



Memorandum

Date:	July 25, 2014
To:	Marcus Fuller, Robb Steel, City of Rialto Public Works
Cc:	Bob Tincher, San Bernardino Valley Municipal Water District
From:	Scott Fleury, Mike Romich, Erika Eidson; ICF International
Subject:	Upper SAR HCP Covered Activities Data Request

During Phase 2 of the HCP preparation, ICF staff are working with each water resource agency to finalize the covered activities. This memo will guide you and your agency to identify and provide the information and data required for the HCP preparation.

The analysis of the potential impacts of covered activities on the covered species requires descriptive information and data for each covered activity at a level of detail that accomplishes the following:

- Describes in text the type of activity (project or action) so that a reader of the HCP can understand generally what will occur when the covered activity is implemented.
- GIS data showing the footprint of the area affected by the covered activity (project construction footprint or area where operations and maintenance (O&M) will occur). GIS data should be as accurate as possible given what is currently known about the future covered activity.
- What is the timing (season and duration) and frequency of the activity. For new project construction, when is the project construction expected to start, and what portion of the project footprint is a temporary construction impact. For O&M activity, how often does the activity occur, in what time(s) of year, and what is the duration of the activity.
- For covered activities that may affect hydrology, will need to describe how the covered activities will alter the magnitude, frequency, and duration of flow volume (cfs) throughout the year. All available hydrology data describing measured or modeled seasonal daily flows (and peak flows if available), and all information about the operation of the covered activities that can be used to assess how the activities would change daily flows would be helpful. For example, for recharge and flood control basins, any analyses that have been performed to determine their capacity, infiltration losses, and other factors will assist in

determining how much water can be diverted. If data are available about the baseline hydrology at the location of the covered activity, please provide that or the source as well.

- For proposed recycling of water at wastewater treatment plants that would alter effluent releases back to the system, would need a schedule of current daily flow releases and how proposed water recycling will change it.

The section below includes a description of the covered activity based on the emails you have provided. Please review the information below. We will be contacting you soon to review this memo, answer any questions, and schedule a time to meet with you (conference call with online desktop sharing) to assist you in filling the data and information.

Covered Activities for City of Rialto Public Works

Rialto Wastewater Treatment Plant Reuse Project

The City of Rialto Public Works draft Recycled Water Master Plan (in preparation) will identify a range of options for reusing treated effluent, which includes construction of additional recycled water facilities within City streets to distribute recycled water throughout the City for sale to retail customers within the City's service area. With these options, it is possible that up to 100% of existing and future wastewater discharge from the Rialto Wastewater Treatment Plant is recycled/reused. The planned reuse of the effluent would be to comply with mandates for recycled water and to implement the Recycled Water Master Plan. The current average discharge is approximately 6MGD, with a max capacity of 11.7MGD.

Rialto Channel Regional Flood Control System

New Facilities

The Rialto Channel project would increase channel capacity and reduce impediments to flow between I-210, Cactus Basins, I-10, and the Santa Ana River. The existing rock lined channel between I-10, and the Santa Ana River only conveys a portion of Q100 storm flow. The conveyance capacity for Q10 storms and less is unchanged. Currently, maintenance needs within this area is extensive due to debris, erosion, weeds, trash and human waste from the homeless pollution living within the area, and flood damage during severe storms.

From Interstate 210 to Cactus Basins, the design may include routing of local roadway drainage and development within the existing Rialto Airport area to the Cactus Basins. Construction of the Cactus Basins is ongoing and is not part of the covered activity. Current maintenance within this area is erosion repairs, weed abatement, sediment removal and trash removal.

The Rialto Channel from the existing concrete lined at Willow upstream to Cactus Basin 1 at Etiwanda Ave Project is anticipated to be an improved channel designed to alleviate flooding in the area and be able to convey the ultimate condition Q100 flow. The channel configuration and lining type have not yet been determined. The current capacity of the channel ranges from a couple hundred cubic feet per second (cfs) second to several hundred cfs. The proposed channel capacity

will range from approximately 1,000 cfs to nearly 7,000 cfs. Current maintenance within the area is grading, trash removal, weed abatement and storm damage repair as most road crossing and channel areas are subject to damage even during minor storms.

The majority of the project would occur between the south side of the I-10 right-of-way and the downstream side (eastern edge) of Riverside Avenue, within the railroad parcel. This portion of the project site currently includes an existing earthen bottom channel with rock rip-rap sides and a single box culvert under Riverside Avenue. At Riverside Avenue, the proposed project would install a proposed concrete rectangular channel designed to convey the ultimate condition Q100 flow, as well as concrete lining the channel to increase the channel capacity. In addition to expanding the channel capacity under Riverside Avenue, the project also calls for removal of an existing bulkhead at the upstream end of the project site, at the northern opening of the culvert under I-10. . Currently, maintenance needs within this area is extensive due to debris, erosion, weeds, trash and human waste from the homeless pollution living within the area, and flood damage during severe storms.

Rialto Channel from the Santa Ana River to the existing concrete lined channel immediately downstream of the tank farm and upstream of Santa Ana Avenue will consist of channel and bank stabilization work designed to convey the ultimate condition Q 100 flow of over 10,000 cfs through the area. The proposed improvements configuration and material has not yet been determined. However, concrete-lining would not occur. Current maintenance within this area consists of erosion repair, weed abatement, graffiti removal and general grading.

Paved access roads are proposed adjacent to the channel to allow access by maintenance personnel. Channel wall and right-of-way fencing is proposed to be installed for this project.

Current maintenance within the area is grading, trash removal, weed abatement and storm damage repair as most road crossing and channel areas are subject to damage even during minor storms. Future maintenance needs will depend on the final proposed channel type but it is anticipated to include access road grading, invert stabilization / repairs, trash / graffiti removal, weed abatement and general control of existing and planned connections.

Maintenance

Maintenance actions include inspection, repairs, and cleaning, as well as sediment removal during low flows, concrete repairs, and trash removal. Maintenance activities are further described in Routine Operations and Maintenance Activities, below.

Some specific maintenance that is expected within the Rialto Channel includes removal of sedimentation, removal of trash and debris, graffiti removal, fence and railing maintenance, access road grading, invert stabilization / repairs, weed abatement, and general control of existing and planned connections.

Operations

According the Flood Control Design Group, the lining of this section will not have any impact on the peak flow rates downstream. Although there is a constriction removal at Riverside Avenue, the flows in Rialto Channel are still limited by the box culvert beneath the I-10 freeway. The net

infiltration rate into the Rialto channel will be unchanged for nuisance flows as flows will be carried down to the unlined portion of the channel downstream of the tank farm (just upstream of Santa Ana Avenue) and it is not planned to be lined. Infiltration during storms and immediately following storms will be changed a bit, but the amount is questionable as a good portion of this reach is rock lined.