

2015 Consumer Confidence Report

Water System Name: Floriston Water System

Report Date: 6/15/16

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, 2015 and may include earlier monitoring data.

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: Spring water, under the influence of surface water

Name & general location of source(s): Spring 03, located Northeast of the town of Floriston.

Drinking Water Source Assessment information: _____

Time and place of regularly scheduled board meetings for public participation: Monthly meetings held at 6 pm, at: FPOA School House, 22261 Juniper Street, Floriston CA 96111

For more information, contact: Michael Allen Smith

Phone: 775-338-2023

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 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.

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: State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: not detectable at testing limit

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

ppb: parts per billion or micrograms per liter ($\mu\text{g/L}$)

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 Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board 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 State Board 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.) 1 | 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) 1 | 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) | Sample Date | No. of samples collected | 90 th percentile level detected | No. sites exceeding AL | AL | PHG | Typical Source of Contaminant |
|---|-------------|--------------------------|--|------------------------|-----|-----|---|
| Lead (ppb) | 6/9/14 | 5 | 0 | 0 | 15 | 0.2 | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |
| Copper (ppm) | 6/9/14 | 5 | 0.066 | 0 | 1.3 | 0.3 | 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) | 6/15/15 | 4.9 mg/L | n/a | none | none | Salt present in the water and is generally naturally occurring |
| Hardness (ppm) | 6/15/15 | 63 mg/L CaCO3 | n/a | 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 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 |
|--|-------------|----------------|---------------------|--------------------|--------------------|---|
| Barium (ppm) | 6/15/15 | 0.013 | n/a | 1.0 | 2.0 | Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits |
| Copper (ppm) | 6/15/15 | 0.007 | n/a | (AL=1.3) | 0.3 | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Nitrate (as nitrate, N) (ppm) | 6/15/15 | 0.11 | n/a | 1.0 | 1.0 | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits |
| Total Trihalomethanes (TTHMs) (ppb) | 9/24/15 | 26 | 13-26 | 80 | n/a | By-product of drinking water disinfection |
| Haloacetic Acids (HAA5) (ppb) | 9/24/15 | 24 | 14-24 | 60 | n/a | Byproduct of drinking water disinfection |
| Hexavalent Chromium (ppb) | 3/13/15 | 0.38 | n/a | 10 | 0.02 | Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits |
| Chlorine (ppm) | 2015 | Ave. = 0.71 | Range = 0.10 - 2.20 | (MRDL= 4.0 as Cl2) | (MRDL= 4.0 as Cl2) | Drinking water disinfectant added for treatment |

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 |
|--|-------------|----------------|---------------------|------|------------|---|
| Copper (ppm) | 6/15/15 | 0.007 | n/a | 1.0 | n/a | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Zinc (ppm) | 6/15/15 | 0.04 | n/a | 5.0 | n/a | Runoff/leaching from natural deposits; industrial wastes |
| Total Dissolved Solids (TDS) (ppm) | 6/15/15 | 92 | n/a | 1000 | n/a | Runoff/leaching from natural deposits |
| Specific Conductance (uS/cm) | 6/15/15 | 170 | n/a | 1600 | n/a | Substances that form ions when in water; seawater influence |

| | | | | | | |
|-----------------|---------|-----|-----|---------|-----|---|
| Chloride (ppm) | 6/15/15 | 1.0 | n/a | 500 | n/a | Runoff/leaching from natural deposits; seawater influence |
| Sulfate (ppm) | 6/15/15 | 0.5 | n/a | 500 | n/a | Runoff/leaching from natural deposits; industrial wastes |
| Turbidity (Ntu) | 6/15/15 | 1.5 | n/a | 5.0 Ntu | n/a | Soil runoff |

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS

| Chemical or Constituent (and reporting units) | Sample Date | Level Detected | Range of Detections | Notification Level | Health Effects Language |
|--|-------------|----------------|---------------------|--------------------|-------------------------|
| | | | | | |

**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).

Total Coliforms: Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

E. coli: Fecal coliforms and *E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

Turbidity: 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.

Barium: Some people who drink water containing barium in excess of the MCL over many years may experience an increase in blood pressure.

Hexavalent Chromium: Some people who drinking water containing hexavalent chromium in excess of the MCL over many years may have an increased risk of getting cancer.

Nitrate: Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women.

Total Trihalomethanes: Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.

Haloacetic Acids: Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

Chlorine: Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

Lead-Specific Language for Community Water Systems: 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. Floriston Water System 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. [Optional: If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.] 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/lead>.

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

| VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT | | | | |
|---|------------------------------------|----------|--|--|
| Violation | Explanation | Duration | Actions Taken to Correct the Violation | Health Effects Language |
| Total Coliform Rule MCL Violation | Failure to perform repeat sampling | 1 month | Routine sampling the following month | Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially-harmful bacteria may be present |
| Monthly Report Violation | Failure to submit monthly report | 1 month | Reports submitted the following month | n/a |

For Water Systems Providing Ground Water as a Source of Drinking Water

| TABLE 7 – SAMPLING RESULTS SHOWING FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLES | | | | | |
|--|----------------------------|-----------------|---------------|--------------------------|-------------------------------|
| Microbiological Contaminants (complete if fecal-indicator detected) | Total No. of Detections | Sample Dates | MCL [MRDL] | PHG (MCLG) [MRDLG] | Typical Source of Contaminant |
| <i>E. coli</i> | (In the year) 0 | n/a | 0 | (0) | Human and animal fecal waste |
| Enterococci | (In the year) 0 | n/a | TT | n/a | Human and animal fecal waste |
| Coliphage | (In the year) 0 | n/a | TT | n/a | Human and animal fecal waste |

Summary Information for Fecal Indicator-Positive Ground Water Source Samples, Uncorrected Significant Deficiencies, or Ground Water TT

| SPECIAL NOTICE OF FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLE | | | | |
|---|-------------|----------|--|-------------------------|
| | | | | |
| SPECIAL NOTICE FOR UNCORRECTED SIGNIFICANT DEFICIENCIES | | | | |
| The Floriston Water System is supplied by a spring source which is under the influence of surface water. This type of source requires a filtration system, however the filters have been removed due to failed operations. The town is waiting for funding and approval for water treatment/filtration system improvements. | | | | |
| | | | | |
| VIOLATION OF GROUND WATER TT | | | | |
| TT Violation | Explanation | Duration | Actions Taken to Correct the Violation | Health Effects Language |
| | | | | |

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) | Floriston is not using an approved filtration technology at this time. |
| 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> 0.3 </u> NTU in 95% of measurements in a month. 2 – Not exceed <u> 1 </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. | 0 % |
| Highest single turbidity measurement during the year | 0.78 Ntu |
| Number of violations of any surface water treatment requirements | Floriston Water System does not meet surface water treatment requirements. |

(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.

* Any violation of a TT is marked with an asterisk. Additional information regarding the violation is provided below.

Summary Information for Violation of a Surface Water TT

| VIOLATION OF A SURFACE WATER TT | | | | |
|---------------------------------|---|--------------------|---|-------------------------|
| TT Violation | Explanation | Duration | Actions Taken to Correct the Violation | Health Effects Language |
| Surface Water Treatment Rule | Failure to meet Turbidity & CT requirements | 2015 Calendar year | Waiting for funding & approval for new system | Boil Order in effect |
| | | | | |

Summary Information for Operating Under a Variance or Exemption

N/A