May 8, 2024

Robert Schlipf
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Via Email: Robert.Schlipf@waterboards.ca.gov

Subject: BACWA's Comments on the Nutrient Watershed Permit Tentative Order (NPDES Permit CA008873)

Robert Schlipf,

The Bay Area Clean Water Agencies (BACWA) appreciates the opportunity to comment on the Tentative Order for NPDES Permit CA0038873 (Tentative Order), also known as the Nutrient Watershed Permit. BACWA is a joint powers agency whose members own and operate publicly-owned treatment works and sanitary sewer systems that collectively provide sanitary services to over 7.1 million people in the nine-county San Francisco Bay Area. BACWA members are public agencies, governed by elected officials and managed by professionals who protect the environment and public health. As you know, the 37 BACWA members that discharge to the San Francisco Bay are committed to protecting the Bay by taking an effective and strategic approach to reducing nutrient discharges while maximizing other ecological and regional community benefits. Accomplishing the Tentative Order nutrient load reduction requirements proposed by the San Francisco Bay Regional Water Quality Control Board (Water Board) will require the most significant simultaneous investment of public resources in treatment upgrades across our region since the inception of the Clean Water Act in the 1970s. If the reductions are to be achieved using conventional technologies, they will cost in the range of eleven billion dollars for our region, and will increase our region's average utility bills by upwards of $200 per year per household[1]. Our communities will be paying to service the debt on these investments for a generation.

Not only are these public resource expenditures the most significant since the 1970s, but, as currently proposed, the Tentative Order mandates completion within 10 years, an impossible task. After the 10-year compliance schedule expires, BACWA's members have been told that an enforcement order, specifically a cease-and-desist or time-schedule order, will follow to address the additional time needed for project implementation. Given the exposure to enforcement along with the expenditures and other challenges outlined in the following pages, we believe the Tentative Order must be revised to avoid significant economic burdens, especially to disadvantaged communities, and compliance jeopardy for BACWA members for technical infeasibilities that preclude a 10-year compliance time frame.

[1] https://bacwa.org/document/nutrient-reduction-escalation-memo-050724/

For the past decade, the San Francisco Bay Nutrient Watershed Permit, as well as the Nutrient Management Strategy that governs the scientific discovery process, have been national models for collaborative, science-based regional nutrient management. This permitting process is receiving national attention and the decisions made by this Water Board will have repercussions beyond our region, and even beyond California. BACWA would like to continue to work cooperatively with the Water Board and regional stakeholders so that our region can continue to serve as a national model in collaborative nutrient management that maximizes regional benefits while avoiding unintended consequences.

We appreciate Water Board staff for keeping lines of communication open throughout the development of the Tentative Order, and for hearing our perspectives on how the Nutrient Watershed Permit must support a regional vision for nutrient reduction. We believe that while we are in alignment with the Water Board on our goals for nutrient reduction, this Tentative Order unintentionally undermines some of these goals due to the 10-year timeline for compliance. We acknowledge that there are legal hurdles to address to satisfy both the federal Clean Water Act and the State Water Board's 2008 Compliance Schedule Policy. These constraints mean that the Tentative Order critically lacks the flexibility we need to balance nutrient reductions with competing capital and environmental priorities, and to promote projects with multiple benefits for the communities we serve. The comments below outline our requests to provide this flexibility. Our comments encompass specific edits to the Tentative Order as well as additional actions to be taken by the Water Board outside of the permitting action. These recommendations are crafted with the intent of providing regulatory support for our shared vision.

Comment 1. BACWA requests that concurrent with the adoption of this Order, the Water Board approve a Resolution that would direct staff to identify and present to the Board for consideration a plan to legally extend the compliance schedule for the Nutrient Watershed Permit beyond ten years.

The Tentative Order's 10-year timeline has unintended consequences that will lead to projects with higher costs and lower value for the region.

The Water Board is proposing to set a numeric effluent limitation and then use the State Water Board's 2008 Compliance Schedule Policy to provide a 10-year compliance schedule to meet that limit. The Compliance Schedule Policy allows a maximum of 10 years to comply with new permit limitations. Ten years is inadequate to perform a major upgrade, especially with agencies competing for funding, consultants, and contractors and accounting for conflict with other capital improvements already planned during this time frame, and the fact that facilities need to continue reliable 24/7 operations while upgrades are undertaken. Even worse, this regulatory timeline will dissuade agencies from pursuing recycled water, nature-based solutions, and innovative technologies.

Because of the regional scope of the requirement to reduce nitrogen loading, project timing is likely to be impacted by the limited contractors and skilled laborers qualified to perform large-

scale construction in the region. The competitive bidding environment will also have an impact on project cost and small agencies will be at a particular disadvantage when competing with larger agencies for resources. This limitation necessitates a longer implementation period for projects throughout our region to minimize costs to the public.

While any agency performing a traditional nutrient upgrade in this challenging bidding environment will be pushing up against the 10-year compliance schedule, agencies implementing recycled water, nature-based solutions, or needing to pilot innovative technologies before full-scale implementation will find this timeline impossible to meet, for the reasons below. Managers contemplating alternative strategies for nutrient removal will be faced with a choice of going with traditional grey infrastructure upgrades to assure compliance, or risking compliance jeopardy if they proceed with a project with multiple benefits.

- *Recycled Water* – In addition to the construction-related challenges described above, the implementation of a recycled water project requires agreements between wastewater agencies and water supply agencies as a precondition to the project. Enhanced public outreach is also often needed to bolster public acceptance of the project, all of which lengthens the project timelines.
- *Nature-Based Solutions* – Implementing a nature-based solution requires overcoming the construction and public outreach hurdles described above. Additionally, permits must be obtained from multiple agencies that have jurisdiction over the Bayshore, and land must be acquired where the agency does not already own land to site the project.
- *Innovative Technologies* – Traditional nitrogen reduction is energy-intensive, contributes to greenhouse gas emissions, and requires a large land area. Several agencies are interested in pursuing innovative technology that will reduce energy, chemical use, emissions, and footprint, as well as technologies that will improve effluent quality in preparation for water recycling. Piloting emerging technologies before implementation is a critical step to project acceptance, and lengthens project timelines.

