Consumer Confidence Report

2010

City of REDLANDS "A City That Works"

Redlands' Water Sources

The majority of water, over 40 percent, delivered to the City's consumers in 2009 was from groundwater sources pumped from the Bunker Hill groundwater basin. This water is produced through a system of wells, disinfected, and sent directly into the distribution system or into enclosed reservoirs.

Upon demand, water flows by gravity or is pumped from reservoirs into the distribution system. Other sources of water include the Santa Ana River which is treated at the City's Horace Hinckley surface water treatment plant, and Mill Creek which is treated at Henry Tate surface water treatment plant. These two water treatment plants treat both local surface water and purchased water delivered from Northern California via the California State Water Project to meet customer demands.

Tours

Groups are welcome to tour our treatment facilities in order to learn how drinking water is treated and delivered to our customers. For information on touring our facilities, please contact Bill Gane, Water Operations Manager, at (909) 798-7588, extension #1.

Please contact us if you have any questions regarding the information presented in this report.

City of Redlands
Municipal Utilities &
Engineering Department
PO Box 3005
35 Cajon Street, Suite 15A
Redlands, CA 92373
(909) 798-7698

THIS REPORT CONTAINS IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER. TRANSLATE IT OR SPEAK WITH SOMEONE WHO UNDERSTANDS IT.

ESTE INFORME CONTIENE INFORMACIÓN MUY IMPORTANTE SOBRE SU AGUA POTABLE. TRADÚZCALO O HABLE CON ALGUIEN QUE LO ENTIENDA BIEN.

www.redlandswater.org

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Water Source Protection

Redlands Municipal Utilities and Engineering Department is committed to protecting our water sources from possible contamination. Source water assessments have been completed for all of our drinking water supplies.

The assessments help to identify the vulnerability of drinking water supplies to contamination from typical human activities.

These assessments are intended to provide basic information necessary for us to develop programs to protect our drinking water supplies.

Possible contaminants can originate from: agricultural drainage, urban runoff, septic systems, sewer collection systems, junk/scrap/salvage operations, crop irrigation, underground storage tanks at automobile gas stations, and illegal dumping.

Anyone interested in receiving a copy of the source water assessment should contact Pat McKasy, Regulatory Compliance Officer-Water at (909) 798-7588 ext. 2.

You can do your part to protect our precious water sources by properly disposing of household hazardous wastes.

To find out how to properly dispose of hazardous waste so it does not contaminate groundwater, please phone our Customer Service Office at (909) 798-7529, or visit www.redlandssolidwaste.org

We welcome your comments regarding water issues in Redlands at our City Council Meetings held in the Council's Chambers at 35 Cajon Street in Redlands on the first and third Tuesdays of every month.

TERMS USED IN THIS REPORT

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the US Environmental Protection Agency (US EPA).

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

ND: Not detectable at testing limit.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

N/A: Not applicable

Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health, along with their monitoring, reporting and water treatment requirements.

Units of Measure:

Parts per million (ppm) or milligrams per liter (mg/L).
Parts per billion (ppb) or micrograms per liter (ug/L).
Parts per trillion (ppt) or nanograms per liter (ng/L).
Picocuries per liter (pCi/L): a measure of radiation.
Umhos/cm: A measure of conductivity in water.

Redlands Water: Water source site average for water supplied to customers.

Range of Detection: The range (lowest to highest) of detected constituents.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Notification Level (NL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that water system must follow.

From **January 1, 2009** to **December 31, 2009**, the City of Redlands conducted over 14,000 water quality tests from samples taken at various locations throughout the water system in accordance with state and federal laws. The following tables list only those contaminants that were detected. It is important to note, that the presence of these contaminants, as detected in the water, does not necessarily indicate that the water poses a health risk.

Primary Drinking Water Standards

MICROBIOLOGICAL CONSTITUENTS

CONSTITUENT	YEAR	MCL	PHG (MCLG)	REDLANDS WATER	RANGE	SOURCE
Total Coliform**	2009	5%	(0%)	< 1%	ND – 1.8%	Naturally present in the environment

** Results of all samples collected in the distribution system during any month shall be free of total coliform bacteria in 95 percent or more of the monthly samples. In the month of June 2009, there were two total coliform positive samples out of the 110 samples taken that month. Follow-up samples were negative for total coliform.

