

Draft EA Chapter 5—Coordination and Environmental Review



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Canada geese in flight near Bear Lake National Wildlife Refuge, Idaho.

The Service has discussed the proposal to establish the Bear River Watershed Conservation Area with landowners; conservation organizations; other Federal agencies; tribal, State, and local governments; and other interested groups and individuals.

Agency Coordination

The Service has coordinated within the agency as well as with each of the three State wildlife agencies in developing this EA. Field and regional Service staffs conducted the analysis and prepared the documentation (refer to “Appendix A, List of Preparers and Reviewers”). The Service held six public open-house meetings throughout the proposed project area to provide information and to discuss the proposal with landowners and other interested citizens.

At the Federal level, Service staff briefed Senators Labrador, Simpson, Hatch, Lee, Enzi, and

Barrasso and the congressional delegations for Representatives Simpson, Labrador, Bishop, and Lummis. Representatives from the USDA Forest Service, NRCS, and the Bureau of Land Management were also contacted and provided with project information. At the State level, Governors Otter, Herbert, and Mead; Idaho Department of Fish and Game; Utah Division of Wildlife Resources; Utah State Forestry; Utah Sovereign Lands; and the Wyoming Game and Fish Department were also briefed on the proposed project. Information on the proposed project was provided for 15 tribes with interest in the proposed project area.

Representatives from local soil and water conservation districts, farm bureaus, universities, counties, and towns were also provided with project information.

The Service has coordinated with many nongovernmental groups that are essential to the success of the proposed conservation project, including The Nature Conservancy, Trout Unlimited, Bridgerland

Audubon, Sagebrush Steppe Regional Land Trust, and Wyoming Stock Growers Agricultural Land Trust.

Contaminants and Hazardous Materials

A level I pre-acquisition site assessment would be conducted on individual tracts before purchase of any land interests. Qualified Service staff in Idaho, Utah, and Wyoming would make sure that policies and guidelines are followed before acquisition of any conservation easements.

National Environmental Policy Act

The Service conducted this environmental analysis under the authority of and in compliance with the National Environmental Policy Act, which requires an evaluation of reasonable alternatives that meet stated objectives and an assessment of the possible effects on the human environment.

Environmental Assessment

This EA will be the basis for determining whether implementation of the proposed action would constitute a major Federal action significantly affecting the quality of the human environment. National Environmental Policy Act planning for this EA involved other government agencies and the public in the identification of issues and alternatives for the proposed project.

Distribution and Availability

The Service is distributing this EA (with the associated draft LPP in the same volume) to the project mailing list, which includes Federal and State legislative delegations, tribes, agencies, landowners, private groups, and other interested individuals. After they have been released for public review, the Service will hold public meetings to talk about the EA and draft LPP.

Copies of the EA and information about public meetings are available by visiting the project Web

site or by contacting the Service by email, postal mail, telephone, or in person.

Project Web site: www.fws.gov/mountain-prairie/planning/lpp/ut/brr/brr.html

Project email: brwca_comments@fws.gov

Service Unit Contacts

Amy Thornburg, Planning Team Leader
Attn: Proposed Bear River Watershed Conservation Area

U.S. Fish and Wildlife Service, Region 6
Division of Refuge Planning
134 Union Boulevard
Lakewood, Colorado 80228
303 / 236 4345

U.S. Fish and Wildlife Service, Region 1
Division of Refuge Planning
911 NE 11th Avenue
Portland, Oregon 97232-4181
503 / 872 2897

U.S. Fish and Wildlife Service, Region 1
Bear Lake National Wildlife Refuge
P.O. Box 9
Montpelier, Idaho 83254
208 / 847 1757

U.S. Fish and Wildlife Service, Region 6
Bear River Migratory Bird Refuge
2155 West Forest Street
Brigham City, Utah 84302
435 / 734 6451

U.S. Fish and Wildlife Service, Region 6
Cokeville Meadows National Wildlife Refuge
P.O. Box 700
Green River, Wyoming 82935
307 / 875 2187

Strategic Habitat Conservation

The proposed Bear River Watershed Conservation Area project is a landscape-scale effort to conserve populations of priority species in a highly diverse and endangered ecosystem over the approximately 4.8 million-acre project area. Therefore, it is important to incorporate the elements of strategic habitat conservation to ensure effective conservation. Strategic habitat conservation uses an ongoing cycle of strategic biological planning and conservation

design, integrated conservation delivery, monitoring, and research at ecoregional scales (see figure EA–9).

