Citizens Advisory Committee Meeting - July 20, 2020

1. Agenda Packet
   Documents:

   200720 AGENDA PACKET - POSTED 200716.PDF
Notice: Pursuant to Governor Newsom’s Executive Orders N-29-20 and 33-20, which in part, provide waivers to certain Brown Act provisions, meetings of the Citizens Advisory Committee will be held by teleconference. There will be no physical location from which members of the public may participate. Instead, the public may listen and/or view the meeting proceedings and provide public comment and comments on agenda items by following these instructions:

To join via Zoom Webinar from a computer, tablet, or smartphone, click on the link below:
https://zoom.us/j/91458023440

To join this meeting via telephone, please dial:
1-669- 900-6833 or 1-253-215-8782
Meeting ID: 914 5802 3440

If you are unable to access the meeting using this call-in information, please contact the Committee Secretary at (619) 409-6704 for assistance.

To provide public comment on non-agenda items or to provide public comment on any item of the agenda:

**Before the meeting:**

- Go to www.sweetwater.org; click on the “HOW DO I…” at the top of the page; and then click on the “Public Comment” link in the Contact section.

OR

- Physically deposit your public comment in the Authority’s payment drop box located in the public parking lot at the Authority’s Administrative Office at 505 Garrett Avenue, Chula Vista.

OR

- Mail your comments to 505 Garrett Avenue, Chula Vista, CA 91910 [Attention: Public Comment].

All written public comment submissions must be received 1 hour in advance of the meeting and will be read aloud to the Committee during the appropriate portion of the meeting with a reading limit of 3 minutes for each comment.
During the meeting:
The Chair will inquire prior to Committee discussion if there are any comments from the public on each item.

- Via Zoom Webinar go to Participants List, hover over your name and click on “Raise Hand.” This will notify the moderator that you wish to speak during Oral Communication or during a specific item on the agenda.

- Via phone, you can raise your hand by pressing *9 to notify the moderator that you wish to speak during the current item.

Any person with a disability who requires a modification or accommodation in order to participate in a meeting should direct such request to the Board Secretary at (619) 409-6703 at least forty-eight (48) hours before the meeting, if possible. The above public comment procedures supersede any Authority standard public comment policies and procedures to the contrary.

1. CALL MEETING TO ORDER AND ROLL CALL

2. ITEMS TO BE ADDED, WITHDRAWN, OR REORDERED IN THE AGENDA

3. PUBLIC COMMENT
   Opportunity for members of the public to address the Committee. (Government Code Section 54954.3).

4. CHAIR’S PRESENTATION
   June 24, 2020 Summary of Governing Board Meeting Actions Related to the CAC

5. ACTION AGENDA
   The following items on the Action Agenda call for discussion and action by the Committee. All items are placed on the Agenda so that the Committee may discuss and take action on the item if the Committee is so inclined, including items listed for information.
   
   A. Update from Steve Castaneda, Governing Board Chair, Sweetwater Authority

   B. Presentation of Sweetwater Authority’s Annual Water Quality Report, Justin Brazil, Director of Water Quality
      This item was requested by Member Magaña.

   C. Review and Discussion of the Citizens Advisory Committee Areas of Focus
      This item was requested by Vice-Chair Fernandez and carried over from the June agenda.

   D. Request to Modify Timeline for CAC Agendas (No Enclosure)
      This item was requested by Member Sampsel.
E. Pay for Performance
   This item was requested by Member Sampsel.

6. NEXT MEETING DATE: August 17, 2020 at 2:00 p.m.

7. MEMBER COMMENTS
   Opportunity for Members of the committee to briefly respond to statements and questions from public; ask clarifying questions; make a brief announcement; or report on activities. Comments should not revisit items previously discussed as part of the agenda. (Government Code Section 54954.2(a))

8. ADJOURNMENT
   This agenda was posted at least seventy-two (72) hours before the meeting in a location freely accessible to the Public on the exterior bulletin board at the main entrance to the Authority’s office and it is also posted on the Authority’s website at www.sweetwater.org. No action may be taken on any item not appearing on the posted agenda, except as provided by California Government Code Section 54954.2. Any writings or documents provided to a majority of the members of the Sweetwater Authority Governing Board or a majority of the members of the Citizens Advisory Committee regarding any item on this agenda will be made available for public inspection at the Authority Administration Office, located at 505 Garrett Avenue, Chula Vista, CA 91910, during normal business hours. Upon request, this agenda will be made available in appropriate alternative formats to persons with disabilities, as required by Section 202 of the Americans with Disabilities Act of 1990. Any person with a disability who requires a modification or accommodation in order to participate in a meeting should direct such request to the Board Secretary at (619) 409-6703 at least forty-eight (48) hours before the meeting, if possible.

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1. **Citizens Advisory Committee Rescission of the Recommendation to Perform an Energy Audit**
   
   No action was taken by the Governing Board.

2. **Consideration to Approve the FY 2020-21 Strategic Plan Detailed Work Plan (Annual Work Plan)**
   
   The Governing Board approved the FY 2020-21 Strategic Plan Detailed Work Plan.
SWEETWATER AUTHORITY’S
Annual Drinking Water Quality Report for 2019

Last year, the water delivered to you by Sweetwater Authority met all state and federal drinking water health standards.

EL REPORTE CONTIENE VALIOSA INFORMACIÓN SOBRE LA CALIDAD DE SU AGUA POTABLE Esta disponible en nuestro sitio de web www.sweetwater.org/wqreportsp
WHAT IS SAFE DRINKING WATER?

