

# Water Quality Annual Report 2012



# **Fresno's Water** – It's Clean, Healthy, and Moving Towards Sustainability

The Water Division manages and operates the City of Fresno's water system. The City purchases, treats, and delivers an average of 125 million gallons of water to about 500,000 urban residential, commercial, and industrial customers in over 114 square miles of the City, and many County Islands. This safe, high-quality water meets all state and federal drinking water standards. The Water Division operates and maintains a surface water treatment facility, pipelines, pump stations, fire hydrants, storage reservoirs, wells, and water meters.

### Where Does Our Water Come From?

For Fresno customers, there are two sources of drinking water. One is derived from the Fresno Sole Source Aquifer, a large underground water system that supplies many communities in the San Joaquin Valley. The City operates approximately 260 wells that draw from this aquifer, which can lower the water table, or depth where groundwater can be found. In fact, over the past 80 years, the water table has dropped

> more than 100 feet. For this reason, Fresno has an aggressive recharge program that is continually finding new places and methods to

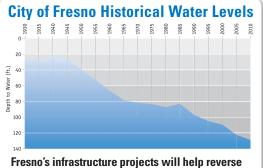
conduct ground water recharge. The second source is surface water delivered via Fresno Irrigation District canals. This water comes from either Millerton or Pine Flat lakes, located in the foothills

east of Fresno. Surface water is treated to drinking water standards at Fresno's state-of-the-art, 30 million gallons per day Surface Water

Treatment Facility in northeast Fresno. The imminent completion of the 4 million gallons per day T-3 Surface Water Treatment and Storage Facility will further supplement the supply.

### An Eye Towards the Future

In order to obtain a more balanced water diet and reverse the trend of a declining water table once and for all, it is necessary that a number of capital projects be implemented. A multi-pronged approach consisting of building a Surface Water Treatment Facility in southeast Fresno,



Fresno's infrastructure projects will help reverse the trend of our declining water table. increasing the number of groundwater recharge basins, improving well efficiency, and replacing aging pipes (some exceeding 80 years of age) is essential

to the future viability of Fresno's water supply. These capital projects, especially the construction of the SWTF, will decrease the reliance on underground wells and mitigate the threat from proposed federal regulations for TCP and Cr-6 contaminants that could impact dozens of City water production wells, especially in southeast Fresno.

## What Conservation Can Do For You

Of course, one of the most valuable water sources is water that is not actually used. Water conservation is the beneficial reduction in water use, waste, and loss. Conservation is the most economical and environmentally protective resource management tool, helping Fresno meet the many challenges of water supply.

# What's in This Report?

This Annual Water Quality Report, prepared in cooperation with the California Department of Public Health, provides important information about Fresno's water supply, water quality, and water delivery system. Test results for Fresno's 2012 Water Quality Monitoring Program are summarized on the following pages. It is important to read the messages regarding various water quality issues from the U.S. Environmental Protection Agency (USEPA) and from your City of Fresno Water Division.

Also included are results from unregulated contaminant monitoring that helps EPA and the California Department of Public Health to determine where certain contaminants occur and whether the contaminants need to be regulated.

The following tables list all the drinking water contaminants that were tested for during the 2012 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2012. The State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data contained in this report, though representative of the water quality, is more than one year old.

## **Facts About Drinking Water Standards**

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791). Under the 1974 Safe Drinking Water Act, the USEPA and the California Department of Public Health were charged with the responsibility of setting and implementing safe drinking water standards. Congress reauthorized this act in 1996. One hundred compounds are now regulated; another 48 are subject to monitoring. Fortunately, only a small number have ever been detected in Fresno's water supply.

## What happens in Fresno if a well exceeds EPA or DHS standards?

In order to ensure that tap water is safe to drink, the USEPA and the California Department of Public Health (Department) prescribe regulations that limit the amount

of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

If a well violates standards, it would be removed from service and an alternate water supply is provided. In the event a well exceeds standards but must stay in service, customers who receive water from that well would be directly notified by mail or by hand-delivered flyers.

