



**San Luis & Delta-Mendota Water Authority**

P.O. Box 2157  
Los Banos, CA 93635  
Phone: (209) 826-9696  
Fax: (209) 826-9698



**State Water Contractors**

1121 L St., Suite 1050  
Sacramento, CA 95814  
Phone: (916) 447-7357  
Fax: (916) 447-2734

April 25, 2014

*Delivered Via E-mail to [djimmerson@waterboards.ca.gov](mailto:djimmerson@waterboards.ca.gov)*

Ms. Dania Jimmerson  
California Regional Water Quality Control Board  
Central Valley Region  
11020 Sun Center Drive, Suite 200  
Rancho Cordova, CA 95670

**Subject: Comments on the Tentative Order R5-2014-XXXX, NPDES No. CA0078590, for the Town of Discovery Bay Community Services District, Discovery Bay Wastewater Treatment Plant, Contra Costa County**

Dear Ms. Jimmerson:

The State Water Contractors (SWC) and San Luis & Delta-Mendota Water Authority (Authority)<sup>1</sup> (collectively, "Public Water Agencies") appreciate the opportunity to provide comments on the Central Valley Regional Water Quality Control Board's (Regional Water Board) Tentative Renewal of Waste Discharge Requirements (NPDES No. CA0078590) (tentative permit) for the Town of Discovery Bay Wastewater Treatment Plant (Discovery Bay WWTP). The Public Water Agencies have a significant interest in the health of the San Francisco Bay/Sacramento-San Joaquin River Delta (Bay-Delta) ecosystem, the protection of drinking water supplies, and in the development of management actions to address stressors on the Bay-Delta, including water quality impairment. With respect to municipal wastewater discharges, we support the development and implementation of management actions to address nutrient impacts in the Bay-Delta ecosystem.

The Public Water Agencies commend the Regional Water Board staff for their commitment to protect municipal and aquatic life beneficial uses in the Bay-Delta, and for their efforts to address nutrient discharges to the Bay-Delta through the development of the tentative permit. The Public Water Agencies support the tentative permit, and in particular support the revised effluent limits for ammonia and nitrate plus nitrite. Excess nutrient loading to the Bay-Delta can contribute to excess and/or nuisance algae blooms that result in significant impacts including ecosystem changes, depressed dissolved oxygen, cyanotoxin production, nuisance to recreational uses and water provider operations, and taste and odor issues for drinking water supplies.

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<sup>1</sup> For a description of the SWC and San Luis & Delta-Mendota Water Authority see Attachment 1.

In the tentative permit, the Regional Water Board properly finds that the contribution of nitrate from the Discovery Bay WWTP can contribute to excessive algal growth and change the ecology of Delta waterbodies, which has impacts on aquatic life and municipal beneficial uses. The Regional Water Board also properly finds that the Discovery Bay WWTP discharge likely increases nitrate concentrations at the State Water Project and Central Valley Project pumping plants as the entire discharge flows toward the water facilities, and that the discharge has reasonable potential to cause or contribute to an exceedance of the Basin Plan narrative water quality objectives for biostimulatory substances and taste and odors. The applicable narrative water quality objectives are the following:

- Biostimulatory Substances. Water shall not contain biostimulatory substances which promote aquatic growths in concentrations that cause nuisance or adversely affect beneficial uses.
- Taste and Odors. Water shall not contain taste- or odor-producing substances in concentrations that impart undesirable tastes or odors to domestic or municipal water supplies or to fish flesh or other edible products or aquatic origin, or that cause nuisance, or otherwise adversely affect beneficial uses.

Further, the Regional Water Board properly finds that excessive algae growth and the resulting impacts on downstream waterbodies and municipal drinking water supplies (i.e., increased organic carbon, filter clogging algae, and taste and odor producing algae) are occurring and that nutrient loading contributes to the impairment of beneficial uses. Finally, the Regional Board properly established the effluent limit for nitrate plus nitrite at 10 mg/L (as N), based on the technical capability of wastewater treatment plants to achieve the limit using standard denitrification technologies.

As the State Water Resources Control Board (SWRCB) found when upholding the discharge permit issued to the Sacramento Regional County Sanitation District, "The total amount, or load, of nitrogen needs to be reduced in the Delta in order to address the damaging effects of nutrient over-enrichment. Since ammonia and nitrate are the dominant forms of nitrogen from point source discharges, the loads of both forms of nitrogen to waterbodies experiencing excessive biostimulation needs to be reduced. Elevated levels of ammonia are toxic and thus the conversion to nitrate through nitrification is necessary to protect aquatic life beneficial uses. However, converting the dominant form from primarily ammonia to nitrate will still result in cultural eutrophication. Reductions of total nitrogen loads through both nitrification and denitrification is the goal to protect beneficial uses from cultural eutrophication from point source discharges." (SWRCB Order WQ 2012-0013 at 30).

