## San Antonio Express News

12/16/09

By Colin McDonald - Express-News

The U.S. Fish and Wildlife Service is considering adding nine species of Texas freshwater mussels to the federal endangered species list — a development that could change the management of rivers and watersheds across the state.

"It's going to open up probably a really big sore politically, because water is already an issue," said Fish and Wildlife Biologist Charrish Stevens, who's leading the evaluation. "But what people forget to remember is that (mussels) are what help us have clean water."

Some of the species are found in the San Antonio and Guadalupe rivers. Officials with both river authorities said an endangered species listing would have dramatic impacts.

Ultimately, cities and towns could be forced to limit development to control pollution and reduce water use.

When the federal government listed eight species as endangered and dependant on the San Marcos and Comal springs, it spurred lawsuits for their protection.

That led to the creation of the Edwards Aquifer Authority and a planning process to try to balance the needs of those who pump from the Edwards Aquifer, such as the city of San Antonio and Hill Country farmers, with downstream users, including the city of Victoria and Dow Chemical.

Almost two decades after the first lawsuits were filed, the debate about how to protect the species and meet the growing region's water demands hasn't been resolved.

# Mussels may be endangered

The U.S. Fish and Wildlife Service is gathering information as it considers listing nine species of freshwater mussels in Texas as either endangered or threatened. Because these species are spread across the state and are sensitive to water pollution and dependant on steady flows of clean water, their listing could change water management across the state.



EXPRESS-NEWS GRAPHIC

"This is bigger," Texas Parks and Wildlife Department aquatic biologist Marsha May said. "We are talking about East Texas, Central Texas and West Texas."

May coordinates the Texas Nature Trackers programs, which allow "citizen scientists," to volunteer their time to help with research the state is conducting. One of the programs is the Texas Mussel Watch.

"Freshwater mussels are one of the most imperiled groups of animals in the U.S. Texas hosts more than 50 species of native freshwater mussels," the program's Web page states.

The biggest threat to the species is the loss and degradation of habitat, May said. If sediment is dropped into a river, they can become smothered and die. If too much water is diverted from rivers, the mollusks will suffocate for lack of water.

"I see a lot of farmers and agriculture having a hard time with this," Stevens said. "And that goes for TxDOT — anyone with large construction that is going to affect water systems."

The mussels also depend on specific fish populations to scatter their young. For many of the species, like the golden orb, which is found in the San Antonio River, it's not known what that fish species is.

The San Antonio River Authority is studying the golden orb because it considers the filter feeders an indicator species for river health.

By protecting the mussels, those fish populations also will be assured survival, along with the entire aquatic ecosystem, May explained.

The state already has approved these and six other species of mussels to be listed as threatened under state guidelines.

"Basically, one of the very few tools they have is the Endangered Species Act," said Annalisa Peace executive director of the Greater Edwards Aquifer Alliance, which advocates for the protection of the aquifer and its water. "Especially in Texas, we have been so limited in what we can do with good planning."

Forcing Texas and the federal government to recognize the need for planning to protect the state's river ecosystems is why WildEarth Guardians sued Fish and Wildlife to evaluate the mussels.

The Fish and Wildlife Service started a 90-day review of the species on Tuesday. It will next determine if a more extensive 12-month review is warranted.

If federal funding is available, and the species are determined to be endangered or threatened, the process will take at least two years.

"If there is one thing these mussels don't have it is the luxury of time," said Nicole Rosmarino, Wildlife Program director for WildEarth Guardians.

## **Under review**

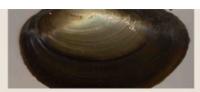
The U.S. Fish and Wildlife Service is considering whether to list these nine species of freshwater mussels as threatened or endangered under the Endangered Species Act.



#### **TEXAS FATMUCKET**

Historically found: Colorado, Guadalupe and San Antonio river systems

Currently found: Llano, upper San Saba and upper Guadalupe rivers



## **TEXAS HEELSPLITTER**

Historically and currently found: Neches River, lower-central Trinity River, upper Sabine River



#### SMOOTH PIMPLEBACK

Historically found: Brazos and Colorado river systems

Currently found: central Brazos, central Leon, central Little Brazos, Navasota and central Colorado rivers



#### **TEXAS PIMPLEBACK**

Historically found: Brazos, Colorado and Guadalupe-San Antonio river systems

Currently found: lower Concho, upper San Saba and upper San Marcos rivers



#### FALSE SPIKE

Historically found: Brazos, Colorado, Guadalupe and Rio Grande river systems

Currently found: lower San Marcos River



## **SALINA MUCKET**

Historically found: Rio Grande from New Mexico to northern Mexico

**Currently found:** Rio Grande from Big Bend to below Falcon Dam



#### **GOLDEN ORB**

**Historically found:** Guadalupe, San Antonio, Colorado and Nueces-Frio river systems

Currently found: upper and central Guadalupe and lower San Marcos rivers and Lake Corpus Christi



## **MEXICAN FAWNSFOOT**

Historically found: large section of the Rio Grande system, including the lower Pecos

Currently found: small section of lower Rio Grande near Laredo



## TEXAS FAWNSFOOT

Historically found: Brazos and Colorado river systems

Currently found: Brazos River and Colorado river systems

Photos: Texas Parks and Wildlife Department Source: Federal Register

#### FAIR USE NOTICE

This document contains copyrighted material whose use has not been specifically authorized by the copyright owner. The Texas Living Waters Project, which is a nonprofit undertaking, is making this article available in our efforts to promote comprehensive water planning in Texas. We believe that this constitutes a "fair use" of the copyrighted material as provided for in section 107 of the US Copyright Law. If you wish to use this copyrighted material for purposes of your own that go beyond "fair use", you must obtain permission from the copyright owner.