On January 28, 2022, Chris Crompton (Manager of the North Orange County Watershed Management Area, Orange County Public Works) submitted on behalf of the County and the City of Newport Beach a proposed Alternative Implementation Plan for Santa Ana Water Board staff's proposed Copper (Cu) TMDLs for Newport Bay. The Alternative Implementation Plan was accompanied by a Supplemental Fact Sheet Language document, intended to provide supplemental explanatory language for the proposed Alternative Plan and the "Fact Sheet" for the June 29, 2021 draft Attachment A to Resolution No. R8-2021-0009 (i.e., Water Board staff's proposed Basin Plan amendment).

The following provides: (1) a summary of the proposed Alternative Implementation Plan; (2) a summary of key points in the Supplemental Fact Sheet Language document; and (3) Santa Ana Water Board staff's review, comments, and conclusions regarding the County/City proposal.

SUMMARY
ALTERNATIVE IMPLEMENTATION PLAN FOR COPPER (Cu) TMDL WITHIN NEWPORT BAY
(January 2022)

[Note: text in brackets provided by Board staff for clarification purposes]

A. IMPLEMENTATION PLAN ACTIONS

1. **State actions to reduce Copper (Cu) discharges from Cu antifouling paints (Cu AFPs) on boats in Newport Bay.**
2. **Monitor sediments within Newport Bay and evaluate results utilizing the sediment quality objectives (SQOs) methodology to estimate potential effects of metals.**
3. **Monitor Cu [in water] in Newport Bay and evaluate the results compared to the in-bay [dissolved Cu] numeric targets and concentration-based allocations.**
4. **Monitor Cu in tributary runoff (San Diego Creek and Santa Ana-Delhi) and storm drain runoff (representative larger storm drainages such as Costa Mesa Channel or Big Canyon Wash that directly discharge to Newport Bay) for continued demonstration that tributary and storm drain runoff are within total mass-based WLA.**

B PHASED IMPLEMENTATION

1. Phase I will be 8 years, during which the Water Board and participating state and/or local agencies will seek to implement the following, where feasible and in compliance with applicable law.

a. State Actions to Reduce Copper in discharges from Cu AFPs on boats in Newport Bay (A.1)

- Incorporation of boat paint certification/verification requirements in existing DMV vessel registration [registration is required for sailboats greater than 8' in length and for all vessels with a motor]
- Development of hull maintenance/cleaning and alternative AFP brochures in DPR AFP licenses and registrations
- Modifications to boat paint labeling to inform consumers of leach rates and approved low leach rate Cu AFPs
- Adoption of new statewide certification programs and/or use regulations designed to reduce leaching associated with cleaning
- Evaluate development of WDRs or conditional waivers to vessel owners and maintenance personnel performing hull cleaning/repainting
- Continued coordination between Water Board and DPR staff
- Copper leaching from vessels should be treated as point source discharges subject to WLAs [not LAs]
- Statewide education and training programs (hull cleaners, BMPs, etc.)

b. Monitoring sediments and copper in Newport Bay (A.2-3)

c. Tributary and Storm Drain Runoff Waste Load Allocation (WLA) Implementation (A.4)

2. TMDL Reconsideration
(Completion as soon as possible, but no later than 4 years after Phase I.)

- Water Board is responsible to review, reconsider, and make appropriate revisions to the Cu TMDLs…, and determine Phase II actions and schedule
- Water Board's reconsideration should include an analysis of whether TMDL targets have been substantially met or whether the Bay is otherwise unimpaired for copper.
- Water Board is responsible for review of effectiveness of strategies implemented in Phase I to develop appropriate strategies and requirements for Phase II.

3. Phase II
(Completion as soon as possible but no later than 12 years from the effective date of the reconsidered TMDLs)

- Recognizes that site-specific objectives (SSOs) for Cu in Newport Bay may need to be adopted [The proposal makes no mention of possible WER adjustments to the CTR Cu criteria, nor is there a commitment by the County/City to engage in WER or SSO studies.]

[Note: A "Summary of Implementation Tasks and Schedule" table is included in the proposed Alternative Implementation Plan. The table lists the tasks, the parties responsible for implementation and the schedule.]

SUMMARY OF KEY POINTS IN "SUPPLEMENTAL FACT SHEET LANGUAGE FOR PROPOSED IMPLEMENTATION FOR COPPER (CU TMDLS WITHIN NEWPORT BAY (January 2022)" [SUPPLEMENT TO THE ALTERNATIVE IMPLEMENTATION PLAN]

Regarding State actions to reduce Copper (Cu) discharges from Cu antifouling paints (Cu AFPs) on boats in Newport Bay.

