Glossary

adfluvial—Referring to fish that live in lakes and migrate to rivers and streams.

Beyond the Boundaries—National Wildlife Refuge Association program to expand conservation work to areas outside national wildlife refuge borders.

BRWCA—Bear River Watershed Conservation Area.

candidate species—A species of plant or animal for which the USFWS has sufficient information on their biological status and threats to propose them as endangered or threatened under the Endangered Species Act, but for which development of a proposed listing regulation is precluded by other higher priority listing activities.

CFR—Code of Federal Regulations.

conservation easement—A legally enforceable encumbrance or transfer of property rights to a government agency or land trust for the purposes of conservation. Rights transferred could include the discretion to subdivide or develop land, change current land use practices, sever water rights, or others as appropriate, and are specified by contract between the landowner and the conservation entity.

conservation strategy—An adaptive approach for integrating biological priorities with current socioeconomic threats to habitat to target the acquisition of wetland and grassland easements in the Bear River of Region 6. The strategy focuses on the five, primary, upland-nesting duck species, which also provide for other trust species' benefits. To meet the goal of this strategy, there is an estimated need of an additional 1.4 million acres of high-priority wetland and 10.4 million acres of high-priority grassland.

EA—See environmental assessment.

endangered species—A species of plant or animal that is in danger of extinction throughout all or a significant part of its range.

Endangered Species Act—A law passed by Congress in 1973 with the purpose of protecting and recovering imperiled species and the ecosystems on which they depend.

environmental assessment (EA)—A public document for which a Federal agency is responsible. An environmental assessment provides evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact, aids an agency's compliance with the National Environmental Policy Act when no environmental impact statement is necessary, and facilitates preparation of a statement when one is necessary.

fluvial—Referring to fish that live in rivers and streams.

GCN—Greatest Conservation Need: species of wildlife, including low and declining populations, as the State wildlife agency deems appropriate, that are indicative of the diversity and health of the State's wildlife.

HAPET—Habitat and Population Evaluation Team is part of the Migratory Bird Division of the USFWS. Its mission is to improve the biological basis for migratory bird management in the Upper Midwest.

Important Bird Areas Program—A global effort to find and conserve areas that are vital to birds and other biodiversity sponsored by the National Audubon Society.

Intermountain West Joint Venture—Diverse partnership of 18 entities including Federal agencies, State agencies, nonprofit conservation organizations, and for-profit organizations representing agriculture and industry. IWJV was founded in 1994 to facilitate bird conservation across the vast 495 million acres of the Intermountain West.

Intermountain West Joint Venture Implementation Plan—A plan that provides direction for integrating the conservation of all migratory birds under one framework. The process involves stepping down the objectives of the four plans for the international species groups of waterfowl, shorebirds, other waterbirds, and landbirds. Population and habitat trends, coupled with knowledge of how species respond to landscape change, would be used to build a biological foundation and set quantifiable goals.

landscape conservation cooperative (LCC)—A public–private partnership intended to facilitate cross-political boundary conservation in the face of a changing environment through application of science.

land protection plan (LPP)—Describes resource protection needs, proposes a refuge or conservation area boundary, and identifies in priority order the areas that the Service may buy land interests from willing sellers.

LCC—See landscape conservation cooperative.

LPP—See land protection plan.

Marxan—A software package used as a decision support tool for spatial conservation prioritization.

NRCS—Natural Resources Conservation Service, an agency of the U.S. Department of Agriculture.

NWR—National wildlife refuge.

Refuge System—National Wildlife Refuge System.

Region 1—An administrative unit of the Service known as the Pacific Region encompassing Hawaii, Idaho, Oregon, Washington and Pacific Island Territories and United States affiliated States.

Region 6—An administrative unit of the Service known as the Mountain–Prairie Region, which covers eight States: Colorado, Kansas, Montana, Nebraska, North Dakota, South Dakota, Utah, and Wyoming.

Service, or USFWS—U.S. Fish and Wildlife Service, an agency of the U.S. Department of the Interior.

strategic habitat conservation—A process used within the Service to set biological goals for priority species populations, make strategic decisions, and to reassess and improve management actions. Comprised of four stages: Biological Planning, Conservation Design, Delivery of Conservation Action, and Monitoring and Research.

threatened species—A species of plant or animal that is likely to become endangered in the foreseeable future.

trust species—Federal trust species include threatened and endangered species, as well as migratory birds such as waterfowl, wading birds, shorebirds, and neotropical migratory songbirds, anadromous (migratory) fish such as salmon.

U.S.C.—United States Code.

USDA—U.S. Department of Agriculture.

USFWS, or Service—U.S. Fish and Wildlife Service, an agency of the U.S. Department of the Interior.

WPA—Waterfowl production area.

Appendix A

Environmental Assessment

USFWS

Birds at Oxford Slough Waterfowl Production Area, Idaho.

Section 1—Purpose of and Need for Action

Introduction

Before Euro-American settlement, the Bear River delta on the north side of the Great Salt Lake was a vast natural marsh that provided wetland habitat for waterfowl in the arid Great Basin region. When John C. Fremont, an early explorer in the West, visited the area near the present-day Bear River Migratory Bird Refuge in 1843, he commented, "the waterfowl made a noise like thunder… as the whole scene was animated with waterfowl."

The Bear River travels a 500-mile course from its headwaters in Utah's Uinta Mountains through Wyoming and Idaho, eventually terminating its horseshoe-shaped route in Utah's Great Salt Lake, the largest inland sea in the Western Hemisphere. The forested areas at the headwaters are part of a crucial wildlife corridor for species migration in the western United States. These areas offer a major link between the northern and southern Rocky Mountain ecosystems (Theobald et al. 2011, USDA Forest Service 2003). The small, pristine mountain streams found in the area provide ideal breeding habitat for important native species, such as the Bonneville cutthroat trout and northern leatherside chub. Elk, black bear, grizzly bear, Canada lynx, wolverine, gray wolf, pika, and marmot use the high-elevation forest and snow-covered mountain slopes found in the watershed. The montane shrubland, sage grassland, and pastureland provide good habitat for greater sage-grouse, Columbian sharp-tailed grouse, bald eagle, hawks, mule deer, elk, pronghorn, rabbit, bobcat, and black bear.

Wetlands and riparian areas in the lower elevations provide some of the most important resting, staging, feeding, breeding, and nesting areas for migratory birds in the Pacific and central flyways (Downard 2010). More than 46 percent of the North American population of white-faced ibis, 24 percent of the North American population of marbled godwit, and 18 percent of the North American population of black-necked stilt use the wetland habitat found within the watershed. More than 270 different species are

associated with the habitats supported by the Cokeville Meadows National Wildlife Refuge, Bear Lake National Wildlife Refuge, Bear River Migratory Bird Refuge, Oxford Slough Waterfowl Production Area, and adjacent lands located within the Bear River watershed. The Bear River watershed is essential to the survival of the Bonneville cutthroat trout, millions of birds, and many other species of wildlife.

The Bear River is heavily influenced by land use along its course that in turn affects wildlife habitat and the amount and quality of available water. Agricultural lands provide habitat for wildlife, but in some areas these lands are rapidly being converted to residential development. The collaborative efforts of conservation partners in the Bear River watershed will be needed to preserve this working landscape that is such an important resource for people and wildlife.

Proposed Action

The Service proposes to establish a voluntary conservation easement program in southeast Idaho, northeast Utah, and southwest Wyoming called the Bear River Watershed Conservation Area (see figure EA–1). The proposed project boundary encompasses roughly 4.8 million acres, within which the Service would strategically protect habitat using conservation easements on up to 920,000 acres of privately owned land from willing sellers (see figure EA–2).

Conservation Easements

The Service would seek to protect habitat through perpetual conservation easements; it would not seek fee-title acquisitions. This easement program would rely on voluntary participation from landowners. Grazing, haying, and prescribed burning would continue on any land included in the easement contract. Land within an easement would remain in private ownership; therefore, property tax and management activities such as invasive plant control and burning would remain the responsibility of the landowner. Public access to the land would also remain under the control of the landowner. This purpose is in alignment with, but does not supersede, the vision and statutory purposes of the three existing refuges in the Bear River watershed.

Easement restrictions may include, but are not limited to, residential, commercial, and industrial development that alters the natural topography; conversion of native uplands and wetlands to cropland; and draining of wetlands. The proposed easements would help maintain unfragmented blocks of habitat that would complement efforts by the existing national wildlife refuges and land trusts and entities:

- The Nature Conservancy
- Bridgerland Audubon
- Wyoming Stock Growers Agricultural Land Trust
- Sagebrush Steppe Regional Land Trust
- Idaho Department of Fish and Game
- Trout Unlimited
- Utah Department of Natural Resources
- Wyoming Game and Fish Department
- Utah Partners for Conservation and Development
- USDA's NRCS

Proposed Vision Statement

Landscape-scale protection of the natural resources found within the Bear River watershed is essential to humans and wildlife. The Bear River Watershed Conservation Area project preserves, protects, and restores the natural resources and working landscapes within the drainage.

Through cooperative efforts with ranchers, farmers, local communities, land management agencies, and other conservation organizations, the United States Fish and Wildlife Service builds a community of citizens dedicated to protection of wildlife habitat, maintenance of healthy communities, enhancement of water quality, promotion of sustainable agriculture, and recognition of good stewardship.

The legacy of this effort is the tapestry of snow-covered mountains, deciduous and conifer forest, vast areas of sagebrush and wetlands, and working farms and ranches that decorate the landscape of the Bear River watershed. This expansive landscape supports a multitude of diverse wildlife species including migratory birds, sage-grouse, elk, black bear, pronghorn, mule deer, Bonneville cutthroat trout, and other native species.

Implementation of a landscape-scale collaborative effort within the Bear River Watershed Conservation Area conserves the significant wildlife, aesthetic, and cultural values of this region in perpetuity.

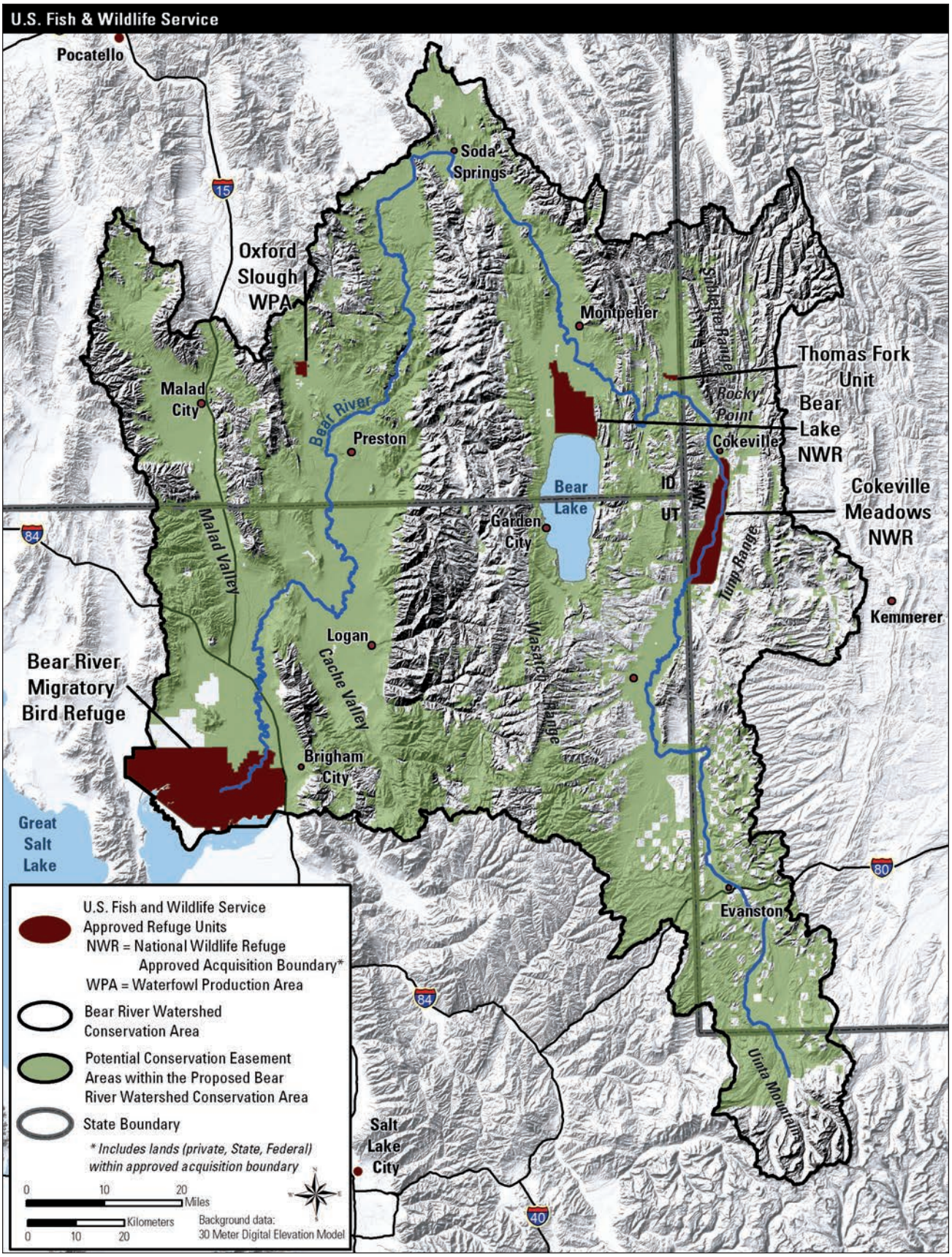

Figure EA–1. Map of the proposed Bear River Watershed Conservation Area in Idaho, Utah, and Wyoming.

develop and improve wildlife habitat on agricultural land, nonindustrial private forest land, and Native American lands.

The *Wetlands Reserve Program* was reauthorized in the Farm Security and Rural Investment Act of 2002 (Farm Bill) to provide a voluntary conservation program for farmers and ranchers that promotes agricultural production and environmental quality as compatible national goals. The program offers financial and technical assistance to help eligible participants install or implement structural improvements and management practices on eligible agricultural land. In Idaho 812, Utah 30, and in Wyoming 1,013 acres are enrolled in Wetlands Reserve Program easements (USDA NRCS 2010b).

U.S. Department of the Interior

Partners for Fish and Wildlife provides funding and technical assistance for habitat restoration and enhancements, with a special emphasis placed on projects that simultaneously benefit agricultural production and wildlife habitat for Service trust species. Participation in the Partners for Fish and Wildlife program is voluntary, and the details for each project are outlined in individual landowner agreements. Past examples include fence and water developments that improve livestock grazing management, irrigation diversion upgrades that allow for traditional water withdrawal and fish passage in streams, and rehabilitation of irrigation infrastructure to maintain and enhance created wetlands.

From the period 2007–2012, the Partners for Fish and Wildlife program restored or enhanced 10 structures for fish passage, 293 wetland acres, 1,747 upland acres, and 14.9 river miles for the Idaho portion of Bear River watershed. In Utah, 9 structures for fish passage, 2,157 wetland acres, 21,432 upland acres, and 5 river miles were completed. During this period in Wyoming, 16 structures for fish passage, 816 wetland acres, and 15.4 river miles were restored or enhanced.

LCCs are public–private partnerships that recognize that natural resource challenges transcend political and jurisdictional boundaries and require a more networked approach to conservation—holistic, collaborative, adaptive, and grounded in science to ensure the sustainability of America's land, water, wildlife, and cultural resources. As a collaborative effort, LCCs seek to identify best practices, connect efforts, find gaps, and avoid duplication through improved conservation planning and design. Partner agencies and organizations coordinate with each other while working within their existing authorities and jurisdictions. In carrying out conservation actions through the proposed Bear River Watershed Conservation Area, the Service would work with the three LCCs (Great Northern, Great Basin, and Southern Rockies) (see figure EA–3) and other partners to address current and future issues and opportunities related to landscape-scale conservation in a rapidly changing world.

Habitat Protection and Easement Acquisition Process

Following approval of a project boundary, habitat protection would occur through the purchase of conservation easements. It is the long-established policy of the Service to acquire the minimum land interest needed from willing sellers to achieve habitat acquisition goals.

The acquisition authority for the proposed conservation area is the Fish and Wildlife Act of 1956 (16 U.S.C. 742 a–742j). The Federal monies used to acquire conservation easements are received from the Land and Water Conservation Fund, which is derived primarily from oil and gas leases on the Outer Continental Shelf, motorboat fuel tax revenues, and the sale of surplus Federal property.

There could be more money to acquire lands, waters, or interest therein for fish and wildlife conservation purposes through congressional appropriations and donations from nonprofit organizations and other possible sources including Federal Duck Stamp money.

The Service would develop an objective review process for evaluating potential conservation easement areas submitted for consideration by willing sellers. The main considerations in acquiring an easement interest in private land are the biological significance of the area, the biological needs of wildlife species of management concern, existing and anticipated threats to wildlife resources, and landowner interest in the program. The purchase of conservation easements would occur with willing sellers only and would be subject to available funding.

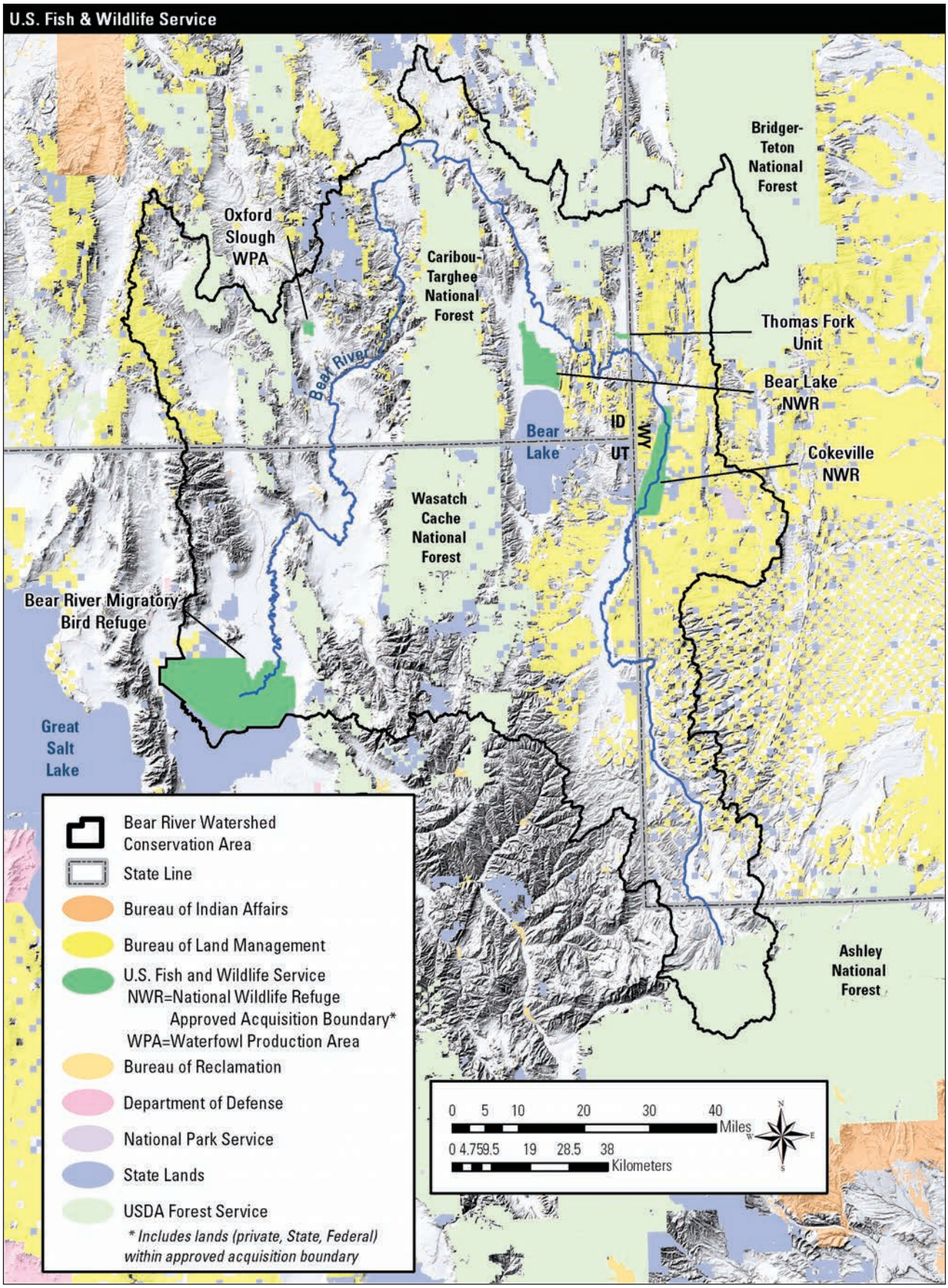

Figure EA–2. Map of land stewardship in the proposed Bear River Watershed Conservation Area in Idaho, Utah, and Wyoming.

Project Area

The Bear River's current course developed about 50,000 years ago (Toth et al. 2005) when a volcanic debris slide cut off its original northerly route and deflected the river southwards through present-day Soda Springs and into the Great Basin instead of westwards toward the Snake River watershed and present-day Pocatello, Idaho.

The Bear River originates in the mountains of Utah's High Uintas Wilderness, meanders through Wyoming and Idaho, and reenters Utah, where it empties into the Great Salt Lake. The Bear River is in the Basin and Range and the Middle Rocky Mountains physiographic provinces. It has the largest discharge of any river in the Western Hemisphere that does not flow to an ocean (Dion 1969). Along with other areas in the basin, the forested areas at the headwaters form a crucial wildlife migration corridor. These forested areas offer a major link between the northern and southern Rocky Mountain ecosystems (Theobald et al. 2011). As the river flows north out of the conifer-covered slopes of the Uinta Mountains into the narrow valleys of Utah downstream, land uses begin to change and water quality begins to decline.

The Bear River eventually passes through the Bear River Migratory Bird Refuge and terminates its almost circular route in the Great Salt Lake in Utah, which has no outlet. The river contributes more than half of the total surface flow entering the Great Salt Lake each year. This large volume of fresh water from the river influences temperatures, salinity, and water levels in the lake. The basin contains many large reservoirs and hundreds of small reservoirs, stock ponds, and an extensive network of irrigation canals.

The water of the Bear River is the lifeblood for human and wildlife populations throughout the region. The central and Pacific flyways for migratory birds overlap in the watershed, and the Bear River Migratory Bird Refuge and Bear Lake National Wildlife Refuge are considered by the National Audubon Society to be Globally Important Bird Areas. [See the glossary for descriptions and definitions of some of the terms used in this document.]

Approximately one-half of the Bear River watershed is under Federal ownership. The proposed project area is adjacent to or encompasses portions of lands managed by the U.S. Fish and Wildlife Service, Bureau of Reclamation, Bureau of Land Management, and USDA Forest Service. Important habitat in private ownership is located within and next to lands managed by these Federal entities, as well as on lands adjoining the national wildlife refuges.

Purpose of and Need for the Proposed Action

This project proposal originates from the recognition that water availability and quality are crucial for conserving the fish and wildlife species within the Bear River watershed. It is recognized that private lands are heavily used by wildlife and that properties that are next to public lands provide crucial migration corridors and linkages to a variety of habitats. As climate conditions and land use patterns change over time, many key off-refuge habitat areas will likely become both increasingly important for wildlife and increasingly subject to development pressures.

The proposed Bear River Watershed Conservation Area is a landscape-scale, strategic habitat conservation effort designed to contribute to the protection of significant values of this highly diverse ecosystem. (See more on strategic habitat conservation in chapter 5.) These values follow:

- The area is one of the most significant resting, staging, feeding, breeding, and nesting areas for large populations of migratory waterfowl and shorebirds on both the central and Pacific flyways:
  - white-faced ibis (46 percent of the North American population)
  - tundra swan (32 percent of the western population)
  - American avocet (over 16 percent of the North American population)
  - black-necked stilt (over 18 percent of the North American population)
  - marbled godwit (over 24 percent of the North American population)
- The watershed provides habitat for species such as greater sage-grouse, Columbian sharp-tailed grouse, Bonneville cutthroat trout, pronghorn, and, in the high country, grizzly bear, Canada lynx, wolverine, and gray wolf.
- The watershed is an important source of water both along the river course and as the major surface water source of the Great Salt Lake.
- It is an important migration area for wide-ranging mammals.

Much of the lands in the wide valleys of the Bear River watershed have been converted to pastures and agricultural fields. Water from the river is used for irrigation of alfalfa, pastureland, and small grains. Oil and gas exploration and development are expanding in parts of the watershed. Residential development is affecting prime agricultural lands and wildlife habitat. In some areas of the Cache Valley, the population is expected to double by 2050 (Utah Division of Water Resources 2004). The Service seeks to work with ranchers, conservation organizations, and other agencies to conserve wildlife habitat and working lands for future generations.

The purposes for establishing the Bear River Watershed Conservation Area are to:

- maintain healthy populations of native wildlife species including migratory birds and threatened and endangered species;
- protect and maintain water quality and quantity;
- conserve aquatic, riparian, wetland, and upland habitats associated with the full diversity of Bear River ecosystems;
- provide habitat connectivity and migratory corridors;
- promote partnerships to coordinate implementation of watershed-level wildlife conservation actions;
- increase resiliency of the watershed to sustain wildlife and important habitat through climate and land use changes.

Decisions to Be Made

The Service's planning team (see "Appendix C, List of Preparers and Reviewers") has completed an analysis of the protection and management alternatives. Based on the analysis documented in this final EA, the Service's Directors of Region 1 (Idaho) and Region 6 (Utah and Wyoming), with the approval of the Director of the U.S. Fish and Wildlife Service, will make three decisions:

- Determine whether the Service should establish the Bear River Watershed Conservation Area.
- If yes, select an approved, conservation easement project boundary that best fulfills the habitat protection purposes for the proposed conservation area.
- If yes, determine whether the selected alternative would have a significant impact on the quality of the human environment as required by the National Environmental Policy Act of 1969. If the quality of the human environment would not be significantly affected, a finding of no significant impact will be signed and made available to the public. If the alternative would have a significant impact, completion of an environmental impact statement would be required to address those impacts.

Issues Identified and Selected for Analysis

Six public scoping meetings were held in Idaho, Utah, and Wyoming in May 2011. Public comments were taken in Cokeville and Evanston, Wyoming; Brigham City and Logan, Utah; and Preston and Montpelier, Idaho, to identify issues to be analyzed for the proposed action. Approximately 130 landowners, members of various organizations, and elected representatives attended the meetings. Additionally, 10 letters providing comments were received by mail or email. A total of 327 comments and questions were received on the project proposal.

Refuge staff contacted tribal, Federal, State, and local officials as well as conservation groups that expressed an interest in the future of the Bear River watershed. Approximately 675 fact sheets were distributed, and they were also made available on the refuges' Web sites.

The main categories of comments, issues, and questions expressed at meetings or received by mail follow.

Biological Issues

- Importance of wildlife and wildlife habitat in the watershed.
- Questions about the types of habitat and lands that would be included in the proposed project.
- Ecosystem importance of the watershed (connectivity and habitat types represented).
- Importance of protecting water resources.
- Water quality and quantity issues in the watershed.
- Impacts of dams and diversions.
- Climate change impacts on the region.

- Development (residential, oil and gas, mineral, and recreational), which was perceived as the biggest threat to the long-term health and stability of the Bear River landscape, culture, and wildlife resources.
- Perceived mismanagement of lands and inappropriate stewardship (grazing and agricultural practices) in the watershed.
- Invasive species in the watershed.
- Fragmentation of habitat.

Socioeconomic Issues

- Funding sources and matching contributions.
- Tax implication of easements.
- Economic impacts of easements.
- Financial implications of easements.
- Quantity and location of land needed for the proposed Bear River Watershed Conservation Area project.
- Agricultural values of the Bear River.
- Aesthetics (open space and scenery).
- Importance of recreational opportunities.
- Availability of recreational opportunities in the watershed.
- Economic importance of the watershed (agriculture and power generation).

Administrative and Enforcement Issues for Easements

- Potential easement restrictions and language.
- Responsibilities and limitations on management practices of an easement.
- Current and future land uses and encumbrances (oil and gas leases, mining, and rights-of-way).
- Perpetual nature of Service easements.
- Comments and questions about enforcement of easements.
- Importance of monitoring conservation easement parcels.
- Possibility of easements increasing wildlife depredation, especially by sandhill cranes.
- Comparable easement programs that are available with other agencies and organizations.
- Easement financial and funding implications.
- Service appraisal process.
- Easement valuation determination.

Other Issues

- Conservation partnerships and coordination.
- Organizations and other agencies that the Service would be working with.
- Interest expressed in selling a conservation easement to the Service.
- Questions on timelines, public input opportunities, and availability of data and GIS information.
- Comments on the need for planning various watershed uses and future development.
- General concern.
- General support.
- Interest in easements.

Issues Not Selected for Detailed Analysis

Historically, there has been concern about the amount of tax generated for the counties when land protection programs take place. Because the proposed project involves conservation easements, land would not change hands and, therefore, the property taxes paid by the landowner to the county would not be affected.

Development of rural landscapes often leads to increased demand for services and higher costs to rural counties. There would generally be an offset of any perceived reduction in the tax base, because the county would not incur the expense of providing services to rural developments.

National Wildlife Refuge System and Authorities

The mission of the Refuge System is "to preserve a national network of lands and waters for the conservation, management, and where appropriate, restoration of fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans." The Bear River Watershed Conservation Area would be a part of the Refuge System managed in accordance with the National Wildlife Refuge System Administration Act of 1966 and other relevant legislation, Executive orders, regulations, and policies.

Conservation of more wildlife habitat in the Bear River watershed would also continue in a manner consistent with the following policies and management plans:

- Migratory Bird Treaty Act (1918)
- Migratory Bird Hunting and Conservation Stamp Act (1934)
- Bald and Golden Eagle Protection Act (1940)
- Fish and Wildlife Act (1956)
- Land and Water Conservation Fund Act (1965)
- Endangered Species Act (1973)
- "North American Waterfowl Management Plan" (1994)
- "Migratory Non-game Birds of Management Concern in the U.S." (2002)

Related Actions and Activities

There are a number of ongoing conservation activities and programs in the watershed, including those listed below.

Private landowners have worked with many organizations to complete conservation easements. In an effort to control invasive species such as tamarisk, phragmites, Russian olive, quagga and zebra mussels, and carp, the Service's Partners for Fish and Wildlife program, The Nature Conservancy, State agencies, county weed districts, and private landowners have begun cooperative efforts throughout the region.

Bridgerland Audubon Society has worked with The Nature Conservancy and PacifiCorp to protect 500 acres of key riparian land along the Bear River in Cache County using conservation easements.

Coordinated Resource Management committees in Box Elder and Rich Counties in Utah consist of State and Federal agency staff, representatives from local governments, nonprofit organizations, academic institutions, private industry, and private individuals. Coordinated Resource Management committees work to provide rich, healthy ecosystems with a sustainable agricultural industry and wildlife populations and that contain diverse recreational opportunities and a vibrant rural community.

Sagebrush Steppe Regional Land Trust was founded in 2003. It has completed 15 projects in southeast Idaho that protect 2,260 acres of natural and working lands that benefit Bonneville cutthroat trout and other wildlife species.

The Nature Conservancy bought a 6,700-acre conservation easement to protect habitat for the Columbian sharp-tailed grouse and other wildlife species. The Nature Conservancy is coordinating agricultural and conservation partners to map and treat invasive weeds in Cache and Box Elder Counties that affect wetland and riparian systems. The Nature Conservancy has conducted a landscape-scale geospatial assessment of wetlands through the identification and mapping of wetland complexes in the Bear River watershed in southwest Wyoming to quantify the relative importance of these complexes in terms of biodiversity, recreational potential, agricultural influence, current condition, and vulnerability to future environmental changes.

Trout Unlimited has 12 projects underway in the watershed that aim to reconnect essential spawning tributaries in each of the five major sections of the Bear River. Trout Unlimited and project partners identified barriers to fish passage such as dams and retrofitted the structures with fish ladders and screens to allow upstream passage and prevent downstream loss of fish in irrigation canals. Trout Unlimited also improves riparian and aquatic habitats in the reconnected tributaries and the main stem Bear River.

Utah Partners for Conservation and Development is a sponsor of the Utah Watershed Restoration Initiative, a partnership-driven effort to conserve, restore, and manage ecosystems in priority areas across the State to enhance Utah's wildlife, biological diversity, water quality and quantity for all uses, and opportunities for sustainable uses. In 2010, the watershed restoration initiative was involved in 26 projects totaling 19,336 acres in its Northern Region, which includes the Bear River watershed (Utah Division of Wildlife Resources 2011).

Wyoming Stock Growers Agricultural Land Trust holds 62 conservation easements on more than 170,000 acres of ranchland throughout the State. By working with landowners to conserve working ranches, crucial wildlife winter ranges and migration corridors commonly found in the most agriculturally productive locations along valleys and waterways are also protected.

