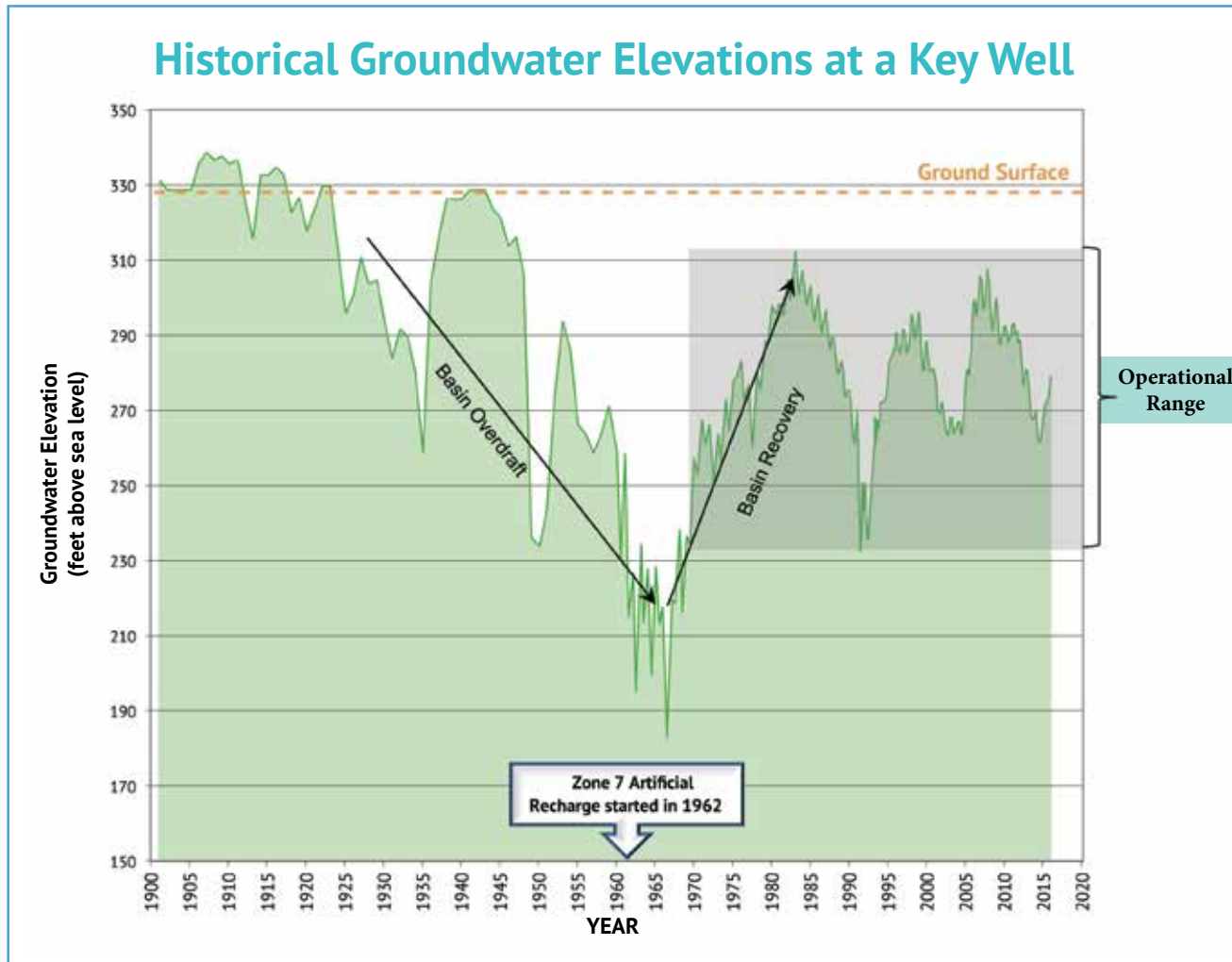
The NMP anticipates that average nitrate concentrations from all identified sources, including recycled water for landscape irrigation at existing and projected levels, will remain within Livermore Valley Groundwater Basin objectives if current best management practices are continued. Only for five small geographic Areas of Concern where septic tanks are still in use, the plan recommends that the state and county establish separate permitting criteria for new or replacement onsite wastewater treatment systems (OWTS).

