

To save a slough



JUDITH CALSON — MERCURY NEWS PHOTOGRAPHS

Jerry Busch, president of Watsonville Wetlands Watch, is among those trying to preserve species like the foliage, inset at top, and the goldfinch below that live in the Watsonville Slough system.

New tests will set stage for preserving unique nature of the Watsonville Slough

BY ^{Wetlands} **TERRI MORGAN**
Special to the Mercury News

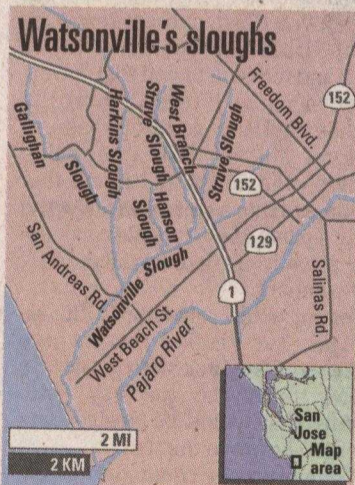
In the dwindling family of central coast wetlands, the Watsonville sloughs have been the poor stepsisters of the more scenic and celebrated Elkhorn Slough down the coast in Moss Landing.

But efforts are under way to give the six waterways that make up the Watsonville system — which has been at the heart of nearly every land-use controversy in the Pajaro Valley in recent years — their due with studies of water quality, erosion and wildlife.

Because the sloughs are intricately connected to local water supply, flood control and agricultural drainage, the plan is intended to improve their function as infrastructure as well as habitat.

"There have been very few studies of the Watsonville Slough system," said Susanna Danner, program manager for the Coastal Watershed Council. "It really has, compared to Elkhorn Slough, been overlooked."

The 1,400-acre Elkhorn Slough, which opens to Monterey Bay at Moss Landing, was designated as a National Estuary Research Re-

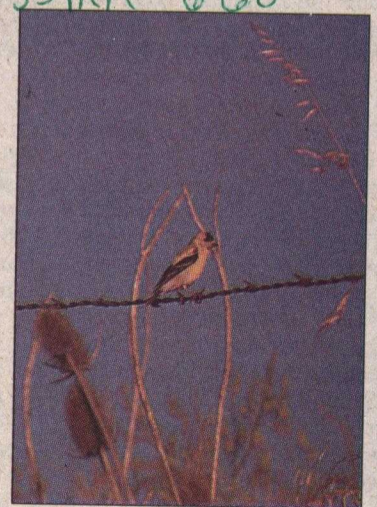


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serve in 1979, making it a field lab for education and research.

Its brackish waters filled with seals, otters and egrets are visible to motorists from Highway 1. Bird-watchers and kayakers come in droves, and a pontoon boat bristling with camera-laden tourists regularly plies its main channel.

The 800-acre Watsonville Slough system, by contrast, is not a reserve, and is mostly tucked away amid farms — barely visible from



the highway.

Yet it is the largest freshwater wetland on the central coast and among few remaining in the state. Red-legged frogs, tiger salamanders, eagles, falcons and a host of other birds call it home.

"It doesn't have the whiz-bang of Elkhorn Slough, but it's still as important," Danner said.

Those familiar with the Watsonville Slough system say it is a *na*

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Tests to determine health of slough

■ SLOUGH

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ture lover's paradise, home to numerous plants and animals rarely seen elsewhere in the state.

"They're a genetic repository for diverse plants and wildlife once found along the central California coast," said Jerry Busch, president of Watsonville Wetlands Watch, a group founded in 1991 to protect and restore the wetlands of the Pajaro Valley. "Twenty-seven of the 68 species of birds listed as being of special concern by the state have been observed in the Watsonville sloughs."

Sloughs also are important, Busch said, because they help filter out pollutants before they reach the ocean.

This summer the non-profit watershed council — founded in 1995 to advocate the protection and preservation of coastal watersheds in Santa Cruz, Monterey, San Mateo and San Luis Obispo counties — will begin monitoring water quality, erosion and wildlife populations in the Watsonville sloughs.

"It's an expansion of what's proven successful in Elkhorn Slough," said Santa Cruz County planner Donna Bradford.

The project comes on the heels of an effort launched in March to develop a plan for improving and protecting the Watsonville system. The plan is being developed by the city of Watsonville, Santa Cruz County, the U.S. Environmental Protection Agency, the local farm bureau, the water district and conservationists. The EPA and California Coastal Conservancy have contributed \$200,000 toward the project.

Multiple efforts

These are just two of the projects under way to help protect the central coast sloughs.

