ITEM: INFORMATIONAL ITEM/STAFF REPORT

26. DRAFT WATER YEAR 2019 AQUIFER STORAGE AND RECOVERY PROJECT SUMMARY OF OPERATIONS REPORT

Meeting Date:	**July 20, 2020**	**Budgeted:**	**N/A**
From:	**David J. Stoldt, General Manager**	**Program/ Line Item No.:**	**1-2-1**
Prepared By:	**Jonathan Lear**	**Cost Estimate:**	**N/A**

General Counsel Review: N/A
Committee Recommendation: N/A
CEQA Compliance: This action does not constitute a project as defined by the California Environmental Quality Act Guidelines Section 15378.

SUMMARY: A draft report documenting the summary of operations for Water Year 2019 at the Monterey Peninsula Aquifer Storage and Recovery (ASR) Project sites has been prepared by the District's technical consultant on the project, Pueblo Water Resources, Inc. The completion of this annual report is a requirement of the Central Coast Regional Water Quality Control Board (RWQCB) as part of their ongoing oversight of the ASR program in the Seaside Basin and is due July following the close of the past water year (WY 2019). The draft report with figures removed for brevity is provided as **Exhibit 26-A**. A full printout of the report is available for review at the MPWMD offices, or a PDF will be provided upon request. The report documents the ASR activities conducted cooperatively with California American Water (Cal-Am) at the Phase 1 and 2 ASR sites during WY 2019, including: (a) summary of project status and injection well performance, (b) seasonal recharge operations, and (c) water-quality monitoring. During WY 2019, a volume of 530 acre-feet (AF) of Carmel River Basin source water was injected and stored in the Seaside Basin during the winter high-flow season.

RECOMMENDATION: The Board should receive the draft report documenting ASR activities at the ASR project sites during WY 2019. The report will be finalized and distributed, subject to inclusion of comments from the District, Cal-Am or other interested parties.

BACKGROUND: The District has been pursuing Aquifer Storage and Recovery (ASR) in the Seaside Basin since 1996. The project concept entails diverting excess winter flows from the Carmel River Basin approximately six miles through existing Cal-Am distribution system pipelines to the hydrologically-separate Seaside Basin, where the water is injected into specially-constructed ASR wells, for later recovery during dry periods. Prior to injection, the diverted water is treated at Cal-Am's Begonia Iron Removal Plant in Carmel Valley so that it meets potable drinking water standards. In 1998, the District constructed a pilot injection well, known as the Paso Robles Test Injection Well (PRTIW) in the northeastern portion of the City of Seaside. The 460-feet deep pilot well was screened in the Paso Robles Formation aquifer. Subsequent injection testing at the pilot well provided data that allowed the District to proceed with construction of a larger injection test well, SMTIW No. 1 (now referred to as ASR-1), for which construction was completed in 2002 on the former Fort Ord Military Reservation, approximately 300 feet east of

the PRTIW. This site is known as the Phase 1 or Santa Margarita ASR facility. ASR-1 is an 18 inch-diameter, 720 feet deep stainless steel well screened in the Santa Margarita Sandstone aquifer. The Santa Margarita aquifer has more favorable hydrogeologic characteristics, and is therefore more conducive to a full-scale ASR project in the basin. ASR-2 was drilled in 2007 and equipped with permanent pump and motor in 2008. ASR- 2 is larger and deeper, at 22 inches in diameter and 790 feet deep. In recent years, District staff has been working with the City of Seaside and the Fort Ord Reuse Authority in order to expand the Santa Margarita ASR site to incorporate needed space for pipelines, treatment equipment, and well backflushing capacity.

Also in 2008, the District began negotiations with the Monterey Peninsula Unified School District (MPUSD) for potential use of an unused portion of the Seaside Middle School property for a second phase of ASR expansion. This was followed by successful exploration work at the site in 2009 and an easement for the site was acquired by Cal-Am in 2011. The District has been working under contract with Cal-Am to complete construction of ASR wells 3 and 4 and the permanent ASR facilities at this Phase 2 ASR site.

The draft WY 2019 report has been provided to Cal-Am staff for their review and comment. The report, once finalized, will be posted and available on the District's website. The report will also be a useful reference document to support future operations and testing at the ASR Project sites.

IMPACT ON STAFF/RESOURCES: A significant staff effort has been expended planning, coordinating, and overseeing work on the District's ASR program in the Seaside Basin. It is planned to continue this level of effort during the remainder of this year and into the next recharge season.

EXHIBIT

26-A 2019 Aquifer Storage and Recovery Project Summary of Operations Report
(A print out of the full report is available for review at the MPWMD office and PDF can be provided upon request.)