The U.S. Environmental Protection Agency (USEPA) and the California State Water Resources Control Board (State Water Board) regulate California's tap water. These agencies establish standards that define our current understanding of safe drinking water. Last year, the water delivered by Sweetwater Authority (Authority) met all USEPA and State Water Board drinking water health standards.

This report provides information about the ways that the Authority vigilantly safeguards and treats your drinking water supplies. In accordance with state and federal laws, it also provides a detailed listing of constituents found in your drinking water, and compares those levels to the maximum levels considered safe for the general public by the USEPA and the State Water Board. If you have questions about Authority operations or the contents of this report, please visit www.sweetwater.org or call the Water Treatment Superintendent at 619-409-6812.

This report also includes information about the Authority's water sources and how those sources are protected, as well as people to contact for more details, and ways you can become more involved in protecting your water.

ABOUT SWEETWATER AUTHORITY

The Authority is a publicly-owned, joint powers water agency, with policies and procedures established by a seven-member Governing Board. Five directors are elected by the citizens of the South Bay Irrigation District. Two directors are appointed by the Mayor of National City, subject to City Council confirmation.

The Authority provides safe, reliable water service to approximately 190,000 people in National City, Bonita, and western and central portions of Chula Vista. Its customers include residential, business, government, and industrial water users in an area covering more than 36 square miles in the South Bay region of San Diego County.

ABOUT YOUR 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 Safe Drinking Water Hotline at 1-800-426-4791, or visiting the USEPA website at www.epa.gov/ground-water-and-drinking-water.

Note to special populations: 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.

Before water is treated, raw water may contain contaminants including:

- **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, 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 applications, and septic systems.
Radioactive contaminants, that can be naturally occurring or the result of oil and gas production, and mining activities.

To learn more about contaminants and health effects, call the USEPA Safe Drinking Water Hotline at 1-800-426-4791. Further information is available at www.sweetwater.org or www.mwdh2o.com.

In order to ensure that tap water is safe to drink, the USEPA and the State Water 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.

Water Sources: Authority customers receive water from four sources: the Sweetwater River (drawn at Sweetwater Reservoir in Spring Valley), deep freshwater wells in National City, brackish water wells in Chula Vista, and the region’s imported supply, which is drawn from the Colorado River and/or the State Water Project in northern California. Source water assessments are available for each of these sources.

How is your water protected from contamination?
The local water used by the Authority can be affected by activities within its watershed, a 230-square-mile area leading into the streams that feed the Sweetwater River. The Authority uses a multiple-barrier approach to ensure water quality. Education, stakeholder involvement, and comments to local planners are part of Authority efforts, in addition to the “hardware” solutions described here:

1) An innovative diversion system captures urban runoff before it enters Sweetwater Reservoir and transports the runoff below Sweetwater Dam, reducing the buildup of mineral salts in the reservoir. The diversion system can also capture and hold runoff from a chemical spill or sewage system failure, allowing the contaminants to be removed and trucked away for proper disposal.

2) Well sites are closely monitored to assure that contaminants have not entered the well fields.

3) Surface water is treated and disinfected at the Robert A. Perdue Water Treatment Plant.

4) Potable groundwater is disinfected.

5) Brackish groundwater is treated with reverse osmosis and disinfected. (To learn more, visit www.sweetwater.org/water.)

Consumer questions and answers about water quality, taste, color and odor, can be found at www.sweetwater.org/wq.

The Source Water Assessment identifies activities to which water sources are considered “most vulnerable.” In 2002, source water assessments were completed for the Authority’s water supplies. There were NO contaminants from the “possible contaminating activities” found in the Authority’s water supplies. To request a summary of the assessments, contact the Water Quality Services Technician at 619-409-6805, or cpino@sweetwater.org.

