

Consumer Confidence Report Certification Form

(To be submitted with a copy of the CCR)

Water System Name: FORESTVILLE WATER DISTRICT (FWD)

Water System Number: # 49100100-CD

The water system named above hereby certifies that its Consumer Confidence Report was distributed on 6/30/15 (date) to customers (and appropriate notices of availability have been given). Further, the system certifies that the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the State Water Resources Control Board, Division of Drinking Water (DDW).

Certified by: Name: MATTHEW FRONEBERGER

Signature: 

Title: GENERAL MANAGER

Phone Number: (707) 887-1551 Date: 6/30/15

To summarize report delivery used and good-faith efforts taken, please complete this page by checking all items that apply and fill-in where appropriate:

- CCR was distributed by mail or other direct delivery methods (attach description of other direct delivery methods used).
- CCR was distributed using electronic delivery methods described in the Guidance for Electronic Delivery of the Consumer Confidence Report (water systems utilizing electronic delivery methods must complete the second page).
- "Good faith" efforts were used to reach non-bill paying consumers. Those efforts included the following methods:
 - Posting the CCR at the following URL: www._____
 - Mailing the CCR to postal patrons within the service area (attach zip codes used)
 - Advertising the availability of the CCR in news media (attach copy of press release)
 - Publication of the CCR in a local newspaper of general circulation (attach a copy of the published notice, including name of newspaper and date published)
 - Posted the CCR in public places (attach a list of locations)
 - Delivery of multiple copies of CCR to single-billed addresses serving several persons, such as apartments, businesses, and schools
 - Delivery to community organizations (attach a list of organizations)
 - Publication of the CCR in the electronic city newsletter or electronic community newsletter or listserv (attach a copy of the article or notice)
 - Electronic announcement of CCR availability via social media outlets (attach list of social media outlets utilized)
 - Other (attach a list of other methods used)
- For systems serving at least 100,000 persons: Posted CCR on a publicly-accessible internet site at the following URL: www._____

- For privately-owned utilities: Delivered the CCR to the California Public Utilities Commission

Consumer Confidence Report Electronic Delivery Certification

Water systems utilizing electronic distribution methods for CCR delivery must complete this page by checking all items that apply and fill-in where appropriate.

- Water system mailed a notification that the CCR is available and provides a direct URL to the CCR on a publicly available website where it can be viewed (attach a copy of the mailed CCR notification). URL: www._____
- Water system emailed a notification that the CCR is available and provides a direct URL to the CCR on a publicly available site on the Internet where it can be viewed (attach a copy of the emailed CCR notification). URL: www._____
- Water system emailed the CCR as an electronic file email attachment.
- Water system emailed the CCR text and tables inserted or embedded into the body of an email, not as an attachment (attach a copy of the emailed CCR).
- Requires prior DDW review and approval. Water system utilized other electronic delivery method that meets the direct delivery requirement.

Provide a brief description of the water system's electronic delivery procedures and include how the water system ensures delivery to customers unable to receive electronic delivery.

**A COPY OF THE FOLLOWING NOTICE WAS INCLUDED IN EACH WATER BILL FOR MAY/JUNE 2015
TO EACH FORESTVILLE WATER DISTRICT CUSTOMER. (MAILED ON 6/30/15)**



**FORESTVILLE
WATER DISTRICT**
(707) 887-1551

~ QUALITY MATTERS ~

**YOUR DRINKING WATER HAS BEEN TESTED
AND THE RESULTS ARE HERE..!**

TO READ OUR CONSUMER CONFIDENCE REPORT

- 1) VIEW ON OUR WEBSITE:**
http://www.forestvillewd.com/uploads/consumer_confidence_report_2014.pdf
- 2) REQUEST BY EMAIL: fwd@sonic.net**
- 3) CALL (707) 887-1551 TO REQUEST A HARDCOPY**

FORESTVILLE WATER DISTRICT

2014 Consumer Confidence Report

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, 2014.

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

Water Sources

Water produced by the Sonoma County Water Agency (Water Agency) originates from the following sources: Six Ranney radial collector wells along the Russian River; seven production wells along the Russian River; and three production wells along the Cotati Aqueduct in the Santa Rosa Plain.

The Ranney radial collector wells (or Caissons) consist of three collectors at Wohler (Caissons 1, 2 and 6) and three collectors at Mirabel (Caissons 3, 4, & 5).

