

# Agenda Item

# 4

**Engineering Committee Meeting**

**Meeting Date:** September 8, 2022

**TO:** PC2 Engineering Committee Members

**STAFF CONTACT:** Amber Baylor, Director of Environmental Compliance

**SUBJECT:** JB Latham Mass Balance Salt Loading Model Evaluation

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## **Summary**

Biologically mediated carbon and nitrogen removal is essential to meet NPDES permit R9-2022-0005, issued by the San Diego Regional Water Quality Control Board (SDRWQCB)<sup>1</sup>. Discharge compliance requirements are included in Ocean dischargers are also subject to requirements in the California Ocean Plan<sup>2</sup>, specifically not to exceed 2 parts per thousand above natural background to maintain a buoyant discharge plume. There is published literature indicating that the wastewater with high salinity disrupt metabolic functioning in bacteria and reduce the ability to removal carbonaceous and nitrogenous loading into the treatment plant. SOCWA is concerned about the ability to meet permit requirements for the JB Latham Facility (discharge M-001A) contained in Table E-3 and requirements for percent removals across the facility for discharge, which are contained in section 4.2.2 of the NPDES permit. The scope of work is to determine the safe operating envelope of salt loading to Plant 1, Plant 2, and the combined discharge of the JB Latham treatment facility to be compliant with the NPDES and Ocean Plan requirements.

## **Discussion**

This work request is coming to the Engineering Committee due to questions about projects that would or have already, increased salt loading at the JB Latham facility. Those current and future projects are presented below:

1. Plant 1: Lake Mission Viejo flow and loading data to be included in the model.
2. Plant 1: Mission Viejo Country Club flow and projected loading into the model.
3. Plant 1: El Niguel Country Club flow and projected loading into the model.
4. Plant 2: Dana Point Harbor revitalization dewatering flow and projected loading into the model.

## **Fiscal Impact:**

The cost of the study is less than \$25,000 and within the General Manager's spending authority. However, this study was not budgeted for FY 22-23. The table below provides the breakdown per agency based on FY 22-23. Please note that the table includes City of San Juan

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<sup>1</sup> SOCWA R9-2022-0005 NPDES Permit: <https://www.socwa.com/environment/permits/>

<sup>2</sup> California Ocean Plan: [https://www.waterboards.ca.gov/water\\_issues/programs/ocean/docs/oceanplan2019.pdf](https://www.waterboards.ca.gov/water_issues/programs/ocean/docs/oceanplan2019.pdf)

Capistrano since it was part of the budget process. The combined allocation for SMWD would be \$15,961.54.

	% Flow	Cost Per Agency
CSJC	26.23%	\$ 6,515.27
MNWD	16.64%	\$ 4,133.21
SCWD	19.10%	\$ 4,744.25
SMWD	38.03%	\$ 9,446.27
		\$ 24,839.00

**Recommendation Action:** Staff recommends utilizing the percent distribution of flows to the JB Latham treatment facility identified in the FY22-23 PC2 Budget or provide an updated cost allocation direction to SOCWA staff.

**Attachment:**

Carollo scope of work.