Exercise – Biological Goals and Objectives

Instructions: Follow the steps below to develop your own biological goals and objectives for the Edwards Aquifer Habitat Conservation Plan.

1. Vision for the EAHCP

A vision statement is a concise statement of what the EAHCP conservation program should be, or hopes to accomplish, based on the needs of the species and other regulations, policy, or guidance. Not all HCPs have a vision statement, but it can be helpful in forming the basis for the biological goals.

Use the space below to write your vision for the EAHCP.

2. Biological Goals

A biological goal is descriptive, open-ended, and often broad statement of desired future conditions that conveys a purpose but does not define measurable units. It is clear and understandable to all, not just the person developing the goal. A biological goal can be habitat-based or species-based. That is, it can describe desired future conditions for Covered Species habitat, or it can describe desired future conditions for a single species or community of species.

Barton Springs Edwards Aquifer Conservation District HCP Species-based Example:

Promote recovery of [Barton Springs salamander and Austin blind salamander] populations from [drought-related decreases in size and health] to levels required for their long-term viability.

Upper Santa Ana River HCP Habitat-based Example:

Maintain or simulate natural ecological processes necessary to maintain the functionality of the natural communities and habitats upon which the Covered Species depend within the HCP Preserve System.

Use the spaces below to write biological goals for the EAHCP.

Goal 1:

Goal 2:

Goal 3:

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3. Biological Objectives

A biological objective is an incremental step taken to achieve a biological goal. It establishes a measurable target that can be used to determine if the biological goal is achieved. A biological objective provides a foundation for developing conservation measures and always links to a monitoring program.

A well-developed biological objective should follow the SMART acronym:

- ***Specific**: describe **what, who, when,** and **where**—not **how** (how = conservation measures)*
- ***Measurable**: ability to monitor progress toward the goal (quantitative or qualitative)*
- ***Achievable**: the Permittee can control or affect the outcome*
- ***Result-oriented**: describes an outcome*
- ***Time-fixed**: can be accomplished within the permit duration*

The most important of these criteria are the first three: specific, measurable, and achievable.

Barton Springs Edwards Aquifer Conservation District HCP Species-based Examples:

Objective 1: Adopt and implement groundwater-management and HCP conservation measures to avoid springflows that create anoxic conditions (DO concentration of 0.0 mg/L) at Main Springs and Eliza Spring at all times.

Objective 2: Adopt and implement groundwater-management and HCP conservation measures to minimize the a) spring area affected by, b) the deviation in DO concentrations below, and c) the length of time that springflow-dependent DO concentrations at Main Springs and Eliza Spring are less than 3.4 mg/L under all Aquifer conditions, including Extreme Drought.

Objective 3: Adopt and implement groundwater-management and HCP conservation measures to maintain combined springflows that correspond to monthly-average springflow-dependent DO concentrations of no less than 4.0 mg/L at Main Springs and Eliza Spring during all but Extreme Drought conditions.

Objective 4: Adopt and implement groundwater-management and related measures that do not cause other natural water chemistry parameters, as periodically monitored by the COA and other governmental entities and reported to the District under terms of an Interlocal Agreement, to exceed their historical ranges under all Aquifer conditions.

Upper Santa Ana River HCP Habitat-based example:

Objective 1: Acquire, protect, and fund the long-term management of a minimum of 1,348.8 acres of land for Covered Species within the HCP Preserve System prior to Phase 3 of HCP implementation.

Objective 2: Provide habitat improvement (create, restore, rehabilitate, or enhance) and long-term management of native habitats for the benefit of Covered Species in the HCP Preserve System.

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Develop objectives that align with the goals you developed above. Focus on making the objectives specific, measurable, and achievable as these are the most important characteristics of well-developed objectives. You can develop multiple objectives for the same goal, or an objective for each goal.

Linked to Goal # **Objective:**

Linked to Goal # **Objective:**

Linked to Goal # **Objective:**