SANTA ANA SUCKER
ANNUAL REPORT FOR FISCAL YEAR 2002-03
(September 1, 2002 To September 1, 2003)

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

SEPTEMBER 2003

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 is 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. With a USFWS approved Section 7 Consultation for the Environmental Assessment and Conservation Program, an incidental "take" of the Sucker will not be considered a violation of Section 9 of the Endangered Species Act.

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. As of the generation of this Annual Report (September 1, 2003) the case has not been reheard and the summary judgement stands. This has been particularly disappointing and frustrating for the Santa Ana Sucker Conservation Team. At a time when significant progress has 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 has been stopped in midstream. And because of budgetary constraints, the USFWS is not in a position to conduct work necessary to designate critical habitat. After considerable consternation, the Team, following its tradition of proactivity, has decided to continue its implementation of the Conservation Program.

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 a 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, two 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.

As stipulated by the Conservation Program For The Santa Ana Sucker (*catostomus santaanae*) Within The Santa Ana River Watershed, 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 Discussion 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 2 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. This second component also contains specific criteria that includes

1. A brief summary of significant actions that were accomplished
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. Known or likely occurrences of incidental take
5. Updates on the implementation and completion of the Covered Activities (e.g., any water diversions or de-watering of river sections that were conducted), and any anticipated changes in the project description or implementation schedule.
6. Any other pertinent data concerning success in meeting conservation measures outlined in the Program or biological opinion (i.e., terms and conditions of the incidental take statement) and an explanation of failure to meet such measures, if any,
7. Any anticipated new activities including an assessment of anticipated effects to the Sucker and any minimization measures, and
8. Recommendations.

To obtain the information required for the Covered Activities portion of the Annual Report, interviews with each of the Program participants took place in August 2003. Following is the information obtained during those interviews using the format contained in the Conservation Program.

Riverside County Flood Control & Water Conservation District

1. Significant Actions: The most significant action taken during the year was invasive plant removal consisting mainly of Arundo donax. This was accomplished by mowing in the fall of 2002, followed about two weeks later with spraying to control emerging growth. In August 2003, the concrete portion of Sunnyslope Creek had sediment removal done along with routine road maintenance, graffiti removal and rodent control. Routine road maintenance is done to smooth out ruts, prevent erosion and control weeds. Also during the year, routine maintenance, graffiti removal, fence repair and access road grading took place from Mission Street Bridge upstream for 4 ½ miles.
2. Amount of habitat disturbed: No work was done within the river during the year. No structural work was done on the levees and groins during the year. The Arundo donax vegetation mowing and treatment was conducted from the levee area downstream of Mission Street Bridge proceeding upstream for 4 ½ miles. This activity occurs on a yearly basis.
3. Observation of listed species: No listed species were observed during the year.
4. Incidental take: No listed species were taken during the year.
5. Updates on Covered Activities: Two covered activities were undertaken during the year, Arundo donax vegetation mowing within the river and sediment removal in the concrete portion of Sunnyslope Creek. Both occurred in Fall 2002. The activities have not changed as described in the Conservation Program.
6. Success in meeting Conservation measures: The District complied with all minimization/conservation measures.
7. Anticipated new activities: In April 2003, a District retained consultant completed a Draft Biological Assessment (BA) to analyze the environmental conditions/settings of the river to address the need to relocate the low flows of the river away from the

existing groins for structural stability. The BA is currently undergoing internal staff review.