## **How Water Quality Affects People**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders. some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/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). Nitrate: Nitrate in drinking water at levels above 45 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

Arsenic: While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The USEPA continues to research

the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Lead: 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 Fresno 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 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 or at http://www.epa. gov/safewater/lead.

Fluoride: Fluoride in small amounts has been found to be a beneficial additive to drinking water that aids in the prevention of tooth decay. It is most beneficial when administered to very young children and many dentists prescribe fluoride drops for their patients. In 2012, fluoride was added to the drinking water in several Fresno County districts that lay within the City of Fresno service area. The fluoride levels in the treated water are maintained within a range of 700 to 1,300 ug/L or ppb, as required by Department regulations. Children living in these districts should avoid taking fluoride drops. While all of the fluoridated districts exist north of Shaw Ave., not all districts north of Shaw Ave. are fluoridated. If you are unsure as to whether you received fluoride in your tap water, please contact the water division or your dentist. Additional information is available at the Department of Public Health's fluoridation website, where you may obtain more information about fluoridation, oral health, and current issues. www.cdph.ca.gov/certlic/drinkingwater/Pages/ Fluoridation.aspx. Special Notice: Effective June 1st 2013, the addition of fluoride to drinking water was discontinued in all water provided by the City of Fresno.

# We're here to help!

You can contact the City of Fresno Water Division by phone, mail or e-mail.

#### PHONE

Water Division 621-5300 Water Quality 621-5365 Water Conservation 621-5480

MAIL 1910 E. University Ave. Fresno, CA 93703-2988 E-MAIL

City of Fresno Water Division information@water.fresno.gov www.fresno.gov/water

#### **OPPORTUNITIES FOR PUBLIC DISCUSSION**

The public is invited to discuss water quality and other water issues during monthly meetings held at the Water Division. For more information, contact us at 621-5305.

#### **SPEAKER'S BUREAU & TOURS**

Need a speaker for your school, community group, or service club about water issues? Tours and classroom presentations are also available. Call us at 621-5480.

# **California Drinking Water Source Assessment and Protection Program**

The City of Fresno Water Division and the California Department of Public Health, CaDPH, has completed the California Drinking Water Source Assessment and Protection (DWSAP) Program for water wells operated by the Fresno Water Division. The complete report prepared in 2003 is available for viewing at the Water Division or the Fresno CaDPH office. Please contact the Water Division at 621-5300 or CaDPH at 447-3300 if you are interested in more information regarding this report.

The City operates approximately 260 wells throughout Fresno's 115 sq mile area. Given the size and complexity of our system, the DWSAP report is a very large document and even a brief summary would be difficult to include in this Consumer Confidence report. However, two summary data tables are available on the City's website at www. fresno.gov. In the search box type Water Quality Report and you will automatically be routed to the linking page containing the reports. The multipurpose goal of the DWSAP is to identify ways communities can protect the water supplies, manage their water resources, improve drinking water quality, inform their citizens of known contaminants, identify known activities and locations that can threaten their supply, and meet regulatory requirements.

As an example, the following is a partial list of contaminating activities and sources which can affect Fresno's drinking water:

Airports-Maintenance/Fueling Areas, Apartments and Condominiums, Automobile-Body Shops, Automobile-Gas Stations, Automobile-Repair Shops, Boat Services/ Repair/Refinishing, Chemical/Petroleum Processing/Storage, Crops, Irrigated, Dry Cleaners, Electrical/Electronic Manufacturing, Fertilizer, Pesticide/Herbicide Application, Golf Courses, Historic Gas Stations, Historic Waste Dumps/Landfills, Home Manufacturing, Hospitals, High-Density Housing, Junk/Scrap/ Salvage Yards, Known Contaminant Plumes, Landfills/Dumps, Machine Shops, Metal Plating/ Finishing/Fabricating, Medical/Dental Offices/ Clinics, Military Installations, Motor Pools, Office Buildings/Complexes, Parks, Pesticide/ Fertilizer/Petroleum Storage & Transfer Areas, Photo Processing/Printing, Plastics/Synthetics Producers, Railroad Yards/Maintenance/Fueling Areas, Rental Yards, Schools, Septic Systems-High Density, Sewer Collection Systems, Transportation Corridors-Railroads, Underground Storage Tanks-Confirmed Leaking Tanks, Utility Stations-Maintenance Areas, Veterinary Offices/ Clinics, Wastewater Treatment Plants, Wells-Agriculture/Irrigation, Wells-Water Supply.