The seven production wells along the Russian River are located at Mirabel between Caisson 5 and Caisson 2. They can deliver water directly into the Santa Rosa Aqueduct, the Cotati Aqueduct, and into Caisson 1. Production wells 1, 4, 6 and 7 are standby wells, and wells 2, 3 and 5 are inactive (disconnected from the system but not destroyed). No water was supplied to the system from these production wells in 2014.

The remaining three production wells are located along the Cotati Aqueduct where it crosses Occidental, Sebastopol, and Todd Roads and are rated as production sources.

The Water Agency has the ability to deliver water between the Santa Rosa and Cotati Aqueducts through the 20" intertie located between Mirabel and Wohler, and the 54" intertie located between the Cotati Aqueduct and Wohler. Water can also be delivered between the two systems through Wilfred Booster Station in Rohnert Park along the Petaluma Aqueduct, operating in either north or south mode. Or from west to east from the Cotati Aqueduct to Santa Rosa through the West Transmission Main. Because of these abilities to interchange water, any deliveries by the Water Agency to customers should be considered a blend of water from all sources used. There are two exceptions; the Town of Windsor and the Larkfield-Wikiup community, neither of which can receive water from the three production wells in the Santa Rosa plain under any realistic circumstance.

The Water Agency delivered a total of 16,482,962,595 gallons of water in 2014.

Operation of the Santa Rosa Plain Production Wells.

The Occidental Road Well, Todd Road Well, and Sebastopol Road Well are permitted as production wells.

Outside of the peak demand the Santa Rosa Plain wells were maintained in 2014 with short runs every 60 days without supplying water to the aqueducts, and were typically only run to the aqueduct when water quality sampling was needed.

*The Occidental Road Well was operated supplying water to the aqueduct in August, and October 2014. Annual production was 117.1 million gallons total, an average of 1.0% of water flowing into the Cotati Aqueduct. The monthly flows, and the percentage of the total Cotati Aqueduct flow, are as follows:

*The Todd Road Well was operated supplying water to the aqueduct in August 2014. Annual production was 104.4 million gallons total, an average of 0.9% of water flowing into the Cotati Aqueduct. The monthly flows, and the percent of total Cotati Aqueduct flow, are as follows:

*The Sebastopol Road Well was operated supplying water to the aqueduct in March, April, June, July, August, September and October 2014. Annual production was 192.5 million gallons total, an average of 1.7% of water flowing into the Cotati Aqueduct. The monthly flows are as follows:

Water Monitoring Requirements:

After reviewing data collected by the Water Agency, the State currently classifies Caisson 5 as being under the direct influence of surface water when: 1.) the flow in the Russian River at Hacienda Bridge reaches 5,000 cfs -and- 2.) until the flow at the Hacienda Bridge drops below 2,000 cfs. During periods that the Russian River flows meet these criteria, Caisson 5 must be operated under the State's Surface Water Treatment Regulations (SWTR). It is the Water Agency's standard operating procedure to never operate Caisson 5 under the SWTR. **Caisson 5 was not operated under SWTR any time during 2014.**

Caissons 1 through 4 and 6 are **not** under the direct influence of surface water and, therefore, are not subject to the State's Surface Water Treatment Regulations. For sampling purposes, however, the State requires the Water Agency to sample the Caissons at the same frequency as surface water sources.

pH Adjustment System

On Thursday, July 31, 2014, the Water Agency ceased adjusting pH for corrosion control due to foreign particles in the bulk caustic soda solution. The particles were discovered during piping maintenance and appeared as metallic flecks which were not solid, as they smeared like chalk or graphite. Further investigation found the particles visible in the bulk solution from all four 10,000 gallon tanks. The Water Agency investigated the material and potential sources. All four storage tanks were emptied, cleaned and re-inspected. The storage tank inspection results were good with no measurable loss of tank material or evidence of corrosion. pH control to the Cotati Aqueduct resumed on August 21, 2014, and pH control to the Santa Rosa Aqueduct resumed on September 4, 2014.

Analytical Results:

The water quality report is broken up into five parts:

- 1.) Results for Caissons 1-6.
- 2.) Results for Production Wells 1, 4, 7 and Occidental, Todd, and Sebastopol Wells.
- 3.) Result summary for tank Haloacetic Acids.
- 4.) Result summary for tank Total Trihalomethanes.
- 5.) Tank results for Volatile Organic Compounds.

The Board of Directors for the Forestville Water District meets the second Tuesday of each month at 5:30 PM in the District office. Please feel free to participate in these meetings. We want our customers to be informed about their water quality.