How to Reach Us
Customer Service.................619-420-1413
After Hours Emergency........619-420-1413
Water Quality Info..............619-409-6780
Water Efficiency Helpline.....619-409-6779
Fluoride Info Line..............619-409-6780
Construction Information.....619-409-6850
School Programs...............619-409-6781
Community Presentations.....619-409-6723
Board Secretary...............619-409-6703
<table>
<thead>
<tr>
<th>Inorganic Contaminants</th>
<th>MCL [MRDL]</th>
<th>PHG (MCLG) [MRDLG]</th>
<th>Range and Average</th>
<th>National City Wells (Disinfected with chloramine)</th>
<th>Treated at Reynolds Groundwater Desal Facility</th>
<th>Lake Skinner Outlet (Aqueduct)</th>
<th>Sweetwater Reservoir</th>
<th>Typical Source of Contaminant:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluoride (ppm)</td>
<td>2.0</td>
<td>1</td>
<td>Range</td>
<td>0.4 - 0.4</td>
<td>0.1 - 0.5</td>
<td>0.1 - 0.2</td>
<td>0.2 - 0.3</td>
<td>Erosion of natural deposits; discharge from fertilizer and aluminum factories; water additive that promotes oral health</td>
</tr>
<tr>
<td>Aluminum (ppb)</td>
<td>1000</td>
<td>600</td>
<td>Average</td>
<td>0.4</td>
<td>0.2</td>
<td>0.2</td>
<td>ND</td>
<td>Erosion of natural deposits; residue from surface water treatment processes</td>
</tr>
<tr>
<td>Arsenic (ppb)</td>
<td>10</td>
<td>0.004</td>
<td>Range</td>
<td>ND</td>
<td>ND</td>
<td>1.8</td>
<td>ND</td>
<td>Erosion of natural deposits; glass and electronics production wastes</td>
</tr>
<tr>
<td>Barium (ppm)</td>
<td>1</td>
<td>2</td>
<td>Average</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>Erosion of natural deposits; discharges of oil drilling wastes and from metal refiners</td>
</tr>
<tr>
<td>Selenium (ppb)</td>
<td>50</td>
<td>30</td>
<td>Range</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>Refineries, mines, and chemical waste discharges; erosion of natural deposits; runoff</td>
</tr>
<tr>
<td>Radionuclides (a)</td>
<td></td>
<td></td>
<td>Range</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td></td>
</tr>
<tr>
<td>Gross Alpha (pCi/L)</td>
<td>15</td>
<td>(0)</td>
<td>Average</td>
<td>ND</td>
<td>3.9</td>
<td>ND</td>
<td>ND</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td>Gross Beta (pCi/L)</td>
<td>50</td>
<td>(0)</td>
<td>Average</td>
<td>NA</td>
<td>8.1</td>
<td>ND</td>
<td>ND</td>
<td>Decay of natural and man-made deposits</td>
</tr>
<tr>
<td>Radium - 226 (pCi/L)</td>
<td>5</td>
<td>0.05</td>
<td>Average</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td>Uranium (pCi/L)</td>
<td>20</td>
<td>0.43</td>
<td>Average</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td>Turbidity (b)</td>
<td></td>
<td></td>
<td>Highest Single Measurement</td>
<td>0.28</td>
<td>Soil runoff</td>
<td>0.28</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>Combined Filter Effluent Turbidity (NTU)</td>
<td>TT = 1 NTU</td>
<td>NA</td>
<td>Lowest Monthly Percent of Samples Meeting MCL</td>
<td>0.28</td>
<td>Soil runoff</td>
<td>100.0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Unregulated Contaminants:

- Boron (ppm) NA NL = 1.0 Range 0.23 - 0.24 0.17 - 0.18 0.23 - 0.46 0.13 0.11 - 0.13 0.13 - 0.23 Runoff/leaching from natural deposits; industrial wastes 0.18 Naturally occurring; industrial waste discharge
- Vanadium (ppb) NA NL = 50 Range ND 13 - 14 ND ND 5.3 - 5.5 ND Products manufactured with perfluoroalkyl substances (PFAS) include non-stick cookware, fast-food packaging, stain- and water-repellent fabrics, including clothing and carpets. PFAS chemicals are also found in fire-fighting foam, wastewater effluent, and in landfills.
<table>
<thead>
<tr>
<th>Inorganic Contaminants</th>
<th>MCL (MRDL)</th>
<th>PHG (MCLG) [MRDLG] Range and Average</th>
<th>— BEFORE TREATMENT —</th>
<th>Treated at Reynolds Groundwater Desal Facility</th>
<th>Treated at Robert A. Perdue Water Treatment Plant</th>
<th>Treated Sweetwater Authority Drinking Water</th>
<th>If you do not see a contaminant listed here, it was not detected in 2019.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorate (ppb)</td>
<td>NA</td>
<td>NL = 800</td>
<td>Combined Distribution System Range</td>
<td>Combined Distribution System Average</td>
<td>43 - 700</td>
<td>By-product of drinking water disinfection when using chlorine dioxide; hypochlorite degradation</td>
<td></td>
</tr>
<tr>
<td>Molybdenum (ppb)</td>
<td>NA</td>
<td>NA</td>
<td>Combined Distribution System Range</td>
<td>Combined Distribution System Average</td>
<td>1.0 - 8.2</td>
<td>Naturally occurring; manufacturing process waste</td>
<td></td>
</tr>
<tr>
<td>Strontium (ppb)</td>
<td>NA</td>
<td>NA</td>
<td>Combined Distribution System Range</td>
<td>Combined Distribution System Average</td>
<td>320 - 1100</td>
<td>Erosion of natural deposits; atmospheric deposition; wastewater discharges</td>
<td></td>
</tr>
<tr>
<td>Vanadium (ppb)</td>
<td>NA</td>
<td>NL = 50</td>
<td>Combined Distribution System Range</td>
<td>Combined Distribution System Average</td>
<td>ND - 7.2</td>
<td>Naturally occurring; industrial waste discharge</td>
<td></td>
</tr>
<tr>
<td>Total Organic Carbon (ppm)</td>
<td>TT</td>
<td>NA</td>
<td>Range Average</td>
<td>Perdue Water Treatment Plant - Raw Water Influent (Before Treatment) 2.9 - 12</td>
<td>NA</td>
<td>Various natural and man-made sources</td>
<td></td>
</tr>
<tr>
<td>Bromide (ppb)</td>
<td>NA</td>
<td>NA</td>
<td>Range Average</td>
<td>Perdue Water Treatment Plant - Raw Water Influent (Before Treatment) 81 - 420</td>
<td>NA</td>
<td>Runoff/leaching from natural deposits; seawater influence</td>
<td></td>
</tr>
<tr>
<td>Manganese (ppb)</td>
<td>50</td>
<td>NL = 500</td>
<td>Combined Distribution System Range</td>
<td>Combined Distribution System Average</td>
<td>ND - 10</td>
<td>Leaching from natural deposits</td>
<td></td>
</tr>
<tr>
<td>HAA5 (ppb)</td>
<td>60</td>
<td>NA</td>
<td>Combined Distribution System Range</td>
<td>Combined Distribution System Average</td>
<td>ND - 38.2</td>
<td>By-product of drinking water chlorination</td>
<td></td>
</tr>
<tr>
<td>HAA6Br (ppb)</td>
<td>NA</td>
<td>NA</td>
<td>Combined Distribution System Range</td>
<td>Combined Distribution System Average</td>
<td>ND - 39.6</td>
<td>By-product of drinking water chlorination</td>
<td></td>
</tr>
<tr>
<td>HAA9 (ppb)</td>
<td>NA</td>
<td>NA</td>
<td>Combined Distribution System Range</td>
<td>Combined Distribution System Average</td>
<td>ND - 66.4</td>
<td>By-product of drinking water chlorination</td>
<td></td>
</tr>
<tr>
<td>Disinfection and By-product Contaminants:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Trihalomethanes (TTHMs) (ppb)</td>
<td>80</td>
<td>NA</td>
<td>Highest Locational Running Annual Average (LRAA)</td>
<td>48.5</td>
<td>By-product of drinking water chlorination</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haloacetic Acids (HAAs) (ppb)</td>
<td>60</td>
<td>NA</td>
<td>Highest Locational Running Annual Average (LRAA)</td>
<td>27.2</td>
<td>By-product of drinking water chlorination</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chloramines (ppm)</td>
<td>[4.0]</td>
<td>[4]</td>
<td>Highest Running Annual Average (RAA)</td>
<td>Combined Distribution System Range</td>
<td>ND - 40.3</td>
<td>Drinking water disinfectant added for treatment</td>
<td></td>
</tr>
<tr>
<td>Chlorine Dioxide (ppb)</td>
<td>800</td>
<td>800</td>
<td>Perdue Plant Clearwell Effluent Range</td>
<td>Perdue Plant Clearwell Effluent Average</td>
<td>ND - 240</td>
<td>Drinking water disinfectant added for treatment</td>
<td></td>
</tr>
<tr>
<td>Chlorite (ppm)</td>
<td>1.0</td>
<td>0.05</td>
<td>Combined Distribution System Range</td>
<td>Combined Distribution System Average</td>
<td>ND - 0.43</td>
<td>By-product of drinking water disinfection when using chlorine dioxide</td>
<td></td>
</tr>
<tr>
<td>Chlorate (ppb)</td>
<td>NA</td>
<td>NL = 800</td>
<td>Combined Distribution System Range</td>
<td>Combined Distribution System Average</td>
<td>ND - 0.13</td>
<td>By-product of drinking water disinfection when using chlorine dioxide; hypochlorite degradation</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lead and Copper Rule</th>
<th>Number of sites found above AL</th>
<th>90 percent of samples below</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead (ppb)</td>
<td>AL = 15 0.2</td>
<td>1 site above AL out of 62 sites sampled</td>
</tr>
<tr>
<td>Copper (ppm)</td>
<td>AL = 1.3 0.3</td>
<td>0 sites above AL out of 62 sites sampled</td>
</tr>
</tbody>
</table>
### SECONDARY STANDARDS

