SANTA ANA SUCKER
ANNUAL REPORT FOR COVERED ACTIVITIES
(September 1, 2007 To September 1, 2008)

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

DECEMBER 2008

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 used 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.

Pursuant to the Federal Clean Water Act, the Team has submitted a 404 permit application to the U. S. Army Corps of Engineers in Spring 2008. The comment period for the Public Notice was October 10, 2008 through November 10, 2008. Comments are currently being reviewed. After comments are addressed, it is anticipated that a Regional General Permit (RGP) will be issued by the U. S. Army Corps of Engineers. On a concurrent timetable, an Initial Study/Mitigated Negative Declaration was prepared by the Team and circulated. The IS/MND also received comments that are under

review. After comments are addressed, the IS/MND will be re-circulated for an additional 30 day review. A Notice of Determination will then be prepared per CEQA. As a component of the 404 permit process, a 401 Water Quality Certification will be submitted to the Regional Water Quality Control Board for approval. This effort will be undertaken in 2009.

Lastly, since some participating agencies already have 1602 permits with the California Department of Fish & Game, individual 1602 permits will be secured by each of the participating agencies. A Section 2082 permit with the Department of Fish & Game may be forthcoming in the future.

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 entitled "*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, four annual documents have been produced. In 2002, the document entitled "Results of the Year 1 Implementation of the Santa Ana Sucker Conservation Program for the Santa Ana River" was generated. In 2003, the document entitled "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. Lastly, 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.

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 6 (2007) 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. 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 2008. 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.

<u>Riverside County Flood Control & Water Conservation District</u>

1. Summary of all Covered Activities that were conducted: This year, routine maintenance activities included general trash and litter removal. Approximately 9 tons of trash and litter were removed from the SAR and associated facilities. Accumulated sediment was removed from the concrete lined Highgrove Channel

upstream of the confluence with the SAR levee. The eroded westerly slope just upstream of Market Street and the west levee was restored. 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. High flows relocated the low-flow channel upstream of Market Street away from the westerly slope prior to the slope restoration by the District. Thus, the active low-flow channel was not impacted and a qualified biologist confirmed that SAS were not present along the toe of the slope in the former low-flow channel before it was filled.
3. Observations of Federally listed species or their sign in the vicinity of instream activities: Least Bell's vireos and Santa Ana wooly stars were previously detected in the vicinity of SH 60 and Market Street. 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 were also 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: None

Riverside County Transportation Department

1. Summary of all Covered Activities that were conducted: As in previous years, sand removal took place both upstream a distance of 1,000 feet and downstream a distance of 700 feet.
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: None
4. Estimates of Incidental takes: 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: No other data.
6. Any anticipated changes in the project description, modifications to the Program and/or new activities that will be proposed: No anticipated changes in the project description.
7. Recommendations: None

San Bernardino County Flood Control District

1. Summary of all Covered Activities that were conducted: No flood control activities or maintenance occurred in the Santa Ana River proper in 2008. Operations removed 750 cubic yards of debris from the de-energizer blocks located approximately 300 feet upstream of the San Timoteo Creek confluence. An excavator, loader and 3 dump trucks were used and the work tool place over a three week period. Tree limbs hanging over the north levee of the Santa Ana River, just downstream of Waterman Avenue, were trimmed by hand crews. This completed on September 30, 2008. the work took 3 days to complete and the hand crews used loppers to trim the branches.
2. Estimates of the amount of habitat disturbed and disturbance type: Work that occurred in the San Timoteo Creek disturbed ruderal weeds and removed mostly sediment and therefore all disturbances that occurred were temporary. No disturbance to riparian habitat occurred.
3. Observations of Federally listed species or their sign in the vicinity of in stream activities: In 2008, District 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 willow flycatchers were recorded. The least Bell's vireo numbers were much more robust. A total of 21 territories were detected with 13 of the 21 territorial males being paired. A total of 12 vireos were successfully fledged during the season. Santa Ana wooly star was observed in the SAR, adjacent to the Colton Landfill, downstream of La Cadena Blvd.
4. Estimates of incidental take: None. No suckers were harmed or harassed because no work was completed in the area.
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 County did not do any maintenance activities in the SAR proper or the Rialto Channel in the year 2008.
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 Flood Control District, County of Orange Resources & Development Management Department

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 210 acres were treated with no habitat being disturbed or destroyed. All spray applications took place outside of the nesting season (March 15th – September 15th).
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 letter/debris removal, graffiti removal and arundo removal of approximately 5 acres.
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 one reconstruction, in September 2007, 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: Approximately 7,500 cu ft of sand was mounded in the river bed to create the conveyance dike.
3. Observations of Federally listed species or their sign in the vicinity of instream 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: None.
6. Any anticipated changes in the project description, modifications to the Program and/or new activities that will be proposed: None
7. Recommendations: None.

<u>Orange County Water District</u>

1. Summary of all Covered Activities that were conducted:
   Constructed Wetlands: In 2008, the diversion berm which is used to divert 50% of the river flow into the wetlands was rebuilt four times. By-pass pipes which allow the other 50% of the river to continue downstream were also re-installed after being blown out during the flood events of 04/05. The by-pass pipes were installed with flared ends on the downstream side which is designed to allow fish to pass up and downstream through the pipes.
   Groundwater recharge: As part of OCWD's water conservation activities, the District re-built its T-levee system beginning in late spring 2008 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 & by-pass pipes was a very temporary disturbance, necessitating a few 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 2008 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: No suckers were observed, harmed or harassed in the process of re-establishing the diversion berm or the by-pass pipes.
   Groundwater recharge: No suckers have ever been reported from the spreading grounds, and none were taken in 2008.
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

<u>City of San Bernardino Municipal Water Department (Rapid Infiltration & Extraction Facility [RIX].</u>

1. Activities: From September 1, 2007 to September 1, 2008, the RIX facility experienced 16 shutdowns. This averages about 1.3 shutdowns per month. All

shutdowns were routine in nature and unavoidable, mainly attributed to ultra-violet (UV) channel safe-guards, maintenance needs or utility power failures. The longest shutdown was 4 hours and 29 minutes. The shortest shutdown was for 13 minutes. The median shutdown time was 39 minutes, and there were 2 days when a shutdown lasted more than 2 hours (one at 4 hours 29 minutes, the other 2 hours 2 minutes). 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 County of Orange's Resources and Development Management Department (RDMD). Access to several manholes requires the river be crossed. There is 1 river crossing located near the Gypsum Canyon Bridge to access manholes.
   CCTV: A 1,000 foot section of the SARI pipeline located in the river was close circuit televised (CCTV). The pipe contains numerous cracks in this section of the pipe where groundwater enters the pipe. 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 2007 Annual Survey took place in May 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 2007.
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. The following covered activities did not occur: Rip-rap, Pipe Cleaning, and Manhole Repair.
6. Any anticipated changes in the project description, modifications to the Program and/or new activities that will be proposed: The SARI Line Relocation/Protection Project EIR/SEIS Draft is scheduled for release by April 2008.
7. Recommendations: Based on the results of the 2007 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.