

Tuesday, December 22, 2009

Matthew Mitchell
United States Environmental Protection Agency
75 Hawthorne Street (WTR – 5)
San Francisco, California 94105

**RE: Bioevaluation of White Water River Channel,
Coachella Valley Storm Water Channel at point of Discharge for POTW
City of Coachella, Coachella, California, Riverside County California**

Dear Mr. Mitchell:

This letter report describes the methods and results of a biological evaluation conducted by the City of Coachella's Environmental Programs Manager/Staff Biologist at the Publicly Owned Treatment Works (POTW) in the City of Coachella, Riverside County, California.

PURPOSE

The purpose of the biological evaluation was to characterize biological resources present at the site (e.g., vegetation communities and wildlife habitats). In addition, the evaluation was carried out to give an expert biological opinion as to the habitat characterization at the point of discharge (POD) from the POTW into the WhiteWater River Channel/Coachella Valley Storm Water Channel to classify existing conditions as a freshwater, saltwater, or estuarine. The following letter presents the methods and results of the survey, including a detailed description of the site, a description of plant communities and wildlife observed, and an evaluation of special-status plants and animals and their potential to occur on the project site.

METHODS

The biological evaluation included a literature review and a habitat-level survey of the POD. Literature was reviewed to identify special-status resources reported as occurring in the project vicinity and to gather additional information on the natural history and ecology of these species (e.g., habitat requirements). Literature sources cited include:

- California Department of Fish and Game's (DFG) California Natural Diversity Database (CNDDDB). Special Animals List. Unpublished List. DFG/CNDDDB, 1999.
- California's wildlife - Volumes I – Amphibians and Reptiles
- California's Wildlife – Volume II – Birds. DFG, 1990
- California's Wildlife – Volume III – Mammals. DFG, 1990

Prior to conducting field surveys, the California Natural Diversity Database (CNDDDB) was queried to identify sensitive plant and animal species that have been reported from the Coachella Valley and Thermal quadrangles.

A habitat-survey was conducted by Brett Daniels, Environmental Compliance Inspector/Staff Biologist for the City of Coachella on April 17, 2009. The survey consisted of a site walk-over to identify plant communities, dominant plant species, aquatic habitats and wildlife present on the project site. In addition, habitat that could support special status plants and animals was characterized. For purposes of this analysis, special status resources are plant communities, plants, and wildlife that are:

- Identified by state and/or federal agencies as rare, threatened, or endangered or designated as candidates for listing under provisions of the federal or state Endangered Species Acts
- Considered sensitive by recognized monitoring agencies and conservation organizations (Department of Fish and Game {DFG}, California Native Plant Society {CNPS}, United States Fish and Wildlife Service {FWS} or the National Audubon Society)
- Wetlands or other waters under the Clean Water Act and California Fish and Game Code, administered by the U.S. Army Corps of Engineers (Corps) and DFG, respectively.

Vegetation communities on the project site were identified and mapped based on the field survey and review of the dominant communities associated with the region where the point of discharge (POD) is located. Vegetation communities occurring on the project site are described below. Wildlife species occurring or having the potential to occur on the project site were identified during the site surveys through direct observation, indirect evidence (e.g. scat, tracks, nests, and burrows), and assessment of habitat suitability. Habitat suitability was assessed on pre-survey literature review to identify habitat requirements of special-status species potentially occurring in the project vicinity, as well as to evaluate characteristics of plant communities/wildlife habitat observed on or adjacent to the project site.

DISCUSSION

The POTW site is located at the end of 54th Ave. off HWY 86S, and is adjacent to the WhiteWater River/Coachella Valley Storm Runoff Channel in the city of Coachella, Riverside County, California. Urban development, industrial businesses and open space are located adjacent to the POTW. The WhiteWater River Channel/Coachella Valley Storm Water Channel is naturalistic in nature with both native and ruderal plant species occurring in and along the channel. The banks and open space surrounding the channel are heavily vegetated upstream and downstream of the POD.

The following sections present a brief description of the habitat characterization, vegetation communities, and wildlife species observed in and around the channel extending 100 meters above and below the POD from the POTW, and a discussion of the special-status resources potentially occurring on-site.

