

Notice of Preparation of an Environmental Impact Report and Scoping Meeting

Date:	August 15, 2017
То:	State Clearinghouse, Responsible and Trustee Agencies, Other Interested Parties
Project Sponsor and Lead Agency:	City of Antioch
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Project Title:	City of Antioch Brackish Water Desalination Project
Location:	The project site is located within the fenceline of the existing Antioch Water Treatment Plant (APN 071-140-010, 401 Putnam Street, Antioch, CA 94509), at the San Joaquin River Water Intake facility (near McElheny Road and Fulton Shipyard Road), Delta Diablo Wastewater Treatment Plant (APNs 074-040-037, 073-230-046, 073-230-041, 2500 Pittsburg-Antioch Highway, Antioch), and along roadway right-of-ways (ROW) in the Cities of Antioch and Pittsburg, California.
General Plan Designation:	The Antioch General Plan designates the proposed desalination project site as Open Space, Neighborhood Commercial, Medium Low Density Residential. The raw water pipeline and brine disposal pipeline will be constructed in roadway ROWs within medium/low density residential, public/ institutional, and business park designated areas.
Public Review Period:	August 15, 2017 through September 14, 2017

This Notice of Preparation (NOP) has been prepared to notify agencies and interested parties that the City of Antioch (City) as the Lead Agency will prepare an Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA) for the proposed Brackish Water Desalination Project (Project), described below. If you work for a responsible or trustee State agency, we need to know the

views of your agency regarding the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with the proposed project. The EIR may be used by your agency when considering subsequent permits or approvals necessary for this project.

Pursuant to Section 15082 of the State CEQA Guidelines, this NOP will be circulated for a 30-day review period. CEQA requires that your response be submitted to the City at the earliest possible date, but not later than **5:00 p.m. on Thursday, September 14, 2017**. Please include your name, address, and phone number with your response. Responses may be submitted by hand, mailed, or sent by e-mail.

The NOP and file for the proposed project are available for review Monday through Friday between the hours of 8:00 a.m. and 11:30 a.m., and between the hours of 1:00 p.m. and 5:00 p.m. by appointment only, at the City of Antioch City Hall, Community Development Department, 3rd and H Street, Antioch CA, except on specified holidays.

Scoping Meeting

Pursuant to the State of California Public Resources Code Section 21083.9 and CEQA Guidelines Section 15206, a public scoping meeting will be held to receive comments concerning the scope of the EIR. Public agencies, community groups and interested members of the public are invited to attend the meeting and present oral or written comments on the proposed project. The meeting will be held on Tuesday, September 5, 2017, from 6:00 to 7:30 p.m. at the City of Antioch Maintenance Service Center located at 1201 West 4th Street, Antioch, CA. Meeting location access and restrooms are compliant with the Americans with Disabilities Act. To request a language interpreter or to accommodate persons with disabilities at the scoping meeting, please contact the staff contact listed above at least 72 hours in advance of the meeting.

Background and Project Description

Currently, the City's primary sources of untreated water are the San Joaquin River (River) and water purchased from the Contra Costa Water District (CCWD) via the Contra Costa Canal. The City currently pumps River water to the City's municipal reservoir then to the water treatment plant (WTP) located at 401 Putnam Street, Antioch (see **Figure 1**). Because the Antioch WTP does not reduce chloride concentrations (i.e., total dissolved solids [TDS], salinity), the City stops pumping River water when the chloride concentration in the municipal reservoir approached levels that are too high for public consumption, typically around 75 milligrams per liter (mg/l). The City purchases water from CCWD when it is unable to utilize River water. Generally, the City is able to use River water from January to July, and relies on water from CCWD for the remainder of the year.

The City proposes to construct, operate, and maintain the Project which includes a desalination facility within the City's existing WTP. The goals of the Project are to improve water supply reliability and water quality for its customers, especially during droughts and future changes in Delta water management, and to provide operational flexibility for the City. The Project meets these goals by constructing facilities that allows the City to withdraw water from the River year-round under its pre-1914 water rights, even when the chloride concentration is above the 75 mg/l limit normally treated at the WTP.

