



**Board Operations and Engineering Committee  
September 24, 2020**

**SUBJECT:**

Purified Water Replenishment (PWR) Project Update

**BACKGROUND:**

The proposed Purified Water Replenishment (PWR) Project is part of the District's Groundwater Reliability Plus Program advanced by the District to improve the quality and yield of the San Jacinto groundwater basin.

The PWR Project includes recharging a blend of advanced treated permeate and tertiary recycled water into spreading ponds along the San Jacinto River corridor. The spreading ponds will also be used for the District's proposed Water Banking Program. Proposed project facilities include a recycled water advanced treatment plant adjacent to the San Jacinto Valley Regional Water Reclamation Facility (SJVRWF), brine management facilities, recycled water pipeline, and use of a raw water pipeline for supplemental water deliveries.

The following is an update on various ongoing activities in support of advancing the PWR Project.

**Title 22 Engineering Report:**

Preparation of a Title 22 Engineering Report is necessary to demonstrate the proposed PWR Project meets Indirect Potable Reuse Groundwater Recharge regulations. On February 6, 2019, the Board approved and authorized execution of an agreement with CDM Smith in the amount of \$259,890 for the preparation of Program and Title 22 Engineering Report.

In April 2020, a draft Title 22 Engineering Report was submitted to the Division of Drinking Water (DDW) for their review and comments. A workshop was recently held with DDW and the Regional Water Quality Control Board to review the draft Title 22 Engineering Report. Once comments are received the report will be finalized and a public hearing will be held with DDW.

**Environmental Impact Report:**

On November 20, 2019, the Board approved and authorized execution of an agreement with Helix Environmental Planning, Incorporated (Helix), in the amount of \$213,9865 to prepare an Environmental Impact Report (EIR) for the PWR Project. The District has received the first draft for internal review and comments. A final draft is scheduled to be completed in October 2020 and will be available for public review and comment. The EIR is scheduled to be presented to the Board in February 2021 for consideration and adoption.

Community and Public Outreach:

The District has continued its outreach efforts to the community and stakeholders in San Jacinto and Hemet to provide updates on the PWR project. Prior to release of the draft EIR, a series of informational meetings will be held with various community stakeholders including the cities of Hemet and San Jacinto, the Soboba Band of Luiseno Indians, Lake Hemet Municipal Water District, and the Hemet-San Jacinto Watermaster Advisor.

Brine Concentration Pilot Project:

The PWR Brine Concentration Pilot Project will test closed-circuit reverse osmosis (CCRO) as the primary treatment technology to minimize brine generation. This innovative approach will be the first comprehensive test of CCRO as the primary RO process on municipal recycled water. The objective of the pilot testing is to maximize the amount of purified water that can be produced through the PWR project and minimize brine generation.

On December 11, 2018, the District was awarded a Future Supply Actions Funding Program Grant up to \$500,000 from the Metropolitan Water District of Southern California for the PWR Brine Concentration Pilot Project. On August 15, 2019, the District was also awarded grant funding up to \$223,747 from State Water Resources Control Board's Water Recycling Funding Pilot Program to support construction of the PWR Brine Concentration Pilot Project.

The pilot plant, located at SJVRWRF, consists of two 40-foot shipping containers that house the reverse osmosis and microfiltration membrane filtration units, and associated chemical tanks. The Pilot Project began operating in August 2020 and is expected to run approximately four to six months. CDM Smith, Separation Processes, and Cal Poly Pomona engineering students will be assisting District staff with operations, monitoring and sampling of the pilot unit.

The attached presentation provides an overview of ongoing activities to advance the PWR project and associated next steps.

**FINANCIAL IMPACT:**

None

**STRATEGIC PLANNING GOAL/OBJECTIVE:**

Water Supply Diversity and Reliability: Develop and implement a portfolio of projects and management techniques to achieve a reliable and cost-effective balance of water supplies utilizing imported, local and recycled water sources.

**ENVIRONMENTAL IMPACT:**

This study is exempt from the California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15262, which provides exemption for planning studies.

**RECOMMENDATION:**

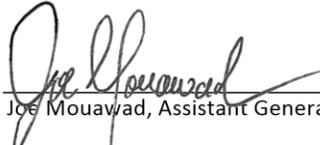
This item is informational only.

**SUBMITTED BY:**



Paul D. Jones II, P.E., General Manager

9/21/2020



Joe Mouawad, Assistant General Manager

9/16/2020

**Attachment(s):**

*Presentation*

10/07/20 Board Meeting

Staff Contact: David Ahles