Wyoming Land Trust holds conservation easements on 30,324 acres of working ranchland, wildlife habitat, and scenic areas in Wyoming.

U.S. Department of Agriculture

The *Conservation Reserve Program* is administered by the USDA Farm Service Agency and provides technical and financial help to eligible farmers and ranchers to address soil, water, and related natural resource concerns on their lands in an environmentally beneficial and cost-effective manner. Currently, 668,643 acres in Idaho, 163,082 acres in Utah, and 226,044 acres in Wyoming are enrolled in the Conservation Reserve Program (USDA Farm Service Agency 2007).

The *Farm and Ranch Land Protection Program* provides matching funds to help buy development rights to keep productive farm and ranchland in agricultural uses. Working through existing programs, the USDA collaborates with State, tribal, or local governments and nongovernmental organizations to acquire conservation easements or other interests in land from landowners. A total of 3,450 acres in Idaho, 898 acres in Utah, and 101,326 acres in Wyoming are Farm and Ranch Land Protection Program lands (USDA NRCS 2010a).

The *Environmental Quality Incentives Program* is a voluntary program administered through the NRCS that provides financial and technical help to agricultural producers through contracts lasting up to a maximum term of 10 years. These contracts provide financial assistance to help plan and carry out conservation practices that address natural resource concerns and opportunities to improve soil, water, plant, animal, air, and related resources on agricultural land and nonindustrial private forestland. In addition, a purpose of the Environmental Quality Incentives Program is to help producers meet Federal, State, tribal, and local environmental regulations.

The *Grassland Reserve Program* is a voluntary conservation program administered through the NRCS that emphasizes support for working grazing operations, enhancement of plant and animal biodiversity, and protection of grassland under threat of conversion to other uses. Participants voluntarily limit future development and cropping uses of the land while keeping the right to conduct common grazing practices and operations related to the production of forage and seeding, subject to certain restrictions during nesting seasons of bird species that are in significant decline or are protected under Federal or State law. A grazing management plan is required for participants. There are 9,692 acres in Idaho, 29,336 in Utah, and 24,458 acres in Wyoming enrolled in the program.

The *Wildlife Habitat Incentive Program* is a voluntary program administered by the NRCS for conservation-minded landowners who want to

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Wetland Scenery in Utah

develop and improve wildlife habitat on agricultural land, nonindustrial private forest land, and Native American lands.

The *Wetlands Reserve Program* was reauthorized in the Farm Security and Rural Investment Act of 2002 (Farm Bill) to provide a voluntary conservation program for farmers and ranchers that promotes agricultural production and environmental quality as compatible national goals. The program offers financial and technical assistance to help eligible participants install or implement structural improvements and management practices on eligible agricultural land. In Idaho 812, Utah 30, and in Wyoming 1,013 acres are enrolled in Wetlands Reserve Program easements (USDA NRCS 2010b).

U.S. Department of the Interior

Partners for Fish and Wildlife provides funding and technical assistance for habitat restoration and enhancements, with a special emphasis placed on projects that simultaneously benefit agricultural production and wildlife habitat for Service trust species. Participation in the Partners for Fish and Wildlife program is voluntary, and the details for each project are outlined in individual landowner agreements. Past examples include fence and water developments that improve livestock grazing management, irrigation diversion upgrades that allow for traditional water withdrawal and fish passage in streams, and rehabilitation of irrigation infrastructure to maintain and enhance created wetlands.

From the period 2007–2012, the Partners for Fish and Wildlife program restored or enhanced 10 structures for fish passage, 293 wetland acres, 1,747 upland acres, and 14.9 river miles for the Idaho portion of Bear River watershed. In Utah, 9 structures for fish passage, 2,157 wetland acres, 21,432 upland acres, and 5 river miles were completed. During this period in Wyoming, 16 structures for fish passage, 816 wetland acres, and 15.4 river miles were restored or enhanced.

LCCs are public–private partnerships that recognize that natural resource challenges transcend political and jurisdictional boundaries and require a more networked approach to conservation—holistic, collaborative, adaptive, and grounded in science to ensure the sustainability of America's land, water, wildlife, and cultural resources. As a collaborative effort, LCCs seek to identify best practices, connect efforts, find gaps, and avoid duplication through improved conservation planning and design. Partner agencies and organizations coordinate with each other while working within their existing authorities and jurisdictions. In carrying out conservation actions through the proposed Bear River Watershed Conservation Area, the Service would work with the three LCCs (Great Northern, Great Basin, and Southern Rockies) (see figure EA–3) and other partners to address current and future issues and opportunities related to landscape-scale conservation in a rapidly changing world.

Habitat Protection and Easement Acquisition Process

Following approval of a project boundary, habitat protection would occur through the purchase of conservation easements. It is the long-established policy of the Service to acquire the minimum land interest needed from willing sellers to achieve habitat acquisition goals.

The acquisition authority for the proposed conservation area is the Fish and Wildlife Act of 1956 (16 U.S.C. 742 a–742j). The Federal monies used to acquire conservation easements are received from the Land and Water Conservation Fund, which is derived primarily from oil and gas leases on the Outer Continental Shelf, motorboat fuel tax revenues, and the sale of surplus Federal property.

There could be more money to acquire lands, waters, or interest therein for fish and wildlife conservation purposes through congressional appropriations and donations from nonprofit organizations and other possible sources including Federal Duck Stamp money.

The Service would develop an objective review process for evaluating potential conservation easement areas submitted for consideration by willing sellers. The main considerations in acquiring an easement interest in private land are the biological significance of the area, the biological needs of wildlife species of management concern, existing and anticipated threats to wildlife resources, and landowner interest in the program. The purchase of conservation easements would occur with willing sellers only and would be subject to available funding.

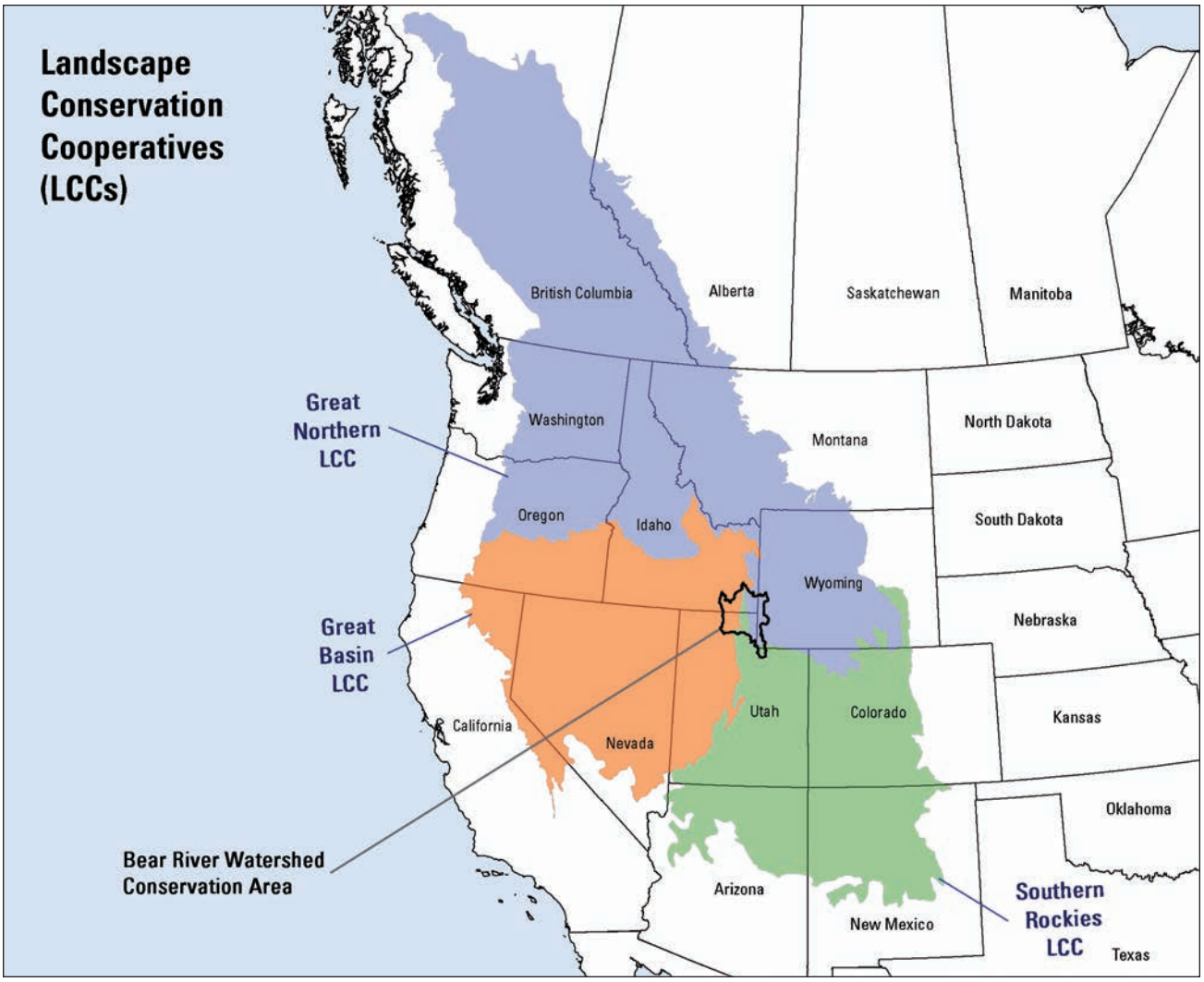

Figure EA–3. Map of the three landscape conservation cooperatives that cover the proposed Bear River Watershed Conservation Area in Idaho, Utah, and Wyoming.

Section 2—Alternatives, Including the Proposed Action

Two alternatives were studied in detail, and several other alternatives were considered but not studied.

Alternative A (No Action)

The Bear River Watershed Conservation Area would not be established. Habitat enhancement or restoration projects on private lands, such as water developments, grazing systems, and grassland management, would continue through cooperative efforts with private landowners. Public agencies and private land trusts would continue conservation efforts through securing easements.

Alternative B (Proposed Action)

The Service would establish the Bear River Watershed Conservation Area in parts of Idaho, Utah, and Wyoming, with the objective of conserving up to 920,000 acres of grassland, shrubland, riparian areas, and wetlands.

The Service would work to protect habitat using conservation easements from willing sellers on privately owned lands that are now providing valuable wildlife habitat. The easement contracts would specify perpetual protection of habitat used by trust species (migratory birds and threatened and endangered species) and would restrict development.

Development for residential, commercial, or industrial purposes such as energy and aggregate extraction would not be permitted on properties under a conservation easement. Alteration of the natural topography and conversion of native grassland, shrubland, wetland, and riparian lands to cropland would be prohibited. Conservation easements would prohibit the draining, filling, or leveling of protected lands.

All land would remain in private ownership; property tax and land management, including invasive plant control, would remain the responsibility of the landowner. The Service would seek to provide participating landowners with more help for invasive plant control and habitat restoration. Control of public access to the land would remain with the landowner.

The easement program would be managed by staff located at the three national wildlife refuges within the Bear River watershed. The Service staff at the Bear Lake, Bear River, and Cokeville Meadows Refuges would be responsible for monitoring and administering all easements on private land. Monitoring activities would include periodically reviewing land status through correspondence and meetings with the landowners or land managers to make sure that the stipulations of the conservation easements are being met. Photo documentation would be used at the time the easements are established to document baseline conditions.

Alternatives Considered But Not Studied

The Service considered five other potential alternatives, but did not study them further for the reasons described below.

Voluntary Landowner Zoning

Landowners would voluntarily petition the county commissioners to create a zoning district directing the types of development that can occur within an area. This is called "citizen-initiated" zoning. For example, landowners could petition the county government to zone an area as agricultural, precluding certain types of nonagricultural development such as residential subdivisions. Because "citizen initiatives" are rarely used, this alternative was not studied further.

© Keith Penner

The Bear River watershed provides important complexes of wet meadow, flooded pastures, and hayfields used by many species of migratory birds, including sandhill crane.

County Zoning

In a traditional approach used by counties and municipalities, the local government would use zoning as a means of designating what type of development could occur in an area. While laws in Idaho, Utah, and Wyoming grant cities and counties the authority to regulate land use, engaging in planning and zoning activities is optional. Many counties in these States have opted to have no planning or zoning requirements but, where used, zoning may be subject to frequent changes and would not ensure the long-term prevention of residential or commercial development in the proposed conservation area.

Fee Title

The initial cost associated with fee-title acquisition would be more than twice that of the purchase of conservation easements. In addition, there would be substantial annual costs for staff and materials needed by the Service to manage fee-title land. The higher costs associated with this method would limit acquisition to a much smaller area, making landscape-scale conservation unlikely.

It is the long-established policy of the Service to acquire the minimum interest in land necessary to achieve Service habitat conservation goals. Fee-title acquisition is not preferred over the use of conservation easements, nor is this method of acquisition necessary to conserve wildlife habitat and trust wildlife resources in the Bear River watershed.

Smaller Project Area

During initial project scoping, a smaller project area immediately adjacent to the established national wildlife refuges was discussed for potential land protection. The smaller project area would be unlikely to successfully conserve enough areas of intact habitat and migration corridors that are needed to sustain wildlife populations.

Short-Term Conservation Easements

Interest in the possibility of using short-term conservation easements was expressed in public scoping meetings. However, the purpose and need for action described in chapter 1 is for landscape-scale protection in perpetuity in the Bear River watershed. Repeatedly paying for the same conservation through short-term easements would not allow the Service to achieve the habitat goals and objectives needed to sustain migratory bird and other wildlife populations in this area. Because several less-than-perpetual conservation options are available through other Federal and State programs and conservation partners, it is logical that the Service continue to pursue permanent conservation avenues for the proposed conservation area project.

The Service has periodically tested short-term wetland easements in other areas of the country. A study by Higgins and Woodward (1986) concluded that 20-year contracts merely delayed habitat alteration and that short-term easements have only short-term benefits.

Section 3—Affected Environment

Physical Environment

The physical environment comprises the geology, soils, hydrology, and climate of the Bear River watershed. In addition, climate change is discussed.

Geology and Soils

The Bear River basin encompasses two physiographic provinces: The Basin and Range Province and the Middle Rocky Mountain Province of the Rocky Mountain Section (Dion 1969). The Basin and Range Province is noted for numerous north–south oriented, fault-tilted mountain ranges separated by intervening broad, sediment-filled basins. Approximately the western one-third of the watershed lies within the Basin and Range Province, which began forming when the previously deformed Precambrian (over 570 million years old) and Paleozoic (570 to 240 million years old) rocks were slowly uplifted and broken into huge fault blocks by extensional stresses that still continue to stretch the earth's crust (Milligan 2000).

Sediments shed from the ranges have been slowly filling the intervening wide, flat basins. Many of the basins have been further modified by shorelines and sediments of lakes that intermittently cover the valley floors. The most notable of these was Lake Bonneville, which reached its deepest level about 15,000 years ago when it flooded basins across western Utah (Milligan 2000).

The Middle Rocky Mountains Province, which encompasses approximately the eastern two-thirds of the basin, consists of mountainous terrain, stream valleys, and alluvial basins. The Utah part of this province has two major mountain ranges, the north–south trending Wasatch and east–west trending Uinta Mountains. Both ranges have cores of old Precambrian rocks, some more than 2.6 billion years old (Milligan 2000). This Precambrian bedrock became exposed during the Pleistocene by glacial activity that created smooth bowls that collect and funnel water down the Bear River (Denton 2007).

The Bear River Range, located in the central part of the Bear River watershed, is aligned north to south and divides the eastern Mesozoic and western Cenozoic zones. From the Uinta Mountains in the eastern part of the watershed, the Bear River flows northward along the edge of a Mesozoic region, characterized by rock structures that have little ability to absorb water. The western part of the watershed is comprised primarily of Paleozoic rock in the mountains and Cenozoic rock in the valleys. The valleys

© Craig Denton

Oneida Narrows Breakwater, Idaho

here contain alluvial and glacial deposits that are absorptive and lend well to agricultural use (Haws and Hughes 1973). The Bear River range is an important catch basin for precipitation.

The watershed contains multiple mountain ranges including the Wasatch Front to the west, the Bear River Divide and Tunp Ranges to the east, and the Sublette Range to the north (see figure EA–4). The convergence of mountain ranges at Rocky Point about 1 mile northeast of Cokeville creates a pinch-point for one of the regionally important migration corridors in the watershed. The position and alignment of the various ranges across the watershed play a central role in precipitation, climatic, hydrological, and biological patterns.

Hydrology

The Bear River is the largest tributary to the Great Salt Lake, the remnant of ancient Lake Bonneville. Lake Bonneville was a closed inland sea basin the size of Lake Michigan that once dominated the landscape in Idaho, Nevada, and Utah. Approximately 16,000 years ago, Lake Bonneville began spilling over into the Snake River drainage at Red Rock Pass, reducing the lake level by 375 feet. Over the following 8,000 years, Lake Bonneville continued to shrink because of changing climatic conditions, eventually occupying only the present day Great Salt Lake (Utah Geological Survey [no date]).

The Bear River watershed is unusual in that it is entirely enclosed by mountains, forming one arm of the Great Salt Lake basin, which has no natural drainage outlets. Three States share drainage in the 7,500 square-mile watershed: 2,700 square miles in Idaho, 3,300 square miles in Utah, and 1,500 square miles in Wyoming. Progressions of small, high-mountain streams form the headwaters of the Bear River in Utah's Uinta–Wasatch–Cache National Forest. The Uinta Mountains, a subrange of the Rocky Mountains, vary in elevation from 7,500 to 13,500 feet and are unusual in that they run in an east to west orientation. From the headwaters, the Bear River flows north and west in an arc from Utah, Wyoming, Idaho, and back into Utah. Near the city of Evanston, Wyoming, the topography flattens and land use becomes a mix of urban and agricultural uses. Here the river begins a dramatic transformation from fast-flowing, cold, and clear water in the narrow valleys to a slow-moving, cool-water, meandering course on the valley floors. Humans have altered the natural stream dynamics throughout the remaining course of the Bear River to its termination at the Great Salt Lake. Although agriculture accounts for only 7 percent of the land use in the upper watershed, it accounts for more than 80 percent of the water usage. Surface and ground water sources are used to irrigate more than 96,512 acres of hay, pasture, and cropland (Bear River Watershed Information System 2009).

Instream structures like the Chapman Canal Diversion and Woodruff Narrows Reservoir disrupt natural channel-forming flows and sediment transport, leading to streambed and bank instability downstream. After passing through Woodruff Narrows Reservoir, the valley broadens and the river travels along the Wyoming–Utah border and lends itself to irrigation and production agriculture for 30 miles before reentering Wyoming near Sage Junction. Nutrient loading (especially phosphorus, which is found at naturally high levels in surrounding soil formations), sediment from accelerated bank erosion, and dewatering are leading causes of stream degradation. Sediment and nutrient levels remain as the main water quality concerns throughout the entire Bear River watershed, and those impacts contribute to water management challenges in the refuges (Utah Division of Water Resources 2002).

As the river flows north from Evanston, the ridge and swale topography of the floodplain is characterized by a complex association of irrigated meadows, wetlands, and grass uplands that support one of the highest densities of migrating and nesting waterfowl in Wyoming. Centered along a 20-mile stretch of the Bear River and its associated wetlands and uplands, Cokeville Meadows National Wildlife Refuge was established in 1992 to protect this important habitat.

After leaving Cokeville, the Bear River crosses into Idaho near the community of Border, where the flow is greatly increased by inflow from the Smith's Fork River, which originates in the Bridger–Teton National Forest and has a relatively intact watershed and native fish assemblages (Wyoming Game and Fish Department 2010).

As the Bear River passes into Idaho, PacifiCorp diverts water at Stewart Dam through Bear Lake National Wildlife Refuge and into Bear Lake proper (which straddles Idaho and Utah). Bear Lake National Wildlife Refuge, near Montpelier, Idaho, was established in 1968 to protect and manage habitat for waterfowl and other migratory birds. Once released from Bear Lake proper, water travels from the Outlet Canal and the refuge's Mud Lake unit back to the Bear River's original channel about 7 miles from where the water is first diverted. Except for some water seepage from Stewart Dam, all Bear River water is diverted through the refuge; however, small creeks and irrigation return water enter into the original river channel so that the river is not completely dewatered between Stewart Dam and its reunion with the Outlet Canal.

From Bear Lake, the river travels 100 miles to the north, where it is impounded in the Alexander Reservoir for irrigation, recreation, and hydroelectric power generation. Below the Alexander Dam, about

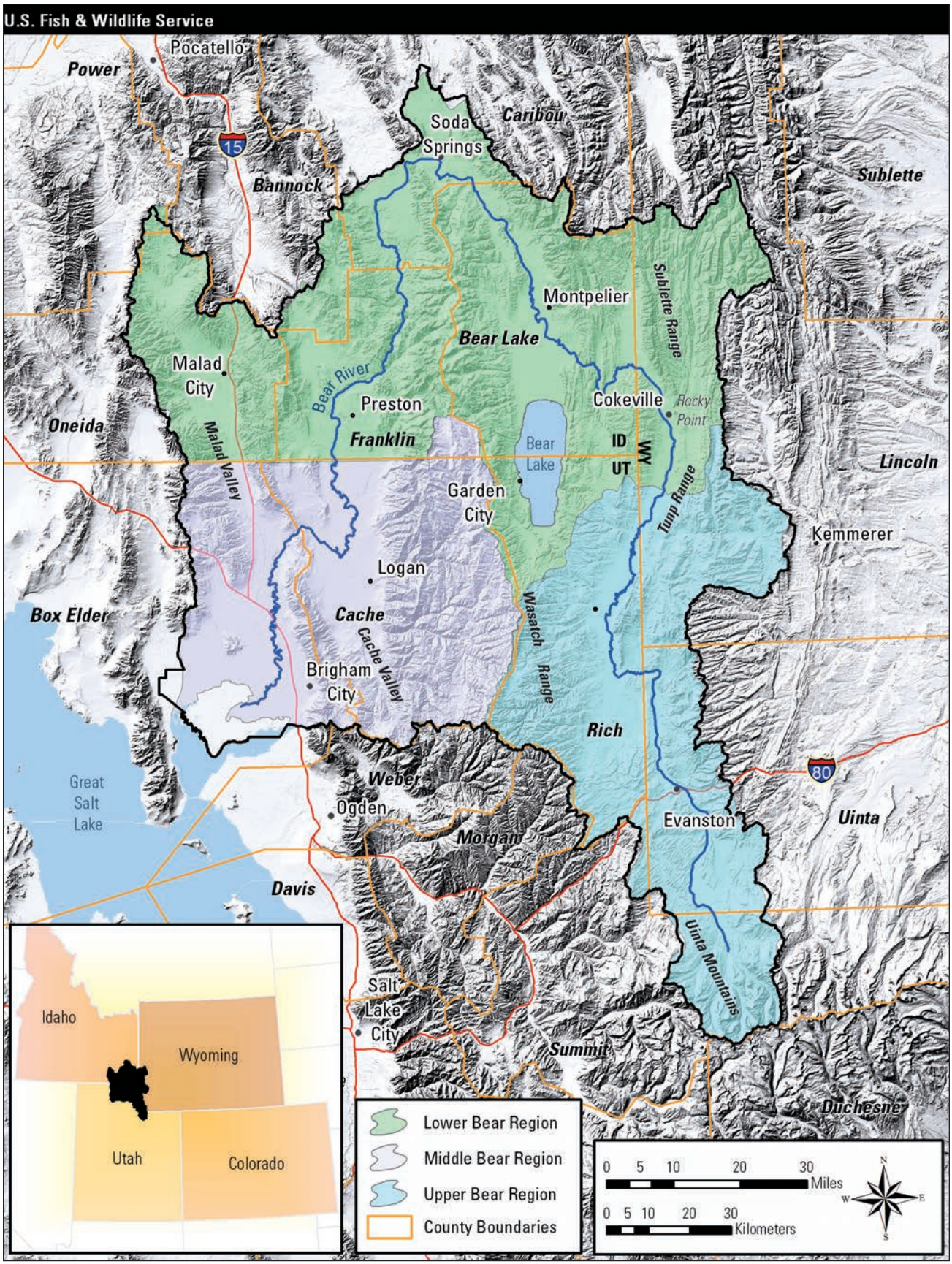

Figure EA–4. Vicinity map for the proposed Bear River Watershed Conservation Area in Idaho, Utah, and Wyoming.

one-tenth of the river's annual flow is sent through one of the oldest diversion canals in the watershed, the Last Chance Canal. The canal was constructed by settlers to provide irrigation for agriculture in the early 1900s. From there, the river continues south toward Grace, Idaho. Just above the Black Canyon, almost all the river water is again diverted, at the Grace Dam, through an aqueduct to the Grace Power Plant for power production. The water then is returned to its original river channel just below Black Canyon at Cove Dam. As a part of its 2008 relicensing agreement for the Grace and Cove dams, PacifiCorp provides scheduled whitewater flow releases back into Black Canyon during spring and early summer months to help mimic natural flow patterns.

Below Black Canyon, the river continues south through the Gem, Gentile, and Cache Valleys, where the predominant land uses are irrigated agriculture, grazing, and dairy production. About 100,000 people live in the Cache Valley, making it the most populated area in the Bear River watershed. Just below the Idaho–Utah State line, the Bear River receives water from the Cub River, which in turn obtains part of its water from the Mount Naomi Wilderness. Below the Cub River, the amount of water in the Bear River doubles because of input from the Logan, Blacksmith Fork, and Little Bear River flows.

Eventually the Bear River passes into the Bear River delta and the Bear River Migratory Bird Refuge and then terminates its horseshoe-shaped 500-mile route in Utah's Great Salt Lake. Today, the Bear River contributes more than one-half of the total surface flow entering the Great Salt Lake each year. This large volume of freshwater from the river helps to maintain proper temperatures, salinity, and water levels in the lake. The saline waters and freshwater marshes of the Great Salt Lake constitute one of the most essential breeding and migratory staging sites for colonial waterbirds, waterfowl, and shorebirds in the Great Basin.

Climate

The climate of most of the proposed conservation area is characterized as having warm to hot summers and cold winters and is classified as humid continental, mild summer under the Koppen climate classification system. The remainder of the watershed near the Great Salt Lake is classified as semiarid desert–steppe or humid continental, hot summer for the Great Basin and Wasatch Front, respectively.

Annual precipitation is influenced greatly by the topography and elevations found within the watershed, which range from 4,200 to 13,000 feet. Annual precipitation ranges from 10 inches in the lower valleys to 65 inches at the headwaters of the Bear River in the Uinta Mountains (Utah Division of Water Resources 2004). Two major storm patterns influence precipitation in the basin: (1) frontal systems from the Pacific Northwest during winter and spring; and (2) thunderstorms from the south and southwest in late summer and early fall.

Temperatures are also variable throughout the watershed because of differences in elevation. Mean annual temperatures range from 37 °F in the Uinta Mountains at about 8,400 feet elevation to 53 °F at Tremonton at 4,300 feet. Maximum July temperatures average 91 °F at Tremonton compared to 74 °F in the Uinta Mountains.

Climate Change

The Bear River basin has warmed an average 2 °F since 1971 (Utah Climate Center; see figure EA–5). The trend of 0.5 °F per decade during the last 40 years is 1.5 times greater than the trend for the global average over the same period. Simulation models predict that by 2040 to 2060, the Bear River basin's climate could be 5–6 °F warmer, with a 5–13 percent decrease in annual runoff, 10–15 percent lower peak accumulation of snowpack, earlier spring melt by 2–4 weeks, and an increasing fraction of winter precipitation coming as rain (Degiorgio et al. 2010). Climate change models in the arid western regions of North America also suggest an increased frequency of extended drought in the future (Hughes and Diaz 2008, Barnett et al. 2008, Degiorgio et al. 2010). These changes have important implications for waterbird populations, and ecosystem stability within the Bear River basin wetlands. Maclean et al. (2008) found that waterbird abundance and phenology are sensitive to the effects of climate change.

Waterbirds dependent on inland wetlands in the west are at particular risk because these important habitats are among the most likely to be dramatically influenced by climate change in the region (Hughes and Diaz 2008, Barnett et al. 2008). For example, breeding waterbirds at the Bear River Migratory Bird Refuge rely on wetlands that lie at the interface between freshwater inflows and the saline Great Salt Lake. As the timing and amount of freshwater snowmelt change and humans respond by altering their use of water, the hydrology and salinity regimes of these wetlands may be dramatically influenced. Without actions that anticipate and address these likely changes, the value of this area for breeding waterbirds could be disrupted, which would likely influence the continental populations of some species.

The "U.S. Fish and Wildlife Service Strategic Plan for Responding to Accelerating Climate Change" (2010) involves three progressive strategies: adaptation, mitigation, and engagement. Adaptation involves helping fish, wildlife, and their habitats

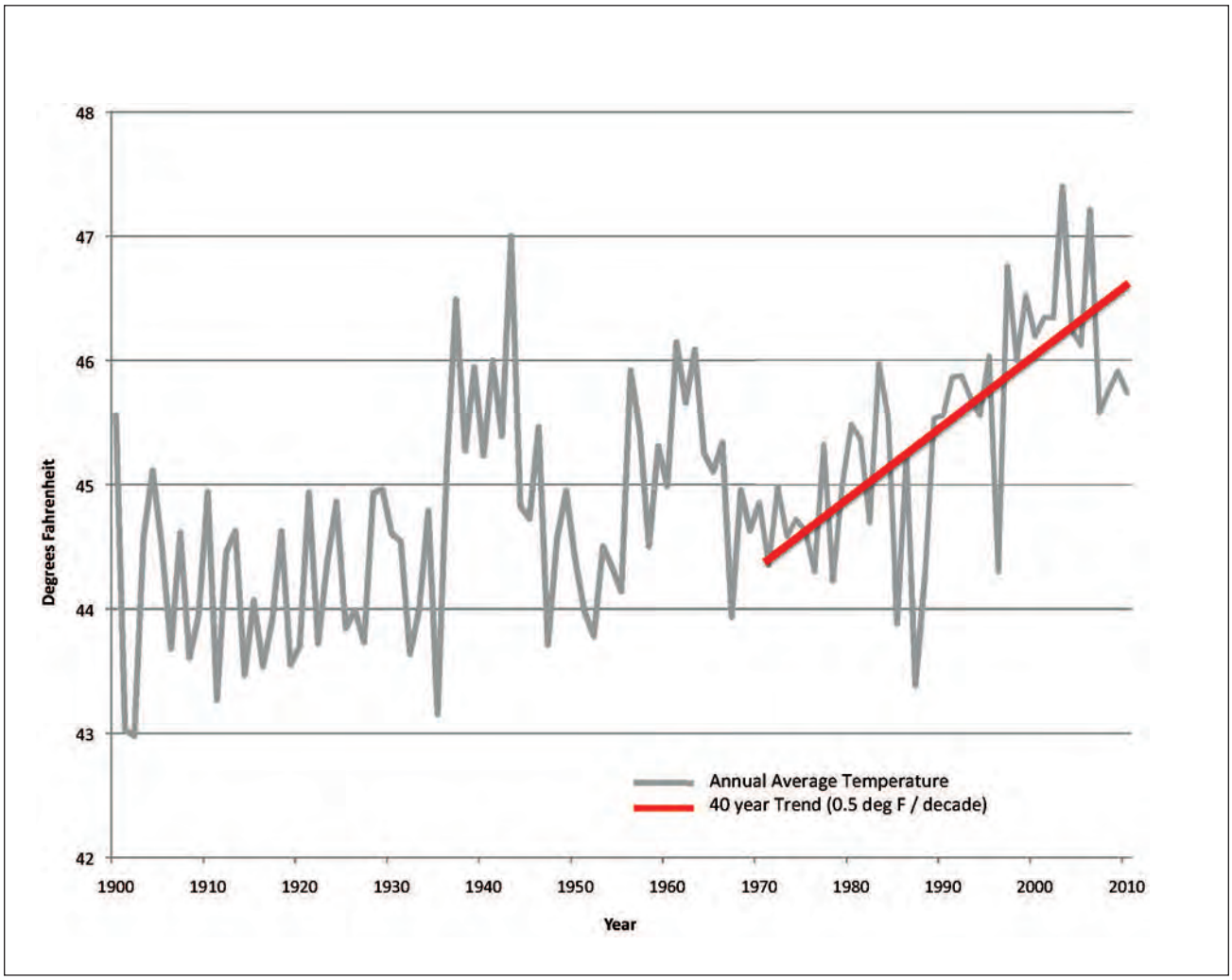

Figure EA–5. Graph of the trend in annual average temperature in the Bear River basin (Idaho, Utah, and Wyoming) over the past 100 years.

adapt to climate change by implementing management actions to help reduce the impacts. Mitigation involves reducing the carbon footprint by using less energy, consuming fewer materials, and increasing sequestration of biological carbon. Engagement encompasses developing partnerships with local, national, and international partners, key constituencies, and stakeholders to seek solutions to the challenges and threats.

