



Memorandum

Date:	May 20, 2014
To:	Jeff Beehler, San Bernardino Valley Water Conservation District
Cc:	Bob Tincher, San Bernardino Valley Municipal Water District
From:	Scott Fleury, Mike Romich, Erika Eidson; ICF International
Subject:	Upper SAR HCP Covered Activities Additional Data Request

During Phase 2 of the HCP preparation, ICF staff are working with each water resource agency to finalize the covered activities. All water resource agencies have provided detailed information about their covered activities, but additional information is still needed. This memo will guide you and your agency to identify and provide additional 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 data needs table indicating which types of data are still missing for each covered activity, a figure depicting the GIS data for the covered activity, and the current text description we have for each of your covered activities. 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 missing data and information.

Covered Activities for San Bernardino Valley Water Conservation District

Mill Creek Diversion (ID: 5.01)

Mill Creek Diversion (ID: 5.01)	
Information Required	Complete
Complete detailed project description	
Detailed GIS information	X
Construction/O&M timing (frequency, duration, and seasonal timing)	
Hydrology changes (frequency, duration, and seasonal timing)	



Diversion

[Text description needed]

Maintenance

This activity includes maintenance of the existing channel, diversion structures, and gates; removal of vegetation and debris; and removal of sediment from the concrete apron at the diversion gates. Roads that have been washed out by the river will also be reestablished. These activities occur within both channel bed and banks. Stream reaches in the channel from approximately 1200 feet downstream of Garnet Street to the edge of the Mill Creek Diversion will be maintained. Channels can be accessed from existing unpaved roads, but some walking through native habitat may be required. The total mapped potential maintenance area is 17.0 acres as detailed below. The impact calculations have assumed that 50% of this area could be subject to maintenance (or 8.5 acres) over the permit term.

Potential covered species in this area include speckled dace and San Bernardino kangaroo rat, as well as Santa Ana sucker critical habitat.

Portions of the maintenance area would likely be considered jurisdictional waters by United State Army Corp of Engineers, California Department of Fish and Wildlife, and Regional Water Quality Control Board and subject to separate permit requirements.

Mill Creek Soft Plug

Within the existing channel upstream of the diversion gates, maintenance of two soft plugs requires bulldozer access every 3 to 5 years. A soft plug is a low (24-inch maximum) sand and gravel berm used to direct flow from Mill Creek into the diversion. The use of a bulldozer is also sometimes required for vegetation and debris management within the channel. [Describe frequency and seasonal timing and duration?]

Some ground disturbances occur near the channel for soft plug restoration. [Describe frequency and seasonal timing and duration?]

Maintenance is accessed off existing roads, reestablished roads, or right-of-ways. To the extent possible, all staging and use of heavy equipment is conducted in paved or dirt roads.

Impact Assumption

Per the GIS layer received, the Mill Creek soft plug area is 8.2 acres.

Mill Creek Diversion Maintenance

This area is located upstream and downstream of the actual diversion gates. This area requires maintenance of diversion structures and gates, and vegetation and channel management. The use of a bulldozer is also sometimes required for vegetation and debris management within the channel. The diversion gates are cleaned and greased on a yearly basis. [Describe frequency and seasonal timing and duration?]

Impact Assumption

Per the GIS layer received, the Mill Creek diversion maintenance area is 1.4 acres upstream of Garnet Street and 3.2 acres downstream of Garnet Street.

