Texas Commission on Environmental Quality (TCEQ) Comments on
Proposed Rule to List the Texas hornshell as an Endangered Species Under the Endangered Species Act

Docket ID Number FWS-R2-ES-2016-0077

Background

On August 10, 2016, the U.S. Fish and Wildlife Service (USFWS) proposed to list the Texas hornshell *(Popenaias popeii)* as an endangered species under the Endangered Species Act (ESA). The Texas hornshell is a freshwater mussel species previously described to occupy medium to large rivers throughout the Rio Grande watershed in the United States (Texas and New Mexico) and Mexico. The mussel was initially included in a candidate review for listing on November 15, 1994; it has been a candidate species since October 30, 2001.

Relevant biological data and information on the Texas hornshell was summarized in the Species Status Assessment (SSA) and included in the proposed rule. Known populations in Texas are as follows:

- Pecos River (Val Verde County)
- Devils River (Val Verde County)
- Lower Canyons of the Rio Grande River (Brewster and Terrell Counties)
- Lower Rio Grande near the city of Laredo (Webb County)

Distribution and abundance of the Texas hornshell has declined, with the species occupying approximately 15 percent of its historical range in the United States. In the proposed rule, the USFWS has determined that the species is in danger of extinction due to habitat loss from loss of water flow, decreased water quality, increased accumulation of fine sediment, and increased predation during periods of low-flow. Critical habitat, geographic areas essential to the conservation of the Texas hornshell, was not designated in the proposed rule due to the lack of sufficient information.

The U.S. Fish and Wildlife Service (USFWS) requested comments or information from other concerned governmental agencies. The Texas Commission of Environmental Quality TCEQ), State of Texas, is a concerned governmental agency.

The public comment period closes on October 11, 2016.

Comments on Proposed Rule

I. General Comments and Overview.

A. The Treaty Between the United States of America and Mexico Signed at Washington February 3, 1944 (1944 Treaty) governs water management by the United States, specifically by the State of Texas, in the mainstem of the Rio Grande River.

Texas has absolute jurisdiction over state surface water rights in the Devils River, Pecos River, and Texas' portion of the Rio Grande.

Surface water management in the Rio Grande is governed by the terms of the 1944 Treaty. Modification of water flow is identified as an action that would potentially

result in a violation of Section 9 of the ESA if the Texas hornshell is listed. Changes to the reservoir operations of Amistad Reservoir to address water flow concerns have the potential to interfere with 1944 Treaty obligations. Interference with 1944 Treaty obligations could undermine Texas' allocation and distribution of surface water to water right holders and users in the Rio Grande basin under Texas' jurisdiction.

B. The information collected through scientific research efforts funded by the Texas Comptroller of Public Accounts should be included in the species assessment.

Relevant biological information is an essential component of the endangered species process, including the basis for listing and designation of critical habitat. Scientific surveys conducted by academic researchers in Texas have provided needed information on the biological status of the Texas hornshell. Examples of the scientific surveys include:

- *Survey Results and Habitat Use for Popenaias popeii (Texas hornshell) in the Rio Grande and Devils River, Texas.* Final Report Prepared for the Interagency Task Force on Economic Growth and Endangered Species. Randklev et. al., April 2016.

- *Texas Hornshell (Popenaias popeii) in the Devils and Lower Pecos Rivers, Texas.* Report prepared for the Interagency Task Force on Economic Growth and Endangered Species. Boseman and Randklev et. al., June 2016

It is requested the USFWS consider this available information in the species assessment.

C. Statements regarding the likely cause for the absence of Texas hornshell should be removed from the rule until substantial and peer reviewed scientific bases are developed.

The proposed rule implicates ammonia from wastewater discharges as the likely cause for the absence of Texas hornshell downstream of the cities of Eagle Pass and Laredo. Some of these discharges originate from Mexico. Discharges originating from Texas are authorized by Texas Pollutant Discharge Elimination System (TPDES) permits that are protective of Texas Surface Water Quality Standards. The TCEQ regulates TPDES permits and cautions against making such definitive statements when many unanswered questions remain with respect to the factors that could explain the presence or absence of this mussel species in any given area.

D. The listing of the Texas hornshell is premature because available research indicates the status of populations in the Devils and Pecos Rivers is uncertain.

The proposed rule indicates that two of the four known populations in Texas are located in the Pecos and Devils Rivers, Val Verde County. Although researchers surveyed this area, their overall sampling effort within the rivers indicated, "the status of both [populations] are still uncertain because overall sampling effort within either river remains limited and lacks sufficient spatial scale to characterize trends and identify environmental factors responsible for patterns in mussel assemblage structure" (Randklev et al, April 2016). Historical surveys conducted in these areas were not designed to adequately quantify conservation metrics needed to describe the species (Boseman and Randklev et. al, June 2016). The TCEQ requests that the USFWS

provide additional time to re-evaluate the status of the mussel in the Pecos and Devils Rivers before making a final listing determination.

E. Designation of broad geographic areas as critical habitat may impact water quality management activities and Texas' management of surface water rights.

The proposed rule indicates a designation of critical habitat will be made no later than one year following a final listing determination, however the lack of current information precludes a determination at this time. The potential listing of the Texas hornshell could greatly expand the scope of regulatory evaluations and have significant impacts on water quality management programs in Texas. The TCEQ requests that the USFWS consider localized areas with site-specific factors, rather than broad geographic regions, when making future critical habitat determinations. Appropriately-sized designations of critical habitat will facilitate the efficient implementation of water quality management activities conducted by TCEQ. Texas has absolute jurisdiction over state surface water rights in the Devils River, Pecos River, and Texas' portion of the Rio Grande. Broad designations of critical habitat could undermine Texas' ability to manage those surface water rights in accordance with state statutes and administrative rules. The 1944 Treaty is also implicated in Texas' surface water management in this river basin, as noted in a separate comment.