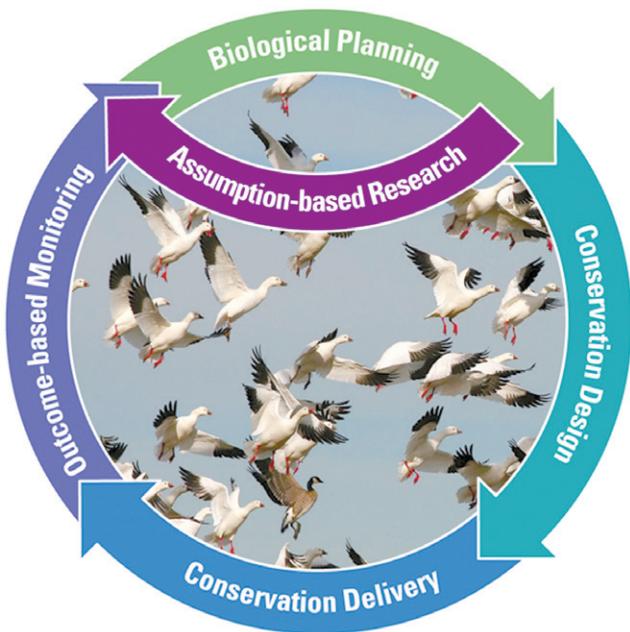


Figure EA–9. Elements of strategic habitat conservation.

Biological Planning

Biological planning requires the identification of priority species, development of population objectives, and identification of landscape-level limiting factors that are keeping the populations of priority trust species below desired levels.

The need and opportunity for strategic conservation to benefit fish and wildlife in the Bear River watershed is articulated in the following regional plans reviewed by the planning team:

- “Conservation Action Plan (CAP) for the Bear River Watershed”
- State Wildlife Action Plans for Idaho, Utah, and Wyoming
- “Intermountain West Regional Shorebird Plan”
- “Intermountain West Waterbird Conservation Plan”
- “Partners In Flight”
- “Audubon Society Globally Important Bird Areas”
- “National Fish Habitat Action Plan 2006”
- “North American Waterfowl Management Plan”

■ “U.S. Shorebird Conservation Plan”

Based on these plans and input from local stakeholders and partners, initial biological planning uses four focal species, acting as surrogates for others, to model the distribution and habitat needs of a larger group of wildlife species with similar needs. This information will also be used to set priorities for Service conservation efforts within the proposed project area.

Focal Species

Bonneville cutthroat trout was used to represent the habitat needs of other native fish species found in the Bear River watershed including northern leatherside chub, mountain whitefish, mottled and Paiute sculpin, longnose and speckled dace, redbreast shiner, and Utah and mountain suckers. Once thought to be extinct because of habitat loss and overharvesting, Bonneville cutthroat trout were rediscovered in recent decades, with relatively pure populations continuing to persist along the periphery of the Bonneville basin in Utah, Idaho, Wyoming, and Nevada. The Bear River basin supports the largest remaining migratory populations, including both fluvial (living in rivers or streams) and adfluvial (living in lakes and migrating to rivers or streams) forms, while other metapopulations and strongholds also occur in the Northern Bonneville basin (Haak et al. 2011). Declines in populations of native salmonids, including Bonneville cutthroat trout, can result from the combined effects of habitat degradation and fragmentation, blocked migration corridors, degraded water quality or quantity, angler harvesting and poaching, entrainment into diversion canals and dams, nonnative species interactions, and other factors (USFWS 2002).

