



ITEM NO. 11

REGULATORY AFFAIRS COMMITTEE AGENDA

Monday, May 13, 2024

12:00 P.M.

**East Bay Dischargers Authority
2651 Grant Avenue, San Lorenzo, CA 94580**

**This meeting will be teleconferenced from the following location:
Guest Parking Area Located on Ocaso Camino, West of and Closest to the
Intersection of Paseo Padre Parkway**

**Teleconference link: <https://us02web.zoom.us/j/82810609847>
Call-in: 1(669) 900-6833 and enter Webinar ID number: 828 1060 9847**

Committee Members: Andrews (Chair); Lathi

- RA1. Call to Order**
- RA2. Roll Call**
- RA3. Public Forum**
- RA4. EBDA NPDES Compliance – See Item No. OM4**
(The Committee will review NPDES Permit compliance data.)
- RA5. Statewide Wastewater Air Toxics Pooled Emissions Study**
(The Committee will receive an update on a state-mandated study.)
- RA6. Nutrients Watershed Permit Update**
(The Committee will receive a status update on negotiations.)
- RA7. Motion Authorizing the General Manager to Execute an Agreement with Azyura for WATERBITS Licensing and Reporting Services for FY 2024/2025 through FY 2026/2027 in the Amount of \$98,130**
(The Committee will consider the motion.)
- RA8. Adjournment**

Any member of the public may address the Committee at the commencement of the meeting on any matter within the jurisdiction of the Committee. This should not relate to any item on the agenda. Each person addressing the Committee should limit their presentation to three minutes. Non-English speakers using a translator will have a time limit of six minutes. Any member of the public desiring to provide comments to the Committee on any agenda item should do so at the time the item is considered. Oral comments should

Agenda Explanation
East Bay Dischargers Authority
Regulatory Affairs Committee
May 13, 2024

be limited to three minutes per individual or ten minutes for an organization. Speaker's cards will be available and are to be completed prior to speaking.

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In compliance with SB 343, related writings of open session items are available for public inspection at East Bay Dischargers Authority, 2651 Grant Avenue, San Lorenzo, CA 94580. For your convenience, agenda items are also posted on the East Bay Dischargers Authority website located at <http://www.ebda.org>

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| <p>Next Scheduled Regulatory Affairs Committee Meeting TBD</p> |
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ITEM NO. RA5 STATEWIDE WASTEWATER AIR TOXICS POOLED EMISSIONS STUDY

Recommendation

For the Committee's information only; no action is required.

Strategic Plan Linkage

1. **Regulatory Compliance:** Proactively meet or exceed regulatory requirements for protection of the environment and public health.

Background

In the late 1980s/early 1990s, the California Air Resources Board (CARB) began implementation of AB 2588, which required wastewater plants to report estimated air emissions of toxic compounds. At the time, the wastewater community undertook a joint study to develop wastewater-specific emission factors. This study, which was conducted at 25 wastewater plants across the state over 11 months, resulted in a shortlist of volatile organic compounds that are likely to be found in wastewater and representative emission factors. By pooling resources and spending \$2.5 million (1990 dollars), the wastewater community avoided sampling every plant and every process unit to develop site-specific factors or having to use overly conservative non-wastewater specific emission factors. The resulting factors have been in use for wastewater reporting since.

Discussion

In 2022, CARB adopted new rules that expand the list of compounds that must be estimated from approximately 500 compounds to over 1700 compounds, including PFAS chemicals. Similar to the 1990s, CARB agreed the wastewater sector could work as a group to reduce the overall costs to the sector, reduce the burden on source test specialists and laboratories, and reduce the burden on regulatory staff. A summary of the proposed approach is provided in the attached two-pager developed by the California Association of Sanitation Agencies (CASA).

The expected outcome is a shortlist of air toxics the sector must start monitoring and reporting beginning in 2028. The statewide study is estimated to cost up to \$10 million spread over the next 3-4 years, to be shared by sector participants. CASA has developed a cost allocation mechanism based on average flows and will be coordinating the study. The MAC recommended that EBDA and LAVWMA members' contributions be made through the Authority to reduce administration costs. These costs have been included in the proposed FY 2024/2025 budget included in Item No. FM7.

CASA staff has hired Yorke Engineering to manage the study, which is kicking off this month. CASA is also working closely with Bay Area Air Quality Management District (BAAQMD) staff to ensure that factors developed for CARB can also be used for compliance with BAAQMD's air toxics rule.



Statewide Wastewater Air Toxics Pooled Emissions Study

The following document describes the “two-step process” pooled emissions study that is required by the California Air Resources Board (CARB). CASA has agreed to serve as the fiscal agent for this project with support from the regional associations (Bay Area Clean Water Agencies, Clean Water SoCal, and Central Valley Clean Water Association).

Background

Reporting requirements for air toxics emitted from permitted stationary sources in California (including WWTPs) have expanded since CARB’s latest amendments to the Emissions Inventory Criteria and Guidelines (EICG) and the Reporting of Criteria Air Pollutants and Toxic Air Contaminants Regulations (CTR) became effective January 1, 2022. WWTPs can report business-as-usual through 2027 but are required to conduct a two-step process (on their own or as a group) to determine which of the 1,700+ air toxics referenced in the latest EICG need to be monitored and reported beginning in 2028. CARB’s provision for the wastewater sector to complete a two-step process to establish air toxics emission factors that can be adjusted for the capacity of the WWTP and will be applicable to all WWTPs. Identifying a shortlist of air toxic compounds to be tested requires:

1. Scanning emissions from representative WWTPs and unit processes to determine detectable air toxics
2. Quantifying emissions of the detectable air toxics using approved sampling and analysis methods to determine which must continue to be monitored and reported beginning with calendar year 2028

For the past few years, CASA has been working with a variety of agencies, regional associations, and the Air Quality, Climate Change, and Energy (ACE) Air Toxics Subgroup to develop an appropriate approach to initiating this two-step process on behalf of the wastewater community.

Benefits of Engaging in the Two-Step Process and Pooled Emissions Study

Through CASA and the regional associations’ leadership, the wastewater sector is uniquely positioned to help lead the execution of a statewide two-step process in the form of a pooled emissions study (Study). Conducting the Study as a statewide group offers numerous benefits to the sector, including:

- **Representative Testing Cost Savings:** Having a select number of WWTPs¹ perform the Study and represent the sector versus every WWTP having to perform the Study. This allows the sector to streamline the work, avoid overwhelming source test specialists (which are already overextended across the state) and significantly reduce costs.¹
- **Administrative Cost Savings:** Pooling funds as a sector and having CASA serve as the fiscal administrator relieves WWTPs of the burden of managing individual contracts and coordinating comparisons of the results across the state, significantly reducing overall administrative costs.
- **Streamlined Project Execution:** Hiring a single project manager (PM) to coordinate and produce a sound technical approach/source test protocol² that is consistently applied across the state, including selection of source test specialists and laboratory to streamline the execution of the Study and the analysis of results.
- **Coordinated Statewide Action:** Close coordination by the PM across CASA staff, regional association staff, WWTPs, CARB staff, Air District staff (including the California Air Pollution Control Officers’ Association or CAPCOA), Source Test Specialists, and other technical experts as needed to complete the Study in time for expanded monitoring and reporting to begin in 2028.
- **Single Reference Set for Future Use:** Producing a single set of emission factors for a shortlist of air toxics that all WWTPs can use for reporting purposes beginning in 2028.

The alternative would be for every WWTP (or smaller groups of WWTPs) to perform their own two-step process for the 1700+ air toxics identified by CARB. That approach poses significant challenges and increased costs for

¹ Per the regulations, WWTPs include covered (≥10 million gallons annual average daily flow) and uncovered (≥5 million gallons annual average daily flow) systems. Covered systems are defined as “...wastewater treatment having a covering over the physical area where the primary settling process occurs in the wastewater treatment process, such as sedimentation tanks. The primary tanks may be sealed or covered with a fixed, floating or retractable cover and shall be airtight, thus preventing emissions from being released to the air.”

² Scanning and sampling protocols will be developed in collaboration with and approved by local air districts and CARB staff. The PM and CASA Steering Committee will lead the coordination and development of the overarching Source Test Protocol.

the wastewater sector. Additionally, the numerous efforts will likely yield inconsistent results, in part from having to use multiple source test specialists and laboratories, which will make it very challenging to determine a single emission factor for any air toxic. Finally, the sampling and analyses necessary would be cost prohibitive for most WWTPs on their own. That is why it is important to maximize individual WWTP participation and contributions to the Study, which will serve as documentation for your agency’s compliance with the requirements under CARB’s EICG and CTR.

Pooled Emissions Study Details and Next Steps

We estimate the Study could take three to four years and could cost up to or possibly more than \$10 million for the wastewater sector to complete as a group. This time and cost factor is based on an assumption that we would be required to sample and analyze over seven families of air toxics across various WWTPs and unit processes, and extrapolation from a previous similar effort, the 1990 Pooled Emissions Estimation Program, which took just over two years to complete and focused on only one family of compounds.

The Study will be performed in two phases, with the vast majority of costs incurred in Phase 2:

1. During Phase 1 (2024), the selected PM in collaboration with CASA and Source Test Specialists will develop (and gain approval from CARB and Air Districts for) the overarching Source Test Protocol necessary to perform the two-step process.
2. During Phase 2 (2025-2027), the PM will coordinate completion of the two-step process with the selected Source Test Specialist(s) in close collaboration with CARB, air districts, the Steering Committee and WWTPs.

The results of Step 1 of this Study will inform the details needed as part of Step 2 (i.e., number of WWTPs, number of unit treatment processes to be sampled at each WWTP, and number of air toxics that will need to be sampled and analyzed from each unit process), at which time we will be able to refine the estimated cost and timeline to perform Step 2. As of November 1, 2023, CASA and the regional associations distributed a request for qualifications to interested entities, and plan to select a suitable PM for Phase 1 in early 2024.

