

Summary of the Current EAHCP Biological Goals

1. Fountain Darter – Comal System

- a. Quantified as areal coverage of aquatic vegetation (habitat) within four representative reaches of the Comal system and fountain darter density (population measurement) per aquatic vegetation type. (EAHCP Table 4-1)
- b. The population measurement goal is to maintain the median densities of fountain darters observed per aquatic vegetation type per system at a level greater than or equal to that observed over the past 10 years in the EAA Variable Flow Study monitoring.

2. Fountain Darter - San Marcos System

- a. Quantified as areal coverage of habitat within three representative river reaches of the San Marcos system and fountain darter density (population measurement) per aquatic vegetation type (EAHCP Table 4-21).
- b. The population measurement goal is to maintain greater than or equal to the median densities per aquatic vegetation type per system over the past 10 years in the EAA Variable Flow Study monitoring.

3. Comal Springs riffle beetle

- a. Maintain silt-free habitat conditions via continued springflow, riparian zone protection, and recreation control throughout each of the three sample reaches.
- b. Population measurement goals is to maintain grater than or equal to the median densities observed over the past six years of EAA Variable Flow Study monitoring.

4. Comal Springs dryopid beetle and Peck's Cave Amphipod

- a. Note: Grouped together as subterranean species inhabiting the Comal system.
- b. Water quality goal:
 - i. To not exceed a 10 percent deviation (daily average) from historically recorded water quality conditions (long-term average) within the Edwards Aquifer as measured issuing from the spring openings at Comal Springs.

5. Texas wild-rice

 a. Areal coverage (quantified) over a spatial extent of the San Marcos River (EAHCP Table 4-10).

6. San Marcos salamander

- a. Note: Goals are similar to the fountain darter and Comal Springs riffle beetle approach.
- b. Habitat perspective: Goal is to maintain silt-free habitat conditions via continued springflow, riparian zone protection, and recreation control throughout each of the three representative reaches.
- c. Population measurement goal is to maintain greater than or equal to the median densities observed over the past 10 years of monitoring (EAHCP Table 4-25).



7. Texas blind salamander

- a. Note: Goals are similar to the Comal Springs dryopid beetle and Peck's Cave amphipod (subterranean species).
- b. Water quality goal:
 - Not to exceed a 10 percent deviation (daily average) from historically recorded water quality conditions (long-term average) within the Aquifer as measured issuing from the spring openings in Spring Lake.

Figure taken from the National Academies of Sciences Report 3.

