**KEYES CSD**

**5601 7th street - PO Box 699**

**Keyes, California 95328**

KEYES COMMUNITY

SERVICES DISTRICT

2015 CONSUMER

CONFIDENCE REPORT

Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.

We are pleased to present to you this year`s Annual Water Quality Report. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water sources are 4 groundwater wells. Well 7 is located at the south end of Hatch Park, Well 8 at 5536 9th Street, Well 9 at 5400 block of Faith Home Road and Well 10 at 4741 Lucinda Avenue.

We have a source water assessment plan available from our office that provides more information such as potential sources of contamination.

This report shows our water quality and what it means.

CONTACT INFORMATION:

If you have any questions about this report or concerning your water utility, please contact Michael Jones/Maintenance Foreman at (209) 668-8341. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings.

Meeting Location: Keyes CSD Board Room 5601 7th st.

Meeting Time: 6:00 P.M.

Keyes Community Services District routinely monitors for constituents in your drinking water according to Federal and State laws. 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.

It`s important to remember that the presence of these constituents does not necessarily pose a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency`s Safe Drinking Water Hotline at 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. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

DEFINITIONS:

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we`ve provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - (mandatory language) A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level (MCL) - (mandatory language) The `Maximum Allowed` (MCL) is 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.

Maximum Contaminant Level Goal (MCLG) - (mandatory language) The `Goal`(MCLG) is 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.

Maximum Residual Disinfectant Level (MRDL) - (mandatory language) 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) - (mandatory language) 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.

The following tables 1-8 show the results of our monitoring for the period of January 1st to December 31st, 2014.

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| **Table 1 – Sampling Results of Coliform Bacteria** |
| **Contaminant** | Violation | Your Water | Range Of Detection | MCL | MCLG | Typical Source |
| **Microorganisms** |
| **Total Coliforms (including fecal coliform and E. Coli)**  **Collection Dates: 01/20/2015-**  **12/15/2015** | N | 0 | 0-0 | More than 1 sample in a month with a detection | 0 | Naturally present in the environment |

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| **Table 2 - Results of Lead and Copper** |
| **Substance** | Number of samples collected | 90th percentile level detected | No. sites exceeding Action Level (AL) | Action Level (AL) | PHG | Typical Source(s) when founf in Drinking Water |
| **Inorganic Chemicals** |
| **Lead (ppb)**  **Collection Date: 08/19/2015** | 20 | <0.007 | 0 | AL=15 | 0 | Corrosion of household plumbing systems, erosion of natural deposits |
| **Unregulated Contaminants** |
| **Copper (ppm)**  **Collection Date: 08/19/2015** | 20 | <0.051 | 0 | AL=1.3 | 1.3 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |

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| **Table 3 - Results of Sodium and Hardness** |
| **Contaminant** | Violation | Your Water | Range Of Detection | MCL | MCLG | Typical Source(s) when found in Drinking Water |
| **Unregulated Contaminants** |
| **Sodium (ppm)**  **Collection Dates: 01/22/2013-**  **10/20/2015** | N | 31 | 28-34 | None | None | Salt present in the water and is generally naturally occurring. |
| **Total Hardness (ppm) (CaCO3)**  **Collection Dates: 01/22/2013-**  **10/20/2015** | N | 139.8 | 97.9-205.2 | None | None | Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring. |

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| **Table 4 - Primary Drinking Water Standards** |
| **Substance** | Violation | Your Water | Range of Detection | MCL | PHG (MCLG) | Typical Source(s) when found in Drinking Water |
| **Inorganic Chemicals** |
| **Arsenic (ppb)**  **Collection Dates: 01/20/2015-**  **10/20/2015** | Y | 12.2 | 6.3-15.0 | 10 | 0.004 | Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes |
| **Chromium VI (ppb)**  **Collection Dates: 08/18/2014-**  **11/18/2014** | N | 6.8 | 5.4-8.0 | 10 | 0.02 | Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits |
| **Fluoride (ppm)**  **Collection Dates: 01/22/2013-**  **10/20/2015** | N | <0.2 | <0.1-0.4 | 2.0 | 4 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| **Nitrate (ppm) (measured as Nitrogen)**  **Collection Dates: 01/20/2015-**  **12/15/2015** | N | 5.2 | 0.6-10 | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| **Nitrate+Nitrite (ppb)**  **Collection Dates: 01/22/2013-**  **10/20/2015** | N | 2,972 | 723-8023 | 10000 |  | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |

