## Microbiological Contaminants

- **Amenia**
  - 2007 - 2015: MPN < 0.004
  - Exceedance of natural deposit, root ball on orchard, grass and electronic producing wires.
  - ND - 3.3 ND - 8.3 ND
- **Barium**
  - 2007 - 2015: MPN (100)
  - Discharge of all drilling waters and from metal refineries; reference range of natural deposits.
  - ND - 0.039 ND - 2.3 ND
- **Chromium (Total Cr)**
  - 2014 - 2015: MPN < 190
  - Discharge from mine and pulp mills and chrome plating; excess of natural deposits.
  - ND - 0.011 ND - 7 ND
- **3 Hexavalent Chromium**
  - 2006 - 2015: MPN < 10
  - Discharge from electroplating factories, leather tanneries, wood preservatives, chemical synthesis, refractory production, and steel manufacturing facilities; excess of natural deposits.
  - ND - 8.6 ND - 1.4
- **Fluoride (Natural Source)**
  - 2014 - 2015: MPN < 1
  - Erosion of natural deposit, water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
  - ND - 0.04 ND - 6.1
- **Nitrate (as NO3)**
  - 2014 - 2015: MPN 45
  - Erosion of natural deposit, water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
  - ND - 15 ND - 43 ND
- **Nitrite as Nitrogen (N)**
  - 2006 - 2015: MPN 10000
  - Erosion of natural deposit, water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
  - ND - 3600 431

## Unregulated Organic Chemicals

- **Total Trihalomethanes**
  - 2005 - 2015: MPN 80
  - Excess of drinking water detection.
  - ND - 0.002 ND - 0.35

## Radiological Contaminants

- **Average Daily Dose**
  - 2005 - 2015: µCi/l (5)
  - Erosion of natural deposit.
  - ND - 0.1 ND - 0.5

## Secondary Standards

### Aesthetic Standards

- **Total Hardness (as CaCO3)**
  - 2007 - 2015: PPM 200 - 420
  - Due to chemicals naturally occurring in the soil below the earth's surface.
  - 59 - 74 67 13 - 420 71

- **Chlorine Residuals**
  - 2015: PPM 4.0
  - Drinking water disinfectant added for treatment.

- **Hexavalent Chromium**
  - 2006 - 2015: PPB 0.02
  - Erosion of natural deposit.
  - ND - 2.4 ND - 42 ND

### Microbiological Contaminants

- **Total Coliform Bacteria**
  - 2015: MPN < 100
  - Naturally present in the environment.
  - 12 ND - 12.2

### Lead & Copper (See Note 16)

- **Copper**
  - 2013: PPM 0.3
  - ND - 4.4 ND - 0.3

### Unregulated Contaminant Monitoring Rule (UCMR)

#### Other Constituents Analyzed

- **Total Hardness (as CaCO3)**
  - 2005 - 2015: PPM 200 - 420
  - Due to chemicals naturally occurring in the soil below the earth's surface.
  - 59 - 74 67 13 - 420 71

### Distribution System

#### Groundwater

- **Specific Conductance (E.C.)**
  - 2007 - 2015: umhos/cm 1600
  - Substances that form ions when in water; seawater influence.
  - 150 - 200 175 200 - 520 279

- **Total Dissolved Solids**
  - 2007 - 2015: PPM 1000
  - Runoff/leaching from natural deposits.
  - 97 - 120 109 160 - 330 211

- **Total Alkalinity (as CaCO3)**
  - 2007 - 2015: PPM MO
  - Due to chemicals naturally occurring in the soil below the earth's surface.
  - 51 - 81 69 88 - 230 118

### Chloroform & Methylene Chloride (see #2)

- **Chloroform**
  - 2013 - 2014: PPM 0.87 - 1.3
  - ND - 1.12 ND - 1.12 12

### Turbidity

- **Turbidity**
  - 2007 - 2015: Units 4 NTU
  - ND - 0.17 ND - 0.17

### OTHER Constituents Analyzed

- **Lead**
  - 2013: PPM 0.2
  - Internal corrosion of household water plumbing systems; discharge from chlorine manufacturing; excess of natural deposit.
  - 0.9 - 2.9 1.7 - 4.2

### Unregulated Contaminant Monitoring Rule (UCMR)

#### Other Constituents Analyzed

- **Hexavalent Chromium**
  - 2006 - 2015: PPB 0.02
  - Erosion of natural deposit.
  - ND - 2.4 ND - 42 ND

### MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements

- **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.