Affordability considerations are also of utmost importance to project phasing, as limited grants and loans are available at any given time to defray the direct cost of these improvements to the public. These improvements must also be coordinated with capital projects needed to maintain existing levels of treatment and service that are either planned or already underway. Many agencies have reached their bonding limit and without financial assistance will need to pass along the project cost directly and immediately to their communities, having a significant and steep impact on rates. Moreover, the California Clean Water State Revolving Fund will not have the capacity to fund new projects for several years, and future total annual funding levels are expected to be a drop in the bucket compared to our regional needs. Project phasing and a compliance schedule extending beyond 10 years will allow longer-term financial planning to minimize the economic burden on the community.

Because of these factors, BACWA proposed that we conduct a regional special study that will allow coordination between agencies and facilitate project implementation as agencies compete for limited contractors and funding. This effort has been included in the Provisions section of the Tentative Order. As conceived, this special study was meant to be more than just a compilation of what all our members are planning to do to meet the nitrogen load limits in ten years. It was

meant to provide a roadmap for meeting permit limits while minimizing competition, establish a realistic timeframe for strategically implementing projects region-wide, and identify steps that agencies can take to meet a range of possible future nutrient limits based on ongoing scientific studies. This special study would form the basis for an extended compliance schedule beyond 10 years.

BACWA members' completed, ongoing and planned projects demonstrate our commitment to nutrient reduction.

Our members are committed to completing nutrient reduction as quickly as feasible, in a strategic no-regrets fashion. This means maximizing use of existing facilities, including using excess dry weather capacity for biological nutrient reduction, planning synergistic upgrades to our facilities in conjunction with other capital priorities, and looking for opportunities to include multiple benefits in our projects.

Completed and ongoing projects
Even before the harmful algal bloom in 2022, BACWA's members understood the need to implement nutrient control to offset increased nitrogen loads due to population growth. Because of this anticipated need, several of our agencies have already embarked on upgrades to reduce nutrients in concert with other major improvements that were needed at their facilities. Fourteen of our members, such as the City of San José, West County Wastewater District, and Oro Loma Sanitary District, have already optimized and/or completed upgrades that significantly reduce nutrient discharges. Regionally, our agencies already remove 50% of the nitrogen that enters our facilities via influent.

Below is a list of the ongoing projects at the larger agencies (>10 mgd) that will soon further reduce nutrient loading to the Bay:

Agency	**Description**	**Anticipated Completion**	**Cost ($M)**
City of Hayward	Replacement of trickling filters with oxic/anoxic secondary treatment	2029	$299
City of Palo Alto	Convert secondary treatment to three-step activated sludge configuration and intensify treatment via membrane aerated biofilm reactors	2028	$193
City of San Leandro	Engineered wetland	2025	$7
City of San Mateo	New headworks, primary sedimentation system, a secondary process with membrane bioreactors, and wet weather equalization	2026	$458
City of Sunnyvale	New Conventional Activated Sludge system to operate in parallel with the existing treatment system	2027	$300
Union Sanitary District	Addition of Biological Nutrient Removal	2029	$509

New projects
Before the summer 2022 harmful algal bloom, our members understood that the reissued Nutrient Watershed Permit would contain load caps to constrain future load increases, and were planning to comply with those caps. We recognized that the 2022 event was a "game changer" that necessitates significant nutrient reductions in lieu of load caps. Public agencies' planning and implementation processes are limited by public outreach and environmental review timelines, funding availability, and engineering/logistical constraints, as our members are concurrently undergoing other significant capital upgrades to keep their aging facilities operational. Since the 2022 event, our members have done what is essentially turning on a dime in the public infrastructure world, to move forward with the following non-exhaustive list of *new* projects:

Agency	**Description**	**Anticipated Completion**
Central Contra Costa Sanitary District	Secondary Improvements	2028 - 2031
Delta Diablo	Secondary Improvements Mainstream Treatment	2029 2034-2036
East Bay Municipal Utility District	Biological Nutrient Removal during dry season	2024 and 2025 (building on work completed in 2023)
Fairfield-Suisun Sewer District	Secondary Improvements	2025
San Francisco Public Utilities Commission	Sidestream Treatment Full upgrade to Mainstream Treatment	2026 2039
Silicon Valley Clean Water	Sidestream Treatment	2029

In addition to these projects, within the next permit term we anticipate other new efforts including piloting innovative technology, expansion of recycled water programs, and optimization of existing secondary treatment processes.

That these ongoing and planned projects were initiated before nutrient load reduction requirements were promulgated speaks to our members' commitment to environmental stewardship. These projects are anticipated to result in a significant decline in nutrient loads well before the 10-year compliance deadline.

All stakeholders value projects with multiple benefits, but these projects are not supported by the Tentative Order timelines.

While we recognize the need to reduce nutrients, we are also committed to planning projects that will allow our communities to realize impactful co-benefits. For example, nutrient reduction in conjunction with recycled water will bolster our region's drought resiliency. Nature-based solutions will enhance Bayshore habitat, provide sea level rise resilience and protect upgradient infrastructure, and provide a recreational benefit to the community. While some uncertainty will always exist about the level of nutrient reduction required for Bay protection, projects

implemented with these co-benefits will provide certain and immediate value to the communities who fund them. The Tentative Order Fact Sheet lists some agencies who are at various stages of planning and implementing recycled water projects and nature-based solutions. We know that promoting projects with multiple benefits is a key goal for this Water Board.

While a 10-year compliance timeline poses technical infeasibilities and challenges even for traditional upgrades, timing is an even more critical consideration for agencies who envision projects with multiple benefits or implementing innovative technologies, as described above. As written, the permit is a strong disincentive to multi-benefit projects, since agencies will look at their effluent limit and compliance timeline, and make choices based on these factors, being hesitant to take on the risk of not meeting them. Compliance is very important to our members. We have discussed this issue with Water Board staff, and we appreciate the language in Finding 2.2 stating that in the future, the Water Board will pursue alternatives to grant more time for these projects. However, for most elected governing boards considering pursuing a project with multiple-benefits, the risks associated with uncertainties in both timeline and in nutrient load reduction magnitude are a strong disincentive when faced with permit limits and a 10-year compliance timeline. Spending tens or hundreds of millions of dollars of the community's money only to be issued an enforcement order is unacceptable. BACWA also notes that a cease-and-desist order does not shield an agency from citizen suits, so an agency actively planning a recycled water project would be open to third-party lawsuits. Several members have already reported to BACWA that they are considering shelving plans for recycled water based on the requirements laid out in this Tentative Order.

