



U.S. Fish & Wildlife Service

# Currents

Fiscal Year 2010  
Vol. 6 No. 3

## REGION 2 – SOUTHWEST REGION *Fisheries Program Highlights* (April – June 2010) September 2010

*Edited by Jeremy Voeltz, Arizona FWCO*



*Lots of smiling kids at the 16<sup>th</sup> annual fishing derby hosted by the Tishomingo NFH*

*Read the complete story on page 1*

## Reflections on a STEP Student's Experience at Uvalde NFH



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*Uvalde STEP employee Katrina Huerta loads fish for a stocking run*

As the first ever STEP student at Uvalde NFH, one of my responsibilities is to ensure I do all that I can to assist in any activities the station takes on and to make sure they are done in a timely, yet safe manner for us and our fish. Another is to make sure that I do my very best so I leave a good lasting impression so future students may have an opportunity to be a part of an elite group who can learn and enjoy such a great program. But by far the most important responsibility as a STEP student is to reach out to as many people as possible, the young and the young at heart, to educate them on our efforts to conserve and recover not only the five endangered species we currently keep on station, but all of our imperiled aquatic species. I very much enjoy and value all that I do and what I've learned during my time at Uvalde NFH and hope to eventually start a career with the U.S. Fish and Wildlife Service.

***Katrina Huerta, Uvalde NFH***

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## Annual Fishing Derby a Big Success

Tishomingo NFH hosted their 16<sup>th</sup> annual fishing derby in June, attracting more than 300 kids from seven states and more than 20 local communities (a 21% increase from last year). The fishing derby provides a free fishing experience that teaches children about recreational fishing and why healthy aquatic ecosystems are important to people and the environment. Kids enjoyed their limit of five channel catfish with several children describing the day as their first fishing experience, or best fishing trip ever. The event would not have been as successful without the donations of prizes, refreshments, and time from the Chickasaw Nation Nutrition Services, Tishomingo National Wildlife Refuge, National Wild Turkey Federation, Oklahoma Department of Wildlife Conservation, Oklahoma Aquarium, Tishomingo Refuge Ecology and Education Society, several local businesses and individuals.



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*More than 300 children came out to fish at Tishomingo's annual fishing derby*

***Rebecca Fillmore, Tishomingo NFH***

## Uvalde NFH Celebrates Free Fishing Day



Let's go fishing! This is a phrase most children love to hear. The thought of going out to a body of water, throwing a line with a hook and something squishy at the end, added with the expectation of catching something big is very exciting for them. At the Uvalde NFH the focus is to stir the interest of the young, and the young at heart, with the Annual Fishing Derby held during the National Fishing and Boating Week in June. Much preparation goes into this event and as the years pass, the organizing, setting up, gathering of donations, etc. gets easier as the word continues to spread about the event. The rewards from the effort put into it are multiplied many times over when the staff and volunteers hear a simple "thank you" or "we had so much fun". This year we had more than 180 anglers take home some 1+ pound catfish and smiles as big as Texas. The event is always free and open to children ages 4-13 and included senior citizens, ages 62 and over. The Hatchery plans to continue this event as part of the National Free Fishing Day each June.

**Sandra Castaneda, Uvalde NFH**

*A child with a huge smile as she catches her first fish.*

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## Arizona FWCO Assists with Fishing Derbies in Arizona

As part of our Tribal Trust responsibilities and in conjunction with the National Free Fishing Day in June, the Arizona FWCO assisted with fishing derbies held by the White Mountain Apache and Kaibab Band of Paiute Indian Tribes.

These free fishing derbies give Tribal youth an opportunity to spend the day in the outdoors with their families.

Rainbow trout were produced by the Alchesay-Williams Creek NFH for these events.