INORGANIC CONSTITUENTS

CONSTITUENT	YEAR	MCL (AL)	PHG (MCLG)	REDLANDS WATER	RANGE	SOURCE
Aluminum	2009	1 ppm	0.6 ppm	0.07 ppm	ND – 0.1 ppm	Erosion of natural deposits
Barium	2009	1 ppm	2.0 ppm	0.018 ppm	0.013-0.03 ppm	Erosion of natural deposits
Chromium	2008	50 ppb	(100) ppb	0.09 ppb	ND – 1.2 ppb	Erosion of natural deposits
Copper	2009	(1.3) ppm	0.3 ppm	0.0005 ppm	ND – 0.002 ppm	Erosion of natural deposits; internal corrosion of household plumbing; leaching from wood preservatives
Fluoride	2009	2.0 ppm	1.0 ppm	0.55 ppm	ND – 0.75 ppm	Erosion of natural deposits
Lead	2008	(15) ppb	0.2 ppb	0.11 ppb	ND – 0.96 ppb	Erosion of natural deposits; internal corrosion of household plumbing; discharges from industrial manufacturers
Nitrate as NO3	2009	45 ppm	45 ppm	13 ppm	1.3 – 31.0 ppm	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrate + Nitrite(as N)	2009	10 ppm	10 ppm	1.87 ppm	0.28 – 5.0 ppm	
Nitrate as Nitrogen	2009	10 ppm	10 ppm	2.8 ppm	ND – 6.9 ppm	
Perchlorate	2009	6 ppb	6 ppb	1.6 ppb	ND – 4.7 ppb	Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries. It usually gets into drinking water as a result of environmental contamination from historic aerospace or other industrial operations that used or use, store, or dispose of perchlorate and its salts.

SYNTHETIC ORGANIC CONSTITUENTS

CONSTITUENT	YEAR	MCL	PHG (MCLG)	REDLANDS WATER	RANGE	SOURCE
Dibromochloropropane (DBCP)	2009	200 ppt	1.7 ppt	2.8 ppt	ND – 30 ppt	Banned nematocide that still may be present in soils due to run-off/leaching from former use on soybeans, cotton, vineyards, tomatoes, and tree fruit.
Simazine	2008	4 ppb	4 ppb	0.01 ppb	ND – 0.06 ppb	Herbicide run-off

DISINFECTION BY-PRODUCTS, DISINFECTION RESIDUALS, DISINFECTION BY-PRODUCT PRECURSORS

CONSTITUENT	YEAR	MCL (MRDL) [TT]	PHG (MRDLG)	REDLANDS WATER	RANGE	SOURCE
Total Trihalomethanes	2009	80 ppb	N/A	30.9 ppb	ND – 100 ppb	By-product of drinking water disinfection
Haloacetic Acids	2009	60 ppb	N/A	20.9 ppb	ND – 46 ppb	By-product of drinking water disinfection
Chlorine	2009	(4) ppm	(4) ppm	0.68 ppm	0.03 – 1.9 ppm	Drinking water disinfectant added for treatment
Total Organic Carbon	2009	[TT]	N/A	1.1 ppm	0.46 – 2.2 ppm	Various natural and man-made sources

RADIOACTIVE CONSTITUENTS

CONSTITUENT	YEAR	MCL	PHG (MCLG)	REDLANDS WATER	RANGE	SOURCE
Gross Alpha	2009	15 pCi/l	(0)	6.1 pCi/l	3.1 – 9.1 pCi/l	Erosion of natural deposits
Gross Beta	2007	50 pCi/l	(0)	3.4 pCi/l	N/A ***	Erosion of natural deposits and man-made deposits
Total Tritium	2006	20,000 pCi/l	400 pCi/l	214 pCi/l	190-277 pCi/l	Erosion of natural deposits and man-made deposits
Radium 226 + 228	2006	5 pCi/l	(0)	0.93 pCi/l	0.8 - 1.1 pCi/l	Erosion of natural deposits
Radium 226	2006	5 pCi/l	0.05 pCi/l	0.97 pCi/l	0.25 – 1.16 pCi/l	Erosion of natural deposits
Radium 228	2008	5 pCi/l	0.019 pCi/l	0.7 pCi/l	ND – 0.8 pCi/l	Erosion of natural deposits
Strontium 90	2007	8 pCi/l	0.35 pCi/l	1.7 pCi/l	N/A ***	Decay of natural and man-made deposits
Uranium	2009	20 pCi/l	0.43 pCi/l	6.5 pCi/l	4.2 – 8.7 pCi/l	Erosion of natural deposits