The *greater sage-grouse* and the *sage thrasher* act as surrogates for sagebrush-dependent trust species. Sagebrush ecosystems are among the most imperiled in North America because of a variety of human-caused disturbances. Sagebrush habitat has been altered and fragmented, resulting in the decline in both the numbers and the distribution of many of the more than 350 species that depend on sagebrush habitat for all or part of their life cycles (Wisdom et al. 2005.) In particular, such habitat shifts have major implications for sagebrush-dependent vertebrates including bird species such as sage thrasher, greater sage-grouse, and sage sparrow (Knick et al. 2003). Keeping large areas of intact sagebrush is considered crucial for the long-term persistence of sage-grouse (Aldridge et al. 2008) as well as other sagebrush-dependent species. Based on this finding, it has been recommended that conservation efforts begin by keeping large expanses of sagebrush habitat and enhancing the quality and connectivity of those areas.

American avocet was used to represent a larger group of wetland-dependent species including the white-faced ibis. Breeding Bird Surveys have shown the population trend for American avocets in the Basin and Range physiographic region to be declining at a rate of approximately 18 percent per year from 1966 (Sauer et al. 2005). Habitat destruction and fragmentation of wetlands and marshes also limits the population of many waterbirds and waterfowl as they eliminate nesting, brood, and foraging habitats. The proximity and quality of these various habitat types particularly affect the survival rates of young birds.

Besides the importance of breeding habitat, the quality and availability of spring migration habitat has direct implications for the survival and breeding productivity of the millions of migratory birds passing through the Bear River watershed each year.

Conservation Design

Conceptual and quantitative models have been developed to help in predicting key habitats now used by the highest density of four focal species populations, and to aid in initial conservation design and delivery efforts.

Priority species, along with associated population goals, would continually be defined and updated throughout the implementation of this proposed project, and additional landscape models would be developed for priority trust species.

Most wildlife species require more than one type of habitat during their life history. The wetland, riparian, grassland, and shrubland habitats found in the Bear River watershed allow multiple groups of species to meet their needs.

The connectivity between the three national wildlife refuges, waterfowl production area, and other large areas of protected lands keeps migration corridors for migratory and resident wildlife species. The connectivity within the Bear River watershed as well as to other ecosystems such as the Greater Yellowstone increases the resiliency of the region.

Habitat and Population Evaluation Team (HAPET) biologists assessed land cover data in a Geographic Information System (GIS) to set priorities for different areas of the watershed for acquisition of conservation easements, resulting in spatially explicit decision support tools. An existing landscape prioritization tool for the greater sage-grouse, which identified rangewide breeding densities (Doherty et al. 2010), was coupled with the decision support tool for sage thrasher and American avocet to provide land managers in the Bear River watershed the best available information on landscape values for the four focal species.

To assess Bonneville cutthroat trout populations, the Service used models prepared by Trout Unlimited that evaluated species densities and genetic purity in Bear River watershed streams.

The Service used a Marxan model to incorporate the HAPET models for sage thrasher, greater sage-grouse, and American avocet along with the Bonneville cutthroat trout model based on data provided by Trout Unlimited. In addition, Marxan modeling was used to incorporate crucial wetland and riparian habitat depended on by a wide variety of migratory bird species including white-faced ibis, yellow warbler, flycatchers, yellow-billed cuckoo, for which there is insufficient data available to develop other types of models based on bird densities and abundance. The modeling allowed a “bottom-up” approach to be used to generate an alternate method of predicting likely areas of habitat use by migratory birds. One of the key results from Marxan is the “selection frequency” of a given spatial planning unit. A spatial planning unit that has a high selection frequency shows that it must be protected to meet conservation goals, based on input criteria. In other words, it is irreplaceable; conservation goals cannot be met in an efficient manner without protecting these areas. The four conservation ranks are described below:

- *High Conservation Rank*: High irreplaceability across all goal levels, higher ecological integrity, and multiple conservation targets present.
- *Medium Conservation Rank*: Moderate irreplaceability across all goal levels, lower ecological integrity, and fewer conservation targets than high priority.
- *Low Conservation Rank*: Not irreplaceable across all goal levels, lower ecological integrity, and one conservation target present.
- *No Conservation Rank*: Not selected with the data that is now available.

