

# *The SAWA Current*

*Dedicated to creating a healthy Santa Ana Watershed for wildlife and people.*

The Santa Ana Watershed Association (SAWA) works to improve the health of the Santa Ana River and its watershed, the land that drains to the river. SAWA's primary goal is to restore the natural functions of the Santa Ana River and its tributaries by correcting human-induced change. Restoration methods include:

- removal of invasive, non-native plants and animals and reestablishment of native species
- wildlife management, targeting endangered and threatened species
- education and public involvement.

SAWA got its start in an effort to combat an invasive intruder.

## **The River Was Choking**

The Santa Ana River began losing its native vegetation as a result of the invasion of aggressive, non-native weeds. The worst of the invaders, *Arundo donax*, commonly called Giant Reed or Giant Cane, is a tall, thin bamboo-like plant. Under optimum conditions, *Arundo* is able to grow three inches per day and consumes three times more water than native plants. With such rapid growth, Giant Reed began to displace native willows, mulefat, and cottonwoods, the essential plants that provide nesting sites, food, and shelter for local wildlife. Dense thickets of *Arundo* spread fire and blocked stream flows, causing flooding. At one point, the reed was estimated to have overtaken 10,000 acres of the river. Coupled with the invasion of another aggressive species, the Brown-headed Cowbird, several native songbirds had been drastically reduced in numbers. The Least Bell's vireo and the Southwestern Willow Flycatcher became in danger of extinction (endangered).

## **Helping the Endangered ... and More**

Efforts to protect the endangered Least Bell's Vireo and the Willow Flycatcher, small migratory songbirds that nest along the River, include habitat restoration and nest management. The Brown-headed Cowbird is a brood parasite. Rather than build its own nest, it lays its eggs in the nests of other birds. The songbird continues to incubate the Cowbirds' eggs along with its own. Cowbird chicks grow quickly and out-compete the songbird hatchlings. Most often, songbird chicks do not survive and the adult vireos or flycatchers spend their precious breeding seasons raising Cowbird chicks. When biologists check nests, they remove the Cowbird eggs, so the adult songbirds are able to raise their own chicks.



Biologists manage a Brown-headed Cowbird-trapping program to remove the invasive birds before they can lay their eggs in the nests of native birds. Field assistants place 50 traps throughout the watershed. Since 2000, over 10,000 cowbirds have been removed from the habitat.

The removal of Cowbirds has been very effective in helping the Least Bell's Vireo. When the vireo was first listed as endangered in 1980, there were only 300 pairs breeding in California. At that time, only 19 pairs were identified in the Santa Ana River, at Prado Basin.



Least Bell's Vireo

## 1,000!!!!

During 2008, over 1,000 vireo territories have been documented in the watershed, an increase of 600 since 2000. (A "territory" is an area claimed by a male through singing.) Unfortunately, trapping and nest monitoring have not been as helpful to the Southwestern Willow Flycatcher, and additional research is needed.

## Fighting for Fish

Native fish populations have declined due to human-created impacts to streams: sedimentation, channelization, encroachment, water pollution, flood control structures, sand and gravel mining, and non-native plants and animals. Over 90% of California's riparian (streamside) habitat has been altered or degraded.

SAWA works to restore stream habitat and conducts native fish research and propagation. SAWA supports the native fish program at the Riverside-Corona Resource Conservation District's constructed stream, where biologists study and propagate the Santa Ana Sucker (a threatened fish species), the Speckled Dace, and the Arroyo Chub. The three native fish were once common in the Santa Ana River and its tributaries.



Santa Ana Sucker (threatened)

During 2008, biologists and field assistants also removed a variety of non-native animals, including crayfish, turtles, bullfrogs, sport fish, and more. The biological staff carried out a variety of general wildlife, vegetation, and river-bottom surveys in different areas of the watershed. They surveyed for sensitive species, including Cactus Wren, Burrowing Owl, Loggerhead Shrike, San Diego Horned Lizard, and endangered plants. Biologists submitted their breeding bird survey results for publication to the Institute for Bird Populations, presented educational programs at conferences, and mapped wetlands.



Kerwin Russell

Biologists removed this red-eared slider turtle from Lake Perris. It was later adopted as a pet.

*Please, never release pets into the wild.*

Biologist Nicole Housel samples macro-invertebrates and tests water quality. Macro-invertebrates, such as stoneflies and mayflies are indicators of water quality.





nestlings (endangered)

## Taking Back the River

By the end of 2008, SAWA will have removed and treated more than 3,200 acres of invasive plants, restoring native riparian forest to broad areas in the River and its tributaries. As a result, over 11,250 acre-feet of water are restored to the river each year (native plants use less water than invasive, exotic plants).

Due to the aggressive growth of some invasives, specifically the prolific *Arundo donax*, eradication requires years of commitment. After removing the top of the plant, regrowth is sprayed repeatedly with a systemic herbicide, which is transported through the reeds to the roots. (*Rodeo* is the brand name, glycol is the active ingredient. Unabsorbed herbicide degrades to harmless ingredients within 48 hours.) After years of treatment, the huge root mass dries. Over time, native plants reclaim the treated areas. If not, SAWA embarks on replanting with native species.

