Marinas Interagency Coordinating Committee (MIACC) & Anti-Fouling Strategies Workgroup (AFSWG)

Notes from December 7, 2020 Online Meeting

Hosted by the State Water Resources Control Board and California Coastal Commission

Please Note: The following meeting notes are paraphrased. The opinions expressed by Committee members, presenters, or any other participant who speaks or otherwise expresses an opinion at a meeting do not necessarily reflect the official policy or position of the State Water Resources Control Board, California Coastal Commission, or Marina Interagency Coordinating Committee and Antifouling Strategies Workgroup. Meetings of this Committee and Workgroup provide an open forum where all participants are invited to share their input and opinions with mutual respect for other participants.

1. Introductions and Announcements

Coordinators:

- Michael Hanks[1] – Nonpoint Source Program, State Water Resources Control Board
- Vanessa Metz[2] – Coastal Water Quality Program, California Coastal Commission
- Christopher Marquis[3] – Coastal Water Quality Program, California Coastal Commission

Purpose:

- Participants introduce themselves and their affiliation.
- Updates and announcements from participants.

Participants and Affiliations:

- John Adriany- ChemMetrics
- Bjorn Alden- Boat owner in Shelter Island Yacht Basin
- Colin Anderson- American Chemet Corporation
- Shelly Anghera- Moffatt & Nichol Engineering
- Stephanie Bauer- Port of San Diego
- Neal Blossom- American Chemet Corporation
- Kate Buckley- John Wood Group, PLC
- Aniela Burant- California Department of Pesticide Regulation
- Casey Caldwell- California Department of Parks and Recreation
- Linda Candelaria- Santa Ana Regional Water Board
- Rhett Cash- American Coatings Association
- Bryce Corlett- Moffat Nichols Engineering

[1] Michael.Hanks@waterboards.ca.gov
[2] Vanessa.Metz@coastal.ca.gov
[3] Christopher.Marquis@coastal.ca.gov

- Suzanne Davis- California Department of Toxic Substances Control
- Natasha Dunn- San Francisco Estuary Partnership
- Pat Earley- U.S. Navy
- David Elias- San Francisco Bay Regional Water Board
- Jeremy Haas- San Diego Regional Water Board
- Michael Hanks- State Water Board
- Jim Haussener- California Marine Affairs and Navigation Conference
- Raymond Hiemstra- Orange County Coastkeeper
- Karen Holman- Port of San Diego
- Tripp Kerr- Shelter Island Boatyard
- Susan Keydel- U.S. Environmental Protection Agency
- Simon Landt- Windward Yacht Center Marina del Rey
- Sandy Lea- Kop-Coat
- Christopher Marquis- California Coastal Commission
- Jeanie Mascia- State Water Board
- Vivian Matuk- California State Parks & California Coastal Commission
- Vanessa Metz- California Coastal Commission
- Jennifer Mongolo- Los Angeles County Department of Beaches and Harbors
- Raya Nedelcheva- California State Lands Commission
- Matt Peterson- Fast Bottom Hull Diving & California Professional Divers Association
- Peter Phillips- Recreational Boaters of California & Southern California Yachting Association
- Michael Quill- Los Angeles Waterkeeper
- Joe Ravitch- Shelter Island Marina
- Greg Schem- Marina del Rey Lessees Association
- Heather Schlosser- U.S. Army Corps of Engineers
- Barry Snyder- Amec Earth & Environmental
- Kelly Tait- Port of San Diego
- Maral Tashjian- Los Angeles County Department of Beaches and Harbors
- Georgia Tunioli- Santa Monica Bay Foundation
- Melissa Vargas- CalRecycle
- Jun Zhu- Los Angeles Regional Water Board

Participant Updates and Announcements:

