

WATER WAYS

Alameda County Flood Control and Water Conservation District • Zone 7

PREPARING FLOOD CONTROL FACILITIES FOR WINTER WEATHER

The Tri-Valley has more than 120 miles of flood control channels that help protect residents and property from flooding by sending stormwater out to the San Francisco Bay and the Pacific Ocean. Zone 7 owns and maintains about 39 miles of these flood control channels, while Tri-Valley cities and private citizens own and maintain the remainder.

Flood control maintenance activities are year-round at Zone 7 Water Agency. In the spring, summer and fall these efforts ensure that the Zone 7 flood control facilities are in good condition before heavy winter rains and storm events occur.

ROUTINE OPERATIONS AND MAINTENANCE

The Flood Control Operation and Maintenance Program prevents storm problems from becoming flood problems by ensuring that sediment basins, creeks, channels, storm drains and other flood protection facilities are fully operational during the wettest of weather.

During the dry season, Zone 7 runs an aggressive maintenance program that clears Agency-owned creeks

and channels of obstructive vegetation, debris and deposited sediments to allow floodwaters to flow unhindered.

With the help of Alameda County, the California Conservation Corps, and engineering contractors, Zone 7 completed more than 20 maintenance projects in 2004. These included bank and access road reconstruction, erosion repairs, desilting of channels, vegetation management and storm drain repairs. Flood Control project development routinely incorporates and uses environmentally friendly approaches such as biotechnical bank stabilization, meandering channels, and wildlife and fish passages.

The Flood Control staff also complies with a variety of environmental regulations such as the California Environmental Quality Act (CEQA) and an assortment of regulatory requirements as mandated by the

California Department of Fish and Game, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and California Regional Water Quality Control Board (the Clean Water Program).

WINTER STORM RESPONSE

In winter, Zone 7 steps up its Operations and Maintenance Program with rigorous spot checks of channels, especially in areas where there is a known risk of problems. The Agency responds to all drainage complaints received from the general public and cities to evaluate the situation and schedule a timely response.

During and immediately after severe storm events, Flood Control staff directs emergency debris removal and repair of facilities to maintain channel flow capacity and to restore facilities' functions. Maintaining the facilities at maximum flow capacity is essential to providing adequate protection for Valley residents and property.

For more information about Zone 7's flood control responsibilities, facilities and challenges, please log on to www.zone7water.com. Debris in the channels and other flood control related problems may be reported to Zone 7 by calling (925) 484-2600.

The California Department of Water Resources also has a short video presentation and flyer on how to prepare homes for flooding entitled *Fight Flooding at Home* on its website at http://www.publicaffairs.water.ca.gov/news_releases/.

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Maintenance crews remove debris blocking channel.

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WATER QUALITY UPDATE

NEW ALTAMONT WATER TREATMENT PLANT MEANS MORE AND BETTER QUALITY WATER FOR THE VALLEY

In December, Zone 7 Water Agency anticipates selecting an engineering consulting firm to design and manage construction and environmental permitting for the new Altamont Water Treatment Plant and pipeline. The plant will be located in eastern Alameda County and will supply treated drinking water to Valley residents and businesses. The source water will be imported from the Sacramento-San Joaquin Delta. The plant's first phase, which is due to come on line in 2009, will have a treatment capacity of 24 million gallons per day.

The Altamont Treatment Plant and pipeline project will follow completion of the State Department of Water Resources' South Bay Aqueduct Improvement and Expansion Project that will increase the amount of water that can be imported from the Delta.

While the plant will bring more Delta water to the Valley to



meet the planned future growth of Pleasanton, Livermore, and Dublin, it will also lessen Zone 7's current dependence on groundwater supplies to reliably meet Valley water demands. Because water from the Delta contains less hardness than groundwater, introducing more Delta water into the Valley's distribution system will reduce the overall hardness of water and will supplement supplies to be provided from Zone 7's groundwater quality improvement projects. Because Delta water has treatment challenges of its own – taste and odor frequently exist in Delta water because of algae and other constituents – the new treatment plant will employ new technologies to mitigate these problems.

