

## United States Department of the Interior



## FISH AND WILDLIFE SERVICE

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JUN 2 6 2019

Mr. Scott Storment, Program Manager Edwards Aquifer Authority Habitat Conservation Plan Edwards Aquifer Authority 900 E Quincy, San Antonio, Texas 78215

Dear Mr. Storment:

We received your request to amend the Edwards Aquifer Recovery Implementation Program Habitat Conservation Plan (EAHCP) on June 13, 2019. The amendment requested by you on behalf of the five Permittees is to increase the volume of water that groundwater irrigators enrolled in the Voluntary Irrigation Suspension Program Option (VISPO) will forgo pumping during periods of drought from 40,000 acre-feet to 41,795 acre-feet per year. The VISPO enrollment requirements are described in section 5.1 the EAHCP.

The Covered Species need clean and flowing water for their survival and reproduction. The EAHCP relies on several water conservation programs that function together to maintain spring flows during times of drought at the Comal and San Marcos springs complexes. During the development of the EAHCP, the combined effectiveness of the water conservation programs to meet the minimum flow objectives during a repeat of the drought of record was predicted using a hydrologic model. The model predicted that the EAHCP would fall short of achieving the minimum flow target of 30 cfs at Comal Springs.

The Service and the Permittees agreed to execute the groundwater conservation and flow protection programs during the first phase of the permit term and later to reevaluate with an updated hydrologic model making adjustments to the water conservation programs as needed to meet the flow objectives. The Permittees have updated the hydrologic model and reanalyzed the predicted minimum spring flows. The model was then used to determine the amount of VISPO forbearance that will result in attaining the 30 cfs minimum flow target. The EAHCP and the April 12, 2019, Scientific Evaluation Report: Nonroutine Adaptive Management Proposal for the EAHCP VISPO, and other documents cited in the report provide details on the model, the underlying assumptions, and its appropriate application.

We have reviewed the information that you have provided for consistency with the EAHCP, incidental take permit (TE63663A-1), and our biological opinion. By increasing the VISPO forbearance goal, the Permittees are increasing the likelihood that under extreme drought



conditions the springs will continue to flow and the Covered Species would survive. We accept and approve the amendments to the EAHCP as provided in your June 13, 2019, letter.

We thank the Permittees for their continued support of the rare and unique species in the Edwards Aquifer. We also recognize the commitment of time and other resources dedicated to the preservation of our native species by the Edwards Aquifer stakeholders.

Sincerely,

Adam Zerrenner