- State regulation may be necessary to reduce Cu discharges from boats
  - **local governments legally prohibited from regulating sale/use of pesticides**
  - primarily relates to non-commercial vessels of less than 79 feet in length
- State agencies that have regulated pesticides include DPR, Dept. of Boating and Waterways (DBW)
- DMV implements requirements for boats and for aquatic invasive species (e.g., Quagga/Zebra Mussel) via vessel registration
- State actions to reduce copper involve at a minimum:
  - Enforcement of existing regulations, e.g., DPR's leach rate regulation; existing license or certification requirements; other existing regulatory programs pertaining to Cu AFPS/anti-fouling, e.g., State Lands Commission Biofouling Management Standards [SLC standards apply to large, oceangoing vessels and cruise ships greater than 300 Gross Registered Tons]
  - Promulgation of new regulations to impose DPR's BMP requirements
  - Adoption of new certification programs
    - Certification of compliance with low-leach rate AFPs as condition of DMV registration
    - Certification programs for hull cleaning/maintenance personnel

        - Implementation of Cu reduction actions Implement/modify clean marina certification programs to promote best [management] practices [BMPs]
        - Promote or implement standards/incentive programs for use of BMPs during hull cleaning and repainting
        - Implement/modify labeling for Cu AFPs to promote/enhance use of low-leach AFPs, to label paints for recreational use, and to define a list of approved paints for boat shops to implement
    - Water Board actions - evaluate development by SWRCB of conditional waivers/WDRs to vessel owners/maintenance personnel during hull cleaning/repainting
    - Coordination of Agency Actions - promote continued cooperation between Regional Board, SWRCB, DPR

Regarding Phased Implementation (from Supplemental Fact Sheet)

State actions in Phase I should include:

- Pursuant to case law, vessels must be treated as point sources and assigned WLAs, not LAs
- Education and training - Framework provided by the **state [emphasis added]** would include statewide education/training program for hull cleaners
    - Hull cleaners would need to attend in-water hull cleaning BMP program offered by a state-qualified trainer.
        - Completion certificate issued and used for Commercial Service ID from the Harbor Master
- Updates: Framework provided by the **state** [emphasis added] would offer:
    - Education/updates
    - Signage for posting
    - Promote statewide implementation of Cu reduction efforts

TMDL Reconsideration

- Regional Board responsible to review data to assess compliance with targets and effectiveness of strategies implemented.

SANTA ANA WATER BOARD STAFF REVIEW, COMMENTS, and CONCLUSIONS

Conclusions:

- **A. The proposed alternative implementation plan submitted by the County and City of Newport Beach is unacceptable and must be rejected:**
  - **a. The proposed implementation plan relies on the incorrect legal premise that the County and City of Newport Beach (and any other local agency) are not legally able or responsible to address Cu reductions from boats.**
    - **i. The City/County have repeatedly made this legal argument, which Santa Ana Water Board staff have repeatedly advised is incorrect.**
  - **b. The proposal relies on actions by State agencies, including DPR, to achieve Cu reductions that the Santa Ana Water Board has no authority to require.**
  - **c. Therefore:**
    - **i. There is no reasonably foreseeable method of implementation of the County/City proposal, and thus no reasonable assurance that Cu impairment in Newport Bay will be corrected.**
    - **ii. Since the proposal fails to provide reasonable assurance that Cu impairment will be corrected, it is unacceptable as a TMDL implementation plan.**
- **B. The proposal includes sediment and water column monitoring that would be implemented through orders issued by the Santa Ana Water Board to the dischargers. Monitoring is a requisite component of any implementation plan. The County/City monitoring proposals generally mirror those in Water Board staff's proposed TMDL Implementation Plan, but with some subtle and incorrect variations (as described below) and with less specificity. (The lack of specificity is somewhat surprising, given the extent of detailed comments by the County in their comment letter on the proposed BPA documents dated August 30, 2021.) (Note that Board staff remain committed to participate in additional technical meetings with County/City and other agency staff, in particular to resolve questions in advance regarding an appropriate monitoring program(s) to the extent possible.)**
- **C. No justification was provided for the proposed Phase I and II schedules, which could allow as much as 24 years to achieve the Cu TMDLs.**
  - **a. Per USEPA, a phased TMDL approach may be appropriate where there is significant data uncertainty and the State believes that the use of additional data, or data based on better analytical techniques, would likely increase the accuracy of the TMDL load calculation and merit development of a second phase TMDL.**
    - **i. These circumstances do not apply to the proposed Cu TMDLs.**

ii. The phased schedule proposed by the County/City is evidently intended to accommodate actions by state agencies to reduce Cu discharges from boats; however, there is no claim of data uncertainty or enhancement of the proposed TMDLs by better analytical techniques. In fact, the County/City proposal focuses on a general implementation plan for the technical elements of the proposed TMDLs, rather than the technical elements themselves.