Because of Zone 7's collaboration with the Regional Water Quality Control Board and the Alameda County Department of Environmental Health (ACDEH) during development of the NMP, these criteria have been included in ACDEH's Draft Local Agency Management Plan (LAMP) and amended OWTS ordinance in 2016.

Maintaining Groundwater Storage Levels

Zone 7 was established in 1957 in part to address overdraft of the Livermore-Amador Valley's main groundwater basin, which had been over-pumped in previous decades. The downward trend in groundwater elevation began to reverse in 1962 when Zone 7 began importing water from the State

Water Project. Surface water treatment for potable water distribution, groundwater recharge using more of the imported State Water Project supplies, along with local surface water captured and stored in Lake Del Valle, continue to be critical components of Zone 7's sustainable groundwater management.



CONSERVATION

FOCUSING REDUCTIONS ON OUTDOOR WATER USE: ANOTHER SUCCESSFUL COMMUNITY EFFORT

As the persistent drought continued into 2015, residents and businesses maintained their focus on outdoor conservation. Thank you for conserving! With the focus on outdoor savings, Zone 7 experienced declines in the number of clothes washer rebates (1,228 rebates were processed, a 40 percent decrease from 2014) and in the number of high-efficiency toilet rebates (801 rebates were issued, a 20 percent decline). But participation in the lawn conversion rebate program increased 46 percent.

Zone 7 received 120 applications for lawn conversion rebates – resulting in 183,113 square feet of turf being removed, of which 82,120 square feet received rebates. This was all in response to outreach, customer engagement and increased public awareness -- and it stood to reduce outdoor water use by more than 4.5 million gallons (14 acre-feet) annually.

Also in 2015, Zone 7 conservation activities included:

- ▶ Hosting a Qualified Water-Efficient Landscape (QWEL) training for 32 participating landscape professionals.
- ▶ Co-sponsoring and helping to promote the Bringing Back the Natives Garden Tour, which showcases water-wise gardens throughout the East Bay, including in Zone 7's service area.
- ▶ Co-sponsoring a “Mow-No-More” hands-on workshop teaching residents how to sheet mulch over their lawn for water efficiency and other environmental benefits.
- ▶ Co-sponsoring the PG&E water and energy showcase held in San Francisco.
- ▶ Participating in several conservation outreach events, including a water-wise workshop as part of Dublin Pride Week and teaming up with the Valley's water retailers and other community partners at two Home Depot water conservation plant and gardening events.
- ▶ Expanding public education to address the need to water trees in a drought to help ensure their survival, with tips on how to water trees efficiently.

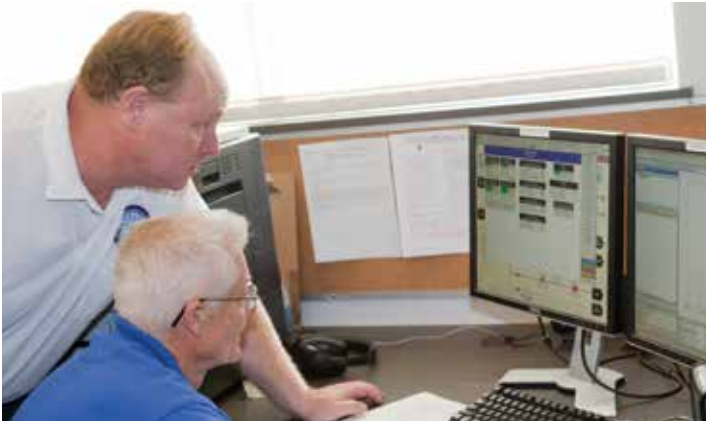


Zone 7's booth at the 2015 Alameda County Fair lauded residents and businesses for their drought-related conservation efforts, and encouraged lawn conversions to drought-tolerant landscaping. The “Everyone Can Help Save Water” display also was exhibited at libraries in Pleasanton, Livermore and Dublin.



Bringing Back the Natives Garden Tour showcased water-wise gardens throughout the East Bay, including in Zone 7's service area.