Adaptation

Worldwide scientific consensus is that human activity is changing the climate system. As the climate changes, the abundance and distribution of wildlife and fish will also change in response to changing habitat conditions. Some species will adapt successfully to a warming world; many will struggle; and others will disappear.

The exact changes to temperature and precipitation in the Bear River basin are unknown. Equally unknown are the responses of wildlife and habitat to these changes, for example, which species will become the most vulnerable. Maintaining adequate densities of wetlands, robust riparian corridors, and open spaces will become increasingly important to allow fish and wildlife to adapt to the changing environment.

Mitigation

Forests, grasslands, wetlands, and soils have a large influence on atmospheric levels of carbon dioxide. Carbon sequestration forms one of the key elements of mitigation. The World Resources Institute estimates that grasslands store approximately 34 percent, forests store approximately 39 percent, and agro-ecosystems approximately 17 percent of the

global stock of carbon in terrestrial ecosystems. It is as important to protect existing carbon stores from further degradation as it is to sequester atmospheric carbon.

Historically, the destruction of wetlands through land use changes has had the largest effects on carbon fluxes and the resulting radiative forcing of North American wetlands. [Radiative forcing is the measure of the amount that the Earth's energy budget is out of balance.] The primary effects have been a reduction in the ability of the wetlands to sequester carbon (a small to moderate increase in radiative forcing), oxidation of their soil carbon reserves upon drainage (a small increase in radiative forcing), and reduction in methane emissions (a small to large decrease in radiative forcing). It is uncertain how global changes will affect the carbon pools and fluxes of North American wetlands (Bridgham et al. 2006).

Engagement

Engagement involves cooperation, communication, and partnerships to address the conservation challenges presented by climate change (USFWS 2009). The proposed Bear River Watershed Conservation Area would serve as a model for engagement by working with landowners, nongovernmental organizations, State agencies, and Federal agencies.

A key recommendation from a recent climate change workshop held by The Nature Conservancy was to coordinate management of shared resources. Given the regional pattern of recent temperature changes, with some areas experiencing warming more rapidly than others, natural resource managers would benefit by coordinating their activities with others who are managing common resources. Regional and coordinated management of shared habitat may be the only way to make sure that some habitat can be kept in a resilient state while other habitat transitions to another state (Robles 2010).

Taking action on these recommendations will be crucial for achieving conservation and management goals in the face of a changing climate. Reduced snowpack in the mountains combined with earlier seasonal melting caused by rising temperatures may increase the intensity and length of late summer droughts and reduce the availability of water, especially in the western United States. Finding enough water is becoming an increasingly difficult challenge for western fish and wildlife species. Spring is arriving earlier, and plants and animals are being found farther and farther north of their historical ranges in the United States. Wildlife biologists are concerned that this will mean some migratory species may not arrive in their breeding habitats when, or where, their particular food sources are available.

Education is a key part of engagement. The Bear River Migratory Bird Refuge watershed education program will work with local school districts to apply scientific understanding, at a student level, through field trips to sites within the Bear River watershed. Students groups will monitor local climate change through tracking phenological events and engage in strategies to reduce carbon footprints. It is predicted that student engagement in climate change education will result in advancing its understanding among the citizenry within the watershed.

Biological Environment

The Bear River watershed's habitat ranges from riverine and the adjacent riparian areas to wetland, grassland, shrubland, and forest. This section also describes the wildlife and species of concern that use these habitats.

Habitat

Below the peaks of the Uinta Mountains lies a landscape carved by glaciers containing lakes, streams, forests, and meadows. Dropping in elevation from more than 13,000 feet to 4,211 feet and crossing through numerous life zones (alpine to valley floor), the Bear River watershed contains a large diversity of plant communities. The diversity of habitats in the Bear River watershed support a variety of fish, mammal, reptile, and amphibian species as well as a large number of resident and migratory bird species. (See figure EA–6 for a map of habitat types, table EA–1 for acreages, and appendix D for a list of plant and animal species representative of the Bear River watershed.)

USFWS

Riparian areas are important habitat for yellow warblers.

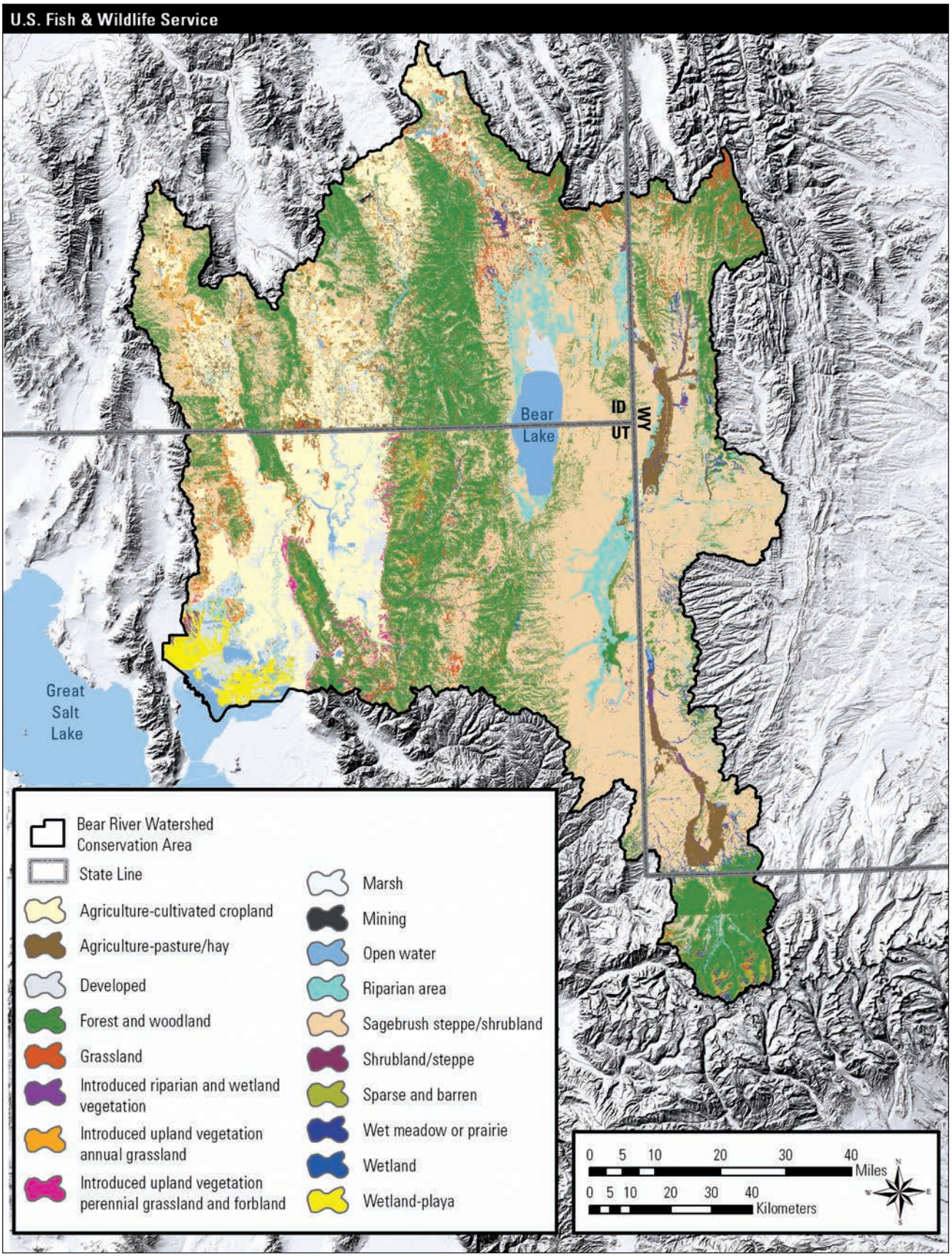

Figure EA–6. Habitat map for the proposed Bear River Watershed Conservation Area in Idaho, Utah, and Wyoming. *Source: NorthWest GAP (Idaho Cooperative Fish and Wildlife Research Unit 2011); South West reGAP (U.S. Geological Survey 2005).*

Table EA–1. Acreages of vegetation types found in the proposed Bear River project area in Idaho, Utah, and Wyoming.

Vegetation types	*Acres*
Agriculture: cultivated cropland	594,358
Agriculture: pasture and hay	133,482
Developed	83,343
Forest and woodland	1,250,529
Grassland	128,848
Introduced riparian area and wetland vegetation	8,821
Introduced upland vegetation—annual grassland	44,840
Introduced upland vegetation—perennial grassland and forbs	19,171
Marsh	69,430
Mining	197
Open water	119,497
Riparian area	261,407
Sagebrush steppe and shrubland	1,945,752
Shrubland and steppe	18,565
Sparse and barren	44,912
Wet meadow or prairie	12,803
Wetland	27,577
Wetland–playa	59,350
Total	4,822,882

Source: http://gap.uidaho.edu/index.php/gap-home/Northwest-GAP/landcover; http://fws-nmcfwru.nmsu.edu/swregap/habitatreview/ModelQuery.asp; Northwest GAP (Idaho Cooperative Fish and Wildlife Research Unit 2011); Southwest ReGAP (U.S. Geological Survey 2005).

Connectivity and Corridors

Habitat loss and fragmentation are the chief factors in the decline of many populations of wildlife throughout the world (Harris 1984, Ehrlich 1986, Lovejoy et al. 1986). In the western United States, human development of open spaces has fragmented the connections between wildlife habitats (Gude et al. 2007). Corridors that link habitats or other landscape linkages help mitigate the effects of habitat fragmentation by linking core areas so that individuals can move between them (Mech and Hallett 2001). They also allow evolutionary and ecological processes (for example, fire, succession, and predation) to continue. By ensuring that plants and animals have connected populations, corridors can help prevent or mitigate against harmful population-level effects resulting from isolation including inbreeding, low genetic diversity, and extirpation (Noss 1983, Harris 1984, Dobson et al. 1999) and may actually increase population sizes, viability, and movement of habitat-restricted species (Noss and Cooperrider 1994, Haddad 1999, Haddad and Baum 1999). Corridors that provided connection between habitats within the landscape should also help provide for longer-term gene flow between populations in core habitats and may provide a pathway for plant populations to shift under regional climate change trends (Bates and Jones 2007).

Almost all species rely on more than one habitat type to complete their life cycles, and the availability of various intact habitats close together is essential to many wildlife species found in the watershed. For example, Saalfeld et al. (2010) found that, while the long-billed curlew's need for wetlands near its grassland nesting habitat is poorly understood, close proximity might be important since more curlews were detected near wetlands. Brood-rearing long-billed curlews typically forage in upland areas (Pampush and Anthony 1993); however, curlew chicks move toward wetlands as they grow (Foster-Willfong 2003). Shorter travel times between nest sites and wetland foraging sites may reduce chick mortality (Saalfeld et al. 2010). In addition to grassland habitat, conservation of emergent wetlands—an element that generally has been overlooked—needs to be incorporated into habitat management plans for curlews (Saalfeld et al. 2010).

White-faced ibis also have specific habitat needs that are being met in the Bear River watershed. In Wyoming, Dark-Smiley and Keinath (2003) found that ibis require large wetlands or lakes with dense emergent vegetation, such as bulrushes for breeding and foraging grounds near breeding areas. One consistent feature that all the breeding records in Wyoming have in common is proximity to irrigated crops where ibis forage. It seems likely that a combination of factors, such as proximity of foraging grounds and specialized habitat at open-water systems, plays a role in where white-faced ibis choose to breed.

The Bear River watershed provides linkages and migration corridors for seasonal movements of wildlife between various habitats within the watershed as well as between other protected lands and ecosystems in the region (see figure EA–7). Crucial wildlife corridors maintain system resiliency in

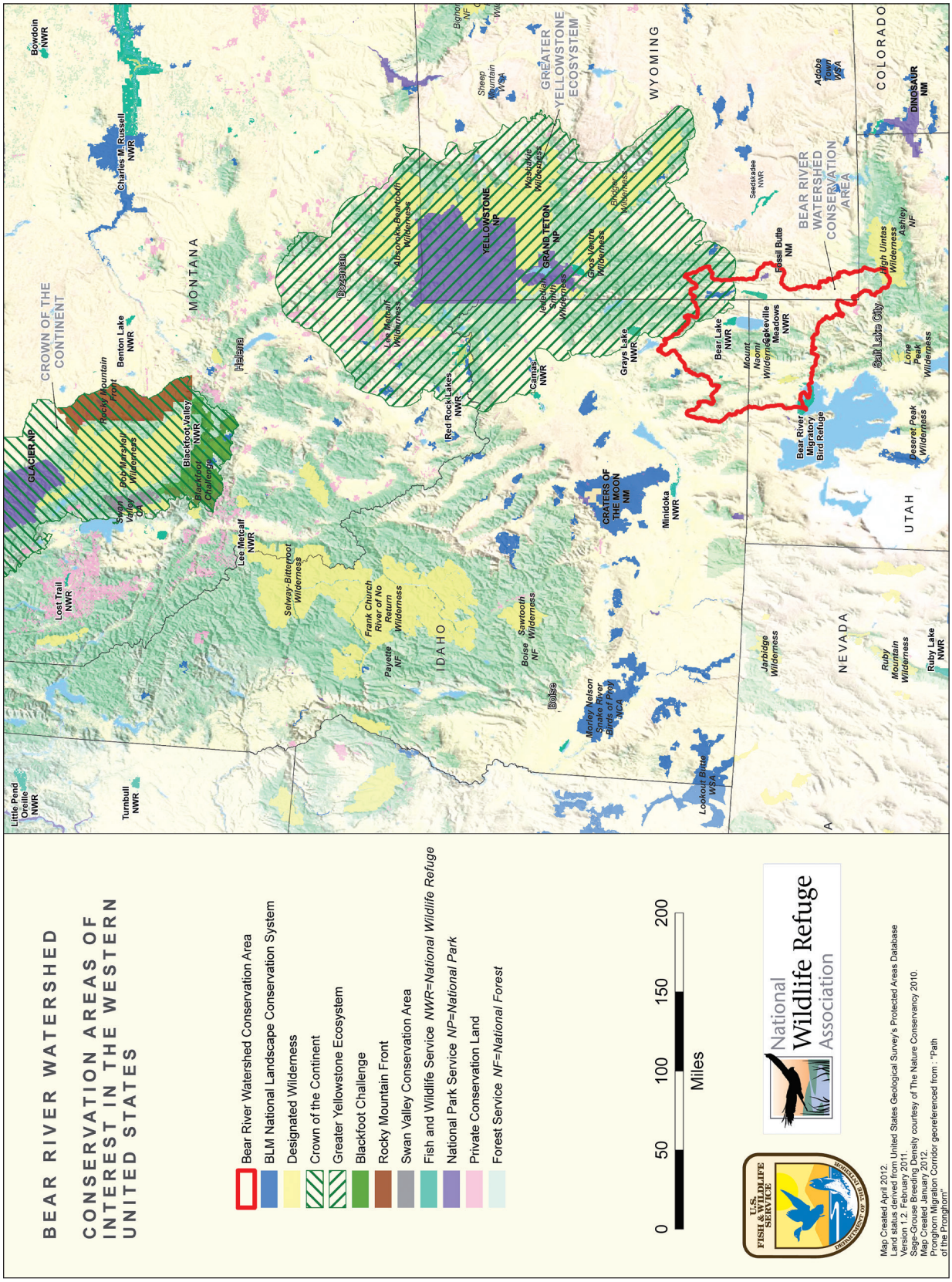

Figure EA–7. Map of regional conservation and protected areas adjacent to the proposed Bear River Conservation Area in Idaho, Utah, and Wyoming.

the face of climate change, especially for wide-ranging wildlife species such as Canada lynx, wolverine, mule deer, and pronghorn. Migration corridors provide connectivity between habitats in the northern and southern Rockies and between Idaho and the Greater Yellowstone Ecosystem for mule deer, elk, and mid- to large-sized carnivores. In particular, Canada lynx linkages are mentioned for Cache, Rich, and Uinta Counties (Idaho Department of Fish and Game 2007). Core habitat areas for lynx are found in the Uinta Mountains (USDA Forest Service 2003) as well. Large numbers of mule deer, pronghorn, elk, and moose migrate through narrow corridors in the Rocky Point area north of Cokeville Meadows National Wildlife Refuge in Wyoming.

Riverine and Riparian Areas

Although riparian areas occupy only a small proportion of the total landscape in the western United States, they tend to be more productive than other ecosystems (Svejcar 1997). Riparian habitat is estimated to cover less than 2 percent of the States of Idaho (Idaho Gap Analysis 2011) and Wyoming (Merrill et al. 1996) and less than 1 percent of the State of Utah (Utah Division of Wildlife Resources 2005b).

The importance of riparian habitat to wildlife far exceeds its abundance. Distinct ribbons of green riparian areas connect streams with uplands across much of the West. These ecosystems support high species diversity and density as well as high productivity, and they allow for an exchange of energy, nutrients, and species between aquatic, riparian, and upland terrestrial systems (Johnson and McCormack 1978, Gregory et al. 1991, Poff et al. 2011). Riparian zones along the major streams are important migration and dispersal corridors traversing harsh grassland and desert environments (Lohman 2004).

Densities of breeding birds can be up to 10 times higher in riparian tracts than in adjacent, nonriparian habitats (Lohman 2004). Bird diversity in riparian habitats has been linked to the complex vertical vegetative structure of these habitats compared to adjacent grassland or shrubland habitats (Slater 2006). In the arid Southwest, about 60 percent of all vertebrate species (Omhart and Anderson 1982) and 70 percent of all threatened and endangered species are riparian area obligates (Johnson 1989, Poff et al. 2011). The quality of riparian habitat greatly influences the quality of aquatic habitat. Riparian vegetation influences light penetration and air and water temperatures, and is the transition point for food chain interactions between aquatic and terrestrial zones. Large woody debris and litter associated with riparian vegetation are often necessary for productive fish habitats, and influence the physical, chemical, and biotic characteristics of riparian and stream ecosystems (Naiman et al. 1992). In some riparian ecosystems, herbaceous plants provide the functions supplied by woody plants in other locations (Baker et al. 2004, Poff et al. 2011).

Riparian areas also play an essential role in maintaining year-round aquatic habitat for fish and other species that occupy the stream channel. In most years, overbank flooding during snowmelt saturates riparian area soils and elevates water tables in adjacent areas. Subsurface water sustains riparian vegetation during drought periods and releases water slowly into the stream (Ewing 1978). Although often small, these waterflows help keep appropriate stream temperatures, improve water quality, and sustain isolated pools essential for fish survival (Winters et al. 1998 as cited in Wyoming Game and Fish Department 2010). Native fish populations have fluctuated, through time, in response to changes in the extent and function of riparian willow communities (Chaney et al. 1991, Binns 1981). Riffle-dwelling species such as longnose dace and riffle-spawning salmonids require relatively smaller fine sediment levels associated with healthy riparian vegetation. Riparian habitat is also required by many amphibian and reptile species.

Trout Unlimited (2010) found that the greatest limiting factor for Bonneville cutthroat trout appears to be land stewardship, because most populations are located on unprotected public and private lands. Strategies such as securing long-term protection, restoring and reconnecting degraded and fragmented habitats, and controlling nonnative species on a watershed scale are necessary to build resiliency while protecting genetic purity.

Wildlife abundance, water availability, vegetation diversity, soil productivity, and favorable topography found in riparian zones attracted both Native Americans and early Europeans settlers to these areas. As a result, a high percentage of riparian areas are privately owned today. Most communities in the Bear River watershed are located near riparian zones used for agriculture, recreation, travel, water development, and housing (Wyoming Game and Fish Department 2010).

Riparian areas in the West are being influenced by a variety of stressors including land use change, grazing, dams, invasive species, timber harvesting, climate change, recreation, water quality, water diversion, ground-water depletion, fire, and mining. Although no comprehensive national inventory of riparian area conditions exists, Ohmart (1994) suggests that a minimum of 95 percent of all western riparian habitats have been altered in some way during the past century.

Another major influence on riparian areas in the Bear River watershed is irrigation. The timing, extent, and method of irrigation can have a strong influence on riparian vegetation. Conversion from

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Springtime wetlands at Cokeville Meadows National Wildlife Refuge, Wyoming.

flood irrigation to center pivot irrigation has been known to change riparian area characteristics. While technological changes like side-role systems and gated pipe deliver water more efficiently to crops and potentially conserve water for other uses like maintaining streamflows, the influence on riparian area characteristics is complex (Wyoming Game and Fish Department 2010).

Lowland Riparian Areas. Lowland riparian areas in the West are typically narrow bands of trees—predominantly cottonwoods—and shrubs surrounded by uplands of shorter vegetation (Knopf et al. 1988, Montgomery 1996). Principal woody species found in lowland riparian habitats in the watershed include Fremont cottonwood, netleaf hackberry, squaw-bush, boxelder, lanceleaf cottonwood, willow, and redosier dogwood. Nonnative invasive species include Russian olive and tamarisk. (Jones and Walford 1995, Utah Division of Wildlife Resources 2005b, Wyoming Game and Fish Department 2005).

Mountain Riparian Areas. Mountain riparian habitats differ from those found in lowlands because of the generally steeper stream gradients, cooler temperatures, and smaller amounts of soil deposition (Knight 1994). Mountain riparian vegetation is often characterized by sedges and short willow shrubland (Winward 2000). As elevation decreases, alder and tall willows become common, along with Engelmann spruce, narrowleaf cottonwood, lodgepole pine, aspen, and occasionally blue spruce and balsam poplar (Knight 1994).

Wetlands

Wetlands represent a small part of the landscape in the Intermountain West, covering less than 5 percent of Utah and 0.2 percent or less in both Idaho and Wyoming (Idaho Gap Analysis, Utah Division of Wildlife Resources, Wyoming Joint Venture Steering Committee 2010). Wetlands are often found in the form of marshes next to desert springs, rivers, streams, and lakes; wetlands can also be found in the spring and summer where snowmelt collects. In the Intermountain West, wetlands provide habitat for more than 140 birds and 25 mammals that are either dependent on or associated with wetlands (Gammonley 2004, Copeland et al. 2010). Nicholoff et al. (2003) estimates that about 90 percent of the wildlife species in Wyoming use wetlands and riparian habitats daily or seasonally during their life cycle, and about 70 percent of Wyoming bird species depend on wetland or riparian areas.

Wetlands within lower elevation grasslands and shrublands are especially important in terms of the biodiversity of plant species and because they have much longer growing seasons than those at higher elevations (Weiher and Keddy 1999). Lower

elevation wetlands generally sustain greater biological diversity and greater overall densities of wildlife. However, these lower wetland complexes are also at greatest risk of future change because they support higher density human populations and more agriculture, have a higher potential for energy development, and are at a higher risk for climate change (Copeland et al. 2007, 2009).

Privately owned wet meadow habitats are some of the most important unprotected wetlands within the Intermountain West. Irrigated wet meadows that are hayed and grazed annually (hay meadows) represent a particularly important subset of wetland habitats. These privately owned wetlands typically occur at mid- to high elevations (4,500–8,500 feet) in landscapes dominated by intact wetland, grassland, and sagebrush habitats not fragmented by development. These areas are important, as they often constitute almost entirely native habitats with little area converted to cropland. Grass-dominated landscapes with minimal fragmentation from cropland support high nest success for wetland- and grassland-nesting birds.

In addition to nesting habitat, these landscapes provide crucial stopover habitat for migrating waterfowl and shorebirds (Intermountain West Joint Venture 2010). Agricultural areas are a major source of foraging habitat during migration as well as nesting and brood-rearing habitat for many waterbird species. The Bear River watershed provides important complexes of wet meadow, flooded pastures, and hayfields used by many species of migrating waterfowl, shorebirds, and waterbirds including American avocet, sandhill crane, white-faced ibis, American bittern, marbled godwit, long-billed dowitcher, long-billed curlew, and northern pintail. The quality and availability of spring migration habitat have direct implications for the survival and breeding productivity of migratory birds. This shallowly flooded habitat is extremely important to spring-migrating waterfowl, especially northern pintails, whose population remains below continental management goals. Important flood-irrigated grazed and hayed wet meadow habitats sustain migrating waterfowl and waterbirds in the Intermountain West. These areas also provide crucial brood habitat for waterfowl and other waterbirds by supplying both escape cover from predators and productive foraging sites for rapidly growing ducklings and chicks.

As with riparian areas, the irrigation of agricultural lands can have both a positive and a negative influence on the ecological condition of wetlands. Agricultural irrigation has affected the hydrology of many wetlands in the Bear River watershed. Copeland et al. (2010) found that more than 50 percent of Wyoming wetland areas in four different complexes were influenced by agricultural irrigation and predicted that changes in irrigation practices driven by the need for water conservation would be likely to adversely affect the hydrology of many lower elevation wetlands. As agricultural producers convert to alternative forms of irrigation because of drought concerns, many wetlands throughout the watershed may disappear. Some studies have documented negative effects from irrigation, mainly involving the conversion of existing wetlands to cropland and impairment from contaminant and nutrient runoff (Dickerson et al. 1996; Lemly et al. 1993, 2000; Kiesecker 2002).

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The long-billed curlew depends on wetland and upland habitats.

Livestock grazing can also have a major influence on the functional integrity of wetlands and riparian systems throughout the Intermountain West (U.S. General Accounting Office 1988; Chaney et al. 1990, 1993; Belsky et al. 1999; Copeland et al. 2010). If effective land conservation measures are not employed, certain farming practices may adversely affect wetlands. Sediment runoff from tilled fields and heavily grazed pastures decreases the lifespan of ponds and wetlands and impairs water quality.

Upland, Grassland, and Shrubland

From 1950 to 1990, grasslands west of the Mississippi River declined by 27.2 million acres, with approximately 36 percent converted to uses other than cropland (Conner et al. 2001). Now, the greatest threats to grasslands and sagebrush ecosystems come from oil and gas development, increasing urban and agricultural development, and invasive species. Climate change is also expected to cause major changes in grassland and sagebrush distribution across the landscape (Bachelet et al. 2001). Range expansions of woody species are predicted to continue, particularly the expansion of pinyon–juniper

into sagebrush–steppe and grasslands (Rowland et al. 2008), resulting in a decrease in sagebrush and an increase in woodlands across the West. Wildfires are increasing and are likely to intensify in a warmer future with drier soils, longer growing seasons, and more severe droughts (Field et al. 2007). Wildfires may also cause large changes in grassland and sagebrush ecosystems.

Changes in grassland cover can be subtle, but cover is generally predicted to decrease (Bachelet et al. 2001). Modeling suggests that climate change will likely increase net primary production in grasslands and decrease soil carbon, but high annual variability in plant production makes these projections uncertain (Parton et al. 2005). Nutrient cycling and plant production are expected to occur more rapidly in response to climate change than changes in community composition (Parton et al. 1994).

Sagebrush is typically the most common plant in shrub–steppe habitats in the watershed. There are many species of sagebrush in the Bear River watershed including basin, Wyoming, and mountain big sagebrush, and black or low sagebrush, which differ in height and habitat affinity. Other common shrubs include rabbitbrush, greasewood, fourwing saltbush, shadscale, serviceberry, and bitterbrush. Perennial grasses may also be common and include Indian ricegrass, sand dropseed, bluebunch wheatgrass, Sandberg bluegrass, alkali sacaton, wild rye, and inland saltgrass. Common forbs include Hood's phlox, arrowleaf balsamroot, yarrow, Richardson's geranium, and milkvetch (Idaho Department of Fish and Game 2005, Utah Division of Wildlife Resources 2005b).

In the foothills and on mountain slopes, mountain big sagebrush occurs as a dominant shrub, typically with bluebunch wheatgrass or Idaho fescue. Mountain big sagebrush also occurs in a more diverse shrub community known as mountain shrub, in which it codominates with bitterbrush, serviceberry, mountain snowberry, chokecherry, mountain mahogany, bigtooth maple, and a variety of forbs. In Utah, Gambel oak is a dominant species in the mountain shrub community. Idaho fescue and basin wildrye are common bunchgrasses (Idaho Department of Fish and Game 2005, Utah Division of Wildlife Resources 2005b). In Idaho, this habitat is restricted to the southern part of the State but is widespread in Wyoming. This diverse community of shrubs is highly palatable and is the preferred browse for many big game species (Wyoming Game and Fish Department 2010).

Sagebrush ecosystems are among the most imperiled in North America because of a variety of human disturbances. Sagebrush habitat has been altered and fragmented by changing fire regimes, an influx of invasive species, and development (agriculture, energy, natural resource, urban, and associated infrastructure). This has resulted in a 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

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White-faced ibis feeding in an irrigated agricultural field.

for sagebrush-dependent vertebrates, such as certain bird species (Knick et al. 2003). In all, shrub–steppe habitats are home to 20 species in Utah, 15 species in Wyoming, and at least 25 species Idaho that need additional conservation actions (Utah Division of Wildlife Resources 2005b), Wyoming Game and Fish Department 2005, Idaho Department of Fish and Game 2005).

Climatic suitability models suggest that by 2100, sagebrush communities in Nevada, southern Idaho, Utah, Colorado, and eastern Wyoming may be at risk of loss because of climate change. Communities in southwestern Wyoming will be at less risk (Bradley 2010).

Sagebrush-dependent wildlife species have adapted to heterogeneous sagebrush communities comprised of multiple age classes of plants across the landscape. In sites where the forb and grass diversity necessary for a healthy sagebrush community is reduced, the amount of essential food and cover available for wildlife is decreased (Wyoming Game and Fish Department 2011). Greater sage-grouse in particular have been affected, with breeding populations declining 45 to 80 percent from estimated numbers in the 1950s (Connelly and Braun 1997, Connelly et al. 2004, Braun 2006).

Sagebrush ecosystems are rapidly declining both in extent and quality rangewide. The historical range contraction of the greater sage-grouse is a result of land conversion of sagebrush habitats to agriculture, climatic trends, and human population growth. Future range loss, however, may be due more to recent changes in land use and habitat condition including energy development and invasive species, such as cheatgrass and disease such as West Nile virus (Aldridge et al. 2008). Keeping large areas of intact sagebrush is considered essential to the long-term persistence of the sage-grouse (Aldridge et al. 2008). Based on this finding, it has been recommended that conservation efforts should begin by keeping large expanses of sagebrush habitat and enhancing the quality and connectivity of those areas.

Recent research shows that viable prairie grouse and sage-grouse populations are heavily dependent on suitable nesting and brood-rearing habitat (Connelly et al. 2000, Hagen et al. 2009). These habitats are usually associated with leks that are located in the approximate centers of nesting and brood-rearing habitats (Connelly et al. 2000, but see Connelly et al. 1988; Becker et al. 2009). Quality nesting and brood-rearing habitats surrounding leks are crucial to sustaining viable prairie grouse and sage-grouse populations (Giesen and Connelly 1993, Hagen et al. 2004, Connelly et al. 2000). The average distances from nests to active leks of nonmigratory sage-grouse range from 0.7 mile to 4 miles (Connelly et al. 2000), and are possibly much more for migratory populations (Connelly et al. 1988). Kaczor et al. (2011) found that sage-grouse selected brood-rearing habitats that provided increased visual obstruction and bluegrass cover. More herbaceous vegetation at these sites may provide increased invertebrate abundance. Invertebrates are a necessary part of the diet of sage-grouse chicks to support their growth, development, and survival (Johnson and Boyce 1990).

Sage-grouse avoid energy developments in otherwise suitable habitats in winter. Previous research has shown that breeding sage-grouse in oil and gas fields avoid developments, experience higher rates of mortality, or both (Holloran 2005, Kaiser 2006, Aldridge and Boyce 2007). Studies on the impacts of energy development in sagebrush–steppe ecosystems show that the effects extend beyond the sage-grouse. Sawyer et al. (2006) found that mule deer avoided otherwise suitable habitats within 1.7–2.3 miles (2.7–3.7 kilometers) of gas wells, and densities of Brewer's sparrow and sage sparrow declined by 36–57 percent within 328 feet (100 meters) of dirt roads in gas fields (Ingelfinger and Anderson 2004).

Sagebrush habitats conserved for sage-grouse may also benefit other sagebrush-dependent species, although the effectiveness of sage-grouse as an umbrella species will depend on the specific management objectives for the conservation of other target species (Rowland et al. 2006). The limits of the conservation umbrella of sage-grouse for management of many species is related in part to the nearly complete reliance of sage-grouse on sagebrush; sage-grouse are among the few species identified as true "sagebrush obligates" (Schroeder et al. 1999).