Agency Cost Sharing and Planning for Future Budget Allocations

The \$10 million estimated budget is to be shared by the ~145 WWTPs¹ across the state who have annual average daily flows near or exceeding the regulatory threshold.¹ We have estimated contributions per million gallons of average annual daily flow, with the costs spread over the next three to four fiscal years. This resulted in a total project estimate of approximately **\$3,700 per MGD of average annual daily flow** (based on 2019-2021 flows) for each of the ~145 WWTPs¹. For smaller agencies who may be exempt from these regulations at this time, we are still requesting your participation. CASA is requesting the following of those who wish to participate:

| Fiscal Year 2024: Pay now or July 1, 2024* | Fiscal Year 2025: Pay now or July 1, 2024* | Fiscal Year 2026: Pay July 1, 2025 | Fiscal Year 2027: Pay July 1, 2026 |
|----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-----------------------------------------------|-----------------------------------------------|
| \$200 per MGD | \$1,000 per MGD | TBD, budget ~\$1,250 per MGD | TBD, budget ~\$1,250 per MGD |
| *Paying now is encouraged. If not budgeted, please budget for Fiscal Year 2025 and send payment July 1, 2024. | | | |

Agencies that have budgeted for this Study in FY24 are encouraged to make contributions promptly to the maximum extent possible to fund Phase 1 PM costs. We recognize that some agencies may not have budgeted for FY24 – those agencies may pay both the FY24 and FY25 amounts as a lump sum in FY25. Any funds not spent on Phase 1 of the Study will be applied to Phase 2. CASA will track early contributions to ensure equity across the sector. Funding levels for FY 26 and FY 27 will be determined as part of Phase 1.

Contact Information

Please contact Shacara Gamboa at sgamboa@casaweb.org to confirm participation in the statewide group and ability to contribute in FY 23/24 and 24/25. Please also provide a point of contact for invoicing. At the appropriate time, CASA can send an invoice for your contribution to the Study or work with your respective regional association (BACWA, CVCWA, or Clean Water SoCal) to administer the invoice. For substantive questions about the Study, please reach out to Sarah Deslauriers at sdeslauriers@casaweb.org.

ITEM NO. RA6 NUTRIENTS WATERSHED PERMIT UPDATE

Recommendation

For the Committee's information only; no action is required.

Strategic Plan Linkage

1. **Regulatory Compliance:** Proactively meet or exceed regulatory requirements for protection of the environment and public health.
 - b. Represent EBDA and the Member Agencies' interests by preemptively engaging in development of emerging regulations and permits and advocating for reasonable, science-based decisions.
7. **External Collaboration:** Collaborate with external stakeholders to build strong relationships for joint problem-solving and to expand EBDA's and its Member Agencies' reach.
 - b. Partner with regulators to develop and implement permits and programs leading with science and lessons learned.

Background

While the loads of nutrients such as nitrogen and phosphorus to San Francisco Bay are higher than other estuaries, the Bay has historically been very resilient, and negative impacts of nutrient enrichment such as eutrophication have not occurred. Scientists believe this resilience to stem at least in part from high turbidity (i.e., the Bay is cloudy); which blocks the light that phytoplankton need to grow; presence of filter-feeding clams, which reduce phytoplankton concentrations; and strong tidal mixing, which reduces nutrient concentrations. Over the last decade, concerning trends caused the scientific and regulatory communities to question whether the Bay's resilience is weakening.

To begin to proactively address these nutrient-related risks, Bay Area wastewater agencies, through the Bay Area Clean Water Agencies (BACWA), have participated since 2012 in a positive collaboration with a wide variety of stakeholders to implement a Nutrient Management Strategy that focuses on conducting scientific research and modeling to determine the effects of nutrients on the Bay ecosystem, and protective levels of nutrient loading going forward. BACWA worked closely with staff of the San Francisco Bay Regional Water Quality Control Board (Water Board) to negotiate a Watershed Permit for nutrients, which was issued in 2014 and reissued in 2019.

In Summer 2022, a harmful algae bloom caused unprecedented decreases in dissolved oxygen in the Bay, resulting in significant fish kills. While it is unclear exactly what triggered this bloom, its timing did correspond with a prolonged period of unusually clear skies in the Bay Area, making available more light than usual for photosynthesis. Scientists believe that the bloom was nitrogen limited, meaning that nitrogen loads to the Bay sustained the bloom and likely contributed to its extent and duration. This conclusion, along with the increased media attention garnered by the event, has led to public and

political pressure on wastewater agencies and on regulators, particularly the Water Board, to act quickly to reduce nutrient loads to the Bay, with a goal of preventing or lessening the impact of future blooms. A brief, and thankfully less consequential, recurrence of the bloom last summer amplified that pressure.

Discussion

EBDA and our partners with BACWA are currently negotiating the third Watershed Permit for nutrients. An administrative draft of the permit was provided to stakeholders on February 15, 2024, and EBDA staff responded on March 6 with a comment letter, which provided to the Committee last month.

On April 5, the Water Board issued its [Tentative Order](#) – the formal public draft of the permit. The Tentative Order incorporates some of EBDA’s comments, while leaving other elements consistent with the prior draft. The permit relies on modeling to set a Bay-wide target of 40% reduction in nitrogen loads in ten years. Reductions are then allocated to individual dischargers in the form of effluent limits that would be enforceable in 2035.

The Water Board has expressed support for continuing to refine the underlying science and for allowing additional time for multi-benefit projects such as water recycling and nature-based solutions. While the permit does not expressly allow for more time to complete these projects, it states that the Water Board will “consider available regulatory mechanisms to provide more time to comply.” A new section has been added to the permit recognizing early actors that have already completed or begun construction or implementation of projects to reduce total inorganic nitrogen discharges to San Francisco Bay. For these dischargers, the permit contains the same language regarding the Water Board considering available regulatory mechanisms to provide more time to comply.

EBDA’s comment letter on the Tentative Order is attached and was submitted on May 8. The letter was developed as a collaborative effort with all of EBDA and LAVWMA’s member agencies and was submitted on the agencies’ behalf. The Water Board will issue a formal written response to comments in late May or early June. The permit is scheduled for an adoption hearing on June 12, 2024 and would go into effect on July 1.



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A Joint Powers Public Agency

Mr. Robert Schlipf
 Senior Water Resource Control Engineer
 San Francisco Bay Regional Water Board
 1515 Clay St., #1400
 Oakland, CA 94612
Robert.Schlipf@waterboards.ca.gov

May 8, 2024

RE: Tentative Order Regulating Nutrients in Discharges from Municipal Wastewater Treatment Facilities to San Francisco Bay (NPDES Permit CA0038873)

Dear Mr. Schlipf:

The East Bay Dischargers Authority (EBDA) appreciates this opportunity to comment on the Tentative Order (TO) for the third Watershed Permit for Nutrients (Nutrient Permit). This letter is submitted on behalf of EBDA and our members and partners – City of San Leandro, City of Hayward, Castro Valley Sanitary District, Oro Loma Sanitary District, Union Sanitary District (USD), Dublin San Ramon Services District (DSRSD), and City of Livermore (together, “EBDA Agencies”). On behalf of these agencies, EBDA efficiently and reliably manages the wastewater resources of one million East Bay residents and thousands of businesses to protect human and environmental health. Along with our partners in the Bay Area Clean Water Agencies (BACWA), EBDA has been an active participant in and advocate for the Nutrient Management Strategy since its inception. Our agencies believe strongly in collaborative, science-based decision-making. We appreciate the challenge the Regional Water Quality Control Board (Water Board) is facing in crafting a permit that is responsive to the 2022 Harmful Algal Bloom and protective of the Bay going forward, while acknowledging the magnitude of investments that will be required to meaningfully reduce nutrient discharges and the progress that is already being made.

The proposed Order requires the largest investment in wastewater infrastructure in the Bay Area since the Clean Water Act of the 1970’s. Unlike the Clean Water Act improvements, there is no state or federal financial assistance associated with these required upgrades, placing the entirety of the cost burden on the region’s rate payers. Given that, it is extremely important that we collectively get this right.

The collaborative Nutrient Management Strategy (NMS) has been a model framework for addressing the challenge of nutrient enrichment in the nation’s waterways. As noted by the

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| CHAIR Anjali Lathi Union S.D. | VICE-CHAIR Fred Simon Oro Loma S.D. | COMMISSIONER Ralph Johnson Castro Valley S.D. | COMMISSIONER Bryan Azevedo City of San Leandro | COMMISSIONER Angela Andrews City of Hayward | GENERAL MANAGER Jacqueline T. Zipkin LEGAL COUNSEL Eric S. Casher |
|-------------------------------------|-------------------------------------------|-----------------------------------------------------|------------------------------------------------------|---------------------------------------------------|----------------------------------------------------------------------------|

National Association of Clean Water Agencies in presenting the NMS with a National Environmental Achievement Award:

The NMS program's regional collaborative approach benefits the environment by developing the appropriate regulatory response to the nutrient challenge; benefits the utilities by fully evaluating the alternatives to arrive at the best overall solution; and benefits the community by spending cost-effectively to reduce the financial burden to individual households, while ensuring protection of the Bay. The approach identifies nutrient management solutions that are well-suited to the unique set of scientific, regulatory, and economic challenges in San Francisco Bay and serves as a model for other watersheds nationwide.

Unfortunately, EBDA believes that the current TO abandons that promise of better outcomes through collaboration, and in doing so risks becoming a national model for the wrong reasons.

Water Board staff, Baykeeper, and the wastewater community agree that nutrient reductions should be made as expeditiously as possible to protect the Bay from future algal blooms. We all further agree that given the magnitude of expenditures that is required to make meaningful reductions, we should focus on projects that are synergistic with other wastewater infrastructure needs and that provide multiple benefits such as enhancing water supply and providing sea level rise resilience. Finally, the parties agree that given financial, logistical, and practical constraints, most agencies will not be able to complete sufficient nutrient reduction projects, especially those with multiple benefits, in ten years. However, rather than creating a compliance pathway that honors these three facts, the TO sets up a framework in which despite spending billions of dollars and working collaboratively toward the vision that we all share, public wastewater agencies will be in violation of effluent limits in 2035. While the Water Board states in the TO that they will use available regulatory mechanisms to provide more time, the idea of receiving a cease-and-desist order or other "enforcement discretion" provides cold comfort to an agency that has done everything asked of it and more, and raised rates significantly on vulnerable communities to do so.

