U.S. Fish & Wildlife Service

Strategic Habitat Conservation

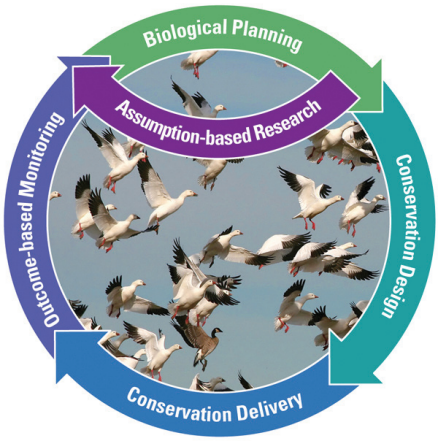
Thinking Bigger for Fish and Wildlife

September 2012

In 2006, the U.S. Fish and Wildlife Service leadership endorsed *Strategic Habitat Conservation (SHC)* as the conservation approach the agency would use to achieve its mission in the 21st Century. In response to the unprecedented scale and complexity of challenges facing our natural resources, agency leaders saw the need to develop and implement a landscape approach to conservation that was more strategic, science-driven, collaborative, adaptive, and understandable. Indeed, throughout the conservation community, people are relying more and more on strategic approaches that apply advanced science and technologies to questions of how best to target conservation to sustain populations of fish and wildlife across the landscape.

SHC relies on an adaptive management framework to focus on a subset of shared conservation targets, set measurable biological objectives for them, and identify the information, decisions, delivery, and monitoring needed to achieve desired biological outcomes. Key elements include:

Biological planning involves setting measurable biological objectives, for selected species of fish, wildlife, and plants – our conservation targets. The first step in this process is to select a subset of species that can serve as surrogates for a broader array of biological outcomes, since it is often impractical and inefficient to consider requirements for all species present on a given landscape. This subset of species will represent other species or aspects of the species' environment (e.g., water quality, sagebrush or grasslands, etc.) in conservation designs and strategies. By setting measurable biological objectives, such as population objectives, for this subset of conservation targets, the Service and its partners will be able to carry out conservation actions that benefit a larger group of species of conservation interest. Biological models for these species help us understand what habitat features or other conditions are limiting their populations—preventing them from existing or thriving—so we can target conservation to best address these underlying problems. Working with state wildlife agencies and other partners is critical throughout the biological planning process.



Conservation design involves combining geospatial data with biological information and models to create tools such as maps that evaluate the potential of every acre of habitat to support a species' population. Using these tools, we can determine what the current habitat-acre capability is—and what it needs to be—to achieve our specific biological objectives or outcomes. We can then make decisions collaboratively about the kind, quantity, and configuration of habitat needed, and what activities to undertake and where.

Conservation delivery involves working strategically to influence human behaviors, species, and habitats across the landscape. It involves using the products of conservation design to adjust and target our efforts, as we collaborative with people to develop and carry out conservation strategies that affect the landscapes, habitats, and ecological processes fish and wildlife depend on. Conservation strategies, delivery tools, and management activities, such as restoring wetlands, acquiring grassland easements, and working with private landowners to enhance habitat conditions for priority species (e.g., candidate conservation agreements), can be targeted to those areas that have the greatest benefits for fish, wildlife, and plant populations based on landscape scale models and designs. In this way, site-scale actions are coordinated and linked to landscape-scale habitat objectives and population outcomes using the biological planning and conservation design tools described above. Other important conservation delivery tools to influence human behavior and help achieve biological outcomes include communication, environmental education, access to recreational opportunities, regulatory forums and processes, conservation policy development, and targeted law enforcement activities. With a such broad array of tools at our disposal—tools based on biological planning and conservation design work—we can ensure that our actions add up to real landscape level results for fish, wildlife, and plants.

Outcome-based monitoring and assumption-driven research help us ensure that our work is adaptive – that we learn from our actions and improve them over time. During biological planning, we make many assumptions about how wildlife populations respond to their environment. Research that tests the validity of these assumptions and their relevance for natural resource management is a high priority. When taking any conservation action at a site, we need to monitor actual outcomes to evaluate the effectiveness of our programs and our progress toward goals and objectives. Updating our biological models and conservation designs and strategies based on information we get from research and monitoring activities completes the SHC feedback loop.

To comment on the SHC approach and draft guidance for selecting species, visit:
http://www.fws.gov/landscape-conservation/public-comments.cfm

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