More information is included in the summary which identifies the affected well(s) and associated activities.

The 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 source water 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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides** that may come from a variety of sources such as agriculture, urban stormwater 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 stormwater runoff, agricultural application, and septic systems.
- Radioactive contaminants that can be naturally-occurring or be the result of oil and gas production and mining activities.

# **Terms and Abbreviations**

- n/a: not applicable
- NTU: Nephelometric Turbidity Unit (a measure of light)
- nd: not detectable at reporting limits.
- ng/L: nanograms per liter or parts per trillion.
- ug/L: micrograms per liter or parts per billion
- mg/L: milligrams per liter or parts per million
- pCi/L: picocuries per liter (a measure of radiation)

**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 U.S. Environmental Protection Agency.

**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.

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

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that 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. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

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



Chemical Table	MCL	PHG (MCLG)	Fresno Average	Range of Detection's	MCL Violation	Last Sampled	Typical Source of Contaminant		
Volatile Organic Contaminants							·		
cis-1,2-Dichloroethylene (ug/L)	6	100	0.06	0 - 2.8	NO	2012	Discharge from industrial chemical factories; major biodegradation byproduct of TCE and PCE groundwater contamination		
trans-1,2-Dichloroethylene (ug/L)	10	60	0.12	0 - 2.8	NO	2012	Discharge from industrial chemical factories; minor biodegradation byproduct of TCE and PCE groundwater contamination		
Tetrachloroethylene (PCE) (ug/L)	5	0.06	0.31	0 - 4.4	NO	2012	Discharge from factories, drycleaners, and auto shops (metal degreaser)		
richloroethylene (TCE) (ug/L)	5	1.7	0.88	0 - 3.3	NO	2012	Discharge from metal degreasing sites and other factories		
Synthetic Organic Contaminants									
Dibromochloropropane (DBCP) (ng/L) (1)	200	1.7	45.1	0 - 220	NO	2012	Banned nematocide that may still be present in soils due to runoff/ leaching from former use on soybeans, cotton, vineyards, tomatoes, and tree fruit		
Ethylene Dibromide (EDB) (ng/L)	50	10	0.9	0 - 44	NO	2012	Discharge from petroleum refineries; underground gas tank leaks; banned nematocide that may still be present in soils due to runoff and leaching from grain and fruit crops		
norganic Contaminants									
Aluminum (AL) (ug/L)	1	0.6	0.000	nd - 0.09	NO	2011	Erosion of natural deposits; residue from some surface water treatment plants		
Arsenic (As) (ug/L)	10	0.004	0.8	nd - 5.4	NO	2011	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes		
Barium (Ba) (mg/L)	1	2	0.040	nd- 0.22	NO	2011	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits		
Chromium (Total Cr) (ug/L)	50	(100)	2.440	nd - 12	NO	2011	Discharge from steel and pulp mills and chrome plating; erosion of natural deposit		
Cyanide (ug/L)	150	150	0.000	nd06	NO	2011	Discharge from steel/metal, plastic and fertalizer factories		
Fluoride (ug/L)	2	1	0	nd - 1.2	NO	2011	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories		
Nitrate (NO3) (mg/L) (2)	45	45	22	0 - 47	NO	2012	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits		
Perchlorate (ug/L) (3)	6	6	0	nd - 9.2	NO	2011	Historic aerospace or industrial operations associated with rocket propellant, fireworks, explosives, flares, matches and a varity of industries.		
Radionuclides (4)									
Gross Alpha (pCi/L)	15	n/a	2.51	-0.62 - 9.79	NO	2011	Erosion of natural deposits		
Radium 226 (pCi/L)	3	n/a	0.72	-0.12 - 3.84	NO	2007	Erosion of natural deposits		
Radium 228 (pCi/L)	5	.019	0.51	0.043074	NO	2011	Erosion of natural deposits		
Jranium (pCi/L)	20	0.5	5.89	nd - 16	NO	2007	Erosion of natural deposits		
Unregulated Contaminants (ICR, UCMR & N	/lisc)			·			·		
DCPA Diacid + Monoacid		n/a	0.969	nd - 4.7	n/a	2004	We are required by regulations to monitor for certain unregulated contaminants.		
Dichlorodifluoromethane (Freon 12)	n/a n/a		0.780	nd - 34	n/a	2011	This is helpful to the USEPA and CDHS for tracking the location of contaminant and whether there is a need for stricter regulations. Several contaminants indic detected values with a "<" symbol meaning less than. There are two possible		
Trichloropropane (1,2,3-TCP) (5)			0.004	nd - 0.18	n/a	2011			
ert-butly Alcohol (TBA)		n/a	0.1	nd - 3.2	n/a	2011	reasons for this. First, the Detection Limit for Reporting, DLR, has not been established by EPA or CDHS. Second, for various reasons, the analytical equipmer is unable to quantify the value below the stated "less than" value but analysis indicates the contaminant is present. For either reason, the concentration cannot be quantified and the City must assume that a "Fresno Average" is not applicable for this report.		
Disinfection Byproducts, Disinfectant Resi	duals, an	d Disinfectio	on Byproduct P	recursors					
Total Trihalomethanes (TTHM) (ug/L)	80	n/a	3.90	nd - 13	NO	2012	Byproduct of drinking water chlorination		
Haloacetic Acids (HAA5) (ug/L)	60	n/a	1.40	nd - 7	NO	2012	Byproduct of drinking water chlorination		
Chlorine (NAOCL) (mg/L)	4	4	0.79	nd - 3.0	NO	2012	Drinking water disinfectant added for treatment		

