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**San Francisco Bay Regional Water Quality Control Board**

October 9, 2017

Mr. David R. Williams  
Executive Director  
Bay Area Clean Water Agencies

**Subject: Water Board Staff's Intention on the Key Tenets of the Second Watershed Permit**

Dear Mr. Williams:

The purpose of this letter is to set forth the Water Board staff's intention on the key tenets that will be included in the proposed second Nutrient Watershed Permit that will be presented to the Water Board for adoption in 2019. As you know, the Water Board and BACWA have been working collaboratively over the last several years in support of the Water Board's Nutrient Management Strategy that seeks, through scientific investigations, to better understand the impact of nutrient loads on the beneficial uses of San Francisco Bay and to establish a basis for appropriate nutrient load management and regulatory actions. The Nutrient Watershed Permit provides and serves as the regulatory mechanism to recognize this collaboration.

The first Nutrient Watershed Permit, adopted by the Water Board in 2014, included requirements to monitor and report trends in nutrient loads to the Bay, evaluate the feasibility and costs of treatment alternatives to reduce nutrient loads to the Bay, and to provide funding for scientific investigations as part of a multi-year Science Plan. We are now into the fourth year of the five-year permit term, and, with an eye towards subsequent Nutrient Watershed Permits, we need to ensure that key data and information are available and analyses completed to support taking appropriate regulatory actions in the future.

To adequately inform nutrient load management decisions in the third Nutrient Watershed Permit, we see need to enhance and accelerate progress being made under the first Watershed Permit. To that end, we envision that the key tenets in the second Nutrient Watershed Permit would include the following:

1. Individual treatment plant nutrient monitoring and reporting;
  2. Group Annual Reporting of nutrient loads to the Bay;
  3. Funding for Nutrient Management Strategy's scientific investigations;
  4. A regional assessment of the feasibility and cost for reducing nutrients through means other than treatment and discharge at POTWs;
  5. Establishing a baseline for POTWs that undertake early actions to reduce nutrients;
- and

6. Funding for Monitoring and Modeling at the end of the second Nutrient Watershed Permit

Further delineation and explanation of these key tenets is included in Attachment A. We understand that the BACWA membership has reviewed these tenets and concurs that if these are the main tenets around which the requirements of the second Nutrient Watershed Permit will be developed, the desire is for each member of BACWA to be named in the second Nutrient Watershed Permit. BACWA will also voluntarily contribute \$200k in FY 2017-18 and FY 2018-19 to help address the funding gap that exists in the Science Plan.

Water Board staff feels continued collaboration with the Bay Area POTWs on this important issue is very valuable and provides a model for working together on difficult regulatory issues. We look forward to continuing this effort to the benefit of the Bay environment and the residents of the Bay Area.

Should have questions, please contact me at 510-622-2314 / [bwolfe@waterboards.ca.gov](mailto:bwolfe@waterboards.ca.gov) or Tom Mumley at 510-622-2395 / [tmumley@waterboards.ca.gov](mailto:tmumley@waterboards.ca.gov).

Sincerely,

Bruce H. Wolfe  
Executive Officer

Attachment A: Key Tenets of Second Nutrient Watershed Permit

Cc (w/att):

SF Bay Water Board Members

David Smith, USEPA Region IX

Ian Wren, SF BayKeeper

## Attachment A

### Key Tenets of Second Nutrient Watershed Permit

#### **1. Individual treatment plant nutrient monitoring and reporting**

The second Nutrient Watershed Permit will continue individual treatment plant monitoring and reporting requirements for nutrients using the same constituents and monitoring frequency as described in the first Permit.

#### **2. Group Annual Reporting of nutrient loads to the Bay**

The permit will continue the requirement to produce an annual report showing nutrient loads and trends to the various subembayments, as described in the first Permit and with similar reporting content as has been provided by BACWA to date. The Group Annual Report will also track any load reductions due to early actions undertaken by individual agencies.

#### **3. Funding for the Nutrient Management Strategy's scientific investigations**

The increase in science funding is nominally set at 2.5 times the amount in the first Permit, or \$2.2M/year for five years. The actual annual commitment will be based on the number of POTWs participating as of the start of FY 2019-2020. If all POTWs continue participation, the funding commitment in the second Permit will be set at \$2.2M/year. If one or more POTWs decide not to participate, the amount designated in the second Permit will be reduced by their Nutrient Surcharge as of FY 2018-19, as shown in the attached schedule of the projected Nutrient Surcharges. Thus, individual POTWs will have certainty as to their Nutrient Surcharge since it will be independent of which other municipal dischargers participate in the second Permit.

#### **4. A regional assessment of feasibility and cost for reducing nutrients through means other than treatment and discharge at POTWs**

The second Nutrient Watershed Permit will require the completion of a study that will look at regional opportunities for non-grey scape approaches (e.g., wetland enhancement, irrigation recycling) to reduce nutrients, possibly limited to just nitrogen. The study approach will be similar to that utilized with the Optimization/Upgrade Study required by the first Permit. BACWA will issue a Request for Proposals and select a consultant and will prepare a Scoping and Evaluation Plan for Water Board review and approval. BACWA will periodically brief Water Board staff on study progress.

#### **5. Establishing a baseline for POTWs that undertake early actions to reduce nutrients**

The second Nutrient Watershed Permit will recognize that some POTWs may independently undertake early actions to reduce nutrients. In recognition of early actions, the Permit will contain language that establishes a total nitrogen baseline load for any POTW that achieves reductions in advance of a regulatory limit. The baseline load will be the total nitrogen load from the POTW, prior to the time nutrient reduction efforts are initiated, projected forward to the time when a regulatory limit may be imposed assuming there have been no reductions through early actions. The annual difference between the baseline projected load or regulatory load cap and the actual nitrogen load can be banked for credit by the POTW.

If anticipated load caps are subsequently implemented in a future permit, agencies that have implemented early actions and accumulated a credit bank will be able to use the credits to (1) provide for future growth within their service area, (2) participate in trading to allow other

dischargers to meet a regulatory limit, and/or (3) secure relief on other permit issues (e.g., mixing zones, toxicity, other limits) as appropriate.

The Water Board will continue to recognize that improvements to achieve greater nutrient reduction requires decades of capital improvement program planning and construction. The working life of wastewater treatment infrastructure spans 50 years or more. Long-term planning and integration of nutrient removal actions may require regulatory accounting and recognition of agencies that take early actions that achieve significant load reductions. Credit banking and nitrogen load trading are just two examples of possible means of incentivizing agencies to make significant investments ahead of regulatory requirements. To the extent possible, based on continued monitoring and modeling, those POTWs achieving early nitrogen load reductions will not face further load reductions over the life of the plant upgrades.

#### **6. Funding for Monitoring and Modeling at the end of the second Nutrient Watershed Permit**

Given that the intent was to complete the Science Plan by 2024, it is expected that the second Nutrient Watershed Permit would require the \$2.2M/year level of funding (or less depending on POTW participation, per Tenet 3) for five years only. Monitoring and modeling beyond those five years may be carried out through the RMP program with some funding support from the POTWs at an adjusted (presumably lower) level.