EBDA believes that it does not serve our communities or the Bay to adopt a permit that ignores the fact that despite best efforts, its limits cannot be achieved by its deadline. We acknowledge that the Water Board has certain legal hurdles that have driven staff to structure the TO in this form. Accordingly, **EBDA strongly urges the Water Board to commit via resolution to creating a legal framework that provides more time for nutrient reduction projects. We further request that the Water Board employ a Best Management Practice (BMP)-based approach to establishing water quality-based effluent limits in this permit to allow for adaptive management.** A BMP-based approach allows our agencies to continue to make prudent investments in nutrient reduction without the threat of violating the permit, and it avoids boxing all parties into a set of numbers that we all acknowledge are likely to change given the nascent stage of scientific understanding and the infeasibility of determining numerical limits.

EBDA echoes the comments submitted by BACWA. In addition, our detailed comments and suggestions on the TO are included on the following pages. These comments outline our requests to provide additional flexibility and a regulatory framework that actively supports rather than

disincentivizes actions that meet our mutual goals. As described in further detail in the following pages, the EBDA Agencies have invested heavily in actions that the Water Board and other stakeholders purport to support including water recycling, nature-based solutions, and early action upgrades. It is in our collective interest for our efforts to be recognized and for the permit not to place us in compliance jeopardy despite these proactive investments. Our comments and suggestions are crafted with the intent of providing regulatory support for our shared vision.

Comment 1. Concurrent with the Adoption of this Order, the Water Board Should Adopt a Resolution Committing to Creating a Regulatory Framework that Allows for Additional Implementation Time.

EBDA requests that concurrent with the adoption of this Order, the Water Board approve a Resolution committing staff to amending applicable compliance schedule requirements to allow a compliance schedule that is longer than ten years for nutrient management in the San Francisco Bay region. The Resolution would also state that if this is found to be infeasible, Water Board staff would draft a Basin Plan Amendment extending compliance timelines to support region-wide strategic nutrient reduction that takes into account competing environmental priorities and affordability concerns.

As we have proven through our early actions, which are further outlined below, EBDA is committed to reducing nutrient discharges and to being effective stewards of the San Francisco Bay. However, we strongly believe that adopting a permit with final numeric effluent limits and a ten-year compliance schedule is the most expensive way to meet Bay-wide nutrient reduction goals, creates a race to single-benefit solutions, and endangers other environmental priorities, including addressing aging infrastructure and making our systems more resilient to climate change.

Significant capital projects at wastewater treatment plants take significant time. While ten years may sound like a long runway, in reality, agencies need several years for options analysis and conceptual design, then another couple of years for final design. During this process, agencies also need to develop and implement a funding strategy in the absence of (or at a minimum, to supplement) state and federal assistance. Permitting can also be a lengthy process, with simple air permits for generators recently taking up to two years. Once funding, permits, and design are in place, construction can commence, but that phase brings its own challenges. Care is needed to phase improvements such that site-constrained facilities can continue to treat wastewater 24/7 while undergoing upgrades. In addition, lead times for certain equipment, particularly electrical components, has spanned multiple years in recent times. For example, USD began the order process for a large transformer in 2021 to power its upgrades currently underway; it is currently scheduled to arrive in 2025. The City of Hayward similarly awarded an electrical upgrade project in 2022. Knowing that there were long lead times for the electrical equipment, they had planned completion for July 2025. Due to further delays in the fabrication and delivery of the transformer, they are now scheduled to complete the project in August 2026. These factors combine to create project schedules that span over a decade. If many agencies in the Bay Area are driven to undergo

major upgrades at the same time, these factors will be multiplied by the fact that there are limited consultant and contractor resources to get all the work done.

Multi-benefit approaches such as nature-based solutions and recycled water projects are further complicated by the fact that they require complex, sometimes novel permitting strategies as well as multi-agency agreements. DSRSD's partnership with East Bay Municipal Utility District to serve recycled water to the San Ramon Valley has been a huge success in diverting nutrients from the Bay and providing sustainable water supply. It should be noted that it took about a decade from project initiation until recycled water distribution actually commenced. Similarly, EBDA has been working for the past five years to advance the First Mile Horizontal Levee project at Oro Loma Marsh, which will provide additional effluent nutrient reduction while enhancing habitat and building shoreline resilience and flood protection. In those five years, we have engaged stakeholders, including East Bay Regional Park District, who owns the land, and many others. We have begun conversations with the Bay Restoration and Regulatory Integration Team (BRRIT) about permitting pathways and mitigation requirements, and we have developed a 30% design for the levee. We are still a long way from completing the project, with the next phase anticipated to include 60% and then final design, developing a governance structure for the project, identifying funding for construction and for ongoing maintenance, and submitting permit applications and securing environmental approvals, before finally embarking on construction. Ten years is simply not enough time to see these projects through completion, and the notion of going through all of this effort to then be faced with a compliance order does not seem appropriate.

Thoughtful regional planning is needed to understand the strategies to be employed around the Bay for nutrient reduction and the best way to phase and stagger them to maximize benefits and avoid exacerbating affordability concerns. For this reason, BACWA proposed, and the Water Board incorporated in the TO, a requirement to develop a Regional Plan. The benefits of this plan are negated by a ten-year compliance schedule and prescriptive milestone requirements. However, with a more open and adaptive approach, this Regional Plan could create a roadmap for regional nutrient reduction and establish a realistic timeline for achieving nutrient reduction goals.

EBDA understands that the Water Board believes it is limited by current policy to a ten-year compliance schedule. The main legal hurdle Water Board staff has identified is that Section 4.7.6 of the San Francisco Bay Region Basin Plan (Basin Plan) and the 2008 Compliance Schedule Policy state that compliance schedules in permits must not exceed ten years. Normally, this ten-year limitation applies when a permit contains new numeric limits. As a result, the Tentative Order includes final numeric effluent limits for nitrogen, which, in turn, allows staff to provide dischargers with ten-year compliance schedules. The TO approach, as currently drafted, results in enforcement orders at the end of the ten years, which even if handled in a friendly, cooperative manner, are not justified.

To ensure that sufficient time is available to effectively implement nutrient reduction projects, EBDA requests that the Water Board commit to finding a legal framework that allows for that time. We assert that there are several legal approaches to directly address the issues described above outside of the enforcement context:

- Amend applicable compliance schedule requirements in the Basin Plan and the State’s Compliance Schedule Policy to allow a compliance schedule that is longer than ten years.
- Amend the Basin Plan to include adoption of new, revised, or newly interpreted water quality objectives that provide a compliance deadline that will not take effect until a date far enough in the future to allow completion of nutrient management projects or to support a ten-year compliance schedule following the compliance schedule under Section 6.3.3 of the permit. Basin Plans may include schedules of compliance. (Clean Water Act §303(c)(3)(F), 33 U.S.C. §1313(c)(3)(F).) Further, CWA section 301(b)(1)(C) authorizes water-quality based effluent limits (WQBELs) to comply with schedules of compliance. A compliance schedule specific to the biostimulatory substances water quality objective could be incorporated in this manner.
- Amend the Basin Plan to adopt a Water Quality Attainment Strategy that includes a realistic implementation plan for nutrient reductions. Basin Plan section 4.1.1 indicates that the Water Board will establish Water Quality Attainment Strategies (WQAS) including Total Maximum Daily Loads (TMDLs) where necessary and appropriate to ensure attainment and maintenance of water quality standards. WQAS are development and implementation actions associated with implementing (attaining) water quality standards. The Basin Plan further states that “The Water Board will establish WQAS including TMDLs at the level (the Estuary, smaller segments within the Estuary, or individual watersheds) deemed most appropriate in terms of effectiveness and efficiency relative to the applicable water quality standard, types and locations of pollutant sources, and type and scale of implementation actions.”

Any of these strategies would be acceptable to EBDA. We understand that significant staffing resources would be needed for a Basin Plan Amendment, particularly one that involves a WQAS. As this is the most impactful action that the Water Board is likely to take in a generation, we believe that allocating staffing support for these actions is appropriate, particularly at a time when EPA Region 9 is in the process of prioritizing use of its newly established San Francisco Bay Program Office resources. If the Water Board can commit to pursuing these avenues, EBDA and our partners at BACWA will work with the Water Board and other stakeholders to identify resources to support the effort.

As explained in Comment 4, EBDA continues to believe that BMPs are a superior, appropriate, and permissible approach, but if the Water Board will not accept that suggestion, the Water Board could issue the Nutrient Watershed Permit as proposed, with the final numeric effluent limitation for nitrogen, so long as the Water Board adds a provision that commits to a regulatory mechanism to provide Dischargers more time for compliance. Under this approach, interim numeric limits would still apply, and an enforcement order is avoided.

If final numeric effluent limitations are included in the Nutrient Permit, it is our understanding from Water Board staff that the final effluent limitations are not subject to anti-backsliding because they are not effective until a future compliance date in 2034. If the Water Board continues to agree, the final Nutrient Permit should acknowledge this expressly. EPA has stated, “The Agency’s

interpretation of the CWA is that the antibacksliding requirements of section 402(o) of the CWA do not apply to revisions to effluent limitations made before the scheduled date of compliance for those limitations." (69 Fed. Reg. 41720 (July 9, 2004).) Additionally, in a 1988 Interim Guidance Memo¹, there is a statement: "The restrictions on backsliding do not apply to limits with a delayed implementation date . . ."

We propose the following revisions to the TO:

Page 7 - Section 2.2:

This Order requires Dischargers to take steps to comply with the 40 percent load reduction requirement within 10 years, while maintaining at least current performance in the interim. ~~If a Discharger cannot comply~~ Because Dischargers have demonstrated that compliance within 10 years is not feasible for all Dischargers, the Regional Water Board ~~will consider~~ shall, prior to issuance of the next nutrient permit, use available regulatory mechanisms ~~as warranted and as available to grant more time (see specified in~~ Fact Sheet sections 6.3.5 and 6.3.6) to provide more time to comply. This Order particularly recognizes that multi-benefit solutions, such as nature-based treatment or water recycling, ~~may take longer~~ are projected by Dischargers to require more than 10 years to implement, and that Early Actors will also need additional time to comply, as described in Fact Sheet section 6.3.6. ~~and~~ The Regional Water Board ~~will~~ shall use ~~any~~ available regulatory mechanisms to allow more time for these projects to be implemented.

