



- **Board of Directors**
One Water and Stewardship Committee

4/9/2024 Board Meeting

Revised 8-5

Subject

Review and consider the South Coast Water District's Agency's certified Final Environmental Impact Report and take related CEQA actions; authorize the General Manager to enter into a Local Resources Program Agreement with the Municipal Water District of Orange County and South Coast Water District for the Doheny Ocean Desalination Project for up to 5,600 acre-feet per year of treated desalinated seawater for potable purposes in the Municipal Water District of Orange County service area

Executive Summary

This letter requests authorization for Metropolitan to enter into a Local Resources Program (LRP) Agreement with the Municipal Water District of Orange County (MWDOC) and South Coast Water District (SCWD) for the Doheny Ocean Desalination Project (Project). The Project would provide up to 5,600 acre-feet per year (AFY) of treated desalinated seawater for potable purposes within MWDOC's service area. The Project is consistent and compliant with the Local Resources Program goals and objectives and would help Metropolitan to increase regional water supply reliability, reduce future demands on Metropolitan for imported water supplies, decrease the burden on Metropolitan's infrastructure, and achieve its long-standing Integrated Water Resources Plan (IRP) goals for local resources development.

Proposed Action(s)/Recommendation(s) and Options

Staff Recommendation: Option #1

Option #1

Review and consider the Lead Agency's certified Final Environmental Impact Report (EIR) and take related CEQA actions, and authorize the General Manager to enter into a Local Resources Program Agreement with the Municipal Water District of Orange County and South Coast Water District for the Doheny Ocean Desalination Project for up to 5,600 acre-feet per year of treated desalinated seawater for potable purposes in the Municipal Water District of Orange County service area.

Fiscal Impact: Metropolitan's maximum financial obligation would be up to \$39,900,000 over 15 years for a Project yield of up to 5,600 AFY over 25 years. Staff factors these incentive payments into Metropolitan's rate projections and includes them in future budgets.

Business Analysis: The Project would help Metropolitan achieve its IRP and LRP goals and objectives, which increase regional water supply reliability and reduce Metropolitan's future water and system costs.

Option #2

Do not authorize the execution of an agreement for the Project.

Fiscal Impact: None

Business Analysis: Metropolitan would pursue other projects, and it may take longer to meet IRP goals.

Alternatives Considered

The LRP is a non-competitive program, and Metropolitan considers applications on a first-come, first-served basis until the LRP target of 170,000 AFY is reached. No alternatives to this Project were considered due to the structure of the LRP.

Applicable Policy

By Minute Item 49923, dated October 14, 2014, the Board approved refinements to the Local Resources Program to encourage additional local resource production.

By Minute Item 51356, dated October 9, 2018, the Board approved an interim Local Resources Program target yield of 170,000 AFY of new water production.

Related Board Action(s)/Future Action(s)

None.

California Environmental Quality Act (CEQA)

CEQA determination(s) for Option #1:

Acting as the Lead Agency, South Coast Water District certified a Final EIR on June 27, 2019, for the Doheny Ocean Desalination Project. The Lead Agency also approved the Findings of Fact and the Mitigation Monitoring and Reporting Program (MMRP). The Final EIR and related CEQA documents are included in **Attachments 2-5**.

The Board has reviewed and considered these environmental documents and adopts the findings of the Lead Agency. (State CEQA Guidelines Section 15096.)

CEQA determination for Option #2:

None required

Details and Background

Background

Metropolitan created the LRP to provide financial incentives to local projects such as water recycling, groundwater recovery, and seawater desalination projects developed by local and member agencies. Since the inception of the LRP in 1982, Metropolitan has provided financial assistance for the production of over 4.3 million acre-feet (AF) of local supply. Benefits include helping increase water supply reliability, reducing imported water demands, decreasing the burden on Metropolitan's infrastructure, reducing system costs, and freeing up conveyance capacity. In October 2018, the Board approved an interim LRP target of 170,000 AFY to develop additional contractual yield. In fiscal year 2022/23, Metropolitan incentivized member agencies to produce about 96,000 acre-feet (AF) of local supply.

Proposed Project

The proposed Project is an ocean water desalination facility located in Dana Point, California and located on approximately 10 acres at SCWD's San Juan Creek Property. SCWD will construct the Project with an initial capacity of up to 5 million gallons per day (MGD), or 5,600 acre-feet per year (AFY), with potential for future expansion up to 15 MGD. SCWD only intends to pursue the Phase 1 Project (up to 5 MGD) at this time, and the larger potential future Project may be addressed at a programmatic level and will be considered for future needs. SCWD will own and operate the Project and plans to deliver water from the Project commencing in 2028.

The Project consists of a subsurface (buried) slant well water intake system drilled at an angle below the ocean floor, a raw (ocean) water conveyance pipeline, a seawater desalination facility, brine disposal through an existing wastewater ocean outfall, solids handling facilities, electrical transmission facilities, potable-water storage, delivery to SCWD's distribution infrastructure located immediately adjacent to the desalination facility, and potential delivery to other MWDOC member agencies. The desalination treatment process will begin by drawing in ocean water through the intake wells located below the ocean floor, pumping that water to the desalination

facility, desalinating and treating the water, disposing of the resulting brine and solids, and distributing the potable water to customers.

