

Date:

January 04, 2016

Applicant:

The Metropolitan Water District of Southern California
PO Box 54153
Los Angeles, CA 90054-0153
Contact: Deirdre West
DWest@mwdh2o.com
Phone No. 213-217-6696

Applicant's Representative:

Helix Environmental Planning, Inc.
7875 El Cajon Blvd.
La Mesa, CA 91942
Contact: Karl Osmundson
619-462-1515

Project Name:

The Metropolitan Water District of Southern California - Whitewater River / Colorado River
Aqueduct Siphon Scour Protection Project, WDID No. 7A333152001

Receiving Water:

Unincorporated community of Whitewater

Location:

City or area: Riverside County, California
Longitude/ Latitude: 116 38.29W / 33 56.12N
Township/Range: S2, T 3S, R 3E

Project Description:

Metropolitan plans to conduct required construction and maintenance activities within its ROW in order to immediately repair and prevent continued erosion, scour and down-cutting of the streambed above the Colorado River Aqueduct (CRA) Whitewater Siphon. The CRA Whitewater Siphon is a double-barreled siphon approximately 2,200 feet long, constructed of two reinforced concrete pipes 11.5 and 13.0 feet in diameter, respectively, running perpendicular to the Whitewater River below the channel bed. The width of the water surface of the Whitewater River where the siphon crosses is less than 150 feet under average flow conditions and was approximately 730 feet for the largest storm on record, in 1938.

Following a large storm event in 1993 that exposed the siphon, Metropolitan installed protective measures including a 25-foot-wide by 250-foot-long concrete apron across the siphon within the active channel of the Whitewater River, and a 760-foot-long earthen berm that runs north from the eastern end of the concrete apron then curves eastward and functions to divert larger storm flows in the Whitewater River away from the eastern end of the siphon. This berm also protects two manhole structures located near the eastern end of the siphon, where top cover is minimal and the risk of exposure of the CRA by erosion is high.

Since 1993, the earthen berm has deteriorated, and it nearly failed in the storms that occurred between January and February 2004. Although the concrete apron continues to protect the siphon, ongoing erosion and head-cutting downstream of the concrete apron causes undermining and progressive failure of the concrete apron that will ultimately destroy it and the protection it affords the siphon. Critical maintenance activities will include construction of protective barriers/structures to protect two existing manhole structures and to minimize the effects of erosion of the Whitewater River to the eastern end of the Whitewater River/CRA Siphon. The project would consist of the construction of a grade control/drop structure, reconstructing the existing concrete apron with a 25-foot-wide concrete slab, replacement of the existing earthen berm on the eastern side of the concrete slab with a gabion faced earthen berm approximately 550 feet long, and the replacement of the existing earthen berm on the western side of the concrete apron with a gabion faced earthen berm approximately 650 feet long.

Temporary construction access, storage, and staging will be restricted to an approximately 12.3-acre work area (i.e., limits of construction) within Metropolitan's ROW. Temporary equipment staging and storage will be restricted to existing disturbed uplands outside of the Whitewater River floodplain. Equipment access and operation outside of required grading limits are not expected to require the removal of vegetation, although it is expected that construction vehicles will have to track over and crush vegetation to obtain access to construction and maintenance areas. Flows would be temporarily diverted around or away from work areas during construction through the use of temporary aqua dams, earthen berms, sandbags, pump, and hose or pipe. Temporary diversions would be placed within the temporary impact area on the upstream side of the Whitewater River crossing. Flows would be conveyed around or away from work areas, where they would be diverted and discharged back into the Whitewater River on the downstream end of the work areas. Areas temporarily impacted would be returned to pre-construction contours. Temporary fills within Regional Water Quality Control Board (RWQCB) jurisdiction would be removed in their entirety and the affected areas will be returned to pre-construction elevations.

Action:

Pending

Water Board Contact:

Jay Mirpour, Water Resources Control Engineer

(760) 776-8981

jmirpour@waterboards.ca.gov