- **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.

- **Weighted Average (WTD AVG):**
  - An average of water quality samples in which each sample is assigned a weight. Each sample's contribution (or weight) is based on the amount of water the corresponding water source produces for the whole system. Instead of each of the sample results contributing equally to the final average, some of the results contribute more than others.

### Exceedence

Last year, we conducted more than 46 tests to analyze over 40 contaminants per test. The following contaminants exceeded the secondary standards' maximum contaminant level.

### Surface Water

#### Groundwater

- **Magnesium**
  - ND - 7.9 ND - 8.1

- **Sodium**
  - ND - 13 ND - 30

### Monterey County Water Agency

- **SACRAMENTO COUNTY WATER AGENCY**
  - **Location:**
    - **INSIDE:**
      - **PHG**
        - **CONSTITUENT**
          - **SAMPLE DATE**
          - **PHG or WTD (MPN/WGDL)**
          - **MCL OF (MPN/WGDL)**
          - **MAJOR SOURCES IN DRINKING WATER**
          - **DISTRIBUTION SYSTEM RANGE AVG**
          - **SACRAMENTO COUNTY WATER AGENCY**
          - **LOCATION:**
            - **SACRAMENTO COUNTY WATER AGENCY**
            - **LOCATION:**

### DETECTED PRIMARY STANDARDS - Mandatory Health-Related Standards

- **Primary Drinking Water Standards (PDWS):**
  - 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.

- **Primary Monitoring and Reporting Requirements:**
  - Exceedance of natural deposit, root ball on orchard, grass and electronic producing wires.

### Maximum Contaminant Level (MCL):**

- **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.

### Groundwater

- **Barium**
  - 2007 - 2015: PPM 2
  - Discharges from electroplating factories, leather tanneries, waste treatment plants, industrial manufacturing facilities, and metal refineries. 400 - 1200

