

SANTA ANA SUCKER
ANNUAL REPORT FOR COVERED ACTIVITIES
(September 1, 2008 To September 1, 2009)

A COMPONENT OF THE SANTA ANA SUCKER
CONSERVATION PROGRAM
WITHIN THE SANTA ANA RIVER WATERSHED

DECEMBER 2009

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Background

In the Spring of 1998, a group of concerned public agencies from throughout the Santa Ana River Watershed began meeting with the goal of determining the reason(s) for the decline of the Santa Ana Sucker and correspondingly, to devise strategies for recovering the species. Early on, the U.S. Fish & Wildlife Service (USFWS) and the California Department of Fish & Game joined the effort. The Santa Ana Watershed Project Authority (SAWPA) hosted the monthly meetings and served as the administrating agency for the effort. The group collectively became known as the Ad-Hoc Santa Ana Sucker Discussion Team (Team) and more recently, the Santa Ana Sucker Conservation Team.

In April 2000, the USFWS listed the Santa Ana Sucker as “threatened”. In 2001-2002 the USFWS in close collaboration with the Team and SAWPA, drafted an Environmental Assessment, Conservation Program and Implementation Agreement. Since that time, it was recognized that the U.S. Army Corps of Engineers should be the lead agency for the Environmental Assessment. The Corps of Engineers initiated formal consultation with the Service regarding the Conservation Program on January 7, 2003. It was the intent of the Environmental Assessment to describe ongoing, routine “Normal Activities” which are covered by the Conservation Program. These activities have been ongoing for decades including percolation and recharge activities, flood control maintenance procedures, tertiary treated wastewater discharges and transportation maintenance. The EA approach has been shelved in favor of a Programmatic Biological Opinion by the Service and supported by the Team. It is described in further detail on the following page but continues to rely on the Conservation Program approach.

On February 26, 2003, the United State District Court, Northern District of California, San Francisco Division, in California Trout et al v. Gale Norton, Secretary of Interior, promulgated an order granting plaintiffs (California Trout) motion for summary judgment and enjoining defendants from issuing any section 7 concurrence or biological opinions that allows Federal actions which “may affect” the Santa Ana Sucker to proceed pending designation of critical habitat. On April 18, 2003, the Defendants filed a

memorandum with the Court in support of motion to alter or amend the judgment. Also during this time, the Santa Ana Sucker Conservation Team filed a declaration as Amicus Curiae in support of the Defendants memorandum. This had been particularly disappointing and frustrating for the Santa Ana Sucker Conservation Team. At a time when significant progress had been attained in building a body of scientific understanding, devising and implementing recovery strategies, and supporting the overall effort financially and administratively, the Biological Opinion for this proactive effort had been stopped in midstream. And because of budgetary constraints, the USFWS was not in a position to conduct work necessary to designate critical habitat. However, on February 25, 2004, the U.S. Fish & Wildlife Service issued a Final Rule in compliance with the court order in designating critical habitat for the Santa Ana Sucker. The Service designated critical habitat for approximately 21,129 acres of streams in Los Angeles and San Bernardino Counties. Acres designated as critical habitat include portions of the main stem of the Santa Ana River and the City, Chino, Mill and Cucamonga Creeks. With this Final Rule, the Service can effectively proceed on consultations on actions that may affect the species. In a procedural action, the U.S. District Court, Northern District of California, San Francisco Division issued a Joint Stipulation to lift the injunction on June 21, 2004. Both parties signed the Joint Stipulation. The Service drafted a “Conservation Program for the Santa Ana Sucker (Catostomus santaanae) Within the Santa Ana River Watershed”, dated May 17, 2005. The Conservation Program is the document that the Team uses to carry on its obligations to the overall effort of recovering the species. These obligations include the “Research” Annual Report and the “Administrative” Annual Report. This document is the Administrative Annual Report.