iii. The County/City proposal does not include requirements to achieve interim Cu reductions from boats—only a timeline to achieve final compliance. USEPA expects such interim reductions when an extended compliance schedule is proposed.

b. Santa Ana Water Board staff's proposed Implementation Plan includes the requirement for TMDL reconsideration once identified tasks have been completed. The Water Board can elect to revisit the TMDLs at any time, based on new data and information, including the development of a WER or site-specific objective.

Detailed Proposal Review

Overall, this proposal is unacceptable—it reiterates the monitoring set forth in Board staff's Implementation Plan in the proposed Cu TMDLs and little else. It provides no details for monitoring and does not address the current condition of Newport Bay, which is impaired based on exceedances of the dissolved copper (Cu) criteria. No actions by responsible dischargers, including the City of Newport Beach and the County, to reduce Cu discharges from Cu antifouling paints (AFPs), the largest source of Cu to the Bay, are proposed, and no actions regarding commercial vessels are proposed. In addition, while an extended compliance schedule is proposed, there is no recommended interim reduction schedule for Cu discharges from Cu AFPs as in the proposed Cu TMDLs (20% reduction in 4 years, 40% in 8 years and 60% in 12 years).

Instead of local agency actions, the burden of the reduction of Cu discharges from Cu AFPs is placed on state agencies, over which the Santa Ana Water Board has no control. Rather, the proposal reiterates and relies on the false legal premise that no local agency has the legal ability to address the reduction of Cu discharges from boats.

In short, the expectation of the proposal is that the State agencies will take actions, including legislative changes, necessary to reduce Cu discharges from boats, and that the local agencies will only conduct monitoring. (The proposal is also internally inconsistent with respect to the analysis and evaluation of the data collected. While the narrative text appears to expect data and evaluation to be conducted by the Water Board, the Summary Table commits the City of

Newport Beach, the County, and other permittees to submit an annual report that includes data evaluation.)

Review by task

A. Implementation Plan Actions

- There are four basic tasks in this proposal that will be reviewed below.

1- This task puts all of the burden onto state agencies to control Cu discharges from Cu AFPs on boats, including issuing regulations for the use of BMPs when using DPR's lower leach rate Cu AFPs. Some of these recommendations would require changes in the law, and the Santa Ana Water Board has no authority to require actions from other state agencies. The dischargers should work with their legislators to initiate changes in the law if they deem that these changes are necessary. These changes cannot be part of the TMDL adoption process. (See also item B.a in the Phased Implementation below.)

To support the proposal for state agency actions, the proposal cites examples of programs and regulations of the Department of Motor Vehicles, Department of Boating and Waterways and State Lands Commission that, ostensibly, support the idea that coordinated state agency actions could, or could be made to, achieve the requisite Cu reductions from Cu AFPs on boats. While these citations may have superficial appeal, in substance they are misleading. For example, the State Lands Commission and the Commission's Biofouling Management Standards have jurisdiction over vessels that are 300 tons or more Gross Registered Tons, i.e., large oceangoing vessels and cruise ships. The Department of Boating and Waterways has at best only a tangential relationship to the reduction of Cu discharges from AFPs in that the information in the Aquatic Invasive Species Program link, provided in the Supplemental Fact Sheet, describes various AFPs for consideration by boaters. This said, the concept that there should be closer State agency coordination and statewide efforts to address impairment due to Cu AFPs has merit. Again, however, it is not within the Santa Ana Water Board's authority to require such coordination or to implement the specific measures identified in the proposal, e.g., certification of compliance with Cu AFPs requirements as part of DMV vessel registration.

As stated above, the proposal does not address the current condition of Newport Bay, which is impaired for dissolved Cu, and provides no actions to be taken by the County/City or other local agencies to reduce Cu discharges from Cu AFPs on boats. It also provides no actions regarding Cu discharges from commercial vessels. (The TMDLs require the reduction of Cu discharges from commercial vessels, as well as recreational vessels, but they are not addressed in the County/City's proposed plan.) This proposal does not provide reasonable assurance that water quality standards will be met, or even addressed, in a reasonable amount of time.