VOLATILE ORGANIC CONSTITUENTS

CONSTITUENT	YEAR	MCL	PHG (MCLG)	REDLANDS WATER	RANGE	SOURCE
Trichlorotrifluoroethane	2008	1.2 ppm	4 ppm	0.003 ppm	ND – 0.023 ppm	Discharge from metal degreasing sites and other factories; dry-cleaning solvent; refrigerant

*** *No range to report - only one sample tested.*

Secondary Drinking Water Standards (Aesthetic Standards) (a)

CONSTITUENT	YEAR	SECONDARY MCL	REDLANDS WATER	RANGE	SOURCE
Aluminum	2009	200 ppb	73 ppb	ND – 100 ppb	Erosion of natural deposits; residual from some surface water treatment processes
Chloride	2009	500 ppm	25.5 ppm	2.9 – 63.3 ppm	Run-off; erosion of natural deposits; seawater influence
Color	2009	15 Units	0.12 Unit	ND – 3 Units	Naturally occurring organic materials
Copper	2009	1 ppm	0.0005 ppm	ND – 0.002 ppm	Erosion of natural deposits; internal corrosion of household plumbing; leaching from wood preservatives
Iron	2009	300 ppb	20 ppb	ND– 49.0 ppb	Leaching from natural deposits; industrial wastes
Manganese	2009	50 ppb	0.9 ppb	ND – 3.7 ppb	Leaching from natural deposits.
MBAS (Foaming Agents)	2009	500 ppb	0.0028 ppb	ND – 0.03 ppb	Municipal and industrial waste discharges
Odor - Threshold	2009	3 Units	1.3 Units	1 – 3 Units	Naturally-occurring organic materials
Specific Conductance	2009	1,600 umhos/ cm	350 umhos/ cm	280 – 450 umhos/ cm	Substances that form ions when in water; seawater influence
Sulfate	2009	500 ppm	32 ppm	25 – 44 ppm	Run-off/leaching from natural deposits; industrial wastes
Total Dissolved Solids	2009	1,000 ppm	208 ppm	160 – 260 ppm	Run-off/leaching from natural deposits

(a) There are no PHGs, MCLGs, or mandatory standard health effects language for these constituents because secondary MCLs are set on the basis of aesthetics.

Sampling Results For Sodium and Hardness

CONSTITUENT	YEAR	MCL	PHG (MCLG)	REDLANDS WATER	RANGE	SOURCE
Sodium	2009	N/A	N/A	20 ppm	7 – 48 ppm	Generally found in ground and surface water
Hardness	2009	N/A	N/A	120 ppm	100– 150 ppm	Generally found in ground and surface water

Additional Monitoring (State Regulated & Unregulated Constituents with no MCLs)

CONSTITUENT	YEAR	NOTIFICATION LEVEL	REDLANDS WATER	RANGE
Alkalinity	2009	N/A	96 ppm	74 - 133 ppm
Bicarbonate	2009	N/A	131 ppm	110 – 162 ppm
Boron	2008	1,000 ppb	10 ppb	ND – 57 ppb
Bromide	2005	N/A	50 ppb	ND – 120 ppb
Calcium	2009	N/A	35 ppm	29 – 46 ppm
Hexavalent Chromium	2008	N/A	0.26 ppb	0.14 – 0.38 ppb
Langelier Index at 25C	2009	N/A	0.1	ND – 0.2
Magnesium	2009	N/A	7.9 ppm	6.2 – 9.3 ppm
pH	2009	N/A	7.87	7.8 – 7.9
Potassium	2009	N/A	2.4 ppm	1.7 – 3.2 ppm
Radon	2007	N/A	748 pCi/L	682 – 793 pCi/L
Silica	2005	N/A	17 ppm	15 – 23 ppm
Vanadium	2005	50 ppb	4 ppb	ND – 12 ppb

INFORMATION ABOUT RADON

Radon is a naturally occurring gas formed from the normal radioactive decay of uranium. In 2007 testing, radon was detected in our finished water supply. There are no regulatory limits prescribed for radon levels in drinking water – the pathway to radon exposure occurs primarily through its presence in the air. Exposure over a long period of time to air containing radon may cause adverse health effects. If you are concerned about radon in your home, testing is inexpensive and easy. For more information, call your State radon program (1-800-745-7236), the National Safe Council's Radon Hotline (1-800-SOS-RADON), or the EPA Safe Drinking Water Act Hotline (1-800-426-4791).