Zone 7 and the Valley will always partially rely on groundwater to meet water demands. Zone 7 also is working on several projects that over time will reduce the hardness of water.

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ZONE 7 PARTICIPATES IN WORLD WATER MONITORING DAY

Tri-Valley high schools and others teamed up with Zone 7 Water Agency October 18 for the Second Annual World Water Monitoring Day global testing project to map worldwide water quality trends.

Students from environmental studies classes at Foothill High School in Pleasanton and Livermore High School conducted water sampling at several sites along Valley arroyos under the direction of their teacher, Dr. Sarah Palmer, and Zone 7 Water Agency staff. Students at Sunset Elementary School and Camp Arroyo in

Livermore also tested the waters.

The students monitored the quality of the water in area creeks over a month's time leading up to October 18. Their findings are being shared with international organizers to help build a database to identify worldwide water trends and potential water quality problems. The

effort's ultimate goal is to ensure people everywhere have clean water for domestic, agricultural, commercial and recreational uses.

educate young people about the importance of monitoring and protecting water quality right to the Tri-Valley's doorstep. World Water Monitoring Day is sponsored by the America's Clean Water Foundation and the International Water Association, and also includes a long list of partner groups such as the U.S. Environmental Protection Agency, U.S. Army Corps of Engineers and the U.S. Geological Survey.

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Protecting water quality is an important and daily part of Zone 7's job. We are excited to bring this worldwide effort to help



High school students collect water samples.

PLEASANTON AND ZONE 7 TEAM UP FOR COASTAL CLEANUP DAY

More than 300 local residents participated with the staffs of the City of Pleasanton and Zone 7 Water Agency in California Coastal Cleanup Day activities on September 18. Although Valley communities are not along the coast, local arroyos and flood control channels eventually drain into the San Francisco Bay and out to the Pacific Ocean. Maintaining water quality in the Valley helps to protect the California coast. Volunteers included Scouts, members of local

churches, employees of various businesses and entire families.

The hard-working helpers scoured the banks of 11 miles of waterways and hauled out approximately two and one-half tons of trash, including 126 pounds of recyclable material. Among the findings were 43 railroad ties,

two water softeners and a water heater.

The trash was also tallied and the data shared with the California Coastal Commission, the statewide organizer of the annual event that develops policy and strategy to reduce pollution.



Local citizens help clean up local waterways.

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LUNAR LANDER AT PLEASANTON GOLF CENTER?



No, but in May a CIMIS station was installed. CIMIS stands for California Irrigation Management Information System. The station is one of 120 automated weather stations throughout the state used mainly to determine irrigation requirements. You can learn how CIMIS can help you know how much water your yard needs, or just check other weather information, by logging on and registering free at

<http://www.cimis.water.gov/cimis/welcome.jsp>

“GOOD MORNING. THIS IS ZONE 7 WATER AGENCY.”

Zone 7's administrative team is often its most public faces. Amanda Rogers and Judy Rector make sure visitors and callers are connected to the right Zone 7 staff. They also ensure that the public is notified of agency meetings and activities.

Barbara Morse supervises the section and serves as Secretary to the Board of Directors and as Senior Management Assistant to the General Manager. She is responsible for committee and Board meeting agendas and minutes, and documenting Zone 7 activities. With her 26 years of service, Barbara knows the ins and outs of water resources management history at Zone 7 and in the Tri-Valley.

Zone 7 is grateful to the administration team for their help in serving the public.

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ZONE 7 MAINTAINS TREATED WATER RATE IN 2005

The Zone 7 Board of Directors voted to maintain its rates for the second straight year for the treated water it sells to its four water retailers – California Water Service Company, Dublin San Ramon Services District and the cities of Livermore and Pleasanton. Slight rate increases for untreated water for agricultural users will take effect on January 1.