**Jennifer Johnson, AZFWCO**



*Youth from the Kaibab Band of Paiute Indians pose with prizes won at their annual fishing derby*

## Kids in the Creek at Inks Dam NFH

Five school groups, with hundreds of students in each group, visited the hatchery this summer to participate in the Inks Dam NFH's Outdoor Skills and Education Program. These students, teachers, and parents had the opportunity to experience "Kids in the Creek", Fishing Skills 101, printmaking, wildflower identification, and "What's Under Your Feet?" None of these events would have been possible without the hard work and dedication of our Friends Group and volunteers who logged hundreds of hours in supporting hatchery personnel. The teachers at our local schools plan to use some of the information obtained through this program to develop an outdoor education program at the school.



*Students get a chance to explore the aquatic life found in a creek at Inks Dam NFH's Outdoor Skills and Education Program*

**Marc Jackson, Inks Dam NFH**

## NMFWCO assists with Native American Youth Practicum



*Tribal Youth learn how to identify fish collected from a creek*

This summer, the NMFWCO participated in the 15th Annual Southwest Region-Native American Fish & Wildlife Society Youth Practicum held this year at Hermosa Ranch. Fifteen Native American high school students from throughout the Southwest Region participated in the one-week practicum exposing them to various fields in natural resources, including fisheries. Youth were divided into three groups of five individuals to allow students to interact and acquire hands-on training at each session. The NMFWCO staff discussed and demonstrated the safety, purpose, and usage of backpack electrofishing to survey streams.

**Chris Kitcheyan, New Mexico FWCO**

## Outdoor Education Events Hosted by Tishomingo NFH



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*4<sup>th</sup> graders attend an outdoor education event hosted by the Tishomingo NFH*

This summer, staff from the Tishomingo NFH set up educational booths at Murray State Park and the Greater Southwest Historical Museum (GSHWM) in Ardmore, Oklahoma to give biologists an opportunity to interact with, and educate students and parents from the local community. The event at Murray State Park was organized by the Love County Cooperative Extension Service and was attended by more than 150 children from four area schools in Oklahoma. Each class of 4th graders spent approximately 25 minutes at the booth while the biologists described and answered questions on why and how each species is reared at the hatchery. The hatchery also participated in the 1st Annual Wildlife and Outdoor Education Expo sponsored by the GSHWM. This event was open to the public and attended by numerous families to learn about Oklahoma's wildlife and outdoor opportunities. Both events featured live alligator snapping turtles that are raised at Tishomingo NFH.

**Brian Fillmore, Tishomingo NFH**

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## New Tribal Sportfishing Opportunity

In June, Tishomingo NFH staff met with Kickapoo Environmental Division staff to discuss opportunities for establishing a bass fishery on Kickapoo tribal lands. The hatchery stocked approximately 50 largemouth bass fingerlings into a pond located on tribal trust land near McLoud, Oklahoma. The 4.5-inch largemouth bass were stocked for the second year in an attempt to establish fishing opportunities for neighborhood tribal members and their families.



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*A new sportfish pond on Kickapoo Tribal Trust lands*

**Ralph Simmons, Tishomingo NFH**

## Willow Beach NFH Goes Solar

Willow Beach NFH recently installed an 8.39 Kilowatt photo voltaic solar power system. Since its installation, the hatchery has saved 5.22 Megawatt-hours of electricity. This translates to 3.39 tons of CO<sub>2</sub> not being released into the atmosphere. Willow Beach is located in the Mohave Desert in Arizona and averages 334 days a year of sunshine which makes the hatchery a perfect location to generate solar electricity and reduce traditional energy consumption. The hatchery received a rebate from the local power company for installation of the system that will purchase more panels in the future, making the system approximately 12 Kilowatts.



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*New solar panels at Willow Beach NFH*

**Scott Peterson, Willow Beach NFH**

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## Inks Dam NFH Quarterly Tribal Sportfish Update



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*Inks Dam NFH workers load sportfish for stocking on Tribal lands in the Southwest Region*

During the quarter, Inks Dam NFH distributed channel catfish to five Tribes in fulfillment of our tribal trust responsibilities. The Navajo Nation received 13,250 fish; Zuni Reservation received 3,035; Zia and Jicarilla Reservations received 4,050 each; and the Ohkay Owingeh Reservation received 4,396 fish.

