

March 17, 2015

Edwards Aquifer Authority 2016 Applied Research Work Plan

Section 6.3.4 of the Edwards Aquifer Habitat Conservation Plan (EAHCP) includes Applied Research as a “valuable” component of the Phase I package and states that the “Edwards Aquifer Authority (EAA) will contract for the research activities.” The main focus of the Applied Research is to evaluate the effects of low-flows on Covered Species and their habitats. As described in the HCP § 6.3.4.2, Applied Research for Phase I will focus on the fountain darter relative to Comal Springs (although research should be transferable to the San Marcos system) and the Comal Springs riffle beetle, as these are the two species with the greatest potential for impact relative to the Phase I package.

Long Term Objective: The experimentation done through the Applied Research program of the EAHCP will evaluate the effects of low-flows on Covered Species and their habitats. The information gathered through this program will be utilized in the ecological model and will subsequently be used to inform the Adaptive Management Process and identify strategies for improved mitigation in the spring cities’ model.

In order to assure that Applied Research projects meet the long term objectives and to meet specific EAHCP needs, the EAA has initiated a procedure that allows members of the Implementing Committee, Stakeholder Committee, Science Committee and EAHCP Staff to submit proposed studies for consideration. The proposed studies are evaluated by EAHCP Staff, outside experts (if necessary), and the Science Committee. The following link is to the Applied Research project submissions, review and prioritization procedure:

http://www.eahcp.org/files/admin-records/NEPA-and-HCP/AR_Selection_pACKET.pdf

Assumptions: Completion of all 2015 approved Applied Research projects.

Methodology:

The Applied Research Study (ARS) process was adopted by the Science Committee at its meeting on March 11, 2015

All Covered Species collected and utilized for Applied Research may be shared with other Applied Research contractors, within United States Fish & Wildlife Service (FWS) and Texas Parks & Wildlife (TPWD) regulations. The FWS and/or TPWD may require that at the conclusion of the research projects, all Covered Species collected and utilized for Applied Research be delivered to the FWS or the TPWD for Refugia operations.

Monitoring: EAHCP staff will receive monthly status reports from selected contractors and will visit with selected contractors on-site to evaluate the progress and methodology compliance of Applied Research projects.

Science Committee Review: EAA Staff will follow the ARS process to determine which studies were complete, and will then submitted electronically to the Science Committee on March 25, 2015, to assist with prioritization. The Science Committee will discuss and prioritize the 2016

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Applied Research projects at their April 7, 2015 meeting. The proposed studies with the highest priority could be considered for funding first. Prioritized projects will be funded within the Applied Research budget.

Research Facility:

In 2015, the Edwards Aquifer Authority is entering the second year of a five-year contract (three, one-year extensions remaining) with Texas State University (TEXAS STATE) to allow researchers to use the Freeman Aquatic Building (FAB) raceways, two concrete ponds and wet lab (with living streams and aquaria) to conduct EAHCP research. The TEXAS STATE facilities meet the needs of providing source water, quarantine capabilities, endangered species handling, and infrastructure/resource needs. The EAA pays the utility costs for use of the facilities.

The FAB facilities are available to potential EAHCP contractors, and terms of use will be included in contracts between EAA and researchers. Additionally, EAHCP staff will coordinate the projects for timing and availability of resource needed (tank, living stream, trough, raceway, or pond).

Budget

Table 7.1 Applied Research Budget: *\$450,000*

The Science Committee reviewed and prioritized the Applied Research projects for 2016. The approach is to conduct as much of the highest priority research in 2016 as the allocated budget in Table 7.1 allows, ensuring necessary research in the time frame allowed prior to Phase II decisions. Research contracts will be awarded until funds are utilized.

Prioritized 2016 Applied Research

(Insert the prioritized list)

Research Projects

Prioritized Applied Research Budget: *\$425,000*

The Edwards Aquifer Authority will develop an RFP based on the key elements with expected deliverables and experimental design criteria for each study approved by the Implementing Committee. Where possible, all efforts will be made to match similar studies to allow for shared facility and expertise in an effort to promote fiscal stewardship.

These RFPs will each be issued through a competitive procurement process that will include publication in six print regional newspapers and direct distribution to a list of at least sixty potential qualified contractors.

Facility Budget

The EAA pays the utility costs for use of the facilities (\$25,000). There is no annual fee for the use of the FAB for Applied Research.