Initially the wholesale treated water rate had been expected to increase up to 6%, or about \$1.38 a month for the average household. The rate increase would have gone principally to increase the funds being set aside to repair and replace aging treatment facilities and distribution systems. It also would have helped to pay for additional facilities required to improve the taste, odor and hardness of water. However, an unexpected \$3.14 million in unspent funds from previous capital projects were used to offset this cost in 2005.

RATE INCREASES WILL BE NEEDED IN THE FUTURE

Modest rate increases are often necessary to keep up with the inflationary increased costs of imported water, chemicals to treat water, other supplies, power and other utilities, consulting services and personnel.

In some years, higher than expected water sales due to dry weather can offset the cost of inflation and help Zone 7 maintain water rates.

Zone 7 anticipates that rate increases will be

needed to fund long-term improvement and replacement of treatment facilities and other infrastructure, as well as water quality improvements to reduce the hardness of water in Pleasanton and Dublin and to improve taste and odor of water throughout the Valley. These projects are assessed and scheduled to maintain water reliability for Valley residents in Zone 7's Asset Management Plan (AMP). The cost

of replacing facilities, taste and odor water quality improvements, and other expenses require an investment of an additional \$6 million a year that will be set aside for these projects. Zone 7 and its retailers are working together now to determine what rate increase may be required in the future.

Zone 7 Water Agency has historically followed a policy of "pay-as-you-go" financing. In other words, instead of borrowing money for infrastructure improvements, Zone 7 raises money in small increments through water rates and then pays for improvements and other projects with these funds.

THE IMPACTS OF PROJECT FINANCING ON WATER RATES

Zone 7 Water Agency has historically followed a policy of "pay-as-you-go" financing. In other words, instead of borrowing money for infrastructure improvements, Zone 7 raises money in small increments through water rates and then pays for improvements and other projects with these funds. Zone 7 also limits its need to borrow money by maintaining a capital reserve fund. The fund ensures that facilities can be improved, replaced, and repaired in keeping with long-term system needs and long-term budgeting, without being impacted by the yearly rise and fall of water sales. Over the years "pay-as-you-go" and capital reserve financing saves ratepayers millions of dollars that otherwise would be paid in interest cost on borrowed money.

The chart below shows the real cost of a hypothetical project costing \$10 million based on the two types of financing and the term of debt financing. An annual interest rate of 6% is used for the debt financing examples.

Hypothetical Project Costs Based on Type and Term of Financing

Project Cost	Type of Financing	Term of Debt Financing	Total Amount of Repayment	Additional Cost to Rate Payers
\$10 million	Pay-As-You-Go	None	\$10 Million	None
\$10 million	Debt Financing	10 years	\$13 Million	\$3 Million
\$10 million	Debt Financing	20 years	\$17 Million	\$7 Million
\$10 million	Debt Financing	30 years	\$22 Million	\$12 Million

RATE STABILIZATION (EMERGENCY) RESERVE FUND

Like many water agencies, Zone 7 maintains a reserve fund designated for use during unpredictable but likely events such as droughts,



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earthquakes, or sharp cost increases beyond the Agency's control. The amount in the Reserve is set at a level equivalent to a 10% reduction in water sales over a two-year period. The money is used only to offset rate increases in the event of emergency repairs or an increase in costs essential to service such as energy and the water itself.

The rate stabilization fund was first created in 1985, when a severe six-year drought forced the Agency to increase the cost of water by as much as 30% in a single year. The fund is now maintained as an insurance policy so that ratepayers will not be subject to such drastic rate increases in the future.

SERVING THE PUBLIC THROUGH FISCAL RESPONSIBILITY

Zone 7's pay-as-you-go financing policy, capital and emergency reserve funds, and budget expenditure limits demonstrate its commitment to fiscal responsibility. Zone 7 believes that good water resources management and planning includes living within its means. Zone 7 is committed to providing a reliable supply of high quality water for the least long-term cost to ratepayers.