Due to the impact resulting from construction projects funded through the American Recovery and Reinvestment Act, the hatchery is currently propagating all 2011 tribal production in troughs, tanks, and raceways. Once the pond construction is completed, which is scheduled for September, production fish and broodstock will be moved to the newly renovated ponds.

**Marc Jackson, Inks Dam NFH**

## Willow Beach NFH Partners with State of Nevada



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*Staff from NDOW cleans a raceway at Willow Beach NFH*

Willow Beach NFH has an ongoing partnership with the Nevada Department of Wildlife's (NDOW) Lake Mead State Fish Hatchery to provide trout fingerlings for their rainbow trout program. The fingerlings will be grown to 10-inches for stocking Nevada and Arizona state waters. Willow Beach NFH receives extra eggs from several federal brood stock facilities each year to fulfill the agreement. These eggs are hatched and reared to 3-inches before being transferred to NDOW. In June, NDOW received its final fingerling transfer, totaling approximately 50,000 fish in fiscal year (FY) 2010. In return, NDOW staff assists with hatchery operations, such as cleaning raceways and loading and hauling fish.

***Kurt Eversman, Willow Beach NFH***

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## Increased Tourism at Willow Beach NFH

With the summer heat come tourists looking to explore Lake Mohave and all it offers, including the Willow Beach NFH. During the month of June, hatchery staff gave tours to 75 visitors from four different organizations including elementary and 4H students, boy scouts, and local fisherman. Visitors learned the history, function, and mission of the hatchery and its role in providing rainbow trout for fisherman and razorback sucker and bonytail chub for recovery efforts in the lower Colorado River system.

Several students from the 4H group asked very specific questions, leading me to believe that they may be interested in future careers as fish biologists.

***Kurt Eversman, Willow Beach NFH***



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*A group of boy scouts tour Willow Beach NFH*

## Outreach Through Art at Uvalde NFH

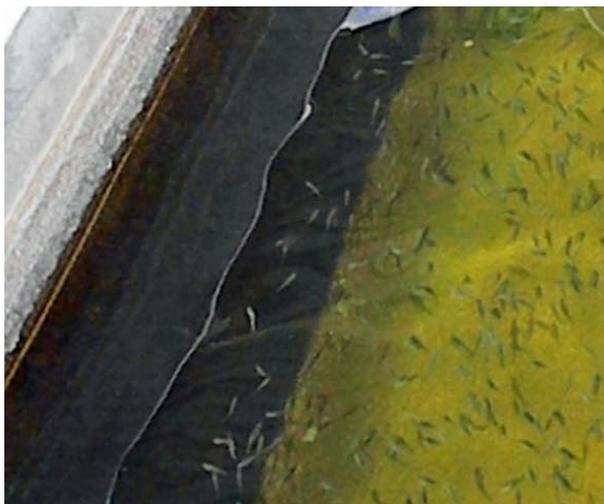
In an effort to get the community of Uvalde, Texas more interested in the Uvalde NFH, staff went to talk to the local high school hoping to interest them in completing an art project that would involve fish with the results ultimately displayed at the hatchery. As a result the entire Uvalde school district featured fish in their art projects this year and at the end of the year those projects were displayed at the public library in an art show, which Uvalde NFH staff were invited to attend. The projects ranged from sketches to ceramics and the species selected by the students included both fresh and salt water fish species. The junior high school's paper-mache art project is now on permanent display at the hatchery. We are currently discussing future art projects and a joint art and science field trip once Uvalde's Outdoor Classroom is in place.