WATER QUALITY



Zone 7 is committed to delivering high-quality water to its customers. Even though continuing drought conditions in 2015 increased Zone 7's water treatment costs due to challenges with Delta water quality, all of the water that Zone 7 delivered to its customers again met the drinking water standards set by the state and federal governments and, in almost all cases, the quality was significantly better than required.

Both the Del Valle and Patterson Pass surface water treatment plants maintained their Partnership for Safe Water status for the 2015 reporting period. The Partnership is a program developed by the American Water Works Association (AWWA), the U.S. Environmental Protection Agency, and associated Partner organizations.

Hexavalent Chromium: In addition to successfully handling the drought-related challenges, Zone 7 in 2015 addressed the State of California's new water quality standards for Chromium 6, and did so in a cost-effective manner. A new groundwater well (Chain of Lakes Well No. 5) had been put into production in late 2014. An amended permit for it was obtained in August 2015 from the State Water Resources Control Board's Division of Drinking Water to use blending with groundwater from the other Chain of Lakes wells as a treatment to meet Chromium 6 standards.

Cyanotoxin Monitoring: Zone 7 collaborated with other South Bay Aqueduct contractors – the Alameda County Water District and the Santa Clara Valley Water District – on a study evaluating the effectiveness of different treatment technologies

for cyanotoxins – which are naturally occurring and are found in some blue-green algae, should they ever appear in significant levels in source water. The best technique identified was the use of ozone. Zone 7's Capital Improvement Program includes the addition of ozone to its treatment plants within a few years. While there are no current federal standards for cyanotoxins in drinking water, a provisional health-based guideline value for four types of cyanotoxins has been published. Zone 7's Water Quality Laboratory developed in-house monitoring capability for the most common type, microcystins. Raw water monitoring is conducted as deemed necessary to protect the public health, and levels of microcystins in 2015 were well below the published guideline.



Surface Water Treatment Plant Testing and Optimization: Full-scale carbon dioxide (CO₂) testing began in late March 2015 at the Del Valle Water Treatment Plant and continued intermittently through November 2015. The testing was initiated to determine if the addition of carbon dioxide into the plant's raw water could serve to improve coagulation for optimal treatment. Study results were inconclusive and additional data will be collected. Additional testing at the Del Valle plant was planned for 2016.

FLOOD CONTROL & STREAM MANAGEMENT

EL NIÑO PREPARATION

Zone 7 conducted extensive work throughout the summer of 2015 to prepare the Agency's regional flood-protection system to ensure the flood-control channels were in good working condition to convey stormwaters, doing even more preparation for the winter than usual.

The Agency completed four bank repairs totaling 215 linear feet, 21 soil bio-engineering brush walls, 1,030 linear feet of access roadway, 32 outfall structure rehabilitations, 2,000 linear feet of concrete lining repairs, and 100 feet of access ramp repair. Total construction cost was \$985,000. Zone 7 also managed various maintenance activities such as vegetation management, downed tree removal, hydro-seeding, fence and gate repairs and debris and trash removal, totaling an additional \$500,000. Planning, permitting, design and construction was performed directly by Zone 7 staff.

Repairing a channel's damaged concrete lining



Slide repair along South San Ramon Creek in Dublin



Clearing of vegetation that was impeding Arroyo de la Laguna flow at Highway 84 helped to reduce flood risk, including a bridge near Sunol Glen School.

Zone 7 conducted a well-attended flood-preparedness open house

at Livermore headquarters to provide information on what residents and businesses can do to brace for a potentially wet winter. The open house included participation from the cities of Pleasanton, Livermore and Dublin; Alameda County; the Federal Emergency Management Agency (FEMA) and the California Department of Water Resources (DWR). In 2015, the Agency provided additional extensive outreach at other community events, on Zone 7's website and in e-newsletters with information on where to obtain free sandbags and how to fill and place them for maximum effect, links with information on how to obtain flood insurance, flood safety tips and resources, etc., and established Zone 7 sandbag distribution centers to augment those of other Valley agencies.



