

## Groups join to destroy invasive water plants

San Diego Union-Tribune December 4, 2004 By Craig Gustafson

HARMONY GROVE – Some people say you can watch it grow.

A perennial contender for the top spot on the state's most-unwanted-plants list, *Arundo donax*, a bamboo-like grass, has been invading local waterways for years.

For the first time, though, a collection of North County cities and agencies is working together to permanently eradicate the aggressive plant.

Formed in 1997, the Carlsbad Watershed Network is spearheading a three-year \$4 million project to remove *Arundo* and other destructive plants from the region. Officials say that invasive non-native vegetation harms wildlife, increases fire and flood risk, decreases water quality and pushes out native plants.

"Physically, they need to come out somehow," said Eric Munoz, a senior planner for the city of Carlsbad. "Otherwise they'll blanket over the area and they'll re-establish what our landscape is, and then we won't be able to reverse it."

Besides Carlsbad, the network includes the cities of Encinitas, Escondido, Oceanside, San Marcos, Solana Beach and Vista, along with conservation groups and the county.

*Arundo*, also called giant reed, has been particularly crippling to Escondido Creek, the largest watershed in the network's territory. It runs nearly 25 miles and covers 54,000 acres from Valley Center west to the Pacific Ocean. The creek contains about 80 percent of North County's *Arundo*, which causes frequent flooding and deprives native plants of basic nutrients.

The amazingly destructive plant's vigorous growth, and its ability to prosper in a wide range of conditions, make it particularly difficult to eliminate, said Doug Gibson, the project manager. *Arundo* can grow several inches a day and stretch up to 40 feet in length.

"It's like trying to put out a fire, so to speak," said Gibson, who also is executive director of the San Elijo Lagoon Conservancy, which received the \$4 million state grant for the project on behalf of the watershed network. "If we walk away in three years, it'll all come back."

That's why Gibson has spent much of the past year acquiring permission from hundreds of landowners along the creek to remove *Arundo* from their property. Only a handful of landowners with smaller parcels are still holding out, he said.

In October, crews began the laborious process of destroying the creek's *Arundo*. As they tackle each section, workers bend the tall plants over to create a mushroom-like shape, then spray a blue-colored herbicide called Rodeo along the stems so that it absorbs into the plant's root structure.

In January and February, crews will return to mow down the *Arundo* and use the mulch to cultivate native plants such as willows. The cycle will continue for three years, with a break from mid-March to mid-December to coincide with the mating season for most wildlife.

Gibson said spraying with a herbicide is the only way to permanently kill *Arundo*. Chopping it down without destroying the roots would only create a temporary solution. If any part of a root remains, a new plant will sprout up again in a few months, he said.

*Arundo*, native to countries surrounding the Mediterranean Sea, was introduced in the southern

United States in the early 1800s as an ornamental plant. French immigrants are believed to have introduced Arundo to California in the 1890s for use as wind breaks on ranches.

The success of its invasion has been aided by a lack of cohesion between various cities and agencies in fighting it. For example, while one downstream city removes its Arundo, an upstream city would neglect to do the same, allowing it to regain its foothold all along the waterway.

The problem is compounded when considering that North County's seven watersheds drain into numerous creeks and lagoons, crossing dozens of jurisdictions.

Officials said they hoped widespread cooperation this time will keep Arundo from quickly returning.

Frank McCulloch, who has lived along Escondido Creek for 25 years, says he knows how destructive Arundo can be and how difficult it is to remove.

"I've been fighting it since I've been here," he said. "It's a big problem and it's gotten worse over the last few years as more has grown."

A retired elementary school teacher, McCulloch said he's lost about four feet of his creek bank because Arundo builds up and alters the flow of water. It also acts as a natural dam, capturing bottles and other trash.

"What they're doing is going to be a tremendous asset to the whole creek," McCulloch said. "I'd like to see everybody participate because if they don't, the stuff can break away on its own and stems wash down, and wherever they stop that thing will do its thing."

Ray Barnett, who lives on Harmony Grove Road near Escondido Creek, said he's seen large patches of Arundo flow downstream and smash small bridges. "It's really alarming because it can do so much damage," he said.

When a conservation crew came last month, he witnessed another of Arundo's traits: home for all kinds of critters.

"I saw one of the biggest rats I've ever seen in my life when they were trimming out there," Barnett said. "It looked like a small dog running across the road."

One state's invasive species, however, is another's alternative fuel.

In Florida, Arundo is seen as a replacement for coal and wood products. One company has even contracted with the city of Jacksonville to deliver electricity derived from the burning of tons of the giant reed.

Arundo can be found in all of North County's watersheds. The conservation project also targets other invasive plants such as pampas grass, tamarisk and eucalyptus.

Besides long-term ecological effects, officials said the public should be concerned about Arundo's role as a dual threat. The plant serves as kindling for fires in the summer and creates dams and flooding in the winter.

"The reason why people should care is for the aesthetics of the creek, and also for the impacts that it has on both the wildlife and property in terms of fire and flooding," said Leonard Wittwer, a board member with the Escondido Creek Conservancy.

As for the project, he said, "It's a really good opportunity to take care of this nasty plant."