*Fish art, constructed by junior high school students, hangs at the Uvalde NFH*

**Karin Eldridge, Uvalde NFH**

## 2010 Razorback Sucker Production at Willow Beach NFH



*Young razorback suckers are grown from larvae to over 15-inches at the Willow Beach NFH*

The last of the 2010 year class of razorback suckers have been transferred from the inside raceways to the outside re-circulating systems. The larvae started arriving on station in late January where they spent approximately two weeks in the aquariums before being transferred to the inside raceways for a duration of 2-5 months. In total there were approximately 30,300 razorback suckers moved to the outside re-circulating systems, and another 5,450 were transferred to the Nevada Department of Wildlife. The 2010 year class will spend approximately three years on station before being released into the lower Colorado River system.

**James Hare, Willow Beach NFH**

## Seafood Buffet Closed at Willow Beach NFH



Willow Beach NFH is located on the Colorado River in the Mohave Desert, a popular water source along the migration route for many birds in the West. Herons, ravens, and mallards prey on small fish and inflict physical damage to the ones they miss, creating open wounds for diseases. Mallards also serve as vectors for disease transmission by swimming in the river and then swimming in the treated re-circulating water systems. To deter bird predation, the hatchery's outside raceways are covered by fencing and bird netting; however, extreme sunlight degrades the bird netting resulting in torn netting that allows birds to enter the raceways. Hatchery staff recently removed the damaged netting and replaced it with a UV resistant material, hopefully lengthening the time between replacements!

**Angela Baran, Willow Beach NFH**

*Staff at Willow Beach NFH repair bird netting covering the raceways*

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## Conservation of Clear Creek Gambusia Continues

With the assistance of Region 2 Engineering and the Austin Ecological Services Field Office, a plan was developed to repair the head pool dam which protects the last remaining wild population of Clear Creek gambusia. Funding for the dam repairs was obtained through the Partners for Fish and Wildlife Program and a Preventing Extinction grant. The head pool dam serves as a barrier to prevent non-native gambusia from hybridizing with Clear Creek gambusia. Several hundred individuals will be transferred to Inks Dam NFH to serve as a backup population prior to dam renovations.



*This old dam protects the only remaining wild population of Clear Creek gambusia*

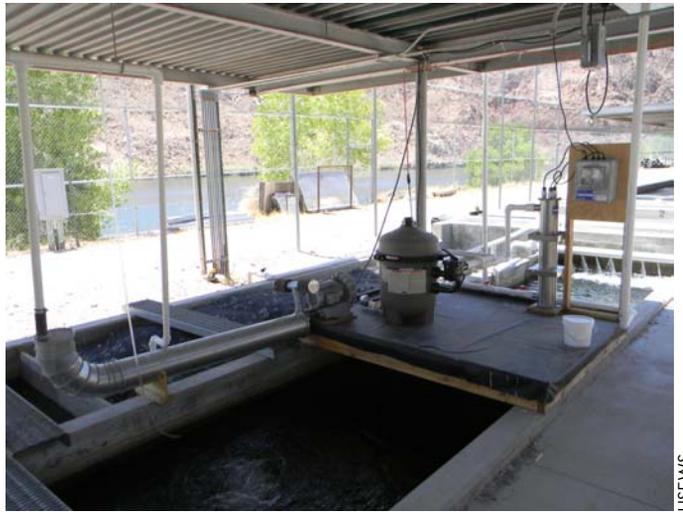
**Marc Jackson, Inks Dam NFH**

## Razorback Sucker Rearing Improvements

Willow Beach NFH has recently updated all eight of the recirculation units that are used to rear razorback suckers. All of the equipment, including one-horsepower water pumps, stainless steel sterilizers, filters, heat diffusers, air blowers, and solar powered water heating pipes was updated or replaced along with new air manifolds, air lines, and air stones.