The components that comprise the Project shown in **Figures 1 and 2** are as follows:

Desalination Facility – The desalination facility would produce up to 6 million gallons per day (mgd) of finished water and would be constructed south and east of 'Plant A' within the fenceline of the existing WTP. Salinity would be removed from water pumped from the River using a treatment system called reverse osmosis (RO). The RO treatment system would be housed in a new building located at the site. In addition to the RO treatment system, the desalination facility includes storage tanks, pumps, an electrical substation, and associated piping, equipment and appurtenances to support the RO system. Locating the desalination facility at the WTP would allow use of existing infrastructure as part of the overall treatment process including use of Plant A's conventional treatment for removal of solids prior to RO treatment. A new pipeline would be constructed to allow filtered water from Plant A to flow to the new desalination facility. Permeate from the RO system would undergo post-treatment before entering Plant A's existing clearwell for

distribution. The proposed desalination facility would only be operated during times of year when the salinity of River water is too high for public consumption. These poor water quality conditions have historically been limited to summer and fall months but may extend to longer periods in the future due to changes in Delta water management and frequency of droughts.

- Intake Pump Station Replacement and Raw Water Pipeline Connection The Project would require a direct connection to the City's existing River water intake. The existing intake pump station would be demolished and a new pump station will be constructed. The new pump station would be equipped with a fish screen to protect sensitive aquatic habitat in the Delta. Water would be conveyed from the new pump station through the City's existing raw water pipeline for the majority of the distance between the pump station and the WTP. A new pipeline branch (up to approximately 3,000 feet long) from the existing pipeline underneath Long Tree Way to the WTP would allow a direct connection to maximize use of existing infrastructure.
- Brine Disposal Pipeline An approximately 4-mile long brine disposal pipeline from the desalination facility to the existing Delta Diablo (formerly DDSD) Wastewater Treatment Plant (WWTP) outfall would be constructed. River intake pumping at 8 mgd would produce 6 mgd of finished water and approximately 2 mgd of brine flows from the RO system. The brine disposal pipeline would be constructed within existing public road right-of-ways and use existing underground pipelines to the extent possible to minimize cost and public disruption. In addition to the brine disposal pipeline, storage facilities for the brine may be provided to allow discharges to be timed to minimize any potential impacts to receiving waters and habitat. The brine would be discharged with the WWTP effluent through the existing Delta Diablo outfall to New York Slough.

The Notice of Preparation is available on the City's website at www.antioch.ca.us.

Probable Environmental Effects

The EIR will identify, describe, and evaluate the significance of the potential environmental impacts associated with implementation of the Project as described. The EIR will address direct, indirect, and cumulative effects in all issue areas. The EIR will include feasible mitigation measures to reduce significant or potentially significant environmental impacts, where appropriate. Each of the following CEQA environmental issue areas will be addressed in the EIR:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gases
- Hazards and Hazardous Materials
- Hydrology and Water Quality

- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Tribal Cultural Resources
- Utilities, Energy and Service Systems

CEQA Guideline Section 15126.6(a) requires that an EIR describe a range of reasonable and potentially feasible alternatives to the proposed project. The alternatives must feasibly attain most of the objectives of the proposed project while also avoiding or substantially lessening at least one of the significant environmental effects of the proposed project. The EIR will identify alternatives to the project, in part, by public comment received during the NOP comment period. To ensure that the full range of issues and alternatives related to the proposed project are identified, comments and suggestions are invited from all interested parties. The EIR will evaluate alternative project site locations and the required "No-Project" Alternative.

Required Discretionary City Approvals

Approvals from the City for the proposed project include but are not limited to: certification of the EIR, approval of the project, grading and encroachment permits.

Other Agency Review and Approvals

Other local, regional, and statewide agencies that may require review of permits for the proposed project include:

- City of Pittsburg encroachment permit
- Regional Water Quality Control Board San Francisco Bay
- California Department of Fish and Wildlife
- California Department of Transportation
- California Department of Water Resources
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- U.S. National Marine Fisheries Service (NOAA Fisheries)

Attached Figures

- Figure 1 Vicinity Map and Facilities Location
- Figure 2 Proposed Desalination Facility Site Plan



FIGURE 2 - PROPOSED DESALINATION FACILITY SITE PLAN