- [Ray Heimstra, Orange County Coastkeeper]- We are working on a new proposal for a voluntary boat haul cleaner BMP implementation plan for Newport Bay. Newport has been working on copper in the Bay for a while; but BMPs have not had a big focus in the Bay. We're looking to submit the 319(h) grant proposal this month, and upon approval we would be starting in spring or summer of 2021.
  - [Matt Peterson, Fast Bottom Hull Diving & the California Professional Divers Association]- How is enforcement going to work for your BMP program in Newport Bay?
  - [Ray Heimstra]- There are no enforcement protocols, the program will be 100% voluntary.
- [David Elias, San Francisco Bay Regional Water Board]- I have attended MIACC Meetings

before to talk about our region's in-water vessel hull cleaning program in the San Francisco Bay area. The state of California, in coordination with the states of Washington, Oregon and Hawaii, recently submitted comments on the Vessel Incidental Discharge Act, which will replace the EPA's General Vessel Permit. This is a remarkable act, because it will pre-empt the states' regulatory power. Standards in the Act are concerning and will allow for higher concentration discharges of copper and zinc, so the applicable states have drafted a comment letter. It's uncertain when EPA will respond to comments.

- [Matt Peterson]- The new regulatory framework is for large commercial vessels and not for pleasure crafts?
- [Mike Hanks- State Water Board]- I just looked it up; it is for 79-foot vessels.
- [David Elias]- Yes, it replaces the Vessel General Permit' it's going to take some time, the earliest would be in a year, I think. U.S. EPA is participating in the drafting of standards, but then the Coast Guard will do the oversight of compliance, rather than the EPA or the Water Boards here in California. If it goes through as written, it's been problematic. I think that they will have to have major changes to it.

Action Items:

Notes, presentations, and materials from this meeting will be posted on the Coastal Commission's Marinas and Recreational Boating webpage[4], under the heading '**Archive of Meeting Notes & Presentations**' – 2020, December.

2. TMDL for Dissolved Copper in the Shelter Island Yacht Basin

Speaker:

Jeremy Haas[5] - Environmental Program Manager, California Regional Water Quality Control Board, San Diego Region

Purpose:

Summarize regulatory status of the Total Maximum Daily Load (TMDL) for dissolved copper in the Shelter Island Yacht Basin and discuss potential approaches for assessing and protecting ecosystem health in the yacht basin.

Background:

The San Diego Regional Water Board adopted a TMDL for dissolved copper in the Shelter Island Yacht Basin of San Diego Bay in 2005, because water in the yacht basin did not meet applicable numeric water quality objectives for copper or narrative objectives for toxicity and pesticides. Copper biocidal hull paints on recreational boats are the driving source of copper in the basin. Today, as we approach the deadline for achieving the TMDL, and despite revised hull paint regulations from the California Department of Pesticide Regulation and efforts of the Port of San Diego to educate boaters and regulate hull cleaning, the yacht

[4] https://www.coastal.ca.gov/water-quality/marina-boating/
[5] Jeremy.Haas@waterboards.ca.gov

basin still exceeds copper standards. As a result, the Regional Water Board will soon need to update its implementation strategy for achieving healthy waters in that portion of San Diego Bay.

Materials:

- **Status Update: TMDL for Dissolved Copper in the Shelter Island Yacht Basin (PowerPoint).** Jeremy Haas, San Diego Regional Water Quality Control Board (Dec. 2020).
- **Assessing Bacteria Levels in San Diego Bay (Status Sheet).** San Diego Regional Water Quality Control Board (Feb. 2017).
- **Assessing Contaminants in Fish & Shellfish in San Diego Bay (Status Sheet).** San Diego Regional Water Quality Control Board (Feb. 2017).
- **Assessing the Condition of San Diego Bay for Non-Water-Contact Recreation (Status Sheet).** San Diego Regional Water Quality Control Board (Oct. 2017).

Notes on Presentation:

- The Shelter Island Marina is a densely packed recreational marina, with recreational and commercial boating opportunities as well as swimming and paddle boarding. There isn't heavy industry in Shelter Island, but the Navy is just outside of the marina's basin. There is contact and non-contact recreation in the basin, as well as eelgrass habitat.
- The Regional Water Board adopted a TMDL for Shelter Island in 2005, as water quality did not meet numerical objectives for dissolved copper and narrative objectives for toxicity and pesticides. The narrative objectives came from the California Toxics Rule. The copper loads needed to be reduced by 76 percent, and the TMDL was given 17 years to achieve the reduction.
- The main contributing sources of dissolved copper for the basin are from passive hull paint leaching and underwater hull cleaning. The TMDL developed a model for pollutant reductions that includes 81% from the boat leaching and 28% from in-water hull cleaning.
- The Regional Water Board had a hands-off regulatory approach for the implementation plan. The Port of San Diego has helped with outreach and education on painting and cleaning.
- The Regional Water Board had contemplated issuing a NPDES Waste Discharge Requirement for Marinas and Boat Yards, but no enforcement actions have been taken, in hopes that the voluntary actions will be effective enough.
- The Port of San Diego has been water quality monitoring for dissolved copper for 15 years, using a series of six stations from the front to back of the bay. The average copper concentrations for these six sites over time are displayed on a graph, produced by the Port of San Diego, that shows three things: the green line shows the chronic water quality objectives for dissolved copper; the red line shows the acute water quality objectives for dissolved copper; and the blue dots are the yearly averages of dissolved copper concentrations.
- In the dataset, in the first four years the copper concentrations were decreasing, but the