TERMS USED IN THIS REPORT:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set close to the PHGs and MCLGs as is economically and technologically feasible. Blanks indicate no numerical values have been established.

Detection Limits for the Purposes of Reporting (DLR): The designated minimum level at or above which any analytical finding of a contaminant in drinking water resulting from monitoring shall be reported. Blanks indicate that no numerical values have been established.

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). Blanks indicate that no numerical values have been established.

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 determined by the Office of Environmental Health Hazard Assessment. Blanks indicate no numerical values have been established.

Notification Levels: Are health-based advisory levels established by DHS for chemicals in drinking water that lack Maximum Contamination Levels (MCL).

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.

ug/L: Micrograms per liter (equals parts per billion)

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

mg/L: Milligrams per liter (equals parts per million)

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

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

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

NTU: Nephelometric Turbidity Units

Unregulated Contaminant: Constituents that do not have drinking water standards and have been determined by CDHS or EPA to warrant monitoring for occurrence data.

MFL: Million fibers per liter greater than 10 micrometers

ND: not detectable at testing limit

N/A: Not available

TON: Threshold Odor Number

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 byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants* can be naturally-occurring or 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 must provide the same protection for public health.

Tables 1, 2, 3, 4, and 5 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 (to be completed only if there was a detection of bacteria)	Highest No. of detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	0 (In a mo.)	0	More than 1 sample in a month with a detection	<2 (In a mo.)	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	0 (In the year)	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 (to be completed only if there was a detection of lead or copper 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 (mg/L)	10	<0.005	0	0.015	200	Internal corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
** Copper (mg/L)	10	<0.05	0	1.3	300	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

****NOTE:** These Lead and Copper results were from testing performed during June 14, 2012 through June 19, 2012. Next Test needed: 2015

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 (mg/L)	8/19/2014 8/20/2014 8/27/2014	14.95 (average)	7.8 - 41.0	none	none	"Sodium" refers to the salt present in the water and is generally naturally occurring.
Total Hardness as CaCO ₃ (mg/L)	8/19/2014 8/20/2014 8/27/2014	53.88 (average)	43 - 142	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

*Any violation of an MCL or AL is marked with an asterisk. 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 (ug/L)	8/19/2014 8/20/2014 8/27/2014	72.0 (average)	49.0 - 210.0	1000	600	Erosion of natural deposits; residue from some surface water treatment processes.
Arsenic (ug/L)	8/19/2014 8/20/2014 8/27/2014	2.61 (average)	1.9 - 6.0	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Asbestos (MFL)	8/19/2014 8/20/2014 8/27/2014	0.40 (average)	0.10 - 2.20	7	7	Internal corrosion of asbestos cement water mains; erosion of natural deposits
Chromium, Hexavalent (CrVI) (ug/L)	8/19/2014 8/20/2014 8/27/2014	0.55 (average)	0.40 - 0.83	10	0.02	Internal corrosion of galvanized pipes; erosion of natural deposits; discharge from electroplating and industrial chemical factories, and metal refineries; runoff from waste batteries and paints
Fluoride (F) (mg/L)	8/19/2014 8/20/2014 8/27/2014	<0.10	<0.10	2.0	1.0	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate (as NO ₃) (mg/L)	8/19/2014 8/20/2014 8/27/2014	.94 (average)	0.90 - 1.20	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

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
Aluminum (ug/L)	8/19/2014 8/20/2014 8/27/2014	72.0 (average)	49.0 - 210.0	1000	600	Erosion of natural deposits; residue from some surface water treatment processes.
Chloride (mg/L)	8/19/2014 8/20/2014 8/27/2014	8.14 (average)	4.9 - 23.0	500 (mg/L)	None	Runoff/leaching from natural deposits; seawater influence
Color (color units)	(See Note #1 below)	4.43 (average)	2.0 - 11	15 (units)	None	Naturally-occurring organic materials
Iron (ug/L)	8/19/2014 8/20/2014 8/27/2014	152.71 (average)	<100 - 410	300	100	Leaching from natural deposits; industrial wastes
Manganese (ug/L)	(See Note #1 below)	48.9 (average)	<20 - 95.0	50 (ug/L)	None	Leaching from natural deposits
Odor - Threshold (TON)	(See Note #1 below)	1.6 (average)	<1.0 - 5.0	3 (units)	None	Naturally-occurring organic materials
Specific Conductance (uS/cm)	8/19/2014 8/20/2014 8/27/2014	244.62 (average)	210 - 300	1600 (uS/cm)	None	Substances that form ions when in water; seawater influence
Sulfate (mg/L)	8/19/2014 8/20/2014 8/27/2014	10.11 (average)	2.3 - 16.0	250	500	Runoff/leaching from natural deposits; industrial wastes

Total Dissolved Solids (TDS) (mg/L)	8/19/2014 8/20/2014 8/27/2014	156.92 (average)	130 - 210	500	1000	Runoff/leaching from natural deposits
Turbidity (NTU)	8/19/2014 8/20/2014 8/27/2014	0.77 (average)	0.02 - 8.40	5 (units)	None	Soil runoff.

