



Water Quality Annual Report 2013



Preparation is the Name of the Game:

Fresno's Been Working Towards Drought Management for Years

The City of Fresno 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.

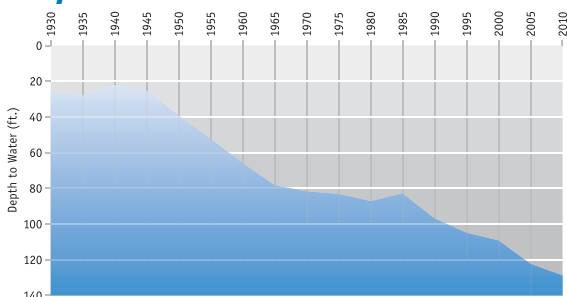
You Don't Need Clouds to Find a Silver Lining

The good news is that the City has been preparing for these circumstances for years. It's the reason we developed the Metropolitan Water Resources Management Plan – a systematic approach that utilizes groundwater, treated surface water, and intentional recharge – along with continued water conservation. This plan allows for the replenishing of our groundwater in years when surface water is plentiful so we can count on a steady water supply, even during periods of drought.

The City has also promoted water conservation messaging through numerous outreach efforts, including Water Conservation Program classroom presentations, outreach educational information, speaker's bureau presentations, and water tours. In addition, the City has long maintained strict watering schedules, provided representatives to help individual homeowners reduce water use, and provided a hotline that allowed residents to report water waste.

Even though we can't force rain to fall, by working together, we can continue to create a reliable water supply, now and in the future.

City of Fresno Historical Water Levels



Fresno's infrastructure projects will help reverse the trend of our declining water table.

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.



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.

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 2013 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 2013 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, 2013. 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 United States Environmental Protection Agency 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 DPH standards?

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State 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. 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. Those who are immunocompromised, such as people with cancer undergoing chemotherapy, people 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 U.S. Environmental Protection Agency 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. Fluoride is 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 are receiving fluoride in you tap water, please contact the water division or your dentist. Additional information is available at the Public Health Department'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.

NOTE: The City of Fresno discontinued all fluoridation activities at all locations in May 2013 due to several operational and distribution considerations.

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

City of Fresno Water Division

1910 E. University Ave.

Fresno, CA 93703-2988

E-MAIL

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 be automatically 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.

Table 1: PRIMARY STANDARDS AND UNREGULATED CONTAMINANTS

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	0.17	0 - 3.9	NO	2013	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
1,1-Dichloroethylene (ug/L)	6	10	0.04	0 - 1.3	NO	2013	Discharge from industrial chemical factories
Tetrachloroethylene (PCE) (ug/L) (1)	5	0.06	0.56	0 - 6.3	NO	2013	Discharge from factories, drycleaners, and auto shops (metal degreaser)
Trichloroethylene (TCE) (ug/L)	5	1.7	0.64	0 - 3.9	NO	2013	Discharge from metal degreasing sites and other factories
Synthetic Organic Contaminants							
Dibromochloropropane (DBCP) (ng/L) (2)	200	1.7	44.5	0 - 260	NO	2013	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	0.4	0 - 44	NO	2013	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
Inorganic 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 deposits
Cyanide (ug/L)	150	150	0.000	nd - .06	NO	2011	Discharge from steel/metal, plastic and fertilizer factories
Fluoride (ug/L)	2	1	0.1	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)	45	45	21	0 - 42	NO	2013	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Perchlorate (ug/L) (3)	6	6	0.1	nd - 9.2	NO	2011	Historic aerospace or industrial operations associated with rocket propellant, fireworks, explosives, flares, matches and a variety 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	0.043 - .074	NO	2011	Erosion of natural deposits
Uranium (pCi/L)	20	0.5	5.89	nd - 16	NO	2007	Erosion of natural deposits
Unregulated Contaminants (ICR, UCMR & Misc)							
DCPA Diacid + Monoacid	n/a		0.969	nd - 4.7	n/a	2004	We are required by regulations to monitor for certain unregulated contaminants. This is helpful to the USEPA and CDHS for tracking the location of contaminants and whether there is a need for stricter regulations. Several contaminants indicate detected values with a "<" symbol meaning less than. There are two possible reasons for this. First, the Detection Limit for Reporting, DLR, has not been established by EPA or CDHS. Second, for various reasons, the analytical equipment 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.
Dichlorodifluoromethane (Freon 12)	n/a		0.780	nd - 34	n/a	2011	
Trichloropropane (1,2,3-TCP) (5)	0.0007 ug/L (PHG)		0.004	nd - 0.18	n/a	2011	
tert-butyl Alcohol (TBA)	n/a		0.1	nd - 3.2	n/a	2011	
Disinfection Byproducts, Disinfectant Residuals, and Disinfection Byproduct Precursors							
Total Trihalomethanes (TTHM) (ug/L)	80	n/a	0.32	nd - 9.4	NO	2013	Byproduct of drinking water chlorination
Haloacetic Acids (HAA5) (ug/L)	60	n/a	0.58	nd - 3.9	NO	2013	Byproduct of drinking water chlorination
Chlorine (NAOCL) (mg/L)	4	4	0.79	nd - 3.0	NO	2013	Drinking water disinfectant added for treatment

(1) Tetrachloroethylene (PCE): PS 284 located near Barstow and Maroa is currently being monitored monthly. To date, the average concentration of 3.4 ug/L has remained below the MCL of 5 ug/L but there have been a few individual results exceeding the MCL including a 6.3 ug/L result from May 2013. Determination as to whether a well exceeds an MCL for non-acute contaminants such as PCE 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 PCE in excess of the MCL over many years may experience liver problems, and may have an increased risk of getting cancer.