8. Recommendations: None

Riverside County Transportation Department

1. Significant Actions: The Sand mining operation under contract with the Riverside County Transportation Department conducted its sand removal operation approximately 1,000 feet upstream of the River Road Bridge during the year. The winter and early spring of 2003 brought storm flows that deposited large amounts of Arundo donax, sediment and debris. Fortunately, the River Road bridge did not sustain damage due to the on-going sand removal and the immediate response to remove the debris by the County's contractor, KEC Engineering. Clearing of the debris was done with heavy equipment in a manner similar to how the sand is removed from the river bottom on a regular basis. Storm activity consisting of heavy and light rains took place on the following dates: February 11-28, March 15-16, April 14 and April 20. Removal of the debris took place on February 21-24, March 4-11, March 18-April 1, and April 22. Debris removal took place outside of the time periods in which the Santa Ana Sucker has historically been observed in the area. Berms were also routinely replaced during these time frames. Biologists with the Orange County Water District conducted surveys on February 19, March 5 and April 22 to verify that Suckers were not impacted by the debris removal and berm reconstruction and that no "take" of the Sucker took place. Fish & Wildlife Service personnel were contacted to inform them of this work.
2. Amount of habitat disturbed: The habitat disturbance this year was confined to the sand mining operation 1,000 feet upstream of the River Road Bridge. The overall disturbance was approximately 1,000 feet in length as well.
3. Observation of listed species: Unlike last year, the number of Suckers was considerably less. Approximately 100 Suckers were observed above the sand mining operation on June 5, 2003 and about 12 Suckers were observed in the vicinity of the River Road Bridge to the Orange County Water District pond diversion on August 25, 2003.

4. Incidental takes: No Suckers were taken during the year.
5. Updates on Covered Activities: Events that occurred regarding Covered Activities are described in numbers one and two above.
6. Success in meeting conservation measures: Riverside County Transportation Department complied with all conservation measures during the year.
7. Anticipated new activities: A Biological opinion to assess the population of Suckers in the vicinity of River Road Bridge is currently in abeyance because of the recent Court order.
8. Recommendations: None

San Bernardino County Flood Control District

1. Significant Actions: Pursuant to an agreement with the U.S. Fish & Wildlife Service and State Department of Fish & Game, the District conducted low flow channel maintenance from Waterman Avenue to the Rialto Drain, a distance of approximately 3 miles. Additionally, Arundo donax removal was performed on approximately 60 acres between La Cadena and Riverside Avenues. The work was performed by County crews.
2. Amount of habitat disturbed: No Sucker habitat was disturbed during the year except the low flow channel maintenance described under number 1 above.
3. Observation of listed species: Wooley Star was found just southeast of the Rialto Drain. Four pairs of least Bell's vireo were located southwest of the burned area that burned in 2002. The burn area is located in the vicinity of the Rialto Creek confluence and La Cadena Avenue. An additional pair of least Bell's vireo was found at Waterman Avenue and the river. Lastly, Suckers were observed at the Rialto Drain as in past years.
4. Incidental take: No known takings occurred during the year.
5. Updates on Covered Activities: No other work occurred other than the work described in number 1 above.
6. Success in meeting conservation measures: SBCFCD's vegetation control activities were routine this year.
7. Anticipated new activities: No new activities are planned during the next year.

8. Recommendations: None

Orange County Flood Control District, County of Orange Public Facilities & Resources Department

1. Significant Actions: No significant actions took place this year. With least Bell's vireos being found no hand crews were used to remove Arundo donax.
2. Amount of habitat disturbed: In a limited effort, utility trucks were utilized to spray for Arundo in already established pathways. No habitat was disturbed.
3. Observation of listed species: Least Bell's vireos were observed in six locations this year in the Orange County Flood Control District's service area along the Santa Ana River. They were generally observed from the County line to Weir Canyon Road. Two pairs were observed nesting. No Suckers were observed during the year.
4. Incidental Take: No known takings occurred during the year.
5. Updates on Covered Activities: Because of least Bell's vireo sightings, Arundo donax removal was limited this year.
6. Success in meeting conservation measures: Since 1989, 75% of the Arundo donax located from the Riverside County line to Weir Canyon Road has been removed. The goal is to remove the remaining 25% over the next couple of years.
7. Anticipated new activities: No new activities are planned for the next year.
8. Recommendations: Arundo no more in 2004!

City of Riverside (Regional Water Quality Control Plant)

1. Significant Actions: Because of the more significant water year (more storms) the dike was repaired 9 times during the year. Two nets (one 150' long, the other 200' long) were used to isolate the maintenance area for two repairs which took place between May 2003 and August 2003.
2. Amount of habitat disturbed: During the 9 times that the dike was repaired, no precise estimates were made regarding the extent of area repaired. However, last year the dike maintenance was approximately 4,000 square feet during each occurrence and it is assumed that this was the case this year as well.

