

Strategic Landscape Conservation

The Right Conservation in the Right Places for America's Fish and Wildlife

Introduction

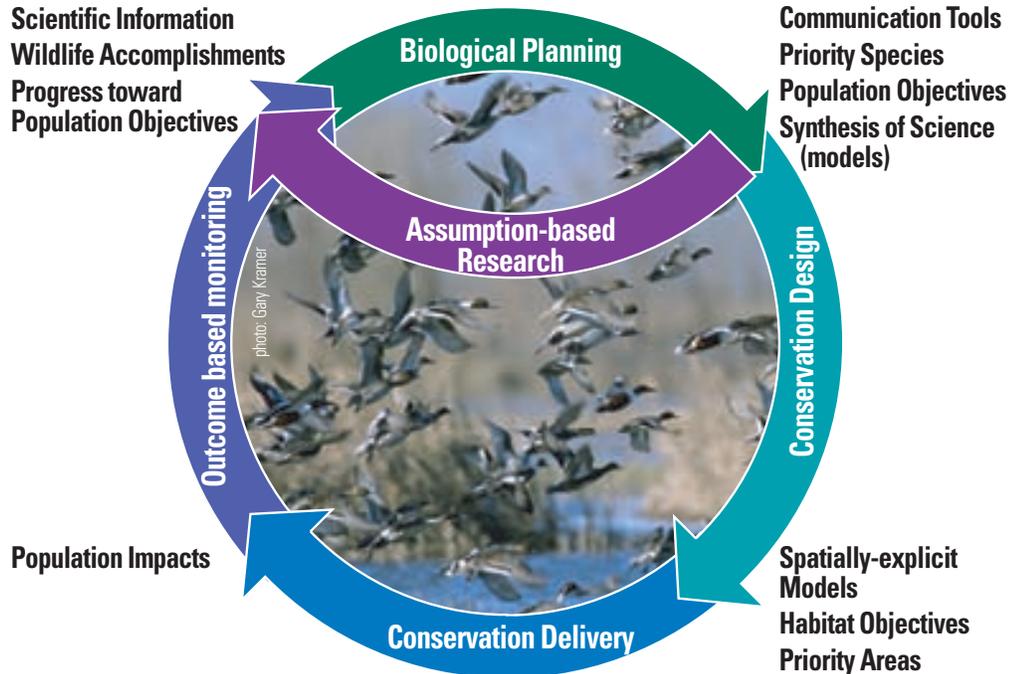
To more effectively address the growing threats to fish and wildlife conservation in the 21st. century, the U.S. Fish and Wildlife Service recently adopted a landscape approach to conservation termed: Strategic Habitat Conservation, or SHC. This approach links site specific actions to population and landscape sustainability. Please note that the terms strategic landscape conservation and SHC are used interchangeably throughout this document. Employees have asked questions and raised concerns about SHC that the Southeast Regional Advisory Team, a working group of their peers, has addressed in the document that follows.

The Team is collaborating with the National SHC Technical Advisory Team and teams in other Service regions to achieve consistent implementation of this conservation approach, which is, by its very nature, adaptive and evolving. While the conceptual idea that underpins SHC will remain stable over time and across regions, the specifics of what landscape conservation will look like "on the ground" will vary according to the resource issue it addresses and where it is applied. As a result, every question that might be raised at the outset concerning this concept may not be immediately answerable.

Landscape conservation is a dynamic process, and some answers will only come with time and experience. Nevertheless, we welcome questions as a sign of active employee involvement in this important undertaking, a requirement for its ultimate success. The Team will continue to add to this online document as questions are raised and new information becomes available. Employees are encouraged to contact members of the Team (<https://intranet.fws.gov/region4/SHC>) with ideas, comments, questions and concerns.

What is the Service's landscape conservation approach?

Landscape conservation is not a "new" concept, but it is a new, concerted effort to apply existing, adaptive, landscape-level approaches to fish and wildlife conservation. It does not discount the great work the Service has



accomplished for more than a century and is still accomplishing today. In fact, it builds upon these past and present accomplishments by leveraging the lessons we have learned, the data we have collected, the relationships and partnerships we have established, and the legacy we have built as a leader in the nation's fish and wildlife conservation community.

