

WATERSHED WEEKS IN REVIEW



Have you enjoyed tubing the Comal River?

This may seem like a strange question for a newsletter about the Llano, but it provides some perspective.

Without the Endangered Species Act, Comal Springs, which feeds the River, would often be dry due to pumping from the Edwards Aquifer. Because of the endangered species located at the Springs, pumping must be balanced against protecting and preserving the habitat of the species.

US Fish and Wildlife Proposes Listing Freshwater Mussels on the Endangered Species List

The US Fish and Wildlife Service (USFWS) is proposing to protect six central Texas mussels under the Endangered Species Act. These include the Texas Fatmucket, Texas Pimpleback, and Texas Fawnsfoot, all of which are found in the Llano watershed.



Photo credit: MUSSELP

Texas Fatmucket shell from Llano River, 1843

Freshwater Mussel Listing- continued

Called the “Livers of the Rivers”, freshwater mussels are natural filters, helping to purify the river and keep the waters clear. However, these species have become threatened due to the decreases in water quality, loss of stream flow, riparian and instream habitat fragmentation and degradation of stream habitats.

The USFWS proposal lists both the Texas Fatmucket and Texas Pimpleback as “Endangered”, meaning they are in danger of becoming extinct. The Texas Fawnsfoot is proposed to be listed as “Threatened”, meaning that it is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

The USFWS proposal designates “Critical Habitat” for the Texas Fatmucket along the North Llano from just below the headwaters at Fort Terrett Spring to the confluence with the South Llano in Junction, and along the South Llano from the Edwards-Kimble county line to the confluence. Along the Llano, critical habitat is proposed from the confluence in Junction to Llano. Critical habitat is also proposed for the James River from the Kimble-Mason county line to the confluence with the Llano and for Beaver Creek from Ranch Road 783 to the confluence with the Llano. Critical habitat designations for both Texas Pimpleback and Texas Fawnsfoot extend along the Llano River from Yates Crossing (Ranch Road 385) to Castell.



Texas pimpleback



Texas fawnsfoot

Photos: US Fish and Wildlife Service

Freshwater Mussels-continued

Critical habitat is designed to protect species from ‘destruction and adverse modification’ from actions carried out, funded, or authorized by a federal agency. Projects with federal funding or requiring a federal permit, such as bridges, pipelines, and dams, will need to consult with USFWS on how the project affects the “physical or biological features essential to conserve a listed species.”

This critical habitat designation does not apply to private property, so for Texas, it only extends up the bank as far as the gradient boundary. Any landowner project above the gradient boundary is not affected.

Having freshwater mussels listed under the Endangered Species Act likely means that there will be a significant amount of additional funding available for landowners to implement projects that help improve habitat for the mussels.

The proposed rule along with additional resources regarding freshwater mussels may be found here. US Fish and Wildlife is accepting public comments in writing until October 25, 2021.

Over the past five years, the Office of the Texas Comptroller has hosted a series of meetings and funded research to better understand freshwater mussels. The Alliance has been an active participant in this process and believes the science warrants the proposed listing of the freshwater mussels in the watershed.



This looks to be an interesting series! Check out the trailer

TCEQ Hears from Residents re Wastewater Treatment Plant

By Melissa Burnard

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Photo : Bill Neiman

On Tuesday, August 31, 2021, the Texas Commission on Environmental Quality (TCEQ), held a public telephone meeting regarding the Junction Wastewater Plant Renewal permit that was submitted in June 2020. The meeting was held at the request of State Representative Andrew Murr. A representative from TCEQ noted that the burden on a city and the fact that there is an existing wastewater plant are both taken into consideration in issuing a permit renewal.

Currently, the City of Junction is required to monitor water quality at a point prior to where the water from the treatment pond mixes with the Llano River. The testing is performed after the final treatment at the wastewater treatment plant. During the meeting, concerns were raised by Kimble County residents, as the outfall location at the Llano River and downstream areas are used for recreational purposes, including swimming and kayaking, as well as land irrigation and drinking water. The Llano river is also part of the Texas Parks and Wildlife Texas Paddling Trail Network.

TCEQ continued...

The current permit, as it stands to be renewed, does not include any nutrient or phosphorus standards. Concerns regarding this included a foul odor and green color that are coming from the discharge pipe into the Llano River, as well as a dead sandstone area around the outlet. A TCEQ employee stated that the current pond system used by Junction is effective at removing nutrients. He noted that there is likely algae within the pond itself, which could account for the green color of the discharged water.

Downstream landowners inquired about the possibility of land application for the treated water coming from the wastewater plant. Although TCEQ advised that they do not have jurisdiction over land, and they could not compel the city to use a different application method, the City of Junction could amend its permit to allow for land application. Junction mayor Russel Hammonds stated that they are trying to get through the permit process, then the City Council will explore other alternatives, such as land based application. The city is currently planning construction of a chlorine chamber at the wastewater treatment plant to comply with the new permit.

In the past, Junction has had prior violations of the permitted standards that apply to the wastewater discharge. TCEQ advised that the city's compliance history is monitored, and they also consider the city's actions and plans of action to comply with the permit standards.

Inquiries were also made regarding the likelihood that U.S. Fish and Wildlife will be listing six freshwater mussels, two of which exist in the Llano River, as endangered species. Because the mussels were not listed as of the time of Junction's permit renewal, the permit application was not flagged. TCEQ advised there is a process for referring to the Environmental Protection Agency if there is a possibility that the habitat for an endangered species will be impacted.

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The Texas Clean Rivers Program was mentioned. This consists of surface quality information databases that are compiled from crowdsourcing. An individual can become part of the program and begin collecting data. This program looks at water bodies aside from areas covered by a permit. More information can be found at <https://www.tceq.texas.gov/waterquality/clean-rivers>.