3. Observation of listed species: The City of Riverside used a full time observer during dike repair/maintenance. No Suckers were observed.
4. Incidental Take: No known takings occurred during the year.
5. Updates on Covered Activities: The City of Riverside is using the nets and protocol established in the Conservation Program regarding dike repair/maintenance.
6. Success in meeting conservation measures: The agency is successful in meeting its conservation measures.
7. Anticipated New Activities: No new activities are anticipated.
8. Recommendations: None

Orange County Water District

1. Significant Actions:

   Constructed Wetlands: In September and October 2002, the District dried 6 of the constructed wetland ponds at Prado Basin for routine repair of ditches, weirs, pipes and culverts. Maintenance was also performed on the diversion and ditches because of the spring storms that overwhelmed the system.

   Groundwater recharge: As part of OCWD's water conservation activities, the District re-built its T-levee system on 6 occasions during March-May 2003 as a result of the spring storms.
2. Amount of habitat disturbed:

   Constructed wetlands: The wetlands themselves are not considered favorable habitat for the Suckers. The reconstruction of the diversion is a temporary disturbance, however, is repeated during the year as necessary.

   Groundwater recharge: Suckers have not been observed in the Districts recharge area located between Imperial Highway and Ball Road in some time, 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: In comparison to last year, the occurrence of Suckers in the vicinity of the River Road Bridge and the diversion for the constructed wetlands has

dropped off dramatically. In fact, no Suckers were observed this year at the diversion for the constructed wetlands.

Groundwater Recharge: In an effort spearheaded by the Riverside County Resource Conservation District, 40 tagged Suckers were released in March 2003 below Prado Dam. It remains to be seen if the tagged Suckers will live and propagate in the vicinity. None have been found since the release in March 2003 despite monthly surveys. In a related effort, the OCWD will begin a quarterly survey of five sites below Prado Dam to find Suckers. This effort will begin in January 2004.

4. Incidental Take:

   Constructed wetlands: No known takings occurred during the year. No Suckers were relocated because of diversion reconstruction.

   Groundwater recharge: No known takings occurred during the year.

5. Updates on Covered Activities:

   Constructed Wetlands: Routine activities occurred this past year including diversion reconstruction and pond maintenance.

   Groundwater recharge: Routine levee construction and maintenance occurred during the year. Sucker surveys were conducted as part of the research program.

6. 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.

7. Anticipated new activities:

   Constructed Wetlands: OCWD is planning to construct a new constructed wetlands system on OCWD property just upstream of the River Road Bridge. The new wetlands system will consist of 180 acres of inter-linked pond systems and 220 acres of habitat restoration for the least Bell's vireo and southwestern willow flycatcher. Additional Sucker enhancements will also be built including sand substrates and boulder placement in the river course. In addition to the new

constructed wetlands system, the District and USFWS are conducting collaborative research to improve the Diversion structure. This includes the removal of culverts and the creation of Sucker habitat enhancements.

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

8. Recommendations: None

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

1. Significant Actions: From September 2002 to July 30, 2003, the RIX facility experienced 42 shutdowns, as compared to 51 shutdowns from September 1, 2001 to June 30, 2002. All shutdowns were routine in nature, mainly attributed to ultra-violet (UV) channel maintenance and utility power failures. The longest shutdown from September 2002 through July 2003 was 5 hours and 40 minutes. The shortest shutdown was for 15 minutes. Most occurred for approximately one hour.
2. Amount of habitat disturbed: Due to plant shutdowns, temporary habitat disturbance occurs below the RIX facility. To determine any impacts on Suckers, a study was commissioned in August 2002 to determine impacts, if any. Currently, this study, conducted by Brant Allen of U.C. Davis, is in Final Draft form. It will be released after this Annual Report is completed. This study is one of the measures in the Sucker Conservation Program and is funded by the Conservation Team participants through SAWPA.
3. Observation of listed species: As part of the research work funded by the Discussion 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: During the year, SBMWD conducted no work in the Santa Ana River including water quality sampling and piezometer maintenance.

6. Success in meeting conservation measures: SBMWD met all conservation measure objectives during the year.
7. Anticipated new activities: No new activities are planned during the year.
8. Recommendations: None