By updating these systems, the recirculation units have improved water movement, water quality, and heating efficiency. The new systems are less maintenance and ultimately will give Willow Beach NFH the ability to produce higher quality razorback suckers for recovery efforts in the lower Colorado River area

***Giovanni Capelli, Willow Beach NFH***



*Upgraded recirculation units will allow for more efficient production of razorback suckers at Willow Beach NFH*

## Recovery Act Projects Completed at Inks Dam NFH



*The new water filtration system at Inks Dam NFH*

During the 3<sup>rd</sup> quarter of 2010, progress was made on projects funded under the 2009 American Recovery and Reinvestment Act at Inks Dam NFH. A new water filtration system was installed which will reduce or eliminate non-target organisms entering the hatchery. In addition, drain lines, levees, retaining walls, and pads were either repaired or installed on several of the ponds at the facility.

***Marc Jackson, Inks Dam NFH***

## Seismic Retrofits at Willow Beach NFH



Willow Beach NFH recently completed two American Reinvestment and Recovery Act projects to make corrections to the hatchery and shop buildings. The project tied the walls and roof together with bracing, strapping, and blocking so they do not topple like a house of cards in the event of a large earthquake.

This project required removing a large portion of the old roofing material that contained asbestos; infilling windows and doors; building a shear wall and completing finish work. In addition a new PVC roofing system was installed on both buildings.

*Workers retrofit the buildings at Willow Beach NFH*

**Mark Olson, Willow Beach NFH**

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## Tishomingo NFH Completes Recovery Act Projects

The Tishomingo NFH recently completed two projects funded under the 2009 American Reinvestment and Recovery Act. One project replaced windows and doors in the office building and visitor's center/crew building with energy efficient doors and windows, providing a quieter environment and less air-conditioning use during the hot days of summer. Double-paned vinyl replacement windows as well as both entry and passage doors were replaced with insulated metal doors and frames for additional energy savings. The second project involved reconfiguring and lining of two ponds to reduce water consumption. Both newly lined ponds were successfully leak tested and are currently in use for production.



*A pond at Tishomingo NFH is prepped for installation of a new liner*

**Ralph Simmons and Mary Davis,  
Tishomingo NFH**

## Parasite Research at San Marcos NFHTC

As part of an ongoing research effort to understand the affects of an exotic trematode on the endangered fountain darter in the Comal River, staff from San Marcos NFHTC are collecting biweekly to monthly water samples and then counting the trematodes using a dissecting microscope.

This research project examines the hypothesis that the number of trematodes per volume of water (and thus the potential infection rate for the fish) will increase as the spring flows (the source of the river) decrease. Under the drought conditions Central Texas experienced last year, the flow from the springs decreased greatly. One of the few benefits of that drought is that it gave us an excellent window of opportunity to monitor the situation and determine if the fountain darter was under increased environmental pressure. Data analysis is ongoing. We hope to publish this work in a peer-reviewed journal within the calendar year.

***Mara Alexander and Matt Johnson,  
San Marcos NFHTC***



*Research on a parasite that affects endangered fountain darter is on-going at San Marcos NFHTC*

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# Southwest Region Fisheries Division

## National Fish Hatcheries

The National Fish Hatcheries (NFH), at Willow Beach, Alchesay-Williams Creek, Uvalde, Tishomingo, and Inks Dam; develop and maintain brood stocks of important fish species, both sport fishes and critically imperiled non-game fishes. The hatcheries are the source of fish and eggs distributed to partners with similar aquatic conservation missions, such as native fish restoration or fulfilling federal mitigation responsibilities. Hatcheries are often called upon to provide a place of refuge for imperiled aquatic organisms, such as aquatic plants and amphibians.

## Fish and Wildlife Conservation Offices

The Fish and Wildlife Conservation Offices (FWCO) in Arizona, New Mexico, Oklahoma, and Texas evaluate wild native fish stocks and their habitats, and work with partners and other Service programs to restore habitats and fish populations.

These offices provide technical fish and wildlife management assistance to tribes and other partners with a primary focus on native aquatic species.