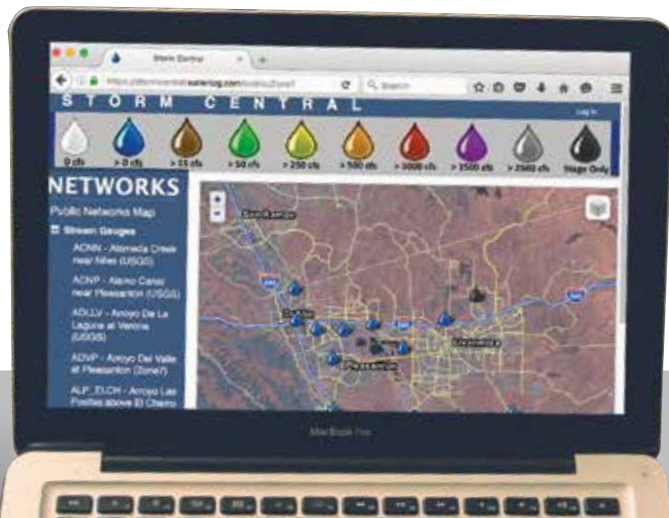
In 2015, Zone 7 upgraded and added new stream gauges

and did public outreach to inform the public on how to use the new Storm Central website to obtain real-time stream-flow information (the website address is <https://stormcentral.waterlog.com/public/Zone7>). Coupled with the incorporation of new rain gauges that measure precipitation, data from the gauges also will help Zone 7 staff track flows in the flood-control channels and respond accordingly.

Addressing ADLL erosion: In 2015, Zone 7 worked with the Natural Resources Conservation Service, the Alameda County Resource Conservation District and other agencies to explore possible opportunities – including going after grants -- to collaborate on potential solutions addressing erosion along the reach of Arroyo de la Laguna upstream of Verona Bridge.

Creek cleanups: Zone 7 again collaborated extensively with other agencies to keep local creeks clean both by teaming up on debris removal and by promoting as well as serving as a site captain at community creek cleanups. In addition to reducing pollution, debris removal helps to increase the flood-protection capacity of local waterways to handle high flows during storms.

Advanced Quantitative Precipitation Information (AQPI) project: Zone 7 is a member of the Bay Area Flood Protection Agencies Association (BAFPAA), which was awarded \$19 million from the California Department of Water Resources under the Integrated Regional Water Management Proposition 84 grant program for the AQPI project. The project's purpose is to implement a network of improved radar units and observation stations to better predict the amounts and precise location of precipitation, especially extreme precipitation events from Pacific Ocean atmospheric rivers.



WATERSHED STEWARDSHIP/ MULTI-BENEFIT PROJECTS



Zone 7 collaborated with the U.S. Natural Resources Conservation Service and the Alameda County Resource Conservation District on a workday in which 40 volunteers helped plant vegetation along Altamont Creek in



Livermore's Springtown area. Among other things, the project helped to improve Zone 7's ability to protect streambanks while enhancing native vegetation and improving instream water quality.



In 2015, Zone 7 hosted a well-attended Alameda Creek Watershed Forum workshop. The Forum is a voluntary, non-regulatory stakeholder group that supports the community's interest in protecting and achieving a healthy and sustainable Alameda Creek watershed.



Arroyo Mocho Stanley Reach

LIVING ARROYOS

The Living Arroyos Program was initiated in 2013 and is currently a partnership of Zone 7, the City of Livermore, Livermore Recreation and Park District, the City of Pleasanton and others in the Valley that engage community volunteers in the stewardship of local streams. The program engages local college students as interns who are instructed on stream management techniques and then interact and guide the volunteers. Much of the vegetation work for Zone 7's Arroyo Mocho Stanley Reach Riparian Restoration and Channel Enhancement Pilot Project (see below) was accomplished through the Living Arroyos Program. In 2015, volunteers and Living Arroyos staff harvested and planted more than 500 willow stakes and performed other maintenance activities along the reach, including watering the newly planted riparian trees during summer, applying mulch to over 1,000 oak seedlings, completing a mile of non-native invasive weed removal in the fall, and conducting several stream cleanups following high-flow events in the winter.

Arroyo Mocho Stanley Reach Riparian Restoration & Channel Enhancement Pilot Project: This Zone 7 project, located in Livermore, was a finalist in the Association of California Water Agencies 2015 Clair A. Hill Water

Award for Excellence, recognizing innovative projects by ACWA members in water resources management. The project was undertaken to demonstrate the feasibility of transforming an earthen trapezoidal channel into a vegetated stream reach exhibiting natural characteristics, while also maintaining its core functionality for flood protection, sediment management, and groundwater recharge. Zone 7 is now in the monitoring phase.