Page 17 – Section 6.3.5:

Multi-Benefit Solutions for Load Reductions. Dischargers ~~that~~ shall identify long-term multi-benefit solutions⁴ (e.g., water recycling, organics codigestion, or nature-based solutions) ~~that cannot be completed by the effective date of the final effluent limitations in Table 4 shall identify such projects by July 1, 2025,~~ and their intent to pursue and implement them, as part of the Regional Plan report required by Provision 6.3.4.3.2.1. ~~If these projects result in total inorganic nitrogen loads at or below the individual final effluent limitations in Table 4,~~ Recognizing that multi-benefit solutions are projected by Dischargers to require more than 10 years to implement, the Regional Water Board ~~will consider~~ shall, prior to issuance of the next nutrient permit, use available regulatory mechanisms to provide more time to comply as explained in the Fact Sheet.

⁴Multi-benefit solutions refer to initiatives that incorporate nature-based solutions, such as horizontal levees, open water treatment wetlands, organics codigestion, or wastewater recycling (both potable and non-potable). These projects are designed to provide benefits such as ~~reduce~~

¹ <https://www3.epa.gov/npdes/pubs/owm0354.pdf>

~~nutrient loads while also providing other benefits, such as~~ enhancing flood control, increasing water supply, reducing greenhouse gas emissions, or improving habitat quality.

Page F-36 – Section 6.3.5:

Multi-Benefit Solutions for Load Reductions. Multi-benefit projects will take longer to complete than conventional projects due to additional challenges associated with interagency agreements, multi-agency permitting, and land acquisition. This provision requires Dischargers that identify long-term ~~multi-benefit solutions (i.e., water recycling or nature-based solutions)~~ nutrient management strategies that cannot be completed by the compliance date (October 1, 2034) for the final effluent limitations to identify such projects and their intent to pursue them. The Regional Water Board encourages Dischargers to pursue ~~these long-term strategies~~ multi-benefit solutions (i.e., water recycling or nature-based solutions) when feasible because they are likely to result in a greater benefit to the community and the environment relative to treatment plant improvements alone. ~~The~~ To enhance the affordability and implementation of these projects, the Regional Water Board ~~will consider~~ shall, prior to reissuance of the permit, use available regulatory mechanisms to provide more time to comply to Dischargers that identify ~~multi-benefit~~ long-term nutrient management projects likely to result in total inorganic nitrogen loads at or below the final WQBELs ~~more time to comply~~. Available regulatory mechanisms ~~may include, for example, amending the Basin Plan to include a water quality attainment strategy for biostimulatory substances; finding that a new compliance schedule under the Compliance Schedule Policy is justified based on~~ are, as follows:

- (a) amend applicable compliance schedule requirements to allow for compliance schedules of more than 10 years for nutrient management projects by amending Section 4.7.6 of the Basin Plan, requesting that the State Water Resources Control Board amend the 2008 Compliance Schedule Policy, or using other regulatory means;
- (b) amend the Basin Plan to include adoption of new, revised, or newly interpreted water quality objectives; ~~or imposing a time schedule under a time schedule order or cease and desist order.~~ for biostimulatory substances in order to specify that the new objective will not take effect until a date far enough in the future to allow completion of nutrient management projects or to support a 10-year compliance schedule following the compliance schedule under Section 6.3.3 of this permit; or

- (c) [amend the Basin Plan to include a water quality attainment strategy for biostimulatory substances with a compliance schedule of more than 10 years.](#)

EBDA further requests that, concurrent with the adoption of the Nutrient Permit, the Water Board approve a Resolution committing staff to amend the applicable compliance schedule requirements to allow more time for nutrient management programs in the San Francisco Bay region. The Resolution would also state that if this is found to be infeasible, Water Board staff would draft a Basin Plan Amendment extending compliance timelines to support region-wide strategic nutrient reduction that takes into account competing environmental priorities and affordability concerns. EBDA supports the example Resolution provided by BACWA.

The EBDA Agencies and our fellow dischargers around the Bay need more time to achieve nutrient reductions, and we need a roadmap that provides us with certainty as we plan and implement reduction projects. We believe that the Regional Plan that BACWA will develop under this permit can provide that roadmap if it is paired with a legal framework that allows for adequate time.

Comment 2. Agencies that have taken Early Action need a Compliance Pathway

The EBDA Agencies have taken the vulnerability of the Bay to nutrients seriously and have invested in an “all of the above” approach to reducing our loads within the current permit term and beyond. Through water recycling and plant upgrades, EBDA has already reduced loads by 1000 kg/d from 2019 levels. These load reductions create an important bridge that provides ongoing environmental value while other agencies finalize their nutrient reduction strategies. In addition, the EBDA Agencies have significant projects underway – both traditional upgrades and multi-benefit projects – that will result in additional reductions during the next permit term.

The previous Watershed Permit was issued with an incentive clause for early actions (Early Actor Clause) based on the understanding that after implementing their planned projects, the EBDA Agencies and other Early Actors would be moved to the “back of the line” and not asked to make further upgrades until other agencies made reductions. The EBDA Agencies went above and beyond what was required of us. The cost of these projects approaches \$1 billion, and the agencies have fully leveraged their financial resources to make them happen. We made design decisions based on the best information at the time, adding nutrient reduction to planned upgrade projects. Yet according to this TO, our best efforts are still not enough. EBDA shared with Water Board staff that *after* our major projects have been completed, our dry season total inorganic nitrogen load (TIN) is estimated to be 6,300 kg/d. This estimate incorporates population growth, which the Association of Bay Area Governments (ABAG) estimates at 1.2% annually for EBDA’s service area (see Comment 9). Including all feasible optimization measures and using “best case” assumptions for what the project designs can achieve and for recycled water demand, EBDA estimates our load could potentially get as low as 5,000 kg/d by 2034. However, this is still shy of the TO’s effluent limit for EBDA of 4,200 kg/d, and therefore, would put us in violation.

While we are very willing to take additional steps to further reduce nutrient loads beyond these projects, we simply will not have the financial capacity to do so within a ten-year compliance

schedule. Acknowledgement of this reality was the impetus behind the Early Actor Clause in the previous Watershed Permit.

EBDA appreciates the inclusion of new early action language in the TO in response to our comments on the Administrative Draft. We believe this is necessary but not sufficient, and as noted in Comment 1, we implore the Water Board to expeditiously pursue amendments to compliance schedule requirements, a Basin Plan Amendment, or other legal mechanism that will allow for more time. EBDA takes our long record of permit compliance incredibly seriously. Our elected officials view it as their role to ensure consistent compliance, and they made difficult political decisions to increase rates and proceed with projects before they were required to on the basis that those proactive efforts would provide some measure of regulatory certainty, moving them to the back of the line. Instead, the TO largely disregards EBDA's efforts because the Water Board is not implementing its prior commitment under the Early Action Clause. The Water Board has advised that after the ten-year compliance schedule in the TO, the Water Board will most likely issue a cease-and-desist order or other enforcement order to provide the additional time that everyone today knows will be needed for full nutrient reduction implementation. To receive a time schedule order, cease and desist order, consent decree, or any other type of enforcement order would be seen as failure and would naturally lead the EBDA Agencies to question the value of acting early in the future.

With respect to the TO language, we request the following edits:

Page 17 – Section 6.3.6:

Recognition of Early Actors. Dischargers that have already completed or begun construction or implementation of projects to reduce total inorganic nitrogen discharges to San Francisco Bay by the effective date of this Order ~~may~~ will qualify as early actors. These Dischargers shall provide updates with each Annual Nutrients Report required by MRP section 5.2.2. Upon completion of these projects, if a Discharger's total inorganic nitrogen loads are above the individual final effluent limitations in Table 4, the Regional Water Board shall, prior to issuance of the next nutrient permit, use ~~will consider~~ all available regulatory mechanisms to provide more time to comply as explained in Fact Sheet section 6.3.~~5~~6.

Page F-37 – Section 6.3.6:

Recognition of Early Actors. The previous order encouraged Dischargers to make early investments in nutrient reductions in the absence of nutrient load limitations. Fact Sheet section II.E of the previous order identified several Dischargers that planned to take early actions to reduce total inorganic nitrogen loads to San Francisco Bay. Once complete, these projects were expected to result in effluent total inorganic nitrogen concentrations below 20 mg/L. Because of these investments, nutrient loads from these Dischargers to San Francisco Bay will be realized well before those of other Dischargers that have yet to undertake such investments.

[For example, the six agencies that discharge through the East Bay Dischargers Authority's combined outfall have each taken significant steps to implement nutrient reduction projects prior to the adoption of this Order. The table below summarizes these efforts.](#)

| <u>Agency</u> | <u>Plant Upgrade</u> | <u>Water Recycling</u> | <u>Nature-based Solutions</u> |
|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>Oro Loma/Castro Valley Sanitary Districts</u> | <u>\$20M Nutrient Optimization Project was placed into operation in 2020. Oro Loma’s load in 2022 was 304 kg/d. Using their 2022 flows and pre-upgrade concentrations, their load would have been 1388 kg/d - a reduction of over 1000 kg/d that potentially decreased the severity of the algal bloom.</u> | <u>Recycled Water provided to former Skywest Golf Course during dry season.</u> | <u>The pioneering Oro Loma Horizontal Levee Demonstration Project has provided the data and framework to support many projects around the Bay that will achieve water quality improvement while also enhancing habitat and offering flood protection. EBDA is also continuing to pursue the First Mile Horizontal Levee Project, which was recently funded for final design and permitting and would receive Oro Loma effluent.</u> |
| <u>Union Sanitary District</u> | <u>Currently in construction on a \$509M upgrade, designed to achieve a 50% nutrient load reduction. Expected project completion in 2029.</u> | <u>Participating in Regional Purified Water Pilot Project with Alameda County Water District, Zone 7, San Francisco PUC, Dublin San Ramon Services District, and others.</u> | <u>Horizontal levee project being evaluated in cooperation with South Bay Salt Ponds as part of continuing work by BACWA assessing Nature-Based Solutions for Nutrient Removal.</u> |
| <u>City of Hayward</u> | <u>Currently in design on a \$300M upgrade, designed to achieve a 30% nutrient load reduction. Expected project completion in 2029.</u> | <u>Currently send 1-2 MGD of recycled water to Russel City Energy Center year-round (subject to RCEC’s demands). An additional ~0.5 MGD is provided to irrigation customers.</u> | <u>Feasibility studies completed and design underway for a treatment wetland and horizontal levee at the former Hayward Oxidation Ponds.</u> |
| <u>City of San Leandro</u> | <u>Currently evaluating optimization strategies and sidestream treatment options with a goal of achieving Level 2 concentration.</u> | <u>Recycled water provided to Monarch Bay Golf Course for irrigation.</u> | <u>Construction expected to commence this summer on a treatment wetland at the plant site. Studies will begin this Spring on expanded treatment wetland concepts on additional land owned by the City.</u> |
| <u>Dublin San Ramon Services District (DSRSD)</u> | | <u>DSRSD maximizes water recycling during the dry season. At times, recycled water demands exceed available influent wastewater flows, resulting in no flow (or corresponding nutrient load) being sent to EBDA. DSRSD has invested \$240M in this program.</u> | |
| <u>City of Livermore</u> | | <u>Livermore has invested \$100M in its recycled water program, which diverts approximately 1/3 of Livermore’s flow and load in the dry season.</u> | |