** The State allows monitoring for some contaminants less than once per year because these contaminants do not change frequently. Some of these data, though representative, are more than one year old.*

Important Facts From the US EPA About Drinking Water

Sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in untreated source water may include:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, that can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application, and septic systems.
- Radioactive contaminants, which can be naturally occurring or the result of oil and gas production, and mining activities.

In order to ensure water is safe to drink, the United States Environmental Protection Agency (US EPA) and the California Department of Public Health (DPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DPH regulations also establish limits for contaminants in bottled water to provide the same protection for public health.

Additional Information About Drinking Water

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the US EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as people with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly persons, and infants can be particularly at risk from infections. For these people, advice should be sought about drinking water from their health care providers. US EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Air Bubbles in the Water

Tap water that appears cloudy could simply have air (bubbles) in the water. Some well sources produce water with dissolved air that remains pressurized in the distribution pipelines until reaching the consumer. When the water flows from the faucet, the air is released and may form tiny air bubbles. After filling a glass, these bubbles will slowly rise and disappear.

Sampling Results Showing Treatment of Surface Water Sources

Turbidity is a measure of the cloudiness of water. We monitor turbidity because it is a good indicator of the effectiveness of our filtration system. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

Treatment Technique	Conventional Filtration
Lowest Monthly % of Samples Meeting TPS No. 1	100%
Highest single turbidity measurement during 2009	0.55
Number of Violations to Any Surface Water Treatment Regulations	None

Turbidity Performance Standard No. 1 (TPS No. 1):

The turbidity level of the combined filter effluent shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1.0 NTU for more than one hour. Additionally, the turbidity level of the combined filter effluent shall not exceed 1.0 NTU for more than eight consecutive hours while the plant is operating.

Lead and Copper Analysis Results

The Municipal Utilities and Engineering Department performs an analysis of lead and copper in the water of residential homes in our service area every three years. The last round of testing was conducted in September of 2008. When water comes into contact with residential plumbing containing lead and/or copper, they can leach into the household water system. Of a random sampling of thirty residences tested, none exceeded the Regulatory Action Level (AL) for lead or copper. The 90th percentile value for lead in the water samples was 5.7 parts per billion as compared to an AL of 15 parts per billion for lead, while the 90th percentile for the copper samples was 0.27 parts per million, as compared to an AL of 1.3 parts per million for copper.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Redlands is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using the water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at http://www.epa.gov/safewater/lead.

The next round of voluntary residential testing will take place between the months of June – September 2011. A component of the lead/copper program requires sampling from the same homes each sampling round, therefore the same customers that volunteered in 2008 will be sent letters again in 2011 asking them to volunteer to take a sample from their home. All volunteers will be given a $15.00 credit on their water bill following the analysis of the samples, along with a copy of the sample results from their home. If not enough people volunteer, other customers whose homes meet the EPA's criteria for a sampling site will be sent letters asking them to volunteer to collect samples at their homes. They also will be offered the $15.00 credit.

Water Info and Saving Guide

Be Water Wise!

Fresh, clean drinking water is yours to use whenever you need to. While our groundwater and surface water resources are renewable, depending on weather conditions, wise water use helps to ensure that we'll have an adequate supply of high quality water. Remember to be water wise whenever and wherever you can.

Did You Know?

- There is about the same amount of water on Earth now as there was millions of years ago.
- Nearly 97 percent of all the world's water is salty or otherwise undrinkable. Another 2 percent is locked in ice caps and glaciers. That leaves 1 percent for all our needs.
- Water regulates the Earth's temperature. It also regulates the temperature of the human body.
- More water is used in the bathroom than any other place inside the home.
- A dripping faucet can waste up to 2,000 gallons of water a year.

You Can Help Conserve Our Water Resources

- Turn off the faucet in your bathroom while you brush your teeth.
- Take shorter showers. (Get a timer and time yourself.)
- Don't let the water run constantly while you're washing or rinsing dishes.
- Fill a pitcher with tap water and put it in the fridge, rather than running the water every time you want a cold drink.
- Clean sidewalks and driveways with a broom—not the water hose.
- Water your lawn in the early morning to avoid evaporation.
- Repair dripping faucets.
- Place a layer of mulch around trees and plants to retain water.

Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.