Forest

At higher elevations in the watershed, forests below treeline typically consist of spruce, lodgepole pine, and subalpine fir, with areas of high-elevation

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An aspen grove in bright fall colors.

tundra on north-facing slopes. Moving down slope and the corresponding precipitation gradient, subalpine forests give way to dry forests of Douglas-fir, white fir, lodgepole pine, limber pine, and aspen groves, with bigtooth maple and boxelder in ravines.

Although the forested areas are largely on public lands, habitat loss through conversion to residential development is of local importance in some areas of the watershed. Phosphate mining also has had a significant long-term impact on forest habitats in eastern Idaho. This habitat typically occurs in landscapes that are extensively used for recreation, for livestock grazing, and increasingly for residential development.

Wildlife

This section describes the abundant variety of birds, mammals, amphibians, reptiles, and fish that live in the Bear River watershed.

Birds

The Bear River watershed provides diverse habitats used by more than 300 species of birds annually for breeding or migration. Banding data also show that migratory routes for some species that nest in the Pacific and central flyways overlap in the Bear River watershed (for example, northern pintail). The Intermountain West Joint Venture's diverse partnership for avian habitat conservation has identified eight Bird Habitat Conservation Areas (Intermountain West Joint Venture 2005), and the Bear River Migratory Bird Refuge and Great Salt Lake are designated as Western Hemisphere Shorebird Reserve Network Sites. The National Wildlife Refuge Association has designated the Bear River watershed as one of six Beyond the Boundaries focal areas nationwide because of its importance to migratory birds and other wildlife. The National Audubon Society (2012) has designated eight Important Bird Areas within the Bear River watershed, which serves to highlight the regional and continental significance of this watershed for migratory birds. Many of the transient species are neotropical migrants that breed in the United States and Canada and winter in the Central Highlands of Mexico or further south into Central and South America. Other spring migrants to the watershed winter along the Gulf of Mexico and the coasts of southern California, Baja Norte, Baja Sur, and southwestern Mexico, including the Gulf of California.

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Cinnamon teal and many other waterfowl species migrate through the watershed.

Upland areas within the Bear River watershed provide essential habitat to many bird species. Shrub–steppe and grassland habitats make up about 60 percent of the Bear River watershed land cover, supporting species such as greater sage-grouse, sage sparrow, sage thrasher, Columbian sharp-tailed grouse, burrowing owl, and long-billed curlew. All of these bird species have been listed as "Species of Greatest Conservation Need" (GCN) in the Idaho, Utah, and Wyoming comprehensive wildlife conservation strategies because of changes in habitat quantity and quality (Idaho Department of Fish and Game 2005, Wyoming Game and Fish Department 2005, Utah Division of Wildlife Resources 2005b). The greater sage-grouse is the only species listed above that has Federal status. The species became a candidate for listing under the Federal Endangered Species Act after the Service's conclusion that listing was warranted but precluded (USFWS 2010a). The Columbian sharp-tailed grouse was petitioned for listing in 2004, with a finding of "Not Warranted for Listing" issued in 2006 (USFWS 2006).

Studies referenced in the "U.S. Fish and Wildlife Land-Based Wind Guidelines" (2012) found that "based primarily on data documenting reduced fecundity (a combination of nesting, clutch size, nest success, juvenile survival, and other factors) in sage-grouse populations near roads, transmissions lines, and areas of oil and gas development and production (Holloran 2005, Connelly et al. 2000), development within 3–5 miles (or more) of active sage-grouse leks may have significant adverse effects on the affected grouse population." Lyon and Anderson (2003) found that in habitats fragmented by natural gas development, only 26 percent of hens captured on disturbed leks nested within 1.8 miles of the lek of capture, whereas 91 percent of hens from undisturbed areas nested within the same area. Holloran (2005) found that active drilling within 3.1 miles of sage-grouse leks reduced the number of breeding males by displacing adult males and reducing recruitment of juvenile males. The magnitudes and proximal causes (for example, noise, height of structures, movement, human activity) of those impacts on grouse populations are areas of much needed research (Becker et al. 2009).

Hanser and Knick (2011) found that the diversity of sagebrush habitats used by greater sage-grouse may provide an effective umbrella for a broader community of passerine bird species associated with sagebrush that are also declining in numbers. Brewer's sparrow, sage sparrow, and sage thrasher had moderate to strong associations with sage-grouse.

The three national wildlife refuges—Bear Lake (with the Oxford Slough Waterfowl Production Area), Bear River, and Cokeville Meadows— in the watershed provide habitat for waterfowl, wading birds, shorebirds, and landbirds that migrate through these refuges on their way to and from Canadian and Alaskan interior and coastal wetlands. More than 270 different species have been identified using the habitats associated with the three refuges including the following birds:

- white-faced ibis (46 percent of the North American population)
- marbled godwit (more than 24 percent of the North American population)
- black-necked stilt (more than 18 percent of the North American population)
- American avocet (more than 16 percent of the North American population)
- tundra swan (32 percent of the western population)

Fish populations on the refuges provide food for birds like the American white pelican, egrets, herons, and the bald eagle. The Bear River Refuge is likely the most important foraging location for the Great Salt Lake breeding colony of American white pelican (Frank Howe, Utah Division of Wildlife Resources, personal communication 2000).

Other noteworthy species using wetland habitats found throughout the watershed include sandhill crane, redhead, Wilson's phalarope, trumpeter swan, black-crowned night-heron, cinnamon teal, blue-winged teal, northern pintail, American white pelican, rough-legged hawk, burrowing owl, and short-eared owl.

Mammals

The Bear River watershed provides habitat for nearly 100 species of mammals. Forty-six of these species are listed as "Species of Greatest Conservation Need" under the Idaho, Utah, and Wyoming comprehensive wildlife conservation strategies (Idaho Department of Fish and Game 2005, Utah Division of Wildlife Resources 2005b, Wyoming Game and Fish Department 2005).

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A bull moose rests in wetland vegetation at Bear Lake National Wildlife Refuge, Idaho.

Many wide-ranging mammals depend on the large blocks of intact habitat found in the watershed, the wintering areas, and the key migration linkages including elk, mule deer, moose, pronghorn, grizzly bear, Canada lynx, gray wolf, and wolverine. Upland shrub and grassland habitats support many species, such as white-tailed prairie dog, pygmy rabbit, Idaho pocket gopher, sagebrush vole, Wyoming ground squirrel, and Preble's shrew.

Wetlands in the watershed provide habitat for such species as water shrew, water vole, and northern river otter. In addition, the concentration of insects found in and around wetland complexes attract many bat species of concern including pallid bat, Townsend's big-eared bat, long-eared bat, and long-legged bat.

Amphibians

The diversity of amphibian species in the Great Basin and southern Rocky Mountains is low compared to other areas of the country, such as the Pacific Northwest. However, wetland and riparian habitats in the watershed do support 11 species of frogs and toads and one salamander. Most of these species are listed as "Species of Greatest Conservation Need" under the Idaho, Utah, and Wyoming comprehensive wildlife conservation strategies (Idaho Department of Fish and Game 2005, Utah Division of Wildlife Resources 2005b, Wyoming Game and Fish Department 2005).

The Bear River watershed provides important habitat for the western population of the northern leopard frog, which was petitioned for listing under the Endangered Species Act in 2006. The Fish and

Wildlife Service issued its 12-month finding in October 2011. Although the species is declining across its range and is considered rare or is locally extirpated from many States, including Idaho, Utah, and Wyoming, the Service concluded that listing was not warranted at this time (Federal Register 2011).

Reptiles

Approximately 20 species of reptiles occur in the Bear River watershed. Fifteen of these species are listed under State plans as "Species of Greatest Conservation Need." Upland areas such as sagebrush and grasslands are important habitats for species such as common sagebrush lizard and western skink. Moist habitats near wetlands or streams support species such as common gartersnake, eastern yellow-bellied racer, and smooth greensnake.

Fish

The Bear River and its tributaries provide important instream habitat for at least 15 species of native fish. All three State comprehensive wildlife conservation strategies identified the Bear River and its tributaries as playing an important role in providing habitat for an assemblage of native cool- and cold-water fish species, most notably the following:

- Bear River Bonneville cutthroat trout: Because of overharvesting, habitat modifications, dams, and diversions, Bonneville cutthroat trout was thought to be extinct by the 1960s; however, in 1974, an isolated population was discovered, which resulted in large restoration efforts by State, Federal, and local wildlife officials to bring them back. The Bonneville cutthroat trout was petitioned for listing under the Endangered Species Act in 2008; however, a finding of "Not Warranted for Listing" was decided (USFWS 2008b).

- Northern leatherside chub: The northern leatherside chub was petitioned for listing under the Endangered Species Act in 2011; however, a finding of "Not Warranted for Listing" was decided (Federal Register 2011).

Several other important Bear River native fish species recognized by these plans include mountain whitefish, mottled and Paiute sculpin, longnose and speckled dace, redside shiner, Utah sucker, and mountain sucker.

Many of these fish species evolved primarily as lake-dwelling (lacustrine) populations inhabiting Lake Bonneville during the Pleistocene. As Lake Bonneville began to recede, some fish moved up stream in search of cooler water while others adapted to the shrinking remnant lake. In the upper reaches of the Bear River, seasonal migrations from larger to smaller rivers is a common reproductive strategy for many fluvial fishes—those produced or found by a river or stream.

Species of Special Concern

Several federally listed species live in or have home ranges that overlap the proposed Bear River Watershed Conservation Area, as described in the following:

- The historical range of the endangered black-footed ferret includes the far eastern part of the watershed. Where ferrets have been reintroduced, they are considered experimental–nonessential; however, unconfirmed sightings of naturally occurring ferrets continue to be reported (Utah Division of Wildlife Resources 2005a).

- Grizzly bear and Canada lynx, both listed as threatened, can be found in the high country.

- The threatened plant Ute ladies'-tresses occurs within the proposed project area and is found in wet meadows and along perennial streams.

- Maguire primrose, a threatened plant that grows in rocky areas and on cliff faces, is highly localized near Logan, Utah.

- Species proposed for listing, such as the yellow-billed cuckoo, occupy mature cottonwood–willow riparian habitats

- Greater sage-grouse, a candidate for listing, is dependent on sagebrush and grassland habitats found throughout the watershed.

- The wolverine, a candidate species, occurs in higher elevation forested areas of the watershed.

- Whitebark pine, a coniferous tree occurring in subalpine to alpine sites above 8,000 feet, is a candidate species.

Cultural Resources

Humans have inhabited the Bear River area for more than 12,000 years. Their uses of the land are as diverse as the regional topography and environments and reflect both changes through time and localized adaptations. The following brief summary of the prehistory and history of the Bear River area provides an overview of some of the major themes that have influenced the human interaction with the land.

Prehistory

Paleo-Indian Period

Current archaeological evidence shows that the earliest humans, called the paleo-Indians, migrated to the region near the close of the last ice age approximately 12,000 years ago. These people had a highly mobile lifestyle that depended on big game hunting including mammoths and a huge, now-extinct bison species. The hallmarks of most paleo-Indian sites are the beautiful but deadly spear points that are generally recovered from animal kill and butchering sites and small temporary camps, or from isolated occurrences.

Recorded paleo-Indian sites are rare in the Bear River drainage, probably indicating the need for more surveys and research rather than reflecting actual prehistoric use patterns. Several early sites have been recorded in the general region, and many of these are found in the many caves that characterize parts of the Great Basin. Sites are also found near wetlands and along the shorelines of ancient lakes, indicating the use of the abundance of floral and faunal resources that would have been available in these locations. The warming and drying climatic trend that began at the start of the Paleo-Indian Period continued and, by approximately 8,000 years ago, contributed to a change in settlement patterns and local adaptations.

Archaic Period

There was a gradual but definite shift in the pattern of human use of the region beginning about 8,000 years ago and continuing until approximately 2,500 years ago. The changes were the result of a combination of regional climatic fluctuations and an increasing population, coupled with technological innovation and regional influences. Although the Archaic Period is better represented in the archaeological record than the preceding Paleo-Indian Period, the interpretation of the remains is difficult. A greater diversity of tools and the use of a larger variety of plants and animals are found on many sites. The semipermanent occupation of small villages, the use of smaller spear points, and the creation of basketry, cloth, and cordage are hallmarks of this period. As with the earlier inhabitants, the Archaic peoples made extensive use of the many caves and the wetland environments in the region.

Late Prehistoric and Protohistoric Period

Beginning approximately 2,500 years ago, several innovations greatly influenced life in the Bear River region. Although these changes were adopted at different rates and degrees throughout the area, the advent of pottery, the bow and arrow, and agriculture, coupled with a larger and more sedentary population, define the period until approximately 800 years ago.

Approximately 1,500 years ago, people archaeologists refer to as the Fremont began to settle the Bear River drainage. Although five distinct Fremont variants have been identified in the archaeological record of the Great Basin, the use of pit houses, agriculture, granaries, and distinctive artistic motifs are common throughout the region. Fremont subsistence included cultivated corn, beans, and squash but also relied heavily on hunting and the intensive exploitation of native plants. Archaeologists suspect that a major staple of the Fremont diet along the Bear River would have been cattail and other seeds ground into meal. Animal species exploited included bison, pronghorn, and mule deer as well as shellfish, fish, and waterfowl. Evidence of the Fremont in the archaeological record disappears about 700 years ago.

About 600 years ago, the people living in the Bear River watershed began to blend culture traits with Shoshonean people living to the east of the Uinta Mountains and abandoned some Fremont cultural traits. These people continued to live in part on wild foods available in the marsh, but probably lived in smaller groups and exploited a broader range of resources. It is not known if the Fremont people were replaced or the two groups integrated. When the first trappers arrived in the early 1800s, people of the Shoshone and Bannock Tribes were living in the area.

History

The Historic Period for the Bear River drainage begins with the recurring contact of the Native Peoples with people of European descent and ends in the mid-twentieth century. This interaction generally followed many years of occasional contact—usually for the exchange of trade goods—and occurred at different times throughout the area. As with the prehistory of the area, the history of the Bear River watershed reflects both broad themes and individual stories. The narrative below briefly summarizes some of the major historic influences in the region.

The earliest documented European in the area was fur trapper Robert Stuart in 1812. The region quickly gained fame for its abundant resources and became the site of both the 1827 and 1828 trappers' rendezvous on the southern end of Bear Lake near the current town of Laketown, Utah. These annual gatherings were held from 1825 to 1840 to allow the trappers to sell their furs and restock their supplies.

Border disputes between the United States and Spain in various parts of North America, including the Bear River drainage, were addressed in the Adams–Onis Treaty of 1819. As a part of this treaty, the land north of the 42nd Parallel—the State boundary between Idaho and Utah—became United States

territory and the lands below the parallel that of New Spain (Mexico after 1821).

Several major trails, sometimes referred to as the Emigrant Trails, crossed the Bear River drainage. The Oregon Trail in this area often followed the route of earlier fur trapper foot and horse trails but did not become a wagon trail until 1836. Coming from the east, the main trail takes a sharp north turn at Fort Bridger in southwest Wyoming before heading northwest along the northern banks of the Little Muddy Creek. It crosses over the Bear River Divide and joins the Bear River just south of the Cokeville Meadows National Wildlife Refuge. From there, it never strays far from the Bear River and is most often along the east or north sides of the river. Just west of Soda Springs, where the river cuts to the south, the trail diverges from the river and heads northwest toward Fort Hall. The California Trail follows a similar path through the watershed, but splits from the Oregon Trail at Fort Hall.

The grade of the Union Pacific Railroad, built as a part of the Transcontinental Railroad, crosses the watershed just north of the Bear River Migratory Bird Refuge. The Union Pacific began in Omaha, Nebraska, and headed west until joining the Central Pacific Railroad at Golden Spike, approximately 10 miles to the north of the Bear River Migratory Bird Refuge in 1869. The completion of this railroad and its links to rail systems in the eastern United States had a profound effect on the settlement of the West.

The first European resident of the area is reported to have been Thomas "Peg Leg" Smith, who ran a trading post from 1842–57 near Dingle, Idaho, on the northeastern shores of Bear Lake. The influx of settlers accelerated greatly during the early 1850s following the initial waves of Mormon immigrants arriving from the east. The towns of Brigham City and Willard in the southwest corner of the watershed were both founded in 1851 by Mormon pioneers. In 1860, Mormons settled to town of Franklin, Idaho, located along the Cub River just north of the Utah–Idaho boundary, which became the first town settled in what is now Idaho. In 1867, the Fort Hall Reservation near Pocatello, Idaho, was established for the Shoshone and Bannock Tribes.

Socioeconomic Environment

The proposed Bear River Watershed Conservation Area is located in a vast basin covering 12 counties across Idaho, Utah, and Wyoming. The watershed spans roughly 7,500 square miles: 1,500 square miles in Wyoming, 2,700 square miles in Idaho, and 3,300 square miles in Utah (Utah Division of Water Resources 2004).

The 12-county region (which excludes the five out-of-watershed counties) has a population of roughly 361,120 people (U.S. Census Bureau 2010). (See table EA–2.) Population growth is expected throughout much of the region, with most of the growth centered in the Cache Valley. Located in the western part of the Bear River watershed in Utah, the Cache Valley is the most populated area in the watershed, and its population is estimated to double from 2000 levels to 297,597 by 2050 (Utah Division of Water Resources 2004). Population growth in the Cache Valley is partly because of the valley's proximity to the metropolitan Wasatch Front. In Wyoming, Lincoln County has seen 24.3 percent population growth over the last decade (U.S. Census Bureau 2010), with about 200 new homes built each year (Royster and Gearino 2006), and Uinta County has experienced a 7 percent population growth over the decade. Idaho counties within the proposed conservation area have seen less growth, with Bear Lake and Caribou Counties seeing a decline in population over the decade. Of the proposed conservation area counties in Idaho, Franklin, and Bannock Counties have experienced the greatest growth, with 12.9 percent and 9.6 percent growth over the decade, respectively.

Total nonfarm employment was more than 265,000 individuals in 2010 (U.S. Census Bureau 2011) in the combined 12-county region. The highest percentage of total employment was found in educational services, health care, and social aid at 20 percent of nonfarm employment. This percentage is, in part, because of the high population and abundance of educational and health care centers in Cache County, Utah (home to Utah State University) and Weber County, Utah. The second and third highest percentage of total employment in 2010 was in manufacturing at 14 percent and retail trade at 12 percent. Agriculture, forestry, fishing, hunting, and mining made up an estimated 4 percent of the total employment by sector.

Mining represents a relatively small percentage of total employment for many of the counties in the region, but has increased slightly since 1998 (U.S. Census Bureau 2011, Headwaters Economics 2011). Mining accounted for less than 1 percent of total employment in 2009 for all but three counties in the 12-county region.

Landownership

The Upper Bear River area is located in parts of Rich and Summit Counties, Utah, and Lincoln and Uinta Counties, Wyoming. The headwaters of the Bear River, near the border of Summit and Uinta Counties, is forested; the remaining land cover in the high-elevation Upper Bear River area is primarily grassland and shrubland, with about three-quarters of the land used for grazing (Utah Water Research

Laboratory 2011). As of 2006, about 63 percent of the land in the Upper Bear River counties was federally owned, primarily by the Bureau of Land Management and the USDA Forest Service; about 24 percent of the land was privately owned, 4 percent was State owned, and 7 percent was tribally owned (Headwaters Economics 2011). The Upper Bear River area is lightly populated. The largest municipalities in the region are Evanston and Cokeville, Wyoming, and Randolph and Woodruff, Utah (Utah Water Research Laboratory 2011).

The Middle Bear River area is located in parts of Bear Lake, Caribou, Franklin, Bannock, Oneida, and Power Counties in Idaho. Grassland and shrubland account for about 77 percent of the land cover in the Middle Bear River counties, and croplands account for about 11 percent of the land cover (Headwaters Economics 2011). As of 2006, urban development accounts for only about 0.2 percent of the land cover in these counties; the largest municipalities in the region are Grace, Preston, Montpelier, Soda Springs, and Malad City, Idaho, and Garden City, Utah (Headwaters Economics 2011, Utah Division of Water Resources 2004). As of 2006, landownership in the Middle Bear River counties was 48 percent private, 38 percent Federal, 5 percent State, and 6 percent tribal (Headwaters Economics 2011).

The Lower Bear River area is in parts of Box Elder and Cache Counties in Utah. The rich soil and abundant water in this part of the Bear River watershed support a mix of urban and agricultural uses. About 9 percent of the land cover in the Lower Bear River counties is water. Mixed croplands account for 21 percent of the land cover in the Lower Bear River counties, with croplands concentrated in Cache and Box Elder Counties (Headwaters Economics 2011). As of 2006, about 1.6 percent of the land in these counties is urban development, with much of the development concentrated in the Cache Valley (Headwaters Economics 2011). Major municipalities in the Lower Bear River area include Brigham City, Logan, North Logan, Smithfield, Tremonton, and Richmond. As of 2006, landownership in the Lower Bear River counties was 52 percent private, 31 percent Federal, and 6 percent State (Headwaters Economics 2011).

Table EA–2. Population statistics for Wyoming and counties in and near the proposed Bear River Watershed Conservation Area in Idaho, Utah, and Wyoming.

	Residents (2010)	*Persons per square mile*	*Population % change since 2000*
Utah	2,763,885	33.6	24
Cache County	112,656	96.7	64
Rich County	2,264	2.2	16
Summit County	36,324	19.4	22
Weber County*	231,236	401.8	18
Morgan County*	9,469	15.5	33
Box Elder County	49,975	8.7	17
Idaho	1,567,582	18.9	21
Power County	7,817	5.6	4
Bannock County	82,839	74.4	10
Oneida County	4,286	3.6	4
Franklin County	12,786	19.2	13
Caribou County	6,963	3.9	–5
Bonneville County*	101,234	55.8	26
Teton County*	10,170	22.6	70
Bear Lake County	5,986	6.2	–7
Wyoming	563,626	5.8	14
Uinta County	21,118	10.1	7
Teton County*	21,294	5.3	17
Lincoln County	18,106	4.4	24

Source: Utah Governor's Office of Planning and Budget (2008).
**Outside the proposed Bear River Watershed Conservation Area.*

While the population of the proposed conservation area has declined in two counties in Idaho, some parts of the proposed conservation area as well as areas next to it have experienced significant growth trends over the past decade (see table EA–2).

Property Tax

Property taxes are assessed based on the value of property. For most types of properties, county assessors use fair market value to determine property tax liabilities. In many States, however, the assessed value of agricultural land is determined based on the productive value of the land rather than on the fair market value of the property. The fair market value of land is the estimate of a property's sale price. This value includes both the productive value of the land and any speculative value associated with the possibility of developing the land.

Conservation easements reduce the fair market value of a property by removing the speculative value associated with possible development; however, conservation easements generally do not affect the productive value of agricultural land. The proposed Bear River Watershed Conservation Area encompasses three States: Idaho, Utah, and Wyoming. In all three States, property taxes for agricultural land are assessed based on the productive value of the land. Most properties that enter into conservation easement agreements with the Service are classified as agricultural land.

Public Use and Wildlife-Dependent Recreational Activities

According to the "2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation," approximately 2.9 million residents took part in wildlife-associated recreational activities in Idaho, Utah, and Wyoming in 2006 (USFWS 2008a). It was estimated that residents and visitors spent $3.3 billion on wildlife-associated recreational activities in 2006 in the three States combined. Among participants, wildlife watching was the most frequently reported activity followed by fishing and hunting. In Wyoming, 84 percent of individuals surveyed watched wildlife, 27 percent fished, and 13 percent hunted; in Utah, 77 percent watched wildlife, 33 percent fished, and 15 percent hunted; and in Idaho, 75 percent watched wildlife, 35 percent fished, and 19 percent hunted (USFWS 2008a). Following the national trend, wildlife viewing has become increasingly popular, while hunting and fishing have decreased or remained stable in popularity. From 1996 to 2006, it was found that the number of Idaho residents who fished declined by 21 percent while those who hunted declined by 33 percent. Wyoming residents who fished declined by 19 percent, while hunting and wildlife viewing numbers remained relatively constant. During the same time period, Utah residents who watched wildlife increased by 30 percent, while hunting and fishing numbers remained relatively constant (USFWS 2008a).

Section 4—Environmental Consequences

This chapter assesses the environmental impacts that are expected to occur from the implementation of alternatives A and B, as described in chapter 2. Environmental impacts are analyzed by issues for each alternative and appear in the same order as discussed in chapter 2. Several aspects of environmental effects are evaluated, including whether the effects are negative or beneficial, direct, indirect, or cumulative with actions independent of the proposed action. The duration of the effect, whether it is a short-term or a long-term effect, is also used in the evaluation of the environmental consequences.

The intensity and timing of effects from alternative A, the no-action alternative, would vary by the location within the watershed. For example, the intensity of development would be much greater, and would occur sooner in the Cache Valley than in the more rural areas.

The level of impact from alternative B would be greatly dependent on the degree completeness the program achieves. If only a small acreage is conserved through the easement program, the long-term effects would be negligible. The rate of implementation would depend on the availability of funding and the level of landowner interest. Alternative B would likely be a long-term process with incremental change.

Effects on the Physical Environment

The physical environment comprises the geology, soils, hydrology, and climate of the Bear River watershed. In addition, climate change is discussed. Anticipated effects on these features are described for alternatives A and B. Some of the effects would be the same for either alternative.

Effects Common to Both Alternatives

Existing uses of the proposed lands would continue to have some negative effects on soils. On lands zoned for agriculture, soil problems such as compaction, trampling, and erosion caused by farming equipment, cattle grazing, and vehicle use on range lands would continue.

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Black-necked stilts are migratory shorebirds that frequent the Bear River watershed.

Water and Soil Resources—Alternative A (No Action)

The Bear River delivers an annual average of 1.2 million acre-feet of water into the Great Salt Lake, more than one-half of the total surface water flowing into the lake each year. Over the next 50 years, about one-fifth of this volume of water could be diverted to the Wasatch Front for municipal and industrial use by communities outside of the watershed (Utah State University Extension 2006).

Increased development and disturbance could reduce infiltration and ground-water recharge. Development can result in more wetland drainage, water diversion, and introduction of invasive species. Development could change drainage patterns and the rate of surface runoff, increasing soil erosion and nonpoint source pollution. Additional residential development in the proposed conservation area would have a negative effect on aquatic habitat because of sewage-derived nutrient additions to streams and lakes (Wernick et al. 1998). With projected development patterns (Toth et al. 2010), there would be more demand for ground water, potentially resulting in degradation of the hydrology of some wetland areas and negatively affecting the three refuges in the Bear River watershed.

This alternative could have a negative effect on local mitigation efforts by reducing options for conserving and storing carbon through land protection and habitat restoration.

Water and Soil Resources—Alternative B (Proposed Action)

Historical water rights would continue and the conservation easements would not allow any water rights to be sold or otherwise separated from the property. The easements would not allow change to or alteration of points of diversion, timing, or place of use for any water rights. Historical water use would be kept in accordance with current practices.

Water resources on up to 920,000 acres of conservation easements would result in some additional protection from increased nonpoint source pollution from residential subdivisions, commercial development, and draining of wetlands, all of which would be prohibited under the proposed easement program. A long-term commitment to maintenance of vegetative cover with minimal soil disturbance would help conserve local microclimate patterns and soil processes. By limiting development on some prime agricultural and wildlife habitat areas, communities would help to ensure future ground-water supplies, thus reducing the need to develop more water resources to meet growing demand (Toth 2010). The protection from conservation easements would improve water resources throughout the Bear River watershed, including for the three national wildlife refuges.

Effects on the Biological Environment

This section describes the anticipated effects on wildlife and habitat under alternatives A and B. The Bear River watershed's habitat ranges from river and the adjacent riparian areas to wetland, grassland, shrubland, and forest. This section also describes the wildlife and species of concern that use these habitats.

Habitat and Wildlife—Alternative A (No Action)

Under the no-action alternative, the Service would continue to work cooperatively with landowners to voluntarily improve habitat on private land through programs such as Partners for Fish and Wildlife. Private landowners would continue to be responsible for complying with Federal, State, county, and local invasive animal and plant control laws. Degradation of resources used by wildlife on some unprotected lands would continue as the need and demand for help and for easements exceed the capacity of existing programs. Intensification of agricultural processes combined with increasing residential and commercial development would result in the further decline of wildlife populations, such as migratory birds, native fish, resident wildlife, and species of special concern.

Under this alternative, predicted changes in the quantity and quality of water (Toth et al. 2010) combined with direct loss and fragmentation of habitat and of migration corridors would negatively affect fish and wildlife over the long term.

Loss and Fragmentation

Subsurface, residential, and commercial development would negatively affect riverine, riparian, grassland, and shrubland habitat on which a wide variety of wildlife species depend. Besides direct habitat loss resulting from commercial and residential development, infrastructure associated with development would fragment wildlife habitat. Oil and gas development could lead to saltwater contamination and new road development. Increased levels of nonnative and invasive species resulting from disturbance would likely further fragment wildlife habitat.

Davies et al. (2011) found that exurban growth decreases native plant and animal diversity, increases the number of exotic species (including nonnative predators), and restricts the use of ecosystem management options, such as using fire to prevent conifer encroachment (Knight et al. 1995, Maestas et al. 2003,

Hansen et al. 2005). Fire frequency and size are influenced by housing density and tend to be highest at intermediate levels of human actions (Syphard et al. 2007, 2009).

Riverine Area, Riparian Area, and Wetland Effects

Because the Bear River watershed is considered one of the last areas of Utah with a developable water supply, there is some concern that development pressure and demand for water would negatively affect sensitive refuge habitats and ecosystems (Toth et al. 2010). With much of the undeveloped water claimed by municipalities along the Wasatch Front, it has been estimated that one-fifth of the current Bear River flows could be diverted within the next 50 years (Utah State University Extension 2006).

Under the no-action alternative, the likely increase in development in riparian areas would remove corridors of connectivity between wetland and upland habitat types. In addition, stream quality could become degraded from development, which would negatively affect the Bonneville cutthroat trout; leatherside chub; mountain whitefish; mottled and Paiute sculpin; longnose and speckled dace; redside shiner; and Utah, bluehead, and mountain suckers. With increasing development, more barriers to fish passage are likely to be constructed.

Upland Effects

Wildlife habitat would be fragmented by increased levels of nonnative and invasive species that result from disturbance. Vertical structures such as wind towers and oil and gas infrastructure could result in large tracts of otherwise suitable habitat being avoided by some species, such as greater sage-grouse, sage thrasher, sage sparrow, pronghorn, mule deer, and other sage-dependent species. Besides the direct impacts of habitat loss and increased wildlife mortality from vehicle collisions, roads associated with development would lead to increased soil erosion, wetland degradation, spreading of invasive weeds, and habitat fragmentation.

Because it would increase the number of human-caused fires, exurban development in sagebrush communities could create and keep plant systems dominated by exotic plants and start a positive feedback loop between exotic grass invasion and increased fire frequency (D'Antonio and Vitousek 1992).

USFWS

White-faced ibis colony a-wing.

The loss of sagebrush communities is a concern in part because these plant communities provide crucial habitat for sagebrush-dependent wildlife species. Long-term monitoring of sage-grouse populations has shown a steady decline across their range since the 1960s (Connelly and Braun 1997, Connelly et al. 2004). Aldridge et al. (2008) suggested that the loss of sagebrush habitat was the main factor in the extirpation of local sage-grouse populations.

Species of Special Concern Effects

The Idaho, Utah, and Wyoming State conservation strategies include at least 70 bird, 7 amphibian, 15 reptile, and 8 fish "Species of Greatest Conservation Need" (Idaho Department of Fish and Game 2005, Utah Division of Wildlife Resources 2005b, Wyoming Game and Fish Department 2005).

Although there are many species on the State lists of concern, only 10 species within the Bear River watershed are federally listed. The no-action alternative would increase the level of threat to endangered, threatened, and candidate species through habitat loss, degradation, and fragmentation, among other factors. More land conservation and protection measures are the primary actions identified in the recovery plans for most such species, as well as for species on the State lists.

Without more habitat protection measures in the watershed, there would be an increased likelihood that more species would be added to the State lists of conservation concern or to the Federal threatened and endangered species lists.

Habitat and Wildlife—Alternative B (Proposed Action)

Loss and Fragmentation

The availability of large, intact areas of diverse habitat types is important to provide for the various needs of wildlife species. Habitat connectivity provides a migration corridor for neotropical birds; between winter and summer ranges for mule deer, pronghorn, and elk; and between breeding, nesting, and brood-rearing areas for birds. It also provides access to spawning grounds for native fish. Connectivity increases the resiliency of wildlife populations by allowing movement to new areas during environmental challenges such as drought or flooding, and provides for genetic diversity by allowing an exchange of individuals from different subpopulations. Privately owned lands adjacent to the Bear Lake (and Oxford Slough Waterfowl Production Area), Bear River, and Cokeville Meadow Refuges provide connectivity between the refuges and other Federal lands, thus creating a larger block of permanently protected wildlife habitat. Through protection of important migration corridors and habitats, the proposed action would have long-term beneficial effects on fish and wildlife populations.