This provision requires Dischargers that have already completed or begun construction or implementation of their projects by the effective date of this Order and that seek to be recognized as early actors to provide updates with each Annual Nutrients Report required by MRP section 5.2.2. Because early actions to reduce total inorganic nitrogen loads to San Francisco Bay will make excessive algae blooms less likely sooner, the Regional Water Board ~~will consider~~ shall, prior to issuance of the next nutrient permit, use available regulatory mechanisms to provide more time to comply to any such Dischargers that ~~are unable to need more time~~ to comply with final WQBELs upon completion of their projects ~~more time to comply~~. Available regulatory mechanisms are as follows:

- (a) amend applicable compliance schedule requirements to allow for compliance schedules of more than 10 years for nutrient management projects by amending Section 4.7.6 of the Basin Plan, requesting that the State Water Resources Control Board amend the 2008 Compliance Schedule Policy, or using other regulatory means;
- (b) amend the Basin Plan to include adoption of new, revised, or newly interpreted water quality objectives for biostimulatory substances in order to specify that the new objective will not take effect until a date far enough in the future to allow completion of nutrient management projects or to support a 10-year compliance schedule following the compliance schedule under Section 6.3.3 of this permit; or
- (c) amend the Basin Plan to include a water quality attainment strategy for biostimulatory substances with a compliance schedule of more than 10 years.

Comment 3. NMS Science Work has been Misapplied in Setting the Effluent Limits

EBDA has been an active participant in the NMS since its inception, and we are proud of the collaborative joint fact finding that has been advanced through the NMS Science Program. However, we believe that the Water Board has overstated its confidence in the science and modeling as a basis for imposing final numeric effluent limits. The April 2, 2024 Water Board memo outlining the numeric translation of the narrative objective for biostimulatory substances relies on a series of model runs performed by the NMS Science Team, in collaboration with key stakeholders, including EBDA. However, the San Francisco Estuary Institute (SFEI) memo (Contribution #1175²) summarizing this underlying science and modeling was only made publicly available by request in late April, and only in draft form.

EBDA has significant concerns with the TO's reliance on these documents as the bases for final numeric effluent limits. As was conceded in the Water Board's memo (p. 5): "The model was developed and validated to simulate the typical long-term ambient conditions observed in the Bay, and it performs reasonably well in predicting algae growth and dissolved oxygen levels under those

² SFEI, 2024, Simulations of Load Reduction Scenarios to Inform Nutrient Management Planning for San Francisco Bay April 2024 – DRAFT, SFEI Contribution#1195

conditions. However, it was not developed to simulate HAB-like events similar to the one observed in 2022 so we did not use the NMS model to predict algae growth and dissolved oxygen for our analysis.”

As noted in that memo, there were multiple “worst case assumptions” included in the sequence of “back of the envelope” calculations used to derive the proposed 40 percent overall loading reductions. SFEI’s analysis involved multiple variables including 1) three different modeling approaches for calculating dissolved inorganic nitrogen (DIN), 2) three different ambient pre-bloom dissolved oxygen (DO) concentrations (8, 9, 10 mg/L) and 3) year-round vs. seasonal loading reductions.

Each of the three modeling approaches yielded moderately to significantly different results, with the greatest differences seen in the Lower South Bay (LSB) and South Bay. The SFEI report noted that one of the known limitations/uncertainties of the existing model is that it overestimates DIN for the LSB and lower portion of the South Bay. This is a critical uncertainty that needs to be resolved prior to adopting final loading reductions with uncertain benefits to DIN concentrations and resultant DO conditions, should a July/August 2022 type algal bloom reoccur.

Contribution #1175 Section 3.3 – Overview of Uncertainties – acknowledged that “There are clearly major unknowns that remain about the factors that triggered the August 2022 HAB event, and about mechanisms/factors that influenced the bloom’s progression” and that “HAB events are notoriously challenging to accurately simulate.” Section 3.3 also noted that “Fully characterizing these uncertainties was beyond the scope of this project, however, quantifying/constraining these uncertainties will be pursued as part of on-going modeling work.” EBDA supports this important need for further modeling work to address the limitations and uncertainties noted above and to improve the level of scientific confidence in the water quality outcomes of proposed nutrient loading reductions.

SFEI modeling efforts prior to the 2022 bloom had been focused on long-term trends and not on the more challenging effort to predict or even to identify and track the myriad of potential conditions necessary to trigger a short-term “acute” bloom. This is also the first use of the SFEI model for running load reduction scenarios. The approach and results have not been independently validated or peer reviewed, for example by the Model Advisory Group. It is problematic that the first time the model was ever used to conduct scenario runs, it was used to inform the very significant and impactful load reduction requirements included in the TO.

The known limitations of the “back-of-the-envelope” approach used for deriving the proposed loading reductions highlights the critical need for an open and comprehensive evaluation of these uncertainties prior to adopting numeric final limits. We remind the Water Board that the established numeric limits will drive over \$11B in regional infrastructure investments, which will impact ratepayers and necessitate prioritization over other infrastructure needs. Given this level of consequence, EBDA believes that we need an adaptive management approach that allows the science to continue to evolve before we lock ourselves into numeric limits. It would be prudent public policy, given the magnitude of public resource commitments involved, to modify the TO as requested in Comment 4 to utilize a BMP-based approach until further science and modeling

development is able to provide a greater level of confidence in the likely benefits of loading reductions on a given subembayment.

EBDA applauds the advances in understanding that have been made as part of the NMS Science Program, and we believe that it is in all stakeholders' interest to allow the science to advance and incorporate future learnings as we continue to reduce nutrient loads. The current level of scientific uncertainty necessitates an iterative, adaptive management-focused approach to nutrient management. An ideal regulatory approach would require us to be closely monitoring the Bay and improving the model, while our nutrient management investments should be no-regrets via strategic use of existing facilities, synergistic upgrades at our facilities, and a focus on multi-benefit projects. As discussed in Comment 4, we recommend that the Water Board find that as in Puget Sound, the science currently does not allow for the establishment of numeric WQBELs, and in so finding, establish BMP-based limits.

Comment 4. The Permit Should Employ a Best Management Practices-based Approach to Effluent Limits.

As asserted in Comment 3, flexibility is needed to reflect the current state of the science and the need to adapt to new information while continuing to progress nutrient reduction projects. Luckily, the Clean Water Act provides the Water Board discretion to decide how to formulate final effluent limitations in an NPDES permit. EBDA believes that the best means to achieve needed flexibility in permitting is to require best management practices (BMPs) as final effluent limits. Effluent limits include any restriction on the concentration of pollutants (40 CFR §122.2) and may consist of narrative or numeric limitations. BMPs may be used in lieu of a numeric effluent limit when numeric effluent limitations are infeasible (40 CFR §122.44(k)(3)). BMPs may also be used in lieu of numeric effluent limits when the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the Clean Water Act (40 CFR §122.44(k)(4)).

In the Puget Sound region in Washington State, the Washington Department of Ecology made the finding that based on the state of the science, it was not feasible to calculate Water Quality-Based Effluent Limits. Instead of implementing numeric limits, they required dischargers to implement BMPs.³ It should be noted that the Salish Sea numerical model used in Puget Sound is significantly more advanced than the current model under development for the San Francisco Bay. EBDA believes that rather than calculating numeric water quality-based effluent limits (WQBELs), the Water Board could instead make a similar finding and require dischargers to implement actions aimed at reducing nutrient loadings by 40% from 2022 loads via BMPs.

A BMP-based approach for the Nutrient Watershed Permit would rely on specific actions in lieu of numeric limits. The Nutrient Permit would include BMP milestones that are achievable within ten years and would put us on the path to attaining the narrative water quality standard. EBDA and other dischargers would document the projects we have completed and nutrient reductions those projects have realized, as well as additional projects that we are planning, along with their design goals. An adaptive management approach to nutrient management would allow us to course-

³ <https://ecology.wa.gov/regulations-permits/permits-certifications/nutrient-permit>

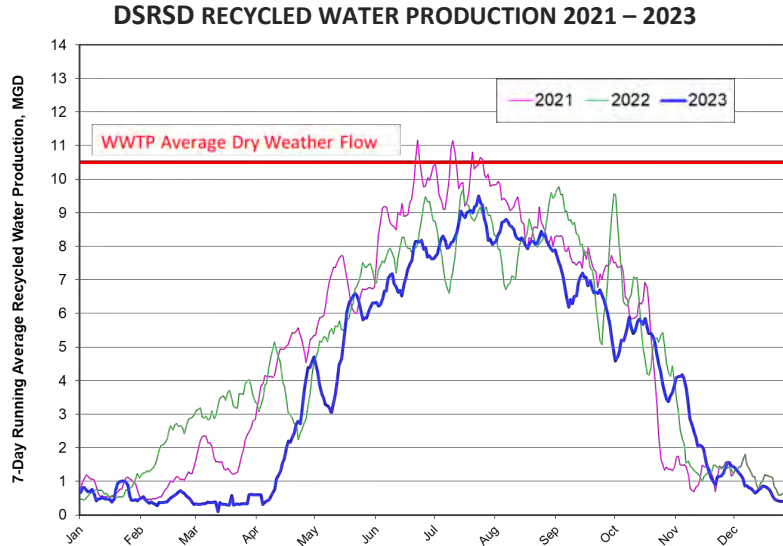
correct as we get more information about the impact of nutrients on the Bay as we move forward into future permits. BMPs in lieu of numeric limits would allow more flexibility when effluent limits inevitably change in response to new scientific developments (see Comment 3). BMPs would also provide protection against mandatory minimum penalties for Early Actors and other agencies who are diligently working toward nutrient reduction.