In 2008-09, a Biological Assessment was completed pursuant to the Federal Endangered Species Act. The USFWS is currently reviewing the Biological Assessment. The approved Biological Assessment will be used by USFWS to prepare the Biological Opinion for the U. S. Army Corps of Engineers 404 permit. The 404 permit, in the form of a Regional General Permit (RGP) was circulated during this period and the review period is closed. At this time, the Team is awaiting for a Biological

Opinion from the USFWS and 401 Certification from the Regional Water Quality Control board. To obtain the 401 Certification, the Team needs an approved CEQA document which is likely an Initial Study/Mitigated Negative Declaration. The CDFG is analyzing the feasibility of issuing a Master Streambed Alteration Permit which is similar to the RGP process prepared by the Corps where SAWPA would act as the clearinghouse. If the CDFG can prepare a Master Streambed Alteration Permit then this will dictate the type of CEQA document that the Team prepares. Fortunately a Draft IS/MNP has been prepared by the Team so the bulk of the work on the CEQA document is complete.

Pursuant to the Conservation Program (May 2005), the Team's annual budget for research, monitoring and administrative responsibilities is \$125,000. Over the past two years, approximately \$68,000 of this budget has been dedicated to San Marino Environmental Associates ongoing scientific work. The remainder of the budget is dedicated to Administration and Team support. Funds are held by SAWPA in a restricted, dedicated account. Contribution levels may increase yearly upon approval of the Participants, limited to the Consumer Price Index (CPI).

In advance of listing the Sucker in 2000, the Team had embarked on an approach where sound science preceded recovery implementation projects. Following are some of the major accomplishments thus far.

- The Team funded through the National Fish & Wildlife Foundation a comprehensive study titled "*Water Quality & Other Environmental Variables Associated with Variations in Population Densities of the Santa Ana Sucker*". The principal investigator was fisheries biologist Dr. Michael K. Saiki, U.S. Geological Survey, Biological Resources Division. The study concluded that no single causal physiochemical parameter is responsible for the decline of the Sucker. This study is known as the Phase 1 report. The Phase 1 report cost approximately \$125,000, all funded by Team participants. It was completed in late 1999.
- A Phase 2 study, also funded by Team agencies, was undertaken by fisheries biologist Dr. Camm Swift. The purpose of this study was to investigate migration

patterns, exotic fish predation and the significance of tributaries to the species long-term survival. It was completed in January 2001 at a cost of \$35,000.

- In an effort to begin investigation of a long term recovery strategy, a Phase 3 study funded by SAWPA, was completed. Authored by Drs. Jonathan N. Baskin and Thomas R. Haglund, principals of San Marino Environmental Associates (SMEA), the study is entitled "*Conservation Program for the Santa Ana Sucker in the Santa Ana River, Southern California*". The study's mission was to investigate the feasibility of recovery of the Sucker and to outline a long-term Conservation Program based on the best available scientific information and utilizing adaptive management techniques. This effort cost \$10,000.
- Based on the Phase 3 work, the Team authored an annual Conservation Program for the Sucker commencing September 1, 2000. The Program balances Information Needs/Research with Recovery Implementation Strategies and has an annual budget of \$125,000. SAWPA is the administrator of the Program and holds and disperses funds for various Program elements. Currently, SMEA is implementing the Information Needs/Research portion of the Program. The Conservation Program will be renewed each year drawing upon adaptive management strategies and input from all Team members. It is to commence on September 1 of each year.
- Pursuant to the Conservation Program, SMEA has been retained to implement the scientific/research portion of the Program. Thus far, six annual documents have been produced. In 2002, the document titled "Results of the Year 1 Implementation of the Santa Ana Sucker Conservation Program for the Santa Ana River" was generated. In 2003, the document titled "Results of the Year 2 Implementation of the Santa Ana Sucker Conservation Program for the Santa Ana River" was produced. Correspondingly, in Spring 2004, SMEA produced "Results of the Year 3 Implementation of the Santa Ana Sucker Conservation Program for the Santa Ana River". In Spring 2005, SMEA generated "Results of the Year 4 (2004) Implementation of the Santa Ana Sucker Conservation Program for the Santa Ana River." In December 2006, a "Results of the Year 5 Implementation of the Santa Ana Sucker Conservation Program for the Santa Ana River" was generated by SMEA. In 2007, a "Results of the Year 6 Implementation of the Santa Ana Sucker

