

USACE Natural Resource Management

Freshwater Mussels



Texas Hornshell

Texas Hornshell (*Popenaias popeii*): This is a medium sized mussel that is trapezoidal and elongate in shape. This mussel is laterally compressed. The outer shell ranges in color from olive-green to dark brown. The nacre varies from glossy to dull white, bluish white, or purple-gray. (New Mexico Game & Fish)

Status: Endangered, listed 2018

NatureServe: Critically Imperiled



Genus: *Popenaias* is a genus of freshwater mussels in the family *Unionoidae*. Currently this species contains three taxonomically valid species. (Integrated Taxonomic Information System)

Range: This mussel is native to the Grande River drainage in Texas, New Mexico, and Mexico. It is believed to have been extirpated from all but 5 locations in the U.S. and much of Mexico. (USFWS)

Photos Left to Right: Outer Shell (USFWS), Specimens from Black River, NM (USFWS), & Live Specimen (New Mexico Game & Fish)



Photo: NatureServe map of species' status by state.

Management and Protection:

- This species overall distribution has declined significantly. Currently, the Texas Hornshell occupies only 15% of its historical range. (USFWS)
- Adults and juveniles occur in medium to large rivers. Generally found in crevices, undercuts, riverbanks, travertine shelves, and under large boulders that contain suitable amounts of small-grained substrate, such as clay, silt, and/or sand.
- The Texas hornshell needs multiple resilient populations distributed widely across its range to maintain its persistence into the future and to avoid extinction.
 - Factors influencing current and future health of populations include increased sediments, changes in water quality, loss of flowing water, and barriers to fish movement. (USFWS)



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USACE ROLE: Across the nation the USACE works closely with natural resource agencies to ensure that current and proposed work has as little negative impacts to species, their habitat, or the ecosystem as possible while achieving mission goals. Though the Texas Hornshell is tracked in the Engineering Research and Development Center's Threatened and Endangered Species Team Cost Estimates Database, there are currently no records associated with this species.

Photo: A panoramic view of the Two Rivers Dam project in New Mexico. This project was listed in the 2020 NRM Assessment as having the potential for the Texas Hornshell to occur.

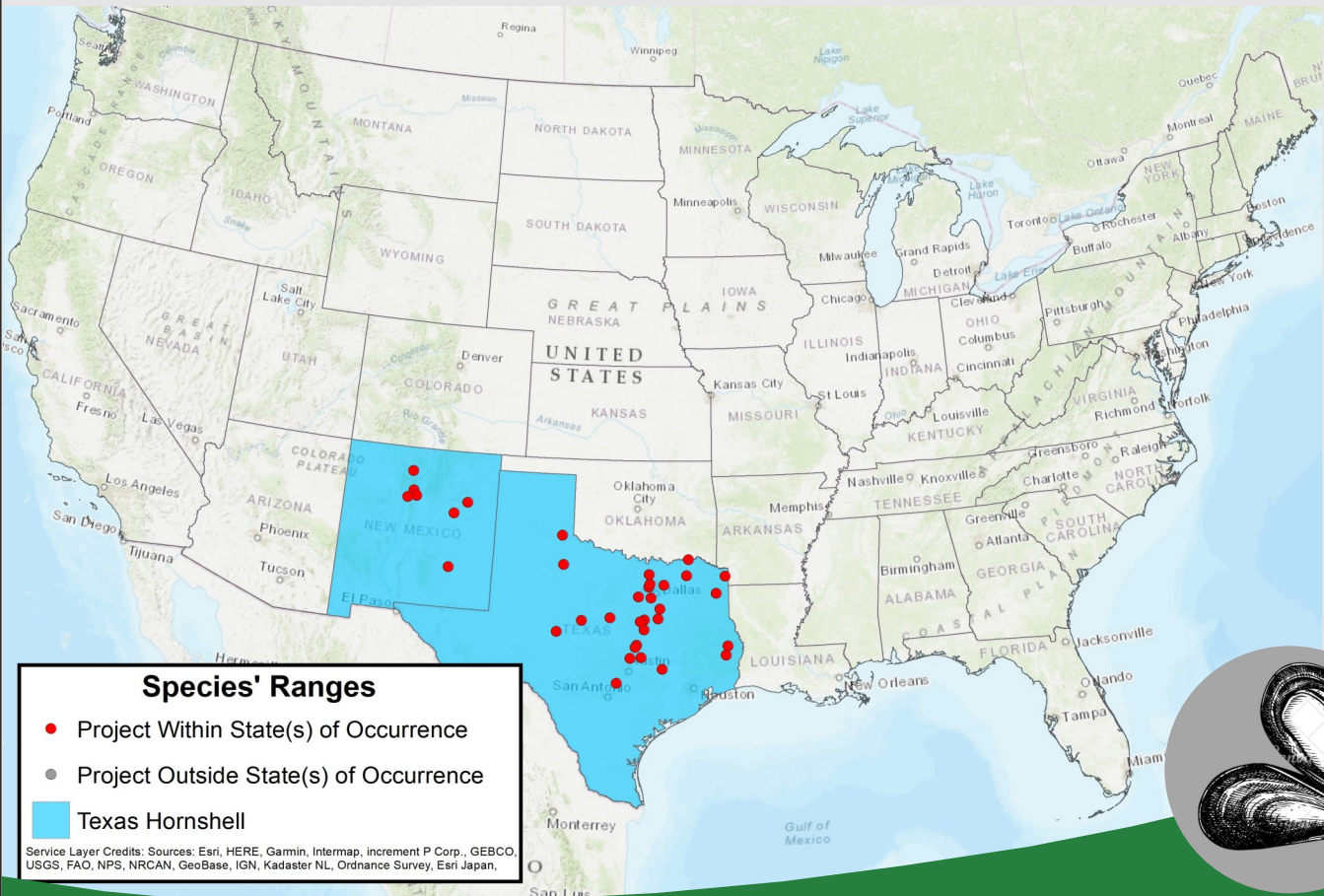


The Texas Hornshell has a limited distribution and restricted range which falls within the Southwestern Division. Within this range the USACE manages project lands and waters to ensure that the Texas Hornshell and other listed species are not negatively impacted by current or proposed work. In the FY 20 NRM Assessment, the Two Rivers Dam project of Albuquerque District is noted as having the potential for the Texas hornshell to occur on project lands.

Photo: One of the recreation areas found at the Two Rivers Dam project.



This fact sheet has been prepared as an unofficial publication of the U.S. Army Corps of Engineers (USACE). This online publication is produced to provide its readers information about best management practices related to special status species. Editorial views and opinions expressed are not necessarily those of the Department of the Army. Mention of specific vendors does not constitute endorsement by the Department of the Army or any element thereof.



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 Source: Map provided by Ashleigh Boss, ORISE Fellowship, Institute for Water Resources