The Project incorporates several sustainable design elements that remove, reduce, or mitigate coastal resource impacts. Using slant well subsurface intakes ensures that seawater is drawn from below the ocean floor, thus avoiding negative impacts on marine life during facility operations, as described by the California Coastal Commission. Additionally, the Project strategically aligns its discharge with an existing wastewater treatment facility, reducing overall environmental impacts compared to separate discharges. Incorporating slant wells and co-mingled discharge makes the Project the first new desalination project in California to comply fully with the California Ocean Plan Amendment. The Project also aligns with the State’s new streamlined permitting process, released in December 2023 through the Seawater Desalination Siting and Streamlining Report to Expedite Permitting. The Project secured permits from the key regulatory agencies for seawater desalination, including the California Coastal Commission, State Lands Commission, and State Water Resources Control Board. During the permitting process, these agencies commended the Project for its sustainability features.

The Project, described in **Attachment 1**, complies with LRP criteria adopted by the Board on October 14, 2014. Key terms of the proposed agreement, subject to approval in form by the General Counsel, include the following:


1. Agreement term is 25 years for a maximum contract yield of 5,600 AFY.
2. Pay for performance – LRP financial incentives are only for the desalinated seawater produced by the Project for beneficial use.
3. Sliding scale incentives up to \$475 per AF, calculated annually based on actual project unit costs that exceed Metropolitan’s prevailing water rate over 15 years.
4. Termination for non-performance if construction does not commence within two years of agreement execution or if water deliveries are not realized within four years of agreement execution.
5. Reduction in Metropolitan’s contract commitment if the Project falls short of production targets measured in four-year intervals throughout the agreement term.

Project Milestone

After an LRP agreement is executed, the Project is required to start construction, begin operation, and meet performance targets as outlined in the terms listed above. The operation deadline may be extended up to three additional fiscal years with Board approval.

Staff Assessment and Recommendation

After a thorough review of the Project and supporting documents, staff finds that the Project is consistent and compliant with the goals and objectives of the LRP. Staff recommends approval of the Project and the General Manager be authorized to enter into an LRP Agreement with the Municipal Water District of Orange County and South Coast Water District for the Project.



4/4/2024
Date

Brandon Goshi
Interim Manager
Water Resource Management



4/4/2024
Date

Adel Hagekhalil
General Manager

Attachment 1 – Doheny Ocean Desalination Project Description

Attachment 2 – Dohney Ocean Desalination Project Full EIR with Appendices

Attachment 3 – Dohney Ocean Desalination Project Draft EIR

Attachment 4 – Notice of Determination

Attachment 5a – Mitigation Monitoring and Reporting Program

Attachment 5b – Findings

Ref# wrm12699577

EXHIBIT A**DOHENY OCEAN DESALINATION PROJECT****Overview**

The Doheny Ocean Desalination Project (Project) will be owned and operated by South Coast Water District (SCWD). The Project is an ocean water desalination facility in Dana Point, California and located on approximately 10 acres at SCWD's San Juan Creek Property. SCWD will construct the Project with an initial capacity of up to 5 million gallons per day (MGD), or 5,600 acre-feet per year, with potential for future expansion up to 15 MGD. SCWD only intends to pursue the Phase 1 Project (up to 5 MGD) at this time, and the larger potential future Project may be addressed at a programmatic level and will be considered for future needs.

The desalination treatment process begins by drawing in ocean water through subsurface intake wells, pumping that water to the desalination facility, desalinating and treating the water, disposing of the resulting brine and solids, and distributing the potable water to customers within the Municipal Water District of Orange County (MWDOC) service area.

Project Facilities

The Project consists of a subsurface (buried) slant well water intake system drilled at an angle below the ocean floor, raw (ocean) water conveyance pipeline, a seawater desalination facility, brine disposal through an existing wastewater ocean outfall, solids handling facilities, power transmission facilities, renewable energy facilities, potable water storage, delivery to SCWD's distribution infrastructure located immediately adjacent to the desalination facility, and potential delivery to other MWDOC member agencies.

Source of Water

The source of raw water for the Project is the Pacific Ocean via a sub-surface intake. Blending water potentially provided by local water transmission facilities or the District's existing potable treatment production facilities may be considered during the design phase of the to support water quality objectives.

Concentrate Waste Disposal

A concentrate (brine) disposal system would utilize the existing San Juan Creek Ocean Outfall to return brine and treated process waste streams to the ocean. This would be achieved in part through blending in the outfall pipe with the existing wastewater stream from the J.B. Latham Wastewater Treatment Plant and other regional facilities. Any residual solids, such as precipitated iron and/or manganese generated from the treatment process will be dewatered and hauled offsite for proper disposal.

Points of Connection

Points of connection for the Project include:

- New raw water (seawater) conveyance line to transport water from the subsurface slant well intake system to the facility site.
- Brine disposal to existing wastewater ocean outfall located on the facility site.
- Product water connection into local pipelines within MWDOC.

DOHENY OCEAN DESALINATION PROJECT

