

SECTION 5

Environmental Analysis

This Environmental Impact Report (EIR) evaluates the potential environmental impacts of implementing the proposed Ocean Water Desalination Project by the West Basin Municipal Water District (West Basin). Section 5 of this EIR contains a detailed description of applicable laws and policies, discusses the existing/baseline conditions, and evaluates potential environmental impacts associated with implementation of the proposed Project. Sections 5.1 through 5.16 analyze those environmental issue areas where potentially significant impacts could occur.

Approach to Analysis

West Basin proposes to construct an ocean water desalination facility at the existing El Segundo Generating Station (ESGS). The desalination facility would produce 20 million gallons per day (MGD) of potable drinking water (Local Project) and potential future expansion of the facility would produce up to 60 MGD (Regional Project). The analyses contained in Section 5 addresses the Local Project and Regional Project. The Local Project analyses address construction-related and operational impacts of the ocean water desalination facility (at both the ESGS North and ESGS South Sites), screened ocean intake and concentrate discharge, and desalinated water conveyance components, including pipelines (along optional alignments) and appurtenances (such as valves and flow meters). The Regional Project analyses address construction and operation of additional facilities to accommodate a full 60 MGD treatment. Accordingly, the Regional Project's analyses address the incremental/additional impacts associated with an increment of 40 MGD treatment to reach 60 MGD production.

Impacts associated with the Local Project are assessed at a project-level,¹ whereas impacts associated with the Regional Project are assessed at a project-level for those components that are known (such as the physical size of the facility) and a programmatic-level for those aspects of the Project that are not well-defined (such as regional partners).² The assessment of impacts resulting from the Regional Project assumes the Local Project facilities would already exist, and impacts

¹ CEQA Guidelines Section 15161 (Project EIR) specifies that a project EIR examines the environmental impacts of a specific development project. This type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project including planning, construction, and operation.

² CEQA Guidelines Section 15168 (Program EIR) specifies that a program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either: geographically; as logical parts in the chain of contemplated actions; in connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program; or as individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

are therefore assessed in terms of the incremental increase potentially resulting from the additional build out and operation of the described Local Project facilities. The quality of environmental resources within the Project area at the time of the issuance of the Notice of Preparation (NOP), as well as the existing regulatory framework relevant to construction and operation of the proposed Project, represent the baseline conditions against which the potential direct and indirect impacts of the Project(s) (and alternatives) are assessed.

If the Regional Project is approved and constructed, it is anticipated that the Local Project would continue operation during Regional Project construction, with possibly limited periods of temporary Local Project shutdown for interconnections. Onshore, the overlap of Regional Project construction with Local Project operations would primarily be associated with the additional excavation requirements and associated construction traffic, noise, and air emissions. Offshore, with the Local Project screened ocean intake and concentrate discharge structures already installed, the overlap of Regional Project construction with Local Project operations would be very minor, consisting of additions/modifications to the Local Project screened ocean intake and concentrate discharge diffuser system (with no ocean floor disturbance anticipated).

The purpose for this EIR is to provide adequate information for the public, stakeholders, and West Basin to evaluate the potential environmental impacts of the Project and to consider proceeding with the Local Project. Upon certification, this EIR will serve as the CEQA basis for future permits or approvals. At present, West Basin envisions pursuing regulatory permits only for the Local Project. Some of the Regional Project's specific details have not yet been determined, and are therefore evaluated at a programmatic level. However, where available, this EIR includes substantial detailed descriptions and analyses, and sufficiently conservative assumptions such that the Regional Project's environmental impact analysis should minimize the scope of any further CEQA review of the Regional Project. Concerning most environmental issues, Project impacts would not differ between the ESGS North Site and ESGS South Site for the ocean water desalination facility. As such, analysis of these issues is combined. Where impacts would differ between the ESGS North Site and ESGS South Site, such differences are addressed separately.

Section 5 Content

This EIR examines environmental issues outlined in the CEQA Guidelines Appendix G, Environmental Checklist Form, and Appendix F (Energy), as follows:

- 5.1 Aesthetics, Light & Glare
- 5.2 Air Quality
- 5.3 Biological Resources – Terrestrial
- 5.4 Cultural Resources (including Tribal Cultural Resources)
- 5.5 Energy
- 5.6 Geology and Soils
- 5.7 Greenhouse Gas Emissions

- 5.8 Hazards and Hazardous Materials
- 5.9 Hydrology and Water Quality
- 5.10 Land Use and Planning
- 5.11 Marine Biological Resources
- 5.12 Noise
- 5.13 Public Services
- 5.14 Recreation
- 5.15 Transportation and Traffic
- 5.16 Utilities and Service Systems

Based on the Expanded Notice of Preparation (Appendix 1A), certain environmental resource areas were found to have no impact. These topics are addressed in Section 8, *Effects Found Not to be Significant*:

- Agriculture and Forestry Resources
- Mineral Resources
- Population and Housing