<table>
<thead>
<tr>
<th>Inorganic Contaminants</th>
<th>MCL [MRDL]</th>
<th>PHG (MCLG) [MRDLG]</th>
<th>Range and Average</th>
<th>— BEFORE TREATMENT —</th>
<th>Treated at Reynolds Groundwater Desal Facility</th>
<th>Treated at Robert A. Perdue Water Treatment Plant</th>
<th>Treated Sweetwater Authority Drinking Water</th>
<th>If you do not see a contaminant listed here, it was not detected in 2019.</th>
<th><strong>Typical Source of Contaminant:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum (ppb)</td>
<td>200</td>
<td>NA</td>
<td>Range</td>
<td>National City Well 3</td>
<td>National City Well 4</td>
<td>SD Formation Wells 1 - 11</td>
<td>Lake Skinner Outlet (Aqueduct)</td>
<td>Sweetwater Reservoir</td>
<td>— ND - 420²</td>
</tr>
<tr>
<td>Copper (ppb)</td>
<td>1000</td>
<td>NA</td>
<td>Range</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND - 86²</td>
</tr>
<tr>
<td>Iron (ppb)</td>
<td>300</td>
<td>NA</td>
<td>Range</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND - 440²</td>
</tr>
<tr>
<td>Manganese (ppb)</td>
<td>50</td>
<td>NL = 500</td>
<td>Range</td>
<td>ND</td>
<td>ND</td>
<td>27 - 3000²</td>
<td>ND</td>
<td>35 - 69²</td>
<td>Leaching from natural deposits</td>
</tr>
<tr>
<td>Specific Conductance (microseimens/centimeter)</td>
<td>1600</td>
<td>NA</td>
<td>Range</td>
<td>1100 - 1100</td>
<td>870 - 900</td>
<td>1800 - 9400²</td>
<td>543 - 686</td>
<td>860 - 1000</td>
<td>620 - 1100</td>
</tr>
<tr>
<td>Total Dissolved Solids (ppm)</td>
<td>1000</td>
<td>NA</td>
<td>Range</td>
<td>590 - 620</td>
<td>490 - 500</td>
<td>1000 - 6100²</td>
<td>312 - 394</td>
<td>510 - 650</td>
<td>340 - 670</td>
</tr>
<tr>
<td>Chloride (ppm)</td>
<td>500</td>
<td>NA</td>
<td>Range</td>
<td>200 - 210</td>
<td>150 - 160</td>
<td>370 - 3100²</td>
<td>64 - 82</td>
<td>140 - 170</td>
<td>160 - 180</td>
</tr>
<tr>
<td>Sulfate (ppm)</td>
<td>500</td>
<td>NA</td>
<td>Range</td>
<td>58 - 59</td>
<td>38 - 39</td>
<td>116 - 488²</td>
<td>76 - 113</td>
<td>84 - 107</td>
<td>24 - 127</td>
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<tr>
<td>Color (units)</td>
<td>15</td>
<td>NA</td>
<td>Range</td>
<td>1 - 3</td>
<td>1 - 3</td>
<td>1 - 3</td>
<td>5 - 10</td>
<td>20 - 70</td>
<td>1 - 3</td>
</tr>
<tr>
<td>Odor-Threshold (units)</td>
<td>3</td>
<td>NA</td>
<td>Range</td>
<td>ND</td>
<td>ND - 1</td>
<td>ND - 1</td>
<td>7 - 4</td>
<td>3 - 8²</td>
<td>ND - 1</td>
</tr>
<tr>
<td>Turbidity⁴ (NTU)</td>
<td>5</td>
<td>NA</td>
<td>Range</td>
<td>0.12 - 0.13</td>
<td>0.07 - 0.07</td>
<td>0.04 - 0.41</td>
<td>0.8 - 1.2</td>
<td>1.3 - 11.3</td>
<td>0.04 - 0.42</td>
</tr>
<tr>
<td>Foaming Agents (MBAS) (ppb)</td>
<td>500</td>
<td>NA</td>
<td>Range</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
</tr>
</tbody>
</table>

