

# NATURE

### **NEW MEXICO**

**SPRING 2015** 



Terry Sullivan

### Dear Friend,

News about the drought in California is everywhere. As summer approaches, bringing heat and more dry conditions, I wonder about the lasting effects of this situation on the quality of life, economy and wildlife in that state.

Here in New Mexico we are focused on activities to restore our rivers and streams and help them become resilient to climate change and other challenges. By creating conditions for nature to thrive, we can also secure water for future generations.

This newsletter highlights our recent activities on the San Juan and Colorado Rivers. Our work is not going unnoticed. Laura McCarthy, our Conservation Programs Director, received the Governor's New Mexico Environmental Leader of the Year Award for her work on the Rio Grande Water Fund.

Your support is critical to ensuring the Conservancy is able to continue making a difference for New Mexico's precious lands and waters. Thank you for your commitment to conservation!



#### SUPPORT OUR WORK

Make a donation with the enclosed envelope or at **nature.org/donate**.



Arial photos from 1935 (top) and 2011 (bottom) show how the side channels of the San Juan River dried up over time because of limited runoff from the Navajo Dam and invasive tree growth. © Soil Conservation Service/USDA

# Western Rivers in the Spotlight

Restoration Activities Benefit Nature and People

Water issues are in the media spotlight this year as drought conditions persist in many states, including New Mexico. As a result, millions of Americans are learning more about where their water comes from and about the risks to their water supply. The Conservancy has a strong history of working with partners to preserve

freshwater resources for nature and people. Two current projects—restoring San Juan River flows and renewing life in the Colorado River delta—are especially promising.

For decades, the Navajo Dam has prevented flooding to the San Juan River's

slow-moving channels that provide spawning grounds for native fish. At the same time, non-native Russian olive trees have armored the river's banks and grown into those channels. By the late 1990s, native Razerback suckers and Pikeminnows were functionally extinct. Over the past three years we have collaborated with agencies in the U.S. Government and the

Navajo Nation to remove invasive trees and restore seven miles of low-velocity waterways so native fish can thrive.

The Colorado River is the eventual destination of the San Juan and one of the great rivers of North America. It used to flow through Mexico

to the Sea of Cortez but its delta has been a dry, sandy river bed for the past 50 years. In March 2014, a "pulse flow" of water—designed to mimic spring runoff—was released in the river bed for the first time ever. A year later, initial reports show it has been successful



Bobby Duran of the U.S. Fish and Wildlife Service holds the largest Pikeminnow ever tagged on the San Juan. They grew up to six feet long in the past. © Mark McKinstry

in recharging groundwater, promoting new vegetation and increasing migratory bird abundance in the delta. The US Department of Interior and *Discover Magazine* hailed it as a top achievement of 2014. The Conservancy is proud to play a key role in preserving this iconic river and in restoring essential waterways in New Mexico.



Installation of a flat-plate, pass-by antenna to track tagged fish in a shallow channel of the San Juan River. © Mark McKinstry

## Q&A

# Meet Mark McKinstry, PhD

A biological scientist at the Bureau of Reclamation Adaptive Management Group, McKinstry manages programs to track endangered fish on the San Juan River.



Mark McKinstry

#### When do you tag fish in the San Juan River?

We tag Razorback suckers when they leave the hatchery at 12-15 inches in size. We release about 400,000 tiny Pikeminnows at a time (only 10 percent survive), so we tag those in the wild when they're over six inches.

#### What kind of tag do you use?

We use passive integrative transponder (PIT) tags. They're the size of a grain of rice—the same thing that vets use to tag dogs and cats.

#### How do you tag wild fish?

We use electrofishing, which stuns the fish with low-amperage electricity for a few minutes so we can net them and tag them.

#### How do you track them after they're tagged?

In shallow channels we attach flat-plate antennas to the river bed and fish are tracked when they swim over them. In lakes or deeper waters we use submersible or floating antennas. Where flow is regulated (like on a fish ladder), we use pass-through antennas.

#### How does tracking help endangered fish?

By tracking populations of endangered fish, we know what restoration efforts are most effective. For example, we didn't know how important tributaries were until we installed these tracking systems. Now, expanding secondary channels is a major goal for the San Juan.



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#### DID YOU KNOW?

Desert fish are the most imperiled in the U.S. and  $\frac{30\%}{}$ 

of threatened and endangered fish are located in the arid southwest.

### Water for People and Nature



Robert Efroymson and his family

A new, far-reaching, agriculture-related program to retain more water in the Colorado River will incorporate acquisition and leasing of water rights and improvements to irrigation infrastructure and operations for farmers. Robert Efroymson, trustee for the Conservancy in New Mexico, recently provided a generous gift to help support these efforts.

"Incentives for farmers to save water are backwards and I'd like to see that changed," says Efroymson. "The old ways don't work and now that water conservation is national news, I think we can make that happen."

### Get Involved

#### **Get Outside**

Visit our Gila Riparian Preserve or join a guided hike at the Santa Fe Canyon Preserve. Details at nature.org/newmexico

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