

[DRAFT] Shelter Island Yacht Basin Dissolved Copper Total Maximum Daily Load (TMDL)

Agenda 2021-0132

Presentation and Direction to Staff

- A. Informational Update on a Proposed Pause of In-Water Hull Cleaning of Vessels With Copper-Based Antifouling Paint in Shelter Island Yacht Basin for an Eight-Week Period Starting Approximately Mid-December 2021 and Continuing Through Mid-February 2022, and
- B. Direction to Staff on a Draft Amendment to Section 4.14 of the District Code, Regulation of In-Water Hull Cleaning, To Implement the Temporary Pause

Draft Presentation Subject to Change


Project Partnership

David Gibson, Executive Officer, San Diego Regional Water Quality Control Board

- Regional Board's role is to preserve, enhance and restore the quality of California's water resources
- Establish regulations when waters do not support beneficial uses
- Share mutual concerns about TMDL
- Regular coordination with the Port
- Project partner for Hull Cleaning Pause




 Copper levels in Shelter Island exceeds 3.1 µg/L state regulatory standard

 Per TMDL Copper Antifouling Paint is primary source via

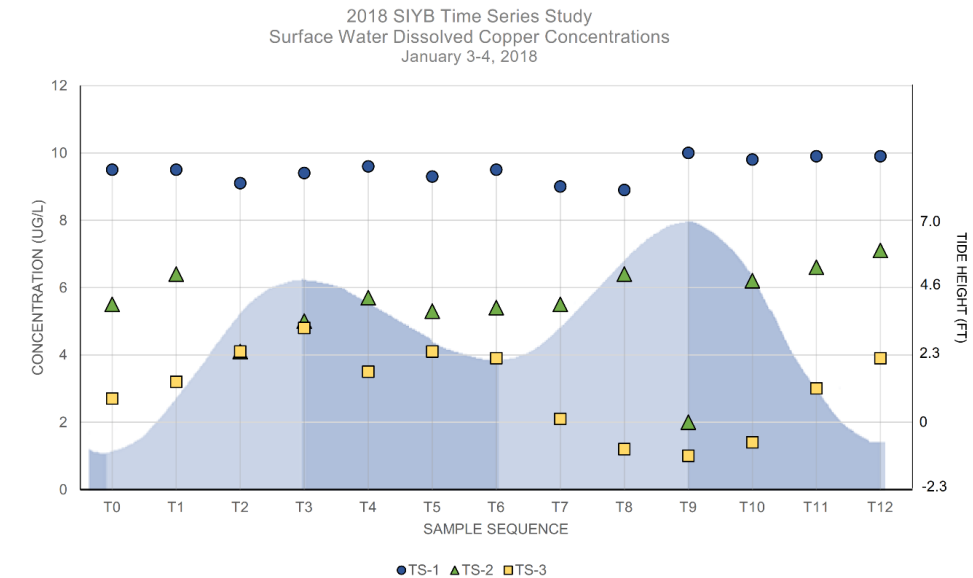
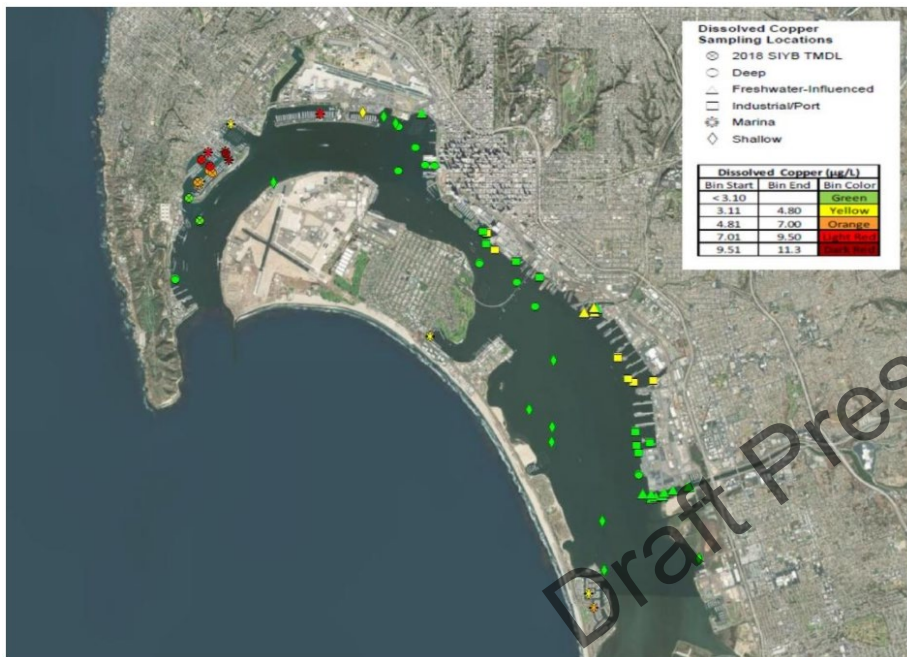
- Passive leaching
- In-Water Hull Cleaning

