

How are Biological Goals and Objectives Developed?

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Consider Starting with an HCP Vision Statement

A Vision Statement is a concise statement of what an HCP conservation program should be, based on Covered Species needs and applicable regulations, policy, and guidance. Not all HCPs have a vision statement; however, it can be helpful for developing biological goals.



Follow USFWS Guidance

The U.S. Fish & Wildlife Service (USFWS) has developed the *Habitat Conservation Planning* and *Incidental Take Permit Processing Handbook*, which offers guidance for developing biological goals and objectives.

USFWS Guidance on Biological Goals

Biological goals can be **habitat-based** or **species-based**, and each should contain four elements:

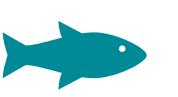
- The key **subject** of concern (i.e., a particular species or habitat type)
- The **attribute** of interest for that subject (i.e., population size or species composition)
- The **target** or condition for the attribute (i.e., a number or historic condition)
- The **action** or effort that will be made to achieve the target (i.e., restore or maintain)

Examples of Biological Goals



Habitat-Based Goal

Maintain and enhance
native submerged aquatic
vegetation communities
that are resilient and diverse
to benefit Covered Species and
promote biodiversity



Species-Based Goal

Maintain or increase
fountain darter populations in
the Comal and San Marcos
springs systems to sizes that are
self-sustaining and resilient to
periods of drought

USFWS Guidance on Biological Objectives

Biological objectives are **incremental steps** taken to achieve a goal. They are **measurable targets** to determine if biological goals are achieved. Objectives provide a foundation for **developing conservation measures** and always **link to a monitoring program**.

The elements of a well-developed biological objective should follow the **SMART acronym**:

- Specific: describe what, who, when, and where—but 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

SUBJECT TARGET ACTION ATTRIBUTE PICK ONE: Species diversity, species **PICK ONE:** richness, population levels, **Species PICK ONE OR TWO:** population status, productivity, **PICK ONE:** diversity/composition Natural, resilient, historical range of variability, existing, Restore, establish, maintain, maximum, period of time, perpetuate, provide, viable, optimum, high quality, contribute, aid, achieve HABITAT **PICK ONE:** proper **PICK ONE:** Structure, integrity, health, Habitat or ecosystem functioning of process

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Question to Consider

How do key management objectives in the EAHCP meet SMART criteria?