downward trajectory was not maintained. Better water quality was observed at the mouth of the bay, and worse was observed in the back of the bay. The water quality in the back of the bay is attributed to poorer circulation at the back of the bay and denser boat congestion.

- The Department of Pesticide Regulation has models that show that new paints achieve water quality reductions in most of the state, but not in the Shelter Island Yacht Basin. In 2023 the TMDL timeline will be complete, and in the following year the San Diego Regional Water Board will determine if objectives are met and will communicate the TMDL outcomes with U.S. EPA.
- The San Diego Regional Water Board is planning on moving forward with the Healthy San Diego Bay Strategy. The new plan does not address water quality on an individual pollutant basis, but instead focuses on a four-step process: 1) identify key uses and areas for these uses; 2) assess conditions for those areas; 3) prioritize issues; and 4) set meaningful measurable outcome goals. The Regional Water Board picked three Beneficial Uses for San Diego Bay: fish and shellfish consumption, recreation, and habitat and ecosystems.
- The Regional Water Board is moving towards metrics that measure biological integrity. The Regional Board awarded a contract to Southern California Coastal Water Research Project (SCCWRP) to do monitoring of eel grass beds for metrics of biological integrity.
- The Regional Water Board has been working with the Port of San Diego and the Navy to develop a coordinated unified monitoring approach for San Diego Bay, like the approach that was taken in San Francisco Bay, but much smaller in scale. The approach will likely take a biological approach instead of water quality objectives.
- Rather than continuing a copper based TMDL, the Regional Water Board will instead likely use biological targets with meaningful environmental outcomes, such as the health and integrity of the eelgrass habitats. The Regional Water Board will likely make a revised Implementation Program for the copper impairments in the bay.

Discussion:

- [Simon Landt- Windward Yacht Center]- How did you come about your final test results? Was it a site-specific study using the water effects ratio or something else to get the TMDL results?
  - [Jeremy Haas- San Diego Regional Water Board]- The graph that was displayed was just dissolved copper levels taken at a few stations in the bay. The standards we compared them to were the original Water Quality Objectives that were set within the TMDL. And we did not include a water effects ratio.
- [Matt Peterson- California Professional Divers Association]- Do you have any idea why the dissolved copper concentration increased in 2013 and 2014, when it had been trending down?
  - [Jeremy Haas]- The data comes from an annual report that the Port of San Diego provides to us under an investigative order we asked them to do. A theory is that there are more slips being occupied now than during the recession of the 2000s.The first data point on that chart was either 2006 or 2007.
  - [Matt Peterson]- We haven't seen any downward trend with the reformulation of the DPR [California Dept. of Pesticide Regulation] paint.

- [Jeremy Haas]- Perhaps not enough boats have been painted with the reformulated paint.
- [Aniela Burant- California Department of Pesticide Regulation]- Since the regulation for the reformulated paint only went into effect a few years ago, I do not think it has been long enough to see the effects of the paint for Shelter Island or across California.

➢ [Greg Schem- Marina del Rey Lessees Association]- You said as it gets closer to 2023 the revised plan will use biological targets. Will that replace or supplement the numeric target approach? And may that apply to other TMDL locations?

- [Jeremy Haas]- We don't really know yet. Because there is an adopted TMDL, we have an obligation to U.S. EPA. If it was a new TMDL, we might have more flexibility to use a non-regulatory approach. Under state policy, we have some leeway to establish plans for correcting impairments that would rely on targets that are different than the Water Quality Objectives.