Monitoring Requirements Not Met for City of Redlands

Our water system failed to monitor as required for drinking water standards during the past year and, therefore, was in violation of the regulations. Even though this failure was not an emergency, as our customers, you have a right to know what you should do, what happened, and what we did to correct this situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the month of June 2009, we tested 110 samples for Total Coliform bacteria. Out of the 110 samples, 2 were positive for Total Coliform bacteria. However, we did not test the correct number of follow-up samples and therefore, cannot be sure of the quality of our drinking water during that time. We collected two follow-up samples rather than the required six samples. The results of the two samples that were collected were negative for any Total Coliform bacteria. We feel confident that the quality of the water at that time, based on the two samples that were collected and which met all state and federal health standards, was safe for drinking.*

What should I do?

- There is nothing you need to do at this time.
- The table below lists the contaminant(s) we did not properly test for during the last year, how many samples we are required to take and how often, how many samples we took, when samples should have been taken, and the date on which follow-up samples were taken.

Contaminant	*Required Sampling Frequency*	*Number of Samples Taken*	*When All Samples Should Have Been Taken*	*When Samples Were or Will Be Taken*
Total Coliform Bacteria	Three follow-up samples for every routine positive sample.	2	June 5, 2009	July 7, 2009

- If you have health issues concerning the consumption of this water, you may wish to consult your doctor.

What happened? What is being done?

We became aware that we failed to collect the correct number of samples in July 2009, and we immediately collected the remaining four samples and submitted them to our contract laboratory. All of the sample results were negative for Total Coliform bacteria.

For more information, please contact Patricia McKasy at 909-798-7588, ext. 2 or at 35 Cajon Street, Suite 15-A, Redlands, CA 92373.

**Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.*

This notice is being sent to you by the City of Redlands Municipal Utilities and Engineering Department. State Water System ID#: _CA3610037_.

Date distributed: _June 28, 2010._ _____

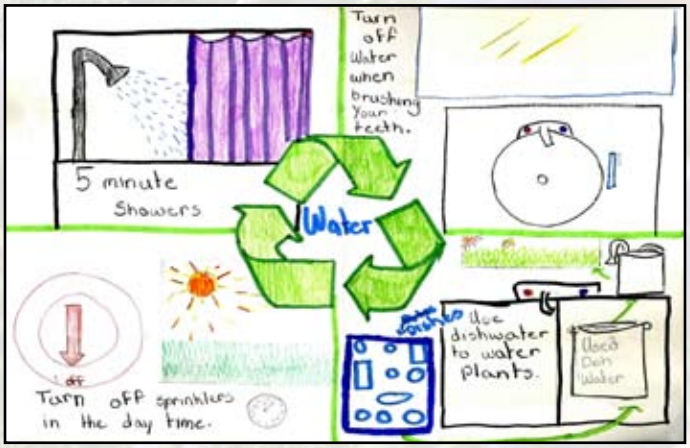
City of REDLANDS
PO Box 3005
Redlands, CA 92373

POSTAL CUSTOMER

Art, Education, Water Conservation

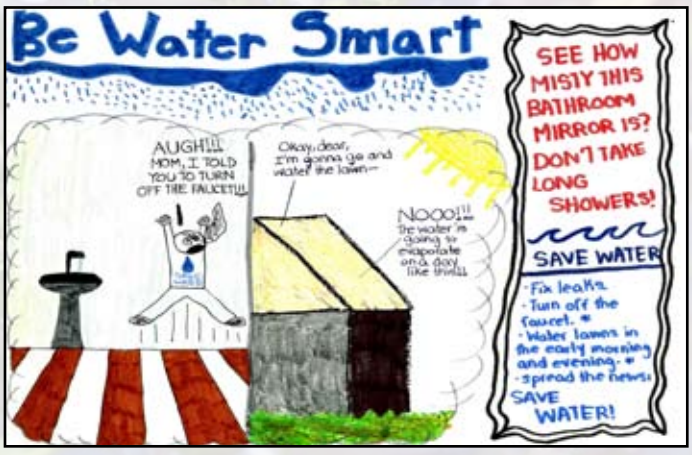
For the past two years the Municipal Utilities & Engineering Department has held a water conservation poster art contest that involves our local elementary school students. Each year has produced wonderful examples of art and water awareness in our community. Below are the winners of the past two years' contests. We would like to thank all of the participants for their wonderful artwork and commitment to being water smart.

2010 4th/5th Grade Winner
Angel O.



2010 1st-3rd Grade Winner
Baylee G.

2009 4th/5th Grade Winner
Heidi L.



2009 1st-3rd Grade Winner
Jared O.