Conservation Program for the Santa Ana River” was generated by SMEA. In September 2008, a “Results of the Year 7 (2007) Implementation of the Santa Ana Sucker Conservation Program for the Santa Ana River” was generated by SMEA. Lastly, in 2009, Results of the Year 8 (2008) Implementation of the Santa Ana Sucker Conservation Program for the Santa Ana River” was generated by SMEA.

As stipulated by the Conservation Program For The Santa Ana Sucker (*catostomus santaanae*) Within The Santa Ana River Watershed, (May 2005) an Annual Report of the previous year’s research and management accomplishments will be prepared by the Program Administrator. The Annual Report will be provided to the Team and the USFWS by December 31st of each year. The report will include two components. The Research & Adaptive Management portion of the report will be compiled by SMEA under separate cover and will be attached to this report. For this year, it is the aforementioned “Results of the Year 8 (2009) Implementation of the Santa Ana Sucker Conservation Program for the Santa Ana River”. Working under a Task order with SAWPA, SMEA annually will include the following information in its portion of the report

1. A list and brief summary of significant actions that were accomplished
2. Results and evaluation of monitoring and surveys completed as part of the research aspect of the Program
3. Location, amount and success of habitat restoration efforts, if any
4. Population estimates or percent occupied habitat
5. New and additional information concerning type of habitat occupied and reproductive biology
6. Analysis of information obtained in the previous year’s research
7. Assessment of the status of the Sucker in the Santa Ana River, and
8. Recommendations for future research.

The second component of the Annual Report describes the “Covered” Activities which is this report. For purposes of this annual report activities are delineated as covered even though all the permits are not in place. This report fulfills the obligations in the 2005

Conservation Program. This second component also contains specific criteria that includes:

1. A summary of all covered activities that were conducted,
2. Estimates of the amount of habitat disturbed and disturbance type (i.e., permanent, temporary),
3. Observations of listed species or their sign onsite or in the vicinity of instream activities,
4. Estimates of incidental take,
5. Any other pertinent data concerning the implementation of measures to avoid or minimize adverse affects to the Sucker and an explanation of any failure to meet such measures,
6. Any anticipated changes in the project description, modifications to the Program and/or new activities that will be proposed, and
7. Recommendations.

To obtain the information required for the “Covered” Activities portion of the Annual Report, information was obtained from each of the Program participants in December 2009. Following is the information obtained during those interviews using the format contained in the Conservation Program. It should be noted that long time Team participant Riverside County Flood Control & Water Conservation District decided not to participate in the Section 404, 401 and 1602 permitting efforts pursued by the Santa Ana Sucker Conservation Team, and described on page 3 of this report. The District will continue to meet its obligations to obtain regulatory permits prior to conducting regulated activities. The District activities are also conducted pursuant to the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), which provides the District with take coverage for MSHCP covered species. The District, however, continues to participate in the Santa Ana Sucker Conservation Team by attending Team meeting/activities, contributing funding, and coordinating with the Team regarding habitat restoration activities that may be proposed within District facilities.

Riverside County Flood Control & Water Conservation District

1. Summary of all Covered Activities that were conducted: This year, routine maintenance activities included general trash and litter removal. Approximately 122 tons of trash and litter were removed from the SAR Levee System, Highgrove and Sunnyslope Channels. Approximately 50 cubic yards of accumulated sediment was removed from the concrete lined Highgrove Channel upstream of the confluence with the SAR levee. Approximately 1,111 cubic yards of accumulated sediment was removed from the riprap and concrete lined reach of the Sunnyslope Channel. The District was the lead sponsor for the annual volunteer Watershed Cleanup Day held on October 4, 2008 providing location for assembly, labor, equipment, facilities and public education hand outs. The event is a multi-agency effort that resulted in the removal of 11,900 pounds of trash from various locations along the Santa Ana River Watershed. Mowing along the existing Riverside levees (D.S. of Mission Blvd. to upstream of Riverside Ave.) was generally limited to a 30-foot width along the levee toe. Channel bottom mowing was generally limited to widths of: 100-feet upstream of Market Street, 200-feet downstream of Market St. and 500-feet downstream of Mission Blvd.
2. Estimates of the amount of habitat disturbed and disturbance type: Because of the nature of the maintenance activities, no SAS habitat disturbance occurred. The sediment removal from Sunnyslope Channel was limited to the structural components of the channel. Recent surveys indicate that areas downstream of the lined Sunnyslope Channel are no longer occupied by SAS.
3. Observations of Federally listed species or their sign in the vicinity of instream activities: Least Bell's vireos and Santa Ana woolly stars were previously detected in the vicinity of SH 60 and Market Street. In the past, SAS have utilized areas downstream of the maintained Sunnyslope Channel, but have not been found in the most recent surveys. The previously described maintenance activities were conducted outside the riparian bird nesting season and in a manner to avoid and minimize impacts to the known species locations.
4. Estimates of incidental take: No known take occurred this year.
5. Any other pertinent data concerning the implementation of measures to avoid or minimize adverse affects to the Sucker and an explanation of any failure to meet such

measures: The vegetation mowing followed the measures in the SAS Conservation Program. The District also continued its efforts to restrict unauthorized access by repairing fences and by installing new fence. Public awareness signs regarding pet waste have been installed along portions of the levee. No other pertinent data is available.

6. Any anticipated changes in the project description, modifications to the Program and/or new activities that will be proposed: The presence of *Arundo donax* within this reach of the Santa Ana River is minimal due to the *Arundo* removal effort that was done in the past years. Therefore, *Arundo* removal is becoming a minor component of the District's routine maintenance activities.

7. Recommendations: Continue to conduct Sunnyslope Channel maintenance activities in a manner that minimizes potential impacts to downstream areas even though these areas are not currently used by SAS.

Riverside County Transportation Department

1. Summary of all Covered Activities that were conducted: Sand removal took place both upstream a distance of 1,000 feet and downstream a distance of 700 feet from September through November 2008. In January of 2009, construction began on replacement of River Road Bridge; as a result, sand removal was limited to what was necessary to protect the bridge (which was open throughout construction) and to maintain flow in the river.
2. Estimates of the amount of habitat disturbed and disturbance type: Habitat disturbance was limited to 1,000 feet upstream of the River Road Bridge and 700 feet downstream of the bridge.
3. Observations of Federally listed species or their sign in the vicinity of instream activities: Approximately 394 Santa Ana Suckers were rescued and relocated between January and July 2009.
4. Estimates of Incidental takes: All Santa Ana Sucker surveys and relocation efforts were performed in accordance with measures outlined by the USFWS.

5. Any other pertinent data concerning the implementation of measures to avoid or minimize adverse affects to the Sucker and an explanation of any failure to meet such measures: No other data.
6. Any anticipated changes in the project description, modifications to the Program and/or new activities that will be proposed: Phase 1 of the bridge construction was underway during the reporting period. Completion of the remaining phases is expected in March 2011.
7. Recommendations: None

San Bernardino County Flood Control District (SBCFCD)

1. Summary of all Covered Activities that were conducted: In November 2009, the District removed a stockpile of boulders from the Santa Ana River, near the confluence with San Timoteo Creek, from the river bed to an upland location. The boulders were stockpiled in this location during a dry season several years ago, during permitted maintenance activities. The presence of the stockpile did not effect the hydrologic regime of the creek. The work was overseen by a biologist. There was no flowing water in the immediate vicinity of the work. For this work one loader and several rock trucks entered off of Waterman Avenue, crossed the Santa Ana River to the location. The work lasted approximately four days. No other flood control activities or maintenance occurred in the Santa Ana River proper in 20089.
2. Observations of Federally listed species or their sign in the vicinity of in stream activities: In 2009, SBCFCD biologists conducted least Bell's vireo and southwestern willow flycatcher surveys within the SAR from Tippecanoe Avenue to the County line just downstream of Riverside Avenue bridge. During these surveys, no nesting willow flycatchers were recorded. The least Bell's vireo numbers were more robust. The SBCFCD submitted the annual report to the USFWS
3. Estimates of incidental take: None. No suckers were harmed or harassed because no work was completed in any wetted area where suckers could exist.
4. Any other pertinent data concerning the implementation of measures to avoid or minimize adverse affects to the Sucker and an explanation of any failure to meet

such measures: The SBCFCD did not do maintenance activities in the SAR proper or the Rialto Channel in the year 2009.

5. Any anticipated changes in the project description, modifications to the Program and/or new activities that will be proposed: None
6. Recommendations: None

Orange County Flood Control District, Orange County Public Works

1. Summary of all Covered Activities that were conducted: No significant actions took place this year. Work was done to remove invasive plants and noxious weeds outside of the least bell vireo breeding season.
2. Estimates of the amount of habitat disturbed and disturbance type: County spray trucks were utilized this past year to make annual routine spray application to Arundo/non-native vegetation. The spray applications took place with the use of County crews which all possess a Qualified Applicator's Certificate. The work sites were between Weir Canyon Road and Gypsum Canyon Road on previously established pathways for spray vehicles to enter and exit the sites. Approximately 66.01 acres were treated with no habitat being disturbed or destroyed. All spray applications took place outside of the nesting season (March 15th – September 15th). To our knowledge, no least Bell's Vireo or Sucker fish were observed during spray applications.
3. Observations of Federally listed species or their sign in the vicinity of instream activities: Work was done outside of breeding season so no surveys were conducted and no habitat was impacted.
4. Estimates of incidental take: No known takings occurred during the year.
5. Any other pertinent data concerning the implementation of measures to avoid or minimize adverse affects to the Sucker and an explanation of any failure to meet such measures: For the requested period we performed general litter/debris removal.
6. Any anticipated changes in the project description, modifications to the Program and/or new activities that will be proposed: None.
7. Recommendations: Continued eradication of Arundo.

City of Riverside (Regional Water Quality Control Plant)

1. Summary of all Covered Activities that were conducted: Standard maintenance included two reconstructions, on February 20, 2009 and September 18, 2009, of the sand dike used to create a conveyance channel between the treatment works and the treatment wetlands. A single, D-8 Caterpillar, tractor was used to move the dirt.
2. Estimates of the amount of habitat disturbed and disturbance type: On February 20, 2009 approximately 7,500 cu ft of sand was mounded in the river bed to create the conveyance dike. On September 18, 2009 approximately 1,500 cu ft of sand was mounded in the river bed to repair a 25 foot section of man-made damage to the conveyance dike.
3. Observations of Federally listed species or their sign in the vicinity of instream during both activities: None.
4. Estimates of incidental take: None.
5. Any other pertinent data concerning the implementation of measures to avoid or minimize adverse affects to the Sucker and an explanation of any failure to meet such measures: Activities were overseen by third-party biologist. Riverside County Parks Department crew placed a fish-blocking net across the river at the upstream and downstream ends of the dike repair area. The net was held in place with steel fence stakes. The crew periodically checked the nets for fish; none were found. A bulldozer then entered the river and conducted the necessary repairs. Following repair the nets were again checked for fish. Upon determining no fish were present, nets were removed.
6. Any anticipated changes in the project description, modifications to the Program and/or new activities that will be proposed: None
7. Recommendations: None.

Orange County Water District

1. Summary of all Covered Activities that were conducted:

Constructed Wetlands: In 2009, the diversion berm which is used to divert 50% of the river flow into the wetlands was rebuilt twice by OCWD staff and several times by the construction company rebuilding the River Road Bridge. Details of the River Road Bridge project can be found under the Riverside County Transportation Department section.

Groundwater recharge: As part of OCWD's water conservation activities, the District re-built its T-levee system beginning in late spring 2009 following the storm flows, to spread water for percolation. There was activity in the river totaling approximately 1,600 hours, mostly only one bulldozer was involved.

Habitat Restoration:

2. Amount of habitat disturbed:

Constructed wetlands: The wetlands themselves are not considered favorable habitat for the Suckers. The re-establishment of the diversion berm is a very temporary disturbance, necessitating one or two days of bulldozer work in or near the water.

Groundwater recharge: Suckers have not been observed in the Districts recharge area located between Imperial Highway and Ball Road, therefore, habitat disturbance in the groundwater recharge area has not affected Suckers and is always temporary in nature.

3. Observation of listed species:

Constructed wetlands: No Suckers were observed in 2009 in the vicinity of the diversion into the constructed wetlands.

Groundwater Recharge: No suckers have ever been observed in the spreading basins.

4. Incidental Take:

Constructed wetlands: In December 2008, one Santa Ana Sucker was caught in a minnow trap along the diversion channel. The trapping was part of our Aquatic Predator Minimization Plan to help reduce non-native aquatic species in the constructed wetlands. The sucker was transported to the Riverside Corona Resource Conservation District and released into the artificial stream there. In

February 2009, one Santa Ana Sucker was caught near the by-pass pipes on the south side of the river during a seining event for the re-building of the diversion berm. The sucker was transported upstream of River Road Bridge and released. Groundwater recharge: No suckers have ever been reported from the spreading grounds, and none was taken in 2009.

5. Success in meeting conservation measures:

Constructed wetlands: The District worked with the Service to implement partial minimization measures, and is working with the Service to implement the remaining measures.

Groundwater recharge: The District worked with the Service to implement partial minimization measures and is working with the Service to implement the remaining measures.

6. Anticipated new activities:

Constructed Wetlands: No new activities are planned for the constructed wetlands.

Groundwater Recharge: No new activities are planned for the groundwater recharge area.

7. Recommendations: none

City of San Bernardino Municipal Water Department (Rapid Infiltration & Extraction Facility [RIX]).

1. Activities: From September 1, 2008 to September 1, 2009, the RIX facility experienced 33 shutdowns. This averages about 2.75 shutdowns per month. All shutdowns were routine in nature and unavoidable, mainly attributed to ultra-violet (UV) channel safe-guards, maintenance needs, and utility power failures. A series of long shutdowns from June 3 to 16 were caused from an electrical strike and needed repairs as a result. The longest shutdown was 7 hours and 12 minutes. The shortest shutdown was for 3 minutes. The median shutdown time was 87 minutes, and there were 7 days when a shutdown lasted more than 2 hours. Per regulatory requirements, the UV system must be maintained and operated within strict guidelines to ensure permit compliance.