The rationale above supports our key request associated with the Tentative Order: **more time to comply.** BACWA recognizes that the Water Board believes it is limited by current policy in issuing a realistic compliance schedule that supports a regional vision for reducing nutrients, while maximizing multiple benefits and considering affordability. There are at least two legal approaches to directly address this issue outside of the enforcement context. One is to work toward amending applicable compliance schedule requirements to allow a compliance schedule that is longer than 10 years. The other approach is to amend the San Francisco Bay Region Basin Plan (Basin Plan) to provide a mechanism for compliance periods longer than 10 years. Either of these strategies would be acceptable to BACWA. BACWA understands that significant staffing resources would be needed for a Basin Plan Amendment that involves a Water Quality Attainment Strategy[2]. As this is the most impactful action that the Water Board is likely to take in a generation, prioritizing staffing support for these actions is not an unreasonable request. If the Water Board can commit to pursing these avenues, BACWA will work with the Water Board and other stakeholders to identify resources to support the effort.

BACWA and Water Board staff have discussed hurdles that need to be addressed to pursue one of these two legal approaches so that BACWA's members do not face an enforcement order 10 years down the road. The main legal hurdle that Water Board staff has identified is that compliance schedules in permits must not exceed 10 years, based on Section 4.7.6 of the Basin

[2] Water Quality Attainment Strategies are defined in Basin Plan Section 4.1.1

Plan and 2008 Compliance Schedule Policy. Normally, this 10-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 a path to provide BACWA members with 10-year compliance schedules. The Tentative Order approach, as currently drafted, results in enforcement orders at the end of the 10 years, which even if handled in a friendly, cooperative manner, are not justified.

BACWA agrees with staff that its members need at least the 10 years under a compliance schedule, but BACWA believes that there are viable legal pathways other than final numeric effluent limits followed by so-called "friendly" cease-and-desist orders. The Water Board could issue the Nutrient Watershed Permit with the final numeric effluent limitation for nitrogen but add a provision to the Nutrient Watershed Permit that better commits to a regulatory mechanism to provide Dischargers more time for compliance. Under this option, interim numeric limits would still apply and an enforcement order is avoided.

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, and waste load allocations formulated under Water Quality Attainment Strategies often allow lengthy implementation periods.

The proposed markup is shown below.

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2.2 **Background and Rationale for Requirements.**

…

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 reissuance of the permit, use available regulatory mechanisms ~~as warranted and as available to grant more time (see~~ specified in Fact Sheet section 6.3.5 and 6.3.6 ~~)~~ to provide more time for Dischargers 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 more time to comply. T~~t~~he Regional Water Board ~~will~~ shall use ~~any~~ available regulatory mechanisms to allow more time for these projects to be implemented.

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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, organics codigestion, 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

(c) amend the Basin Plan to include a Water Quality Attainment Strategy for biostimulatory substances with a compliance schedule of more than 10 years.

BACWA requests that, concurrent with the adoption of the Nutrient Watershed Permit the Water Board approve a Resolution committing staff to identify and present to the Board for consideration a plan to legally extend the compliance schedule for the Nutrient Watershed Permit beyond ten years. The Resolution would direct staff to (1) prepare a draft amendment to Basin Plan Section 4.7.6 to provide more than ten years for nutrient management programs and shall (2) concurrently prepare a proposal to present to the State Water Resources Control Board to seek that the State Water Board amend the 2008 Compliance Schedule Policy to allow longer than ten years for nutrient management compliance schedules in the San Francisco Bay region, as described in (a) in the markup above. The Resolution would provide that if compliance schedule requirements cannot be amended within one year, the Water Board shall instead initiate a Basin Plan amendment for the Board's consideration as specified in (b) or (c) in the above markup and complete all steps prior to re-issuance of the Nutrient Permit.

We have attached a sample Resolution for the Water Board's consideration.

Comment 2. Our understanding of nutrient science in the Bay is evolving, and the Nutrient Watershed Permit should support an approach to adapt to new findings.

BACWA has been a participant in the Nutrient Management Strategy since its inception and has contributed more than $16M over the past decade to understand the impact of nutrients on the Bay. BACWA appreciates the memo that the Water Board developed which clearly and logically describes the process used to derive final effluent limits that would mitigate low DO conditions were there to be a repeat of the 2022 harmful algal bloom. The memo also acknowledges many of the uncertainties inherent in this "back of the envelope" approach, the importance of non-anthropogenic factors controlling algal blooms, as well as the work that remains to be done to better understand harmful algal species.

Although the Fact Sheet (p. F-23) states that "This Order's Aggregate Mass Load was calculated based on use of the physical portion of the model," the biogeochemical portion of the model was in fact used to simulate nitrogen transformation. The numerical model is in its early stages of development. The project's Modeling Advisory Group, cited in footnote 6 of page F-23, made recommendations to improve this facet of the model which have not yet been incorporated. The calculations presented only made partial use of the model because it was not considered to be capable of accurately capturing the impact of varying nutrient loads on the August 2022 *Heterosigma akashiwo* bloom. Even with this limited use, the model's "performance within Lower South Bay and adjacent regions (far South Bay) is a known limitation of the current version" (SFEI, p.14)[3]. For example, the model predicted dissolved inorganic nitrogen (DIN)

[3] SFEI, Simulations of Load Reduction Scenarios to Inform Nutrient Management Planning for San Francisco Bay March 2024 – DRAFT, SFEI Contribution#1175

concentrations of 0.8 ppm of DIN versus actual measured concentrations of 0.5 ppm in June-July (SFEI, Figure 2-10). These differences between the model predictions and measured DIN levels may result from the model "insufficiently resolving or representing some Lower South Bay regions, including ones that have the potential to influence the DIN cycling and fate (i.e., restored ponds, some sloughs and marsh areas). Work has been moving ahead on a Lower South Bay focused version of the San Francisco Bay Biogeochemical Model, but was not available for the work described here." (SFEI, p.15).

