



## Water Conservation

### Water Conservation is Strongly Encouraged

For 2013, as California continues to face water supply shortages, conservation efforts will be stepped up across the state in an effort to reduce water consumption and to meet the State of California's 20 x 2020 Plan. This plan mandates that all municipalities must reduce their per capita water use by 20% no later than 2020. The City of Tracy consumers achieved the 20% reduction goal in 2011 and 2012, and will need to continue to follow water conservation measures to remain at this consumption level. Many local water agencies have already issued mandatory conservation measures while others like the City of Tracy are requesting voluntary measures from its consumers in an attempt to lower water consumption.

What does all this mean for the City of Tracy residents and business owners in the future? It means that continued voluntary conservation measures will need to be observed by everyone in the City. Some simple indoor measures homeowners may implement are: taking shorter showers, turning water off while shampooing, washing full loads of laundry, never using the toilet as a trash receptacle, repairing drips and leaking faucets quickly, and always turning off water while brushing teeth. Businesses might also consider offering water to customers only if asked, reminding hotel guests to conserve water when showering, and changing out high water consuming appliances to more efficient models.

The biggest use of water by homeowners is for outdoor activities. Simple outdoor water conservation measures to utilize are: sweeping instead of rinsing off driveways, parking lots, or sidewalks; using an automated carwash instead of hand washing; turning off irrigation timers in the winter months; only water lawns and landscapes between the hours of 9:00 p.m. and 7:00 a.m.; never water landscaping on a windy day; and do not water for longer than 8 minutes per cycle. Your continued efforts will assist the City in attaining water conservation goals!

For more information on drought conditions visit <http://www.water.ca.gov/drought/>.

### Substances Expected to be in the Drinking Water

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 human activity. Contaminants that may be present in source water include:

- **Microbial Contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;
- **Inorganic Contaminants**, such as salts and metals, which 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, which are by-products of industrial processes and petroleum production, and can, also come from gas stations, urban runoff and septic systems;
- **Radio Active Contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that the tap water is safe to drink, USEPA and the California Department of Public Health prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. California Department of Public Health regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. 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 USEPA's Safe Drinking Water Hotline (800) 426-4791.



### Special Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune disorders, and 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/CDC (Center for Disease Control) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.



### Safe Drinking Water Act

Under the Safe Drinking Water Act (SDWA), USEPA is responsible for setting national limits for hundreds of substances in drinking water and also specifies various treatments that water systems must use to remove these substances. Each system continually monitors for these substances and reports directly to the California Department of Public Health if they were detected in the drinking water. USEPA uses this data to ensure that the consumers are receiving clean water and to verify that states are enforcing the laws that regulate drinking water.

This publication conforms to the regulation under SDWA requiring water utilities to provide detailed water quality information to each of their customers annually. We are committed to providing you with this information about your water supply because customers who are well informed are our best allies in supporting improvements necessary to maintain the highest quality drinking water standards.

Water customers who are landlords receiving this report are asked to share this information with any tenant or user on the premises. The City of Tracy staff is available to answer your questions and provide further information. You are welcome to call the Water Production Superintendent at (209) 831-6302.

Before the water reaches your tap, samples are collected and tested in state-certified laboratories. The City of Tracy Utilities Division of the Public Works Department has a regular program of water quality monitoring and system inspection that ensures safe drinking water is delivered to you and your family. As required by the Federal Safe Drinking Water Act, the City's water supplies must meet stringent water quality standards set by the California Department of Public Health and the United States Environmental Protection Agency. The City of Tracy completed a watershed sanitary survey of its drinking water sources in 2010. This survey can be obtained by contacting the Water Production Superintendent at the number provided below.

### Water Quality Control



Sources of the City of Tracy's water supply include the Stanislaus River, the Delta-Mendota Canal, and groundwater pumped from wells. In 2012, surface water from the Stanislaus River comprised 68%, or 4.2 billion gallons. Surface water from the Delta-Mendota Canal comprised 29% of the total water supply, or 1.8 billion gallons. The groundwater supply comprised 3%, or 0.2 billion gallons of the total water supply. The Stanislaus River water supply is very soft water and has significantly reduced the minerals in the City's water supply. You may no longer need to use a water softener.

### Where Does Your Water Come From?

We are pleased to report that during the past year, the water delivered to your home or business complied with, or exceeded, all state and federal drinking water requirements! We have compiled a table showing what substances were detected in our drinking water. Although all of the substances listed are under the maximum level allowable set by United States Environmental Protection Agency (USEPA), we feel it is important that you know exactly what was detected and how much of the substance was present in the water. In California, drinking water standards, also called Maximum Contaminant Levels (MCLs), are set in two categories: Primary Standards related to public health, and Secondary Standards which relate to the aesthetic qualities such as taste, odor, and color. Within you will find a complete listing of both types of standards along with the results of the analysis of your water supply.