NOTE #1: Manganese (ppb) & Odor-Threshold (TON) & Color Sample Dates: 3/11/14, 6/26/14, 8/19/14, 8/20/14, 8/27/14, 8/28/14 & 11/4/14

DETECTION OF ADDITIONAL CONSTITUENTS ANALYZED

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Aggressiveness Index	8/19/2014 8/20/2014 8/27/2014	11.10 (average)	10.59-11.88	None	None	
Bicarbonate as CaCO ₃ (mg/L)	8/19/2014 8/20/2014 8/27/2014	130.00 (average)	120 - 150	None	None	
Calcium (mg/L)	8/19/2014 8/20/2014 8/27/2014	19.77 (average)	13 - 25	None	None	
Magnesium (mg/L)	8/19/2014 8/20/2014 8/27/2014	11.13 (average)	2.3 - 20.0	None	None	
pH (units)	8/19/2014 8/20/2014 8/27/2014	7.74 (average)	7.28 - 8.53	None	None	
Potassium (mg/L)	8/19/2014 8/20/2014 8/27/2014	1.08 (average)	<1.0 - 1.8	None	None	
Total Alkalinity as CaCO ₃ (mg/L)	8/19/2014 8/20/2014 8/27/2014	106.08 (average)	96 - 130	None	None	
Total Radon (222+/- Counting Error) (pCi/L)	8/19/2014 8/20/2014 8/27/2014	144.50 (average)	49.4 - 397.0	None	None	Erosion of natural deposits

Disinfection Byproducts, Disinfectant Residuals, and Disinfection Byproduct Precursors

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
TTHMs (Total Trihalomethanes) (mg/L)	(See Note #2 below)	0.159 (average)	0.0023 - 0.0066	0.080	N/A	By-product of drinking water disinfection
Haloacetic Acids (ug/L)	(See Note #2 below)	5.85 (average)	1.40 - 5.03	60	N/A	By-product of drinking water disinfection

NOTE #2: Sampling dates: 3/05/2014, 6/10/2014, 9/23/2014 and 12/09/2014

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* & other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Summary Information for Contaminants Exceeding an MCL, MRDL, or AL, or a Violation of Any Treatment Technique or Monitoring and Reporting Requirement

For Systems Providing Surface Water as a Source Of Drinking Water:

(***N/A: See explanation under "Water Monitoring Requirements" on page 1. All sources were run as groundwater in 2008.)

TABLE 7 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES	
Treatment Technique ^(a) (Type of approved filtration technology used)	*** (N/A)
Turbidity Performance Standards ^(b) (that must be met through the water treatment process)	Turbidity of the filtered water must: *** (N/A) 1 – Be less than or equal to ____ NTU in 95% of measurements in a month. 2 – Not exceed ____ NTU for more than eight consecutive hours. 3 – Not exceed ____ NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	*** (N/A)
Highest single turbidity measurement during the year	*** (N/A)
Number of violations of any surface water treatment requirements	*** (N/A)

* Any violation of a TT is marked with an asterisk. Additional information regarding the violation is provided earlier in this report.

- (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.

Summary Information for Surface Water Treatment

(cc: 6-30-2015 - a copy of this 2014 CCR Report was mailed to each FWD Water Customer with their May/June 2015 water bills)

2015 DROUGHT

The drought of 2015 has been four years in the making with below or significantly below average rainfall. Although Sonoma County reservoirs on the Russian River are in better condition than reservoirs statewide, they are still below normal for this time the year. Since April of 2014, Forestville Water District has been at a Stage 2 mandatory conservation level with a 20% reduction goal. An easy way to tell if you are being efficient is to determine the gallons per person per day that you use during the winter time. If you use more than 50 gallons per person per day, then there is additional conservation you can achieve. During the summer time it is important to irrigate only when needed (2 days per week or less) and to consider changing your landscape to low-water-use plants and drip irrigation.