

Surrogate Species - Frequently Asked Questions

Revised July 31-2014

Why should the Service do landscape-scale conservation planning?

Landscape-scale habitat conservation is necessary to ensure that the right types of habitat are available now and in the future in the right amounts, patterns and distribution to support fish and wildlife species at levels that the public expects. Landscape-scale conservation planning and its associated tools (e.g., models of species-habitat interactions, decision support tools), help field staff prioritize and decide where, how much and what kinds of conservation or management actions are needed on the ground to support sustainable fish and wildlife populations at desired levels. Landscape-scale conservation planning also helps to connect local actions to common State and regional conservation goals developed by the Service, State fish and wildlife agencies and other partners. Together, we can jointly develop landscape-scale habitat conservation goals that address regional and national goals for species that federal and State fish and wildlife agencies are responsible for. Landscape-scale conservation planning allows the Service and conservation community to accomplish together what none of us can accomplish individually for fish, wildlife and people.

Why use surrogate species in our landscape-scale conservation planning?

The Service seeks to accomplish its mission for trust species by ensuring populations are self-sustaining at levels desired by the public. With literally thousands of species entrusted to the Service, a landscape-scale approach is needed to help the Service and partners define conditions necessary to support viable populations of the wide-ranging species on the landscape. Because surrogate species represent other species or aspects of the environment, these species are used for comprehensive conservation planning that supports multiple species and habitats within a defined landscape or geographic area. Without this simplification, developing cross-programmatic and inter-organizational objectives and work plans will not be feasible. With it, managers can focus on a set of key elements that can be monitored to determine if planned biological goals are being achieved. Additionally, such an approach can result in more systematic and effective management because it emphasizes the commonalities of species' conservation needs.

How will the surrogate species selection process affect the work of the Service?

The surrogate species selection process will help the Service identify strategic priorities (biological objectives and other conservation planning targets) and collectively work toward achieving these objectives using the SHC approach such that our conservation decisions are informed by landscape-scale assessments. By using surrogate species to identify biological objectives and other conservation planning targets, our programs can more explicitly connect conservation delivery and our policies to larger biological goals on the landscape, including those of our partners.

What does "Designing Functional Landscapes" mean?

Functional landscapes, for the purposes of FWS, are defined as "lands and waters with the properties and elements required to support desirable populations of fish and wildlife, while also providing human society with desired goods and services, including food, fiber, water, energy, and living space." To design functional landscapes is to model future habitat conservation scenarios, at landscape scales, that consider projected ecological factors (e.g. climate change, habitat fragmentation, energy development, human population growth and development, etc.), and the likely capability of any given future habitat conservation scenario to support self-sustaining fish, wildlife and plant populations in a landscape, at levels and distributions desired and expected by the communities (people) that inhabit that landscape.

How will surrogate species selection affect Service budget decisions and performance accountability?

Surrogate species selection will be used as the basis for conservation planning within specified geographic areas. Service budget decisions and performance accountability will be informed and guided by landscape conservation strategies and actions to be developed through these regional conservation planning efforts. This will enable the Service to be more accountable and transparent to partners and stakeholders by connecting our work to meaningful biological goals identified in the field. Aligning our organizational and business management practices to support our work on the ground related to species viability and sustainability will help the Service make more cost-effective conservation decisions and investments in the future.

What is the geographic unit of focus for selecting surrogate species?

The LCC boundaries will serve as initial areas of focus for selecting surrogate species, but it will likely be necessary to further divide the LCCs at a more practical scale based on ecological, physical and geographic considerations. Neither the LCCs nor species' ranges conform precisely to the Service's regional boundaries, so strong collaboration among and between regions and LCCs will be necessary. An integral point in approaching our conservation mission in this way is to integrate our work with that of other conservation organizations across and between multiple scales of time and geographic space.

How are surrogate species different from focal, representative or priority species?

Priority species are those that, because of legal status, management need, vulnerability, geographic areas of importance, financial or partner opportunity, political sensitivity, or other factors, demand extra time and resource efforts to conserve them. Priority species are a subset of the universe of species that we are responsible for.

Surrogate species is a commonly used term for species-based conservation planning. It includes various categories (focal, umbrella, representative, keystone, indicator, flagship), and its use is well documented in the scientific literature. As used in the technical guidance, a surrogate species is used to represent other species or aspects of the environment. Selecting a suite of surrogate species can help represent the habitat and/or management needs of larger groups of species.

Focal species, as defined in the 2006 FWS and USGS NEAT Report as well as in the Service's 2008 SHC Technical Implementation Guide, are species that represent larger guilds of species that use habitats similarly. Generally, focal species are selected based on knowledge that factors limiting their populations are sensitive to landscape-scale characteristics, such as land cover composition or connectivity. By addressing the needs of focal species, other species within a guild are expected to benefit. Focal species are one category of surrogate species. (NOTE: Each of these terms has a unique and legitimate meaning in the lexicon of FWS. Being consistent with our understanding of these concepts, however, is more important than perfect consistency in terminology. Consistent use of the term "surrogate species" is encouraged when referring to SHC species-based landscape conservation design and planning).

What if the species I work on isn't a surrogate species? Does that mean it's not a priority?

No. The conservation and management needs of trust species, including ESA mandates, will remain unchanged and must be addressed either through the surrogate species approach or individually. If it is determined that listed or other trust species' limiting factors are not addressed with this approach, resources and effort to address them in another manner will be necessary. The identification of surrogate species will not replace or supersede our trust species responsibilities; it will help us do landscape

conservation more effectively and efficiently for many of the species of interest to the Service and our partners, including many listed under ESA and relevant counterpart State laws.

What if the selected surrogate species don't represent all the species for which the Service is responsible?

Surrogate species selected cannot represent all needs of all species on the landscape. The Service is responsible, first and foremost, for conserving federal trust species. As such, it is imperative that we select surrogate species that best represent as many of our trust species as possible. State fish and wildlife agencies, however, share many of the Service's priorities and have additional species priorities within the same landscapes. A collaborative effort is needed to accommodate as many species as possible in landscape conservation strategies to ensure that the states and Service together are meeting the public's expectations for all the nation's fish and wildlife resources.

Feedback from species experts and staff throughout the process will refine our knowledge so that we may adapt our approaches as we move forward. Species that have unique habitat requirements or management needs that cannot be adequately represented by other species will be recognized, and their needs will be incorporated individually into landscape conservation strategies or addressed by stand-alone strategies.

What if there are conflicts between the habitat requirements of two species within the same geographic landscape?

Population objectives for species will enable us to identify and account for the habitat available or needed to support species with similar requirements, as well as potential conflicts between species needing different habitat features on the same landscapes. Having both landscape-scale habitat availability data and population objectives will allow us to consider alternative solutions for conserving habitats that can support both species and also will facilitate informed scientific and social discussions that will help us make decisions about how to balance competing conservation objectives.

How will surrogate species selection impact conservation delivery?

Identifying and selecting surrogate species will help ensure that "site-scale" delivery actions and individual projects of Service programs are coordinated and linked to landscape-scale goals – as defined and expressed in the biological planning and conservation design aspects of SHC. This will enable our conservation actions to have a better chance of adding up to real landscape-level results for fish, wildlife and plants and help the Service express our goals and achievements more clearly and understandably to the public, our partners and Congress. Conservation delivery will be stronger and more lasting, because this approach will make our mission more relevant to American society and engender increased support for conservation.