➢ [Linda Candelaria - Santa Ana Regional Water Board]- For Newport Bay, the only metal that exceeds CTR [California Toxics Rule] criteria is dissolved copper, but we have some issues with some of the other metals. We are trying to develop action plans for some of the other metals. Is U.S. EPA onboard with the biological integrity objectives that you are using?

- [Jeremy Haas]- We have not talked to U.S. EPA about this, as we have with some of the freshwater objectives. Over the last 20 years, U.S. EPA has been pushing California to have biological integrity metrics, so I believe they would be onboard with this style of targets and metrics.

➢ [Sue Keydel- U.S. EPA]- You mentioned that even if 100% of the boats in the harbor had new paint, the basin would not be able to reach the required levels of dissolved copper for the TMDL. Is sediment in the harbor driving copper levels? Is there a consideration of removing sediment load?

- [Jeremy Haas]- That was DPR's [California Dept. of Pesticide Regulation's] model for the basin; it showed it was unlikely that Shelter Island would meet the TMDL with the reformulated copper hull paint. We do have some data on sediment copper data for the basin, and some data on the benthos for the harbor. Researchers have seen some effects on ecology of the basin, especially benthic species: more tolerant species towards the front of the basin, less tolerant species towards the back of the basin.
- [Linda Candelaria]- In Newport Bay, when we did a metals study in marinas that showed high metals concentrations in sediment. When DPR established the lower leach rate paints, the model included the use of BMPs. The Port did diver certifications, and boaters must use BMPs to achieve the CTR criterion. In some marinas that are worse, DPR recommends boat conversions to non-copper paints.
- [Aniela Burant]- Our model suggested that certain marinas' size, like Shelter Island, will still need BMPs. The model assumes BMP will be used for hull cleaning.
- [Linda Candelaria]- For example, in Newport Bay, if paints are variable and their leach rates are also variable, the Santa Ana Regional Water Board would like to do a survey of the paints being used in the marina.

3. Coastal Sediment Management Workgroup

Speakers:

Heather Schlosser[6] **–** U.S. Army Corp of Engineers

Casey Caldwell[7] **–** California Department of Parks and Recreation, Division of Boating and Waterways

Purpose:

Provide a presentation and discussion of the Coastal Sediment Management Workgroup.

Background:

The California Coastal Sediment Management Workgroup (CSMW) is a collaborative taskforce of state, federal, and local/regional entities concerned about erosion and excess sedimentation impacts on coastal habitats. CSMW is working towards implementation of Regional Sediment Management (RSM) in order to augment or restore natural processes.

Materials:

- **Coastal Sediment Management Workgroup (PowerPoint).** Heather Schlosser, U.S. Army Corps of Engineers (Dec. 2020).

Notes on Presentation:

- The Coastal Sediment Management Workgroup (CSMW) is co-chaired by the California Resources Agency and U.S. Army Corps of Engineers, and has participation from federal, state, and local organizations.
- CSMW is a collaborative restoration effort addressing coastal sediment imbalances, as well as developing and facilitating beneficial re-use of sediment on a system-wide basis, also known as Regional Sediment Management (RSM).
- The California Ocean Protection Council's Five-Year Plan called on the CSMW to help protect, restore, and enhance California's beaches and coastal resources. CSMW helps to restore and augment the natural delivery of sand to the coastal environment. At times this involves sand mining, moving sediments out of the river and on the beach. Sands trapped in wetlands or lagoons in lower floodplains are moved onto beaches that need sand. Other solutions include reducing beach armoring to increase natural sediment supply.
- The Coastal Sediment Master Plan (CSMP) is a study between the state and the ACOE [U.S. Army Corps of Engineers]. CSMP has produced a lot of products and activities, including the California beach erosion assessment survey, survey of sands and sediments lost to dams, and conceptual plans to capture sands.
- The Sand Compatibility and Opportunistic Use Program (SCOUP) connects regional groups and entities that are developing Regional Sediment Master Plans. SCOUP assesses regional approaches for re-use of upland sands, and acts as a roadmap for regulatory consultations.

