

2015 ANNUAL WATER QUALITY REPORT



SPANISH (ESPAÑOL)

Este informe contiene información muy importante sobre la calidad de su agua potable. Por favor lea este informe o comuníquese con alguien que pueda traducir la información.

IS MY WATER SAFE?

The City of Ilwaco Water Treatment plant pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

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. EPA/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 Water Drinking Hotline (800-426-4791).

WHERE DOES MY WATER COME FROM?

The source of the water for the City of Ilwaco is surface water from a dam across Indian Creek.

SOURCE WATER ASSESSMENT AND ITS AVAILABILITY

You can obtain information about the source water by contacting the City of Ilwaco office to obtain a copy of the source water assessment.

WHY ARE THERE CONTAMINANTS IN MY 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800.426.4791).

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 in source water before we treat it may 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, which 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, which 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, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems; and radioactive contaminants, which 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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

DESCRIPTION OF WATER TREATMENT PROCESS

2015 was busy. Rotschy Construction completed our water plant update. This included the removal of 2 Microfloc treatment skids. Leaving the existing upflow clarifier in place. We added another upflow clarifier from Westech. Which both filters are capable of running dual train or lead lag. Your water is treated with KMNO4 or Hydrogen Peroxide to oxidize iron, manganese, and sulfide. Then, alum, polymer, PAC or ACH are injected. Treated water flows thru CAC area that removes around 80% of turbidity. Then treated water flows into filter bed for final filtering. After filtration, chlorine is added for disinfection as it flows into the clearwell. And from there to distribution.

ADDITIONAL INFORMATION FOR 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 Ilwaco is responsible for providing 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 two 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 at 800.426.4791 or at <http://www.epa.gov/safewater/lead>.

HOW CAN I GET INVOLVED?

You can get involved with your water utility by attending city council meetings, which are scheduled the 2nd and 4th Mondays of every month.

FOR MORE INFORMATION

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City of Ilwaco is an equal opportunity provider and employer.

PWS # 355002

WATER QUALITY DATA TABLE

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of contaminants in water provided by public water systems. The following table lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year. You will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions.

UNITS

- **ppm:** parts per million, or milligrams per liter (mg/L)
- **ppb:** parts per billion, or micrograms per liter (µg/L)
- **NTU:** nephelometric turbidity units. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.
- **NA:** not applicable
- **ND:** not detected
- **NR:** monitoring not required, but recommended.

DEFINITIONS

- **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 allow for a margin of safety.
- **MCL** (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- **TT** (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.
- **AL** (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- **Variations and Exemptions:** State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
- **MRDLG** (Maximum Residual Disinfection Level Goal): 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.
- **MRDL** (Maximum Residual Disinfectant Level): 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.
- **MPL:** State assigned Maximum Permissible Level.

OUR RESULTS

| Contaminants | Allowable Limits | | Ilwaco Water | | | Date | Violation | Typical Source |
|--------------|------------------|-----------------|------------------------|-------|------|------|-----------|----------------|
| | MCLG or MRDLG | MCL, TT or MRDL | Highest Level Detected | Range | | | | |
| | | | | Low | High | | | |

DISINFECTANTS & DISINFECTANT BY-PRODUCTS

| | | | | | | | | |
|--|----|----|------|-----|------|------|----|---|
| Total Trihalomethanes TTHMs (ppb) | NA | 80 | 63 | 62 | 63 | 2015 | No | By-product of drinking water disinfection |
| Halo acetic Acids HAA5 (ppb) | NA | 60 | 30 | 30 | 30 | 2015 | No | By-product of drinking water chlorination |
| Chlorine as C12 (ppm) | 4 | 4 | 2.20 | .42 | 2.20 | 2015 | No | Water additive used to control microbes |

INORGANIC CONTAMINANTS

| | | | | | | | | |
|---|----|----|--------|----|----|------|----|---|
| Nitrate Measured as Nitrogen (ppm) | 10 | 10 | ND | ND | ND | 2015 | No | Runoff from fertilizer use, leaching from septic tanks, sewage; erosion of natural deposits |
| Barium (ppm) | 2 | 2 | <0.005 | NA | NA | 2015 | No | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |

MICROBIOLOGICAL CONTAMINANTS

| | | | | | | | | |
|--|----|-----|------|-----|-----|------|----|-------------|
| Turbidity (NTU) | NA | 0.3 | 0.27 | .27 | .13 | 2015 | No | Soil runoff |
| 100% of the samples were below the TT value of 0.3. A value less than 95% constitutes a TT violation. The highest single measurement was 0.27. Any measurement in excess of 1 is a violation unless otherwise approved by the state. | | | | | | | | |

INORGANIC CONTAMINANTS

| Contaminants | MCLG | AL | Your Water | Sample Data | # Samples Exceeding AL | Each AL | Typical Source |
|--|------|-----|------------|-------------|------------------------|---------|--|
| Copper Action level at consumer taps (ppm) | 1.3 | 1.3 | 0.250 | 2015 | 0 | No | Corrosion of household plumbing systems; erosion of natural deposits |
| Lead Action level at consumer taps (ppm) | 0 | 15 | 0.0075 | 2015 | 0 | No | Corrosion of household plumbing systems; erosion of natural deposits |