Arroyo Mocho Floodplain and Riparian Forest Restoration Project (Medeiros Parkway): In 2015 Zone 7 began the conceptual design, environmental review, and permitting process for the Arroyo Mocho Floodplain and Riparian Forest Restoration Project. The project is located along a reach of the Arroyo Mocho on approximately 45 acres between Holmes Street and Arroyo Road in Livermore. It is identified in Zone 7's Stream Management Master Plan and Capital Improvement Plan to improve regional flood protection. The purpose is to create a natural floodplain along the Arroyo Mocho, which will provide storm water detention while promoting natural habitat and allowing compatible recreational uses by enhancing existing trails. The project may also increase groundwater recharge capacity which will improve both groundwater supply and quality sustainability for the local groundwater basin.

OUTREACH & EDUCATION

Schools Program: The Agency continued in 2015 to expand Zone 7's popular Valleywide water education program, reaching more than 12,000 students covering topics from water conservation and water quality to flood protection and stormwater-pollution prevention. The program was expanded to upper-grade high schoolers in Advanced Placement Environmental Science. BAYWORK materials about careers in the water industry were distributed to high school classes and career counseling centers.



Zone 7's continually expanding work with BAYWORK, a collaborative of water and wastewater agencies working on industry needs and workforce reliability, development and preparedness, included outreach efforts to students and local high schools.



- ▶ **Website Upgrade:** Zone 7 launched a new, more secure website that is “fully responsive,” allowing for optimal viewing/navigation across a wide range of devices, from desktop computers to I-Phones and I-Pads. The website also has an improved search function.
- ▶ **E-newsletter Distribution:** The Agency continued to increase its e-newsletter subscriptions. To subscribe, see the home page of Zone 7's website at www.zone7water.com, or scan this code with your smart phone.
- ▶ **ACWA Drought Response Web Portal:** Zone 7 was included in the Association of California Water Agencies (ACWA) Drought Response Gallery, featuring actions being taken by “local water agencies on the front lines.” It can be accessed at: <http://droughtresponse.acwa.com>.

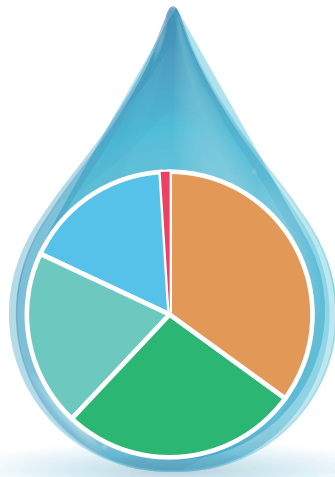


FINANCIAL INFORMATION

FY 2015-16 Revenues & Expenses

Water Supply, Reliability & Quality: Revenue

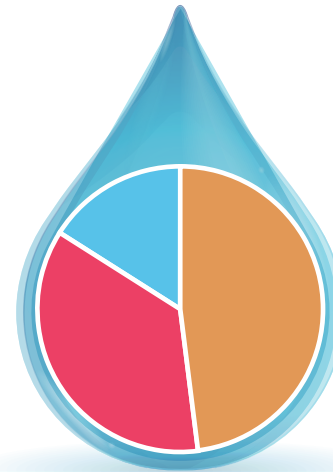
Total: \$98,715,101



- \$34,552,636 (35%)
Water Enterprise (Water Rates)
- \$26,210,826 (26.5%)
System Expansion
(New Development Connection Fees)
- \$19,685,300 (20%)
State Water Facilities (Property Taxes)
- \$17,832,879 (18%)
Use of Reserves
- \$433,460 (0.5%)
Renewal/Replacement, Systemwide
Improvements (Water Rates)