Cu discharges from Cu AFPs on vessels have been addressed in other Regions for years. The San Diego and Los Angeles Water Boards have already adopted TMDLs to address Cu discharges from Cu AFPs on boats, including the Shelter Island Cu TMDL (2005) and the Marina del Rey Toxics TMDL (2005, Cu added in 2014). In response to these TMDLs, local agencies have developed and implemented actions to reduce these Cu discharges, such as establishing a hull cleaning ordinance, diver education and certification, and boater education programs. These are actions that the City and County could potentially take to implement the Cu TMDLs.

Conclusion – Newport Bay is currently impaired for dissolved Cu. The County/City proposed Alternative Implementation Plan, which relies on state actions over which the Santa Ana Water Board has no control, does not provide reasonable assurance that this impairment will be corrected.

2- The monitoring of sediments and the approach to evaluate the sediment data based on the SQOs methodology, outlined in this proposal, are already part of the proposed Cu TMDLs (Task 2 in the Implementation Plan in Santa Ana Water Board staff's proposed Cu TMDLs). In this proposal, however, there are no details on the proposed monitoring, and no mention of monitoring in marinas where the highest concentrations of sediment Cu and sediment toxicity are found.

Water Board staff's proposed Cu TMDLs include a numeric sediment target and an alternative SQOs (sediment quality objectives) target based on the state's Sediment Quality Provisions. The alternative target is the sediment condition of Unimpacted or Likely Unimpacted. Where this condition is not demonstrated, stressor identification studies must be conducted to determine whether Cu is the cause of the impacted condition. In contrast, the County/City proposal would require stressor identification studies when the Unimpacted or Likely Unimpacted condition is not demonstrated <u>*only*</u> when there is concurrent moderate or high sediment toxicity. This is not consistent with the Sediment Quality Provisions.

Conclusion – The County/City's proposal acknowledges the need for sediment monitoring, to be conducted by responsible parties including the City of Newport Beach and the County. Monitoring is a requisite part of any implementation plan, and this requirement must be addressed and include the necessary specificity and consistency with State Water Board policy in Santa Ana Water Board staff's proposed Implementation Plan. A task for monitoring of sediments is already included in Water Board staff's proposed Cu TMDLs (Task 2, Implementation Plan in the proposed Cu TMDLs).

3- The monitoring of Cu in water, outlined in this proposal, is already part of the proposed Cu TMDLs (Task 1 in the Implementation Plan in Board staff's proposed Cu TMDLs). As

stated above, however, there are no details regarding this monitoring and no mention of monitoring in marinas where the highest concentrations of dissolved Cu are found.

Conclusion – A task for monitoring of Cu in water is already included in Santa Ana Water Board staff's proposed Cu TMDLs (Task 1, Implementation Plan in the proposed Cu TMDLs).

Details regarding Task 3 - the monitoring of Cu in water
The intent of the sentence 'If monitoring showed impairment, for areas where copper continues to exceed the in-bay targets and concentration-based allocations…, a survey report will be conducted to evaluate vessel types in the areas and regulations that control discharge from those vessels', is unclear and misleading.
1) The first part of the sentence - 'if monitoring showed impairment…' is misleading; monitoring has already shown impairment in Newport Bay.
2) The next part 'for areas where copper continues to exceed the in-bay targets and concentration-based allocations' is unclear –While it is acceptable to focus on reducing Cu in the areas of highest exceedances, as Santa Ana Water Board staff have made clear in relevant responses to comments on the proposed TMDLs, impairment is determined for an entire waterbody.
3) The term 'in-bay' targets applies to both water and sediment targets and is not adequate to describe Cu targets in water; these are *dissolved Cu targets* based on the CTR criteria.
4) The last phrase 'a survey report will be conducted to evaluate vessel types in these areas and regulations that control discharge from those vessels' is also unclear. The type of survey report is not specified; there are no specifics concerning the information to be collected, the actions that will be taken based on this information, and there are no references on the 'regulations that control discharges'.

4- The monitoring of Cu in tributary and storm drain runoff, outlined in this proposal, is already part of the proposed Cu TMDLs (Task 3 in the Implementation Plan in Water Board staff's proposed Cu TMDLs).

Conclusion – A task for monitoring of tributary and storm drain runoff is already included in Board staff's proposed Cu TMDLs – (Task 3, Implementation Plan in the proposed Cu TMDLs).