Importantly, a BMP-based approach can also be implemented consistent with the 2008 Compliance Schedule Policy. For the Compliance Schedule Policy to apply, the policy requires new or newly interpreted limits in a permit. Section 1e of the Compliance Schedule Policy defines “[n]ewly interpreted water quality objective or criterion in a water quality standard” to include “a narrative water quality objective or criterion that . . . results in a numeric permit limitation more stringent than the limit in the prior NPDES permit . . .” Notably, the policy does not state that the numeric limitation must be an effluent limitation. The Water Board, therefore, does not need to issue a permit with a final numeric effluent limitation. The Water Board could impose numeric limitations as numeric targets that are implemented via BMP limits in the Nutrient Watershed Permit. These targets stem from the narrative biostimulatory objective and would be included in the Nutrient Permit as numeric permit limitations more stringent than the prior NPDES permit.

We submit that a BMP-based effluent limitation is the only type of limitation appropriate for the Nutrient Permit. The Reasonable Potential Analysis under 40 CFR§122.44(d)(1)(vi) requires an effluent limit that assures it will achieve a water quality standard. At this time, actions that can feasibly be taken within ten years provide the best set of restrictions on pollutants to achieve the water quality standard, with some potential project completions as early as 2025 to reduce nitrogen loads. EBDA supports BACWA’s proposed edits to the TO that would implement the BMP-based approach.

Comment 5. Compliance Flexibility is Needed to Account for Recycled Water Demand Variability

The EBDA Agencies have been leaders in water recycling. DSRSD serves as a model for the region and is exploring agreements to take on additional agencies’ effluent to meet peak summer demands, and Hayward, San Leandro, and Livermore also have significant long-standing programs. Continuing to support and expand water recycling as a strategy for dry season nutrient load diversion is a stated priority for the wastewater community, environmental NGO community, and the Water Board. However, recycled water demands are not within wastewater agencies’ control, and are highly variable. Nutrient diversion via recycled water is not possible when recycled water demand decreases. For example, a very wet spring can significantly depress recycled water demand in May, leading temporarily to higher nutrient discharges. As illustrated in the figure below, recycled water demands reached their maximum in 2021, followed by two years of decline due to wet weather. Recycled water demands were notably lower in May 2023 following a historically wet winter (25% lower compared to 2021).



Additionally, non-seasonal factors can temporarily impact agencies’ ability to divert nutrients via recycled water. For example, if a school or park irrigation customer elects to replace their field with turf, or if a power station that uses recycled water curbs production, agencies will need time to identify other customers to make up those demands. Additionally, unplanned outages of the recycled water treatment plant due to PG&E or process issues can be unavoidable at times.

EBDA believes it is counter to our common goals to penalize agencies for temporary demand decreases and force investment in plant upgrades, diverting financial resources from expanding water recycling programs. DSRSD estimates that adding nutrient reduction at its wastewater treatment plant could cost approximately \$54 million and divert future funding away from expanding the recycled water program. In contrast, expansion of DSRSD’s recycled water program, which would include diversion of wastewater from neighboring agencies to meet recycled water peak demands, would reduce nutrient loads to the Bay overall.

To address this inherent variability and incentivize expansion of recycled water programs, EBDA requests several revisions to the TO:

- **Exclude the month of May** which historically has the largest variation in recycled water demand. Wet hydrologic conditions result in lower demand and risk of algal blooms. Drier hydrologic conditions naturally result in higher recycled water demands and increased nutrient reductions.
- Base compliance with final seasonal limitations on a **3-year rolling average** of from discharges from June 1 – September 30.
- **Allow agencies to exclude data points** where recycled water demands have been impacted due to factors beyond an agency’s control from compliance calculations.

EBDA appreciates staff’s addition of Footnote 1 to Table E-4, which we assume was intended to address our concerns related to the impacts of wet weather on recycled water diversion. We believe as currently written, the provision is impractical to implement, and we would prefer the

opportunity to exclude data points rather than refrain from sample collection. We suggest the following modifications:

Samples need only to be collected when discharging (i.e., seasonal Dischargers shall collect samples only during the discharge season). For compliance monitoring (between May 1 and September 30), samples shall be representative of dry season conditions. ~~and shall not be collected if~~ effluent flows are higher than normal due to ~~unseasonal wet weather that increases flows to the treatment plant or results in~~ reduced recycled water demand, such as following periods of unseasonably wet weather, the Discharger ~~is unable to collect representative samples at the monitoring frequency required by Table E-4, it shall~~ exclude such data from reported averages for the purpose of compliance determination and shall include documentation in the transmittal letter of its monthly self-monitoring report that explains effluent flows during that period were ~~higher than normal due to wet weather~~ not representative.

Comment 6. Flexibility Should be Provided for Temporary Excursions Due to Employment of Innovative Strategies

As agencies work toward achieving the ambitious nutrient load reductions contemplated by this TO, they necessarily will be seeking innovative strategies to optimize their processes and/or employ new technologies. This is particularly true for the EBDA Agencies, who will have largely completed major upgrades and will be looking to squeeze incrementally more nitrogen removal out of their plants. EBDA requests that the permit include a mechanism to acknowledge this necessary and encouraged process of trial and error. We suggest that the permit state, perhaps also in Footnote 1 to Table E-4, that an agency may exclude a data point that is non-representative due to optimization efforts or trial of innovative technology and explain its reasons for doing so in its monthly self-monitoring report.

Comment 7. Load Allocations Should be Based on Influent Flows to Appropriately Recognize Recycled Water Diversions

On pages F-25 and F-26 of the Fact Sheet, Water Board staff outlines their use of modeling to determine a total aggregate load of total inorganic nitrogen to the Bay that would have been protective during the 2022 algal bloom. EBDA's concerns with the uncertainties in establishing this aggregate number are highlighted in Comment 3. However, presuming that number is correct, the Water Board has significant discretion in allocating that load among Bay dischargers to develop individual final effluent limits. The Fact Sheet notes that "individual WQBELs are based on the concentration that, when the various flows are considered, results in loads summing to the total aggregate average load of 26,700 kg/day, assuming 2022 dry season flows."

As discussed in Comment 2, EBDA Agencies have been diverting significant flows from the Bay via water recycling since long before 2022. In selecting a load limit based on 2022 effluent flows, the Water Board has penalized these efforts, giving EBDA and other water recyclers a much lower effective concentration limit. Use of influent flows would set a more even playing field among dischargers, incentivizing reuse by giving credit for load diversion. Use of influent in the allocation is also fairer to agencies like the City of San Leandro that have significant contributing industries such as food processing in their service areas.

Having run the numbers, EBDA recognizes that switching to an influent-based calculation would not significantly change EBDA's final effluent limit. However, we believe that if incentivizing water recycling is a policy objective, the basis for load allocations should reflect that, not run counter to it. EBDA therefore recommends reconsidering the load allocation methodology and employing influent flow as a basis.

Comment 8. Moving to a Year-round Limit would Upend all Current Nutrient Reduction Efforts

As discussed above, one of the EBDA Agencies' primary strategies for dry season nutrient reduction is diversion through non-potable water recycling. This strategy works because seasonal demand for recycled water in the Bay Area coincides with the dry season that has been determined so far to be most critical to preventing algal blooms. Other nutrient reduction strategies such as optimization rely on use of available tankage during the dry season for implementing biological nutrient removal. Nature-based solutions are also most effective during the dry season when flows through the system can be carefully managed. Lastly, upgrades currently in design or construction, including those being implemented by USD and Hayward, have been designed to achieve dry season load reductions.

For these reasons, we are greatly concerned by the language on page 8 of the TO, which states, "For the permit reissuance scheduled for 2029, the Regional Water Board will consider any new information available (e.g., observational data, improved load response modeling, and other scientific updates generated by the Nutrient Science Program) to reassess and refine the final limits in this Order to ensure that they remain appropriate to protect San Francisco Bay beneficial uses. This may involve adjusting the magnitude of the required load reductions, the spatial scale for the load reductions (e.g., by subembayment instead of baywide), *or the time-period used to evaluate nitrogen loading (e.g., year-round versus seasonal).*" (emphasis added)

While we understand the need to adjust the regulatory framework over time as new science is developed and absolutely support adaptive management, this must be balanced with some level of regulatory certainty. A change so fundamental and consequential as the seasonality of the limits would require extensive stakeholder discussions and an even longer time horizon for compliance.

We believe this very uncertainty inherent in the current science points to why it is unnecessary and counter-productive to include final numeric effluent limits in this permit (see Comment 4). That said, we request at a minimum that the explicit reference to potentially changing the time period for nitrogen loading limits be struck from this permit.

Comment 9. The Permit Should Acknowledge Population Growth

EBDA wishes to highlight that while the Water Board is characterizing the load cap as a 40% reduction over 2022 levels, the actual reductions required to meet load limits will be far higher over time due to population growth. As shown in the table below, Plan Bay Area 2050⁴ estimates

⁴ <https://planbayarea.org/>

growth in EBDA’s service area to be 1.2% annually, with the Tri-Valley area growing at 1.7% per year.

| | Primary Jurisdictions | Households | | | Total % Growth | Annual Growth |
|------------------------|-------------------------------|------------|---------|---------|----------------|---------------|
| | | 2015 | 2050 | Growth | | |
| East Alameda County | Dublin, Livermore, Pleasanton | 72,000 | 132,000 | 60,000 | 83% | 1.7% |
| South Alameda County | Newark, Fremont, Union City | 105,000 | 152,000 | 47,000 | 45% | 1.1% |
| Central Alameda County | San Leandro, Hayward | 120,000 | 160,000 | 40,000 | 33% | 0.8% |
| | Total | 297,000 | 444,000 | 147,000 | 49% | 1.2% |

Because influent nitrogen load is almost entirely driven by population, this growth means that the EBDA Agencies and dischargers around the Bay will need to target load reductions beyond what’s reflected in the Fact Sheet and will need to continue to find additional ways to reduce loads as population continues to grow. As currently written, this permit is effectively a moratorium on growth without significant infrastructure investment, which is contrary to the region and States priority of creating more affordable housing.