Riverine Area, Riparian Area, and Wetland Effects

The Bear River is the lifeblood of the three national wildlife refuges located along its course. Large populations of waterfowl, shorebirds, and native fishes depend on the refuges and adjacent habitat areas to meet their breeding, migration, and feeding needs. The proposed action would protect privately owned wetlands, irrigated meadows, and fields that now provide important wildlife habitat.

The proposed action would help maintain healthy riparian areas that recharge aquifers, reduce soil erosion, filter chemical wastes, moderate stream temperatures, and help buffer water loss from upland drainages.

Retaining the role of riparian habitats in providing travel corridors for wildlife would become an increasingly important part of effective mitigation plans for human development as well as climate change (Wyoming Game and Fish Department 2010). Conservation of riparian areas would benefit a variety of species of special conservation concern that depend on riparian habitat, such as Lewis's woodpecker and many neotropical migratory birds. Additionally, connectivity between different riverine habitat types is important for fish access to suitable spawning and rearing grounds while providing adequate habitat for adult growth and survival.

Upland Effects

The proposed action would provide the ability to conserve large patches of sagebrush that occur on acquired easements.

Maintaining and restoring large patches of sagebrush would create a mosaic of sagebrush habitats that would be an important step toward reversing the population declines of sage-grouse and other sagebrush-dependent species, such as sage sparrow, sage thrasher, and Brewer's sparrow (Hanser and Knick 2011).

Species of Special Concern Effects

With the additional habitat protection measures in the watershed under the proposed action, there would be a greater likelihood that common species can remain common. There are relatively few species with Federal status in the Bear River watershed. There would be a reduced need for more species to be added to the State lists of conservation concern or to be federally listed as threatened or endangered.

The effects of the proposed Bear River Watershed Conservation Area on endangered, threatened, and candidate species would vary by the area under

consideration. The differences in the effects would be due to differences in species' ranges, habitat affinities and restrictions, and elevations.

Climate—Alternative A (No Action)

Carbon sequestration capabilities would be reduced with the increased development and disturbance of native vegetation likely to occur under the no-action alternative. There would be negative effects on the resiliency of the watershed and the ability of ecosystems to adapt to a changing climate and changing land uses. This alternative could also negatively affect local mitigation efforts by reducing options for conserving and storing carbon through land protection and habitat restoration.

Climate—Alternative B (Proposed Action)

By protecting habitat, reducing habitat fragmentation, and increasing connectivity between habitats, the proposed action would help keep the ability of native species and ecosystems to adapt to a changing climate. Climate change mitigation efforts would be positively affected by this alternative because carbon sequestration now provided by native vegetation would be conserved.

Effects on the Socioeconomic Environment

This section describes the anticipated effects of alternatives A and B on landownership, land use, public use, development (including oil and gas, wind energy, and residential), and intact ecosystem values.

Landownership and Land Use—Alternative A (No Action)

Landownership would not be affected by the no-action alternative. Acquisition of wetland and upland easements would continue under current Federal and private programs and funding sources. More than 2.53 million acres of the Bear River watershed would remain in private ownership, with no additional protections by the Service through conservation easements.

With future predicted development trends (Toth et al. 2010), landowners would lose some open space as well as the agricultural and ranching heritage and natural aesthetics of the Bear River watershed.

Ranching and agricultural opportunities would be reduced if landowners begin to split tracts into smaller lots for residential and commercial development. Landowners who subdivide could increase their revenue by developing recreational homesites. Subdivided tracts could maintain wildlife values if there were a desire to cluster housing or to keep open space.

Landownership and Land Use—Alternative B (Proposed Action)

The proposed action would only affect lands where the Service has acquired a conservation easement. The location, distribution, and sale of development rights by landowners on adjacent lands without Service easements would not be affected. Traditional agricultural uses such as ranching, grazing, and haying would be allowed to continue on easement lands.

Because this alternative would maintain open space on a large scale, it would preserve a rural lifestyle and associated tourism and economic activities. The purchase of an easement would not result in a transfer of land title, so private landowners would continue to pay property taxes. In all three States, property taxes for agricultural land are assessed based on the productive value of the land. Most properties that enter into conservation easement agreements with the Service are classified as agricultural land; therefore, there would be little or no effect on the current property tax base for the 12-county area.

Because the sale of conservation easements provides landowners with more revenue, easement purchases could inject new money into local economies. Landowners could spend some percentage of this money on such items as purchasing new real estate, consumer goods, or local services. This spending activity would directly affect local industries such as construction and various service sectors.

Conservation easements could help keep the regional character by protecting working landscapes and a traditional agricultural way of life. Land with historical commercial use, such as ranching, forestry, and farming, is often compatible with or beneficial to wildlife refuge objectives (Jordan et al. 2007, Rissman et al. 2007). Conservation easements provide financial benefits for landowners that enable them to preserve the natural and historic value of their farms, ranches, and open space lands, and to pass this legacy on to their children and grandchildren.

The easement program would have no effect on tribal jurisdiction or tribal rights, because it is outside of reservation lands and would affect only private landowners who are willing to sell easements.

Public Use—Alternative A (No Action)

Under the no-action alternative, the Service would not buy conservation easements. Private landowners would continue to manage public use and access of their lands.

With increased development levels, opportunities for wildlife-dependent recreational activities such as hunting, fishing, and wildlife observation would likely decline, resulting in diminished associated economic benefits to local communities. Negative economic effects to landowners could occur from diminished public wildlife viewing, tourism, fishing, and hunting opportunities.

Public Use—Alternative B (Proposed Action)

Conservation easements bought on private tracts would not change landowners' rights to manage public access to and use of their property. Under the proposed easement program, landowners would retain full private property rights, including control of hunting and fishing on their lands. Under the proposed action, wildlife-dependent recreational opportunities such as hunting, fishing, and wildlife observation would not be diminished because of declining wildlife populations. According to the "2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation," approximately 2.9 million residents took part in wildlife-associated recreation activities in Idaho, Utah, and Wyoming in 2006. It was estimated that residents and visitors spent $3.3 billion on wildlife-associated recreation activities in the three States combined (USFWS 2008a).

Development—Alternative A (No Action)

More than 2.53 million acres would remain in private ownership, with no additional restrictions from conservation easements. Farming and ranching opportunities could be reduced if landowners begin to split tracts into smaller lots for residential and commercial development.

Over time, the land development that is forecast (Toth et al. 2010) would result in population declines of many wildlife species. The Utah Governor's Office of Planning and Budget (2008) projects that the population in Utah will increase by more than 250 percent between 2008 and 2060, from 2.7 million to 6.84 million people, with Cache and Box Elder Counties accommodating an increasing share of the State's population. To accommodate this growth, 32,000 new households are expected to be built statewide every year, resulting in a 75 percent increase in developed land and a 7.3 percent loss of agricultural land by 2030 (Utah Governor's Office of Planning and Budget 2008). As a result, the communities within the Bear River watershed would lose open space, agricultural lands, and scenic values.

Subsurface Development

Mining and oil and gas development would continue to occur on private lands in the Bear River watershed. Stipulations to protect the surface estate would be governed by existing State regulations.

Commercial and Residential Development

Development rights would remain in private ownership, with none of the restrictions that would accompany conservation easements.

Residential development and subdivisions generally increase costs to the county governments that provide services to rural areas. Rural residences tend to have higher costs for county governments and school districts than urban residences. On average, the cost to provide community services to new residential developments is $1.15 for every $1.00 of revenue created by those developments (American Farmland Trust 2001, Coupal et al. 2002). In Wyoming, community service costs averaged $2.01 for every $1.00 of revenue for rural residential lands; in contrast, the average cost to provide services for lands under agricultural production averaged $0.54 for every $1.00 of revenue (Taylor and Coupal 2000).

Development—Alternative B (Proposed Action)

The proposed action would protect up to 920,000 acres of wetland, riparian, grassland, and shrubland wildlife habitat from more fragmentation and loss by precluding surface occupancy and infrastructure development.

Subsurface Development

The Service desires to purchase conservation easements on lands with high wildlife values. Mineral development is typically disruptive to these values. Therefore, the Service will seek easements where the probability of mineral development is low or the subsurface rights are retained by the surface owner. In cases where surface owners retain the mineral rights below their property, the conservation easement will prohibit exploring for and/or developing or extracting minerals on or below the surface.

Within much of the Bear River watershed, surface rights and mineral rights are under separate ownership. The owners of subsurface rights must be provided reasonable access to the surface for exploration and extraction activities. However they are required to negotiate with the surface owners to

devise a strategy that minimizes impacts to surface values.

Should the Service become interested in property where the mineral rights are owned by a third party, the Service will assess the potential for mineral development. If it is determined that the likelihood of mineral extraction is acceptable, the Service will move forward with purchase of a conservation easement.

Once the Service purchases an easement on a piece of property, we gain standing in negotiations with the mineral developers. Should a developer propose exploration or extraction activities, we will work with the landowner to help ensure that all activities are carried out in a manner that minimizes impacts to surface values.

Commercial and Residential Development

The Service's easement program would enhance the protection of wildlife species that depend on unfragmented upland habitat through prohibiting surface disturbance or development of infrastructure. This program would also provide financial compensation to landowners through the sale of easements to offset potential revenue loss from the sale of development rights or leases.

The proposed project would only affect lands on which the Service has acquired a conservation easement. Development on adjacent lands that do not have Service conservation easements would not be limited.

Land acreage with potential for wind energy development is relatively low in Idaho (1.67 percent) and Utah (1.19 percent). Wyoming, however, has a higher development potential at 43.58 percent (National Renewable Energy Laboratory 2011). Most land with potential for wind energy development in each State would still be available under the proposed action.

Designated open space and protected natural areas can increase surrounding property values (see McConnell and Walls 2005 for a comprehensive review). The value of open space on nearby property values would vary depending on landscape characteristics and location (for example, distance to the conserved area) (Kroger 2008). Permanence of the open space also influences property values. Typically, open space that is permanently protected—such as refuge lands and lands protected with perpetual conservation easements—would generate a higher enhancement value to local properties than land that has the potential for future development (Geoghegan et al. 2003). Location and demographic factors in the region can also influence the relative level of property enhancement value. For instance, open space could generate larger amenity premiums for property in more urbanized areas and where median incomes are higher (Netusil et al. 2000, Vrooman 1978, Phillips 2000, Crompton 2001, Thorsnes 2002). Private lands protected by conservation easements benefit residents through increased biodiversity, recreational quality, and hunting opportunities on adjacent publicly accessible wildlife refuges and on some private lands (Rissman et al. 2007).

Other Conservation Impacts—Alternative A (No Action)

Under the no-action alternative, the threat of habitat fragmentation would continue to increase. Landowners would continue to face economic pressures to subdivide their land and sell their water rights. Ecosystem services such as nutrient cycling (see figure EA–8) that are now provided by a rural landscape would be diminished.

Conservation of wetland and upland habitats would continue under existing acquisition authorities. These conservation programs are not able to keep pace with current rates of wetland and upland loss.

Other Conservation Impacts—Alternative B (Proposed Action)

Wetland, riparian, grassland, and shrubland habitat would remain intact. Because the proposed action would keep intact wildlife habitat on working lands through conservation easements, ecosystem services would be available for local residents (Millennium Ecosystem Service Assessment 2005). Ecosystem services such as pollination, water purification, nutrient cycling, carbon sequestration, soil conservation, and control of pest insects by birds are often unrecognized or are considered "free." These services would not be provided in areas that have undergone residential or commercial development.

The proposed action would help protect valuable ecosystem services provided by wetlands, as shown in figure EA–8 below. Furthermore, it would eliminate the need for expensive restoration of disturbed land and habitat.

Dodds et al. (2008) found that wetlands had the greatest value for each of the ecosystem services examined in both native and restored habitat. The most valuable ecosystem goods and services that wetlands provided were disturbance regulation and nutrient cycling. The greater value per area of wetlands did not translate to an equally large disparity in total value because the total area of wetlands is substantially less than that of terrestrial ecoregions within the United States.

Conservation easements on private lands would strengthen habitat resiliency and provide opportunities for wildlife movement and adaptation for years to come.

Public safety is an added benefit of conservation easements that limit development in wetlands and

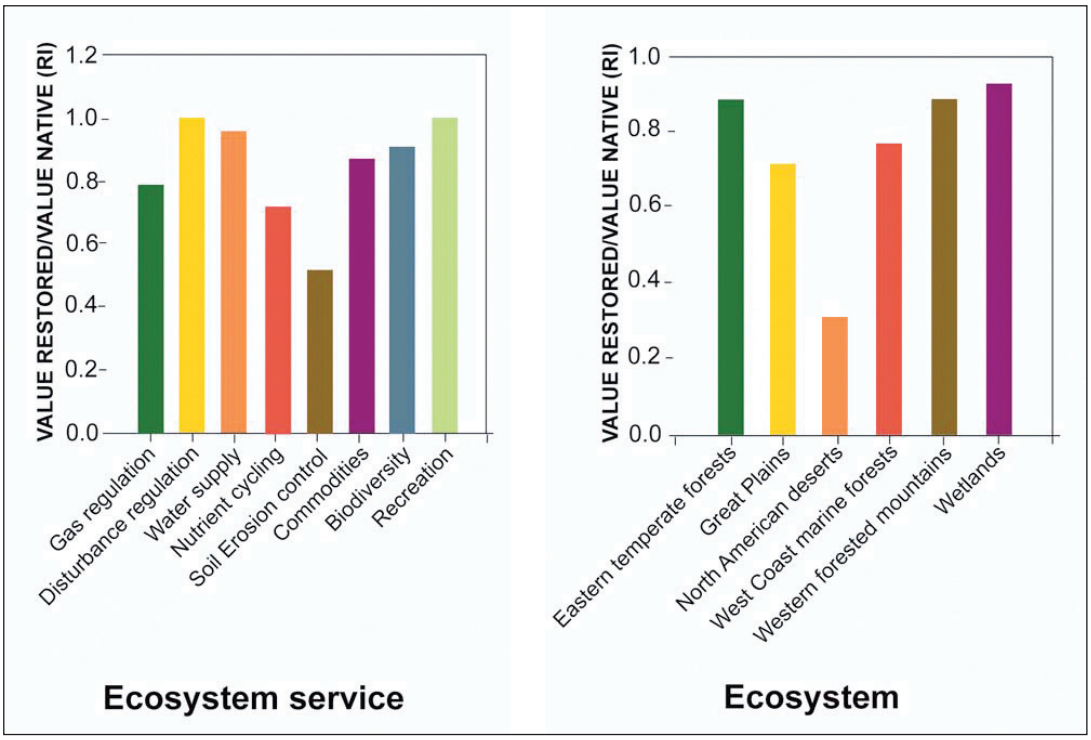

Figure EA–8. Chart of the relative native and restored benefits of ecosystem goods and services.
Source: Dodds et al. 2008.

Note: The relative value is determined as the ratio of estimated benefits derived from native and restored acreages per year.

riparian areas. Some areas within the Bear River watershed have a moderate to high likelihood of a natural disaster that could cause harm to both the residents and structures in these areas. The major hazards that are located within the watershed include flooding, landslides, earthquakes, and soils that are susceptible to liquefaction (Toth 2010).

Effects on Cultural Resources

This section describes the anticipated effects of alternatives A and B on cultural resources.

Cultural Resources—Alternative A (No Action)

Cultural resources on the lands under consideration would remain subject to State and local regulation and permitting. Cultural resources could be negatively affected by differing land uses or development. Activities not requiring permits could contribute to the loss or damage of cultural resources, especially if resources have not been identified.

Cultural Resources—Alternative B (Proposed Action)

As a Federal agency, the Service is required to comply with many laws pertaining to cultural resources, including the National Historic Preservation Act (16 U.S.C. 470 et seq., Public Law 89–665, the Archaeological Resources Protection Act of 1979 (16 U.S.C. 470aa–470mm; Public Law 96–95), as amended, and the Native American Graves Protection and Repatriation Act of 1990 (25 U.S.C. 3001 et seq., Public Law 101–601). Although conservation easements would preclude or limit most forms of surface disturbance, these requirements would not apply to or be fully effective in protecting cultural resources on private lands with easements. However, the proposed action provides benefits to cultural resources when compared to the no-action alternative because easements would limit surface disturbance.

Unavoidable Adverse Impacts

Any adverse effects that could be unavoidable while carrying out alternatives A and B are described below.

Alternative A (No Action)

The adverse impacts of habitat degradation and fragmentation would be expected to be more widespread and prevalent in the proposed project area. Some habitat protection would continue through existing authorities and funding.

Alternative B (Proposed Action)

No direct or indirect, unavoidable, adverse impacts to the environment would result from the selection of alternative B. The easement program would not result in unavoidable adverse impacts on the physical or biological environment. The selection of an approved boundary would not, by itself, affect any aspect of landownership or values. Management of lands to protect wildlife habitat would benefit ranching operations, but would limit future development options for landowners.

More conservation easements acquired by the Service could have unavoidable minimal to moderate adverse effects on the local economy by precluding new mining oil, gas, wind, and residential development on easement lands. However, these impacts would be offset in part by protecting these areas from adverse impacts to watersheds, which are important to aquifer recharge and water quality, from further degradation or loss of native ecosystems, and from conversion of prime agricultural lands.

Irreversible and Irretrievable Commitments of Resources

Any commitments of resources that could be irreversible or irretrievable because of carrying out alternatives A and B are described below.

Alternative A (No Action)

There would be no added commitment of resources by the Service if no action were taken.

The likely introduction of new residential and commercial infrastructure in the Bear River watershed would be considered an irretrievable loss of habitat. The irretrievable loss of habitat caused by the development of new residential and commercial infrastructure in the Bear River watershed could eventually lead to an irreversible loss of both wildlife species and habitat.

The new infrastructure could effectively cause an irretrievable loss of habitat for certain wildlife species because of their avoidance of infrastructure. With the loss of habitat, some of these wildlife species could be pushed toward threatened or endangered status. Without other suitable habitat being available, there could be an irreversible loss to some of these species.

The connectivity between various habitat types and migration corridors between the three national wildlife refuges and other large areas of protected lands would be reduced or possibly eliminated without more conservation of important wildlife areas.

In 2009, The Nature Conservancy conducted a Conservation Action Planning study in the Bear River watershed and found that residential development and water allocation policies are the greatest threats to wildlife conservation in the watershed (The Nature Conservancy 2010). Because the Bear River watershed is considered one of the last areas of Utah with a developable water supply, there is a concern that development pressure and demand for water will adversely affect sensitive refuge habitats and ecosystems (Toth et al. 2010). Without more measures such as wetland easements to keep some of the current water uses and applications, there could be irreversible impacts to wetlands and riparian ecosystems.

The connectivity between various habitat types and migration corridors between the three national wildlife refuges and large areas of protected lands would be reduced or possibly be maintained with added protection of important wildlife habitat with conservation easements.

Alternative B (Proposed Action)

There would not be any irreversible or irretrievable commitments of resources associated with establishing the conservation easement program; however, any easements that are acquired with Land and Water Conservation Funds would require an irretrievable and irreversible commitment of resources (such as expenditures for fuel and staff for monitoring) for the long-term administration of the easement provisions.

The introduction of new residential and commercial infrastructure to the Bear River watershed would be greatly restricted on conservation easement lands, so this alternative would reduce the likelihood of an irretrievable loss of habitat associated with development. The irretrievable loss of habitat caused by the development of new residential and commercial infrastructure in the Bear River watershed that would eventually lead to an irreversible loss of both species and habitat could be minimized under the proposed action.

With the protection measures provided by the wetland conservation easements, some of the current water uses and applications could be retained and irreversible impacts to wetlands and riparian ecosystems related to water loss could be reduced or avoided.

Short-Term Use versus Long-Term Productivity

This section describes the short-term effects versus long-term productivity under alternatives A and B.

Alternative A (No Action)

Wetlands and uplands are expected to continue to be lost at current, or in some areas, increasing rates of development, which would create long-term negative implications for the maintenance of the biological and ecological communities now found in the watershed. Although efforts to conserve these habitats would continue through ongoing efforts by existing agencies and organizations as well as funding, the ability to conserve large tracts of wetlands and uplands would be diminished and fragmentation of these habitats would continue.

Ranches and agricultural lands could be sold to developers for short-term gains, but the expected rates of development would have an adverse effect on the long-term biological and agricultural productivity of the area.

Over the long term, the costs to counties to sustain development in rural areas could be significant (see the "Landownership and Land Use" section above). Wind energy and oil and gas development would provide short-term income gains, but would have a long-term adverse impact on the wildlife habitats in the Bear River watershed and region.

Alternative B (Proposed Action)

The increased ability to acquire perpetual conservation easements under the proposed action would conserve important wetland and upland areas and reduce long-term loss and fragmentation of important habitats that a variety of wildlife species, including threatened and endangered species, depend on.

The proposed conservation easement program would maintain the Bear River watershed's long-term biological productivity, biological diversity, and habitat connectivity as well as migration corridors to other ecosystems and adjacent large blocks of protected lands.

The ability to sell conservation easements would provide an immediate economic benefit to participating landowners while maintaining the long-term agricultural heritage and productivity of the area.

The nation would gain the protection of these habitat types for the wildlife species that depend on them for future generations of Americans. The public would retain long-term opportunities for wildlife-dependent recreational activities.

Cumulative Impacts

Cumulative impacts are defined by the National Environmental Policy Act as the impacts on the environment that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such actions (40 Code of Federal Regulations [CFR] § 1508.7).

This section describes the cumulative impacts on the environment that could result from the combination of reasonably foreseeable actions under alternatives A and B, with other biological and socioeconomic conditions, actions, events, and developments.

Past Actions

Previous land protection efforts within the Bear River watershed included the establishment of the three national wildlife refuges—Bear Lake National Wildlife Refuge (18,089 acres), Bear River Migratory Bird Refuge (74,421 acres), and Cokeville Meadows National Wildlife Refuge (9,259 acres)—the Thomas Fork Unit of Bear Lake National Wildlife Refuge (1,015 acres), and Oxford Slough Waterfowl Production Area (1,878 acres). Sagebrush Steppe Regional Land Trust; Wyoming Land Trust; the Wyoming Stock Growers Agricultural Land Trust; Utah Division of Wildlife Resources; Utah Department of Agriculture; Utah Division of Forestry, Fire and State Lands; Bear River Land Conservancy; and The Nature Conservancy have worked with a variety of partners to acquire conservation easements in the watershed.

Present Actions

The Service's proposed Bear River Watershed Conservation Area easement program, which would establish up to 920,000 acres of conservation easements in the Bear River watershed, is the only known action of this scope and scale for land protection in the region. Once approved, it would take several years for the program to begin to have a noticeable effect. Acquisition of easements would depend on available funding and willing sellers.

Reasonably Foreseeable Future Actions

Reasonably foreseeable actions are actions and activities that are independent of the proposed action but could result in cumulative or additive effects when combined with the proposed action. These

actions are anticipated to occur regardless of which alternative is selected. Commercial oil and gas, mining, wind, and residential development; increased water demands; and future conservation efforts by a variety of organizations are the primary reasonably foreseeable actions occurring in the Bear River watershed.

Development

Overall, mining represents a relatively small percentage of total employment for many of the counties in the region, but has increased slightly since 1998 (U.S. Census Bureau 2011, Headwaters Economics 2011). In particular, employment in nonmetallic mineral mining increased by 124 percent, oil and gas extraction decreased by 64 percent, and metal ore mining decreased to zero by 2009 (U.S. Census Bureau 2011, Headwaters Economics 2011). One of the most economically significant nonmetallic mining activities during the past 50 years has been phosphate extraction, with roughly 40 percent of the United States' reserves located in southeastern Idaho (van Every 2004).

The acreage that has potential for wind energy development is relatively low in Idaho and Utah, with 1.67 percent and 1.19 percent of the State available for such development, respectively. Wyoming has a higher development potential at 43.58 percent (National Renewable Energy Laboratory 2011). Most of the land with potential for wind energy development would still be available under the proposed action.

Population growth is expected throughout much of the region, with most of the growth centered on the Cache Valley. Located in the western part of the Bear River watershed in Utah, the Cache Valley is the most populated area in the watershed. It has experienced a population increase of 64 percent since 2000, and it is anticipated to double in population by 2050 (Utah Division of Water Resources 2004).

Lincoln County, home to the Cokeville Meadows National Wildlife Refuge, has grown by 24 percent since 2000, making it the fastest growing county among the Wyoming counties in the proposed conservation area.

Bannock County has the largest population of the Idaho counties located within the watershed; it has grown by 10 percent since 2000. The populations of two other Idaho counties, Caribou County and Bear Lake County, have decreased by 5 percent and 7 percent, respectively.

Development—Alternative A (No Action). The incremental increases in infrastructure construction resulting from commercial and residential development activities in the Bear River watershed would likely result in the fragmentation of wetland, riparian, grassland, and shrubland habitats now used by wildlife. Over the long term, the combined effect of these activities would likely result in the continuation, and possibly the acceleration, of the decline of many wildlife populations.

Development—Alternative B (Proposed Action). The proposed action would provide more long-term protection on up to 920,000 acres of wildlife habitat from the combined effects of various future development activities by precluding surface occupancy and the resultant habitat fragmentation and infrastructure.

Other Conservation Efforts

The USDA's Conservation, Grassland, and Wetland Reserve Programs provide ongoing programs in the watershed. Additionally, many nongovernmental organizations are active in the area, including Bridgerland Audubon, The Nature Conservancy, Ducks Unlimited, Trout Unlimited, and Wyoming Stock Growers Agricultural Land Trust. These organizations are expected to continue offering multiple programs to landowners. The proposed action would augment these current conservation efforts by collaborating with landowners to protect wildlife, fisheries, and working agricultural lands. The Service would continue to work with other agencies, organizations, and individuals to ensure conservation of migratory birds, threatened and endangered species, and species of special concern.

The Service's Partners for Fish and Wildlife program would likely continue to help landowners in the watershed under either alternative. With the proposed action, this program could increase its efforts in the watershed because of the increased Service interaction with local landowners and the added benefit of habitat restoration and enhancement on lands protected by perpetual conservation easements.

The conservation efforts of these groups would result in generally beneficial cumulative effect for the wildlife resources of the watershed.

Conservation Efforts—Alternative A (No Action). Current Service programs such as Partners for Fish and Wildlife would continue within the proposed conservation project area. The Service would continue to work cooperatively with landowners to voluntarily improve habitat on private land. Those landowners wishing to sell easements on their lands would have fewer options for selling them.

Conservation Efforts—Alternative B (Proposed Action). Through the proposed easement program, up to 920,000 acres of privately owned wetland, riparian, grassland, and shrubland habitats could be added to the 2.53 million acres within the proposed project area that already have some level of protection. This would have long-term positive impacts on wildlife habitat and would result in the long-term conservation of migratory birds, threatened and endangered

species, resident wildlife species, native plants, and the overall biological diversity of the proposed Bear River Watershed Conservation Area.

Section 5—Coordination and Environmental Review

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 C, List of Preparers and Reviewers"). The Service held six public open-house meetings throughout the 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

USFWS

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

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 was 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 distributed the draft EA (with the associated 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.

Copies of the EA 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

Service Unit Contacts

Amy Thornburg, Planning Team Leader
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 / 231 2069

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).

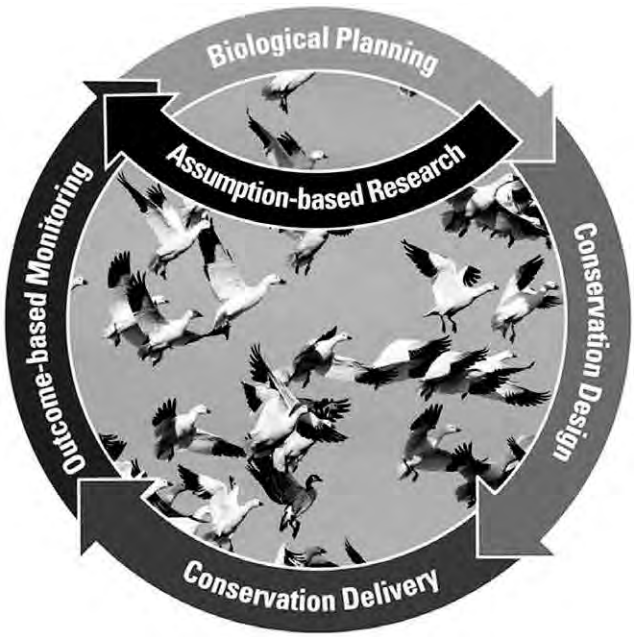

Figure EA–9. Elements of strategic habitat conservation.

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, redside 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).

Greater sage-grouse and *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 sagebrush intact 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 have 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.

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, and 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, LCCs, 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 LCCs 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 LCCs (Great Basin, Great Northern, and Southern Rockies) that cover parts of 11 western States and Canada (see figure EA–3). The LCCs 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 LCCs 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 LCCs as a means of conducting strategic habitat conservation to deal with a range of resource threats, such as development, invasive species, and water scarcity.

Appendix B

Environmental Compliance

Finding of No Significant Impact

U.S. Department of the Interior, U.S. Fish and Wildlife Service
Region 1, Portland, Oregon
Region 6, Lakewood, Colorado

Bear River Watershed Conservation Area

Bannock, Bear Lake, Caribou, Franklin, Oneida, and Power Counties, Idaho
Box Elder, Cache, Rich, and Summit Counties, Utah
Lincoln and Uinta Counties, Wyoming

The U.S. Fish and Wildlife Service (Service) has completed the Land Protection Plan—Bear River Watershed Conservation Area. The environmental assessment, an appendix to the plan, evaluates two alternatives including a no-action alternative and the subsequent environmental consequences of establishing the Bear River Watershed Conservation Area as a new unit of the National Wildlife Refuge System.

Alternative B, the preferred alternative for a perpetual conservation easement program, was selected for implementation because it best meets the Service's mission goal to sustain fish and wildlife populations and to conserve a network of lands that provide essential habitats. Bear River Watershed Conservation Area easements will be acquired on agricultural lands that are providing high-quality habitat for Federal trust wildlife resources. The perpetual conservation easement program will help protect essential wildlife habitat from being drastically changed by widespread, unplanned residential or commercial development. This conservation area also will benefit the American public by protecting wildlife, water quality, and open space.

Public Involvement

As part of the public scoping process associated with this project, comments were solicited from the public through news releases on May 6, 2011. During scoping, approximately 675 fact sheets were distributed. They were also made available on the Region 6 land protection planning Web site and the Web sites of the Bear Lake, Bear River, and Cokeville Meadows National Wildlife Refuges. Six public scoping meetings were held May 16–24, 2011, in Cokeville and Evanston, Wyoming; Brigham City and Logan, Utah; and Preston and Montpelier, Idaho. The comments provided at the meetings were used to identify issues to be analyzed for the proposed project. Approximately 130 landowners, members of various organizations, and elected representatives attended the meetings. Additionally, 10 letters providing comments were received by mail or email. A total of 327 comments and questions were received during scoping for the project proposal.

On November 19, 2012, the Service's External Affairs offices in Regions 1 and 6 issued a news release announcing the beginning of the National Environmental Policy Act (NEPA) review process and soliciting comments from the public. The public comment period on the draft environmental assessment (EA) and land protection plan (LPP) was open from November 28, 2012, until January 4, 2013. Six informal public meetings to receive comments on the draft documents were held December 4–11, 2012, in Logan and Randolph, Utah; Montpelier and Preston, Idaho; and Cokeville and Evanston, Wyoming. Service personnel were on hand to provide a brief overview of the project, answer question, and solicit input from the 217 persons who attended the meetings. Approximately 1,100 factsheets and 170 draft EA and LPP documents were handed out to interested parties. More than 260 comments were received during the public meetings and through email and letters. The Service also received 19 letters from nongovernmental organizations and other agencies, which are included with public comments and responses in an appendix to the LPP.

The Service's refuge staff has contacted tribal, Federal, State, and local government officials; other public agencies; and conservation groups; most of which have expressed an interest in and a desire to protect the watershed resources for future generations through the Bear River Watershed Conservation Area easement program.

Effects of the Proposed Action

In determining whether this project is a major action significantly affecting the quality of the human environment, the Service looked at both the context and intensity of the action (40 CFR § 1508.27.

40 CFR § 1508.14) as required by NEPA. The analysis indicates that there will not be a significant impact, individually or cumulatively, on the quality of the human environment as a result of the proposed action. I agree with this conclusion and, therefore, find that an environmental impact statement need not be prepared. This determination is based on the following factors.

1. Establishment of the Bear River Watershed Conservation Area would provide for the conservation of up to 920,000 acres of important wildlife habitat on private lands. This project would help maintain wildlife habitat and complement other conservation efforts by Bridgerland Audubon, Bear River Conservancy, Sagebrush Steppe Land Trust, The Nature Conservancy, Trout Unlimited, and Wyoming Land Trust, among many others.