CITY OF TRACY

Think Inside the Triangle



## 2012 Consumer Confidence Report

# What's in My Water?

ANALYTICAL PARAMETER	TREATED SURFACE WATER	TREATED SURFACE WATER	WELL WATER			REGULATORY LIMITS		TYPICAL SOURCE
	SOUTH SAN JOAQUIN IRRIGATION DISTRICT	JOHN JONES WATER TREATMENT PLANT	AVERAGE	MINIMUM	MAXIMUM	MCLG or PHG	MAXIMUM CONTAMINANT LEVEL (MCL)	
<b>PRIMARY STANDARDS</b>								
<b>INORGANIC (ug/L)</b>								
Aluminum	ND	60	3	ND	21	none	1000 ug/L	Erosion of natural deposits
Antimony	ND	ND	ND	ND	ND	20	6.0 ug/L	Erosion of natural deposits
Arsenic	ND	2.6	2	ND	4	0	10 ug/L	Erosion of natural deposits
Barium	12.7	31	32	24	44	2000	1000 ug/L	Erosion of natural deposits
Beryllium	ND	ND	ND	ND	ND	NA	4 ug/L	Erosion of natural deposits
Cadmium	ND	ND	ND	ND	ND	0.07	5 ug/L	Erosion of natural deposits
Chromium	ND	1	2	ND	4	100	50 ug/L	Erosion of natural deposits
Copper	ND	ND	2	ND	8	170	1000 ug/L	Erosion of natural deposits
Iron	ND	ND	ND	ND	ND	NA	300 ug/L	Erosion of natural deposits
Lead	ND	ND	ND	ND	ND	2	15 ug/L	Erosion of natural deposits
Manganese	ND	37	19	ND	50	NA	50 ug/L	Erosion of natural deposits
Mercury	ND	ND	ND	ND	ND	2	2 ug/L	Erosion of natural deposits
Nickel	ND	ND	ND	ND	ND	100	100 ug/L	Erosion of natural deposits
Selenium	ND	ND	ND	ND	ND	50	50 ug/L	Erosion of natural deposits
Silver	ND	ND	ND	ND	ND	NA	100 ug/L	Erosion of natural deposits
Thallium	ND	ND	ND	ND	ND	0.1	2 ug/L	Erosion of natural deposits
Zinc	ND	ND	14	ND	100	NA	5000 ug/L	Erosion of natural deposits
<b>FLUORIDE (mg/L)</b>								
Fluoride	ND	0.07	ND	ND	ND	1.0	2.0 mg/L	Erosion of natural deposits
<b>NITRATE/NITRITE</b>								
Nitrate (as NO <sub>3</sub> ) <sup>1</sup>	ND	1.5	4	ND	0	45	45 mg/L	Runoff from fertilizer use; Erosion of natural deposits
Nitrate + Nitrite (sum as N)	ND	0.33	1	ND	0	10	10 mg/L	
<b>REGULATED ORGANICS (ug/L)</b>								
<b>TRICHALOMETHANE</b>								
Bromodichloromethane	1.7	9.2	1	ND	3	NA	ug/L	
Bromoform	ND	8.6	ND	ND	2	NA	ug/L	
Chloroform	30.8	2.9	5	ND	14	NA	ug/L	
Dibromochloromethane	ND	16	1	ND	3	NA	ug/L	
Total Trihalomethane	32.5	36.7	7	ND	0	NA	80 ug/L	By-product of drinking water chlorination
<b>RADIOACTIVITY (pCi/L)</b>								
Gross Alpha	<3.0	<3.0	<3.0	<3.0	<3.0	NA	15 pCi/L	Erosion of natural deposits
<b>SECONDARY STANDARDS</b>								
<b>Aesthetic - Related</b>								
Aluminum (ug/L)	ND	60	3	ND	21	none	1000 ug/L	Erosion of natural deposits
Apparent Color (Units)	ND	25	1	ND	3	NA	15 Units	Naturally occurring organic materials
Copper (ug/L)	ND	ND	2	ND	8	170	1000 ug/L	Erosion of natural deposits
Corrosivity Index	-0.6	-0.34	ND	ND	1	NA	Non-corrosive	Naturally occurring
Iron (ug/L)	ND	0.5	ND	ND	ND	NA	300 ug/L	Erosion of natural deposits
Manganese (ug/L)	ND	37	19	ND	50	NA	50 ug/L	Erosion of natural deposits
Odor (TON)	16	17	1	ND	2	NA	3 TON	Naturally occurring organic materials
Potassium (K) (mg/L)	1	2.8	3	2	5	NA	NS	Erosion of natural deposits
Turbidity (NTU) <sup>2</sup>	ND	8.5	1	ND	1	NA	5 NTU	Soil runoff
Zinc (ug/L)	ND	ND	14	ND	100	NA	5000 ug/L	Erosion of natural deposits
Bicarbonate (HCO <sub>3</sub> ) (mg/L)	50	83	151	100	230	NA	NS	Erosion of natural deposits
Total Alkalinity (CaCO <sub>3</sub> )(mg/L)	40	68	125	86	0	NA	NS	Erosion of natural deposits
Boron (B) (mg/L)	ND	0.09	1	1	3	NA	NS	Erosion of natural deposits
Calcium (Ca) (mg/L)	16	16	58	31	87	NA	NS	Erosion of natural deposits
Magnesium (Mg) (mg/L)	2	12	23	13	32	NA	NS	Erosion of natural deposits
Sodium (Na) (mg/L)	3	53	118	96	140	NA	NS	Erosion of natural deposits
Total Hardness (CaCO <sub>3</sub> ) (mg/L)	48.2	91	236	130	350	NA	NS	Erosion of natural deposits
TDS (mg/L)	70	260	609	390	810	NA	1000 mg/L	Erosion of natural deposits
Specific Conductance (umhos/cm)	120	470	970	690	1300	NA	1600 umhos/cm	Substances that form ions when in water
Chloride (mg/L)	11	84	98	78	120	NA	500 mg/L	Erosion of natural deposits
Sulfate (mg/L)	ND	22	203	110	280	NA	500 mg/L	Erosion of natural deposits
pH	8.0	8.3	7.5	7.1	7.9	NA	6.5 - 8.5 Units	NA