The first time the model was ever used to conduct scenario runs, it was used to inform the tremendously impactful and costly load reduction requirements included in the Tentative Order. Only one water year was used, which was 2022. With more time, even given the approach used, the model could have considered additional water years and therefore its range of outputs would have been more robust.

BACWA acknowledges that our staff and members participated in discussions that led to the process described in the memo to develop the nutrient load limits, and we provided a load reduction scenario based on our members' projects that had been identified as of Summer 2023. However, we would like to clarify that the load reduction provided for this purpose did not include projections of population growth, and it included projects that will not be complete within the 10-year time frame required by the Tentative Order.

BACWA is in no way challenging the principle that our members should significantly reduce nitrogen discharges in response to the 2022 harmful algal bloom. However, the permit should make clear that the limits are a policy decision, and are based on a weak scientific foundation. We need to continue to invest in that science and retain regulatory flexibility while this process moves forward. This 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. These facts further support the need for an extended compliance schedule, as described in Comment 1.

Additionally, BACWA requests edits to the Fact Sheet to provide more context to the nitrogen load estimates presented for San Francisco Bay in Table F-5. While dry weather inputs from stormwater and atmospheric deposition are expected to be minimal, they are not zero, as evidenced by the record-breaking wet weather conditions experienced throughout the Bay Area on May 4, 2024. Additionally, footnote [3] is only applicable to the Suisun Bay estimate; the report cited did not include load estimates for the other subembayments.

BACWA recommends that the Fact Sheet be amended as shown:

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4.1.3. Reasonable Potential Analysis

Municipal wastewater treatment plants are a significant source of nutrients to San Francisco Bay and nutrients pose a threat to San Francisco Bay beneficial uses. In San Francisco Bay, nitrogen is the growth-limiting nutrient.[2] Total inorganic nitrogen is the bioavailable form of nitrogen. As shown in the table below, municipal wastewater treatment plants account for about 86 percent of the ~~annual~~ average dry season total inorganic nitrogen load to San Francisco Bay and close to 100 percent of the total inorganic nitrogen load to Lower South Bay, South Bay, and Central Bay.[3] The estimates in Table F-5 do not account for dry season inorganic nitrogen loads from other sources such as creeks, urban stormwater systems, or aerial deposition, because load estimates were not available.

Table F-5. Dry Season Average Total Inorganic Nitrogen

Subembayment	Municipal [1] (kg N/day)	Petroleum Refinery [2] (kg N/day)	Delta ~~[3]~~ (kg N/day)	Total (kg N/day)	Municipal (%)
Lower South Bay	6,300	-	n/a	6,300	100
South Bay	20,400	-	n/a	20,400	100
Central Bay	11,200	-	n/a	11,200	100
San Pablo Bay & Carquinez Strait	1,500	840	n/a	2,300	64
Suisun Bay	5,900	130	6,200[3]	12,200	48
Baywide	**45,200**	**970**	**6,200**	**52,400**	**86**

Footnotes:

[1] Average of data from 2018 through 2022.

[2] Data from 2011. To gather more information on current total inorganic nitrogen loadings from refineries and assess potential treatment options, the Regional Water Board issued a 13383 order on January 26, 2024.

[3] ~~Data~~ Estimate adapted from *Nutrients in the Northern San Francisco Estuary: Transport, Cycling, and Forecasted Changes after Nutrient Load Reductions* from SFEI in 2021.

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4.1.4.2. Final Effluent Limitations.

…

The panel also found that the physical portion of the model used to predict the spatial patterns of nutrient concentrations is ready for near-term application. This Order's Aggregate Mass Load was calculated based on use of the physical portion of the model. This Order used the biogeochemical portion of the model to simulate nitrogen transformation, but did not use the biogeochemical portion of the model to predict chlorophyll-a and dissolved oxygen levels due to its limitations that will be resolved with ongoing and planned model improvements.

Comment 3. The Tentative Order should state that final effluent limits are a policy decision, given high levels of scientific uncertainty and given available regulatory options to use Best Management Practices instead of numeric effluent limits.

The Clean Water Act provides the Water Board discretion to decide how to formulate final effluent limitations in an NPDES permit; therefore, the type of effluent limitations in a permit are policy decisions, and the Nutrient Watershed Permit should reflect this. 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 C.F.R. § 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.[4] It should be noted that the Salish Sea numerical model used to quantify the impacts of nutrients on Puget Sound is significantly more advanced than the current model under development for the San Francisco Bay Region. BACWA believes the Water Board's evaluations show that rather than calculating water quality-based effluent limits in the Tentative Order, the Water Board could instead make a similar finding of infeasibility, 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 Watershed Permit would include achievable BMP milestones and would put us on the path to attaining the narrative water quality standard. BACWA and its members would document the projects that we are planning along with their design goals to illustrate how they are intended to achieve the load targets. An adaptive management approach to nutrient management would allow us to course-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. BMPs would also provide protection against mandatory minimum penalties for agencies who are diligently working toward nutrient reduction.

A BMP-based approach is consistent with the 2008 Compliance Schedule Policy.

Under this proposal, the Water Board must find a way to justify use of a compliance schedule under the 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

[4] https://ecology.wa.gov/regulations-permits/permits-certifications/nutrient-permit

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 . . ."

The proposed load reductions certainly represent a newly interpreted water quality objective that is more stringent than previous permits. Notably, the policy does not state that the resulting 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 Watershed Permit as numeric permit limitations more stringent than the prior NPDES permit, as required by the Compliance Schedule Policy.

We submit that a BMP-based effluent limitation is the only type of limitation appropriate for the Nutrient Watershed Permit. The Reasonable Potential Analysis under 40 C.F.R. § 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 10 years provide the best set of restrictions on the concentration of pollutants to achieve the water quality standard, with some potential project completions as early as 2025 to reduce nitrogen loads. Several key edits to the Tentative Order that would implement the BMP-based approach are shown below to illustrate the request.