2. The Bear River watershed provides some of the most significant resting, staging, feeding, breeding, and nesting areas for large populations of migratory waterfowl and shorebirds on both the central and Pacific flyways. White-faced ibis (46 percent of the North American population), tundra swan (32 percent of the western population), American avocet (more than 16 percent of the North American population), black-necked stilt (more than 18 percent of the North American population), and marbled godwit (more than 24 percent of the North American population) depend on habitat found along the Bear River. The watershed also provides habitat for upland and sage-steppe species such as the greater sage-grouse, sage thrasher, Columbian sharp-tailed grouse, pygmy rabbit, pronghorn, and mule deer. In the high country, wide-ranging mammals such as grizzly bear, Canada lynx, wolverine, and gray wolf use important migration corridors.

3. Conservation easements within the Bear River Watershed Conservation Area would help protect regionally important migration corridors. Maintaining key biological linkages would facilitate wildlife movement and provide for wildlife habitat requirements, particularly wintering and migration habitat for birds. By maintaining linkages and connectivity, the conservation area would increase the capacity for ecosystems in that region to adapt to climate change and increase their resiliency to temporary environmental disturbances such as drought and fire. These benefits would result from ensuring connectivity between adjacent permanently protected areas and the conservation area. Easements would also prevent the negative local effects of habitat fragmentation resulting from land cover changes due to subdivision and infrastructure development.

4. Water resources on up to 920,000 acres would be protected from increased nonpoint source pollution from residential subdivision and commercial development, which would be prohibited under the easement program. The watershed is an important source of water along the river course and as the major surface water source of the Great Salt Lake.

5. By placing restrictions on where willing landowners could build structures, the Bear River Watershed Conservation Area would affect the location and distribution, but not the rate or density, of human population growth in the project area. Positive effects may occur from increased public wildlife viewing and hunting opportunities. Open space also may enhance property values on adjoining lands as people begin to seek out undeveloped lands in the future.

6. The Service, within the approved project boundary, would create no additional land use regulations. The purchase of an easement would not result in a transfer of land title, and private landowners would continue to pay property taxes. Preventing subdivision and development could decrease future tax revenues in certain market areas. However, open space could actually provide a net savings to local governments when compared to the revenues generated and costs of services associated with residential development (Haggerty 1996).

7. The easement program would not preclude energy development on private land. When acquiring easements on properties where wind, oil and gas, or mineral rights have already been sold and severed from the estate, the Service would work with landowners and developers to minimize any negative effects of development activities (50 CFR § 25.11). On land where the rights for wind, oil and gas, or mineral development have not been sold and where the estate is still intact, conservation easements would require nonsurface occupancy or off-site development for any future development activities.

8. Conservation easements purchased on private tracts would not change the landowner's right to manage public access to his or her property. Private landowners would retain full control over their property access rights, including allowing or restricting hunting and fishing on their lands, under the easement program.

9. Through the easement program, additional conservation on up to 920,000 acres of privately owned native grassland habitats would be added to the approximately 2.3 million acres of Federal, State and privately owned lands within the project area that already have some level of protection. This would have long term positive effects on the connectivity of various types of wetland, riparian, grassland, and sage-steppe habitat used by wildlife as well as between areas of protected lands. The conservation easement program would help provide the long term conservation of migratory birds, threatened and endangered species, native plants, and the overall biological diversity in the Bear River region.

Decision and Finding of No Significant Impact

The EA has taken a hard look at the environmental impacts to inform the public and the Service about the consequences of the proposed action. Environmental consequences will be beneficial to migratory birds and native fish and mammals. While the establishment of the Bear River Watershed Conservation Area will largely preserve the current state of the natural environment and prevent degradation, there may be some reduction in energy development requiring surface occupancy, that would otherwise occur, but for the easements proposed by the Service. Substantive conflict is not apparent over these land use issues; although some comments expressed concern about the Federal Government, in general, most of the verbal and written comments received during scoping meetings and on the environmental assessment were in favor of the establishment of the Bear River Watershed Conservation Area through the use of voluntary conservation easements.

In determining whether this project is a major action significantly[1] affecting the quality of the human environment, the Service looked at both the context and intensity of the action (40 CFR § 1508.27, 40 CFR § 1508.14) as required by NEPA. In terms of context, the proposed action will occur in southeast Idaho, northeast Utah, and southwest Wyoming, but the Service evaluated whether it may have effects to the human environment[2] on a broader scale, particularly in regard to commercial and residential development, water usage and migratory birds, and native fish populations. The project will be implemented over time and will depend on the Service's ability to obtain the funding needed for easement acquisitions and the level of landowner interest. Of the 2.5 million acres of private lands within the 4.8-million-acre watershed, 920,000 acres may be entered into voluntary easements with the Service.

Because the human environment is interpreted by NEPA to mean the natural and physical environment and the relationship of people with that environment (40 CFR § 1508.14), in addition to a thorough analysis of physical environmental effects, the Service carefully assessed the manner in which the local people relate to the environment in the Bear River watershed. Although a number of towns and several cities lie within the project area, the focus of the proposed action is largely on rural areas dominated by agricultural industries, mainly ranching. Most commenters on the Bear River Watershed Conservation Area project supported the proposed action, indicating that it would allow them to relate to their natural and physical environment in much the same way they do now, through an agriculturally based economy. Those who are interested in pursuing other economic opportunities, such as mineral and energy development, would not be precluded from doing so because the proposed action involves easements acquired on a voluntary basis only.

Therefore, in consideration of the fact that the Service's conservation easement approach has a proven track record of effectiveness and minimal controversy due to its fundamental basis of voluntary participation to accomplish mutual goals of the Service and landowners, the compelling science in support of the project, and my review and evaluation of the information contained in the supporting reference, I have determined that establishing an executive boundary for the Bear River Watershed Conservation Area is not a major Federal action that would significantly affect the quality of the human environment within the meaning of Section 102(2)(C) of NEPA.

[1] 40 CFR § 1508.27 "Significantly" as used in NEPA requires considerations of both context and intensity: (a) Context—This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant; and (b) Intensity—This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action.

[2] 40 CFR § 1508.14 "Human environment" shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment. (See the definition of "effects" (40 CFR § 1508.8).) This means that economic or social effects are not intended by themselves to require preparation of an environmental impact statement. When an environmental impact statement is prepared and economic or social and natural or physical environmental effects are interrelated, then the environmental impact statement will discuss all of these effects on the human environment.

The Finding of No Significant Impact (FONSI) and supporting assessment will be available to the public. Copies of the LPP are available for all affected landowners, agencies, private groups, and other interested parties.

The FONSI, LPP, and other supporting documents are on file at the U.S. Fish and Wildlife Service, Region 6, National Wildlife Refuge System, Division of Refuge Planning, 134 Union Boulevard, Lakewood, Colorado 80228 (telephone 303/236 4345) and the U.S. Fish and Wildlife Service, Region 1, National Wildlife Refuge System, Division of Planning, 911 NE 11th Avenue, Portland, Oregon 97232 (telephone 503/231 2069). They are available for public inspection on request.

Supporting Reference: U.S. Fish and Wildlife Service. 2013. Land Protection Plan—Bear River Watershed Conservation Area. Lakewood, CO: U.S. Department of the Interior, Regions 1 and 6. 227 p.

Noreen E Walsh 2/25/2013

Noreen Walsh — Date
Regional Director
U.S. Fish and Wildlife Service, Region 6
Lakewood, Colorado

Robyn Thorson FEB 27, 13

Robyn Thorson — Date
Regional Director
U.S. Fish and Wildlife Service, Region 1
Portland, Oregon

U.S. Fish and Wildlife Service
Region 1
Portland, Oregon
Region 6
Denver, Colorado

ENVIRONMENTAL ACTION STATEMENT

Within the spirit and intent of the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act (NEPA) and other statutes, orders, and policies that protect fish and wildlife resources, I have established the following administrative record and have determined that the action of establishing an executive boundary for the Bear River Watershed Conservation Area:

_ is a categorical exclusion as provided by 516 DM 2, Appendices 1 and 2, and 516 DM 6, Appendix 1. No further documentation will be made.
X is found not to have significant environmental effects as determined by the attached Finding of No Significant Impact and Environmental Assessment.
_ is found to have special environmental conditions as described in the attached environmental assessment. The attached Finding of No Significant Impact will not be final nor any actions taken pending a 30-day period for public review [40CFR 1501.4(e)(2)].
_ is found to have significant effects and, therefore, a notice of intent will be published in the *Federal Register* to prepare an environmental impact statement before the project is considered further.
_ is denied because of environmental damage, Service policy, or mandate.
_ is an emergency situation. Only those actions necessary to control the immediate impacts of the emergency will be taken. Other related actions remain subject to NEPA review.

Other supporting document:
Environmental Assessment and Land Protection Plan, Bear River Watershed Conservation Area

Paul B Santavy — 2/19/2013
Paul Santavy
Acting Assistant Regional Director
National Wildlife Refuge System, Region 6
Date

Noreen E Walsh — 2/25/2013
Noreen Walsh
Regional Director, Region 6
U.S. Fish and Wildlife Service
Date

Acting
Ben Hamson — 2/27/2013
Robin West
Assistant Regional Director
National Wildlife Refuge System, Region 1
Date

Robyn Thorson — February 27, '13
Robyn Thorson
Regional Director, Region 1
U.S. Fish and Wildlife Service
Date

Statement of Compliance

The following Executive orders and legislative acts have been reviewed as they apply to the establishment of an Executive boundary for the Bear River Watershed Conservation Area.

1. **Executive Order 11593—Protection of Historical, Archaeological, and Scientific Properties.** The regional archaeologist determined that the acquisition of easements within the Bear River Watershed Conservation Area is not an undertaking under section 106 of the National Historic Preservation Act. In fact, the project has the potential to protect cultural resources. If, in the future, the Service grants a special permit for the landowner under the easement, section 106 may be relevant at that time. If so, the Service will take the necessary steps to address any historical or archaeological issues.

2. **Executive Order 11988—Floodplain Management.** No structures that could be damaged by or that would significantly influence the movement of floodwater are planned for construction by the U.S. Fish and Wildlife Service on easements acquired as part of this project.

3. **Executive Order 11990—Protection of Wetlands.** This action is consistent with protection of existing wetland resources from incompatible activities and thereby complies with this Executive order.

4. **Executive Order 12372—Intergovernmental Review.** The Service has discussed the proposal to establish the Bear River Watershed Conservation Area with landowners; conservation organizations; other Federal agencies; tribal, State, and county commissioners; and other interested groups and individuals. At the Federal level, the Service staff has coordinated with the U.S. Department of Agriculture (Natural Resources Conservation Service, USDA Forest Service), Bureau of Land Management, and National Park Service (Fossil Butte National Monument). At the State level, the Service discussed the project with staff of Governors C.L. Butch Otter (Idaho), Gary Herbert (Utah), and Matt Mead (Wyoming). Representatives from all three State fish and game agencies were contacted and provided input on the project. Congressional representatives' staff within the project area have been notified of this proposed action and given the opportunity to review the environmental assessment. In addition, the Service has provided information to fourteen tribes with potential interest in this project.

5. **Executive Order 12898—Federal Actions to Address Environmental Justice in Minority and Low-Income Populations.** Establishing the Bear River Watershed Conservation Area will not have a disproportionately high or adverse human health or environmental effect on minority or low-income populations. Therefore, this action complies with this Executive order.

6. **Executive Order 12996—Management and General Public Use of the National Wildlife Refuge System.** The public has been invited to participate in the planning process and has been very engaged. The Service held a total of 12 public meetings; 6 scoping meetings and 6 open houses to get input on the draft environmental assessment and land protection plan, were held throughout the project area. More than 280 comments have been received from the public on the draft environmental assessment and land protection plan. The public's substantive issues and comments have been incorporated into the environmental assessment, and a copy of the final document will be sent to all interested landowners, agencies, private groups, and other parties. Since this project will strictly be by easement acquisition, the Service will not manage or have control over public access to the protected lands. This right will remain with the private landowner and therefore a compatibility determination is not needed for this project.

7. **Endangered Species Act, Section 7.** An internal section 7 consultation with Ecological Services field offices in Idaho, Utah and Wyoming concluded that the proposed action would have a "may affect, not likely to adversely affect," on species within the acquisition project area that are listed under the Endangered Species Act.

8. **Coastal Zone Management Act.** Due to the location of the project area, compliance of this Act was determined not to be needed.

9. **Uniform Relocation Assistance and Real Property Acquisition Policies Act.** Since the Service will not be acquiring any land within the project area in fee title, no relocation assistance will be needed and no real property acquisition will occur.

10. **Secretarial Order 3127—Contaminants and Hazardous Waste.** A level 1 pre-acquisition contaminant survey will be completed before the purchase of any easement parcel.

I hereby certify that the Service has complied with all requirements of law, rules, or regulations applicable to pre-acquisition planning for the above project. I approve the establishment of an Executive boundary for the Bear River Watershed Conservation Area and the subsequent acquisition of up to 920,000 acres of easements from willing sellers.

Noreen E Walsh 2/25/2013 Robyn Thorson Feb 22, 13

Noreen Walsh Regional Director U.S. Fish and Wildlife Service, Region 6 Lakewood, Colorado	Date	Robyn Thorson Regional Director U.S. Fish and Wildlife Service, Region 1 Portland, Oregon	Date

U.S. Fish and Wildlife Service, Region 6
ENVIRONMENTAL COMPLIANCE CERTIFICATE

Project: **Bear River Watershed Conservation Area**
State: **Idaho, Utah and Wyoming**

Action (indicate if not applicable)	Date
NEPA (National Environmental Policy Act)(indicate one)	
Categorical Exclusion	N/A
Environmental Assessment/Finding of No Significant Impact	2/21/13
Environmental Impact Statement/Record of Decision	N/A
Executive Order 11593, Protection of Historical, Archaeological, and Scientific Properties	2/07/13
Executive Order 11988, Floodplain Management	2/04/13
Executive Order 11990, Protection of Wetlands	2/04/13
Executive Order 12372, Intergovernmental Review of Federal Programs	2/04/13
Executive Order 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations	2/04/13
Executive Order 12996, Management and General Public Use of the National Wildlife Refuge System	2/04/13
Endangered Species Act, Section 7	2/14/13
Coastal Zone Management Act, Section 307	N/A
Uniform Relocation Assistance and Real Property Acquisition Policies Act	N/A
Level I Contaminants and Hazardous Waste (Secretarial Order 3127: 602 DM2)	2/04/13

I hereby certify that all requirements of the law, rules, and Service regulations or policies applicable to planning for the above project have met with compliance. I approve the establishment of an executive boundary for the Bear River Watershed Conservation Area to be administered and managed as part of the National Wildlife Refuge System.

Noreen Walsh
Regional Director, Region 6
U.S. Fish and Wildlife Service

2/25/2013
Date

Robyn Thorson
Regional Director, Region 1
U.S. Fish and Wildlife Service

Feb. 27, '13
Date

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Washington, D.C. 20240

MAY - 1 2013

In Reply Refer To:
FWS/ANRS-CPP/053914

Memorandum

To: Regional Directors, Region 1 and 6

From: Director

Subject: Approval to Proceed with Publication and Distribution of the Final Planning Documents for the Establishment of the Bear River Watershed Conservation Area in Idaho, Utah, and Wyoming

I approve your request dated February 27, 2013, to protect up to 920,000 acres through the Bear River Watershed Conservation Area, encompassing three existing national wildlife refuges located in two U. S. Fish and Wildlife Service Regions - Cokeville Meadows National Wildlife Refuge (Wyoming), Bear Lake National Wildlife Refuge (Idaho) and the Bear River Migratory Bird Refuge (Utah).

The decision package submitted for review included an Environmental Assessment, Land Protection Plan, and other related documents indicative of detailed planning. These documents comply with the requirements of the Director's land acquisition planning procedures memo dated August 11, 2000.

The lands targeted for protection will conserve up to 920,000 acres in the Bear River Watershed, the largest river in the Western Hemisphere that flows into an inland sea. These additions will conserve aquatic, riparian, wetland, and upland habitat while promoting connectivity between three existing wildlife refuges. The watershed is one of the most significant resting, staging, feeding, breeding, and nesting areas for large populations of migratory waterfowl and shorebirds on both the Central and Pacific flyways. The project would acquire conservation easements only (no fee-title acquisition).

If you have any questions please contact Ms. Monica Kimbrough, Acting Land Protection Planning Coordinator at (703) 258-3657.

Appendix C

List of Preparers and Reviewers

Author name	*Position*	*Work unit*
David Allen	realty specialist	USFWS, Region 1, Division of Realty, Portland, Oregon
Bob Barrett	project leader	USFWS, Region 6, Bear River Migratory Bird Refuge, Brigham City, Utah
Pamela Benn	realty specialist	USFWS, Region 1, Division of Realty, Portland, Oregon
Badge Blackett	Landscape Conservation Programs	National Wildlife Refuge Association, Washington, DC
Howard Browers	refuge biologist	USFWS, Region 6, Bear River Migratory Bird Refuge, Brigham City, Utah
Steve Caicco	conservation planner	USFWS, Region 1, Planning Division, Portland, Oregon
Tracy Casselman	project leader	USFWS, Region 1, Southeast Idaho Refuge Complex, Chubbock, Idaho
Annette deKnijf	refuge manager	U.S. Fish and Wildlife Service (USFWS), Region 1, Bear Lake National Wildlife Refuge, Montpelier, Idaho
Joann Dullum	wildlife biologist, Inventory and Monitoring GIS specialist	USFWS, Region 6, Benton Lake National Wildlife Refuge, Great Falls, Montana
Mark Ely	cartographer	USFWS, Region 6, Division of Refuge Planning, Lakewood, Colorado
Sean Fields	HAPET biologist	USFWS, Region 6, Benton Lake National Wildlife Refuge, Great Falls, Montana
Karl Fleming	Utah State coordinator for Partners for Fish and Wildlife program	USFWS, Region 6, Bear River Migratory Bird Refuge, Brigham City, Utah
Todd Gallion	refuge manager	USFWS, Region 6, Cokeville Meadows National Wildlife Refuge, Cokeville, Wyoming
Pat Gonzales-Rogers	tribal liaison	USFWS, Region 1, External Affairs, Portland, Oregon
Kim Greenwood	tribal liaison	USFWS, Region 6, External Affairs, Lakewood, Colorado
Mark Hogan	Wyoming State coordinator for Partners for Fish and Wildlife program	USFWS, Region 6, Partners for Fish and Wildlife State Office, Lander, Wyoming
David Kimble	biologist for Partners for Fish and Wildlife program	USFWS, Region 6, Partners for Fish and Wildlife State Office, Evanston, Wyoming
Tom Koerner	project leader	USFWS, Region 6, Cokeville Meadows and Seedskadee National Wildlife Refuges, Green River, Wyoming
Greg Langer	law enforcement officer	USFWS, Region 6, Lakewood, Colorado
Brant Loflin	archaeologist	USFWS, Region 6, Bozeman Fish Technology Center, Montana
David C. Lucas	division chief	USFWS, Region 6, Division of Refuge Planning, Lakewood, Colorado
Noel Matson	realty specialist	USFWS, Region 6, Division of Realty, Huron, South Dakota

Author name	*Position*	*Work unit*
Tom Miewald	geographer and conservation planner	USFWS, Region 1, Planning Division, Portland, Oregon
Carl Millegan	former project leader	USFWS, Region 6, Cokeville Meadows and Seedskadee National Wildlife Refuges, Green River, Wyoming
Linda Moeder	cartographer	USFWS, Region 6, Division of Realty, Lakewood, Colorado
Greg Mullin	law enforcement officer	USFWS, Region 6, Bear River Migratory Bird Refuge, Brigham City, Utah
Cary Myler	biologist for Partners for Fish and Wildlife program	USFWS, Region 1, Partners for Fish and Wildlife Program, Chubbock, Idaho
Kevin O'Hara	conservation planner	USFWS, Region 1, Planning Division, Portland, Oregon
Sue Oliveira	former division chief	USFWS, Region 6, Division of Realty, Lakewood, Colorado
Kathi Stopher	visitor services manager	USFWS, Region 6, Bear River Migratory Bird Refuge, Brigham City, Utah
Amy Thornburg	land protection planning team leader	USFWS, Region 6, Division of Refuge Planning, Lakewood, Colorado
Anne Truslow	Strategic Programs and Development	National Wildlife Refuge Association, Washington, DC
Meg Van Ness	regional historic preservation officer	USFWS, Region 6, Refuges, Lakewood, Colorado
Sharon Vaughn	deputy project leader	USFWS, Region 6, Bear River Migratory Bird Refuge, Brigham City, Utah
Jeffrey Warren	wildlife biologist	USFWS, Region 6, Red Rock Lakes National Wildlife Refuge, Lima, Montana

Reviewer name	*Position*	*Work unit*
Sylvia Cantu	desktop publisher	North State Resources, Inc., Redding, California
Scott McCarthy	branch chief, refuge planning	USFWS, Region 1, Planning Division, Portland, Oregon
Brooke McDonald	technical editor	North State Resources, Inc., Redding, California
Kathryn McDonald	managing editor	North State Resources, Inc., Redding, California
Deb Parker	writer-editor	USFWS, Region 6, Planning Division, Lakewood, Colorado

Appendix D

Species List of the Bear River Watershed Conservation Area

Plant Species

Scientific name	*Common name*
TREES	
Abies concolor	white fir
Abies lasiocarpa	subalpine fir
Acer grandidentatum	big-toothed maple
Acer negundo	boxelder
Juniperus osteosperma	Utah juniper
Juniperus scopulorum	Rocky Mountain juniper
Picea englemannii	Engelmann spruce
Picea glauca	white spruce
Picea pungens	blue spruce
Pinus albicaulis	whitebark pine
Pinus contorta	lodgepole pine
Pinus edulis	pinyon pine
Pinus flexilis	limber pine
Pinus monophylla	singleleaf pinyon
Populus tremuloides	quaking aspen
Pseudotsuga menziesii	Douglas-fir
Quercus gambellii	Gambel oak
SHRUBS and SUBSHRUBS	
Acer glabrum	mountain maple
Acer negundo	boxelder
Alnus incana	gray alder
Alnus tenuifolia	thinleaf alder
Amelanchier alnifolia	western serviceberry
Arctostaphylos uva-ursi	kinnikinnick
Artemisia tridentata ssp. *tridentata*	basin big sagebrush
Artemisia tridentata ssp. *wyomingensis*	Wyoming big sagebrush
Artemisia arbuscula	low sagebrush
Artemisia cana	silver sagebrush
Artemisia nova	black sagebrush
Artemisia tridentata ssp. *vaseyana*	mountain big sagebrush
Atriplex canescens	four-wing saltbush
Atriplex confertifolia	shadscale
Bassia americana	green molly
Berberis repens	creeping Oregon grape
Betula glandulosa	bog birch

Plant Species

Scientific name	*Common name*
Betula occidentalis	water birch
Cercocarpus ledifolius	curlleaf mountain-mahogany
Chrysothamnus viscidiflorus	green rabbitbrush
Cornus stolonifera	redosier dogwood
Dasiphora fruticosa	shrubby cinquefoil
Ericameria nauseosa	rubber rabbitbrush
Grayia spinosa	spiny hopsage
Juniperus communis	common juniper
Ledum glandulosum	Labrador tea
Lonicera involucrata	honeysuckle
Menziesia ferruginea	menziesia
Pachistima myrsinites	pachistima
Physocarpus malvaceus	ninebark
Physocarpus monogynus	mountain ninebark
Picrothamnus desertorum	bud sagebrush
Populus angustifolia	narrow-leaf cottonwood
Populus × acuminata	lance-leaf cottonwood
Prunus virginiana	chokecherry
Ribes lacustre	prickly currant
Ribes montigenum	mountain gooseberry
Rosa nutkana	wild rose
Salix boothii	Booth's willow
Salix drummmondiana	Drummond's willow
Salix exigua	coyote willow
Salix geyeriana	Geyer willow
Salix lucida	Pacific willow
Salix lutea	yellow willow
Salix wolfii	Wolf's willow
Sarcobatus vermiculatus	black greasewood
Shepherdia canadensis	russet buffaloberry
Spiraea betulifolia	white spiraea
Symphoricarpos albus	common snowberry
Symphoricarpos oreophilus	mountain snowberry
Tetradymia canescens	horsebrush
Vaccinium caespitosum	dwarf huckleberry
Vaccinium scoparium	grouse whortleberry
GRASSES and GRAMINOIDS	
Agropyron cristatum	crested wheatgrass
Agropyron desertorum	desert wheatgrass
Agropyron spicatum	bluebunch wheatgrass
Agrostis stolonifera	creeping bentgrass
Alopecurus aequalis	shortawn foxtail
Alopecurus pratensis	meadow foxtail
Beckmannia syzigachne	American sloughgrass

Plant Species

Scientific name	*Common name*
Bromus tectorum	cheatgrass
Calamagrostis canadensis	bluejoint
Calamagrostis rubescens	pinegrass
Carex aquatilis	water sedge
Carex athrostachya	slenderbeak sedge
Carex disperma	soft-leaved sedge
Carex geyeri	elk sedge
Carex hoodii	Hood's sedge
Carex lasiocarpa	American woollyfruit sedge
Carex microptera	smallwing sedge
Carex nebrascensis	Nebraska sedge
Carex praegracilis	clustered field sedge
Carex rossii	Ross' sedge
Carex rostrata	beaked sedge
Carex simulata	analogue sedge
Deschampsia cespitosa	tufted hairgrass
Distichlis spicata	saltgrass
Eleocharis acicularis	needle spikerush
Elymus elymoides	squirreltail
Elymus glaucus	blue wildrye
Elymus repens	quackgrass
Elymus trachycaulus	slender wheatgrass
Festuca idahoensis	Idaho fescue
Glyceria striata	fowl mannagrass
Hesperochloa kingii	spike fescue
Heterostipa comata	needle and thread
Hordeum jubatum	foxtail barley
Hordium brachyantherum	meadow barley
Juncus arcticus	mountain rush
Juncus bufonius	toad rush
Leymus cinereus	basin wildrye
Leymus triticoides	bearded wheatgrass
Luzula hitchcockii	smooth woodrush
Luzula spicata	spiked woodrush
Melica spectabilis	purple oniongrass
Muhlenbergia richardsonis	mat muhly
Mulenbergia asperifolia	scratchgrass
Pascopyrum smithii	western wheatgrass
Phalaris arundinacea	reed canarygrass
Phleum pratense	timothy
Phragmites australis	common reed
Poa fendleriana	muttongrass
Poa pratensis	Kentucky bluegrass
Polypogon monspeliensis	rabbitfoot

Plant Species

Scientific name	*Common name*
Puccinellia nuttalliana	Nuttall's alkaligrass
Schoenoplectus acutus	hardsterm bulrush
Schoenoplectus americanus	chairmaker's bulrush
Schoenoplectus tabernaemontani	softstem bulrush
Scolochloa festucacea	common rivergrass
Spartina gracilis	alkali cordgrass
Sporobolus airoides	alkali sacaton
Thinopyrum intermedium	intermediate wheatgrass
Triglochin maritima	seaside arrowgrass
Triglochin palustris	marsh arrowgrass
Trisetum spicatum	spike trisetum
Typha angustifolia	narrowleaf cattail
Typha latifolia	broadleaf cattail
HERBS and FORBS	
Achillea millefolium	yarrow
Aconitum columbianum	monkshood
Actaea rubra	baneberry
Alisma plantago-aquatica	European water plantain
Antennaria microphylla	littleleaf pussytoes
Aquilegia caerulea	Colorado blue columbine
Argentina anserina	silverweed cinquefoil
Arnica cordifolia	heartleaf arnica
Arnica latifolia	broadleaf arnica
Astragalus miser	timber milkvetch
Bassia scoparia	burningbush
Caltha leptosepala	white marsh marigold
Cardaria pubescens	hairy whitetop
Castilleja linariifolia	Wyoming Indian paintbrush
Castilleja minor	lesser Indian paintbrush
Castilleja rhexifolia	splitleaf Indian paintbrush
Cirsium arvense	Canada thistle
Cirsium vulgare	bull thistle
Cleome serrulata	Rocky Mountain beeplant
Conyza canadensis	Canadian horseweed
Delphinium barbeyi	subalpine larkspur
Downingia laeta	Great Basin calico flower
Epilobium ciliatum	fringed willowherb
Epilobium latifolium	fireweed
Epilobium palustre	marsh willowherb
Equisetum arvense	field horsetail
Erigeron peregrinus	subalpine fleabane
Eriogonum heracleoides	parshnip wild buckwheat
Fragaria virginiana	Virginia strawberry
Galium triflorum	fragrant bedstraw

Plant Species

Scientific name	*Common name*
Geranium richardsonii	Richardson's geranium
Geranium viscossissimum	sticky geranium
Glaux maritima	sea milkwort
Glycyrrhiza lepidota	American licorice
Grindelia squarrosa	curlycup gumweed
Helianthus nuttallii	Nuttall's sunflower
Heracleum lanatum	cow parsnip
Hymenoxys hoopesii	owl's-claws
Hyoscyamus niger	black henbane
Lactuca serriola	prickly lettuce
Lathyrus lanszwertii	Nevada pea
Lepidium perfoliatum	clasping pepperweed
Lupinus argenteus	silvery lupine
Maianthemum racemosum	feathery false lily-of-the-valley
Maianthemum stellatum	starry false lily-of-the-valley
Medicago sativa	alfalfa
Melilotus officinalis	sweetclover
Mertensia ciliata	bluebells
Monolepis nuttalliana	Nuttall's poverty weed
Mondardella odoratissima	mountain monardella
Myriophyllum sibiricum	shortspike watermilfoil
Orthocarpus luteus	yellow owl's-clover
Osmorhiza berteroi	sweet cicely
Osmorhiza occidentalis	western sweetroot
Pastinaca sativa	wild parsnip
Pedicularis groenlandica	elephanthead lousewort
Pedicularis racemosa	sickletop lousewort
Penstemon whippleanus	Whipple's beardtongue
Plagiobothrys leptocladus	finebranched popcornflower
Polemonium foliosissimum	towering Jacob's-ladder
Potamegeton gramineus	variableleaf pondweed
Potamogeton pectinatus	sago pondweed
Potamogeton richardsonii	Richardson's pondweed
Potentilla glandulosa	sticky cinquefoil
Potentilla gracilis	slender cinquefoil
Pseudostellaria jamesiana	tuber starwort
Ranunculus cymbalaria	alkali buttercup
Ranunculus longirostris	longbeak buttercup
Ranunculus sceleratus	cursed buttercup
Sagittaria cuneata	arumleaf arrowhead
Salicornia rubra	red swampfire
Scutellaria galericulata	marsh skullcap
Senecio hydrophiloides	tall groundsel
Senecio hydrophilus	water ragwort

Plant Species

Scientific name	*Common name*
Senecio integerrimus	lambstongue ragwort
Senecio triangularis	arrowleaf ragwort
Sisymbrium altissimum	tall tumblemustard
Sium suave	hemlock waterparsnip
Solanum triflorum	cutleaf nightshade
Sonchus arvensis	sow thistle
Sparganium euycarpum	broadfruit bur-reed
Spergularia salina	salt sandspurry
Spiranthes diluvialis	Ute ladies'-tresses
Streptopus amplexifolius	claspleaf twistedstalk
Suaeda calceoliformis	Pursh seepweed
Symphotrichum adscendens	western aster
Symphotrichum chilense	Pacific aster
Thalictrum fendleri	Fendler's meadow-rue
Thalictrum occidentale	western meadow-rue
Tragopogon dubius	salsify
Trollius laxus	American globeflower
Utricularia macrorhiza	common bladderwort
Viola nuttallii	Nuttall's violet
Xerophyllum tenax	common beargrass
FERNS and FERN ALLIES	
Asplenium adiantum-nigrum	black spleenwort
Asplenium septentrionale	northern spleenwort
Asplenium viride	green spleenwort
Athyrium distentifolium	alpine lady-fern
Azolla mexicana	waterfern
Botrychium boreale	northern grapefern
Botrychium lunaria	moonwort
Athyrium filix-femina	lady-fern
Cheilanthes feei	Fee's lipfern
Cheilanthes gracillima	lace-fern
Cryptogramma crispa	parsley-fern
Cystopteris fragilis	brittle-fern
Equisetum arvense	common horsetail
Equisetum hyemale	common scouringrush
Equisetum laevigatum	smooth scouringrush
Isoetes howellii	Howell's quillwort
Marsilea vestita	pepperwort
Pellaea breweri	Brewer's cliff-brake
Polystichum lonchitis	holly-fern
Polystichum scopulinum	rock holly-fern
Pteridium aquilinum	bracken fern
Selaginella densa	Rydberg's spikemoss
Selaginella mutica	awnless spikemoss

Plant Species

Scientific name	*Common name*
Woodsia oregana	Oregon woodsia
Woodsia scopulina	Rocky Mountain woodsia

Source: DeKnijf 2011, Mauk et al. 1984, Steele 1983, Welsh et al. 2003, West 1988, Windell et al. 1986, Youngblood et al. 1985.