SAWA's hard-working removal crew (Tim Romo, Neftali Mendoza, and Arcenio Hernandez) and outside contractors are currently cutting 500 acres of invasive weeds, including *Arundo donax*, tamarisk, castor bean, and perennial pepperweed, at the Hidden Valley Wildlife Area, downstream from Van Buren bridge, along the Santa Ana River in Riverside. The project was suspended from March through September in an effort to not disturb bird migration and breeding. The PAR (**Proposition 50 Arundo Removal**) project was funded by an Integrated Regional Water Management Grant through the State Water Resources Control Board.

*"It is estimated that 1,800 acre-feet of water will be restored to the river annually as a result of these removal efforts."* Project leader Tim Romo

## Cleaning the River

SAWA supported three waterway cleanup events in the Santa Ana Watershed this past October. The collaborative efforts helped clean portions of Mill Creek, Chino Creek, and Temescal Wash. In all, 507 volunteers helped remove 194 tons of trash and debris to improve water quality and habitat for wildlife.

## Connecting People to Nature

SAWA's Education Coordinator and Naturalist are now offering field trip programs with hands-on activities, called the Water Discovery Program. The programs and new Interpretive Center are located at the Chino Creek Wetlands and Educational Park at the corner of Kimball Avenue and El Prado Road, in Chino. SAWA has partnered with the Inland Empire Utilities Agency that created the park at its LEED certified headquarters.

SAWA is also developing volunteer and internship programs, and will be seeking volunteers to serve as docents at the Chino Creek Wetlands Park. Periodically, SAWA relies on volunteers to help with projects, including river/creek surveys, bird counts, habitat plantings, waterway cleanups, and invasive species control. SAWA is planning to offer internships for high school and college students. To learn more about SAWA's education and volunteer opportunities, please contact Education Coordinator Dolly Aguirre at (909) 606-1933, Ext. 110 or [daguirre.education@sawatershed.org](mailto:daguirre.education@sawatershed.org).



## Why does the Santa Ana Watershed need help?

The watershed has suffered extreme changes. Much of it has been converted from native habitats to urban and agricultural uses, drastically reducing its ability to naturally filter and clean water and air, decompose waste and recycle nutrients, moderate climate extremes, and reduce flooding. These *ecosystem services* are fundamental to life. However, when natural cycles are interfered with, we can help restore them by correcting what people have inadvertently altered.

*If you are a homeowner, please help by removing invasive plants from your yard. Find planting recommendations at [www.PlantRight.org](http://www.PlantRight.org).*



Melissa Badalian

## Save the Date!

**February 25, 2009** **A Day in the Park**, 3:30-5:30 PM, Chino Creek Wetlands and Educational Park, 6075 Kimball Avenue, Chino, CA 91708, (909) 606-1933, [www.ieua.org](http://www.ieua.org)

**March** **SAWA's six-week Docent Training**. Please call Dolly Aguirre, Ext. 110.

**April 22, 2009** **Earth Day**, 3:30 p.m. to 6:30 PM Chino Creek Wetlands and Educational Park, 6075 Kimball Avenue, Chino, CA 91708, (909) 606-1933, [www.ieua.org](http://www.ieua.org)

**April 22, 2009** **Earth Night** from 4 to 8 PM Western Municipal Water District's water conservation garden, Landscapes Southern California Style<sup>SM</sup> 450 E. Alessandro Blvd. Riverside, (951) 789-5036, [www.wmwd.com](http://www.wmwd.com)

## About SAWA

SAWA was formalized in 2002 as a non-profit organization (501c3). Today it is comprised of four Resource Conservation Districts (RCDs) and one water district.

SAWA works collaboratively with a variety of agencies, organizations, and private citizens to restore the River and to help improve environmental quality throughout the watershed. SAWA constantly seeks funding and had raised over \$30 million by July 2007.

## Member Agencies and Representatives:

Elsinore-Murrieta-Anza RCD, Vicky Long, (951) 698-9366  
Inland Empire RCD, Jennifer Ares, (909) 799-7407  
Orange County Water District, Dick Zembal, (714) 378-3213  
Riverside-Corona RCD, Diana Ruiz, (909) 238-8338  
Orange County Water District, Dick Zembal, (714) 378-3213  
San Jacinto Basin RCD, Gayle Holyoak, (951) 654-7733



## Main Office and Interpretive Center

Corner of Kimball Avenue and El Prado Road, Chino.  
Enter off El Prado Road.  
Located at the Chino Creek Wetlands and Educational Park, a project of the Inland Empire Utilities Agency  
P.O. Box 219, Chino, CA 91708  
(909) 606-1933  
Executive Director: Lee Reeder, Ext. 105  
Cell (951) 522-0440.

Stop by SAWA's budding interpretive center.  
Monday-Friday 8AM-5 PM (8AM-7PM during summer).

## You're Invited!

Visit our Quarterly Partner/Agency meetings and the SAWA board meetings (fourth Thursday of each month at 9 AM). Please call for locations.

## Sub Offices:

Inland Empire Resource Conservation District  
25864-K Business Center Dr.  
Redlands, CA 92374  
(909) 799-7407

## Native Plant Nursery, Construction Facility

Riverside-Corona Resource Conservation District  
4500 Glenwood Dr., Building A  
Riverside, CA 92501  
(951) 683-7691