School Lead Testing¹¹

In 2019, the Authority completed lead sampling at 2 schools within its service area in compliance with State Water Board regulations.

### Microbiological (d)

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Highest monthly percentage</th>
<th>Typical Source of Contaminant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Coliform Bacteria</td>
<td>1.1%</td>
<td>Naturally present in the environment</td>
</tr>
<tr>
<td>E.coli Coliform Bacteria</td>
<td>0%</td>
<td>Human and animal fecal waste</td>
</tr>
<tr>
<td>Cryptosporidium (Oocysts/10L)</td>
<td>NA</td>
<td>Naturally present in the environment</td>
</tr>
</tbody>
</table>

¹¹Typical Source of Contaminant:

- **Inorganic Contaminants**: MCL (Maximum Contaminant Level) [MRDL (Maximum Residual Level)], PHG (Primary Health Goal) [MCLG (Primary Guidelines Level)], Range and Average values for each contaminant are listed, with the **Treated** column indicating data from treated drinking water sources.

- **Secondary Standards**: Aluminum, Copper, Iron, Manganese, Conductance, Dissolved Solids, Chloride, Sulfate, Color, Odor-Threshold, Turbidity, and Foaming Agents are detailed with units and measurement ranges. Each contaminant's presence and concentration are cross-referenced with typical sources of contamination, such as erosion of natural deposits, leaching from natural deposits, runoff, industrial wastes, and naturally occurring organic materials.

- **Microbiological Testing**: Includes data on Total Coliform Bacteria, E.coli Coliform Bacteria, and Cryptosporidium, with values representing the highest monthly percentage and typical sources of contamination noted.
<table>
<thead>
<tr>
<th>Inorganic Contaminants</th>
<th>MCL [MRDL]</th>
<th>PHG (MCLG) [MRDLG]</th>
<th>Range and Average</th>
<th>National City Wells (Disinfected with chloramine)</th>
<th>Treated at Reynolds Groundwater Desal Facility</th>
<th>Treated at Robert A. Perdue Water Treatment Plant</th>
<th>Treated Sweetwater Authority Drinking Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium (ppm)</td>
<td>NA</td>
<td>NA</td>
<td>Range</td>
<td>150 - 160</td>
<td>130 - 130</td>
<td>260 - 1300</td>
<td>55 - 69</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Average</td>
<td>155</td>
<td>130</td>
<td>484</td>
<td>62</td>
</tr>
<tr>
<td>Hardness (Total Hardness as CaCO₃ ppm)</td>
<td>NA</td>
<td>NA</td>
<td>Range</td>
<td>190 - 190</td>
<td>160 - 170</td>
<td>320 - 1800</td>
<td>137 - 170</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Average</td>
<td>190</td>
<td>165</td>
<td>658</td>
<td>154</td>
</tr>
<tr>
<td>Radon (pCi/L)²</td>
<td>NA</td>
<td>NA</td>
<td>Range</td>
<td>270²</td>
<td>374²</td>
<td>190 - 300²</td>
<td>ND</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Average</td>
<td>270</td>
<td>374</td>
<td>240</td>
<td>ND</td>
</tr>
<tr>
<td>pH (Standard Units)</td>
<td>NA</td>
<td>NA</td>
<td>Range</td>
<td>7.8 - 8.1</td>
<td>7.9 - 8.2</td>
<td>7.2 - 8.2</td>
<td>8.0 - 8.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Average</td>
<td>8.0</td>
<td>8.1</td>
<td>7.9</td>
<td>8.2</td>
</tr>
<tr>
<td>Total Organic Carbon (ppm)</td>
<td>TT</td>
<td>NA</td>
<td>Range</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>3.2 - 3.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Average</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>3.4</td>
</tr>
</tbody>
</table>

### Informational Statements

The Authority vigilantly safeguards its water supplies and has met all state and federal health standards. The following information describes potential health effects of drinking water that contain contaminants above federal maximum levels.