Bird Species

Scientific name	*Common name*	*Status or designation*			
		Federal[1]	Idaho[2]	Utah[2]	Wyoming[2]
DUCKS, GEESE, and SWANS					
Anser albifrons	greater white-fronted goose				
Chen caerulescens	snow goose				
Chen rossii	Ross's goose				
Branta hutchinsii	cackling goose				
Branta canadensis	Canada goose				
Cygnus buccinator	trumpeter swan		GCN		GCN
Cygnus columbianus	tundra swan				
Aix sponsa	wood duck				
Anas strepera	gadwall				
Anas penelope	Eurasian wigeon				
Anas americana	American wigeon				
Anas platyrhynchos	mallard				
Anas discors	blue-winged teal				
Anas cyanoptera	cinnamon teal				
Anas clypeata	northern shoveler				
Anas acuta	northern pintail		GCN		GCN
Anas crecca	green-winged teal				
Aythya valisineria	canvasback				GCN
Aythya americana	redhead				GCN
Aythya collaris	ring-necked duck				
Aythya marila	greater scaup				
Aythya affinis	lesser scaup		GCN		GCN
Histrionicus histrionicus	harlequin duck		GCN		GCN
Melanitta perspicillata	surf scoter				
Melanitta fusca	white-winged scoter				
Melanitta nigra	black scoter				
Clangula hyemalis	long-tailed duck				
Bucephala albeola	bufflehead				
Bucephala clangula	common goldeneye				
Bucephala islandica	Barrow's goldeneye				GCN
Lophodytes cucullatus	hooded merganser		GCN		
Mergus merganser	common merganser				
Mergus serrator	red-breasted merganser				

Bird Species

Scientific name	Common name	Status or designation			
		Federal[1]	Idaho[2]	Utah[2]	Wyoming[2]
Oxyura jamaicensis	ruddy duck				
UPLAND GAMEBIRDS					
Callipepla californica	California quail				
Alectoris chukar	chukar				
Perdix perdix	gray partridge				
Phasianus colchicus	ring-necked pheasant				
Bonasa umbellus	ruffed grouse				
Centrocercus urophasianus	greater sage-grouse	candidate	GCN	tier II	GCN
Lagopus leucura	white-tailed ptarmigan				
Dendragapus obscurus	dusky grouse				
Tympanuchus phasianellus	Columbian sharp-tailed grouse		GCN	tier II	GCN
Meleagris gallopavo	wild turkey				
LOONS					
Gavia pacifica	Pacific loon				
Gavia immer	common loon				GCN
GREBES					
Podilymbus podiceps	pied-billed grebe				
Podiceps auritus	horned grebe				
Podiceps grisegena	red-necked grebe		GCN		
Podiceps nigricollis	eared grebe				
Aechmophorus occidentalis	Western grebe		GCN		GCN
Aechmophorus clarkii	Clark's grebe		GCN		GCN
CORMORANTS					
Phalacrocorax auritus	double-crested cormorant				
PELICANS					
Pelecanus erythrorhynchos	American white pelican		GCN	tier II	GCN
HERONS, EGRETS, and BITTERNS					
Botaurus lentiginosus	American bittern				GCN
Ardea herodias	great blue heron				GCN
Ardea alba	great egret		GCN		
Egretta thula	snowy egret		GCN		GCN
Bubulcus ibis	cattle egret		GCN		
Butorides virescens	green heron				
Nycticorax nycticorax	black-crowned night-heron		GCN		GCN
IBISES					
Plegadis falcinellus	glossy Ibis				
Plegadis chihi	white-faced Ibis		GCN		GCN
VULTURES					
Cathartes aura	turkey vulture				
HAWKS and EAGLES					
Pandion haliaetus	osprey			tier III	

Bird Species

Scientific name	Common name	Status or designation			
		Federal[1]	Idaho[2]	Utah[2]	Wyoming[2]
Haliaeetus leucocephalus	bald eagle	species of concern	GCN	tier I	GCN
Circus cyaneus	northern harrier				
Accipiter striatus	sharp-shinned hawk				
Accipiter cooperii	Cooper's hawk				
Accipiter gentilis	northern goshawk			tier I	GCN
Buteo lineatus	red-shouldered hawk				
Buteo platypterus	broad-winged hawk				
Buteo swainsoni	Swainson's hawk		GCN		GCN
Buteo jamaicensis	red-tailed hawk				
Buteo regalis	ferruginous hawk		GCN	tier II	CGN
Buteo lagopus	rough-legged hawk				
Aquila chrysaetos	golden eagle				
FALCONS					
Falco sparverius	American kestrel				
Falco columbarius	merlin		GCN		GCN
Falco rusticolus	gyrfalcon				
Falco peregrinus	peregrine falcon		GCN	tier III	GCN
Falco mexicanus	prairie falcon				
RAILS and COOTS					
Rallus limicola	Virginia rail				GCN
Porzana carolina	sora				
Gallinula galeata	common moorhen				
Fulica americana	American coot				
CRANES					
Grus canadensis	sandhill crane		GCN		GCN
SHOREBIRDS					
Pluvialis squatarola	black-bellied plover				
Pluvialis dominica	American golden-plover				
Charadrius alexandrinus	snowy plover			tier III	
Charadrius semipalmatus	semipalmated plover				
Charadrius vociferus	killdeer				
Charadrius montanus	mountain plover	species of concern		tier III	GCN
Himantopus mexicanus	black-necked stilt		GCN	tier III	
Recurvirostra americana	American avocet		GCN	tier III	
Actitis macularius	spotted sandpiper				
Tringa solitaria	solitary sandpiper				
Tringa melanoleuca	greater yellowlegs				
Tringa semipalmata	willet				
Tringa flavipes	lesser yellowlegs				
Numenius phaeopus	whimbrel				

Bird Species

Scientific name	Common name	Status or designation			
		Federal[1]	Idaho[2]	Utah[2]	Wyoming[2]
Numenius americanus	long-billed curlew		GCN	tier II	GCN
Limosa haemastica	Hudsonian godwit				
Limosa fedoa	marbled godwit				
Arenaria interpres	ruddy turnstone				
Calidris canutus	red knot				
Calidris alba	sanderling				
Calidris pusilla	semipalmated sandpiper				
Calidris mauri	western sandpiper				
Calidris minutilla	least sandpiper				
Calidris bairdii	Baird's sandpiper				
Calidris melanotos	pectoral sandpiper				
Calidris alpina	dunlin				
Calidris himantopus	stilt sandpiper				
Limnodromus griseus	short-billed dowitcher				
Limnodromus scolopaceus	long-billed dowitcher				
Gallinago delicata	Wilson's snipe				
PHALAROPES					
Phalaropus tricolor	Wilson's phalarope		GCN		
Phalaropus lobatus	red-necked phalarope				
Phalaropus fulicarius	red phalarope				
GULLS					
Xema sabini	Sabine's gull				
Chroicocephalus philadelphia	Bonaparte's gull				
Leucophaeus pipixcan	Franklin's gull		GCN		GCN
Larus canus	mew gull				
Larus delawarensis	ring-billed gull				
Larus californicus	California gull		GCN		
Larus argentatus	herring gull				
Larus thayeri	Thayer's gull				
Larus glaucescens	glaucous-winged gull				
Larus hyperboreus	glaucous gull				
TERNS					
Hydroprogne caspia	Caspian tern		GCN	tier III	GCN
Chlidonias niger	black tern		GCN		GCN
Sterna hirundo	common tern				
Sterna forsteri	Forster's tern		GCN		GCN
DOVES and PIGEONS					
Columba livia	rock pigeon				
Streptopelia decaocto	Eurasian collared-dove				
Zenaida asiatica	white-winged dove				
Zenaida macroura	mourning dove				

Bird Species

Scientific name	Common name	Status or designation			
		Federal[1]	Idaho[2]	Utah[2]	Wyoming[2]
CUCKOOS					
Coccyzus americanus	yellow-billed cuckoo	candidate	GCN	tier I	GCN
OWLS					
Bubo virginianus	barn owl				
Otus flammeolus	flammulated owl		GCN		
Megascops kennicottii	western screech-owl				
Bubo virginianus	great horned owl				
Glaucidium gnoma	northern pygmy-owl				GCN
Athene cunicularia	burrowing owl		GCN	tier II	GCN
Strix occidentalis	spotted owl				
Asio otus	long-eared owl				
Asio flammeus	short-eared owl		GCN	tier II	GCN
Aegolius funereus	boreal owl		GCN	tier III	GCN
Aegolius acadicus	northern saw-whet owl				
NIGHTJARS					
Chordeiles minor	common nighthawk				
Phalaenoptilus nuttallii	common poorwill				
SWIFTS					
Chaetura vauxi	Vaux's swift				
Aeronautes saxatalis	white-throated swift				
HUMMINGBIRDS					
Archilochus alexandri	black-chinned hummingbird				
Stellula calliope	calliope hummingbird				
Selasphorus platycercus	broad-tailed hummingbird			tier III	
Selasphorus rufus	rufous hummingbird				
KINGFISHERS					
Megaceryle alcyon	belted kingfisher				
WOODPECKERS					
Melanerpes lewis	Lewis's woodpecker		GCN	tier II	GCN
Sphyrapicus thyroideus	Williamson's sapsucker			tier III	
Sphyrapicus nuchalis	red-naped sapsucker				
Picoides scalaris	ladder-backed woodpecker				
Picoides pubescens	downy woodpecker				
Picoides villosus	hairy woodpecker				
Picoides dorsalis	American three-toed woodpecker		GCN	tier II	GCN
Colaptes auratus	northern flicker				
FLYCATCHERS					
Contopus cooperi	olive-sided flycatcher				
Contopus sordidulus	western wood-pewee				
Empidonax traillii	willow flycatcher				GCN
Empidonax minimus	least flycatcher				

Bird Species

Scientific name	Common name	Status or designation			
		Federal[1]	Idaho[2]	Utah[2]	Wyoming[2]
Empidonax hammondii	Hammond's flycatcher				
Empidonax wrightii	gray flycatcher				
Empidonax oberholseri	dusky flycatcher				
Empidonax occidentalis	Cordilleran flycatcher				
Sayornis saya	Say's phoebe				
Myiarchus cinerascens	ash-throated flycatcher				GCN
Tyrannus verticalis	western kingbird				
Tyrannus tyrannus	eastern kingbird				
SHRIKES					
Lanius ludovicianus	loggerhead shrike				
Lanius excubitor	northern shrike				
VIREOS					
Vireo plumbeus	plumbeous vireo				
Vireo cassinii	Cassin's vireo				
Vireo gilvus	warbling vireo				
Vireo olivaceus	red-eyed vireo				
CORVIDS					
Perisoreus canadensis	gray jay				
Gymnorhinus cyanocephalus	pinyon jay		GCN		
Cyanocitta stelleri	Steller's jay				
Cyanocitta cristata	blue jay				
Aphelocoma californica	western scrub-jay				GCN
Nucifraga columbiana	Clark's nutcracker				
Pica hudsonia	black-billed magpie				
Corvus brachyrhynchos	American crow				
Corvus corax	common raven				
LARKS					
Eremophila alpestris	horned lark				
SWALLOWS					
Progne subis	purple martin				
Tachycineta bicolor	tree swallow				
Tachycineta thalassina	violet-green swallow				
Stelgidopteryx serripennis	northern rough-winged swallow				
Riparia riparia	bank swallow				
Petrochelidon pyrrhonota	cliff swallow				
Hirundo rustica	barn swallow				
CHICKADEES and TITMICE					
Poecile atricapillus	black-capped chickadee				
Poecile gambeli	mountain chickadee				
Baeolophus ridgwayi	juniper titmouse		GCN		GCN

Bird Species

Scientific name	Common name	Status or designation			
		Federal[1]	Idaho[2]	Utah[2]	Wyoming[2]
BUSHTITS					
Psaltriparus minimus	bushtit				GCN
NUTHATCHES					
Sitta canadensis	red-breasted nuthatch				
Sitta carolinensis	white-breasted nuthatch				
Sitta pygmaea	pygmy nuthatch				GCN
CREEPERS					
Certhia americana	brown creeper				
WRENS					
Salpinctes obsoletus	rock wren				
Catherpes mexicanus	canyon wren				
Thryomanes bewickii	Bewick's wren				
Troglodytes aedon	house wren				
Troglodytes pacificus	Pacific wren				
Cistothorus palustris	marsh wren				
GNATCATCHERS					
Polioptila caerulea	blue-gray gnatcatcher				
DIPPERS					
Cinclus mexicanus	American dipper				
KINGLETS					
Regulus satrapa	golden-crowned kinglet				
Regulus calendula	ruby-crowned kinglet				
BLUEBIRDS and THRUSHES					
Sialia mexicana	western bluebird				
Sialia currucoides	mountain bluebird				
Myadestes townsendi	Townsend's solitaire				
Catharus fuscescens	veery				
Catharus ustulatus	Swainson's thrush				
Catharus guttatus	hermit thrush				
Turdus migratorius	American robin				
Ixoreus naevius	varied thrush				
MIMICS					
Dumetella carolinensis	gray catbird				
Mimus polyglottos	northern mockingbird				
Oreoscoptes montanus	sage thrasher			tier III	GCN
Toxostoma rufum	brown thrasher				
STARLINGS					
Sturnus vulgaris	European starling				
PIPITS					
Anthus rubescens	American pipit				

Bird Species

Scientific name	*Common name*	*Status or designation*			
		Federal[1]	Idaho[2]	Utah[2]	Wyoming[2]
WAXWINGS					
Bombycilla garrulus	Bohemian waxwing				
Bombycilla cedrorum	cedar waxwing				
LONGSPURS and BUNTINGS					
Calcarius lapponicus	Lapland longspur				
Plectrophenax nivalis	snow bunting				
WARBLERS					
Seiurus aurocapilla	ovenbird				
Parkesia noveboracensis	northern waterthrush				
Mniotilta varia	black-and-white warbler				
Oreothlypis peregrina	Tennessee warbler				
Oreothlypis celata	orange-crowned warbler				
Oreothlypis ruficapilla	Nashville warbler				
Oreothlypis virginiae	Virginia's warbler		GCN	tier III	
Geothlypis tolmiei	MacGillivray's warbler				
Geothlypis trichas	common yellowthroat				
Setophaga ruticilla	American redstart				
Setophaga americana	northern parula				
Setophaga petechia	yellow warbler				
Setophaga striata	blackpoll warbler				
Setophaga palmarum	palm warbler				
Setophaga coronata	yellow-rumped warbler				
Setophaga nigrescens	black-throated gray warbler			tier III	
Setophaga townsendi	Townsend's warbler				
Cardellina pusilla	Wilson's warbler				
Icteria virens	yellow-breasted chat				
SPARROWS					
Pipilo chlorurus	green-tailed towhee				
Pipilo maculatus	spotted towhee				
Spizella arborea	American tree sparrow				
Spizella passerina	chipping sparrow				
Spizella pallida	clay-colored sparrow				
Spizella breweri	Brewer's sparrow		GCN	tier III	GCN
Pooecetes gramineus	vesper sparrow				
Chondestes grammacus	lark sparrow				
Amphispiza bilineata	black-throated sparrow				
Amphispiza belli	sage sparrow				GCN
Calamospiza melanocorys	lark bunting				GCN
Passerculus sandwichensis	Savannah sparrow				
Ammodramus savannarum	grasshopper sparrow		GCN	tier II	GCN
Passerella iliaca	fox sparrow				
Melospiza melodia	song sparrow				

Bird Species

Scientific name	Common name	Status or designation			
		Federal[1]	Idaho[2]	Utah[2]	Wyoming[2]
Melospiza lincolnii	Lincoln's sparrow				
Melospiza georgiana	swamp sparrow				
Zonotrichia albicollis	white-throated sparrow				
Zonotrichia querula	Harris's sparrow				
Zonotrichia leucophrys	white-crowned sparrow				
Zonotrichia atricapilla	golden-crowned sparrow				
Junco hyemalis	dark-eyed junco				
CARDINALS, BUNTINGS, and GROSBEAKS					
Piranga ludoviciana	western tanager				
Pheucticus ludovicianus	rose-breasted grosbeak				
Pheucticus melanocephalus	black-headed grosbeak				
Passerina caerulea	blue grosbeak		GCN		
Passerina amoena	lazuli bunting				
Passerina cyanea	indigo bunting				
BLACKBIRDS and ORIOLES					
Dolichonyx oryzivorus	bobolink			tier II	GCN
Agelaius phoeniceus	red-winged blackbird				
Sturnella neglecta	western meadowlark				
Xanthocephalus xanthocephalus	yellow-headed blackbird				
Euphagus cyanocephalus	Brewer's blackbird				
Quiscalus quiscula	common grackle				
Quiscalus mexicanus	great-tailed grackle				
Molothrus ater	brown-headed cowbird				
Icterus bullockii	Bullock's oriole				
FINCHES					
Leucosticte tephrocotis	gray-crowned rosy-finch				
Leucosticte atrata	black rosy-finch		GCN	tier III	GCN
Pinicola enucleator	pine grosbeak				
Carpodacus cassinii	Cassin's finch				
Carpodacus mexicanus	house finch				
Loxia curvirostra	red crossbill				
Loxia leucoptera	white-winged crossbill				
Acanthis flammea	common redpoll				
Spinus pinus	pine siskin				
Spinus psaltria	lesser goldfinch		GCN		
Spinus tristis	American goldfinch				
Coccothraustes vespertinus	evening grosbeak				
WEAVER FINCHES					
Passer domesticus	house sparrow				

[1]*Federally listed under the Endangered Species Act as an "endangered" or "threatened" species; a species that is a "candidate" for listing as endangered or threatened; a "recovered" species that is no longer listed; or a species not listed but recognized as a "species of concern."*

[2]*Listed as a States species of "Greatest Conservation Need" (GCN): "tier I" species (highest priority), "tier II" species (moderate priority), or a "tier III" species (lowest priority).*

Mammal Species

Scientific name	Common name	Status or designation			
		Federal[1]	Idaho[2]	Utah[2]	Wyoming[2]
Sorex merriami	Merriam's Shrew		GCN	tier III	
Sorex preblei	Preble's Shrew			tier II	GCN
Sorex vagrans	vagrant shrew				GCN
Sorex monticolus	montane shrew				
Sorex nanus	dwarf shrew		GCN	tier III	GCN
Sorex palustris	water shrew				GCN
BATS					
Myotis californicus	California myotis		GCN		
Myotis ciliolabrum	western small-footed myotis				GCN
Myotis yumanensis	Yuma myotis			tier III	
Myotis lucifugus	little brown myotis				GCN
Myotis evotis	long-eared myotis				GCN
Myotis thysanodes	fringed myotis			tier II	GCN
Myotis volans	long-legged myotis				GCN
Lasionycteris noctivagans	silver-haired bat				GCN
Pipistrellus hesperus	western pipistrelle				
Eptesicus fuscus	big brown bat				GCN
Lasiurus cinereus	hoary bat				GCN
Euderma maculatum	spotted bat			tier II	GCN
Antrozous pallidus	pallid bat				GCN
Corynorhinus townsendii	Townsend's big-eared bat		GCN	tier II	GCN
CARNIVORES					
Ursus americanus	black bear				
Ursus arctos	brown (grizzly) bear	threatened			GCN
Mustela nigripes	black-footed ferret	endangered		tier I	GCN
Bassariscus astutus	ringtail				
Procyon lotor	northern raccoon				
Martes americana	American marten			tier III	GCN
Martes pennanti	fisher				GCN
Mustela erminea	ermine				
Mustela frenata	long-tailed weasel				
Mustela vison	American mink				
Lontra canadensis	northern river otter			tier III	GCN
Gulo gulo	wolverine	candidate	GCN	tier III	GCN
Taxidea taxus	badger				
Spilogale gracilis	western spotted skunk				
Mephitis mephitis	striped skunk				
Canis latrans	coyote				
Canis lupus	gray wolf	recovery	GCN	tier I	
Vulpes vulpes	red fox				
Urocyon cinereoargenteus	common gray fox				
Vulpes macrotis	kit fox			tier II	
Felis concolor	mountain lion or cougar				

Mammal Species

Scientific name	Common name	Status or designation			
		Federal[1]	Idaho[2]	Utah[2]	Wyoming[2]
Lynx canadensis	Canada lynx	threatened	GCN	tier I	GCN
Lynx rufus	bobcat				
RODENTS					
Marmota flaviventris	yellow-bellied marmot				
Cynomys leucurus	white-tailed prairie dog	species of concern		tier II	GCN
Spermophilus variegatus	rock squirrel		GCN		
Spermophilus elegans	Wyoming ground squirrel		GCN	tier III	GCN
Spermophilus mollis	Great Basin ground squirrel/ Piute ground squirrel		GCN		
Spermophilus armatus	Uinta ground squirrel				GCN
Spermophilus tridecemlineatus	thirteen-lined ground squirrel			tier III	
Spermophilus lateralis	golden-mantled ground squirrel				
Cynomys parvidens	Utah prairie dog				
Neotamias minimus	least chipmunk				
Neotamias amoenus	yellow-pine chipmunk				
Neotamias dorsalis	cliff chipmunk		GCN		GCN
Neotamias umbrinus	Uinta chipmunk		GCN		
Tamiasciurus hudsonicus	red squirrel				
Glaucomys sabrinus	northern flying squirrel			tier III	GCN
Thomomys talpoides	northern pocket gopher				
Thomomys idahoensis	Idaho pocket gopher		GCN	tier III	GCN
Perognathus parvus	Great Basin pocket mouse				GCN
Dipodomys ordii	Ord's kangaroo rat				
Castor canadensis	American beaver				
Reithrodontomys megalotis	western harvest mouse				
Peromyscus crinitus	canyon mouse				GCN
Peromyscus maniculatus	deer mouse				
Peromyscus boylii	brush mouse				
Peromyscus truei	pinyon (pinon) mouse				GCN
Onychomys leucogaster	northern grasshopper mouse				
Neotoma cinerea	bushy-tailed woodrat				
Phenacomys intermedius	western heather vole				GCN
Microtus pennsylvanicus	meadow vole				
Microtus montanus	montane vole				
Microtus longicaudus	long-tailed vole				
Lemmiscus curtatus	sagebrush vole				GCN
Clethrionomys gapperi	southern red-backed vole				
Microtus richardsoni	water vole				GCN
Ondatra zibethicus	muskrat				
Rattus rattus	black rat				
Rattus norvegicus	Norway rat				
Mus musculus	house mouse				
Zapus princeps	western jumping mouse				

Mammal Species

Scientific name	Common name	Status or designation			
		Federal[1]	Idaho[2]	Utah[2]	Wyoming[2]
Erethizon dorsatum	North American porcupine				
Ochotona princeps	American pika			tier III	
Myocastor coypus	nutria				
LAGOMORPHS					
Brachylagus idahoensis	pygmy rabbit	species of concern	GCN	tier II	GCN
Lepus townsendii	white-tailed jackrabbit				
Lepus californicus	black-tailed jackrabbit				
Sylvilagus nuttallii	mountain cottontail				
Sylvilagus audubonii	desert cottontail				
Lepus americanus	snowshoe hare				
HOOFED MAMMALS					
Cervus canadensis	elk or wapiti				
Odocoileus hemionus	mule deer				tier III
Odocoileus virginianus	white-tailed deer				
Alces alces	moose			GCN	
Antilocapra americana	pronghorn				
Ovis canadensis canadensis	Rocky Mountain bighorn sheep				GCN
Oreamnos americanus	mountain goat		GCN		

[1]*Federally listed under the Endangered Species Act as an "endangered" or "threatened" species; a species that is a "candidate" for listing as endangered or threatened; a "recovered" species that is no longer listed; or a species not listed but recognized as a "species of concern."*

[2]*Listed as a States species of "Greatest Conservation Need" (GCN): "tier I" species (highest priority), "tier II" species (moderate priority), or a "tier III" species (lowest priority).*

Reptiles

Scientific name	Common name	Status or designation			
		Federal[1]	Idaho[2]	Utah[2]	Wyoming[2]
SNAKES					
Thamnophis sirtalis	common gartersnake			tier III	GCN
Coluber constrictor	eastern yellow-bellied racer				GCN
Pituophis catenifer	Great Basin gophersnake				GCN
Crotalus oreganus lutosus	Great Basin (western) rattlesnake				
Lampropeltis triangulum	milksnake			tier III	GCN
Hypsiglena torquata	nightsnake			tier III	
Diadophis punctatus	ring-necked snake		GCN	tier III	
Charina bottae	rubber boa			tier III	GCN
Opheodrys vernalis	smooth greensnake			tier III	GCN
Masticophis taeniatus	striped whipsnake				
Thamnophis elegans	terrestrial gartersnake				GCN
LIZARDS					
Sceloporus graciosus	common sagebrush lizard				GCN
Uta stansburiana	common sideblotched lizard				

Reptiles

Scientific name	Common name	Status or designation			
		Federal[1]	Idaho[2]	Utah[2]	Wyoming[2]
Phrynosoma platyrhinos	desert horned lizard				
Sceloporus undulatus	eastern fence lizard				GCN
Crotaphytus bicinctores	Great Basin collared lizard				
Phrynosoma hernandesi	greater short-horned lizard				GCN
Gambelia wislizenii	long-nosed leopard lizard			tier II	
Urosaurus ornatus	ornate tree lizard				
Aspidoscelis tigris	tiger whiptail				
Eumeces skiltonianus	western skink			tier III	

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[2]*Listed as a States species of "Greatest Conservation Need" (GCN): "tier I" species (highest priority), "tier II" species (moderate priority), or a "tier III" species (lowest priority).*

Amphibians

Scientific name	Common name	Status or designation			
		Federal[1]	Idaho[2]	Utah[2]	Wyoming[2]
FROGS and TOADS					
Rana catesbeiana	American bullfrog				
Spea intermontana	Great Basin spadefoot				GCN
Bufo cognatus	Great Plains toad				GCN
Rana clamitans	green frog				
Rana pipiens	northern leopard frog		GCN	tier III	GCN
Pseudacris regilla	Pacific treefrog			tier III	
Bufo boreas	western (boreal) toad			tier II	GCN
Pseudacris triseriata	western chorus frog				
Bufo woodhousii	Woodhouse's toad		GCN		GCN
Pseudacris maculata	boreal chorus frog				
SALAMANDERS					
Ambystoma tigrinum	tiger salamander				GCN

[1]*Federally listed under the Endangered Species Act as an "endangered" or "threatened" species; a species that is a "candidate" for listing as endangered or threatened; a "recovered" species that is no longer listed; or a species not listed but recognized as a "species of concern."*

[2]*Listed as a States species of "Greatest Conservation Need" (GCN): "tier I" species (highest priority), "tier II" species (moderate priority), or a "tier III" species (lowest priority).*

Fishes

Scientific name	Common name	Status or designation			
		Federal[1]	Idaho[2]	Utah[2]	Wyoming[2]
SALMONIDS					
Oncorhynchus nerka	sockeye salmon (kokanee)				
Oncorhynchus clarkii utah	Bonneville cutthroat trout		GCN	tier I	GCN
Oncorhynchus mykiss	rainbow trout				

Fishes

Scientific name	Common name	Status or designation			
		Federal[1]	Idaho[2]	Utah[2]	Wyoming[2]
Salmo trutta	brown trout				
Salvelinus namaycush	lake trout				
Salvelinus fontinalis	brook trout				
Prosopium gemmifer	Bonneville cisco		GCN	tier II	
Prosopium spilonotus	Bonneville whitefish		GCN	tier II	
Prosopium abyssicola	Bear Lake whitefish		GCN	tier II	
Prosopium williamsoni	mountain whitefish				GCN
Thymallus arcticus	Arctic grayling				CGN
MINNOWS					
Cyprinus carpio	common carp				
Carassius auratus	goldfish				
Gila atraria	Utah chub			tier III	
Gila copei	northern leatherside chub			tier II	GCN
Richardsonius balteatus	redside shiner			tier III	
Iotichthys phlegethontis	least chub	candidate		tier I	
Rhinichthys osculus	speckled dace			tier III	
Rhinichthys cataractae	longnose dace			tier III	
Pimephales promelas	fathead minnow				
Cyprinella lutrensis	red shiner				
SUCKERS					
Catostomus ardens	Utah sucker			tier III	
Catostomus latipinnis	flannelmouth sucker			tier I	GCN
Catostomus platyrhynchus	mountain sucker				GCN
Catostomus discobolus	bluehead sucker		GCN	tier I	GCN
Catostomus commersonii	white sucker				
CATFISH					
Ictalurus punctatus	channel catfish				
Ameiurus melas	black bullhead				
LIVEBEARERS					
Gambusia affinis	western mosquitofish				
SUNFISH					
Micropterus salmoides	largemouth bass				
Micropterus dolomieu	smallmouth bass				
Lepomis cyanellus	green sunfish				
Lepomis macrochirus	bluegill				
Archoplites interruptus	Sacramento perch				
Pomoxis nigromaculatus	black crappie				
PERCH					
Perca flavescens	yellow perch				

Fishes

Scientific name	*Common name*	*Status or designation*			
		Federal[1]	Idaho[2]	Utah[2]	Wyoming[2]
SCULPINS					
Cottus bairdii	mottled sculpin				GCN
Cottus extensus	Bear Lake sculpin		GCN	tier II	
Cottus beldingii	Paiute sculpin			tier III	GCN

[1]*Federally listed under the Endangered Species Act as an "endangered" or "threatened" species; a species that is a "candidate" for listing as endangered or threatened; a "recovered" species that is no longer listed; or a species not listed but recognized as a "species of concern."*

[2]*Listed as a States species of "Greatest Conservation Need" (GCN): "tier I" species (highest priority), "tier II" species (moderate priority), or a "tier III" species (lowest priority).*

Appendix E

Public Comments and Service Responses

This appendix has the following components:

- copies of comment letters from Federal, State, and local government agencies and from organizations, along with the Service's response to the comments
- comments from individuals, along with the Service's response to the comments

The draft EA and LPP was released to the public for review and comment on November 28, 2012. A 32-day comment period for the document closed on January 4, 2013. In addition, the Service held six public meetings in December 2012.

Throughout the comment period, the Service received more than 260 comments from individuals (primarily emails, letters, and oral comments during public meetings), 19 letters from Federal, State, and local government agencies and organizations.

The purpose of this appendix is to address the substantive comments received on the draft EA and LPP. As defined by National Environmental Policy Act compliance guidelines, comments are considered substantive if they:

- question, with reasonable basis, the accuracy of the information in the document;
- question, with reasonable basis, the adequacy of the environmental analysis;
- present reasonable alternatives other than those presented in the environmental impact statement;
- cause changes or revisions in the proposal.

This appendix contains the Service's responses to substantive comments on the draft EA and LPP. The first section has copies of the letters and comments made by Federal, State, and local government agencies and organizations that qualify as tax-exempt, nonprofit entities. The following section summarizes comments made by the public or other entities.

In compliance with the spirit of the Privacy Act of 1974, it is the policy of the U.S. Fish and Wildlife Service to not publish the names, addresses, or other personal information of individuals (agencies, business, and organizations are excluded). Rather than print every letter from individuals and redact (black out) all personal information, and because many of the comments are similar in nature, the Service has summarized the general nature of the comments received and tracked the number of individuals that expressed each general comment. This is also consistent with the Paperwork Reduction Act of 1995.

The Service responded to each substantive comment. Where appropriate, the text of the final LPP and EA has been revised to address comments. Some of the comments do not meet the definition of "substantive" (as defined previously), and those are shown as "comment noted." In some instances, the Service has opted to respond to specific nonsubstantive comments where the public displayed a strong interest.

Comments from Agencies and Organizations

The Service received formal comments from the following Federal, State, and local government agencies and organizations.

STATE GOVERNMENT

1. Idaho State Legislature, Representative Marc Gibbs
2. Idaho Department of Fish and Game
3. Idaho Fish and Game Commission
4. Wyoming Department of Agriculture

LOCAL GOVERNMENT

5. Bear Lake County Commission
6. Board of Lincoln County Commissioners
7. Box Elder County Commissioners
8. Coalition of Local Governments
9. Franklin Soil & Water Conservation District

NONGOVERNMENTAL ORGANIZATIONS

10. Bear River Land Conservancy
11. Bear River Watershed Council
12. Greater Yellowstone Coalition
13. National Wildlife Refuge Association
14. Sagebrush Steppe Land Trust
15. The Nature Conservancy

16. The Nature Conservancy
17. Trout Unlimited
18. Yellowstone to Uintas Connection

CORPORATION

19. PacifiCorp

Letters from these agencies and organizations are shown in the following pages. Beside each reproduced letter is the Service's response, numbered to correspond to specific comments in the letter.