(1) Dibromochloropropane (DBCP) PS 134 is located near Maple and Alluvial. This well is known to contain DBCP above the detection limit for reporting and is monitored monthly. While the annual average for this well is 0.10 ug/L, a single result of 0.22 ug/L was detected in February 2012. Determination as to whether a well exceeds an MCL's for non-acute contaminants such as DBCP is based on a running average for a prescribed period of time. Therefore a well may have several results above the MCL yet still meet drinking water standards. Some people who use water containing DBCP in excess of the MCL over many years may experience reproductive problems and may have an increased risk of getting cancer.

(2) Nitrate, PS 84 located near Olive and Minnewawa contains elevated nitrate levels and has been closely monitored during 2012 with samples being collected weekly. While results were close to the MCL, they did not exceed the MCL until a sample collected in late October showed a result of 47 mg/L. By previous agreement with California Department of Public Health, the well would be removed from service as soon as we were notified of a result at or above the MCL. This well remains offline pending replacement or treatment options. Nitrate levels exceeding the MCL can cause serious health conditions for infants below six months of age. Pregnant women and others with certain medical conditions are also at risk. Please refer to other information in this report concerning Nitrate.

(3) Perchlorate, PS 187 located in NE Fresno near Nees and Chestnut had a single detection that exceeded the MCL. This was unusual and two follow-up samples were collected with no detection of the chemical. Perchlorate has been shown to interfere with uptake of iodide by the thyroid gland, and to thereby reduce the production of thyroid hormones, leading to adverse affects associated with inadequate hormone levels. Thyroid hormones are needed for normal prenatal growth and development of the fetus, as well as for normal growth and development in the infant and child. In adults, thyroid hormones are needed for normal metabolism and mental function.

(4) RADIONUCLIDES, including Gross Alpha, Uranium, Radium 226 and Radium 228 are sampled on various schedules depending upon the results for previous samples. The well may be sampled as often as every three years but no longer than nine years. Compliance is based on the average of four quarters. Several well sites had samples that exceeded the MCL for a specific sample date. Some people who drink water containing these constituents over many years may have an increased risk of getting cancer.

(5) Trichloropropane (1,2,3-TCP), The USEPA periodically requires utilities to conduct monitoring of unregulated contaminants such as 1,2,3-TCP which has been detected in 30 Fresno wells. The State of California has created a regulatory notification level of 0.005 ppb which is also the detection limit for reporting. At the request of DHS in 2004, we removed from service well site 63, located near McKinley and Chestnut, which exceeds 100 times the action level. The City continues monitoring of the affected wells while the California Department of Public Health continues development of stricter regulations. Some people who use water containing 1,2,3-trichloropropane in excess of the notification level over many years may have an increased risk of getting cancer, based on studies in laboratory animals.

