

2010 Consumer Confidence Report

Dear Water Customers,

We understand how important it is to supply you, our friends and neighbors with the highest quality water possible both for use today and in the future. We are seeking an amendment to our water supply permit that would allow the permanent installation of the splash boards thus allowing us to capture water runoff in the winter months. Also we are moving towards improving the capacity of the water treatment plant to provide for treatment system redundancy. Already new electronic valving and controls have been installed providing more precise control over the process. We continue to work on minimizing future costs of capital improvements to the system by applying for low interest loans and grants through the State of California. The Council shares your interests in responsibly managing the rates you pay for water in order to safely maintain our water system. We invest wisely in equipment and personnel to meet the needs of our water system both today and tomorrow.

Bruce Burton, Mayor

Water System Name: Willits Report Date: May 11, 2011

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2010.

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

Type of water source(s) in use: Surface Water

Name & location of source(s): Morris and Centennial Reservoirs located in the hills just south of the City of Willits

Drinking Water Source Assessment information: Last completed in January of 2008, by Environmental Science Associates. Copies of this report are available by contacting City Hall at (707) 459-4601

Time and place of regularly scheduled board meetings for public participation: Willits City Council meeting are held at 6 pm, on the 2nd and 4th Wednesdays in the council chambers located at 111 East Commercial St.

For more information, contact: J.C. England, Interim Water Supervisor Phone: (707) 459-4990

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 U.S. Environmental Protection Agency (USEPA).

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.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking

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

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

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

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

Variations and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

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.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (ug/L)

ppt: parts per trillion or nanograms per liter (ng/L)

ppq: parts per quadrillion or picogram per liter (pg/L)

pCi/L: picocuries per liter (a measure of radiation)

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.

In order to ensure that tap water is safe to drink, the 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 provide the same protection for public health.

Tables 1, 2, 3, 4, 5, 7, and 8 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA					
Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(In a mo.) 0	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	(In the year) 0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (complete if lead or copper detected in the last sample set)	No. of samples collected	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	20	6.9	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	20	0.28	0	1.3	0.17	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2/03/2010	3.7		none	none	Generally found in ground and surface water
Hardness (ppm)	2/03/2010	49		none	none	Generally found in ground and surface water

*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.

TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Aluminum (ppm)	1/7/10 – 10/6/10	.395 (avg)	ND-1.5	1.0	.06	Erosion of natural deposits; residue from some surface water treatment processes
Chlorine (ppm)	1/1/2010-12/31/10	1.091 (avg)	.78-1.4	[MRDL =4.0 (as CL ₂)]	[MRDLG =4.0 (as CL ₂)]	Drinking water disinfectant added for treatment
TTHMs (Total Trihalomethanes) (ppb)	2/24/10 – 11/24/10	73.24 (avg)	52.92 - 99.52	80	N/A	By-product of drinking water disinfection
HAA5 (Haloacetic Acids) (ppb)	2/24/10 – 8/25/10	21.65 (avg)	<1 – 28.7	60	N/A	By-product of drinking water disinfection

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Chloride (ppm)	2/03/2010	3.2		500		Runoff/leaching from natural deposits; seawater influence
Specific Conductance (umhos/cm)	2/03/2010	91		900-1600-2200		Substances that form ions when in water; seawater influence
Color (units)	2/3/10-12/21/10	<5	<5	15		Naturally-occurring organic materials
Total Dissolved Solids (TDS) (ppm)	2/03/2010	56		1000		Runoff/leaching from natural deposits
Copper (ppm)	7/8/10 7/9/10 7/14/10	.188 (avg)	ND - .61	1.0		Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Odor (Ton)	2/3/10-12/21/10	1.775 (avg)	<1.0 – 3.6	3	Naturally-occurring organic materials
Manganese (ppb)	02/03/10	39		50	Leaching from natural deposits
Iron (ppb)	02/03/10	1400		300	Leaching from natural deposits; industrial wastes
Turbidity*	12/06/10	*3.40		5	Soil runoff

*Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

Additional General Information on Drinking Water

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 (1-800-426-4791).

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).

Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

Violation: Treatment Technique

Explanation: Turbidity from the water treatment plant exceeded 1 NTU

Duration: 15 Minutes

Actions Taken to Correct the Violation: Engineered, purchased and installed new influent valves with controllers at treatment plant

Health Effects Language: *Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.*

Turbidity has no health effects. However, high levels of turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

For Systems Providing Surface Water as a Source of Drinking Water

TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES

Treatment Technique ^(a) (Type of approved filtration technology used)	Alternative Treatment
Turbidity Performance Standards ^(b) (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 – Be less than or equal to <u>.2</u> NTU in 95% of measurements in a month. 2 – Not exceed <u>1.0</u> NTU for more than eight consecutive hours. 3 – Not exceed <u>1</u> NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	December 2010 @ 99.3 %
Highest single turbidity measurement during the year	December 2010 @ *3.40
Number of violations of any surface water treatment requirements	1

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

(b) 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.