#### Radon

Radon is a radioactive gas that you cannot see, taste, or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water through showering, washing dishes, and other household activities. In most cases, the amount of radon entering a home from tap water will be much less than the amount of radon entering the home through soil. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. You should pursue radon removal for your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. For additional information, call the State Radon Program (1-800-745-7236), the USEPA Safe Drinking Water Hotline (1-800-426-4791), or the National Radon Hotline (1-800-767-7236).

#### Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. Lead in drinking water is primarily from materials and components associated with service lines and household plumbing. The Authority is responsible for providing high quality drinking water, but cannot control the variety of materials used in household 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 USEPA Safe Drinking Water Hotline (1-800-426-4791) or at [www.epa.gov/lead](http://www.epa.gov/lead).

#### Fluoride

Fluoride is a naturally occurring mineral found in both surface water and groundwater. Fluoridation is the addition of fluoride to a drinking water supply so that it contains the level recommended for optimal protection against tooth decay. California law mandates fluoridation. Public water systems with at least 10,000 service connections are required, once funded, to fluoridate their drinking water. The Authority began fluoridation of the water supply delivered to customers in January 2017. This action is in compliance with the State Water Board Regulations Related to Drinking Water (Section 64433). State regulations require the fluoride levels in the treated water be maintained within a concentration range of 0.6 mg/L to 1.2 mg/L with the optimal target dose set at 0.7 mg/L, which is considered to provide optimal oral health benefits. Additional information about fluoridation is available from the State Water Board Division of Drinking Water at [www.swrcb.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml](http://www.swrcb.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml).
AL = Regulatory Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow (AL now applies only to lead and copper).

MCL = Maximum Contaminant Level: 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.

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 are set by the USEPA.

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.

MRDLG = Maximum Residual Disinfectant 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.

NA = Not Applicable (No standard specified or no monitoring required)

ND = Not Detected

NL = Regulatory Notification Level: (previously known as Action Level). The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

PFOA. In 2019, both PFOA and PFOS were detected in SDF2 above their respective notification levels, however the reverse osmosis technology used at the Reynolds Desalination Facility effectively removes these chemicals to below detectable levels, therefore there was no impact to our customers and no notification was required. This was confirmed with the State Water Board by sampling the Reynolds Desalination Facility finished water, which showed that none of the 18 PFAS chemicals tested by EPA Method 537.1 were detected. For more information on PFAS, visit www.sweetwater.org/wq.

6. MRDL compliance for chloramines is determined on a system-wide basis by calculating a running annual average of all distribution sampling point averages.

PDWS = Primary Drinking Water Standard: MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

PHG = Public Health Goal: 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 (CalEPA).

FOOTNOTES

1. Sweetwater Authority drinking water data is representative of water which has been processed through the Robert A. Perdue Water Treatment Plant (conventional treatment) or the Richard A. Reynolds Groundwater Desalination Facility (reverse osmosis treatment).

2. The contaminants listed are in the untreated waters. The water is processed through either a reverse osmosis filtration plant (Reynolds Groundwater Desalination Facility) or through a conventional water treatment plant (Perdue Water Treatment Plant). These water treatment applications typically remove these contaminants to concentrations below detectable levels.

2a. This contaminant was not detected in the Reynolds Desalination Facility finished water; contaminant not determined in the Robert A. Perdue Water Treatment Plant finished water.

3. The State Water Board allows the Authority to monitor for some contaminants less than once per year because the concentrations of the contaminants do not change frequently. Radiological data on untreated source waters was collected in 2006-2007, 2017-2019. Lead and Copper data was collected in July 2017. Compliance with the lead and copper action levels is determined at the 90th percentile.

4. Reported value represents a single measurement; therefore, the range and average are the same.

5. Unregulated contaminant monitoring helps USEPA and the State Water Board to determine where certain contaminants occur and whether the contaminants need to be regulated.

On March 15, 2019 the State Water Board, Division of Drinking Water issued an Order requiring the Authority to conduct quarterly monitoring for one year for per- and poly-fluorinated alkyl substances (PFAS) at three San Diego Formation Wells (SDF 1, 2, and 6), which are used as a source of supply to the Reynolds Desalination Facility. These wells were selected because they are located in proximity to an abandoned landfill in National City. Of the PFAS chemicals, perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS) have been the most extensively studied and DDW has assigned health-based notification levels of 5.1 and 6.5 parts per trillion (ppt) respectively to these chemicals. In addition, the State Water Board is currently in the process of developing public health goals (PHGs) and maximum contaminant levels (MCLs) for PFOS and PFOA. In 2019, both PFOA and PFOS were detected in SDF2 above their respective notification levels, however the reverse osmosis technology used at the Reynolds Desalination Facility effectively removes these chemicals to below detectable levels, therefore there was no impact to our customers and no notification was required. This was confirmed with the State Water Board by sampling the Reynolds Desalination Facility finished water, which showed that none of the 18 PFAS chemicals tested by EPA Method 537.1 were detected. For more information on PFAS, visit www.sweetwater.org/wq.

6. MRDL compliance for chloramines is determined on a system-wide basis by calculating a running annual average of all distribution sampling point averages.

MCL compliance for trihalomethanes (TTHMs) and haloacetic acids (HAAs)
FOOTNOTES CONT.

is determined by calculating a quarterly locational running annual average at each Stage 2 DBP Rule monitoring location. MCL compliance for chlorine dioxide is based on daily samples at the entrance to the distribution system and follow-up distribution system monitoring following an MRDL exceedance. MCL compliance for chlorite is based on daily samples at the entrance to the distribution system, monthly distribution system monitoring, and follow-up confirmation sampling following an MCL exceedance.