### Surface Water

- **Sodium**
  - ND - 13 ND - 30

### Surface Water

- **Magnesium**
  - ND - 7.9 ND - 8.1

### Surface Water

- **Sodium**
  - ND - 13 ND - 30
NOTES:
1. The data allows SCWA to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently.
2. Surface Water is from SCWA’s Vinyard Surface Water Treatment Plant (VSWT). VSWT came online in September 2011 and provided 27.23% of the water distributed to customers in the Laguna, Vineyard, CCE & Grantline-99 area in 2015. SCWA received no water from the City of Sacramento. For more information regarding the City of Sacramento’s water quality data, go online (http://portal.cityofsacramento.org/Utilities/Environment/water-quality) or call (916) 808-5371 or (916) 808-5426.
3. The state of California has set 10 PPB as the MCL for chromium-6, beginning July 1, 2014. Chromium-6 is one of the forms of chromium making up total chromium which has a California MCL of 50 PPB. For more information about Chromium-6, please visit the State Water Resources Control Board’s website: www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Chromium6.shtml.
4. Total Trihalomethanes = sum of results for Chloroform, Bromoform, Dibromochloromethane, & Tribromochloroethane.
5. The State Water Resources Control Board allows the measurement of gross alpha radioactivity as a surrogate for Uranium.
6. Waterworks Kd= k = sum of results for Bromotrichloromethane, Dibromochloromethane, Dichloroacetic acid, Monochloroacetic acid & Trichloroacetic acid.
7. The Laguna-Vinyard water system’s facilities are all fluoridated. The Optimal Fluoride Level and Control Range for the system is based on an annual average of maximum daily air temperatures in the Laguna-Vinyard area. In accordance with Title 22, Section 64432.2 of the State Water Resources Control Board (State Board) regulations, the Optimal Fluoride Level is 0.7 mg/l, and the Fluoride Control Range is from 0.0 mg/l - 1.2 mg/l. Information about Saturation, oral health, and current issues is available from www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml.
8. Only Surface water sources must monitor for Distribution-By-Product precursors. Treatment Technique is not required if the raw or treated water TOC is < 2 mg/l.
9. On Systems that collect more than 40 samples per month, the Total Coliform Bacteria MCL is 5% of the monthly samples return total coliform positive, per the Total Coliform Rule (TCR). A positive TOC sample triggers collection of samples for C. coli at the source (i.e., groundwaters wells) per the Federal Ground Water Rule (GWIR). In 2015, all samples taken per the GWIR returned negative (absent) for C. coli.
10. Turbidity is a measure of the cloudiness of the water. 0.171 NTU is the highest individual measurement in 2015. 106% is the lowest percentage of monthly samples which were in compliance below the 0.3 NTU range. SCWA monitors turbidity because it is a good indicator of the effectiveness of its filtration systems. Only surface water sources must comply with PDWS for turbidity.
11. Iron exceeded the MCL of 300 PPB; however the weighted average for iron in the Laguna/Vinyard/CCE/Grantline99 area in 2015 was 0.367 PPB. Surface Water contains small amounts of manganese, which present few adverse effects in food or drinking water; however, elevated concentrations of manganese in water may stain laundry, produce an undesirable odor and taste, contribute to microbial growth and turbidity, or form a coating inside pipes which can peel off as solid precipitates.
12. Chlorate is an anion that can enter drinking water from several potential sources, including from hypochlorite or chlorine dioxide disinfectant use, ozone oxidation of hypochlorite or chlorite and source water contamination from pesticide runoff or papermill discharges. This well has since been taken off line due to its chlorate exceedance and for repairs. When all repairs were completed for this well source, a confirmation sample was taken May 16, 2016 and returned Non-Detect.
13. The levels for Lead and Copper concentrations were obtained from the 50th percentile of fifty-one (51) tap water samples taken throughout the Laguna-Vinyard system. The MCL for lead and copper are set at *Action Levels.* "None of the samples in Laguna-Vinyard exceeded the Action Levels for Lead and Copper. Please refer to the educational information on Lead in drinking water.
14. Scenedesmus obliquus, which present few adverse effects in food or drinking water; however, elevated concentrations of Scenedesmus in water may lead to nausea, cramps, diarrhea, and associated headaches. We encourage immune-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection.
15. Unregulated Contaminants Monitoring Rule (UCMR 3 / 2013 - 2015 Monitoring) with notification Levels help to determine where certain contaminants occur and whether they need to be regulated.
16. SCWA completed its UCMR3 Monitoring Program between 2013-2014, within that time, one well exceeded the Notification Level (Nl) for Scenedesmus obliquus (S. obliquus). Cryptosporidium is a pathogen which can enter drinking water from several potential sources, including from hypochlorite or chlorine dioxide disinfectant use, ozone oxidation of hypochlorite or chlorite and source water contamination from pesticide runoff or papermill discharges. This well has since been taken off line due to its chlorine exceedance and for repairs. When all repairs were completed for this well source, a confirmation sample was taken May 16, 2016 and returned Non-Detect.
17. Since 2005, SCWA 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 (1-800-426-4791) or http://www.epa.gov/lead.

State Mandated Information for Arsenic & Lead:
Arsenic:
While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic’s possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

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 Sacramento County Water Agency 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 (1-800-426-4791) or http://www.epa.gov/lead.

Cryptosporidium: Cryptosporidium is a microbial pathogen found in surface water (e.g., rivers, lakes and streams) throughout the United States. SCWA’s raw surface water source is the Sacramento River. Our monitoring of the source water indicates the presence of these organisms. From 2005 to 2007, SCWA took monthly Cryptosporidium samples. Of the 24 samples taken, only four detected the pathogen in the raw water. The results ranged from non-detected (ND) to 0.2 Oocysts/10 liters. The average analysis result was 0.2 Oocysts/100 liters. SCWA’s surface water is highly treated with a through disinfection and filtration process to remove Cryptosporidium before distribution to the customer; however, the most commonly used filtration methods cannot guarantee 100 percent removal. Ingestion of Cryptosporidium may cause cryptosporidiosis, and abdominal infection, the symptoms of which include nausea, cramps, diarrhea, and associated headaches. We encourage immune-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection.