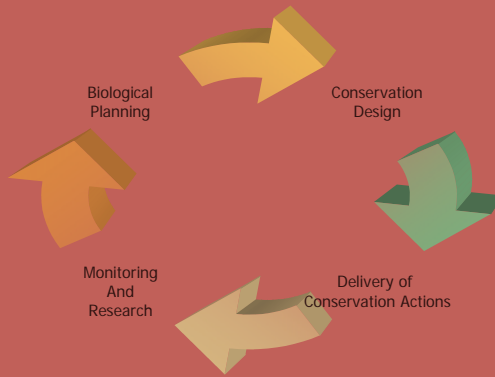


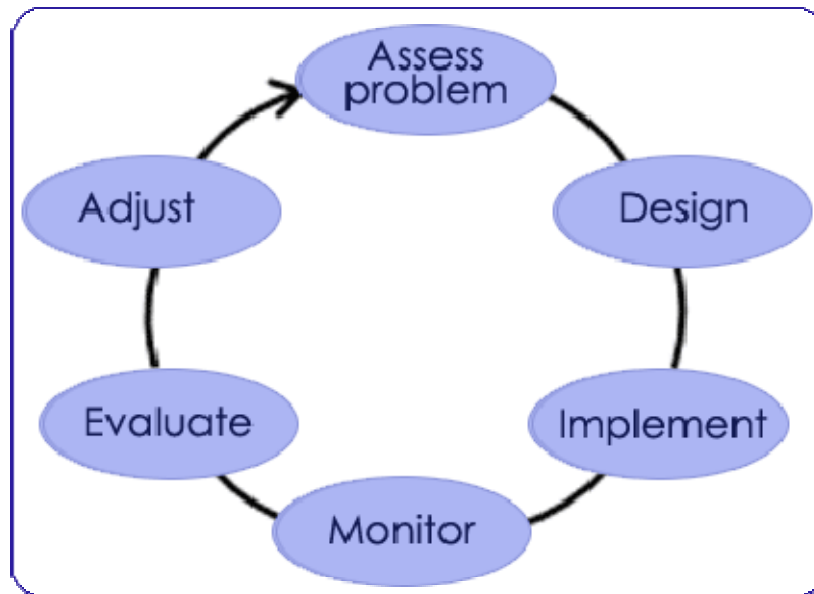
*State Wildlife Action Plans  
and  
Strategic Habitat Conservation*

*July 2006*

# Strategic Habitat Conservation (SHC)



## ADAPTIVE MANAGEMENT



# Strategic Habitat Conservation (SHC)

A framework for setting and achieving conservation objectives at multiple scales based on the best available information, data, and ecological models. Full implementation of SHC requires four elements that occur in an **adaptive management** loop: **(1) biological planning, (2) conservation design, (3) delivery of conservation actions, and (4) monitoring and research.**

## Guiding Principles

1. Habitat conservation is simply a means to attain our true goal – the conservation of populations and ecological functions that sustain them.
2. Defining measurable population objectives is a key component of SHC, at any scale.
3. Biological Planning must use the best scientific information available, both as a body of knowledge and a method of learning. Our understanding of ecological conditions is never perfect. An essential element of SHC is managing uncertainty through an iterative cycle of planning, doing, and evaluating.
4. Management actions, decisions, and recommendations must be defensible and transparent; thus, the implementation of SHC must be systematic, well documented, and explicit about the nature and magnitude of potential errors.
5. Conservation strategies consist of dynamic suites of objectives, tactics and tools that change as new information enters the SHC cycle.
- 6. Partnerships are essential, both for management and for developing conservation strategies.**

**In implementing SHC, the sixth guiding principle is especially important. Partnerships are a powerful means of communicating and implementing a conservation strategy.** Whether a partnership focuses primarily on the conservation of Federal trust resources (e.g., migratory birds via joint ventures), or more broadly on the conservation of all fish and wildlife species in a particular ecoregion, partnerships allow us to integrate these priorities and decide who does what and where. Under this arrangement, **each partner can fulfill its particular mandate, while working cooperatively.** The priorities and actions developed from collaborating on the elements of SHC will also help partners realize when to work separately to achieve unique objectives. **We realize the greatest impact of partnerships when partners jointly deliver and promote a common conservation strategy that achieves multiple objectives and respects the unique goals of each program.**

## Recommended Actions

### 2.6 Initiate a partnership strategy to:

**2.6.1 Share SHC concepts with states and solicit input (Immediate).**

**2.6.2 Review State Comprehensive Wildlife Management Strategies and identify opportunities to develop cooperative capacity for SHC (Immediate).**

**2.6.3 Establish a “community of practice” whereby the FWS convenes members of the conservation community to share methods and approaches for SHC (Near-term).**