 76% reduction required by 2022

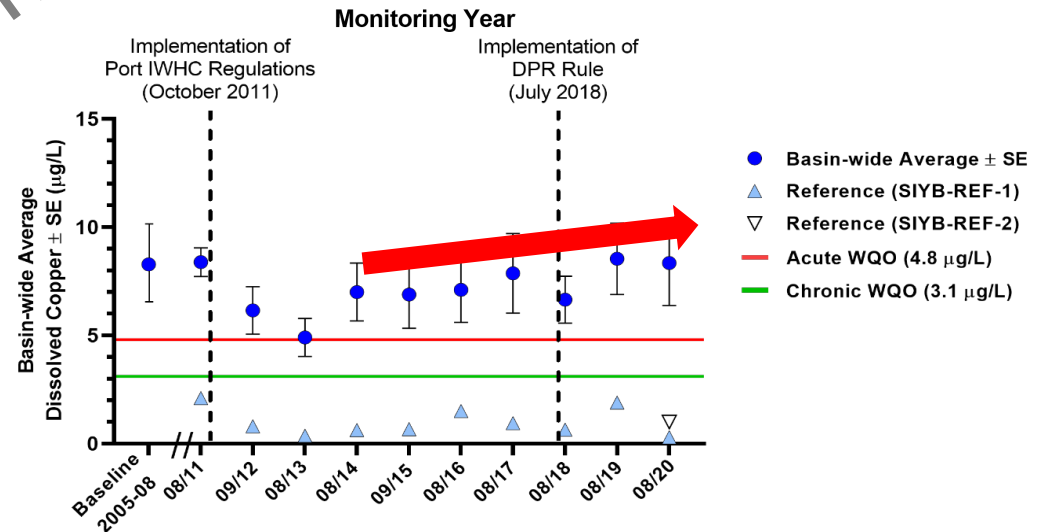
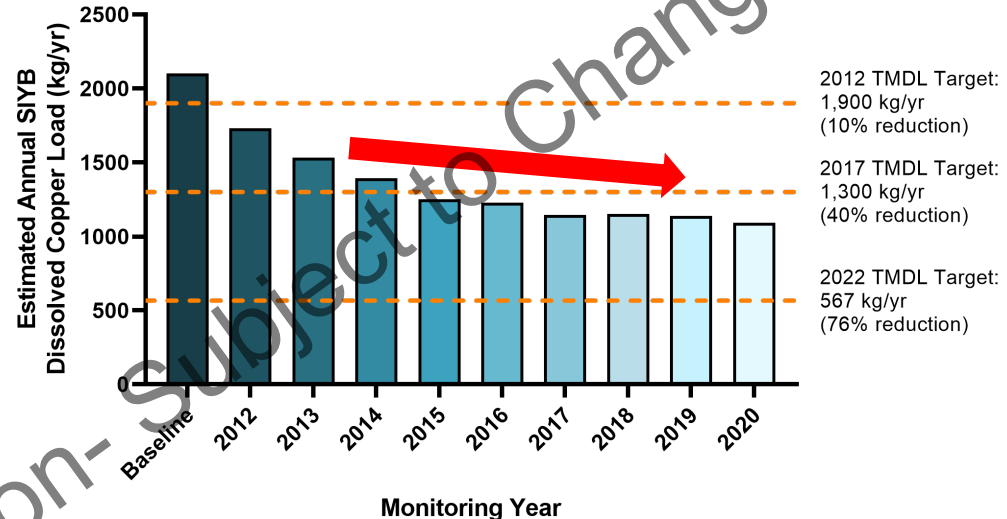
 District, marinas & yacht clubs, hull cleaners, and boaters are named dischargers

Water Quality- What We Know

- Bay-wide water quality: marinas have higher dissolved copper concentrations, especially in SIYB
- In SIYB:
 - Copper concentrations well studied in SIYB
 - Water column is relatively consistent, slightly lower concentrations at bottom depths
 - Tidal influences examined within inner, mid, and outer portions of SIYB



SIYB Water Quality and Loading Disconnect



Source: 2020 SIYB Annual Monitoring & Progress Report, Wood, March 2021

Recent Scientific Studies

- *2019 Conceptual Model Review (Wood)*: adjusting hull cleaning frequencies and practices will reduce copper loads and are likely to improve water quality
- *2021 Study 319 Report: Monitoring of Dissolved Copper in California Coastal Waters (Dept of Pesticide Regulation)*: concluded hull cleaning may contribute 45% greater load compared to no cleaning

Blue Economy Incubator Findings

- Boatwash evaluated water quality effects from diver-based cleaning
- Diver-based cleaning can increase copper 5-10x (4-50 $\mu\text{g/L}$) greater than state standard and effects last 30 days



SIYB Vessel Profile: *Hull Cleaning Projections*

2,169 vessels in SIYB (2020 TMDL Report)