VEGETATION COMMUNITIES AND PLANT SPECIES

Vegetation communities identified in and around the channel include urbanized Sonoran riparian and ruderal (disturbance adapted) plant species. There are some introduced landscape plants found in and along the channel and its banks. Below is a brief description of observed vegetation, for a complete listing of observed vegetation please refer to Table 1.

Desert Riparian: The channel and banks upstream and downstream of the POD support native plant communities with some introduced landscape species. This community is characterized as Sonoran Cottonwood-Willow Riparian in the Coachella Valley Multiple Species Habitat Conservation Plan. The Manual of California Vegetation classifies this as an Arroyo willow or Fremont Cottonwood series under their freshwater floodplain wetland criteria. Please see Table 1 for a complete list of observed plants and trees.

WILDLIFE

Wildlife observed is atypical to riparian habitat in the region and includes; Red-shouldered Hawk, Black Phoebe, California Towhee, Song sparrow and Marsh Wren. A complete listing of observed wildlife is located on Table 1.

SPECIAL STATUS RESOURCES

PLANT SPECIES

Table 2. summarizes the special-status plant species reported by the California Natural Diversity Database, CNDDDB for the Coachella and Thermal U.S. Geological Survey (USGS) quadrangles. In addition, Table 2. includes the current regulatory status, preferred habitat, and assessment of potential presence on the project site for each species. No special status species were observed on the project site during the course of the survey.

WILDLIFE

Table 2. summarizes the special-status wildlife species reported by the United States Fish and Wildlife Service (FWS), Sonny Bono Wildlife Refuge, and the California Natural Diversity DataBase (CNDDDB) for the Coachella and Thermal, U.S. Geological Survey (USGS) quadrangles. In addition, Table 2 includes the current regulatory status, preferred habitat, and assessment of potential presence in the vicinity of the POD for each species. No special-status species were observed during the course of the survey. The high level of disturbance from urban influence and development coupled with the lack of suitable habitat would most likely deter species from using habitat adjacent to the POD.

CONCLUSION

The WhiteWater River/Coachella Valley Storm Water Channel is atypical of southwestern riparian zones and arid land waterways. The Cottonwood and Willow trees present in the CVSC are noted for their sensitivity to saltwater. Previous experimental revegetation studies in the watershed found that 1,200 ppm is the threshold salinity for these trees to establish themselves and that higher salinity levels increase mortality (Anderson and Ohmart, 1985, in *The Restoration of Rivers and Streams: Theories and Experience*). The presence of freshwater organisms, wildlife associated with riparian areas, and dominant vegetation (Willows, Cottonwoods and Cattail) indicate that the WhiteWater River Channel/Coachella Storm Water Runoff Channel is a freshwater ecosystem. No species found in saltwater ecosystems, including those found downstream in the Salton Sea, were present in the channel above or below the POD. Dominant Salton Sea organisms such as the barnacle (*Balanus amphrite*), pileworm (*Neanthes succenia*), and brackish water snail (*Thiara granifera*) were not observed. The nature of the aquatic ecology observed at the POD, the dominant riparian vegetation, and the lack of saltwater endemics coupled with historical state and federal classifications of this region support the conclusion that the area surrounding the POD is classified as a freshwater ecosystem.

We appreciate the opportunity to provide this report in support of activities occurring at the POTW. Please don't hesitate to call Brett Daniels at (760) 398-5744 or Jerry Jimenez at (760) 391-5008 if you have any questions regarding this report.