# Comprehensive Wildlife Conservation Strategies State Wildlife Action Plans

## Essential Elements

1. Information on the **distribution and abundance of species of wildlife**, including low and declining populations as the State fish and wildlife agency deems appropriate, **that are indicative of the diversity and health of the State's wildlife**;
2. Descriptions of **locations and relative condition of key habitats and community types** essential to conservation of species identified in (1);
3. Descriptions of **problems which may adversely affect species identified in (1) or their habitats, and priority research and survey efforts needed** to identify factors which may assist in restoration and improved conservation of these species and habitats;
4. Descriptions of **conservation actions proposed** to conserve the identified species and habitats and **priorities for implementing** such actions;
5. Proposed **plans for monitoring species identified in (1) and their habitats, for monitoring the effectiveness of the conservation actions** proposed in (4), **and for adapting these conservation actions to respond appropriately to new information or changing conditions**;



# Strategic Habitat Conservation

## Element 1 – Biological Planning (CWCS/SWAP Elements 1, 2, &3)

The Biological Planning element identifies clear goals and objectives and compiles information necessary to achieve them. Goals and objectives provide the motives for investing in a particular habitat or location. For the purposes of Biological Planning, a goal is a descriptive, open-ended, and often broad statement of desired future conditions that conveys purpose, but does not define measurable units. An objective elaborates on a goal. It provides a concise, measurable statement of what we want to achieve. The Biological Planning element, which consists of six sub-elements, ensures development of outcome-based objectives that flow from the best available data, information, and models.

Sub-element 1.1 – Identify Priority Species (i.e., Species of Greatest Conservation Need)

Sub-element 1.2 – Select a Subset of Priority Species

Sub-element 1.3 – Formulate Population Objectives

Sub-element 1.4 – Assess the Current State of Species Populations

Sub-element 1.5 – Identify Limiting Factors

Subelement 1.6 – Compile and Apply Models Describing Population-Habitat Relationships

## Element 2 – Conservation Design (CWCS/SWAP Element 4)

Conservation Design brings together the results of Biological Planning into one or a few products that are accessible to diverse stakeholders.

Sub-element 2.1 – Develop Species Habitat Decision Support Tools

Sub-element 2.2 – Designate Priority Areas

Sub-element 2.3 – Formulate Habitat Objectives

## Element 3 – Conservation Delivery (Implementation of CWCS/SWAP Element 4)

As an integral part of SHC, “Delivery of Conservation Actions” will be the subject of a considerable amount of future discussion, including the changing role of the Service in collaborative conservation. The first steps are to understand our role in partnerships as the lead agency for trust resource conservation and to create an internal and external expectation that the Service and USGS will strive for a more strategic and efficient approach with our own contribution to conservation delivery. Whereas the Service has a considerable capacity for conservation delivery, the NEAT has focused primarily on building the largely heretofore undeveloped capacity for biological planning, conservation design and targeted research and monitoring.

In the future, the Service will be equally a manager of populations and habitats and the steward and purveyor of the biological foundation for Federal trust species conservation. The latter function has significant implications for how the Service operates with others. **Partnerships are valuable to the extent that they enable conservation that exceeds the sum of the potential actions of the individual agencies and organizations that comprise them.** Among traditional conservation delivery functions, future conservation partnerships will function as a nexus for information between the scientific community and the agencies and programs seeking diverse natural resource enhancement benefits through habitat conservation. In many cases, more diverse partnerships will eventually be needed to bring together expertise on economics, sociology, hydrology, as well as biology, for the purpose of developing a comprehensive land use strategies that enable humans and wildlife to co-exist at objective levels of abundance. No one should purport to understand the details of how partnerships like these will function most effectively; however, SHC is an open-ended framework that enables integration of any environmental or socio-economic factors that can be measured and predicted based on landscape context.

#### **Element 4 – Monitoring and Research (CWCS/SWAP Element 5)**

Implementation of on-the-ground actions based on information from Biological Planning and Conservation Design (SHC elements one and two) results in the application of specific conservation actions on specific parts of the landscape. Managers constantly make decisions about what conservation treatments to apply and where to apply them. The framework of SHC offers managers access to a variety of tools developed from the best available data and information to make those decisions. They will have transparent and defensible reasons for applying treatments. Finally, they will have targeted research and monitoring to validate or help them adjust their management decisions. Monitoring and Research are a prominent and fundamental element of SHC, and without this step, we lose the iterative process whereby managers learn and increase their efficiency.

Sub-element 4.1 – Target Research to Provide the Highest Value to Resource Management

Sub-element 4.2 – Establish Monitoring Activities to Support Inferences

Sub-element 4.3 – Use Monitoring and Research in a Feedback Loop (Adaptive Management)