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> **4.2. Final Effluent Limitations and Numeric Targets.** Dischargers are required to complete the Best Management Practices (BMPs) in Sections 6.3.4 through 6.3.6, which shall serve as the final water-quality-based effluent limitation for biostimulatory substances under this permit in accordance with 40 CFR 122.44(k)(3) and (k)(4), which are expected to attain the water quality standards under the Water Quality Control Plan for the San Francisco Bay Region (Basin Plan), and the numeric action levels in Table 3. The BMPs in Sections 6.3.4 through 6.3.6 provide reasonable assurance that the applicable water quality standard shall be met.
>
> ~~In accordance with the compliance schedule established by this Order in Provision 6.3.3, starting October 1, 2034,~~ The final WQBEL for future permits shall be based on the waste load allocation or WQBEL determined through a Basin Plan Amendment process. The Dischargers shall comply with the BMP-based approach in Section 6.3.4 through 6.3.6 with the goal of achieving the following final seasonal numeric targets ~~water quality-based effluent limitations~~ at the discharge points and monitoring locations specified in the MRP. Achievement of these numeric targets ~~Compliance with these final limitations~~ shall be determined seasonally based on discharges from May 1 through September 30. If the sum of all the individual Dischargers' total inorganic nitrogen mass loads is greater than the Aggregate Mass Load Target ~~Limit~~ set forth below, the Dischargers whose total inorganic nitrogen mass loads exceed their individual limitations

shall implement corrective actions as identified in Section 6.3.X ~~be in violation of their individual limitations~~. Mass loads shall be determined by calculating each daily average total inorganic nitrogen load from daily flows and concentrations, averaging all resulting daily loads, and rounding to two significant figures. The Aggregate Mass Load shall be determined by summing each individual Dischargers' average mass load.

Table 4. Final Effluent ~~Limitations~~ Targets

Discharger	Total Inorganic Nitrogen
…	..

[Page F-18]

4. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants discharged into waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations: 40 C.F.R. section 122.44(a) requires that permits include applicable technology-based limitations and standards, and 40 C.F.R. section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of receiving waters. The individual NPDES permits listed in Attachment B of this Order contain the applicable technology-based limitations for the discharges covered by this Order.

When the Regional Water Board has determined that there exists a reasonable potential for a discharger to cause or contribute to an excursion above any water quality standard for a particular pollutant, an NPDES Permit must contain effluent limits for that pollutant. (See, 40 CFR § 112.4(d).) Effluent limits include any restriction on the concentration of pollutants. (40 C.F.R. § 122.2.) Best management practices 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 CWA. (40 CFR § 122.44(k)(4).)

This Order adopts BMPs as a means to reduce pollution risks through source reduction and pollution prevention practices that Dischargers and BACWA have

> developed. The BMPs under this Order are necessary to achieve limitations/standards or meet the intent of the CWA.
>
> The Regional Water Board's evaluations to date show it is not feasible to calculate a numeric limitation with a degree of certainty because the numerical model created to simulate impacts of nutrients on the Bay ecosystem was developed to evaluate conditions of chronic chlorophyll enrichment and low dissolved oxygen and has not yet been enhanced to reliably simulate biological processes leading to the growth of harmful algal blooms. The approach used to determine the numeric targets in this permit has also not undergone any external or peer review.
>
> Based on these facts and others, BMP-based effluent limits are needed because, at this time, the Regional Board is still developing a process to calculate how load reductions will affect the Bay. In addition, BMPs are proper to use in lieu of numeric effluent limits because the BMP practices are reasonably necessary to achieve effluent limitations and standards and to carry out the purposes and intent of the CWA. (See 40 CFR § 122.44(k)(4).)

A BMP-based approach would mitigate costs to disadvantaged communities

A BMP-based approach better addresses environmental justice concerns than numeric limits. Nearly half of all Bay Area residents who live in families are low income or very low income, and people of color make up a disproportionate amount of the very low-income residents in the nine-county Bay Area and suffer disproportionately from water unaffordability[5]. Affordability concerns are central to environmental justice in our region.

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 proposed Nutrient Watershed Permit. 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. Economic considerations fall within the scope of meaningful civil engagement under Water Board section 189.7 and within the scope of the findings required under Water Code section 13149.2. Meaningful engagement includes "[s]eeking out and facilitating the involvement of *people potentially affected by the decisions* and taking into account community concerns." People will be directly affected by compliance costs stemming from the Tentative Order, and we disagree that the statute excludes the need to evaluate how disadvantaged communities will be affected economically by the Water Board's decision. The Legislature did not exclude economic considerations from Water Code section 189.7. Likewise, 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

[5] https://bayareaequityatlas.org/distribution-of-incomes

impact[s]" as in they are in subdivision (b)(1), reflecting that the Legislature, again, 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.

We submit that $11 billion or more in public resources spent over 10 years, resulting in hundreds of dollars per household per year in rate increases, to meet the numeric limits in the Tentative Order is too high a burden for disadvantaged communities. Spreading costs and resources over a longer period using a BMP-based approach can best support a phased approach to nutrient reductions that incorporates funding considerations. A BMP-based approach makes sense while implementing the regulatory changes needed to extend the compliance schedule, per Comment 1.

Comment 4. The reference to future year-round limits should be removed.

BACWA and its members understand that future load limitations may change in response to new science. This Tentative Order states that recycled water is a preferred approach for nutrient reduction. Non-potable recycled water is a dry-weather nutrient reduction strategy. Another example of the no-regrets approach that BACWA proposes is to use existing dry weather capacity for nutrient reduction. Strategic use of existing facilities can often achieve nutrient reductions faster and at a much lower cost than a full upgrade, but this approach would be infeasible if nutrient load reduction requirements apply year-round. While we expect that scientific developments will drive future permit limits, inclusion of this language in the Tentative Order sends a dangerous signal that recycled water and innovative use of dry weather treatment capacity are not sustainable and reliable pathways to meet nutrient reduction goals, and disincentivizes these approaches. BACWA recommends that it be deleted, as shown below.

[Page 8]

> 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)~~.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

Comment 5. BACWA requests removal of overly prescriptive compliance plan deadlines in the Tentative Order, as well as other changes to reporting.

The Tentative Order includes two major regional reports that BACWA plans to assist its members in preparing: The Group Annual Report (Section 6.3.3.1 and Attachment E, Section 5.2) and the Regional Planning Report (Section 6.3.4). The Tentative Order also requires

Technical Reports to be submitted to show progress per the State Water Board's 2008 Compliance Schedule Policy. BACWA requests substantial edits to the milestones and due dates identified for these Technical Reports to allow sufficient time for orderly planning and to facilitate prioritization of multi-benefit projects.

