Water Quality and the Water Board
For Oakland Shoreline Leadership Academy

October 23, 2021

Sami Harper
Samantha.Harper@waterboards.ca.gov

Photo by Ronan Furuta on Unsplash
Agenda

- Quiz!
- The Water Board
  - What does “water quality” mean to us?
  - How do we protect water quality?
- Divisions of the Water Board
  - What are the databases available to the public?
- How to Engage
  - How can you engage with us?
  - How should we engage with you?
Water Quiz

http://pollev.com/sharper893

Text SHARPER893 to 22333 to join the session, then text “ABC”
San Francisco Bay Regional Water Quality Control Board

- **Authority:** to protect and improve the quality of water resources, including wetlands and groundwater
  - Set standards
  - Issue permits
  - Determine compliance
  - Take enforcement actions

- **Jurisdiction:** Regional boundary based on watersheds
### Beneficial Uses

<table>
<thead>
<tr>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRICULTURAL SUPPLY (AGR)</td>
</tr>
<tr>
<td>AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE (ASBS)</td>
</tr>
<tr>
<td>COLD FRESHWATER HABITAT (COLD)</td>
</tr>
<tr>
<td>COMMERCIAL, AND SPORT FISHING (COMM)</td>
</tr>
<tr>
<td>ESTUARINE HABITAT (EST)</td>
</tr>
<tr>
<td>FRESHWATER REPLENISHMENT (FRSH)</td>
</tr>
<tr>
<td>GROUNDWATER RECHARGE (GWR)</td>
</tr>
<tr>
<td>INDUSTRIAL SERVICE SUPPLY (IND)</td>
</tr>
<tr>
<td>MARINE HABITAT (MAR)</td>
</tr>
<tr>
<td>FISH MIGRATION (MIGR)</td>
</tr>
<tr>
<td>MUNICIPAL AND DOMESTIC SUPPLY (MUN)</td>
</tr>
<tr>
<td>NAVIGATION (NAV)</td>
</tr>
<tr>
<td>INDUSTRIAL PROCESS SUPPLY (PRO)</td>
</tr>
<tr>
<td>PRESERVATION OF RARE AND ENDANGERED SPECIES (RARE)</td>
</tr>
<tr>
<td>WATER CONTACT RECREATION (REC1)</td>
</tr>
<tr>
<td>NONCONTACT WATER RECREATION (REC2)</td>
</tr>
<tr>
<td>SHELLFISH HARVESTING (SHELL)</td>
</tr>
<tr>
<td>FISH SPAWNING (SPWN)</td>
</tr>
<tr>
<td>WARM FRESHWATER HABITAT (WARM)</td>
</tr>
<tr>
<td>WILDLIFE HABITAT (WILD)</td>
</tr>
</tbody>
</table>
Other State Water Agencies

State Water Board – Division of Water Rights
- Oversees allocation of water

Department of Water Resources
- Manages state-owned water infrastructure
SF Water Board Divisions

- NPDES Wastewater and Enforcement
- Cleanup Programs
  - Toxics Cleanup
  - Groundwater Protection
- Planning and TMDLs
- Watershed
NPDES and Enforcement

- "Point Source" pollution
- Permit wastewater treatment facilities
  - Municipal and Industrial

(National Pollutant Discharge Elimination System)
Cleanup Programs

- Require cleanup of sites
  - Underground storage tanks
  - Landfills
  - Departments of Defense and Energy
  - Vapor intrusion
  - PFAS/PFOS/PFOA
- Databases: GeoTracker and GAMA (and Envirostor)
(Total Maximum Daily Load)

Planning/TMDL Division

- SWAMP (Surface Water Ambient Monitoring Program)
- Develop TMDLs for impaired watersheds
- Agricultural Lands (Non-point source pollution)
- Grants for restoration projects
- Dredging
Watershed Management

- Permits projects that could discharge pollutants
- Stormwater/Urban Runoff
  - Trash control
  - Green infrastructure
  - Oversees permits for CalTrans, industrial sites, construction sites, transportation agencies, and ports
- Stream and wetland protection
- Water recycling
Next Board Meeting

- Triennial Review – Priorities for the Planning Division for the next 3 years
- City and County of San Francisco – cleanup and abatement order
- Follow up on PCB Legacy Sites – workshop hearing on cleanup
Ways to Engage with Us

- Join Lyris lists to get updates on topics of interest to you: [https://www.waterboards.ca.gov/resources/email_subscriptions/reg2_subscribe.html](https://www.waterboards.ca.gov/resources/email_subscriptions/reg2_subscribe.html)
- Attend public meetings
  - Board Meetings: 2nd Wednesday at 9 AM
- Comment on projects
- Use the databases to find cases relevant to you
- Follow us on social media!
- What is missing?

@SFBayWaterBoard
Thank you!!

Why Activism is Essential
Nerd-ery

- News on global water issues (including a lot in CA): https://www.circleofblue.org/
- News on scientific journal articles related to climate change: https://www.anthropocenemagazine.org/
- Articles on nature in and around the Bay Area: https://baynature.org/
- Jobs in water around the world: https://www.joshswaterjobs.com/
Questions?

Sami Harper

Samantha.harper@waterboards.ca.gov

Image: Don Edwards National Wildlife Refuge in Fremont
King Tides Project
Water Facts Quiz

- How much freshwater is available to humans on the planet? 1%
- What are some ways we use water outside the home? Swimming, surfing (Rec1), fishing (Comm, shell), eating food grown with it (Agr), industrial uses (ind, proc), navigation (Nav), kayaking, camping, hiking, aesthetic enjoyment (Rec2), drinking (Mun)
- What % of the earth is covered by water? 70%
- What are some ways animals and plants use the water? Spawning (spwn), migration (Migr), habitat (endangered and not) (ASBS, COLD, warm, wild, EST, Mar, rare)
- How much more expensive is bottled water than tap water? Tap water $1.50/1000 gallons; bottled water $5000/1000 gallons
- What are ways the environment needs water? Maintain water quality (fresh, gwr)
- What % of water is used for domestic uses in the US? 8% domestic use; 33% agriculture; 59% industry (Are these numbers the same for Ca?)
Water Me!

- https://www.youtube.com/watch?v=49I6JrUnSQg
Videos

- Explaining the importance of wetlands:
  - https://www.youtube.com/watch?v=Kg9UN9IeY2A

- Stormwater
  - https://www.youtube.com/watch?v=lVQphhhtJLY

- What is Water Quality
  - https://www.youtube.com/watch?v=eHvrsXkxpKw&list=PL1A323653FE4C34F5&index=18

- Local News on Sea Level Rise and WWTPs
  - https://www.youtube.com/watch?v=eHvrsXkxpKw&list=PL1A323653FE4C34F5&index=18