



STAFF REPORT TO THE CITY COUNCIL

DATE: Regular Meeting of October 27, 2020

TO: Honorable Mayor and Members of the City Council

SUBMITTED BY: Scott Buenting, Project Manager

APPROVED BY: John Samuelson, Public Works Director/City Engineer

SUBJECT: Resolution Authorizing Agreement with Delta Diablo Sanitation District Related to Operation and Maintenance of Discharge Facilities for the Brackish Water Desalination Project, P.W. 694

RECOMMENDED ACTION

It is recommended that the City Council adopt a resolution to authorize the City Manager to execute an agreement with Delta Diablo Sanitation District (DDSD) for operation and maintenance of discharge facilities for the Brackish Water Desalination Project (Project).

FISCAL IMPACTS

This Agreement provides for the City to reimburse DDSD for costs incurred in accepting the Reverse Osmosis (RO) Concentrate from the Brackish Desalination Project and maintaining and operating discharge facilities associated with the Project on DDSD property. These costs are expected to vary year to year depending on the length of the operating season of the desalination facility and are estimated to range from \$50,000/yr to \$150,000/yr. Funding is allocated in the Water Treatment Enterprise Fund.

DISCUSSION

The Project is being implemented to improve the City's water supply reliability and provide operational flexibility while reducing costs, especially during droughts and with future proposed changes in Delta water management. The Project will allow the City to use water from its river intake year-round, even when the salinity is above levels normally treated at the existing conventional Water Treatment Plant.

The Project will replace the City's existing San Joaquin River intake pump station, construct a desalination facility located at the City's existing water treatment plant property, and construct pipelines for the conveyance of source water and byproduct from the desalination process. The Project includes the construction of a 4.3-mile-long RO concentrate disposal pipeline from the new desalination facility to the existing DDSD Wastewater Treatment Plant outfall to convey approximately 2 million gallons per day (mgd) of RO concentrate for discharge to DDSD's existing wastewater outfall.

On October 11, 2018, the City entered into a Cooperative Agreement with the DDSD to obtain regulatory approval to discharge RO concentrate through DDSD's existing San Joaquin River outfall. Discharge of RO concentrate through the outfall was approved by the San Francisco Bay Regional Water Quality Control Board on December 11, 2019, by incorporating the project into Delta Diablo's renewed National Pollutant Discharge Elimination System Permit (NPDES Permit).

On July 16, 2020, the City entered into a Design and Construction Access Agreement with Delta Diablo for site access, construction coordination, and startup and commissioning of Project facilities at Delta Diablo's wastewater treatment plant site.

The City and the District have worked collaboratively in developing an Agreement for the ongoing operation of the Project discharge facilities that will be located on DDSD's property. The City and DDSD staff have determined that DDSD is in the best position to most efficiently and effectively operate and maintain the discharge facilities. This Agreement establishes the terms and conditions under which the District will operate and maintain the Discharge Facilities and under which the City will compensate the District for the operations and maintenance.

ATTACHMENTS

- A. Resolution
- B. Brackish Water Desalination Project Reverse Osmosis Discharge Facilities Operation and Maintenance Agreement

RESOLUTION NO. 2020/?**

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ANTIOCH
AUTHORIZING THE CITY MANAGER TO EXECUTE AGREEMENTS WITH
CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE FOR STREAMBED
ALTERATION AGREEMENT AND INCIDENTAL TAKE PERMIT FOR THE
BRACKISH WATER DESALINATION PROJECT
P.W. 694**

WHEREAS, the City is striving to improve the water supply reliability and operational flexibility while reducing costs, especially during droughts and with future proposed changes in Delta water management, and to allow water usage from its river intake year-round, even when the salinity is above levels normally treated at the existing conventional Water Treatment Plant;

WHEREAS, the City desires to begin the construction of a brackish water desalination facility located within the fence line of the City's existing Water Treatment Plant ("WTP") with a capacity of 6 million gallons per day (mgd) which includes relocation and replacement of the City's existing San Joaquin River intake pump station with a new pump station, including state of the art fish screens and construction of approximately 3,000 feet of new raw water pipeline connecting the new river pump pipeline to the City's WTP;

WHEREAS, the City desires to begin the construction of a 4.3 mile long brine disposal pipeline from the new desalination facility to the existing Delta Diablo Sanitation District's (DDSD) Wastewater Treatment Plant outfall to convey approximately 2mgd of brine for discharge from Delta Diablo's existing wastewater outfall;

WHEREAS, the City is seeking permits from the California Department of Fish and Wildlife (CDFW) to allow the construction and operation of the Brackish Water Desalination Project (Project);

WHEREAS, on July 10, 2020, the City received from CDFW Streambed Alteration Agreement Notification No. 1600-2019-0247-R3 ready for signature;

WHEREAS, on July 15, 2020, the City received from CDFW California Endangered Species Act Incidental Take Permit No. 2081-2019-045-R3 ready for signature;

WHEREAS, the City Council has considered authorizing execution of the Streambed Alteration Agreement and Incidental Take Permit with CDFW including mitigation costs of up to \$400,000.

RESOLUTION NO. 2020/**

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NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Antioch hereby authorizes the City Manager to execute the agreements with California Department of Fish and Wildlife (“CDFW”) for a Streambed Alteration Agreement and Incidental Take Permit for the Brackish Water Desalination Project (“Project”) which include estimated mitigation costs of up to \$400,000 in a form approved by the City Attorney.

* * * * *

I HEREBY CERTIFY that the foregoing resolution was passed and adopted by the City Council of the City of Antioch at a regular meeting thereof, held on the 27th day of October 2020, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

ARNE SIMONSEN, MMC
CITY CLERK OF THE CITY OF ANTIOCH