

# Understanding the Water Situation in and around Channel Islands Harbor

May 17, 2022

Channel Islands Neighborhood Council (CINC)

Marine Advisory Committee (MAC)

5/6/2022





60 years of Mandalay  
Generating Station  
pumping 1.5 billion  
gallons of water helped  
sustain water quality in  
the harbor

**In early 2018 pumping operations stopped!**



# Goals

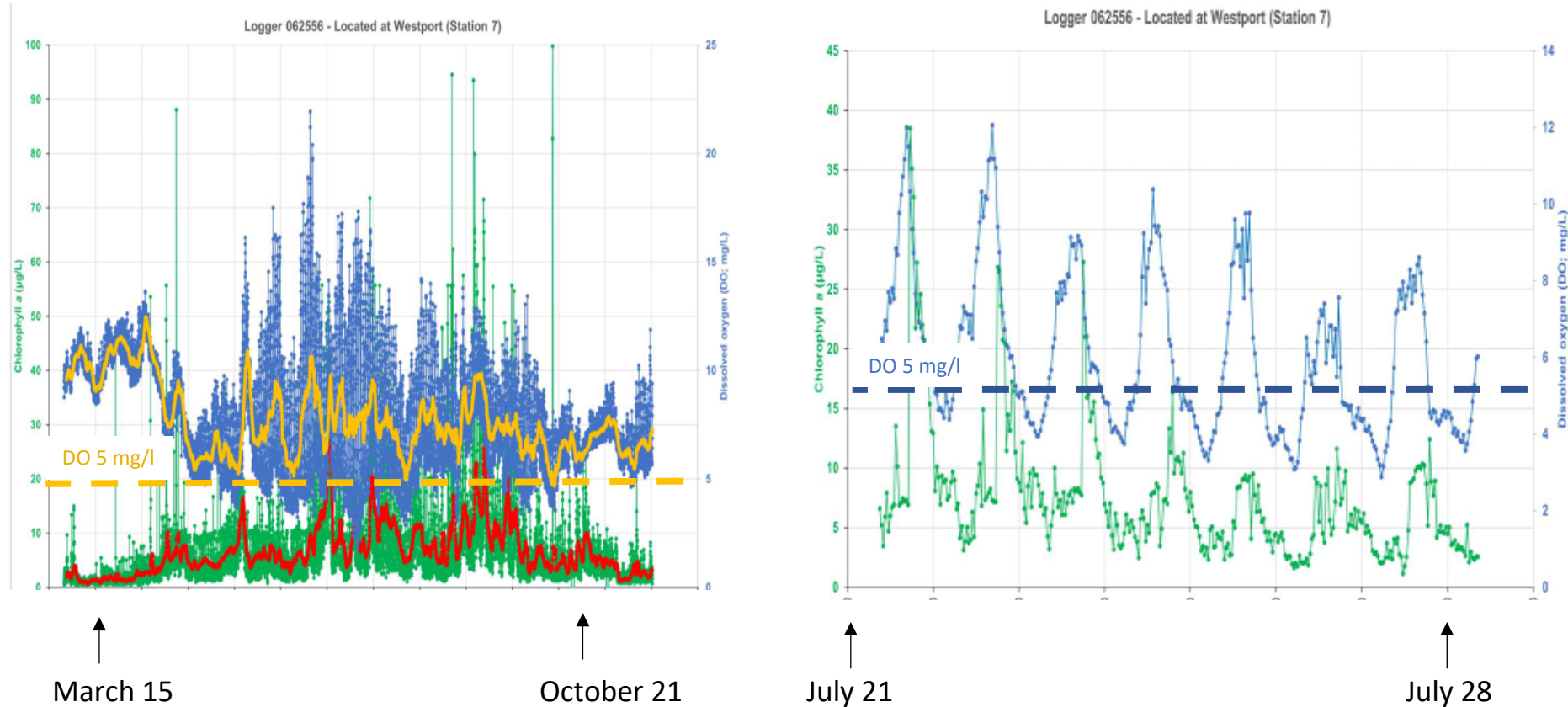
MAC has two parallel goals:

- Safe swimmable and fishable water in the harbor **for all to enjoy**, and
- **Conservation of water** for agricultural and residential usage



# Remote Sensors for Dissolved Oxygen and Chlorophyll (2021)

Westport



- Dissolved Oxygen lower than 5 mg/l can be stressful to marine organisms
- Daily cycle during summer often drops below this level at night, but usually recovers during the day
- Risk if an extensive algae bloom and then die-off depletes oxygen levels that don't recover



# Toxicity

Ability of organisms to survive and reproduce

- Specifically, the test measures the survival of small shrimp in water sample for one week



Moderate Rain (0.82")

% of shrimp that did not survive on Dec 15, 2021



Heavy Rain (1.36")

# Significant Challenges During Wet Weather

March 29, 2022 1.09 inches rain

Sampling of Bacteria 2022-03-29 104 is the maximum acceptable value.