2. Amount of habitat disturbed: Due to plant shutdowns, temporary habitat disturbance may occur below the RIX facility. To determine any impacts on Suckers, a study was commissioned in August 2002. This study, conducted by Brant Allen of U.C. Davis, has been finalized and concluded the following: *“The short duration flow reductions from the RIX facility would not have any significant impact on the Santa Ana Sucker population living in the study section of the Santa Ana River.”* and *“Santa Ana Suckers have evolved life history strategies that are consistent with a dynamic environment. The adult fish utilize deep pool habitat, which provides protection against possible desiccation during the long dry season (Swift 2001, Allen 2002). Rapid percolation in the sandy wash environment can leave shallow water habitat dry within a few minutes when flow is reduced in the river (Allen 2002). The deep pools, selected by the suckers, offer the greatest stability in the environment. During the rainy season, these same pools provide a refuge from rapidly increasing river velocities. In areas where the total river discharge can increase from zero to over 3,000 cfs in twelve hours, the habitat at the bottom of the pools will experience the smallest change in water velocity. The possible maintenance shutdowns and subsequent water release during start up at the RIX facility, are consistent with natural perturbations in the flow regime in the study area of the Santa Ana River.”* This study was one of the measures in the Sucker Conservation Program and was funded by the Conservation Team participants through SAWPA.
3. Observation of listed species: As part of the research work funded by the Team, Baskin et al have observed Suckers from immediately below the RIX facility discharge point downstream to the River Road Bridge area. During certain times of the year, the RIX facility contributes a significant portion of the flows of the river.
4. Incidental Take: No known takings occurred during the year.
5. Success in meeting conservation measures: Maintenance of the river channel taken by the Santa Ana Watershed Association (SAWA) reduced arundo around the RIX outfall. SBMWD staff no longer crosses the river for sampling purposes or piezometer maintenance. SBMWD met all conservation measure objectives during the year.
6. Anticipated new activities: No new activities are planned during the year.

7. Recommendations: None

Orange County Sanitation District

1. Summary of all Covered Activities that were conducted:

Inspection: Staff inspected the pipe, manhole structures and covers, rip-rap surrounding some manholes, access roads, and the surface features along the pipeline's route. The inspection is used to assess the need for repairs. Access is by way of dirt and/or gravel roads maintained either by the Orange County Sanitation District (OCSD) or the Orange County Public Works. Access to several manholes requires the river be crossed. There is 1 river crossing located near the Gypsum Canyon Bridge to access manholes. O&M survey for access roads and CCTV survey of manholes and line was completed on February 13, 2009.

CCTV: The SARI pipeline from the SAVI Ranch development easterly to the Orange County line was close circuit televised (CCTV). The CCTV showed good conditions of the line with no signs of crack or misalignments. The groundwater infiltration was about the same as last time with no new infiltration observed. The SARI line is still considered to be in acceptable condition without any concern of the line breaking or collapsing in the Santa Ana River bed channel. OCSD videos this section annually to assess the pipe's condition and determine if cleaning or repairs are warranted.

Vegetation Removal: Weed abatement and removal of overhanging tree branches was done to provide access to OCSD's manholes for inspection.

Survey: The SAR is constantly shifting its banks and cutting deeper paths through the flood plain. OCSD surveyed the river where it crosses its pipeline and nears its manholes. The information keeps OCSD abreast of the rate at which the river is approaching the pipeline (reduced ground cover) and manholes (bank erosion). Thus, OCSD can schedule and take preventative measures to prevent any failure due to normal shifting of the river. The 2009 Annual Survey took place in March of this year.

2. Estimates of the amount of habitat disturbed and disturbance type: No habitat was disturbed by these activities.

3. Observations of federally listed species or their sign in the vicinity of in-stream activities: No sightings in 2009.
4. Estimates of incidental take: There were no known or likely occurrences of incidental take.
5. Any other pertinent data concerning the implementation of measures to avoid or minimize adverse affects to the Sucker and an explanation of any failure to meet such measures: No changes were made to the covered activities.
6. Any anticipated changes in the project description, modifications to the Program and/or new activities that will be proposed: The Army Corp of Engineers is scheduled to sign the Record of Decision at the end of 2009 following certification of the EIR by the County Board of Supervisors.
7. Recommendations: Based on the results of the 2009 annual survey, there was no further significant degradation of the soil cover above the SARI pipeline that warranted immediate repairs. Therefore, there are no immediate plans to conduct additional repairs. However, OCSD will continue to monitor the rains throughout this fall/winter and if significant erosion occurs that jeopardize the integrity of the pipeline, then emergency repairs will be conducted.