BACWA requests removal of the Tentative Order's requirement for Dischargers to identify nutrient removal projects by **July 1, 2025** (Technical Reports, Section 6.3.3.2.1). Dischargers are currently in the process of identifying these projects, but progress varies widely. As noted in Comment 1, some Dischargers have already implemented nutrient removal, and others are in construction. Conversely, some Dischargers are only now beginning to identify their best options for nutrient removal, including detailed evaluations of multi-benefit project options. The deadline for this compliance plan milestone should be extended until at least 2028 to allow agencies to complete interim work such as master planning; pilot studies; fully vetting opportunities for multi-benefit projects; environmental impact assessments; identifying potential impacts on customer rates, community growth, and equity; and integrating projects into capital plans. If Dischargers must commit to projects in 2025, they will inevitably prioritize projects that rely on established technology and gray infrastructure. The opportunity to identify lower-cost or multi-benefit projects will be lost.

BACWA suggests edits to the Tentative Order to remove the aggressive capital planning deadlines currently listed throughout section 6.3.3.2, as they could substantially inflate project costs and disincentive multi-benefit projects. The imposition of standardized due dates for major capital planning deliverables such as "Final Design Drawings and Specifications" and "Construction Contract" would needlessly exacerbate the regional strain on resources such as engineers, construction contractors, and financing. Furthermore, it is not realistic that every Discharger will obtain a construction contract by March 31, 2029. Inclusion of this milestone would have two undesirable outcomes: it would make permit compliance infeasible for a few dischargers, while inflating construction costs for those who are able to comply.

Overall, BACWA suggests extending the compliance plan due dates for Scoping Plan (Section 6.3.3.2.1), Optimization (Section 6.3.3.2.2), and Governance Plan (Section 6.3.3.2.4), and removing design-specific deadlines such as Draft Design Report (Section 6.3.3.2.3), Final Design Drawings and Specifications (Section 6.3.3.2.5) and Construction Contract (6.3.3.2.6), all of which are subject to delays due to factors outside of an agency's control.

BACWA also proposes to have Dischargers include their compliance plan technical reports (currently listed in Section 6.3.3.2) in the Group Annual Report instead of including them with the Regional Planning Report, which is meant to capture longer-term planning.

Since the Group Annual Report would now contain additional narrative information about planning for individual projects, BACWA requests an extension of the due date of the annual deadline from February 1 to April 1.

In Section 6.3.3.1.3, BACWA requests removal of the requirement to report on "additional plans for nitrogen reductions if current planned projects will not achieve the final effluent limits in Table 4." This provision illogically requests for Dischargers to report on plans that do not exist.

Comment 6. BACWA requests clarification that only dischargers listed in Table 4 should be required to participate in compliance schedule reporting and regional planning efforts.

Section 4.1.3 of the Tentative Order Fact Sheet identifies four facilities with dry season discharge prohibitions: Las Gallinas Valley Sanitation District, Napa Sanitation District, City of Petaluma, and Sonoma Valley County Sanitation District. These four facilities do not have effluent limitations (Table 3 and Table 4) because the Fact Sheet finds that they do not discharge total inorganic nitrogen at levels that could cause or contribute to an exceedance of the narrative biostimulatory substances objective during the dry season. The Tentative Order should clarify that the compliance schedule activities in Section 6.3.3 and regional planning activities in Section 6.3.4 are not applicable to these dischargers. The requested markup is shown below.

[Page 13]

6.3.3.1. **Compliance Schedule and Progress Reporting**. This Order establishes a compliance schedule for Dischargers in Table 4 to meet the final water quality-based effluent limitations for total inorganic nitrogen within 10 years consistent with the State Water Board's Compliance Schedule Policy, as further explained in Fact Sheet section 4.2.1. To demonstrate progress in meeting these limits, each Discharger listed in Table 4 shall submit the information required below …

[Page 14]

6.3.3.2. **Technical Reports**. Each Discharger listed in Table 4 shall submit technical reports as described below. These requirements may be satisfied by Dischargers choosing to collectively submit equivalent documentation through the Scoping Plan, Status Report, and Final Report required by Provision 6.3.4:

[Page 15]

6.3.4. **Regional Planning to Reduce Total Inorganic Nitrogen Loads.** The Dischargers listed in Table 4 and listed as "major" in Table 1 shall, individually or in collaboration with other regional stakeholders…

Comment 7. The Tentative Order should not contain a requirement to "investigate" significant changes in nutrient loading.

Attachment E, Section 5.2.2.5 of the Tentative Order requires an investigation if there is "a significant change in nutrient loading." This requirement was logical in the 2019 Order, when the purpose of the monitoring program was mainly to track regional trends. Now that the Tentative Order is mandating both load reductions (Table 4) and detailed reporting about planned load reduction efforts (Sections 6.3.3 through 6.3.6), no investigations should be necessary. BACWA plans to continue providing an analysis of nutrient loading trends, as required by Attachment E, Section 5.2.2.3.

The requested markup is shown below, and also incorporates the date change for the Group Annual Report referenced above in Comment #5.

[Page E-5]

5.2.2 Annual Nutrients Report. …

~~5.2.2.5. Status and plans for investigation if the trend analysis shows a significant change in nutrient loading. In such cases, the Discharger shall investigate the cause. In the annual reports, the Discharger shall set forth its plans for investigation and report its results, providing necessary updates in subsequent annual reports. The investigation shall include, at a minimum, whether treatment process changes, increasing or decreasing water reclamation, or changes in total influent flow related to water conservation, population growth, transient work community, new industry, or wet weather flows have reduced or increased nutrient discharges.~~

As an alternative to submitting an individual Annual Nutrients Report, each Discharger may instead participate in a group report to be submitted by BACWA. By ~~February~~ April 1 of each year, the Annual Group Nutrients Report shall include the information detailed in this provision.

Comment 8. Monitoring and reporting requirements during wet weather should be modified to reflect practical considerations.

