Notice of Determination, Attachment A

IXTP-7991 Replacement Project

Project Description

The proposed IXTP 7991 replacement Project ("proposed project") consists of the construction and operation of an Ion Exchange Treatment Facility for potable water domestic service provided by The Coachella Valley Water District. The IXTP 7991 Replacement Project would replace the existing 1,000-gpm ion exchange treatment system with a new 2,000 gpm capacity treatment system to allow for the full use of the rehabilitated Well 7991, provide operating efficiency, and ensure adequate supply of water to the Mecca and Bombay Beach Production Zones (which include the communities of Mecca, North Shore, Bombay Beach, and other small communities). The proposed project would include the following elements:

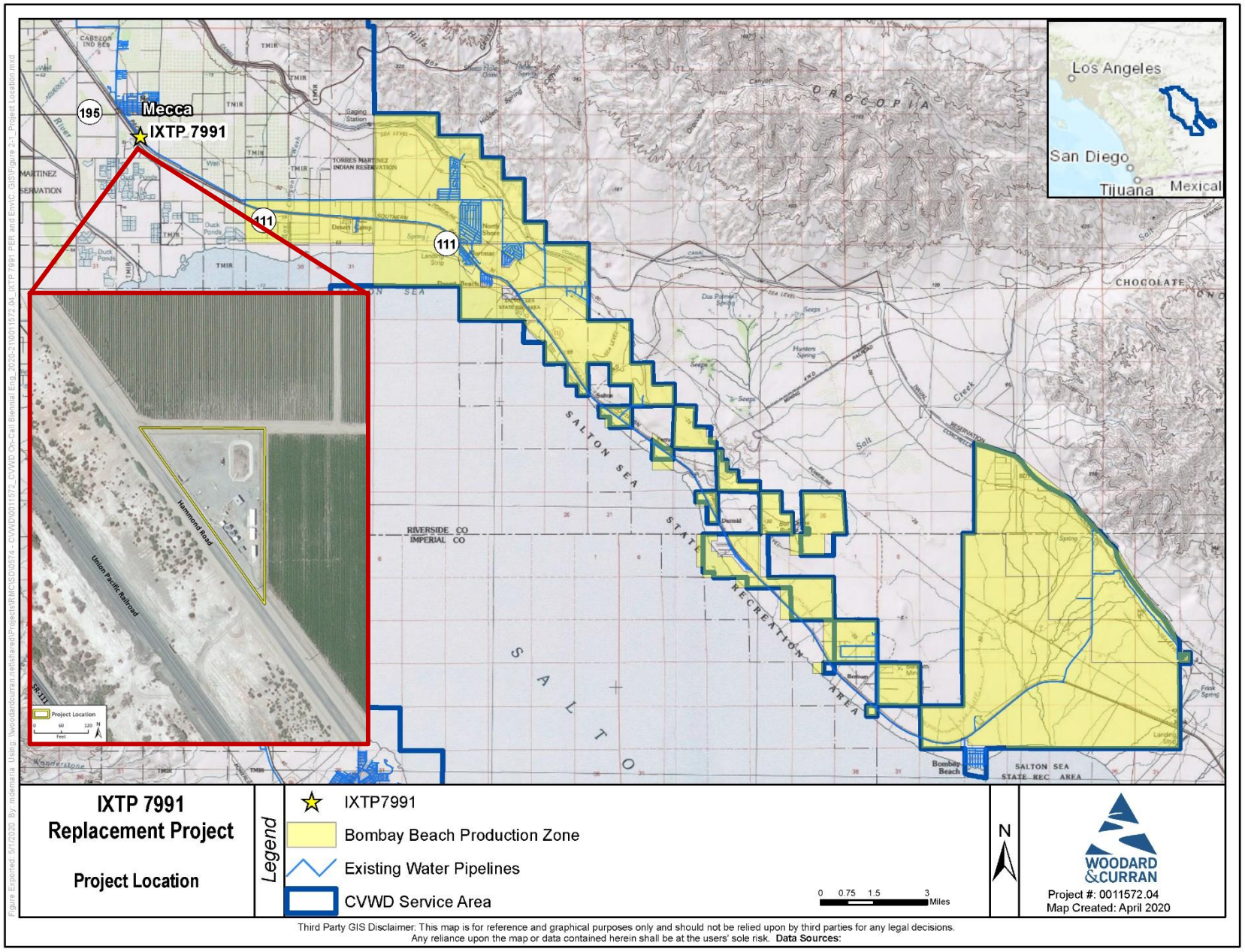
- The existing ion exchange treatment system would be replaced with a new 2,000-gpm capacity adsorption treatment system (granular ferric hydroxide or granular ferric oxide adsorption media).
- The existing sulfuric acid and caustic soda systems would be replaced with new systems within a new building on site. New chemical feed systems are anticipated to consist of sulfuric acid and sodium hydroxide for pH adjustment. The existing calcium hypochlorite system (which was recently replaced) would be reused.
- The existing electrical panels for power and existing programmable logic control for instrumentation and control would be replaced.
- A new, permanent well pump with capacity of 1,500 gpm would be installed in Well 7991, which would have an associated hydropneumatic /surge tank.
- Installation of an emergency standby diesel generator.
- The new treatment system would be connected to the existing asbestos cement pipe water main in Hammond Road which connects to Reservoir 7990.
- The existing ion exchange system, electrical equipment, chlorination system, brine and waste tanks, and brine processing unit would be demolished.

The new ion exchange treatment system would be an adsorption system, which would include two pressurized vessels operated in parallel and filled with media, bypass piping around the vessels for partial flow treatment, backwash pumps and piping, pre-filters, two backwash tanks, and recirculation system and chemical systems. The vessels would be 8 feet in diameter; the backwash tanks would each be 12 feet in diameter and 15 feet tall, with a potential canopy structure for an overall height of approximately 18 feet. The treatment system would achieve a final effluent arsenic goal of 80 percent of the MCL, or 8.0 µg/L.

The project site is located in the Coachella Valley of central Riverside County within the United States Geological Survey (USGS) Mecca, California 7.5-minute topographic quadrangle (APN 727-272-008, Section 17, Township 7S Range 9E, San Bernardino Meridian). The site is addressed 67050 Hammond Road, Mecca, California, 92254, located east of State Route 111 and approximately 0.5 miles south of

the unincorporated community of Mecca. Land uses surrounding the project site are primarily ruderal lots and agriculture. The project site is zoned as mixed use. Surrounding land use designations include agricultural and mixed use, as well as areas designated for controlled development. The project corridor is not included on any lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

CVWD is seeking federal grant/loan funding for the proposed project to reduce the financial burden on its ratepayers; as portions of CVWD's service area are considered to be disadvantaged communities. CVWD is seeking funding through USDA's Rural Development "Water and Waste Disposal Grants to Alleviate Health Risks on Tribal Lands and Colonias" (Colonia Grant) program.


Mecca
IXTP 7991
195
111
111
Los Angeles
San Diego
Tijuana
Mexical
SALTON SEA
SALTON SEA STATE RECREATION AREA
RIVERSIDE CO
IMPERIAL CO
CHOCOLATE
Hammond Road
Union Pacific Railroad
SR-111
Project Location
IXTP 7991
Replacement Project
Project Location
Legend
IXTP7991
Bombay Beach Production Zone
Existing Water Pipelines
CVWD Service Area
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Project #: 0011572.04
Map Created: April 2020
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