5- This proposal does not include Task 4 in the Implementation Plan in Water Board staff's proposed Cu TMDLs, which is to evaluate local impacts of Cu discharges from storm drains

B. Phased Implementation

1 – Phase I – The proposed Alternative Implementation Plan states that Phase I will be 8 years, "during which [time] the Water Board and participating state and/or local agencies" will seek to implement specific actions. No local agencies are identified; the focus of Phase I is on actions by state agencies. The proposed Phase I schedule of 8 years is too long a time

period for the City/County and other responsible dischargers to do nothing but monitoring (and evaluation?; see comment above about the inconsistency of the language regarding the responsibility for data evaluation).

After that, the proposal specifies that up to 4 additional years can be added for the Water Board's evaluation of the data and reconsideration of the TMDLs. This 4-year addition brings the total time for Phase I to as much as 12 years, which is the time allotted for the implementation of Santa Ana Water Board staff's Cu TMDLs, but *no reduction in Cu discharges from boats* is planned in the County/City proposal. Water Board staff's proposed Cu TMDLs already have a phased implementation schedule in the interim schedule to meet the 60% reduction for Cu discharges from Cu AFPs (which is 20% reduction in 4 years, 40% in 8 years and 60% in 12 years). The proposed Cu TMDLs also explicitly recognize the need for TMDL reconsideration, if and as warranted by new data and information, the development of a Cu WER or SSO or other related actions.

The data show that the Bay is currently impaired for dissolved Cu and has been since 2006. Action is needed now to reduce Cu discharges from Cu AFPs, at a minimum by requiring the use of BMPs during hull cleaning for *all* boats using Cu AFPs (and even boats using non-Cu biocide AFPs). The conversion of boats to lower leach rate Cu AFPs (per DPR's regulation), will also help reduce Cu discharges, but *only if* the Cu AFPs currently in use are above DPR's maximum allowable leach rate (9.5 µg/cm^2/d).

(a) State Actions… *This task is the same as Task 1 in Section A. Implementation Plan Actions. in the County/City proposed Alternative Implementation Plan.*

With respect to 'State actions conducted during Phase I should include…', see comments for Task A.1 State actions, above. With respect to boat paint can labels, *only* USEPA can require modifications to paint can labels.

With respect to the recommendation that Cu discharges from boats be treated as point sources rather than non-point source. Cu discharges from all boats will be treated as point source discharges in the revised Basin Plan amendment, and the allocation for recreational and small commercial vessels (<79 ft.) will be revised to waste load allocations from load allocations. The larger commercial vessels (79 ft or greater, with some exemptions) are already treated as WLAs and are covered under the VGP (Vessel General Permit) which is a federal NPDES permit and will be regulated by VIDA (Vessel Incidental Discharge Act) when the regulations are established by USEPA. The smaller commercial vessels (less than 79 ft) were previously regulated under the small VGP; however, they will not be regulated under VIDA. the smaller commercial vessels and all recreational vessels are grouped into the 'other boats' allocation.

Note also that the *total allocation* for boats, which is approximately 7224 lbs dissolved Cu per year, must be achieved whether these discharges are treated as a point source or non-point source.

(b) Monitoring sediments and copper [in water]
This task is the same as A.2 and3.
See comments on A.2-3 monitoring of Cu in water and sediments, above.

(c) Tributary and storm drain WLAs implementation
This task is the same as A.4.
See comments on A.4 tributary and storm drain runoff, above

2 – TMDL Reconsideration; 3- Phase II

The proposal appears to place the burden for data analysis and evaluation on the Water Board to determine whether TMDL targets are "substantially met"; however, this term is not defined. Likewise, the Water Board would have the responsibility to assess the effectiveness of strategies implemented and to determine the appropriate actions for Phase II. The City of Newport Beach, the County, and other permittees/stakeholders are assumed only to provide monitoring results (and, per the Summary Table, to provide data evaluation*), and to provide input in the Water Board's TMDL reconsideration process. (*again, this is confusing as the text and table are inconsistent with respect to data evaluation)

- It is not clear what is meant by "substantially met" with respect to the TMDL targets
- In contrast to the approach identified by the City/County, responsible dischargers, properly identified in Water Board staff's proposed Cu TMDLs, are expected to identify and implement strategies to achieve required reductions in Cu discharges from Cu AFPs on boats.
- The City/County proposal provides no justification for the extended time frames identified for Phase I TMDL Reconsideration, or Phase II.
- No interim reductions in Cu discharges from Cu AFPs are identified in the proposal; given the extended time frame for the TMDL Phases identified in the proposal, USEPA and the State Water Board (and likely the Santa Ana Water Board) will expect interim reduction requirements.