



October 19, 2023

Public Comments Processing  
Attn: FWS-R2-ES-2023-0069  
U.S. Fish and Wildlife Service, MS:PRB/3W, 5275  
Leesburg Pike, Falls Church, VA 22041-3803

Re: Comments on the Proposed Listing of the Widemouth Blindcat and the Toothless Blindcat cavefish species under the Endangered Species Act of 1973 (Docket No. FWS-R2-ES-2023-0069)

Director Williams:

The Edwards Aquifer Authority (EAA) has reviewed the scientific evidence referenced by the U.S. Fish and Wildlife Service (USFWS) in the proposed listing of two blind catfish species located in the deep, confined sections of the Edwards Aquifer and concludes that the justification presented for the proposed listing has substantial technical weaknesses that make listing the species at this time premature and without a rational basis. The EAA respectfully submits the following comments on the Species Status Assessment (“SSA”), which was used by USFWS to support the proposed listing of the species as endangered:

- The SSA states that the spatial configuration of the catfish habitat is not known due to the inaccessible nature of the deep aquifer; however, an analysis that is the primary framework for the proposed listing uses mortality and population dynamics based exclusively on assumptions that include the spatial distribution being known. Since few Edwards Aquifer locations have been used to provide information on the existence of the species, and temporal documentation of species occurrence is sparse, it would appear that an accurate analysis of the mortality impact of relatively few wells within the expansive Immediate Area Analysis Unit (“Analysis Unit”) cannot be made at this time. The SSA presents no other possible scenarios that may or may not support listing the species as endangered.
- The SSA fails to consider the karstic nature of the Edwards Aquifer and the importance to the species as a result thereof. As stated above, the approximate area of the Analysis Unit is quite large, and there is a low probability that any given well will intercept a void, conduit, or enlarged fracture, even in a prolific karst aquifer such as the Edwards. Thus, there is a very low chance for a well to encounter porosity/permeability with conduits or fractures that are large enough to provide likely habitat zones for blind catfish. It is also unlikely that a single, large, integrated habitat zone exists in the deep artesian zone of the Edwards Aquifer; therefore, the few wells that do intersect localized populations of catfish may not affect the other areas where the species exist.

- A linear decay rate for mortality, as proposed by USFWS, assumes that there is a constant source of individuals—even though the population size in the vicinity of any single well (that impacts the catfish) is diminished over time. Thus, it seems unlikely that the rate of mortality could be constant over a long period of time as assumed in the SSA analysis. Since no additional drilling of wells or additional pumping from the Analysis Unit has occurred in recent decades, it seems possible that the population may have reached some sort of equilibrium, with other isolated localized habitats not impacted because no well(s) intersect those habitats.
- An assumption that populations have decreased continually from when pumping was active in all the known habitat wells appears to be inconsistent with actual conditions in the Aquifer. Only 3 of 11 groundwater wells where either or both species have historically been observed are active today. That reflects a 73% reduction in pumping from directly observed habitat. This fact is not addressed in the document but seems significant in describing existing threats. Previous statements in the document claim that wells where pumping has ceased can lead to population rebounds. As 73% of the known habitat wells no longer create threats to either species, population numbers should have increased over time in those areas.
- An analysis of well completion details, vertical hydrogeologic conditions, and current well use status is absent from the SSA. In fact, there was no inclusion of data specific to the completion of wells that have produced specimens of catfish in comparison to wells that have not produced specimens. The geologic and engineering specifications of any single well likely control the well's ability to intercept catfish habitat and transmit partial or complete specimens to the surface.

The EAA intends to continue to share information regarding the hydrogeologic construct of the Edwards Aquifer and specific well information within the areas defined in the SSA to better inform USFWS of existing conditions with the hope of avoiding a premature and erroneous listing of the two blind catfish species. In addition, as the Edwards Aquifer Habitat Conservation Plan continues through its renewal process, the EAA intends to keep USFWS informed of the uncertainties and significant negative impacts the potential listings create in relation to the plan's existing conservation measures. If you have any questions regarding these comments, please contact Mr. Marc Friberg, Deputy General Manager, at 210-477-8522.

Sincerely,



Roland Ruiz  
General Manager