As discussed in Section 2, *Introduction*, West Basin intends to apply to the State Revolving Fund (SRF) Program to finance the Project. The State Water Resources Control Board (SWRCB) administers the SRF Loan Program, which is partially funded by the United States Environmental Protection Agency (USEPA) and is a low-interest loan funding source for large water and sanitation projects. To receive SRF Loan Program funds, a project applicant must demonstrate compliance with several federal regulations: the Endangered Species Act (ESA), National Historic Preservation Act (NHPA), and the General Conformity Rule for the Clean Air Act (CAA). Rather than using a separate document to comply with the National Environmental Policy Act (NEPA) for the SRF distribution, USEPA uses CEQA as the compliance base for the SRF Loan Program, in addition to compliance with ESA, NHPA and CAA. Collectively, these requirements are known as “CEQA-Plus.”

Each potentially significant environmental issue area is addressed in a separate EIR Section (5.1 through 5.16) and is organized into the following Subsections:

- “*Regulatory Framework*” lists and discusses the laws, ordinances, regulations, and standards applicable to the Project.³

³ Note that California Government Code Section 53091(d) states that “[b]uilding ordinances of a county or city shall not apply to the location or construction of facilities for the production, generation, storage, treatment, or transmission of water, wastewater, or electrical energy by a local agency.” Furthermore, Section 53091(e) states that “[z]oning ordinances of a county or city shall not apply to the location or construction of facilities for the production, generation, storage, treatment, or transmission of water . . .” However, West Basin intends to make every effort to comply with all applicable building and zoning ordinances stipulated under the City of El Segundo Municipal Code in the construction and operation of the Ocean Water Desalination Project.

- “*Environmental Setting*” describes the physical conditions that exist at the time the Notice of Preparation was released, and that may influence or affect the issue under investigation.
- “*Significance Thresholds and Criteria*” provides the thresholds that are the basis of conclusions of significance, which are primarily the criteria in CEQA Guidelines Appendix G (California Code of Regulations, Sections 15000 – 15387). Primary sources used in identifying the criteria include the CEQA Guidelines; local, State, federal, or other standards applicable to an impact category; and officially established significance thresholds. “. . . An ironclad definition of significant effect is not possible because the significance of any activity may vary with the setting” (CEQA Guidelines Section 15064[b]). Principally, “. . . a substantial, or potentially substantial, adverse change in any of the physical conditions within an area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance” constitutes a significant impact (CEQA Guidelines Section 15382).
- “*Impacts and Mitigation Measures*” describes potential environmental changes to the existing physical conditions that could occur if the proposed Project is implemented. Evidence, based on factual and scientific data, is presented to show the cause and effect relationship between the proposed Project and the potential changes in the environment. The exact magnitude, duration, extent, frequency, range, or other parameters of a potential impact are ascertained, to the extent possible, to determine whether impacts may be significant. All of the potential impacts related to construction and operation are considered. Impacts are generally classified as no impact, less than significant impacts, or potentially significant impact. This Draft EIR uses the following terminology to describe the Project’s environmental effects:
 - **No Impact.** The proposed Project would not have any measurable environmental impact on the environment.
 - **Less than Significant Impact.** The proposed Project would have the potential for impacting the environment, although this impact would be below established thresholds that are considered to be significant.
 - **Less than Significant Impact with Mitigation Incorporated.** The proposed Project would have the potential to generate impacts, which may be considered as a significant effect on the environment, although mitigation measures or changes to the Project’s physical or operational characteristics would reduce these impacts to levels that are less than significant.
 - **Significant Unavoidable Impact:** When an impact, despite the inclusion of mitigation measures, cannot be mitigated to a level considered less than significant, it is identified as “significant unavoidable impact.”
- “*Mitigation Measures*” are feasible measures that would be required of the Project to avoid a significant adverse impact; minimize a significant adverse impact; rectify a significant adverse impact by restoration; reduce or eliminate a significant adverse impact over time by preservation and maintenance operations; or compensate for the impact by replacing or providing substitute resources or environment.
- “*Cumulative Impacts*” describes potential environmental changes to the existing physical conditions that may occur as a result of the incremental impact of the proposed Project when added to other closely related past, present, and reasonably foreseeable, planned, and approved future (or cumulative) projects (see Section 4 for more information). “Cumulatively

considerable” means that the impact of all cumulative projects is significant and that the Project’s incremental effects are a substantial portion of the significant cumulative impact.

- “*Significant Unavoidable Impacts*” describes impacts that would be significant and cannot be feasibly mitigated to less than significant, and thus would be unavoidable. To approve a project with one or more significant unavoidable impacts, the lead agency must adopt a Statement of Overriding Considerations. In adopting such a statement, the lead agency is required to balance the benefits of a project against its unavoidable environmental impacts in determining whether to approve a project. If the benefits of a project are found to outweigh the unavoidable adverse environmental effects, the adverse effects may be considered “acceptable” (CEQA Guidelines Section 15093[a]).
- “*Sources Cited*” identifies the sources used throughout the section.

This page left intentionally blank