WATER DISTRIBUTION SYSTEM DATA SHEET

<b>BACTERIOLOGICAL (% Present)</b>								
Coliform Density	<1	<1	<1	<1	<1	0	5% Present/mo.	Municipal and industrial waste discharge
<b>ORGANICS (ug/L)</b>								
			RUNNING ANNUAL AVERAGE					
Total Trihalomethane			35			NA 80 ug/L		
Total Haloacetic Acids			18			NA 60 ug/L		

<sup>1</sup> Nitrate in drinking water at levels above 45 ppm 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 ppm 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 if you are pregnant, you should ask advice from your health care provider.

<sup>2</sup> Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality and the effectiveness of disinfectants.

## STANISLAUS RIVER WATER

The City of Tracy is committed to providing a safe, reliable and affordable water supply to meet the needs of the community today and in the future. The City has participated with the cities of Manteca, Lathrop, Escalon and the South San Joaquin Irrigation District to bring high quality Sierra water from the Stanislaus River. This water source has increased the reliability of the City water supplies by having a third source of supply and provides redundancy in treatment facilities by having a second water treatment plant. Delivery of this water comprises the majority of water consumed in the City and is the only supply source used during the winter months.



## CROSS CONNECTION PROTECTION

Backflow prevention assemblies are designed to allow water to flow into your home or office from the public water system but not allow water to flow in the reverse direction, creating effective cross connection protection. Reverse flow can carry untreatable pollutants and contaminants back to the public water system, compromising the water quality for all customers. Backflow prevention assemblies are required to be tested annually to ensure they are effectively protecting the public water system. If your residence has an active well on the premises or your business has fire sprinklers and/or landscaping, you should have a backflow prevention assembly. For questions regarding annual testing requirements, please call Erich Delmas, Laboratory Supervisor at (209) 831-4488.

## WATER SOURCE ASSESSMENT

An assessment of the drinking water sources for the City of Tracy's water system was completed in June 2001. The sources are considered most vulnerable to the following activities: airports (maintenance and fueling areas), gas stations (historic and current), mining activities (historic and current), septic and waste landfill dumps (historic and current). You may request a copy of the assessment by contacting the Water Production Superintendent at (209) 831-6302.

The native groundwater under Tracy contains boron. Boron is a naturally occurring, non-carcinogenic, unregulated contaminant. Six of the City's wells contain elevated levels of boron. The City has minimized the use of groundwater and therefore minimized the amount of boron in the water supply.

## DEFINITIONS

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

**MCL (Maximum Contaminant Level):** 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 (SMCL):** Are set to protect the odor, taste, and appearance of drinking water.

**MCLG (Maximum Contaminant Level Goal):** 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.

**PHG (Public Health Goal):** 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.

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

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

**NA:** Not applicable.

**ND:** Not detected.

**NS:** No standard.

**NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of water.

**ppb (Parts Per Billion):** One part per billion (or micrograms per liter).

**ppm (Parts Per Million):** One part per million (or milligrams per liter).

**pCi/L (Picocuries Per Liter):** A measure of the natural rate of radioactive disintegration.



## SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES

**Treatment Technique:** A required process intended to reduce the level of a contaminant in drinking water (type of approved filtration technology used).

### Turbidity of the filtered water must:

1. Be less than or equal to 0.3 NTU in 95% of measurements in a month.
2. Not exceed 1 NTU for more than eight consecutive hours.
3. Not exceed 3 NTU at any time.

**Turbidity Performance Standards:** Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results, which meet performance standards, are considered to be in compliance with filtration requirements (that must be met through the water treatment process).

Lowest monthly percentage of samples that met Turbidity Performance Standard No.1: 100%. Highest single turbidity measurement during 2012 was 0.11 NTU.

## SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (To be completed only if there was a detection of lead or copper in the last sample set)	# Of Samples Collected	90TH Percentile Level Detected	# Sites Exceeding AL	AL	MCLG	Typical Source of Contaminant
Lead (ppb)	33	1.4	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppm)	33	0.38	0	1.3	0.17	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.