7. Cryptosporidium (Crypto) monitoring. In 2019, Crypto was not detected in Sweetwater Reservoir. The last detection for Crypto in Sweetwater Reservoir occurred in August of 2005 (1.0 oocyst in 10 liters).

8. Aluminum and Turbidity have both a primary and a secondary MCL.

9. Radon was sampled in 2000 for San Diego Formation Wells 1-5, in 2001 for the National City Wells 2 and 3, and in 2008 for San Diego Formation Well 6 and National City Well 4.

10. Fluoride - The Authority treats your water by adding fluoride to the naturally occurring level to help prevent tooth decay in consumers. State regulations require the fluoride levels in the treated water be maintained within a concentration range of 0.6 mg/L to 1.2 mg/L with an optimal target dose set at 0.7 mg/L, which is considered to provide optimal oral health benefits. In 2019, the Authority’s monitoring showed fluoride levels in the (fluoridated) treated water ranged from 0.5 mg/L to 0.9 mg/L, with an average of 0.7 mg/L. Information about fluoridation, oral health and current issues is available at www.swrcb.ca.gov/drinking_water/certlic/drinking-water/Fluoridation.shtml.

11. School Lead Testing - In January 2017, the State Water Board issued an amended permit to all public water systems in California, requiring them to sample for lead at all K-12 schools within their service area. Under this mandate, school officials can request in writing that their local water agency sample their school for lead. The written request must be submitted by November 1, 2019. In 2017, the Authority received requests from 46 schools (out of a total of 67 eligible schools) for lead sampling. The Authority worked with those schools to develop sampling plans and conduct testing. In 2018, no schools submitted written requests for lead testing. In 2019 two schools were tested as required by California Assembly Bill 746 (AB746). The Authority has now completed the school lead sampling requirements as specified by the Authority’s Water Supply Permit Amendment and AB746. Please contact the Water Treatment Superintendent at 619-409-6812 to obtain a summary of the lead testing results.

(a) Compliance with the radiological MCLs is typically based upon samples collected every three to nine years (depending on previous monitoring results), unless waived by the State Water Board. Compliance with the gross alpha MCL is determined by excluding the values for radon and uranium. The State Water Board considers 50 pCi/L to be the level of concern for beta particles. The MCL for radium is for the combination of the “226” and “228” isotopes.

(b) The turbidity level of the filtered water shall be less than or equal to 0.3 NTU (Nephelometric Turbidity Units) in 95 percent of the measurements taken each month and shall not exceed 1.0 NTU for more than eight consecutive hours or 1 NTU for more than one continuous hour and none of the 4-hour interval readings shall exceed 1 NTU.

Turbidity is a measure of the cloudiness of the water. The Authority monitors turbidity because it is a good indicator of the effectiveness of our filtration system.

(c) Quarterly UCMR3 monitoring was conducted in 2014-2015. UCMR3 monitoring consisted of 28 List 1 and List 2 chemicals. Of these, only chlorate, vanadium, molybdenum, and strontium were detected. In addition to UCMR3, the Authority routinely monitors for vanadium as an unregulated contaminant and for chlorate as part of the Disinfection By-products Rule.

Quarterly UCMR4 monitoring was conducted in 2018 - 2019 for the 17 List 1 chemicals and the 11 List 2 chemicals. Of these, only TOC, bromide, manganese, and haloacetic acids were detected. For UCMR4, the haloacetic acids are reported in three groups (HAA5, HAA6Br, and HAA9), as follows:

HAA5 equals the sum of monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid.

HAA6Br equals the sum of monobromoacetic acid, dibromoacetic acid, bromochloroacetic acid, bromodichloroacetic acid, chlorodibromoacetic acid, and tribromoacetic acid.

HAA9 equals the sum of monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, dibromoacetic acid, bromochloroacetic acid, bromodichloroacetic acid, chlorodibromoacetic acid, and tribromoacetic acid.

(d) Please note, starting in 2016, the State Water Board required California public water systems to be in simultaneous compliance with both the CA TCR and the Federal RTCR criteria listed below.

State of California Total Coliform Rule (CA TCR) - Total coliform MCL: No more than 5.0% of the monthly samples may be total coliform positive.

Acute coliform (E.coli) MCL: A routine sample and a repeat sample are total coliform positive, and one of these is also E.coli positive. The Authority did not violate either MCL in 2019. Results are based on the distribution system’s highest monthly percent positives. Compliance is based on the combined distribution system sampling from all treatment plants. In 2019, 1,914 samples were analyzed.

Federal Revised Total Coliform Rule (RTCR) - Total Coliform TT trigger, Level 1 assessments, and total coliform TT violations: More than 5.0% total coliform positive samples in a month trigger a Level 1 assessment. Failure to conduct
A clean water supply is the norm thanks to modern water treatment

Modern treatment techniques have improved water supplies to the point where people often take the safety of tap water for granted.

However, ensuring water quality is a big commitment. Local and regional water agencies work around-the-clock to make sure customers have safe, reliable drinking water.

A century ago, however, many people did not have access to safe, reliable water. That was why filtration and chlorination systems were first installed in municipal water systems.

That seemingly basic service made a profound difference; U.S. life expectancy increased and child mortality decreased. Once-common diseases such as cholera and typhoid have been essentially wiped out.

Continuous advances in technology have allowed water agencies to adopt increasingly sophisticated ways of preventing harmful levels of bacteria and chemicals from fouling water supplies.