Chapter 4 of the LPP describes the detailed process for determining conservation priority areas.

Integrated Conservation Delivery

Over the years, the staffs from the three national wildlife refuges have worked with a wide variety of agencies, nongovernmental organizations, and private landowners on wildlife conservation issues and

opportunities. Partners for Fish and Wildlife biologists have worked with landowners on habitat restoration projects and partnerships that provide the foundation for a successful easement program. The ongoing involvement of the Partners for Fish and Wildlife program, landscape conservation cooperatives, and many partner organizations and agencies would be essential for the effective delivery of sustainable conservation program. Application of the strategic habitat conservation framework would build on existing partnerships and support the development of new partnerships for conservation throughout the region. The spatially explicit decision-support tools being developed would allow for greater flexibility, increased responsiveness, and improved efficiency in meeting Service and partner needs for conservation delivery.

Wetland and upland conservation easements are essential tools for protecting important wildlife habitat on a landscape scale. The detailed LPP developed in conjunction with this EA provides the information necessary to carry out the conservation action of acquiring conservation easements on the “best of the best” habitat for priority species. As understanding of the functional relationships between priority species and habitats increases, the Service would adapt the strategies used to target acquisition of the highest priority habitat for meeting the population objectives of priority species.

Monitoring and Research

Although the importance of the Bear River watershed for migratory birds is widely recognized, there are gaps in our knowledge about the area’s resources. More Breeding Bird Survey routes, completion of the National Wetlands Inventory database, and incorporating research and information from the large number of conservation agencies and organizations in the region would help to assess conservation needs and priorities in the region. The Service would work with the Great Basin, Great Northern, and Southern Rockies Landscape Conservation Cooperatives and many partners to develop and refine predictive population models. The results of Breeding Bird Surveys; the annual monitoring the Service conducts on waterfowl, breeding shorebirds, other waterbirds, grassland birds, and raptors on the three national wildlife refuges; and other appropriate regional, State, and local surveys would be used to assess the effectiveness of the conservation easement program.

Research and monitoring emphasis would be placed on the highest priority species that have the greatest degree of uncertainty about limiting

factors and the effectiveness of management actions at minimizing and reducing limiting factors. Data from existing surveys such as the Breeding Bird Survey would be evaluated and incorporated into spatial models. When necessary, more data would be collected to evaluate the assumptions used in the modeling process and assessments would be adjusted accordingly. These methods would provide an estimate of the population response of trust species on easement lands and on noneasement properties.

Evaluation of the assumptions and uncertainties identified through the biological planning, conservation design, and conservation delivery elements would be addressed in cooperation with partners such as nongovernmental organizations and universities.

The contributions of conservation easements and other management actions toward meeting population goals for priority trust species would be evaluated using spatially explicit models that allow for estimation of population size on conservation easements and other land parcels of interest. Such models would allow the Service and its conservation partners to evaluate the contribution of the program to meeting population goals and to refine conservation delivery to ensure greatest efficiency. Spatially explicit models would also enable the Service to show the contribution of the proposed Bear River Watershed Conservation Area to national and continental population goals for priority species.

Landscape Conservation Cooperatives

The proposed Bear River Watershed Conservation Area covers three landscape conservation cooperatives (Great Basin, Great Northern, and Southern Rockies) that cover parts of 11 western States and Canada (see figure EA-3). The landscape conservation cooperatives involve many partners and function at a scale necessary to address wildlife adaptation in response to climate change. In carrying out conservation actions through the proposed conservation area, the Service would use the efforts of the landscape conservation cooperatives to refine priority acquisitions and to address current and future issues and opportunities related to landscape-scale conservation in a rapidly changing world.

The Service would work with the three landscape conservation cooperatives as a means of conducting strategic habitat conservation to deal with a range of resource threats, such as development, invasive species, and water scarcity.