Comment 10. Co-digestion Projects should be Considered Multi-Benefit

Organic waste in landfills releases 20% of California’s methane, a climate super pollutant 84 times more potent than carbon dioxide. In 2016, the legislature adopted SB 1383, requiring organics to be diverted from landfills. By codigesting food scraps with wastewater solids in digesters, the state can take advantage of available digestion capacity rather than building new facilities, create renewable energy critical to our transition from fossil fuel, and create soil amendment to complete the cycle. In recognition of this opportunity, Bay Area wastewater agencies are under increasing pressure to accept diverted organics for codigestion to assist the state in meeting climate goals. Adding food scraps to a wastewater digester increases nitrogen loads from the solids sidestream. This additional nitrogen can be removed, but additional time will be needed to add sidestream treatment or other nutrient reduction strategies. EBDA therefore requests that codigestion be added as another example of a multi-benefit project that can be afforded additional time for compliance through available regulatory mechanisms. EBDA’s specific proposed revisions to the TO are reflected in our markup in Comment 1.

Comment 11. Reporting Provisions should be Streamlined and Clarified

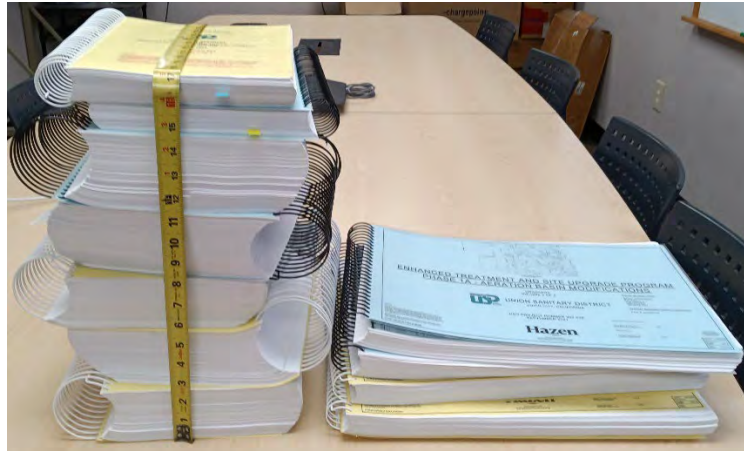
The Tentative Order includes two major regional reports: The “Group Annual Report” and the “Regional Planning Report.” EBDA suggests the Water Board differentiate these two reports more clearly, avoid duplicative content, and remove overly prescriptive requirements:

- The **Group Annual Report** is a data-focused report that is mainly concerned with tracking compliance and regional trends in nutrient loading to the Bay. As an annual report for the entire region, it is a good place to capture high-level information about nutrient load reduction efforts, and to report on the completion of major project milestones, including those listed in Section 6.3.3.2 of the TO. Longer-term plans would be captured in the Regional Planning Study. Since the Group Annual Report will now contain additional narrative information about projects, EBDA requests an extension of the due date of the annual deadline from February 1 to April 1.

- The **Regional Planning Study**, a one-time report that will be developed over several years, is the best location for more detailed descriptions of projects, including those with longer planning timeframes. As described in Comment 1, ideally the Regional Planning Study is the vehicle to lay out a regional roadmap for nutrient reductions required in this permit and beyond and associated timelines.

EBDA is also concerned that as written, the reporting requirements in the TO would put an undue strain on agencies as they diligently work on nutrient reduction projects, would provide the Water Board with detailed information they are unlikely to need or use, and would make it difficult for smaller agencies to compete for limited engineering resources. Further, the proposed deadlines will stifle innovation and the ability for agencies to pursue desired multi-benefit projects. EBDA requests that Water Board staff work with BACWA to revise Section 6.3.3.2. Additional detail supporting this recommendation is as follows:

- **Due date alignment will strain resources.** In Section 6.3.3.2, the imposition of standardized due dates for major deliverables such as “Final Design Drawings” would unwittingly exacerbate the regional strain on resources such as engineers, construction contractors, and financing. Smaller agencies including the City of San Leandro are already finding that upon the release of the Administrative Draft of this permit, consultants with expertise in nutrient removal became increasingly difficult to get ahold of as agencies vie for their support in developing and implementing nutrient reduction strategies. Standardizing due dates only exacerbates this competition for limited resources. EBDA proposes to retain the list of major project milestones within the Group Annual Report, and to report annually on those milestones that are already completed or for which estimated completion dates are available. The remainder of Section 6.3.3.2 is duplicative with the Regional Planning Report, which already states that it can be developed individually or in collaboration with other stakeholders.
- **Document submittal requirements are impractical.** Several of the proposed deliverables in Section 6.3.3.2 do not conform to typical practice at public agencies. For example, the term “Preliminary Design Report” is preferable to “Draft Design Report,” because a draft document would be unsuitable for submittal to the Water Board. “Final Design Drawings” may contain sensitive information that agencies would not want to submit to the Water Board in the midst of a bidding process. Additionally, the documentation that the Water Board is requesting is voluminous. The photo below illustrates Final Design Drawings and Specifications of the type required in Section 6.3.3.2.5 for Phase 1 of 3 of the USD Enhanced Treatment and Site Upgrade Project. On a regional basis, the Water Board would be receiving over 100 times this amount of paper (3 phases x 37 dischargers), which doesn’t seem practical or useful.



EBDA would be happy to provide the date of completion of various deliverables in the Group Annual Report rather than providing entire documents. The documents would be readily available upon request from specific dischargers.

- **Load reductions are an unwieldy measurement.** Throughout this section, EBDA proposes to remove reporting requirements that refer to “load reductions.” This metric is poorly suited for projects with variable load reductions (e.g. process upgrades) or where the baseline is unclear. This is particularly true for agencies such as EBDA’s that have been diverting nutrients via recycled water diversion for many years or who have completed early action projects. In EBDA’s experience, it is difficult to track or forecast compliance using the metric of “load reductions,” whereas it is comparatively straightforward to track actual loads.
- **The due date for identifying multi-benefit projects is too early, and the definition of multi-benefit projects is too constrained.** The TO identifies July 1, 2025 as the due date for identifying multi-benefit projects in order for them to be considered eligible for extended timelines. This early due date disincentivizes multi-benefit projects by providing an inadequate planning horizon. EBDA proposes that agencies identify such projects in the Group Annual Report due in early 2028. This deadline would also allow projects to be included in the final Regional Planning Report due March 31, 2029.

Comment 12. Environmental Justice and Public Outreach Must consider Rate Impacts on Vulnerable Communities

Thus far, the Water Board’s environmental justice outreach has not considered economic impacts, which is particularly relevant given the magnitude of public resources required to meet the permit, as written. We, therefore, urge the Water Board to re-consider its conclusion on page F-40 of the Fact Sheet that economic impacts need not be evaluated.

Water Code sections 189.7 and 13149.2 and other statutory and regulatory provisions and guidance require specific outreach and findings related to potential environmental justice, tribal impact, and racial equity considerations for reissued permits that include time schedules for achieving compliance with water quality objectives. The Water Board held a workshop to engage with

interested groups on March 5, 2024. However, it is our understanding that the significant costs associated with implementing the proposed requirements, and the impact associated rate increases will have on disadvantaged communities, were not highlighted. EBDA believes this oversight is a fundamental flaw in the outreach that must be rectified. Of course, when presented with information on how nutrient reductions will reduce the likelihood and severity of future algal blooms, community groups are likely to express support. However, to leave out information on rate increases that will disproportionately affect the most vulnerable Bay Area residents is misleading and irresponsible. Section 25.4(b)(2) of the Code of Federal Regulations in Title 40 requires that “social, economic, and environmental consequences of proposed decisions shall be clearly stated in [informational materials].”

In order to fully satisfy State Water Resources Control Board Resolution No. 2021-0050 and Water Code §§ 189.7,13149.2, the Water Board must conduct additional required outreach and make findings required under the Water Code § 13149.2 showing how it considered the impact of the compliance schedule on disadvantaged communities.

State and federal law require the Water Board to conduct environmental justice review and outreach to meet requirements set out by California Assembly Bill 2108. AB 2108 was enacted to require “outreach to identify issues of environmental justice [that] needs to begin as early as possible in...permitting processes.” (Wat. Code § 189.7(a).) The Water Board is required to “engage in equitable, culturally relevant community outreach to promote meaningful civil engagement from potentially impacted communities of proposed discharges of waste that may have disproportionate impacts on water quality in disadvantaged communities.” (Wat. Code § 189.7(a)(1).) Culturally relevant community outreach is defined to include “[s]eeking out and facilitating the involvement of people potentially affected by the decisions and taking into account community concerns.” (*Id.*, subd. (d).) Further, Water Code § 13149.2 requires that the Water Board facilitate the development of analyses and findings that apply environmental justice objectives, goals, and policies in a transparent and inclusive manner. The Water Board must (a) prepare a concise summary of the anticipated water quality impact in disadvantaged communities as a result of the permitted activity and (b) identify measures to address the impacts of the permitted activity or facility in a disadvantaged or tribal community.

In addition, State Water Resources Control Board Resolution 2021-0050 (the Racial Equity Resolution) acknowledges that in the past “Water Boards had not explicitly acknowledged the role racism has played in creating inequities in affordability and access to clean and safe water and in the allocation and protection of water resources.” (SWRCB Res. No. 2021-0050, Findings ¶ 7.) Paragraph 10 of the resolution mandates that Water Board staff must provide “accessible, open and transparent opportunities for people to participate in our public meetings, hearings, and workshops” and that staff meet “people in their communities and spaces to seek out their perspectives.”

U.S. EPA’s 2016 and 2023 guidance recommends consideration of any economic challenges that may be exacerbated by the regulatory action for relevant population groups of concern. The guidance states: “[I]f costs are unevenly distributed such that low-income households bear a larger

relative share, it is possible that they may experience net costs even after accounting for environmental improvements.”⁵

Particularly when combined with other resource demands associated with aging infrastructure, nutrient requirements will result in skyrocketing wastewater rates in the coming years. As discussed previously, forcing nutrient upgrades into a ten-year compliance schedule will further exacerbate these economic pressures by driving up construction costs in a contractor-limited market and overburdening state and federal funding programs. EBDA and our wastewater partners have advised Water Board staff that the environmental justice impacts of the draft Order are too severe for a compressed ten-year compliance schedule, and that the brunt of this burden will be borne by the most vulnerable communities. Under Prop 218, utilities do not have the ability to provide discounts or otherwise shift costs based on affordability.

