

Memorandum

To: Mike Porter, San Diego Regional Water Quality Control Board

From: Matt Moore, URS

November 16, 2009

Subject: Low Flow Crossing Summary – Gregory Canyon/San Luis Rey River

The existing low flow crossing at Wild Road has been in place as a functional crossing for many years (the exact year of construction is not known but is believed to be prior to 1975), and this low flow crossing is part of the historic condition for this area. However, this low flow crossing is not proposed to be used for construction of the bridge, or other access. The low flow crossing consisted of soil fill with a series of culverts, including two culverts at the center of the stream channel. These central culverts for this crossing have become exposed as a result of erosion that has occurred over the past few years, and there is an open cut in the low flow crossing at the center of the stream channel at the present time. At this date, there is no flowing water at this location in the San Luis Rey River, and dry periods at this location in the San Luis Rey River occur in most years. It is not proposed that this low flow crossing be repaired, or used on connection with construction of the bridge. Instead, the exposed culverts will be removed during periods of no flow in the river at this location by crane, and no other activity is proposed. The crane would be located in an upland location on the north side of the river. A worker would place a choke chain around or through each of the culvert pipes, and then attach the choke chain to the crane arm. The crane would then remove each culvert pipe, one at a time. The removed culverts will be either recycled, reused elsewhere, and/or disposed of subject to appropriate requirements. Removal of these culverts, combined with the current open cut, have the effect of increasing flow capacity in the river at this location in comparison with the historic condition with the low flow crossing in place.

The culvert removal area is outside the area covered by the HEC-2/HEC-RAS hydraulic analyses performed for modeling the proposed bridge and wetland restoration (Nolte, 1999 and URS 2008), but within the area covered by the Chang Fluvial Report (Chang, 1999). Removal of these culverts was not modeled in the pre-post hydraulic or scour models. The effect of the culvert removal would be a localized condition. Additionally, the low flow crossing is considerably downstream of the aqueduct pipelines (approximately three-quarters of a mile) and therefore it is not foreseen that the culvert removal would result in any adverse impacts to the San Diego County Water Authority First Aqueduct.

Removal of these culverts, which are exposed without cover or side material and sitting on the bed of the channel, using suitable means, such as lifting out with a crane will only result in removal of the culverts without a discharge of dredged or fill material. The discharge of fill material is defined at 67FR90 as:

§ 232.2 Definitions.

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Fill material. (1) Except as specified in paragraph (3) of this definition, the term fill material means material placed in waters of the United States where the material has the effect of:

(i) Replacing any portion of a water of the United States with dry land; or
(ii) Changing the bottom elevation of any portion of a water of the United States.

(2) Examples of such fill material include, but are not limited to: rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mining or other excavation activities, and materials used to create any structure or infrastructure in the waters of the United States.

(3) The term fill material does not include trash or garbage.

Removal of the culverts in manner described herein will not constitute fill.

The culverts are structures. Removal of these structures does not constitute dredging and no discharge of dredged or fill material will result from removal of these culverts in the manner indicated.

Protection of endangered species would be accomplished in the same manner as provided in the 401 application, using a biological monitor for placement of the crane and construction of arroyo toad exclusion fencing around the crane as needed.

References:

Chang, 1999. Fluvial Study and Bridge Scour Analysis for the Proposed Gregory Canyon Bridge on the San Luis Rey River. Howard H. Chang Consultants.

Nolte, 1999. Hydrology/Hydraulic for the Gregory Canyon Road Improvement Project. Nolte Associates, Inc.

URS, 2008. Drainage Report for Gregory Canyon Landfill Restoration. URS Corporation.