The Santa Cruz County Resource Conservation District provides growers and landowners around the sloughs with information and technical assistance to reduce erosion and runoff — which also helps growers retain valuable topsoil and maintain the viability of agriculture.

But the efforts under way in the Watsonville sloughs are particularly important, advocates say, because there are so few freshwater wetlands left in the state.

"More than 90 percent of the freshwater coastal wetlands have been destroyed," said Busch. "I don't know of any freshwater wetlands of this size between the Oregon border and Mexico."

The bulk of the Watsonville system is between Highway 1 and the edge of the Monterey Bay, although several branches extend north and east of the highway into the center of Watsonville.

Since the Gallighan, Hanson, Harkins, Struve and West Branch Struve sloughs all drain into the Watsonville Slough, they are commonly referred to together as the Watsonville sloughs or the Watsonville Slough system.

Waters from the brackish Watsonville Slough, largely confined to drainage ditches along West Beach Drive, flow into the Pajaro River about a quarter-mile before it empties into the Monterey Bay.

This system has been altered over the past century as the city of Watsonville grew up around its north and eastern edges and farmers



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Harkins Slough is one of the waterways feeding into the Watsonville Slough, which comes close to homes in some areas.

drained the waterways to the south and west to cultivate the rich alluvial soils below.

While the Elkhorn Slough was preened under the watchful eye of the California Department of Fish and Game and a 15-member advisory committee assisted by more than 100 volunteers, the Watsonville sloughs were playing a key role in local land-use battles.

Watsonville Wetlands Watch has sued the city several times after its council approved development plans near Struve Slough. The agency that governs boundary changes in Santa Cruz County has rejected attempts by Watsonville in recent years to gain control over property west of Highway 1.

And earlier this year, city officials signed an agreement forgoing future annexation efforts in the area to help win Coastal Commission approval for a badly needed high school to be built between Hanson and West Branch Struve sloughs.

"It's an intensely channelized, managed and altered system," said Bill Parkin, an environmental attorney who has filed numerous lawsuits aimed at protecting the sloughs. "Historically we've looked at them as a nuisance and garbage dumps. We've just begun to understand they're a fantastic resource and a lot of our fisheries depend on them."

Environmentalists say the slough system was originally much larger, probably covering most of the northwest side of the Pajaro Valley before early settlers began filling in the waterways.

Today the remaining wetlands are affected by surrounding land use. Fertilizers, topsoil and agricultural chemicals from surrounding farms wash regularly into the slough system, as do oil and radiator fluid

leaked by cars on neighboring roads, and urban runoff. The impact is so great that the State Water Resources Control Board designated the Watsonville system "impaired" nearly a decade ago.

A red flag

That designation raises a red flag, the Santa Cruz County Resource Conservation District says, indicating the slough can't filter and process all the sediment washing into the wetlands. It alerts land users to take stock of the erosion and runoff they may be contributing to the watershed.

The watershed council's two-year monitoring program, funded through the conservation district by the David and Lucile Packard Foundation, will provide a much closer and continuous look at whether the slough system is recovering or degrading further.

Council volunteers will go out two to three times a month, visiting eight to 10 different sites on each outing. Strolling along stream beds and the edges of the slough system, they will use meters to analyze and record data on the spot, and scoop samples to take back to the lab.

"We'll hit nearly every branch of the slough to get an idea of how water quality changes throughout the watershed," said Danner.

Measurements will be taken in so many different places because the slough system is so vast and varied.

"Near the city (of Watsonville) it's basically a drainage ditch," Danner said. At the mouth of "Harkins Slough, it's really wide, a huge expanse with egrets flying everywhere."

The project is designed to measure, record and compare the amount of dissolved oxygen, nitrates, phosphates and ammonia in the water, along with its temperature, pH, salinity and clarity.

Like tests run in a doctor's office, each piece of information helps indicate the health of the system. By analyzing the amount of dissolved oxygen in the water, for example, watershed managers can gauge the health of the habitat and its ability to support fish and other life.

Participants will keep field notebooks and jot down their observations about the weather, presence of trash and vegetation. They'll also record what kind of birds — golden eagles, peregrine falcons, tri-colored blackbirds and other rare species — and other wildlife, like red-legged frogs and California tiger salamanders, they spot.

Project volunteers, like Kathy Hooper, 43, of San Jose, anticipate the project will be a fun way to explore the slough system while helping protect it.

"I'm looking forward to learning more about the area," said Hooper, who has been interested in water quality and water conservation issues for many years. The project, she said, will help people "look at the impact we have on our waters and wetlands. Anything that gets spilled on land eventually gets into the ocean."

Mercury News Staff Writer John Woolfolk contributed to this report.