[6] Heather.R.Schlosser@usace.army.mil
[7] Casey.Caldwell@parks.ca.gov

- CSMW has another report looking at sediment budgets off the California coast. The group evaluates major littoral sediment budgets for guidance on project-based studies.
- CSMW has a study on the fate and transport of fine-grained sediment, assessing the benefit to use this fine-grained sediment, and if it is having an environmental impact. CSMW evaluates the physical impacts and fate of fine-grained materials deposited from turbidity plumes.
- The ACOE takes a regional sediment balance approach, not a local approach. Clean sediment is a valuable resource in sediment-starved locations. The CSMW aims to keep sediment in the system and looks for ways to maintain the system without having to relocate sediment.
- Part of the Sediment Master Plan is the development of Coastal Regional Sediment Management Plans. This is a statewide look but takes regional approaches; each color on the map shows a different regional approach taken in the state to restore coastal sandy habitats.
- Part of the evolution of CSMW is adaptation. Do the regional plans need revision, and how can we help the regions make better management decisions as we learn more?
- CSMW coordinates with state and federal regulatory programs to integrate RSM needs. For example, SCOUP pursues sediment stockpile areas for upland sediments.
- The state has limited funds for coastal sediment management activities from the California Natural Resources Agency and the Ocean Protection Council, but it still relies on regional partners. More state funds are coming to CSMW from Props 1, 68, and 84.
- CSMW has pulled more groups into the workgroup and is working on Sea Level Rise adaptation. CSMW is even more relevant today than when it was enacted in 1999.

Discussion:

- [Sue Keydel- U.S. EPA]- Are you working with dam removal efforts? The Klamath River would provide huge sediment loads. How are you advising them to do their work while supporting your goals?
  - [Heather Schlosser – U.S. Army Corps of Engineers]- We are working with Rindge Dam in Malibu. For U.S. ACOE, implementation of dam removal is out of the scope of the CSMW but relies on the use of the partners like USGS [U.S. Geological Survey].
- [Shelly Anghera- Moffatt & Nichol Engineering]- You talked about the beneficial use of the sediment behind the dams. But the biggest issue for the coastline is grain size and sediment quality. Do you guide the regulators through some type of workgroup to develop ranges or maximum volumes of this sediment? Or are you doing something to increase the opportunity to use this type of material? Fines are quickly eroded off the system and dispersed, and it seems like its limiting what sediments can be placed on the beach.
  - [Heather Schlosser]- Great questions. Fate and transport of fine-grained materials are included in the model developed by the USGS. The CSMW has been giving regulators better tools to show that placing sediment with higher percentages of fines in the nearshore will have a better impact to the environment. The demonstration project in the Tijuana River estuary was investigating this. More small demonstration projects can help to prove that finer-grained sediments are not an impact and are beneficial.

3. 2020-2025 Nonpoint Source Implementation Plan – Coastal and Marina Comments

Speaker:

Michael Hanks – Nonpoint Source Program, State Water Resource Control Board

Purpose:

Provide information on the response to coastal and marina comments for the 2020 – 2025 Nonpoint Source Implementation Plan.

Background:

The 2020 – 2025 Nonpoint Source Implementation Plan (Plan) was prepared by the State Water Board, the Regional Water Quality Control Boards, and the California Coastal Commission to meet the requirements of Clean Water Act 319 and section 6217 of the federal Coastal Zone Act Reauthorization Amendments of 1990. The Plan represents California's plan for addressing nonpoint source pollution, and identifies nonpoint sources of concern, including coastal issues and marinas. Forty distinct coastal and marina comments were submitted during the response to comment period and were considered for the Plan.

Materials:

- **2020-2025 Nonpoint Source Program Implementation Plan Coastal & Marina Comments (PowerPoint).** Michael Hanks, State Water Resources Control Board (Dec. 2020).