Heavy rain caused extremely high bacteria levels in Edison Canal, adjacent to storm drains, and throughout the harbor. Values significantly **exceed the 104 MPN/100ml** threshold for impaired waters established by the water board.



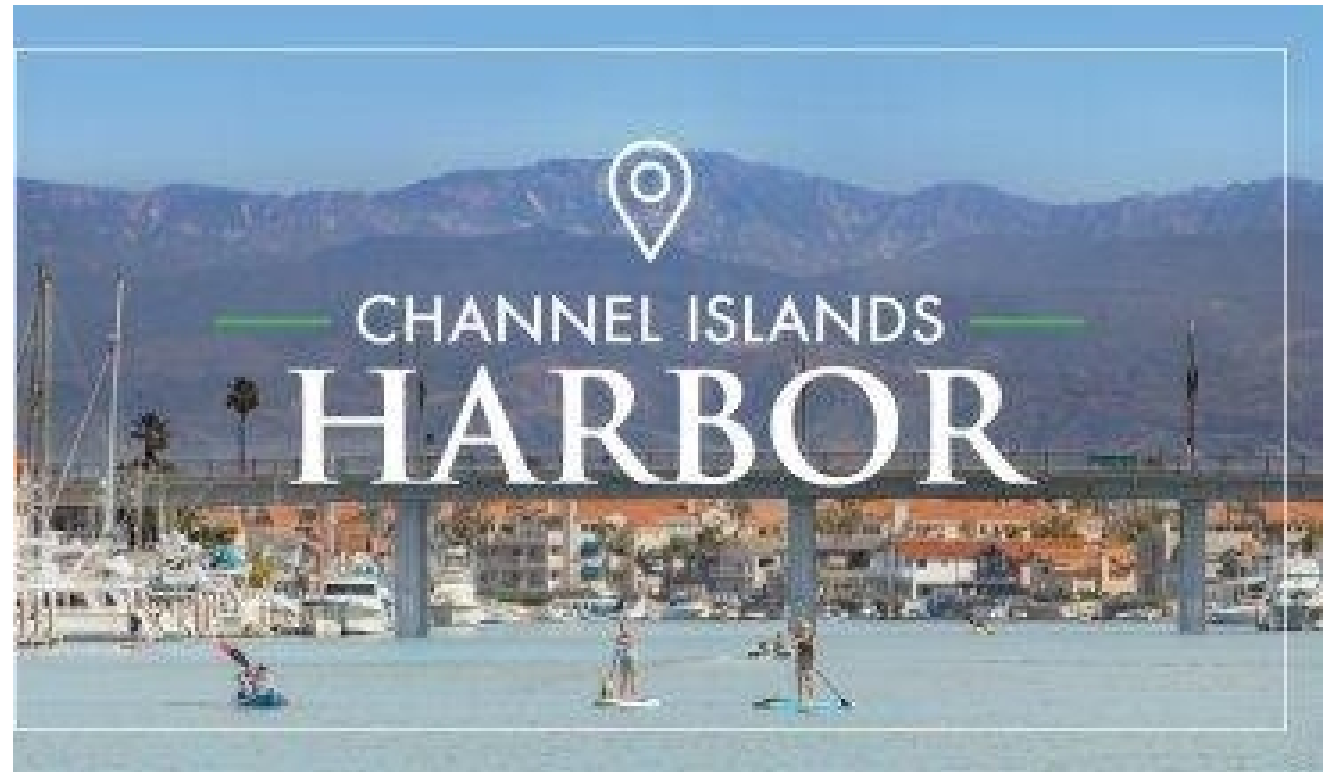
# Triple Threat to the Harbor

- ❖ Elevated bacteria levels makes swimming and water activities unsafe
- ❖ Diminished dissolved oxygen levels are fatal to fish and other sea life
- ❖ Toxins are fatal to aquatic life and may impact the food chain



# Appreciation

- The ARPA designated funding for
  - ✓ Feasibility Study \$300,000
  - ✓ Remediation \$1 million
- Requested \$500k from State Budget
- Grant applications submitted by Eric Humel
- City staff efforts and recently formed Harbor Water Quality Task Force, including
  - Michael Wolfe
  - Steve Howlett
  - Heather D'Anna Nichols
  - Eric Storrie
  - Lyn McGraw





# Support for Safe Water in the Harbor

1. Please provide funding for continuing water testing (\$150,000)
2. Please authorize city staff to initiate RFP for the Feasibility Study **now**
3. Please empower and authorize City employees on the Harbor Water Quality Task Force
4. Please support grant applications