Mill Creek Channel Maintenance and Vehicle Access

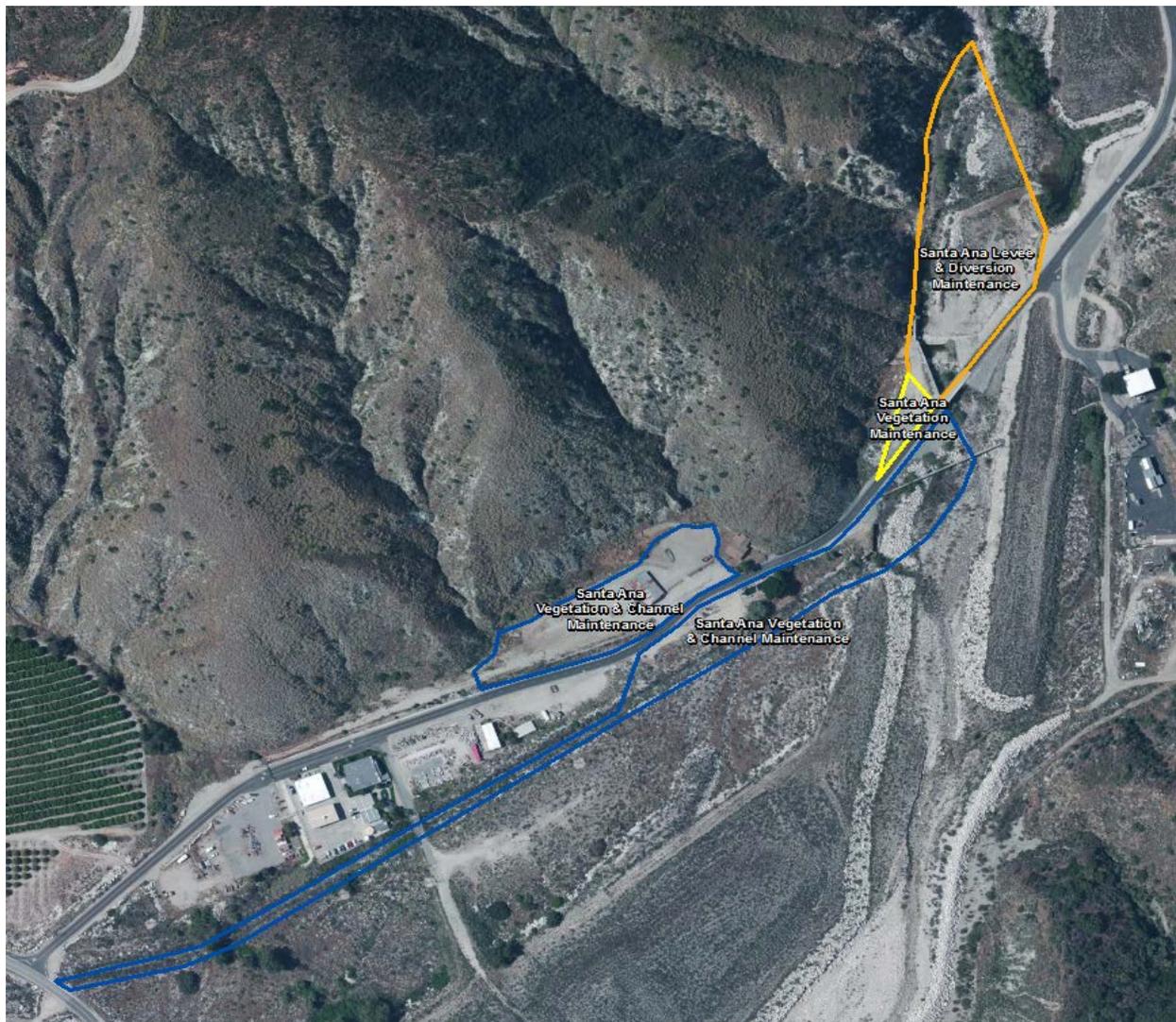
This area is located downstream of the diversion gates. The channel provides bulldozer access for soft plug maintenance and vegetation debris management in soft channel.

Impact Assumption

Per the GIS layer received, the Mill Creek Channel maintenance and vehicle access area is 1.8 acres upstream of Garnet Street. An additional area of 2.4 acres is located adjacent to and downstream of Garnet Street.

Santa Ana River – Cuttle Weir (ID: 6.01)

Santa Ana River - Cuttle Weir (ID: 6.01)	
Information Required	Complete
Complete detailed project description	
Detailed GIS information	X
Construction/O&M timing (frequency, duration, and seasonal timing)	
Hydrology changes (frequency, duration, and seasonal timing)	



Diversion

[Text description needed]

Maintenance

Maintenance activities of the Cuttle Weir and diversion structure include regular mechanical maintenance of diversion structure and gates, vegetation management, streambed recontouring, and levee maintenance. Streambed recontouring requires removal of invasive species, large boulders, and rock and debris that inhibit flow. Invasive vegetation is removed because it hinders the growth of native species and damages the capacity of the channel or basin. These invasive species include salt cedar (*Tamarix*) and castor bean (*Ricinus communis*). These plants are cut down to a stump and an herbicide designed for settling ponds is applied to the stump. In addition, some giant cane

(Arundo donax) removal may occur. Excessive vegetation, invasive or not, may be cut and removed to protect the diversion structure.

Levee maintenance requires the use of mechanical equipment every 3 to 5 years within the river bed, with access occurring from existing paved roads.

The total mapped potential maintenance area is 8.8 acres as detailed below. The impact calculations have assumed that 60% of this area could be subject to maintenance (or 5.3 acres) over the permit term.

No potential covered species are expected to occur in this area, although these areas do overlap San Bernardino kangaroo rat critical habitat.

Portions of the maintenance area would likely be considered jurisdictional waters by United State Army Corp of Engineers, California Department of Fish and Wildlife, and Regional Water Quality Control Board and subject to separate permit requirements.

Santa Ana Levee and Cuttle Weir Diversion Maintenance

Maintenance of Cuttle Weir and river turnout, maintenance of diversion structure and gates, vegetation management, streambed recontouring, levee maintenance requires mechanical equipment every 3 to 5 years. Access from existing paved roads.

[Describe seasonal timing?]

Impact Assumption

Per the GIS layer received, the Santa Ana levee and Cuttle weir diversion maintenance area is 3.3 acres at and upstream of the diversion structure.

Santa Ana Vegetation Maintenance

Maintenance of recharge facilities, vegetation management, levee maintenance, access occurs from existing paved road.

[Describe frequency and timing?]

Impact Assumption

Per the GIS layer received, the Santa Ana Santa Ana vegetation maintenance area is 0.2 acre downstream of the diversion structure.

Santa Ana Vegetation and Channel Maintenance

Maintenance of existing channel and gate structures. Removal of vegetation and access occurs from existing roads.

Impact Assumption

Per the GIS layer received, the Santa Ana Santa Ana vegetation and channel maintenance area is 3.5 acres and is located downstream of the diversion structure to Greenspot Road. In addition, 1.8 acres located at an existing facility may have removal of vegetation, primarily invasive species.

[Describe frequency and timing?]