(2) Dibromochloropropane (DBCP): PS 182-1 is located near Church and Sunnyside. This well is known to contain DBCP above the detection limit for reporting and is monitored monthly. While the annual average of 0.17 ug/L is below MCL of 0.2 ug/L, a single result of 0.26 ug/L was detected in August 2013. Determination as to whether a well exceeds an MCL 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.

(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, contaminants for which no MCL for health has been established, such as 1,2,3-TCP which has been detected in 75 Fresno wells. The State of California has created a regulatory notification level of 0.005 ppb, which is also the detection limit for reporting. The detection limit is the lowest level that current technology can possibly detect the presence of this constituent in water. It is anticipated that CDPH will be announcing a new MCL within the next few years. At the request of DHS in 2004, we removed from service well site 63, located near McKinley and Chestnut, which exceeds 100 times the notification 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	4 of 299 or 1.33%	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.

Contaminant	No. of Samples Collected	90th Percentile Level Detected	No. of Sites Exceeding 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 (Cl) (mg/L)	500	10	nd - 48	NO	2011	Runoff/leaching from natural deposits; seawater influence
Copper (Cu) (mg/L)	1	0.030	nd - .095	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	nd - .05	NO	2011	Runoff/leaching from natural deposits; industrial wastes

(6) Apparent Color: Four well sites last samples in 2011 had initial results that the 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 non-detectable.

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	n/a	0.240	n/a	14-Aug-13	n/a	Soil runoff
	TT = 95% of samples <0.3 NTU		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 good indicator of the effectiveness of our filtration system.

CONSERVATION

As a California Save Our Water partner, the City of Fresno actively promotes campaign recommendations aimed at helping Californians decrease their everyday water use and meeting the goal of reducing consumer water use 20% by 2020! A great place to start is in the yard, where water is often wasted.



The Incredible Shrinking Turf

Fresno's suburban landscape has often been identified by its lush, green lawns. Unfortunately, some green lawns are not suitable to this climate, as they require an incredible amount of water. The single biggest water hog for most Fresno families is a high-water use turf lawn – which is why it makes sense to make the switch to a more water-wise landscape.

Kick Your Lawn Mower to the Curb

The good news is that you can eliminate the hassle and pollution of mowing and have a beautiful water-conserving garden that requires little maintenance, simply by shrinking or eliminating your lawn and choosing alternative lawn options. Lawn alternatives are plentiful and include colorful and interesting water-conserving perennials and ground covers, as well as pavers, mulches, sitting areas, and objects of art.

Start Small, Save Big

Of course, if you're uncomfortable with the idea of doing away with your entire lawn all at once, you can always start with a mowing strip, side patch of lawn, or a portion of your main lawn. By starting small and working in stages, you'll get a better idea of what replacing your lawn will be like and you'll still be able to reap some of the savings that comes with less watering.

Seek and You Shall Find

To find alternatives to lawn, visit one of the many available online resources. On our own site, fresno.gov/water, you'll find downloadable brochures on the literature page of the conservation section. In addition, a local site, fresno.watersavingplants.com, is a wonderful resource filled with local landscape pictures, garden galleries, and tips.



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, Water Conservation 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.

Keep Odd Hours

If you prefer to set the timer yourself, remember to set it for your watering days and "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.

Stay Leak Free

Call and make an appointment today for a FREE water leak survey by our landscape specialists. Finding and repairing leaks will help you save money and water!

Rebates

Install WaterSense toilets or a qualifying clothes washer and receive a rebate. Applications can be found at www.fresno.gov/water.



NO RAIN/NO DRAIN

Aside from structural repairs or to comply with public health standards determined by the County Health Officer, the draining of swimming pools more than once every three years is strictly prohibited by Fresno Municipal Code (Sec 6-520(c)(5)). If you do qualify and need to drain your pool, please call **621-5480** to obtain a permit.

To request these services, email: waterconservation@fresno.gov or call **621-5480**.

For other water conservation tips, go to www.saveourh2o.org/

WATERING SCHEDULE

NO WATERING MONDAYS

SPRING/SUMMER March 2 - November 30	WINTER December 1 - March 1
<p>ODD Numbered Addresses: (Ending in 1, 3, 5, 7, 9)</p> <p>Tuesday/Thursday/Saturday</p> <p>EVEN Numbered Addresses: (Ending in 0, 2, 4, 6, 8)</p> <p>Wednesday/Friday/Sunday</p>	<p>ODD Numbered Addresses: (Ending in 1, 3, 5, 7, 9)</p> <p>Saturdays Only</p> <p>EVEN Numbered Addresses: (Ending in 0, 2, 4, 6, 8)</p> <p>Sundays Only</p>
NO WATERING BETWEEN 6 A.M. AND 7 P.M.	WATER ANYTIME ON YOUR DAY

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