Notes on Presentation:

- The 2020-2025 Implementation Plan was developed by State Water Resources Control Board, the nine Regional Water Boards and the Coastal Commission staff. The Plan identifies nonpoint sources of concern for the State of California. The Plan describes California's strategies for addressing nonpoint source pollution, as well as TMDLs, water quality monitoring, waste discharge requirements, financial assistance, inter-agency coordination, and watershed-based planning.
- Coastal Commission staff will ensure that coastal development projects (subject to Coastal Development Permits) will implement Management Measures and BMPs to protect coastal water quality. They also ensure that Sea Level Rise is considered in the design of water quality protection measures. The Coastal Commission and State Water Board staff co-host MIACC. That State Water Board will implement high- and very high-priority projects from the 2019 Triannual Ocean Plan Review.
- The comment period was extended to July 31st. More comments were received on Marinas and Coastal Issues that any other issue. There were 40 distinct comments received for marina and coastal issues, which yielded noticeable changes to the Plan. The Department of Pesticide Regulation, the regulator of anti-fouling paints, has been made an essential partner for achieving statewide copper-related goals.
- Not every comment received was addressed in the Plan. There were many comments that

were out of the scope of the Plan, including changes to TMDL action plans or other programs the NPS [Nonpoint Source] program does not have authority over. These comments were forwarded to appropriate programs. Other comments addressed work that the State Water Board is already working on, but not a topic that was a priority in the Plan.

- The State Water Board's Executive Director has already signed off on the Plan, and we are submitting the plan to U.S. EPA soon.
- The Marine Recreation Group's comments requested an investigative order for the consideration of the technical and financial resources that stakeholders (including individual boat owners) have. However, there are no functional organizations in place to start that effort. The nonpoint source program started a conversation about possible funding opportunities for an organization like this for future 319(h) grant funding cycles.

Discussion:

- [Shelly Anghera- Moffatt & Nichol Engineering]- A lot of the comments have been shared with the agencies who did the review. Do you know if those agencies will respond? I am guessing there will be some response to comments from those agencies. Is it up to the specific organization to reach out to the Regional Water Board?
  - [Michael Hanks- State Water Board]- We do not have authority over Regional Boards to respond to comments.
  - [Jeanie Mascia- State Water Board]- We will not be responding to each individual comment. Commenters should reach out to Regional Water Board staff if they have any specific comments that were not addressed.
- [Jim Haussener- California Marine Affairs and Navigation Conference]- When will this document be finalized or made publicly available?
  - [Michael Hanks]- We have already submitted to U.S. EPA; we are hoping to have it finalized by January 2021. And I can send out a link to the finalized document.
- [Jim Haussener]- Can we get the L.A. Water Board to give a presentation on what the region will be doing?
  - [Jun Zhu- Los Angeles Regional Water Board]- We would be happy to have an individual conversation or give a presentation of the five-year Plan for the Marina Program to a MIACC meeting. This is a planning document that allows each region to have its own set of plans within the Plan. But plans do change, and sometimes the Board changes their mind.
  - [Jim Haussener]- I think it would be helpful to have an overview presentation, a 5-minute presentation at a future meeting.
  - [Jun Zhu]- We would be happy to give a presentation at the next MIACC meeting.

5. Meeting Wrap-Up

Coordinator:

Michael Hanks – Nonpoint Source Program, State Water Resources Control Board

Purpose:

- Any additional announcements.
- Summarizing action items discussed during the meeting.
- Soliciting ideas for future topics and meeting locations for the spring 2021 MIACC meeting.

Discussion:

- [Jim Haussener- California Marine Affairs and Navigation Conference]- Can Vivian Matuk comment on the marine flares recovery collection event in the bay area since the last meeting?
  - [Vivian Matuk- California Coastal Commission & State Park and Recreation]- Alameda County did have a flares collection event and collected 354 pounds of marine flares at their event in October. They served 38 boaters, which is pretty good compared to other events in the past. Del Norte County also applied to CalRecycle for a marine flares collection event. We are still encouraging counties to apply to the CalRecycle grant; if the money is not spent, it will most likely not be made available in the future. We are pushing the San Francisco Estuary Partnership and the Bay Foundation to educate the people about non-pyrotechnic flares. Next year, as part of our education and outreach we will be providing a discount coupon for the non-pyrotechnic flares, as an immediate solution to marine flares.

~ End ~

Funding for this project has been provided in part by the U.S. Environmental Protection Agency (U.S. EPA) pursuant to Assistance Agreement Nos. C9-79757514; C9-79757515; C9-79757517, and any amendments thereto which have been awarded to the Water Board for the implementation of California's NPS Program. The content of this document does not necessarily reflect the views and policies of the U.S. EPA or the State and Regional Water Boards, nor does mention of trade names or commercial products constitute endorsement or recommendation.