BACWA appreciates the inclusion of Footnote 1 to Table E-4, which encourages innovative and cost-effective compliance strategies such as recycled water diversions and seasonal biological nutrient removal. Unfortunately, as currently written, the provision is impractical to implement. Dischargers are in control of effluent sample collection, which is typically scheduled several days in advance (at a minimum). By contrast, Dischargers are often not in control of recycled water deliveries; these are managed by the recycled water delivery provider. In some cases, this may be a separate division, municipality, or water district. A more practical way to achieve the same objective is to exclude data points from the average rather than deferring sample collection.

The suggested markup is shown below.

[Page E-4]

[1] 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 i~~ 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, the ~~. If a~~ 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.

Comment 9. Table E-2 should be revised to clarify that influent monitoring requirements for nitrate and nitrite may be waived based on monitoring data from the previous Order.

Table E-2 (Influent Monitoring) in the Tentative Order is virtually identical to the version in the 2019 Order. When the 2019 Order was adopted, influent monitoring for nitrate plus nitrite was a new requirement, and baseline data were not available.

Now that dischargers with flow rates exceeding 10 MGD have already collected at least two years of monitoring data (or, in most cases, nearly five years of data), there is ample evidence to demonstrate which dischargers have *de minimis* concentrations of nitrate plus nitrite. Most, but not all, fulfill the requirement. The Regional Water Board should allow dischargers to consider data from the previous permit term to make the determination of eligibility for this reduced monitoring requirement.

Footnote [3] should also be referenced within the table. The requested markup is shown below.

[Page E-3]

Table E-1. Influent Monitoring

Parameter [1]	Unit	Sample Type [2]
Ammonia, Total	mg/L and kg/day as N	C-24
Total Kjeldahl Nitrogen (TKN)	mg/L and kg/day as N	C-24
Nitrate-Nitrite [3]	mg/L and kg/day as N	C-24
Phosphorus, Total	mg/L and kg/day as p	C-24

Footnotes:

[1] Influent samples shall be collected concurrently with effluent samples.

[2] 24-hour composites may be made up of four discrete grab samples collected over a 24-hour period and volumetrically or mathematically flow-weighed. During a 24-hour period, the samples may be collected only when the plant is staffed, if necessary.

[3] ~~If, after two years,~~ If two years of monitoring data are available showing that all measured nitrate-nitrite concentrations ~~a Discharger measures~~ are below 2.0 mg/L, the Discharger may discontinue influent monitoring for this parameter.

Comment 10. Table E-4 should be revised so that the footnotes apply to both nitrogen and phosphorus monitoring requirements.

Table E-4 of the Tentative Order establishes minimum sampling frequencies, and it contains several footnotes. These footnotes should be applied to both the nitrogen and phosphorus monitoring requirements. The requested markup is shown below.

[Page E-3]

Table E-4. Minimum Sampling Frequencies

Discharger Size	Total Ammonia, Nitrate-Nitrite, TKN, Total Inorganic Nitrogen Sampling Frequencies [1,2,3,4]	Total Phosphorous Sampling Frequency [1,2,3,4]
Major Dischargers (design flow ≥ 10 MGD)	Twice per month for effluent Once per quarter for influent	Once per month for effluent Twice per year for influent
Major Dischargers (design flow < 10 MGD)	Once per month for effluent	Once per quarter for effluent
Minor Dischargers (design flow < 1.0 MGD)	Twice per year for effluent [5]	Once per year for effluent

Footnotes:

[1] 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. If a Discharger is unable to collect representative samples at the monitoring frequency required by Table E-4, it 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.

[2] Dischargers that discharge through the East Bay Dischargers Authority Common Outfall (i.e., City of Hayward, City of San Leandro, Oro Loma Sanitary District and Castro Valley Sanitary District, Union Sanitary District, City of San Leandro – Treatment Wetland, and Dublin San Ramon Services District, and City of Livermore) shall monitor their individual wastewater treatment plant influent and effluent at least once per quarter.

[3] Dischargers that discharge through the West County Agency Combined Outfall (i.e., West County Wastewater District and City of Richmond and Richmond Municipal Sewer District) shall monitor their individual wastewater treatment plant influent and effluent at least once per quarter.

[4] The Livermore-Amador Valley Water Management Agency is not required to monitor influent or effluent, and neither the Union Sanitary District nor the Oro Loma Sanitary District is required to monitor effluent from its wet weather outfall.

[5] Monitoring shall occur during the dry season (May - September).

Comment 11. Multi-benefit projects should include nutrient reductions associated with offsetting loads tied to greenhouse gas reduction projects, such as codigestion projects.

Co-digestion projects will reduce the amount of methane emitted from landfills as part of the state's Short-Lived Climate Pollutant Strategy implementing Senate Bill 1383. Often, these projects result in a nutrient rich side-stream tied to anaerobic digestion, so reducing these additional loads should be considered a multi-benefit project.

The requested markup is shown below.

[Page 17]

6.3.5. **Multi-Benefit Solutions for Load Reductions.** Dischargers that identify long-term multi-benefit solutions[4] (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 in the Annual Nutrients Report due January 1, 2028 or the Group Annual Report due April 1, 2028, as required by Provision 6.3.3.2.1. If these projects result in total inorganic nitrogen loads at or below the individual final effluent limitations in Table 4, the Regional Water Board will consider available regulatory mechanisms to provide more time to comply as explained in the Fact Sheet.

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

Our proposed markup of Fact Sheet Section 6.3.5 (Page F-36) in Comment 1 also incorporates organics codigestion as a multi-benefit project.

Comment 12. The Tentative Order should include a revision to Receiving Water Limitations found in individual NPDES permits.

The Section 5 Receiving Water Limitations in the Tentative Order currently states: "This Order retains the nutrient receiving water limitations specified in the individual NPDES permits listed in Attachment B." The individual NPDES permits, in turn, contain a broad Receiving Water Limitations prohibition that discharges "shall not cause a violation of any water quality standard for receiving waters[.]" For the reasons explained in the comments submitted by the City of San Jose, Section 5 should be revised; when an effluent limit is imposed, as is the case in the Tentative Order, no Receiving Water Limitation on the same standard is necessary. The Tentative Order specifies that nutrient load reductions are being imposed in the form of effluent limitations (Tentative Order, Section 4) to meet the translated water quality objective for biostimulatory substances. Because specific effluent limitations apply under the Tentative Order, the Receiving Water Limitations should be modified as follows:

[Page 11]

5. RECEIVING WATER LIMITATIONS

This Order retains the nutrient receiving water limitations specified in the individual NPDES permits listed in Attachment B except for the Biostimulatory Substances objective that is being implemented in this permit through interim and final effluent limitations.