If an individual has concerns, they can call or complete an online complaint form to the TCEQ Regional Office. This information can be found at <https://www.tceq.texas.gov/compliance/complaints>. Additionally, if an individual believes that there are ongoing issues after a permit is renewed, they can present a contested case hearing, which is reviewed by the Commission and referred for an administrative trial.

At the end of a meeting, formal comments were allowed. Formal comments were submitted by downstream Llano River residents and their family members, members of the Llano River Watershed Alliance and a representative from the No Dumping Sewage Coalition. TCEQ advised that their staff is available by phone if anyone had additional questions. Their general number is 512-239-1000. TCEQ has two months to respond to public comments

Covid Catalyst

It is not just your imagination, land sales in the watershed have been booming. The San Antonio Report (formerly Rivard Report) recently ran *Ranch fever : Pandemic drives city slickers to seek out room to roam*. Some notable points from the article:

- Ranch sales in the state nearly doubled between the 2nd quarter of 2021 and the previous year;
- “Everyone was adamant they were not going to be stuck in a city again”...
- According to a broker in Junction, any listing they get, they sell within one or two days right now.

Sign up for a Riparian Site Visit



Does your riparian area look like this?

The Llano River Watershed Alliance is offering on-site technical consultation to assist landowners whose riparian areas need some assistance returning to their properly functioning condition.

During these visits, we will help landowners identify areas where Best Management Practices could be employed to increase vegetative growth and reduce erosion, allowing the riparian area to trap sediment, store more water, and provide shade to improve habitat for aquatic species.

There is no charge for this consultation or for the plantings, which will be delivered in the fall.

If you are interested in this opportunity, please contact southllanoriver@gmail.com.

Kimble County Commissioners and TxDOT pull plug on Boone's Crossing Bridge

According to an article in the *function Eagle* (September 15, 2021), the proposed bridge replacement at KC 150 (Boone's Crossing) across the South Llano River has been cancelled. After hearing public comments opposing the \$1 million bridge that would replace the current low-water crossing (which survived the 2018 flood), both the Kimble County Commissions Court and TxDot agreed that the project should not be undertaken.

TxDOT representatives stated that *"the current design for the proposed new bridge is flawed in light of the major flooding events in 2018, and more importantly, the project was not now as high a priority as other projects under consideration statewide"*

Proposed Sand and Gravel Permit on James River

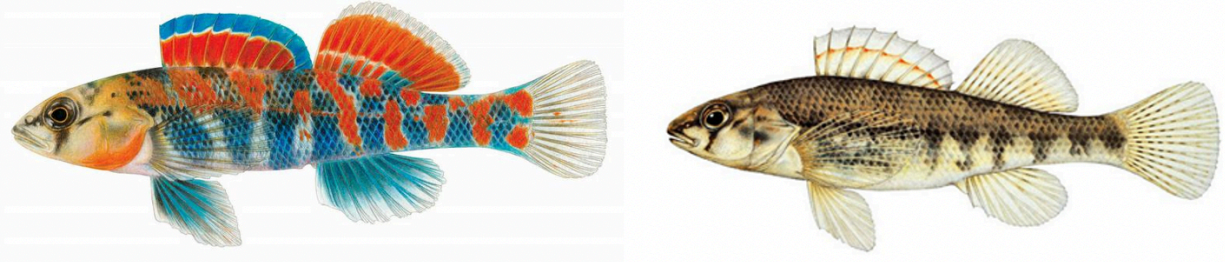
Magellan Crude Oil Pipeline Company has applied to the Texas Parks and Wildlife Department (TPWD) for a permit to remove or disturb 111.1 cubic yards of sedimentary material within the James River in Mason County. (A notice of application is currently published in the *Mason County News*.)

Details of the application note that Magellan is proposing to stabilize an exposed pipeline at two locations where the pipeline crosses the James River, approximately 1 mile below the Eckert James River Bat Cave. At each location, the repair site will be dewatered and excavated to conduct the necessary maintenance on the pipeline. Following repairs, the area will be filled with washed river rock. All activity will occur within the proposed pipeline easement.

At this time, TPWD is only providing notice that an application has been received; the agency has yet to declare the permit to be administratively complete or request public comment. The Alliance will provide additional information when it becomes available.

Plains Orangethroat Darter *Etheostoma pulchellum*

Gary Garrett, University of Texas



(Image © Joseph R. Tomelleri)

In addition to Guadalupe Bass, our iconic state fish, the Llano River is home to many other interesting fish species. One of the most beautiful, and often overlooked, is the Plains Orangethroat Darter.

This species occurs throughout much of the central United States and in Texas is found primarily in the Edwards Plateau region (including the Llano River watershed), then north and east to the Red River.

As with most fishes, the male is the more colorful sex, especially during the breeding season (October – May). The dorsal fin is red at the base and blue on the margins, the body has alternating blue-green bars and red blotches, the gill membranes are orange, and the underside of the head is blue-green. The more-camouflaged female has similar patterns but is primarily a muted brown color.

Many people overlook this species because it is quite small (typically 2”) and makes its living on the bottom of the stream. It can easily do this because it lacks a swim bladder and therefore can remain on the bottom in flowing water. To stay in place in fast moving riffles, darters hide behind larger rocks on the bottom of the streambed or use their pectoral fins against rock surfaces. When feeding on small insects and such, it will dart from its location to get its prey, and thus gets its common name.

For more information on Plains Orangethroat Darter as well as all the other fishes in Texas, check out <http://www.fishesoftexas.org>

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