Dear Golden State Water Customer,

Golden State Water Company (GSWC) is pleased to present our 2022 Annual Water Quality Report (Consumer Confidence Report), providing customers with important information regarding local water quality and service during the 2021 calendar year.

GSWC is proud to be the trusted water provider serving local customers and more than 80 communities throughout California, and we appreciate that customers have peace of mind knowing we never stop working to ensure quality, reliable water is available at their taps when they need it.

We recognize the challenges many customers have faced during this pandemic period and now into the continuing drought. During this unprecedented time, our continued dedication to providing the highest levels of service and care to customers has been a driving force for our team of water professionals. We take great pride in the service we provide and embrace our role as essential workers in the community.

For more than 90 years, water quality has always been a top priority for GSWC. Our team of scientists, engineers and water experts is committed to protecting our water systems and ensuring the water we deliver to local homes and businesses meets the stringent standards set by the state and federal governments and is safe to drink. We aggressively monitor and test for hundreds of contaminants in each of our 38 water systems and have consistently scored among the top water companies for compliance with water quality regulations.

GSWC is proud to report that the water delivered to your tap continues to meet all federal and state quality standards established to protect public health and safety. Within this document, you will find information regarding local water supply sources, testing, and the steps GSWC takes to ensure our water is in compliance with standards set by the United States Environmental Protection Agency (USEPA), State Water Resources Control Board’s Division of Drinking Water (DDW) and California Public Utilities Commission (CPUC).

To access the most up-to-date Water Quality Report for your area, sampling results, and to learn more about common contaminants, you can visit www.gswater.com/water-quality. If you have any questions about this report, please contact our 24-hour Customer Service Center at 1.800.999.4033 or email us at customerservice@gswater.com.

GSWC is constantly working toward 100 percent customer satisfaction and encourages all customers to visit www.gswater.com and follow us on Twitter and on Facebook at @GoldenStateH20.

On behalf of everyone at GSWC, thank you for allowing us the opportunity to serve you and your community.

Sincerely,

Robert Sprowls
President and
Chief Executive Officer
Golden State Water Company

Perry Dahlstrom
General Manager, Mountain-Desert District
Golden State Water Company
Water delivered to customers in the Lucerne System is groundwater pumped from the Mojave River Basin-Este Sub-basin, which is located in the Lucerne Valley area east of the Mojave River.

**Source Water Assessment**

Golden State Water Company conducted a source water assessment in September 2000 for each groundwater well serving the customers of its Lucerne System.

Three of the groundwater wells are considered most vulnerable to the following activities that have been associated with contaminants detected in the water supply: high- and low-density septic systems and high-density housing.

A copy of the assessment may be viewed at:

State Water Board San Bernardino District Office
464 West 4th St. Suite 437, San Bernardino, CA 92401

You may request a summary of the assessment be sent to you by contacting:

State Water Board San Bernardino District Office at 1.909.383.4320

For more details, contact George Zakhari, Water Quality Engineer, at 1.800.999.4033, or email the Customer Service Center at customerservice@gswater.com.
Glossary of Terms

**Maximum Contaminant Level (MCL)**
The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the public health goals and maximum contaminant level goals as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste and appearance of drinking water.

**California Notification Level (NL)**
Non-regulatory, health-based advisory levels established by the State Board for contaminants in drinking water for which an MCL has not 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. Maximum contaminant level goals are set by the United States Environmental Protection Agency (USEPA).

**Maximum Residual Disinfectant Level (MRDL)**
The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the 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 Standard (PDWS)**
MCLs, MRDLs and treatment techniques (TTs) for contaminants that affect health, along with their monitoring and reporting requirements.

**Public Health Goal (PHG)**
The level of a contaminant in drinking water below which there is no known or expected risk to health. Public health goals are set by the California Environmental Protection Agency (CalEPA).

**Regulatory Action Level (AL)**
The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Delivering drinking water is serious business, and our team of scientists, engineers and water experts is dedicated to protecting our water systems and ensuring the water we deliver to local homes and businesses meets stringent standards set by the state and federal governments and is safe to drink.