The framework is simply a landscape conservation approach focused on ensuring the availability of aquatic and terrestrial landscapes capable of sustaining specific population levels of "trust species" the Service is responsible for by law. Examples of "trust species" are migratory birds, threatened and endangered species, and fish that migrate beyond a single state's jurisdiction.

At its core, landscape conservation is a science-based framework for conserving fish and wildlife that includes biological planning, conservation design, conservation delivery, outcome-based monitoring, and assumption-driven research. The framework is adaptive and ties together all those elements needed to do the right conservation in the right places to benefit America's fish and wildlife populations. This means we take into account a conservation problem

usually involves multiple variables and uncertainties, and, thus, a single, direct solution often isn't possible. Science-based approaches to solving a problem are implemented incrementally, reviewed and critiqued, and insights gained are used to determine the next step.

Landscape conservation seeks to advance the efforts of the Service and our partners in supporting and maintaining populations of fish and wildlife by:

- promoting landscape level conservation as a basis for maintaining and expanding populations based on conservation priorities;
- integrating ongoing and future efforts for fish and wildlife conservation both within and outside the Service;
- improving the capacity for resources, data, science, and technology to effectively shape conservation actions;
- incorporating adaptive learning to better address uncertainties and to guide and refine future actions;



building upon our legacy of conservation successes and leveraging these successes in improved or more efficient ways;

- preparing us to effectively face new and unprecedented challenges present in such things as global climate change, water resource issues, and development pressures.

Simply put, there are four key concepts that always need to be considered as we implement actions: Plan, Do, Learn, and Adapt.

Plan: Set a specific objective, collect information, and formulate your landscape conservation strategy.

Do: Take action.

Learn: Evaluate your assumptions and how effective your action was toward achieving your objective.

Adapt: Apply what you have learned to actions and future issues.



This approach may seem commonsensical and may, in fact, be how many Service staff conduct business on a regular basis. SHC seeks to focus and link site specific actions to bigger picture landscape level defined objectives for fish and wildlife populations.

It can be applied at various geographic scales and offers an efficient way to organize all Service activities. In addition, this landscape conservation approach allows the Service to concentrate its expertise and resources, regardless of program, on specific conservation problems, such as the recovery of a species or by ensuring there is enough habitat in the right places for migratory bird species. By definition, SHC is an adaptive approach to habitat

conservation, meaning the Service can test a management practice, evaluate its effect on the problem, and then adjust the practice to meet the desired outcome.

Why implement landscape conservation?

The challenge of conserving fish and wildlife populations greatly exceeds the resources that, individually, the Service and our partners can reasonably expect to bring to bear now and in the future. America’s fish and wildlife resources are encountering levels of ecological change on a scale never experienced by previous generations. The threats are immediate and escalating. By integrating our work among programs and with partners, landscape conservation seeks to improve our collective confidence that we are doing “the right conservation in the right places” to more effectively achieve benefits for our nation’s fish and wildlife resources. It seeks to more fully address questions about fish and wildlife conservation objectives and maintaining populations whose answers are critical to our success in conserving trust resources. Landscape conservation will enhance the collective ability of the conservation community to clearly define conservation goals and to accurately measure accomplishments.

Who has a role in landscape conservation?

The role you as an employee will play in implementing landscape conservation will vary at any given point in time according to your job responsibilities and the resource issues that are of highest priority in your work area. It is important, however, for all employees to understand two basic principles about landscape conservation and its implementation:

Landscape conservation is all inclusive. Its emphasis on accountability, outcomes, and the integration of programs and disciplines all serve to illustrate the importance of every employee’s role in the overall success of the Region’s conservation mission. Successful



implementation will allow each of us, regardless of our job function and its direct impact on habitat conservation, to contribute to the accomplishment of meaningful, measurable conservation objectives that are defined, and refined, by science and a sound, adaptive approach.

It is not a process that can be turned on like a light switch or implemented in one fell swoop across the Southeast Region or the Service. Instead, we will phase in landscape conservation in an incremental, methodical way that preserves the integrity of the process. Ultimately, it will complement the programmatic functions of the Service by adding focus, efficiency, and alignment through cross-program delivery. Accordingly, not every field station or staff member will immediately be redirecting efforts based on a landscape conservation-driven approach.

Nevertheless, what staff at every station can and should do now is learn more about it; consider how what you do fits into and supports the framework; and identify what tools or resources are needed to better accomplish the functions described in the framework in support of landscape conservation and maintaining populations. Many of our existing activities already include some of the functional elements of landscape conservation.

