

6.3.4 Applied Research

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.”

Long Term Objective:

2018 and 2019 represent the final two years for the Applied Research program of the EAHCP. In prior years, the Applied Research program has primarily undertaken study of the Comal Springs riffle beetle, fountain darter, and submerged aquatic vegetation. Much of the information generated as part the program has gone towards creating the Ecological Model (EcoModel) which was completed in 2017.

In addition to finalizing the EcoModel, 2017 represents the first year of a long-term Refugia contract with USFWS. The contract outlines specific research tasks related to species collection methods and techniques, species husbandry, species propagation, species genetics, and species reintroduction methods. It is anticipated that all future research on these topics will take place as part of the Refugia research program and not the Applied Research program.

Given the completion of the EcoModel and startup of long-term Refugia operations, a workgroup of EAHCP science committee members (Research workgroup) met to discuss the Applied Research project schedule for 2018 and 2019.

Target for 2018:

The Research workgroup identified several projects which can be found in the final workgroup report. Projects undertaken as part of the Applied Research program will be developed from this final workgroup report. At present, individual projects targeted for 2018 have not been prioritized.

In addition to the research projects identified for 2018, Applied research funds will be utilized to pay licensing fees to maintain the EAHCP database.

Additional Research Facility

In 2018, the EAA is entering the final year of a five-year contract with Texas State University (TEXAS STATE) that allows Applied Research contractors to use the Freeman Aquatic Building (FAB) raceways, two concrete ponds and wet lab (with living streams and aquaria) for 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 and EAHCP staff coordinates the projects for timing and availability of resource needed (tank, living stream, trough, raceway, or pond).

Monitoring:

EAHCP staff receives 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.

Budget:

Table 7.1:

\$450,000

Available budget for 2018:

\$450,000

Estimated 2018 budget:

\$450,000*

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