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| **Table 5 - Secondary Drinkig Water Standards** |
| **Substance** | Violation | Your Water | Range of Detections | MCL | MCLG | Typical Source(s) when found in Drinking Water |
| **Unregulated Contaminants** |
| **Chloride**  **Collection Dates: 10/20/2015-**  **10/20/2015** | N | 10.6 | 10.1-11.1 | 500 | N/A | Runoff and leaching from natural deposits; seawater influence. |
| **Specific Conductance (E.C.)**  **Collection Dates: 10/20/2015-**  **10/20/2015** | N | 324 | 264-384 | 1600 | N/A | Runoff and leaching from natural deposits;seawater influence. |
| **Sulfate**  **Collection Dates: 01/22/2013-**  **10/20/2015** | N | 6.8 | 3.4-13.2 | 500 | N/A | Substances that form ions when in water; industrial wastes |
| **Total Disolved Solids (Total Filterable Residue @ 180 C (TDS))**  **Collection Dates: 10/20/2015-**  **10/20/2015** | N | 257 | 231-283 | 1000 | N/A | Runoff and leaching from natural deposits. |
| **Turbidity**  **Collection Dates: 10/20/2015-**  **10/20/2015** | N | 0.29 | 0.27-0.30 | 5 | N/A | Soil runoff |

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| **Table 6- Detection of Unregulated Contaminants** |
| **Substance** | Violation | Your Water | Range Of Detection | Notification Level | PHG | Health Effects |
| **Unregulated Contaminants** |
| **1,2,3-Trichloropropane (ppt)**  **Collection Dates: 01/20/2015-**  **10/20/2015** | N | <0.03 | <0.0007-0.12 | NL = 5 | 0.7 | Some people who use water containing 1,2,3-trichloropropane in excess of the notification level over many years may have an increased risk of getting cancer, based on studies in laboratory animals. |

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| **Table 7- Results for Chlorine Residuals** |
| **Substance** | Violation | Your Water | Range of Detections | MRDL | MRDLG | Typical Source |
| **Disinfectant Residual** |
| **Chlorine Residual (ppm) (Chlorine - Free )**  **Collection Dates: 01/20/2015-**  **12/15/2015** | N | 0.4 | 0.15-0.84 | MRDL = 4 | MRDLG = 4 | Drinking water disinfectant added for treatment. |

EXPLANATIONS:

MCL`s are set at very stringent levels. The MCL`s are set such that out of every 10,000 or 1,000,000 people (depends upon how the MCL was developed) drinking 2 liters of water every day for a lifetime, only 1 of those people may experience the described health effect.

Effective January 23, 2006, the federal arsenic MCL is 10 ppb. Wells 8, 9, and 10 have exceeded the 10 ppb. Quarterly monitoring of the well water is required at these wells. Keyes CSD must provide public notification regarding the exceedance. The most recent public notification was mailed to our customers on May 1, 2015 and posted at the Keyes CSD office. The District has hired a consultant who specializes in the design of treatment systems to remove arsenic. The consultant has prepared a report, including rough cost estimates, summarizing the various treatment alternatives that are available. The District has qualified for funding from the State. It consists of a loan with no interest or low interest and a grant. If everything goes as planned it should take approximately 6 to 8 months for the plans and contract documents to be completed. After the plans and contract documents are completed it should take approximately 12 months to complete the ATF. Once the plans and contract documents are completed the District will hold community outreach meetings to keep the community informed of the progress and to answer any questions that may arise.

HEALTH EFFECTS:

Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Nitrates: As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

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. Keyes Community Services District 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. 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/safewater/lead>.

Water Conservation:

Even though we have had an above average year of rainfall we are still in a period of severe drought, so all communities in California are being requested to do their part by responsibly using water. Although the Keyes CSD does not expect to have severe water shortages, we still need to conserve water. Please help us conserve water (and reduce your water bills!) by taking simple steps, like don’t over water your landscape, don’t run water while brushing your teeth, don’t let hoses run while washing your car, etc. Thank you for your participation during this state of emergency.

In April of 2015, state mandated water conservation went into effect. Small water systems, such as ours were required to conserve 25% of the water they used compared to usage from 2013. In 2015 our customers were able to reduce water usage by 26% compared to 2013. As you can see from the chart below, April through October were the months with the most savings. These are the months when we begin to water outdoors more often, typically 2 to 4 times as much as in the winter. By being water conscience and watering your landscape with only what is needed we can continue to conserve one of our most valuable resources, our water. For water saving tips throughout your home you can visit the EPA’S Water Sense website at https://www3.epa.gov/watersense.

Usage in Million Gallons per Month