What is the relationship between landscape conservation and budgets?

We will apply the strategic landscape conservation approach to our conservation priorities and use it over

time to target our priorities even more. Our intent is to use available funding to build capacity in key areas and direct funding toward better defined priorities. One example will be to set the table in fiscal year 2009 by taking some limited steps to fund some needed capacity to address climate change. Landscape conservation will provide us with opportunities to address conservation needs at varied landscape scales; respond to the needs of suites of species rather than single species; and improve our organizational efficiency by sharing resources through cross-program collaboration and key partnerships.

Because our landscape conservation effort builds on this agency's strong conservation legacy and builds on our collaborative work with partners, it allows us to make better use of existing internal and external funding sources to accomplish our mission. In addition, the Department of the Interior and the Office of Management and Budget are encouraging the Service to account for the biological results we are getting on the ground from our conservation efforts.

An outcome-based approach not only will allow the Service to evaluate the costs of achieving its conservation objectives, but will ultimately allow us to accurately predict return on investments.

How is landscape conservation different from ecosystem management?

They are both cross-program, field-based approaches that promote conservation of landscapes capable of supporting and maintaining a diversity of plant and animal life. Landscape conservation should not be confused with a previous Service initiative ("ecosystem approach") that was re-organizational in nature. It will help us to better define, align, and deliver core Service functions and activities, and does not focus on reorganization.

In addition, landscape conservation is fundamentally different from ecosystem management in that it specifically includes an adaptive component, which provides for continuous refinement of our assumptions and activities each step along the way. It is a scientific process that moves us beyond the traditional conservation assumption that "more [habitat] is better" and instead asks us to define "how much more, why do we need it, and where do we need it?"

How are landscape conservation, Structured Decision Making (SDM), and Adaptive Management (AM) related?

These three concepts are closely interrelated. Structured Decision Making (<http://structureddecisionmaking.org>) is an organized approach to identifying and evaluating decision alternatives by engaging stakeholders, experts and decision makers in decision-oriented analysis and dialogue. SDM deals proactively with complexity and judgment in decision making. It provides a framework that becomes a decision-focused roadmap for integrating planning, analysis, and consultation.

Adaptive Management (<http://elips.doi.gov> - search for Adaptive Management; scroll down to 3786) is a process that promotes flexible decision making that can be adjusted in the face of uncertainties as outcomes from management actions and other events become better understood. Careful monitoring of these outcomes both advances scientific understanding and helps with the adjustment of policies or operations as needed. AM is not a "trial and error" process, but rather emphasizes learning while doing. It does not represent an end in itself, but instead is a path to better decisions and improved results. The true measure is how well it helps meet environmental, social, and economic goals; increases scientific knowledge; and reduces tensions among stakeholders.

Landscape conservation was clearly developed on the principles and concepts of Structured Decision Making and Adaptive Management. In a sense, they are three concepts that intersect, all with the intent of helping us make better decisions about things we don't fully understand.

How is the Southeast Region moving forward with landscape conservation?

The first step for implementing landscape conservation in the Region involves educating ourselves about how and why

it is important for the future successes of individual stations, the Southeast Region, and the Service.

This education process requires a feedback loop so the Regional management team (Regional Directorate) and the Advisory Team can develop an operational framework that incorporates employee ideas and addresses questions and concerns. Planning is currently underway to provide forums for Regional employees to further engage with leadership relative to landscape conservation.

The Regional Directorate established the Advisory Team to assist in moving landscape conservation forward in the Region. The Team's membership is programmatically and geographically diverse and its representatives have both technical expertise and a deep commitment to achieving results on the ground. A roster of the Regional Advisory Team members is available at (<https://intranet.fws.gov/region4/LC>).

The Advisory Team recommended forming a Guiding Coalition of Senior Regional Managers to serve as the initial advocates for developing strategies to integrate landscape conservation within current functions. This group was formed earlier this year and has the authority to make decisions, align resources, and address impediments to advance implementation as the fundamental conservation approach underlying Southeast Region activities.

As we move forward with landscape conservation, each of us will be asked to identify those activities and functions that will need modification, those that should remain the same, and those that will need greater or lesser emphasis in order for us to be most effective in achieving the results we seek. Effective internal partnerships among Service programs are essential in the development of the landscape conservation approach to meet our common goals and objectives. It is designed to promote integrated programmatic approaches to species and habitat conservation efforts.