<table>
<thead>
<tr>
<th>Unit of Measurement</th>
<th>Unit Abbreviation</th>
<th>Also Known as</th>
<th>This can be compared to…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parts per million (PPM)</td>
<td>mg/L</td>
<td>milligrams per liter</td>
<td>1 second in 12 days</td>
</tr>
<tr>
<td>Parts per billion (PPB)</td>
<td>µg/L</td>
<td>micrograms per liter</td>
<td>1 second in 32 years</td>
</tr>
<tr>
<td>Parts per trillion (PPT)</td>
<td>ng/L</td>
<td>nanograms per liter</td>
<td>1 second in 32,000 years</td>
</tr>
<tr>
<td>Grains per gallon</td>
<td>grains/gallon</td>
<td>a measurement for water hardness often used for sizing household water softeners</td>
<td>1 grain/gal equals 17.1 mg/L of hardness</td>
</tr>
<tr>
<td>Nephelometric Turbidity Units</td>
<td>NTU</td>
<td>a measurement of the clarity of water</td>
<td>Turbidity in excess of 5 NTU is noticeable to the average person</td>
</tr>
<tr>
<td>Microsiemens per centimeter</td>
<td>µS/cm</td>
<td>a measurement of a solution's ability to conduct electricity</td>
<td></td>
</tr>
<tr>
<td>Picocuries per liter</td>
<td>pCi/L</td>
<td>a measurement of radioactivity in water</td>
<td></td>
</tr>
</tbody>
</table>
The consumer confidence report lets you know which constituents, if any, are in your drinking water and how this may affect your health. The constituents presented in this table were detected above the detection limit set by the State Water Resources Control Board. Below is a guide that explains each column of the table.

### How to Read Your Table

- **Primary Standards – Health Based (units)**: The highest level of a constituent allowed in drinking water.
- **Secondary Standards – Aesthetic (units)**: The highest level for which the constituent has no known or expected health risks.
- **Inorganic Constituents**: Fluoride (mg/L) and Nitrate (as N) (mg/L)
- **Radioactive Constituents**: Gross Alpha Activity (pCi/L) and Uranium (pCi/L)
- **Other Parameters (mg/L)**: Alkalinity, Calcium, Hardness, Magnesium, pH, Potassium, Sodium

<table>
<thead>
<tr>
<th>Substance A (mg/L)</th>
<th>Primary MCL</th>
<th>PHG (MCLG)</th>
<th>Range of Detection</th>
<th>Average Level</th>
<th>Most Recent Sampling Date</th>
<th>Typical Source of Constituent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0</td>
<td>50</td>
<td>0.6</td>
<td>ND - 0.70</td>
<td>0.40</td>
<td>2019</td>
<td>Erosion of natural deposits; residue from some surface water treatment processes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Substance B (µg/L)</th>
<th>Secondary MCL</th>
<th>PHG (MCLG)</th>
<th>Range of Detection</th>
<th>Average Level</th>
<th>Most Recent Sampling Date</th>
<th>Typical Source of Constituent</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>10</td>
<td>0.64 - 0.80</td>
<td>0.72</td>
<td></td>
<td>2021</td>
<td>Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder</td>
</tr>
</tbody>
</table>

### Lucerne Water System – Source Water Quality

#### Inorganic Constituents
- **Fluoride (mg/L)**: 2.0
- **Nitrate (as N) (mg/L)**: 10

#### Radioactive Constituents
- **Gross Alpha Activity (pCi/L)**: 15
- **Uranium (pCi/L)**: 20

#### Secondary Standards – Aesthetic (units)
- **Color (units)**: 15
- **Chloride (mg/L)**: 500
- **Iron (µg/L)**: 300
- **Specific Conductance (µS/cm)**: 1600
- **Sulfate (mg/L)**: 500
- **Turbidity (units)**: 5
- **Total Dissolved Solids (mg/L)**: 1000

#### Other Parameters (units)
- **Alkalinity (mg/L)**: n/a
- **Calcium (mg/L)**: n/a
- **Hardness [as CaCO₃] (mg/L)**: n/a
- **Hardness [as CaCO₃] (grains/gal)**: n/a
- **Magnesium (mg/L)**: n/a
- **pH (pH units)**: n/a
- **Potassium (mg/L)**: n/a
- **Sodium (mg/L)**: n/a

(a) MCL is based on Gross Alpha minus Uranium.

ND = Not Detected
CaCO₃ = Calcium Carbonate

*This table includes data only on constituents that were detected.*
## Laboratory Analyses

Through the years, we have taken thousands of water samples to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants in your drinking water. The table we provide shows only detected contaminants in the water.

Even though all the substances listed here are under the Maximum Contaminant Level (MCL), we feel it is important that you know exactly what was detected and how much of these substances were present in your water. Compliance (unless otherwise noted) is based on the average level of concentration below the MCL. The state allows us to monitor for some contaminants less than once per year because the concentrations do not change frequently. Some of our data, while representative, is more than a year old.