The Public Water Agencies do not support the Nitrate Plus Nitrite Option for the tentative permit. The Nitrate Plus Nitrite Option is based solely on protecting the municipal and domestic water supply (MUN) beneficial use and further narrowly interprets protecting the MUN beneficial use as meeting the California Department of Public Health maximum contaminant level (MCL) for nitrate plus nitrite of 10 mg/L (as N) assuming a mixing zone. This option does not address the on-going impacts of nitrate loading on aquatic life beneficial uses, and does not address compliance with the narrative objectives for biostimulatory substances and tastes and odors. The discharge of nitrate from the Discovery Bay WWTP contributes to nutrient over-enrichment of the Bay-Delta, and impacts aquatic life and MUN beneficial uses.

Ms. Jimmerson

April 25, 2014

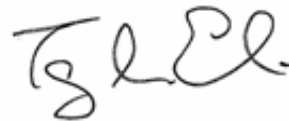
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We appreciate the opportunity to provide comments on the tentative permit and look forward to continuing to work with the Regional Water Board on the permit renewal process. If you have any questions concerning these comments, please contact Lynda Smith, Metropolitan Water District of Southern California, at 916-650-2632 or [lsmith@mwadh2o.com](mailto:lsmith@mwadh2o.com).

Sincerely,



Daniel G. Nelson  
Executive Director  
San Luis & Delta-Mendota Water Authority



Terry L. Erlewine  
General Manager  
State Water Contractors

Attachment

## Attachment 1

**San Luis & Delta-Mendota Water Authority:** The San Luis & Delta Mendota Water Authority (Authority) is a joint powers authority, established under California's Joint Exercise of Powers Act. (Gov. Code, § 6500 et seq.). The Authority is comprised of 28 member agencies. The Authority member agencies have historically received up to 3,100,000 acre-feet annually of Central Valley Project (CVP) water for the irrigation of highly productive farm land primarily along the San Joaquin Valley's Westside, for municipal and industrial uses, including within California's Silicon Valley, and for publicly and privately managed wetlands situated in the Pacific Flyway. The areas served by the Authority's member agencies span portions of seven counties encompassing about 3,300 square miles, an area roughly the size of Rhode Island and Delaware combined. The Authority's members are: Banta-Carbona Irrigation District; Broadview Water District; Byron Bethany Irrigation District (CVPSA); Central California Irrigation District; City of Tracy; Del Puerto Water District; Eagle Field Water District; Firebaugh Canal Water District; Fresno Slough Water District; Grassland Water District; Henry Miller Reclamation District #2131; James Irrigation District; Laguna Water District; Mercy Springs Water District; Oro Loma Water District; Pacheco Water District; Panoche Water District; Patterson Irrigation District; Pleasant Valley Water District; Reclamation District 1606; San Benito County Water District; San Luis Water District; Santa Clara Valley Water District; Tranquillity Irrigation District; Turner Island Water District; West Side Irrigation District; West Stanislaus Irrigation District; Westlands Water District.

**State Water Contractors, Inc. (SWC):** The SWC organization is a nonprofit mutual benefit corporation that represents and protects the common interests of its 27 member public agencies in the vital water supplies provided by California's State Water Project (SWP). Each of the member agencies of the State Water Contractors holds a contract with the California Department of Water Resources (DWR) to receive water supplies from the SWP. Collectively, the SWC members deliver water to more than 25 million residents throughout the state and more than 750,000 acres of agricultural lands. SWP water is served from the San Francisco Bay Area, to the San Joaquin Valley and the Central Coast, to Southern California. The SWC's members are: Alameda County Flood Control and Water Conservation District Zone 7; Alameda County Water District; Antelope Valley-East Kern Water Agency; Casitas Municipal Water District; Castaic Lake Water Agency; Central Coastal Water Authority; City of Yuba City; Coachella Valley Water District; County of Kings; Crestline-Lake Arrowhead Water Agency; Desert Water Agency; Dudley Ridge Water District; Empire-West Side Irrigation District; Kern County Water Agency; Littlerock Creek Irrigation District; Metropolitan Water District of Southern California; Mojave Water Agency; Napa County Flood Control and Water Conservation District; Oak Flat Water District; Palmdale Water District; San Bernardino Valley Municipal Water District; San Gabriel Valley Municipal Water District; San Geronio Pass Water Agency; San Luis Obispo County Flood Control & Water Conservation District; Santa Clara Valley Water District; Solano County Water Agency; and Tulare Lake Basin Water Storage District.