The Southeast Region is not currently pursuing the use of "focal areas," as some regions are. A focal-areas approach implies the implementation of landscape conservation will be focused on a few geographic priorities within a Region, at least initially. In contrast, the Southeast Region views it as a means of better targeting and prioritizing our efforts and



activities across all landscapes throughout the Region. Our approach is premised on the idea that each component of the landscape has some intrinsic potential with respect to conserving fish and wildlife resources.

Landscape conservation has the potential to define and better determine the specific role that each component of the landscape plays in supporting the conservation of these specific resources. Rather than selecting large areas of the landscape as priorities within the Region, or focal areas, we are assessing entire landscapes with respect to its capacity to contribute to specific conservation objectives.

What are the implications of landscape conservation with respect to existing Service capacities and capabilities in the Southeast Region?

The Service, working alone, always will have technical, programmatic, and administrative constraints that limit our capacity to fully and effectively meet our conservation mission, or even to fully engage in landscape conservation. As a result, it is imperative we work with our partners, particularly U.S. Geological Survey and the State fish and wildlife agencies, to assess our collective capacities and capabilities and align ourselves to achieve conservation goals of mutual interest. This provides us with a common conceptual framework. Our partners are increasingly seeing the benefits of adaptive landscape approaches to conservation and are adopting those principles accordingly.



The Regional Director has committed to providing the GIS support needed for landscape conservation. The Southeast Region has invested heavily

in the development of its GIS and data analyses capabilities. We are currently engaged in sharing spatial data on fish and wildlife habitats with numerous partners in State programs, academia, and non-governmental organizations. As landscape conservation moves forward in the Southeast Region, field stations may rest assured that technical assistance from internal and external sources will be made increasingly available.

Landscape conservation partnerships will involve far more than sharing of GIS capabilities. Partners also will engage in structured decision making, monitoring, and research. These opportunities for collaboration with partners will allow us to build the collective capacity and capability to accomplish our mission.

Is this another top-down directive that will disappear when a new administration takes office?

While Service Director Dale Hall and the Directorate embraced landscape conservation or SHC and encouraged all Regions to implement it, it is not a policy directive. Rather, it is a shift in our way of thinking about how we carry out our conservation mission so that we strategically target the species with the greatest needs on a landscape scale to ensure to their long-term survival.

Unlike other recent administration policy directives, landscape conservation evolved at the grass-roots level from the experiences of field employees. Career conservation practitioners from the Service and the U.S. Geological Survey observed that working methodically to reach across program boundaries, to identify priorities, and to concentrate resources on the landscape to address those priorities yielded measurably increased results. Landscape conservation is an attempt by the Service to institutionalize this winning approach.

While there is no way to predict whether a new administration will support the concept of landscape conservation, the question is, to a great extent, moot. If the Region and the Service apply landscape conservation effectively and can show improvements in the status of species as a result, it won't matter what we call this approach, or which administration claims it as its own.

What will matter is that the Service will show the American public that we are carrying out our mission in a way that produces measurable results, even in the



face of shrinking budgets and changing ecological conditions.

How can employees learn more about landscape conservation and get involved in its implementation?

Regional leadership is fully committed to keeping all staff apprised of ongoing activities, including opportunities to learn more about this landscape conservation approach. Regular, periodic updates like this one will be provided to keep you informed. Every effort will be made to ensure a widespread and effective distribution of information on landscape conservation. In addition, the members of the Regional Advisory Team are available as resources for you to learn more (<https://intranet.fws.gov/region4/SHC>). Feel free to contact members directly for more information. You may also invite them to brief your station or office so that you and others in your program can learn more about the landscape conservation process and ways in which to participate.

Conclusion

Landscape conservation is an approach to conservation with the potential to measurably increase the results we achieve for fish and wildlife resources on the ground. It is an approach that requires disciplined, scientific rigor; a willingness to accept uncertainty, and the capacity to learn and adapt as new information arises. It is predicated on internal and external partnerships and the sharing of expertise and resources to achieve mutually desired outcomes. Successful implementation of landscape conservation will require the support and involvement of every employee over time as we move to the next level in fish and wildlife conservation for the sake of the resource.

All photos: USFWS