Sincerely,

Brett Daniels
City of Coachella
Environmental Programs Manager



Point of discharge Site 1. Largest tree in photo is an Arroyo Willow



Point of discharge Site 2. Cattails and Arroyo Willow are dominant species



Overview of channel showing discharge site and habitat upstream

FAMILY	<i>Genus species</i>	Status ^a	Habitat	Potential for occurrence Project Site
Mammals				
California Mastiff Bat	<i>Eumops perotis californicus</i>	FSC	cliffs,snags, deadtrees	Not expected, no suitable habitat present
SCIURIDAE - Squirrels and relatives				
Coachella Valley Round-tailed ground squirrel	<i>Spermophilus tereticaudus chlorus</i>	FSC	Open desert interspersed with creosote and Joshua Trees	Not expected, no suitable habitat present
BOVIDAE - Sheep and relatives				
Peninsular Bighorn Sheep	<i>Ovis canadensis cremnobates</i>	ST, FT	Mountains and canyons	Not expected, no suitable habitat present
Nelsons Bighorn Sheep	<i>Ovis canadensis nelsoni</i>	BLM Sensitive	Mountains and canyons	Not expected, no suitable habitat present
Birds				
FALCONIDAE - Falcons				
Prairie falcon	<i>Falco mexicanus nesting</i>	CSC	Plains, grasslands, and other open country	May forage in area
EMBERIZIDAE - Sparrows and their allies				
Common Yellowthroat	<i>Geothlypis trichas sinuosa</i>	CSC	Riparian and other dense forest habitats near water	May forage in area
TYRANNIDAE - Tyrant flycatchers				
Vermilion flycatcher	<i>Pyrocephalus rubinus</i>	CSC	Riparian and other dense forest habitats near water	May forage in area
SYLVIIDAE - Gnatcatchers				

Black-tailed gnatcatcher	<i>Polioptila californica</i>	CSC	Riparian and other dense forest habitats near water	May forage in area
MIMIDAE - Mockingbirds and thrashers				
Crissale Thrasher	<i>Toxostoma crissale</i>	CSC	Thickets along dry waterways	May forage in area
Le Conste's Thrasher	<i>Toxostoma lecontei</i>	FSC,CSC	Thickets along dry waterways	May forage in area

Amphibians

SALAMANDRIDAE - Newts, salamanders Guadalupe creek slender salamander	<i>Batrachoseps sp. 5</i>	FE/CE	Canyons and palm oasis pools and canyon walls	Not expected, outside population range
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Reptiles

TESTUDINIDAE - Land tortoises Desert Tortoise	<i>Xerobates agassizi</i>	ST,FT	Open desert, washes, creosote galleries on bajadas	Not expected, no suitable habitat present
PHRYNOSOMATIDAE - horned lizards Flat-tailed horned lizards	<i>Phrynosoma mcalli</i>	CSC	Bajadas and areas of fine sand	Not expected, no suitable habitat present
Coachella Valley fringe-toed lizards	<i>Uma inornata</i>	SE,FT	Restricted to windblown sand dunes, and sand source areas	Not expected, no suitable habitat present

Insects

ORTHOPTERA - Grasshoppers and Crickets				
Coachella Giant Sand Treader Cricket	<i>Macrobaenetes valgum</i>	FSC	Restricted to windblown sand dunes, and sand source areas	Not expected, no suitable habitat present

Special Status Plants

Mecca Aster	<i>Xylorhiza cognata</i>	FPE	Desert bajadas, canyons, washes	Not expected no suitable habitat present
Glandular ditaxis	<i>Ditaxis clariana</i>	not listed	Desert bajadas, canyons, washes	Not expected no suitable habitat present
Triple-ribbed milkvetch	<i>Astragalus tricarinatus</i>	FE	variable	Not expected no suitable habitat present

FEDERAL

- FE Listed as endangered under the Federal Endangered Species Act (16 U.S.C. 1531 et seq.)
- FT Listed as threatened under the Federal Endangered Species Act (16 U.S.C. 1531 et seq.)
- FPE Proposed for endangered status by the Federal Government in the Federal Register (16 U.S.C. 1531 et seq.)
- FPT Proposed for threatened status in the Federal Register (16 U.S.C. 1531 et seq.)
- C1 Candidate Category 1 for listing under the Federal Endangered Species Act (16 U.S.C. 1531 et seq.)
- SC U.S. Fish and Wildlife Service designated "Species of Concern" (Former Category 2 Candidate for listing).
- C1R Recommended for Category 1 Candidate status by U.S. Fish and Wildlife Service
- C2R Recommended for Category 2 Candidate status by U.S. Fish and Wildlife Service

STATE

- CE Listed as endangered under the California Endangered Species Act (California Fish and Game Code Division 3, Chapter 1.5, Article 2)
- CT Listed as threatened under the California Endangered Species Act (California Fish and Game Code Chapter 1.5)
- CR California Rare Plant (Section 1900, Fish and Game Code, Native Plant Protection Act))
- CSC California Species of Special Concern
- CFP California Fully Protected Species
- SA Special Animal
- SC California Department of Fish and Game Sensitive Community, Chapter 1, 21001, Section C