# STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION

# STAFF REPORT FOR REGULAR MEETING OF JANUARY 31-FEBRUARY 1, 2019

Prepared on January 8, 2019

**ITEM NO.:** 17

SUBJECT: Educational Field Trip, Central Coast Blue Recycled Water Project

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#### **KEY INFORMATION**

Location: 550 Frady Lane, Pismo Beach, San Luis Obispo County

Type of Discharge: Highly treated, recycled domestic wastewater

Design Capacity 3530 acre feet per year

Treatment Secondary treatment, microfiltration, reverse osmosis, advanced

oxidation

Existing Orders None

This Action: None

#### **SUMMARY**

Central Coast Blue is a climate change adaptation and water quality mitigation project to recycle wastewater under development by south San Luis Obispo County agencies, including the cities of Pismo Beach, Arroyo Grande, and Grover Beach and the Oceano Community Services District. The project will take municipal wastewater treated at existing wastewater treatment facilities and further treat the water before injecting it into the underlying groundwater basin. The project is designed to produce a new, drought-proof water supply, protect the groundwater basin from seawater intrusion, and improve groundwater quality.

#### DISCUSSION

### Background

Seawater intrusion in coastal southern San Luis Obispo County has been an identified problem since the 1960s. High concentrations of nitrate are also a problem in the area.

The City of Pismo Beach and the South San Luis Obispo County Sanitation District, composed of the cities of Arroyo Grande and Grover Beach and the Oceano Community Services District, each currently operate their own wastewater treatment plants. The two plants both discharge treated wastewater through a single, jointly owned ocean outfall. Pismo Beach and the sanitation district, through separate planning processes, arrived at the conclusion that groundwater recharge with recycled municipal wastewater could have a beneficial affect on groundwater conditions. The agencies are now working together to develop a joint recycling and recharge project, known as Central Coast Blue. The project is designed to produce a new,

drought-proof water supply, protect the groundwater basin from seawater intrusion, and improve groundwater quality.

# **Project Description**

Central Coast Blue will take wastewater treated at the existing wastewater treatment facilities and further treat the water before injecting it into the underlying groundwater basin. The advanced treatment facility will use microfiltration/ultrafiltration, reverse osmosis, and ultraviolet advanced oxidation process to treat the water to the required quality for groundwater injection.

After treatment, the recycled water will be conveyed to a series of injection wells to recharge the groundwater basin and to create a seawater intrusion barrier. Due to the exceptional quality of the advanced purified water, the project will not only create a barrier to prevent further intrusion of seawater, but it will also improve groundwater quality by reducing the concentrations of dissolved minerals and nitrate. After an appropriate residence time in the aquifer, the water will be available for use by local water purveyors (i.e., via indirect potable reuse).

### **Grants**

The project proponents received a State Water Board Prop 1 Groundwater Sustainability Planning Grant in the amount of \$1,730,025 that is helping to fund several components of the project, including stakeholder outreach, project administration, permitting and environmental review, a test injection well, a groundwater monitoring program, an antidegradation analysis, and project design.

The Central Coast Water Board also approved a supplemental environmental project (SEP) in the amount of \$221,963 toward a modeling analysis of the groundwater basin that informs the development and implementation of the project. The SEP is associated with the Central Coast Water Board's enforcement action against the South San Luis Obispo County Sanitation District for the 2010 sewage spill at the wastewater treatment plant.

## **Facility Tour**

Central Coast Blue project staff will provide an update to the board and a tour of the Pismo Beach wastewater facility and pilot advanced treatment plant.