These concerns are consistent with recent studies. The January 27, 2023 Bay Area Equity Atlas report found that “nearly half of all residents in the nine-county Bay Area are either low income or very low income” and “Black and Latinx residents make up a disproportionate amount of the very low-income residents in the nine-county Bay Area.”⁶ The Water/Color 2023 study found Black communities “suffer disproportionately from water unaffordability.”⁷

EBDA disagrees that with the Water Board’s conclusion on page F-40 that “cost concerns are beyond the scope of Water Board section 131949.2. To the contrary, the second consideration under section 13149.29(b)(2) of the Water Code is to “address *impacts of the permitted activity* or facility in a disadvantaged or tribal community.” (Emphasis added.) Impacts are not limited to “water quality impact[s]” as in they are in subdivision (b)(1), reflecting that the Legislature purposefully chose not to limit considerations only to “water quality impacts” but generally to “impacts of the permitted activity.” We further disagree that Finding 2.2 adequately considers economic impacts. It merely lists total costs, not how disadvantaged communities must bear portions of those costs.

EBDA believes that a legal framework for providing more time, as is described in Comment 1, is necessary to prevent undue burden on the Bay Area’s environmental justice communities. The Water Board should not adopt this permit unless or until such a commitment is made and appropriate outreach to affected communities is conducted.

Comment 13. EBDA Requests the Following Edits to Fact Sheet Language Regarding Nature-based Solutions.

Page F-11:

⁵ See 2016 U.S. EPA Technical Guidance for Assessing Environmental Justice at p. 57, available at https://www.epa.gov/sites/default/files/2016-06/documents/ejtg_5_6_16_v5.1.pdf and draft 2023 guidance available at <https://www.epa.gov/environmental-economics/epa-draft-revision-technical-guidance-assessing-environmental-justice>.

⁶ See “Who is Low Income and Very Low Income in the Bay Area? (An Updated Look), January 27, 2023, available at <https://bayareaequityatlas.org/distribution-of-incomes#:~:text=More%20than%20half%20of%20the,the%20nine%2Dcounty%20Bay%20Area>

⁷ See Legal Defense Fund “Water/Color 2023” available at <https://tminstitutelfd.org/water-color-2023/#:~:text=We%20are%20in%20a%20national,suffer%20disproportionately%20from%20water%20unaffordability>

Union Sanitary District. [In conjunction with South Bay Salt Pond Restoration Project.](#) The district explored the feasibility of building a horizontal levee on adjacent land. Although the district does not own the land, it has pledged support for the concept and will assist with moving the project forward. The [Union Sanitary District](#) plans to significantly reduce nutrient discharges with treatment plant upgrades. Construction started in 2022 and is expected to be completed by 2029.

Comment 14. EBDA Requests that Table F-3 Break Out Individual EBDA Dischargers.

To better highlight the significant recycled water programs operated by several of the EBDA agencies, we request that the following additions be made to Table F-3. Current and Projected Water Recycling.

Page F-12 - Table F-3:

| Discharger | Average Daily Discharge Oct 2019-Sept 2020 | 2020 Water Recycled (MGD) | 2020 Fraction Recycled | 2025 Projected Water Recycled (MGD) | 2030 Projected Water Recycled (MGD) |
|------------------------------------|--------------------------------------------|---------------------------|------------------------|-------------------------------------|-------------------------------------|
| | East Bay Dischargers Authority (EBDA) | 62.1 | 6.0 | 0.10 | 6.5 |
| Dublin San Ramon Services District | 10.25 | 3.5 | 0.34 | 3.7 | 3.7 |
| City of Hayward | 10.9 | 0.8 | 0.07 | 1.1 | 1.2 |
| City of Livermore | 4.08 | 1.4 | 0.35 | 1.5 | 1.5 |
| Oro Loma Sanitary District | 11.2 | 0.03 | 0.00 | 0.0 | 0.0 |
| City of San Leandro | 5.0 | 0.3 | 0.05 | 0.3 | 0.3 |
| Union Sanitary District | 23.0 | 0 | - | 0 | 0 |

Conclusion

The EBDA Agencies have done everything that has been expected of us and more. We have invested significant capital in treatment plant upgrades to remove nutrients. We have maximized water recycling to provide water supply and nutrient diversion. We have pioneered multi-benefit nature-based approaches to nutrient removal. We might be able to do more – further optimize our processes, explore sidestream treatment, expand water recycling – but we need more time.

Given the state of the science, the monumental investments that are needed regionally to achieve necessary nutrient reductions, the desire of all stakeholders to have those investments go further through multi-benefit projects, the impacts to environmental justice communities if we compress those investments into too short a window, and the good faith efforts that have been made by the wastewater community to both advance the science and make meaningful nutrient reductions in the absence of requirements, an adaptive management framework is in everyone’s interest. It does not make sense to box ourselves into numeric limits and a ten-year compliance schedule when we have other viable options. We respectfully request that the Water Board employ a BMP-based

approach and commit to extending the compliance schedule to ensure that agencies that are engaged in multi-benefit projects and those that have implemented early action will not be held in violation in 2034 and that as a region, we can adapt to new information. With this slight course-correction, we have an opportunity through this permit to continue to be the beacon of science-based, collaborative, and practical regulation of nutrients that the San Francisco Bay region is known for.

We welcome your questions and continued collaboration on these challenging issues. You can reach me at (510) 278-5910 or jzipkin@ebda.org.

Sincerely,



Jackie Zipkin, P.E.

General Manager

Cc:

Eileen White, Tom Mumley, Bill Johnson – Regional Water Board

Ellen Blake, Peter Kozelka – USEPA Region 9

Lorien Fono, Mary Cousins – Bay Area Clean Water Agencies

Jon Rosenfield, Ian Wren – San Francisco Baykeeper

EBDA Agencies

ITEM NO. RA7 MOTION AUTHORIZING THE GENERAL MANAGER TO EXECUTE AN AGREEMENT WITH AZYURA FOR WATERBITS LICENSING AND REPORTING SERVICES FOR FY 2024/2025 THROUGH FY 2026/2027 IN THE AMOUNT OF \$98,130

Recommendation

Approve a motion authorizing the General Manager execute an agreement with Azyura.

Strategic Plan Linkage

2. **Regulatory Compliance:** Proactively meet or exceed regulatory requirements for protection of the environment and public health.
 - b. Maintain consistent compliance with EBDA's National Pollutant Discharge Elimination System (NPDES) Permit.

Background

EPA and the State Water Board have been requiring EBDA to submit its NPDES permit data electronically for the last decade. In collaboration with City of San Leandro lab staff, EBDA works with its member agencies to maintain a uniform laboratory database using Ethosoft's XLIMS software. While XLIMS provides a very effective way of storing the extensive data sets of EBDA and its member agencies, it is not currently configured to create reports in the required format for submittal through the California Information Water Quality System (CIWQS).

Since 2015, EBDA has been using Azyura, a local woman-owned business, to combine data and convert it into the format required by CIWQS. Darlene Reddaway, Azyura's founder, has an incredible depth of knowledge in NPDES reporting and relationships with the State Water Board's CIWQS staff. She is able to quickly respond to EBDA's needs, and member agency laboratory staff have found her to be quite responsive to meeting the Water Board's deadlines and requirements. She also provides outputs in multiple formats to facilitate agency review. Finally, Ms. Reddaway conducts data review, providing another set of eyes to make sure that data sets are complete and correct.

Azyura's contracts over the past several years have had a value under \$25,000 and have therefore been administratively approved by the General Manager.

Discussion

Staff is proposing a multi-year agreement with Azyura to continue to provide reporting services. Funding for services in FY 2024/2025 is included in the proposed budget under Item No. FM7. In addition to standard reporting services, efforts this next year would include labor associated with modifications to EBDA's reports that are required as a result of incorrect programming by the State Water Board and its contractor.

In parallel, staff is working with San Leandro lab staff and Ethosoft to create a framework that will enable XLIMS to generate reports suitable for upload to CIWQS. EBDA staff would continue to use reports generated by Azyura as the primary approach to reporting, but

would have XLIMS reports available as a backup in the event that Azyura staff or systems were unavailable, or for data checking.

May 8, 2024

**PROPOSAL TO EBDA FOR
AZYURA WATERBITS HOSTING, REPORTING AND DATA MANAGEMENT
SERVICES
PERIOD JULY 2024 TO JUNE 2027**

FY 2024/2025

| | |
|----------------------------------------------------------|------------------|
| MONTHLY AND ONGOING SERVICES AND LICENSING 2024-2025 | \$ 21,000 |
| DMR IMPLEMENTATION FOR 2022 ORDER AND DATA RESUBMISSIONS | \$ 13,000 |
| FINISH CONGENERS RESUBMISSIONS, OTHER TBD PROJECTS | \$ 3,500 |
| FY 2024/2025 TOTAL | \$ 37,500 |

FY 2025/2026

| | |
|----------------------------------------------------------|------------------|
| MONTHLY AND ONGOING SERVICES AND LICENSING 2025-2026 | \$ 21,630 |
| NEW NUTRIENT ORDER FOR THE PERIOD JULY 2024 TO JUNE 2025 | \$ 4,000 |
| OTHER TBD PROJECTS | \$ 3,500 |
| FY 2025/2026 TOTAL | \$ 29,130 |

FY 2026/2027

| | |
|------------------------------------------------------|------------------|
| MONTHLY AND ONGOING SERVICES AND LICENSING 2026-2027 | \$ 23,000 |
| DATA AND DRAFT ORDER REVIEW FOR PERMIT REISSUANCE | \$ 5,000 |
| OTHER TBD PROJECTS | \$ 3,500 |
| FY 2026/2027 TOTAL | \$ 31,500 |

MONTHLY AND ONGOING SERVICES AND LICENSING INCLUDE:

Azyura validates, cleans, and stores CIWQS data in its Waterbits application.
Azyura hosts the Waterbits application and provides all software and maintenance updates.
Azyura generates all eSMR, eDMR, Annual Mercury Loading, Annual HDR Nutrient, and monthly Agency Reports.
Azyura provides support on data inquiries necessary for any study.
Azyura provides up to 5 more report templates for recurring reports

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