Table 2: MICRO BIOLOGICAL CONTAMINANTS										
Over 220 bacteriological samples are collected every month in Fresno's distribution system. In addition, over 300 bacteriological samples are collected from wells and treatment sites.										
Contaminant	Highest No. of Detection's	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria					
Total Coliform Bacteria	3 of 303 or 0.99%	0	5%	(0)	Naturally present in the environment					
E.coli	0	0	A routine sample is positive for E.coli and a repeat sample is positive for total, fecal or E.coli bacteria	(0)	Human or animal fecal waste					

Table 3: LEAD AND COPPER									
Lead and Copper samples are collected from wells, the distribution system and from inside residences.									
No. of Samples 90th Percentile No. of Sites Exceeding   Collected Level Detected Action Level			Action Level	MCLG	Typical Source of Contaminant				
Lead (ug/L) (Sampled in 2012)	54	0	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits			
Copper mg/L) (Sampled in 2012)	54	0.19	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives			

### Table 4: SECONDARY STANDARDS CONTAMINANTS LIST

Secondary standards are based on aesthetic factors (taste, appearance and odor, etc.) and are not health related.								
Inorganic Contaminants	MCL	Fresno Average	Range of Detection's	SMCL Violation	Last Sampled	Typical Source of Contaminant		
Aluminum (ug/L)	200	0.400	nd - 90	NO	2011	Erosion of natural deposits; residual from some surface water treatment processes		
Apparent Color (Unfiltered) (6)	15	0.42	nd - 35	NO	2011	Naturally-occurring organic materials		
Chloride (CI) (mg/L)	500	10	nd - 48	NO	2011	Runoff/leaching from natural deposits; seawater influence		
Copper (Cu) (mg/L)	1	0.030	nd095	NO	2011	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives		
Iron (Fe) (ug/L)	300	0.04	nd - 1.5	NO	2011	Leaching from natural deposits; industrial wastes		
Manganese (Mn) (ug/L)	50	0.01	nd - 0.01	NO	2012	Leaching from natural deposits		
Sodium (Na) (mg/L)	n/a	21	4 - 65	NO	2011			
Specific Conductance (E.C.) (umho/cm+)	1600	331	90 - 920	NO	2011	Substances that form ions when in water; seawater influence		
Sulfate (SO4) (mg/L)	500	11	nd - 74	NO	2011	Runoff/leaching from natural deposits; industrial wastes		
Total Dissolved Solids (TDS) (mg/L)	1000	229	99 - 560	NO	2011	Runoff/leaching from natural deposits		
Total Hardness (as CaCO3) (mg/L)	n/a	121	30 - 380	NO	2011			
Turbidity (Lab) (units) (7)	5	0.15	nd - 6.4	NO	2011	Soil runoff		
Zinc (Zn) (mg/L)	5	0.000	nd05	NO	2011	Runoff/leaching from natural deposits; industrial wastes		

(6) Apparent Color, Four well sites had initial samples that exceeded the Secondary MCL. Results from follow-up testing at all wells were non-detectable indicating that the problem was associated with the well itself and not the water.

(7) Turbidity (Lab), PS 22A located in SW Fresno near Stanislaus and Fwy 99 had an initial turbidity result that exceeded the Secondary MCL. Follow-up testing results were nondetectable.

Table 5: TURBIDITY IN NORTH EAST FRESNO RELATED TO SURFACE WATER TREATMENT PLANT OPERATIONS									
	MCL MCLG Level Found Range Sample Date Violation Typical Source								
Turbidity (NTU)	TT = 1 NTU	2/2	0.200	n/a	31-Jan-12	n/a	Soil runoff		
	TT = 95% of samples <0.3 NTU	n/a	100%		Continuous	n/a			
Turbidity is a measurement of the cloudiness of the water determined by the ratio of the intensity of light scattered by the sample to the intensity of incident light. We monitor it because it is a nond indicator of the effectiveness of									

Turbidity is a measurement of the cloudiness of the water determined by the ratio of the intensity of light scattered by the sample to the intensity of incident light. We monitor it because it is a good indicator of the effectiveness of our filtration system.