Water quality standards are measured in “parts per million” or “parts per billion.” But those terms can be difficult to relate to, and it’s hard to know what they mean. This chart can help you visualize the proportions in terms of some ordinary items.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PARTS PER MILLION</th>
<th>PARTS PER BILLION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linear Measure</td>
<td>1 inch in 15.78 miles</td>
<td>1 inch in 15,780 miles</td>
</tr>
<tr>
<td>Time</td>
<td>1 minute in 1.9 years</td>
<td>1 minute in 1,902 years</td>
</tr>
<tr>
<td>Money</td>
<td>1 cent in $10,000</td>
<td>1 cent in $10 million</td>
</tr>
<tr>
<td>1 drop of water</td>
<td>1 drop in a half-full bathtub</td>
<td>1 drop in an Olympic-size swimming pool</td>
</tr>
</tbody>
</table>

Source: USEPA; Alaska Department of Environmental Conservation; Sweetwater Authority

Federal and state agencies oversee the testing process, periodically setting more stringent safeguards. Over the past 30 years, the number of regulated contaminants in potable water has nearly quadrupled; and contaminant levels that once were measured in parts per million are now traced to parts per billion – giving consumers an even greater margin of safety.

The entire process has delivered a major public health benefit, a real value that customers help pay for a little at a time.

Public water providers just charge what it costs to deliver safe supplies

Every few months when corporations publicly announce their revenues, shareholders expect a big return. Some multi-national energy companies routinely post annual profits in the billions.

Not so for the public agencies which deliver another crucial resource – water – right to your home or business every day. They make $0 profit annually. In fact, agencies such as the Authority are legally required to charge only what it costs to treat and deliver drinking water.

All the money collected is invested into the pumps, pipes, and other elements of the water system. The system is complex, and includes securing supplies; pumping, moving, treating, and testing water; maintaining and financing infrastructure; and establishing financial reserves for emergencies and paying for environmental enhancements or mitigation.

Related costs have grown over time due to a variety of factors, such as increases in the price of energy and treatment chemicals. Local water suppliers are also strategically increasing the use of local sources, such as recycled water and groundwater, to buffer our region from shortages.

In all those efforts, customers of public water agencies can be confident that they are paying the actual costs of providing safe and reliable water service – a real value day in and day out.

The Authority is committed to maintaining a safe and reliable supply of drinking water for current and future customers.
MISSION
The mission of Sweetwater Authority is to provide our current and future customers with a safe and reliable water supply through the use of the best available technology, sound management practices, public participation and a balanced approach to human and environmental needs.

VISION
Sweetwater Authority is a premier water agency. We partner with public and private sectors to maximize value for our rate payers. Our water system infrastructure is innovative, yet functional, practical and cost-effective. We provide a reliable and sustainable source of water. We consistently deliver industry-leading service to our customers.
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AREAS OF FOCUS

TOP TIER

I. Costs/Affordability
• Find ways to help out ratepayers struggling to pay water rates

II. Safety
• Communicate Emergency Response Plan to ratepayers (Poway)
• Operations & maintenance; Deferred maintenance; ERP
• SR 8 - Adequate security
• AE 1 - Emergency preparedness
• Water safety (climate security) - provisions and measures in place to protect water during climate crisis

III. Quality /Reliability
• WQ 7 - Ensure long-term sustainable health of Sweetwater Reservoir
• WQ 9 - Laboratory standards

SECOND TIER

IV. Reclaimed Water

V. Pay for Performance

VI. Contract Outsourcing
• Contract outsourcing studies
• Smart meters

ADDITIONAL CONCERNS

• Owner-controlled insurance program on all construction projects
• Customer Service, Citizen Engagement & Community Relations (CS) - incentive → rebates (water barrels, etc.)
• Value engineering program
• Continue to improve website with information to ratepayers
• Energy audit
• Find ways to continue lead testing program to all schools
• Equity provisions - equitable access to water - connect to UN General Resolution
• Technology improvement to help reduce costs to ratepayers
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Proposed Initiatives for SWA Citizens Advisory Committee

1. **Energy Audit of All SWA Facilities**
   - (Goal #3 Financial Viability—Objective FV5)

2. **Value Engineering Program for Major Capital Improvements**
   - (Goal #2 System&Water Supply Reliability—Objective SR9)

3. **Pay for Performance Program (Bid to Goal Incentive Program)**
   - (Goal #5 Workforce Development and Constructive Labor Relations—Objective WD6)

4. **OCIP for All Construction Projects (Owner Controlled Insurance Program)**
   - (Goal #6 Administrative Effectiveness—Objective AE3)

5. **Distributed Control System Automation Study for Industrial Facilities**
   - (Goal #3 Financial Viability—Objective FV5)

6. **Contract Outsourcing Studies**
   - Vehicle Maintenance
   - Meter Reading
   - Laboratory Services
   - Billing Services
   - (Goal #3 Financial Viability—Objective FV5)

7. **Reclaimed Water Utilization (South Bay Water Reclamation Plant)**
   - (Goal #2 System&Water Supply Reliability—Objective SR11)

8. **Desiltation of Sweetwater and Loveland Reservoirs**
   - (Goal #2 System&Water Supply Reliability—Objective SR9)

9. **Loveland Dam to Sweetwater Dam Pipeline**
   - (Goal #2 System&Water Supply Reliability—Objective SR1)

10. **Public Private Partnership (P3) Opportunities**
    - (Goal #3 Financial Viability—Objective FV5)