### Chlorine

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Action Level</th>
<th>PHG (MCLG)</th>
<th>Range of Detection</th>
<th>Average Level</th>
<th>Most Recent Sampling Date</th>
<th>Typical Source of Constituent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine [as Cl2] (mg/L)</td>
<td>(4.0)</td>
<td>(4)</td>
<td>0.3 - 1.4</td>
<td>1.0</td>
<td>2021</td>
<td>Drinking water disinfectant added for treatment</td>
</tr>
</tbody>
</table>

### Inorganic Constituents

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Action Level</th>
<th>PHG (MCLG)</th>
<th>Sample Data</th>
<th>90th % Level</th>
<th>Most Recent Sampling Date</th>
<th>Typical Source of Constituent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper (mg/L)</td>
<td>1.3</td>
<td>0.3</td>
<td>None of the 10 samples collected exceeded the action level.</td>
<td>0.11</td>
<td>2019</td>
<td>Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives</td>
</tr>
</tbody>
</table>

### Lead sampling in schools and residential plumbing

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Action Level</th>
<th>PHG</th>
<th>Sample Data</th>
<th>90th % Level</th>
<th>Most Recent Sampling Date</th>
<th>Typical Source of Constituent</th>
<th>Number of Schools Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead (µg/L)</td>
<td>15</td>
<td>0.2</td>
<td>None of the 10 samples collected exceeded the action level.</td>
<td>ND</td>
<td>2019</td>
<td>Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.</td>
<td>Golden State Water Company does not provide water to any schools in this service area.</td>
</tr>
</tbody>
</table>

**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. GSWC 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 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 about lead in drinking water, testing methods and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 1.800.426.4791 or at [http://www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

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(b) The State of California made lead sampling in schools mandatory with a compliance window through 2019.
ND = Not Detected

This table includes data only on constituents that were detected.
For People with Sensitive Immune Systems

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people, such as those individuals with cancer undergoing chemotherapy, those who have undergone organ transplants, those with HIV/AIDS or other immune system disorders, some elderly populations, and infants, can be particularly at risk from infections. These people should seek advice from their health care providers.

The USEPA and Centers for Disease Control issue guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants. To obtain a copy of these guidelines, please call the USEPA’s Safe Drinking Water Hotline at 1.800.426.4791.

For additional information, please contact our 24-hour Customer Service Center at 1.800.999.4033 or email us at customerservice@gswater.com.

Risk to Tap and Bottled Water

Drinking water, including bottled water, may reasonably be expected to contain 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 USEPA’s Safe Drinking Water Hotline at 1.800.426.4791.

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 layers in the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animal or human activity.

In order to ensure that tap water is safe to drink, the USEPA and the State Water Resources Control Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

Contaminants in Drinking Water Sources May Include:

- Microbial contaminants, such as viruses and bacteria, which 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, and 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, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems
- Radioactive contaminants that can be naturally occurring or be the result of oil and gas production and mining activities

Cross Connection Control Program

Golden State Water Company’s Cross Connection Control Program provides a level of certainty that the water in the company’s distribution system is protected from possible backflow of contaminated water from commercial or industrial customers’ premises. For additional information, visit http://www.gswater.com/protecting-our-drinking-water/.

Flushing

Hydrant flushing is an essential maintenance procedure that all water providers must perform periodically to ensure the water delivered to customers meets state and federal drinking water standards. GSWC is using NO-DES (Neutral Output-Discharge Elimination System) flushing in several of our service areas to help flush our distribution systems sustainably.

Traditional hydrant flushing discharges hundreds of thousands of gallons of water onto the street. GSWC’s NO-DES trucks and trailers offer a new maintenance technology, connecting two hydrants to a complex filtration system which cleans the water and returns it to the distribution system.

For more information about hydrant flushing, visit http://www.gswater.com/flushing.
Infrastructure Investments

Water providers have a duty to maintain the local water infrastructure to ensure that the delivery of reliable, quality water is not compromised. At GSWC, we take that responsibility seriously.

In 2021, GSWC installed approximately 109,200 feet of pipeline, 3,000 service lines and 300 fire hydrants throughout the state. Proactive system investments like these are critical to protect the quality of water we serve to the customers and to avoid the costly and sometimes dangerous effects of deferring maintenance.

Customers interested in learning more about current and completed infrastructure projects in their service areas are encouraged to visit their service area’s webpage at www.gswater.com.

Conserving for California

It’s important that all Californians continue using water responsibly, as many parts of our state are experiencing extreme levels of drought. We must all work together to protect available water supplies. As Californians, it is our duty to make conservation a way of life and protect this precious and scarce resource.

GSWC is proud to be your conservation partner. It is important that we all work together to incorporate water-use efficiency into our daily lives.

To learn more about conservation programs and/or water-use restrictions in your area, please visit www.gswater.com/conservation or call 1.800.999.4033.