Conclusion: A successful permit supports a timeline that allows thoughtful and balanced investments in nutrient reduction

Adopting this permit as written without a concurrent commitment to extending permitting timelines will lead to an abandonment of our regional vision of strategic, science-driven nutrient management that provides co-benefits to our community. It precludes an iterative, adaptively-managed approach that is responsive to advances in the science. It will also maximize costs to our ratepayers, the brunt of which will be felt by our disadvantaged communities. Incorporating flexibility and phasing, along with the ability to adapt to new scientific discoveries, is the key to minimizing unintended consequences. The threat of future enforcement actions intended to mitigate these consequences does not provide a solid foundation for a sustainable regional nutrient strategy. Extending the regulatory timeline is the primary means to achieve these goals as we plan and implement the improvements that all regional stakeholders want to see. As stated in Comment 1, above, we request that the Water Board pass a resolution acknowledging the infeasibility of the approach required in the Tentative Order and to scope out an amendment to the State Compliance Schedule Policy and/or a Basin Plan Amendment that would incorporate a realistic compliance schedule. We have a unique opportunity to demonstrate leadership in proactive, strategic, and collaborative nutrient management. As always, we look forward to working with Water Board staff to address these issues.

I'd be pleased to further discuss the issues described herein. I can be reached by email at lfono@bacwa.org and by phone at 510-684-2993.

Best regards,

Lorien Fono
Executive Director
Bay Area Clean Water Agencies

Attachment: Sample Water Board Resolution directing staff to identify and implement a legal framework for a feasible compliance schedule for nutrient reductions.

Cc: BACWA Executive Board
BACWA Nutrient Strategy Team
BACWA Agency Nutrient Points of Contact
Eileen White, Tom Mumley, Bill Johnson – Regional Water Board
Ellen Blake, Peter Kozelka – USEPA Region 9
Jon Rosenfield, Ian Wren – San Francisco Baykeeper

Attachment to BACWA Comments on Nutrient Watershed Permit Tentative Order

Sample Water Board Resolution

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION RESOLUTION No. R2-2024-00yy

Directing staff to identify and implement a legal framework for a feasible compliance schedule for nutrient reductions.

WHEREAS, the California Regional Water Quality Control Board, San Francisco Bay Region (Water Board), finds that:

1. The Dischargers governed by Order R2-2024-xx (Nutrient Watershed Permit) are committed to a regional approach to reducing nutrient discharges as quickly as feasible; and
2. Projects that reduce nutrient discharges while concurrently achieving multiple benefits such as recycled water, nature-based solutions, and organics management for greenhouse gas mitigation, are of highest value to our region; and
3. A ten-year compliance schedule is not consistent with implementing these projects, which typically have longer timelines than conventional upgrades; and
4. High-value, multiple-benefit projects are more likely to benefit disadvantaged communities, and those benefits will be denied to such communities if Dischargers are forced to pursue traditional treatment; and
5. The science guiding our understanding of the impacts of nutrient discharges on the San Francisco Bay is rapidly developing; therefore, an adaptive management approach to nutrient reduction is essential; and
6. In 1972, Congress established an $18 billion federal grant program to fund local government construction of sewage treatment systems nationwide and continued the grant program through 1977. The provisions of the Nutrient Watershed Permit require Dischargers to undertake the most significant actions and investments since these grants were provided upon the adoption of the Clean Water Act, totaling more than $11 billion in infrastructure spending for conventional infrastructure and upgrades; and
7. Requiring concurrent infrastructure investments at facilities throughout the region will further inflate costs due to competition for consultants, contractors, and funding, necessitating a phased regional approach that is not consistent with a ten-year compliance schedule; and
8. There are currently no grants available that would defray costs to the community via wastewater utility bills, and state and federal loan programs are already oversubscribed; and
9. Nearly half of all Bay Area residents who live with family members are low income or very low income, and people of color make up a disproportionate amount of the very low-income residents in the nine-county Bay Area and suffer disproportionately from water unaffordability. Therefore, affordability concerns are central to environmental justice in our region, and would be exacerbated if Dischargers were forced to significantly raise wastewater rates to fund nutrient reduction projects in a ten-year window; and
10. Section 4.7.6 of the Basin Plan allows up to ten years for compliance schedules, stating "Implementation of any additional measures that may be required to comply with effluent

limitations shall be completed as soon as possible, but in no event later than ten years after new objectives or standards take effect."

11. The State Water Board's Resolution No. 2008-0025, Policy for Compliance Schedules In National Pollutant Discharge Elimination System Permits (Compliance Schedule Policy), requires a maximum of ten years to comply with permit limits, which does not allow for the flexibility necessary to conduct regional planning to mitigate these concerns; and
12. The Compliance Schedule Policy allows the adoption of a compliance schedule longer than ten years only if it is part of an amendment incorporated into the region's Basin Plan.
13. Available regulatory mechanisms to extend the compliance schedule are, as follows: (a) Amend Section 4.7.6 of the Basin Plan, while 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 (c) amend the Basin Plan to include a Water Quality Attainment Strategy for biostimulatory substances with a compliance schedule of more than 10 years.

NOW, THEREFORE BE IT RESOLVED THAT:

The Water Board directs staff to identify and present to the Board for consideration a plan to legally extend the compliance schedule for the Nutrient Watershed Permit beyond ten years. Staff shall (1) prepare a draft amendment to Basin Plan Section 4.7.6 to provide more than ten years for nutrient management programs and shall (2) concurrently prepare a proposal to present to the State Water Resources Control Board to seek that the State Water Board amend the 2008 Compliance Schedule Policy to allow longer than ten years for nutrient management compliance schedules in the San Francisco Bay region, as described in (a) in Section 6.3.5 of the Fact Sheet. This Resolution shall provide that if compliance schedule requirements cannot be amended within twelve (12) months of this Resolution, the Water Board shall within twelve (12) months instead initiate a Basin Plan amendment for the Board's consideration as specified in (b) or (c) in Section 6.3.5 of the Fact Sheet and complete all steps prior to re-issuance of the Nutrient Permit.