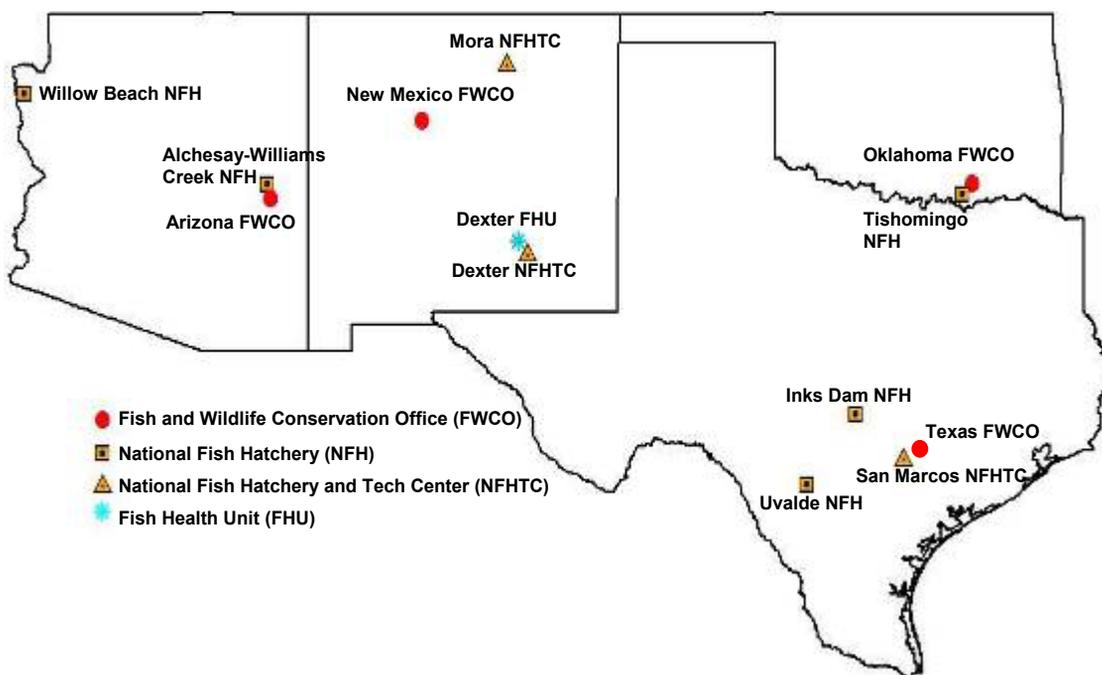
## Fish Technology Centers

The Fish Technology Centers (NFHTC), at Dexter, Mora, and San Marcos; develop leading-edge technology for use by tribal, state, and federal fish hatcheries and fishery biologists to make fish culture more productive, cost-effective, and scientifically sound.

Technology improves hatchery efficiency; helps assure the genetic integrity of fishes, at the same time minimizing the effects of hatchery fish on wild fish stocks.

## Fish Health Unit at Dexter

The Fish Health Unit (FHU) at Dexter assesses the well-being of fish that live in the wild or are raised at hatcheries. Fish health biologists are highly trained in various scientific disciplines, like immunology, epidemiology, toxicology, and genetics. They apply that knowledge in fish health assessments that might lead to early detection of potentially devastating diseases, prescribing preemptive measures.



# SOUTHWEST REGIONAL FISHERIES OFFICES

*Regional Office, Division of Fisheries and Aquatic Resource Conservation*

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Mike Oetker, Assistant Regional Director ([Mike\\_Oetker@fws.gov](mailto:Mike_Oetker@fws.gov))

## Arizona

### **Alchesay-Williams Creek National Fish Hatchery**

PO Box 2430  
Pinetop, AZ 85935  
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### **Arizona Fish and Wildlife Conservation Office**

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### **Willow Beach National Fish Hatchery**

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928-767-3456

## New Mexico

### **Dexter National Fish Hatchery and Tech Center**

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### **Mora National Fish Hatchery and Tech Center**

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### **New Mexico Fish and Wildlife Conservation Office**

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## Texas

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### **San Marcos National Fish Hatchery and Tech Center**

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