# **NOTICE OF VIOLATION**

The monthly total organic carbon and bromate samples for the Surface Water Treatment Facility in NE Fresno for February 2013 were missed. The presence of high levels of total organic carbon in drinking water could lead to formation of disinfection byproducts; trihalomethanes (THM) or haloacetic acids (HAA). Some people who drink water containing THM, HAA, or bromate in excess of the MCL over many years may have an increased risk of getting cancer. Per regular sampling, THM and HAA levels are well below the MCL as are all bromate levels before and after the sample that was missed in February. The following notice is provided regarding this monitoring violation:

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 February 2013, we did not monitor or test for total organic carbon in the raw and treated water and therefore cannot be sure of the quality of the drinking water during that time. Additionally, we did not test for bromate and therefore cannot be sure of the quality of drinking water during that time.

# **CONSERVATION** A Smarter Way to Plant Out Your Garden

Planning a new landscape project? Want to know which plants help to conserve water and still look beautiful? Fresno has established a water-wise gardening website that offers tons of water-saving tips to do just that. The informative site, which features examples of local award-winning landscapes sure to inspire creativity in your own garden,

lists a variety of plants, trees, and shrubs that will thrive in this region with minimal water.

For more traditional help in creating a drought-tolerant garden, call the City of Fresno

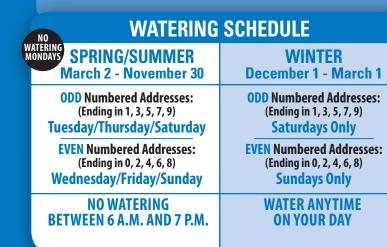
# **Other Ways To Help:**

Summer is a heavy water-use time. You can help alleviate the burden on our water system by following these simple guidelines.

**Timing it Right** If setting your automatic watering timer

is giving you trouble, the Department of Public Utilities Water Division can help! As a courtesy

to our customers, we will come to your home and show you how to adjust your automatic water timer FOR FREE. By having your automatic water timer set correctly, you'll save both energy and water.



Water Conservation Program to get a FREE brochure listing many of the same native plant species that grow well in

our Central California climate.

Visit www.fresno. watersavingplants. com for your smarter online water-wise

experience or



call 621-5480 for your free brochures.

# **Keep Odd Hours**



A SEAM

If you prefer to set the timer yourself, remember to set it "off the hour" (3:45 a.m., 4:37 a.m., 5:11 a.m.) to alleviate the heavy burden put on our water supply at "on the hour" times.

**Planning to Drain Your Pool?** Call 621-5480 to obtain a pool drain permit.

Report Water Waste Call 621-5480

# Money, Money, Money – Back

Save water and money when you purchase a new high-efficiency clothes washer or toilet! First,

> get your rebate forms by calling 621-5480 or by downloading them from the City of Fresno website (www.fresno.gov/ water).

# Incredible Water Statistics

In 2012, the Department of Public Utilities Water Division...

• Supplied an average of 125 million gallons of water per day

- Serviced more than 130,000 water customer accounts
  - Operated approximately 260 active pump stations with a high-tech production and distributed control system
  - Managed more than 200 acres of recharge basins
- Maintained nearly 1,800 miles of water main
- Operated a 30 million gallon per day (MGD) Surface Water Treatment Facility in northeast Fresno

... to supply nearly 46 billion gallons of safe, reliable, and affordable water to Fresno residents...



WALLY

# **Department of Public Utilities**

1910 EAST UNIVERSITY | FRESNO, CA 93703-2988

#### A translation of this report in Spanish, Hmong, and Vietnamese can be requested by calling 621-5365.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien. Daimntawv tshaj tawm no muaj lus tseemceeb txog koj cov dej haus. Tshab txhais nws, los yog tham nrog tej tug neeg uas totaub txog nws. Chi ti t này th t quan tr ng, xin nh ngu i d ch cho quý v.