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LOCAL SCHOOL TEACHERS AND ZONE 7 TEAM UP IN THE CLASSROOM

Zone 7 is proud to provide these programs at no cost to the schools as part of our ongoing community outreach activities. We are committed to furthering water science education in our community.

Did you know that Zone 7 Water Agency goes to school with your children? It's true! Zone 7 offers to teachers in public and private schools in Dublin, Livermore and Pleasanton water science programs, many of which meet California Department of Education curriculum requirements.

Each program offers teachers hands-on activities, demonstrations, worksheets and much more. Last year approximately 70 Valley classes

participated in our programs, giving them great reviews.

Zone 7's classroom programs include:

- **Watershed Education Program.** This program takes a focused look at the Upper Alameda Creek Watershed and teaches students about the connection between surface water and groundwater systems. Other topics include drinking water supply, pollution prevention, the effects of urban development on our watershed and much more.
- **Creek and Storm Drain Pollution Prevention Program.** This program explores how water quality in our local creeks can impact our drinking water supply as well as creek vegetation, local wildlife and even the San Francisco Bay. Students discover how pollution from urban areas is transferred to the creek environment and about ways to prevent water pollution.
- **Water Supply, Treatment and Distribution Program.** This program examines the sources of drinking

water for our watershed, how water is treated to become potable and how it gets to our taps. This program is often combined with a tour of our DelValle water treatment facility in Livermore.

- **Water Conservation Program.** This program is designed to help young students understand the importance of using water wisely and to learn about the science that underlies conservation measures. It explains why California's water is known as "liquid gold" and explores the finite nature of our water supply.

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Parents and teachers can learn more about Zone 7's schools programs at www.zone7water.com. The Agency's schools program coordinator can be e-mailed at schools@zone7water.com.



Students learn about the Valley's water resources.

Zone 7 Kids' Korner

Hey Kids! Many people have jobs protecting our watershed. As a watershed neighbor, you have a job, too. You can protect our watershed by recycling, conserving water, taking household pollutants to a hazardous waste collection site, keeping trash and litter off our streets and using environmentally friendly soaps to wash your car. Unscramble the letters below to see who is responsible for protecting our watershed.

FEARRM _____

SFIH GIBSIOTOL _____

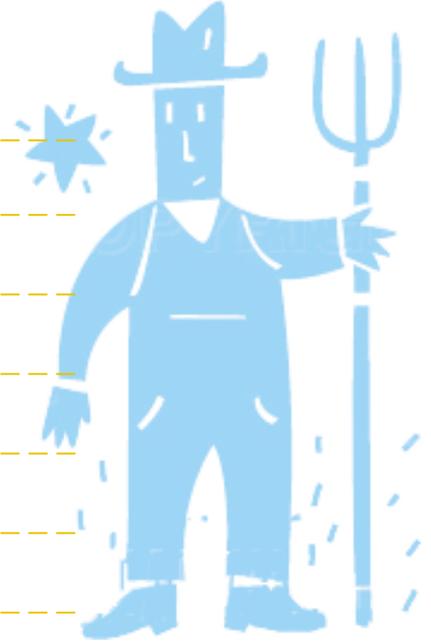
LRIDYOHTOSG _____

NRARHCE _____

LCETEEED IFOIFACL _____

VEEYOERN _____

E!M _____



Answers: FARMER, FISH BIOLOGIST, HYDROLOGIST, RANCHER, ELECTED OFFICIAL, EVERYONE, ME!



POSTAL CUSTOMER

TIME VALUE

ZONE 7 WATER AGENCY
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Regular meetings of the Board of Directors are held the third Wednesday of each month at 7 p.m. in the Board Room. Special meetings are held as needed. Meetings are open to the public.

WATERWAYS is published three times yearly by the Zone 7 Water Agency.

(925) 484-2600
www.zone7water.com