Flood Protection: Revenue

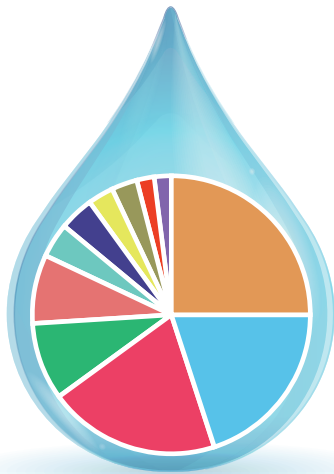
Total: \$18,455,422



- \$8,883,938 (48%)
Use of Reserves
- \$6,709,984 (36%)
Operations & Maintenance
(Property Taxes)
- \$2,861,500 (16%)
Capital Project (Development Fees)

Water Supply, Reliability & Quality: Operating & Capital Expenses

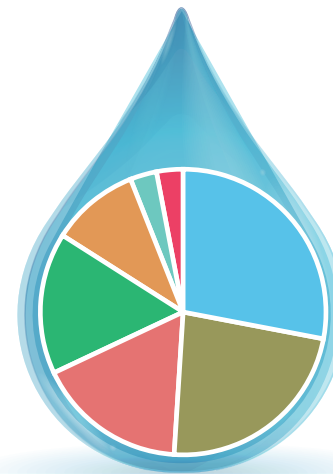
Total: \$98,715,101



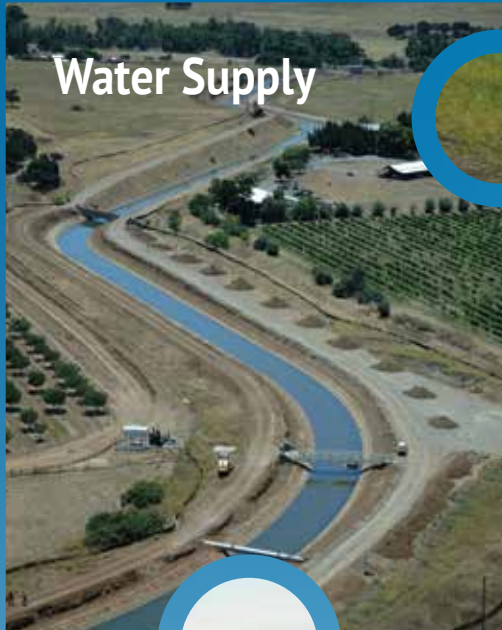
- \$24,347,176 (25%)
Capital Expansion
(New Dev. Connection Fees)
- \$19,404,102 (20%)
Capital Renewal/Replacement,
Systemwide Improvements
(Water Rates)
- \$19,344,521 (20%)
State Water Facilities
(Property Taxes)
- \$9,101,606 (9%)
Operations/Engineering
Personnel
- \$7,566,114 (8%)
Water
- \$4,488,161 (4%)
Admin Personnel
- \$4,360,785 (4%)
Professional/Specialized Services
- \$2,961,480 (3%)
Facilities Maintenance
- \$2,602,316 (3%)
Other Services/Supplies
- \$2,432,413 (2%)
Chemicals
- \$2,106,427 (2%)
Utilities

Flood Protection: Operating & Capital Expenses

Total: \$18,455,422



- \$5,178,863 (28%)
Flood Protection and Stormwater Drainage
Capital Projects (Development Fees)
- \$4,191,785 (23%)
Capital Structures/Improvements
- \$3,209,594 (17%)
Professional/Specialized Services
- \$2,981,711 (16%)
Maintenance-Structures/Equipment
- \$1,763,080 (10%)
Engineering Personnel
- \$652,439 (3%)
Other Services/Supplies
- \$477,950 (3%)
Admin Personnel



Water Supply



Flood/Stream Management



Water Quality



Watershed Protection



Groundwater Management

Zone 7 Water Agency supplies treated drinking water to retailers serving approximately 240,000 people and businesses in Pleasanton, Livermore, Dublin and, through special agreement with the Dublin San Ramon Services District, the Dougherty Valley area of San Ramon. Zone 7 also supplies untreated irrigation water (mostly to vineyards) and provides flood protection services to eastern Alameda County.

Executive Staff: **Jill Duerig**
General Manager

Kurt Arends
*Assistant General Manager,
Engineering*

Tom Hughes
*Assistant General Manager,
Administrative Services*

Osborn Solitei
*Assistant General Manager,
Finance*