- 2,051 with Copper Paint
- 118 with non-copper/no paint

Standard Practice: 15 cleanings/year

The Result: 30,765 / year 592 / week 84 / day

Draft Presentation - Subject to Change

Public Engagement Efforts

Ongoing Engagement

- Port Marina Working Group est. August 2020
- Meetings with divers and boatyards
- Hull cleaning surveys- February 2021

Incorporating Feedback

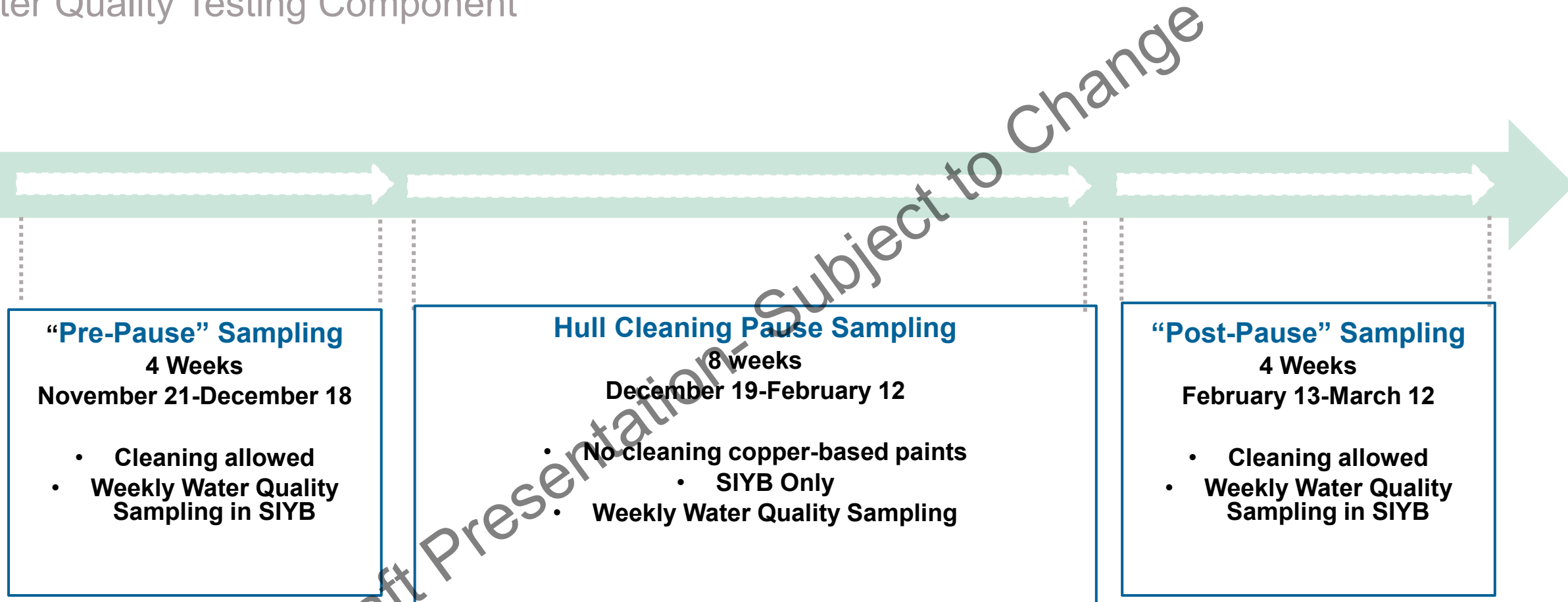
- Key issues: length of the pause, economic impact, vessel upkeep

Agency Support

- Worked with Regional Board on water quality testing plan
- CA Dept. of Pesticide Regulation finds the pause valuable to statewide efforts

In-Water Hull Cleaning Pause

Water Quality Testing Component



In-Water Hull Cleaning Pause

Water Quality Testing Component



Draft Ordinance Amendment

District Code 4.14, Regulation of In-Water Hull Cleaning

- 8 week pause in cleaning of copper-based antifouling paints in SIYB (Subsection E)
- Defines pause period as December 19, 2021 – February 12, 2022
- Only Shelter Island Yacht Basin
- Only copper-based antifouling paints
- Includes prohibitions for cleaning
 - ✓ Hull cleaning business & Hull Cleaners
 - ✓ Boaters
 - ✓ Marinas
- Provision expires upon conclusion of pause period

Proposed Adjustments

Addressing Stakeholder Concerns

- Schedule Adjustments
 - Race events near end of pause
- Alternate Cleaning Locations
 - Ability to clean outside of the SIYB if needed
- Maintain underside of boat (metal parts, drive shafts, replacing zincs, etc.)

Draft Presentation- Subject to Change

Staff Request for Board Direction

Direction to Staff on a draft Amendment to 4.14 of the District Code, Regulation of In-Water Hull Cleaning, To Implement the Temporary Pause

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