Comment number	LETTER 1 (State government)—Idaho State Legislature, Rep. Marc Gibbs, page 1 of 2	RESPONSE
1–1	October 3, 2012 RECEIVED OCT - 5 2012 By RCB Ken Salazar, Secretary United States Department of the Interior 1849 C Street, NW Washington, DC 20240 Dan Ashe, Director United States Fish & Wildlife Service 1849 C Street, NW Washington, DC 20240 Re: Bear River Watershed Conservation Area Dear Secretary Salazar and Director Ashe: I am a State Representative for Idaho's Legislative District 31, which encompasses Franklin, Caribou and Bear Lake Counties, all within which the Bear River Watershed is located. I am writing to express my support for the Bear River Watershed Conservation Area project. My support for the program is based on the following factors: • The project would help maintain the ranching heritage of the area while protecting important wildlife habitat. • The program is based on the acquisition of conservation easements from willing sellers only. Landowners who choose to participate in the program will continue to own, manage and to pay taxes on their property. • The program will not increase federal ownership in the District. The designation of the Conservation Area will not result in any new regulatory overlay on land within the watershed, nor will it change or affect management practices on public lands in the District. • Landowners who participate in the program will continue to have full control of their ability to grant or prohibit access to their property for recreational or other purposes. • This is a voluntary program – landowners can either participate or not. I understand that the designation of the Conservation Area gives the U. S Fish & Wildlife Service the authority to acquire only a conservation easement from a landowner that wants to sell one – an authority the Service does not currently have in the watershed outside of its existing refuges. • The U. S. Fish & Wildlife Service will acquire the conservation easements using funds from the Land and Water Conservation Fund, which I understand to be	**1–1.** Thank you for your comments on the BRWCA project and your support for the effort to provide an additional conservation tool for interested landowners.

LETTER 1 (State government)—**Idaho State Legislature, Rep. Marc Gibbs,** page 2 of 2

funded annually for this purpose from the sale of offshore energy leases, and not from federal taxes.

We view the program as an important tool for landowners who want to participate, and I am particularly supportive of the fact that the program hopes to achieve wildlife conservation objectives without increasing public land ownership.

Very truly yours,

Marc Gibbs
Idaho State Legislature
632 Highway 34
Grace, Idaho 83241
Phone: 208-425-3385
Email: mgibbs@house.idaho.gov

cc: Governor C.L. "Butch" Otter
James W. Kurth, Chief, USFWS National Wildlife Refuge System
Steve Guertin, Regional Director, USFWS Mountain-Prairie Region 6
Robyn Thorson, Regional Director, USFWS Pacific Region 1
Badge Blackett, National Wildlife Refuge Association

Comment number	LETTER 2 (State government)—Idaho Department of Fish and Game	RESPONSE

IDAHO DEPARTMENT OF FISH AND GAME
600 S. Walnut/P.O. Box 25
Boise, Idaho 83707

C.L. "Butch" Otter/Governor
Virgil Moore/Director

February 1, 2013

Tracey Casselman
Project Leader
South East Idaho National Wildlife Refuge Complex
4425 Burley Drive, Suite A
Pocatello, Idaho 83202

Dear Tracey,

2–1 With this letter, I offer the endorsement of the Idaho Department of Fish and Game for the Bear River Watershed Conservation Area (BRWCA). The objectives of the BRWCA and the approach the U.S. Fish and Wildlife Service has chosen to achieve those objectives have the support and appreciation of the Department. The BRWCA can make an important contribution to the security of not only the designated species of concern, but also a variety of other important wildlife species that share the same habitat with Yellowstone cutthroat trout, pigmy rabbits and sharp-tailed grouse.

The emphasis that this proposal places on regional and community based collaboration and cooperation, through conservation easements will provide good protection of high value public wildlife resources with flexibility and consideration of private property owners. The Idaho Department of Fish and Game desires to be a productive partner with the U.S. Fish and Wildlife Service and all BRWCA partners. We appreciate this opportunity and look forward to productive accomplishments for wildlife conservation in the Bear River Watershed.

Sincerely,

Virgil Moore
Director

VM/MG/mb

Keeping Idaho's Wildlife Heritage

Equal Opportunity Employer • 208-334-3700 • Fax: 208-334-2114 • Idaho Relay (TDD) Service: 1-800-377-3529 • http://fishandgame.idaho.gov

2–1. Thank you for your endorsement of and comments on the BRWCA project. We appreciate the information that the Department shared with the Service in assessing conservation needs and priorities for the project. We look forward to an ongoing partnership with the Idaho Department of Fish and Game.

Comment number	LETTER 3 (State government) — Idaho Fish and Game Commission, page 1 of 2	RESPONSE

IDAHO FISH AND GAME COMMISSION

600 South Walnut • P.O. Box 25 • Boise, Idaho 83707-0025 • 208-334-3700

C.L. "Butch" Otter
Governor

Virgil Moore
Director

Commissioners:

Tony McDermott
Panhandle Region
Sagle, Idaho

Fred Trevey
Clearwater Region
Lewiston, Idaho

Robert Barowsky
Southwest Region
Fruitland, Idaho

Joan Hurlock
Magic Valley Region
Buhl, Idaho

Randall Budge
Southeast Region
Pocatello, Idaho

Kenny Anderson
Upper Snake Region
Rigby, Idaho

Will Naillon
Salmon Region
Challis, Idaho

October 3, 2012

Ken Salazar, Secretary
United States Department of the Interior
1849 C Street, NW
Washington, DC 20240

Dan Ashe, Director
United States Fish & Wildlife Service
1849 C Street, NW
Washington, DC 20240

Re: Bear River Watershed Conservation Area

Dear Secretary Salazar and Director Ashe:

3–1 I am the Idaho Fish & Game Commissioner for the Southeast Idaho Region, which includes Franklin, Caribou and Bear Lake Counties within which the Bear River Watershed in Idaho is located. I am writing this letter to express my support of the Bear River Watershed Conservation Area project. My support for the program is based on the following factors:

- The project would help maintain the ranching heritage of the area while protecting important wildlife habitat.
- The program is based on the acquisition of conservation easements from willing sellers only. Landowners who choose to participate in the program will continue to own, manage and to pay taxes on their property.
- The program will not increase federal ownership in the District. The designation of the Conservation Area will not result in any new regulatory overlay on land within the watershed, nor will it change or affect management practices on public lands in the District.
- Landowners who participate in the program will continue to have full control of their ability to grant or prohibit access to their property for recreational or other purposes.

Keeping Idaho's Wildlife Heritage

Equal Opportunity Employer • 208-334-3700 • Fax: 208-334-2114 • Idaho Relay (TDD) Service: 1-800-377-3529 • http://fishandgame.idaho.gov/

3–1. Thank you for your comments on the BRWCA project and your support for the effort to provide an additional conservation tool for interested landowners.

LETTER 3 (State government)—**Idaho Fish and Game Commission,** page 2 of 2

Page 2
October 3, 2012

- This is a voluntary program – landowners can either participate or not. I understand that the designation of the Conservation Area gives the U. S Fish & Wildlife Service the authority to acqu only a conservation easement from a landowner that wants to sell one – an authority the Service not currently have in the watershed outside of its existing refuges.

- The U. S. Fish & Wildlife Service will acquire the conservation easements using funds from the I and Water Conservation Fund, which I understand to be funded annually for this purpose from sale of offshore energy leases, and not from federal taxes.

We view the program as an important tool for landowners who want to participate, and I am particularly supportive of the fact that the program hopes to achieve wildlife conservation objectives without increasing public land ownership.

Very truly yours,

RANDALL C. BUDGE
Idaho Fish & Game Commissioner
Southeast Region
P.O. Box 1391
Pocatello, Idaho 83204-1391
Phone: 208-232-6101
Email: rcb@racinelaw.net

cc: Governor C.L. "Butch" Otter
James W. Kurth, Chief, USFWS National Wildlife Refuge System
Steve Guertin, Regional Director, USFWS Mountain-Prairie Region 6
Robyn Thorson, Regional Director, USFWS Pacific Region 1
Badge Blackett, National Wildlife Refuge Association
Tracy Casselman, Project Leader

Comment number	LETTER 4 (State government)—Wyoming Department of Agriculture, page 1 of 2	RESPONSE

Wyoming DEPARTMENT OF Agriculture

Matthew H. Mead, *Governor*
Jason Fearneyhough, *Director*
2219 Carey Ave. • Cheyenne, WY 82002
Phone: (307) 777-7321 • Fax: (307) 777-6593
Web: agriculture.wy.gov • Email: wda1@state.wy.us

The Wyoming Department of Agriculture is dedicated to the promotion and enhancement of Wyoming's agriculture, natural resources and quality of life.

May 17, 2012

Amy Thornburg
Planning Team Leader
US Fish and Wildlife Service
PO Box 25486
Denver, CO 25486

Dear Ms. Thornburg:

Following are the comments from the Wyoming Department of Agriculture (WDA) on the United States Fish and Wildlife Service (USFWS) environmental assessment and draft land protection plan for the proposed Bear River Watershed Conservation Area (BRWCA).

4–1 Our comments are specific to our mission within state government: dedicated to the promotion and enhancement of Wyoming's agriculture, natural resources, and quality of life. As this project has major impacts upon our agriculture industry, our natural resources and the welfare of our citizens, we believe it is important you continue to inform us of proposed actions and decisions and provide us the opportunity to express pertinent issues and concerns.

The WDA supports the conservation, protection and restoration of America's farm and ranchlands. We believe the benefits to these programs are multifaceted for the private landowner, the wildlife utilizing these private lands and the public for their water quality, aesthetic values and open space.

Wyoming is a leading state in the nation for having vast expanses of open space and healthy wildlife populations and habitat. Much of this is in-part because of our state's strong agriculture industry. Wyoming's farmers and ranchers have proven wildlife and livestock can coexist on shared habitat. Many projects implemented on these farms and ranches have direct and indirect benefits for wildlife.

4–2 A number of private landowners recently participated in the Farm and Ranch Protection Program (FRPP) through the Natural Resources Conservation Service (NRCS), which supports the protection of agricultural lands from development through easements. Conservation easements are a sensitive subject and are not for everyone. Most easements are for perpetuity, which causes many landowners great concern. The FRPP is organized through NRCS, but the easement is held by an organization of the landowners' choice.

The FRPP's top priority is to protect working farms and ranches, while recognizing the multiple benefits this has, including providing wildlife habitat. The USFWS proposed BRWCA top priority is to protect wildlife on private lands. The WDA have numerous concerns regarding this approach and program. We do not support the federal government serving as an easement holder. Instead, we support existing organizations, who specialize in easements, such as the Wyoming Stock Growers Land Trust, Wyoming Land Trust or the Nature Conservancy, to name a few.

4–3 These existing organizations may already hold an easement on a given property. The USFWS proposed easements on private lands could create multiple easement holders on a given property. Should the property owner choose to sell

Equal Opportunity in Employment and Services
BOARD MEMBERS
Jana Ginter, *District 1* • Jim Hodder, *District 2* • Shaun Sims, *District 3* • John Moore, *District 4* • Alison Lass, *District 5*
Bryan Brost, *District 6* • Jim Price, Jr., *District 7*
YOUTH BOARD MEMBERS
Patrick Zimmerer, Southeast • Dalin Winters, Northwest • John Hansen, Southwest • Bridget Williams, Northeast

4–1. The Service shares the Wyoming Department of Agriculture's commitment to conserve and protect farm and ranchlands that are providing crucial wildlife habitat and preserving open space and water quality. The Service fully understands the importance of agriculture and coordination and communication on pertinent issues and concerns.

4–2. In addition to working with the Farm and Ranch Protection Program, the Service will work with the Wetland Reserve Program, Conservation Reserve Program, and other organizations in the watershed to provide an additional conservation easement option for private landowners. The demand for easements has outpaced the available funding in some cases and the ability to raise matching non-Federal funds to secure easements in other instances. We wish to offer another voluntary option for landowners that will complement other conservation efforts in the Bear River watershed. While it is understood that some landowners will not wish to sign an easement with the Service, or with any other agency for that matter, our outreach has shown that some landowners in the Bear River watershed would be interested in the option of a U.S. Fish and Wildlife Service easement on their property.

4–3. While there is a possibility of having multiple easement holders in some cases, selling would be at the landowners' discretion and coordination.

Comment number	LETTER 4 (State government)—Wyoming Department of Agriculture, page 2 of 2	RESPONSE

BRWCA
5/17/2012
Page 2 of 2

in the future, the multiple easement holders could cause difficulties in the sale of this property, which is an unforeseen and unintended consequence of a farm or ranch entering into an easement with the USFWS.

4–4 Ultimately, we strongly oppose the USFWS proceeding with the BRWCA. We believe the USFWS should not hold easements. If federal funding is available, we would encourage this money go through the NRCS and the FRPP program, not the USFWS. The program is established and landowners have the trust and existing working relationships with this agriculture friendly agency. Landowners are likely to have skepticism with the USFWS and are leery of the fine print and long-term consequences of signing an easement with your agency.

4–5 A USFWS easement intended for wildlife on private farms and ranches is likely to dictate selection of range improvements, fence design, restrictions on crop selection or harvest dates, requirements of harvest equipment, reduced grazing or other detrimental restrictions. We emphasize the top priorities of an easement on working farms and ranches, should be to keep agricultural families in production agriculture, while reducing irreversible development, which may reduce or eliminate both agriculture and wildlife habitat.

4–6 The WDA thanks the USFWS for accepting our comments. We encourage the USFWS to reconsider the proposed BRWCA and refrain from the development of any future easement programs. Please feel free to contact us with further questions.

Sincerely,

Jason Fearneyhough
Director

JF/jw

Cc: Governor's Policy Office
WDA Board of Agriculture
Wyoming Stock Growers Association
Wyoming Wool Growers Association
Rocky Mountain Farmers Union
Wyoming Association of Conservation Districts
Wyoming Farm Bureau Federation
Wyoming State Grazing Board
Wyoming Game and Fish Department
Wyoming NRCS State Office
The Nature Conservancy
Wyoming Land Trust

4–4. The Service understands that an easement program new to an area will take time to develop support and trust. Ultimately, the success of the BRWCA easement program will be determined by the interest and support of landowners. The Service looks forward to working with NRCS and other conservation programs in the watershed; however, when Service funding is used for easement acquisition, we will maintain an easement interest.

4–5. The Service fully appreciates the importance of agriculture for the production and conservation of fish and wildlife by maintaining the working farm and ranch landscapes. Through the BRWCA project, another conservation tool and funding source will be available for interested private landowners through the use of long-term conservation easements, in combination with short-term management options with the Partners for Fish and Wildlife Program. The Service's minimally restrictive easement programs have been very successful in a number of other States—including Montana, North Dakota, and South Dakota, where more than 3 million acres have been conserved through a very successful easement program.

4–6. The Service will consider the Department's comments. Since this letter was submitted before the release of the draft EA and LPP and the public meetings, we urge the Department to remain in contact with the BRWCA team and Service about more specific information and future developments with the project.

Comment number	LETTER 5 (local government)—Bear Lake County Commission, page 1 of 2	RESPONSE

RECEIVED
2012 NOV -5 AM 11:07

Ken Salazar, Secretary
United States Department of the Interior
1849 C Street, NW
Washington, DC 20240

516981

Dan Ashe, Director
United States Fish & Wildlife Service
1849 C Street, NW
Washington, DC 20240

Re: Bear River Watershed Conservation Area

Dear Secretary Salazar and Director Ashe:

5–1 The Bear Lake County Commission has voted its support of the Bear River Watershed Conservation Area project. Our support for the program is based on the following factors:

- The project would help maintain the ranching heritage of the area while protecting important wildlife habitat.
- The program is based on the acquisition of conservation easements from willing sellers only. Landowners who choose to participate in the program will continue to own, manage and to pay taxes on their property.
- The program will not increase federal ownership in the District. The designation of the Conservation Area will not result in any new regulatory overlay on land within the watershed, nor will it change or affect management practices on public lands in the District.
- Landowners who participate in the program will continue to have full control of their ability to grant or prohibit access to their property for recreational or other purposes.
- This is a voluntary program – landowners can either participate or not. We understand that the designation of the Conservation Area gives the U. S Fish & Wildlife Service the authority to acquire only a conservation easement from a landowner that wants to sell one – an authority the Service does not currently have in the watershed outside of its existing refuges.
- The U. S. Fish & Wildlife Service will acquire the conservation easements using funds from the Land and Water Conservation Fund, which I understand to be funded annually for this purpose from the sale of offshore energy leases, and not from federal taxes.

5–1. Thank you for your comments on the BRWCA project and your support for our effort to provide an additional conservation tool for interested landowners.

LETTER 5 (local government)—**Bear Lake County Commission,** page 2 of 2

We view the program as an important tool for landowners that want to participate, and we are particularly supportive of the fact that the program hopes to achieve wildlife conservation objectives without increasing public land ownership.

Very truly yours,

BEAR LAKE COUNTY COMMISSION

By _____

VAUGHAN RASMUSSEN
Chairman
P.O. Box 190
Paris, Idaho 83261
Phone: 208-945-2212

cc: Governor Butch Otter
James W. Kurth, Chief, USFWS National Wildlife Refuge System
Steve Guertin, Regional Director, USFWS Mountain-Prairie Region 6
Robyn Thorson, Regional Director, USFWS Pacific Region 1
Badge Blackett, National Wildlife Refuge Association

Comment number	LETTER 6 (local government)—Board of Lincoln County Commissioners, page 1 of 2	RESPONSE

Board of Lincoln County Commissioners

Kent Connelly, Chairman
Kemmerer, Wyoming 83101

Paul C. Jenkins
Thayne, Wyoming 83127

T. Deb Wolfley
Fairview, Wyoming 83119

925 Sage Avenue, Suite 302, Kemmerer, WY 83101 Phone: 307-877-2004 Fax: 307-877-4237
Email: commission@lcwy.org

January 3, 2013

VIA E-MAIL: brwca_comments@fws.gov
Amy Thornburg
Planning Team Leader
U.S. Fish and Wildlife Service
P.O. Box 25486
Denver, CO 80225

RE: Draft Environmental Assessment and Land Protection Plan - Proposed Bear River Watershed Conservation Area

Dear Ms. Thornburg:

6–1 Thank you for the opportunity to comment on the proposed Environmental Assessment for the proposed Bear River Watershed Conservation Area. Lincoln County is an agricultural County with strong ties to the land. It is our priority to maintain and enhance agriculture to retain its contribution to the local economy, customs, cultural and heritage as well as a secure national food supply. We agree that the Bear River is an important resource, not only for the wildlife habitat created, but for the working landscapes of the area. We are supportive of efforts that seek to preserve working ranches by maintaining the health of agricultural landscapes here in Lincoln County.

6–2 In our effort to preserve habitats and working ranchlands, we adopted subdivision regulations that prohibit the subdivision of land within the floodplain. This policy has served us well in years when much of the floodplain is under water. Although this regulation has preserved riparian and riverine habitats, it has also affected the development value of the land, and therefore the purchase price of conservation easements. Obviously, any appraised value will be greater in highly developed areas, such as Cache Valley or Wasatch Front, while the rural areas with intact wildlife habitats receive lesser values.

6–3 We ask that proposed easements be based on the habitat value instead of the market value. The Wyoming Landscape Conservation Initiative, along with partnering federal agencies, has explored habitat term leasing, and we support this concept as the most equitable for those already engaged in protecting resource values. We

6–4 also ask that all appraisals be available to the public. In the past, the USFWS has been unwilling to provide this

6–5 information, even though the appraisal was paid for with public tax dollars.

6–1. We agree that the working landscapes of Lincoln County contain very important wildlife habitat, and that working with private landowners will be essential to protecting the area's resources for the future.

6–2. Although the development values may result in lower appraised values in floodplains, the potential interest by the Service or by other conservation organizations will likely be very high in these areas because of their importance to wildlife. A conservation easement may provide some monetary compensation in addition to agricultural income for landowners in areas that otherwise cannot be developed. Urban areas with high potential for subdivision (and high development values) are less likely to be of interest for most wildlife conservation–based easement programs. According to the "Uniform Appraisal Standards for Federal Land Acquisition," 41 CFR 114–50.305(c), private property or property rights shall not be purchased without just compensation. The Service is required to conduct fair-market appraisals on all land transactions to protect both private and public interests. The rights being acquired for conservation easements are "development rights" and, by law, that is what must be used to determine easement value.

6–3. Repeatedly paying for the same conservation through short-term easements would not allow the Service to achieve the habitat goals and objectives needed to sustain migratory bird and other wildlife populations in this area. Because several less-than-perpetual conservation options are available through other Federal and State programs and conservation partners, it is logical that the Service continue to pursue permanent conservation avenues for the BRWCA project.

The Service has periodically tested short-term wetland easements in other areas of the country. A study by Higgins and Woodward (1986) concluded that 20-year contracts merely delayed habitat alteration and that short-term easements have only short-term benefits. (Refer to page 17 in the draft EA.)

Comment number	LETTER 6 (local government)—Board of Lincoln County Commissioners, page 2 of 2	RESPONSE
6–6	The Draft EA identifies priority areas (Figures 13 & 14) based on ecological integrity. However, the maps exclude private lands that are within the Refuge Acquisition Areas. The map on Figure 14 depicting Cokeville Meadows NWR is inaccurate because most of the lands shown within the NWR are actually privately owned and not part of the refuge. Are these lands not considered for protection? Do they have a higher ranking priority since they are within the acquisitions boundaries? We believe this need to be clarified in the Final plan.	**6–4.** While the Federal Government is in negotiation with a second party, all appraisals have to be kept confidential until the real property rights have been transferred ("Uniform Appraisal Standards for Federal Land Acquisition" and appraisal standards for the Department of Interior, 41 CFR 114–50.305(c)). After the real property rights have been transferred, the appraisal can be made public by the landowner. The easement document will be recorded in the local courthouse, where it is available for public review.
6–7	We support efforts to protect valuable farm and ranch lands and are encouraged by the USFWS' efforts to work with private landowners on conservation matters of mutual interest. Fragmenting farm and ranch land can have a significant impact on wildlife and water quality. We thank you for the opportunity to comment. Sincerely, /s/ Kent Connelly, Chairman Kent Connelly, Chairman Board of Lincoln County Commissioners	**6–5.** Easements will primarily be paid for with Land and Water Conservation Funds derived from offshore drilling revenues, not with public tax dollars. **6–6.** The map boundaries for the three national wildlife refuges in the watershed depict the approved acquisition boundary within which the Service has authority to work with willing landowners to acquire land. Private and State lands are not shown due to the scale of the maps, and the map legend in the final LPP has been clarified to reflect this. **6–7.** Thank you for the comments provided by the Board on the BRWCA project and for the support of our efforts to provide an additional conservation tool for landowners.

Comment number	LETTER 7 (local government)—Box Elder County Commissioners, page 1 of 2	RESPONSE

COUNTY COMMISSIONERS
LuAnn Adams
Brian K. Shaffer
Ryan Tingey

BOX ELDER COUNTY
STATE OF UTAH

517236

OFFICERS
Rodney D. Bennett, assessor
Stephen R. Hadfield, attorney
Tom Kotter, auditor
Marla R. Young, clerk
Kevin R. Christensen, justice court judge
Chad Montgomery, recorder
J. Lynn Yeates, sheriff
Shaun Thornley, treasurer

November 7, 2012

Ken Salazar, Secretary
United States Department of the Interior
1849 C Street, NW
Washington, DC 20240

Dan Ashe, Director
United States Fish & Wildlife Service
1849 C Street, NW
Washington, DC 20240

Re: Bear River Watershed Conservation Area

Dear Secretary Salazar and Director Ashe:

7–1 The Box Elder County Commission has voted its support of the Bear River Watershed Conservation Area project. Our support for the program is based on the following factors:

- The project would help maintain the ranching heritage of the area while protecting important wildlife habitat.
- The program is based on the acquisition of conservation easements from willing sellers only. Landowners who choose to participate in the program will continue to own, manage and to pay taxes on their property.
- The program will not increase federal ownership in the District. The designation of the Conservation Area will not result in any new regulatory overlay on land within the watershed, nor will it change or affect management practices on public lands in the District.
- Landowners who participate in the program will continue to have full control of their ability to grant or prohibit access to their property for recreational or other purposes.
- This is a voluntary program – landowners can either participate or not. We understand that the designation of the Conservation Area gives the U. S Fish & Wildlife Service the authority to acquire only a conservation easement from a landowner that wants to sell one – an authority the Service does not currently have in the watershed outside of its existing refuges.

Commission

All County Offices
(435) 734-3300

7–1. Thank you for your comments on the BRWCA project and your support for the effort to provide an additional conservation tool for interested landowners.

- The U. S. Fish & Wildlife Service will acquire the conservation easements using funds from the Land and Water Conservation Fund, which we understand to be funded annually for this purpose from the sale of offshore energy leases, and not from federal taxes.

We view the program as an important tool for landowners that want to participate, and we are particularly supportive of the fact that the program hopes to achieve wildlife conservation objectives without increasing public land ownership.

Very truly yours,

Brian Shaffer, Chair
County Commission

LuAnn Adams
Commissioner

Ryan Tingey
Commissioner

cc: James W. Kurth, Chief, USFWS National Wildlife Refuge System
Steve Guertin, Regional Director, USFWS Mountain-Prairie Region 6
Robyn Thorson, Regional Director, USFWS Pacific Region 1
Bob Barrett, Project Leader, Bear River Migratory Bird Refuge
Badge Blackett, National Wildlife Refuge Association

Comment number	LETTER 8 (local government)—Coalition of Local Governments, page 1 of 6	RESPONSE

COALITION OF LOCAL GOVERNMENTS

925 SAGE AVENUE, SUITE 302
KEMMERER, WY 83101

COUNTY COMMISSIONS AND CONSERVATION DISTRICTS FOR LINCOLN, SWEETWATER, UINTA, AND SUBLETTE - WYOMING

January 4, 2013

VIA E-MAIL: amy_thornburg@fws.gov

Amy Thornburg
Planning Team Leader
U.S. Fish and Wildlife Service
Division of Refuge Planning
134 Union Boulevard, Suite 300
Lakewood, CO 80228

Re: Comments on the Draft Environmental Assessment and Land Protection Plan for the Proposed Bear River Watershed Conservation Area by the Coalition for Local Governments

Dear Ms. Thornburg,

The Coalition for Local Governments (Coalition), by and through its members, Lincoln County, Uinta County, Lincoln Conservation District, and Uinta County Conservation District, submit these comments on the Draft Environmental Assessment (EA) and Land Protection Plan (LPP) for the proposed Bear River Watershed Conservation Area. The Coalition appreciates the opportunity to comment. The Coalition is a voluntary association of local governments organized under the laws of the State of Wyoming to educate, guide, and develop public land policy in the affected counties. In addition to Lincoln and Uinta Counties and Conservation Districts, members of the Coalition include County Commissions and Conservation Districts for Carbon, Fremont, Sweetwater, and Sublette.

8–1 The Coalition agrees that the Bear River is an important resource for both wildlife habitat and the agricultural lands in the area, and as a source of water. However, the Coalition does not support a conservation effort that will restrict private landowners' water rights or that will reduce property tax revenues to the local governments. The comments that follow address the Coalition's concerns with the Draft EA and LPP.

8–1. We agree that the Bear River area in Lincoln County contains important wildlife habitat, agricultural lands, and water resources.

Comment number	LETTER 8 (local government)—Coalition of Local Governments, page 2 of 6	RESPONSE

Amy Thornburg
Bear River Watershed Conservation Area
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I. Value of the Land

8–2 Lincoln County's current zoning regulations that prohibit the subdivision of the land within the 100 year floodplain have helped to preserve the riparian and wetland habitats, but it has also negatively affected the development value of the land. *See* Lincoln County Land Use Regulations at 1-3, C-2, C-17 (Sept. 2009). The removal of the potential value associated with possible development decreases the fair market value of the land, which determines the purchase price of the conservation easement. *See* Draft EA & LPP, at 88, 103; Service Policy 341 FW 2.1(B)(4) (Apr. 12, 1996); Service Policy 341 FW 6.7(A), 6.10, 6.11(A) (Dec. 15, 2008). The Coalition is concerned because the rural areas with intact wildlife and wetland habitats will receive a lesser appraised value then the highly developed areas. The lower value also directly affects county revenues.

8–3 The U.S. Fish and Wildlife Service (FWS) establishes the market value of the land by using an estimate called the adjusted assessed land value (AALV). Service Policy 341 FW 6.7(A). The AALV is determined by multiplying the assessed land value by a multiplier (gap between market value and assessed value). *Id.* at 6.10. The AALV is then multiplied by the wetland index (usually between 20 and 50 percent) and the number of wetland acres encumbered to determine the final payment for the conservation easement. *Id.* at 6.11(A); Draft EA & LPP at 103.

8–4 8–5 The lands subject to the subdivision regulations have already decreased the value of the lands, and now the perpetual conservation easements will further decrease the market value of the lands. Draft EA & LPP at 37, 88. The Draft EA & LPP fail to recognize this as unavoidable adverse impact. *See id.* at 47, 96. They incorrectly state that the "selection of an approved boundary would not, by itself affect any aspect of landownership or values. Management of lands to protect wildlife habitat . . . would limit future development options for landowners." *Id.* The Draft EA & LPP should recognize that this limit on future development options also has a corresponding effect on the market value of the lands due to the removal of the speculative value associated with possible development. It also affects lands ownership by limiting future land uses.

8–6 The Coalition supports the concept of term easements rather than the perpetual easements. The federal tax incentive would no longer be available for private landowners under term leasing (*see* Internal Revenue Code §170(h)), but the adverse effects on the market value of the land and county revenues would be mitigated.

Short-term conservation easements were considered, but eliminated from further

8–2. Federal realty regulations require us to appraise land on the highest and best use as determined by current local zoning. Although the development values may result in lower appraised values in floodplains, the potential interest by the Service or by other conservation organizations will likely be very high in these areas because of their importance to wildlife. A conservation easement may provide some monetary compensation in addition to agricultural income for landowners in areas that otherwise cannot be developed. Generally, urban areas with high current potential for subdivision or being actively developed—and having high development values—are less likely to have high wildlife conservation value.

8–3. The Service would not use the adjusted assessed land value (AALV) process described by the commenter because it is only used in certain counties of States where it is authorized (Iowa, Montana, Nebraska, North Dakota, and South Dakota). An appraisal of market value of the development rights acquired through an easement will be used for the BRWCA project (www.fws.gov/policy/341fw6.html#section610).

8–4. The approval of the project and the refuge unit administrative boundary provides the authority for the Service to work with landowners interested in selling conservation easements within the BRWCA boundary. Selection and the approval of the BRWCA acquisition boundary in and of itself will not affect landownership or any other management activities in the area.

8–5. Certain restrictions such as limits to development options will apply on properties where willing landowners have sold a conservation easement to any organization or agency, including the Service. However, management of lands to protect wildlife habitat does not necessarily limit all future development options. The private lands throughout the watershed currently support a large number of wildlife species. The private lands around Cokeville National Wildlife Refuge support one of the highest densities of nesting waterfowl in Wyoming along with habitat for numerous marshbirds and shorebirds, sage-grouse, mule deer, elk, and pronghorn.

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review, in the Draft EA because it did not further the purpose and need of a "landscape-scale protection in perpetuity in the Bear River watershed." Draft EA & LPP at 16. However, the purpose and need of the proposed action is to "contribute to the protection of significant values of this highly diverse ecosystem." *Id.* at 7. Further, the Bear River Watershed Conservation Area is being established to maintain healthy populations of native wildlife species, protect and maintain water quality and quantity, conserve the riparian and wetland habitats, provide habitat connectivity and migratory corridors, promote partnerships in conservation actions, and increase the resiliency of the watershed to sustain wildlife and important habitat. *Id.* at 8, 102.

Term conservation easements that last 10 to 30 years would provide the same protections to the wildlife species, water quality and quantity, and riparian habitats in the Bear River watershed. They would also increase the resiliency of the watershed to sustain the wildlife and important habitat; and therefore, should be furthered analyzed as an alternative in the EA.

8–7 Further, the Coalition believes the appraisals of the lands under consideration for a conservation easement should be made available to the public. The conservation easements and the appraisals are paid for by federal tax dollars that make up the Land and Water Conservation Fund. *See* Draft EA & LPP at 103. Even partial federal funding compels public disclosure of these appraisals.

8–8 Funds that will come from the sale of surplus property are very limited since most, if not all such sales, are paid to the United States Treasury. Also, any suggestion that FWS will accept voluntary donations for the easements is only partly accurate because such donations are often reimbursed from later appropriations made to the Land and Water Conservation Fund. Therefore, the funding for the acquisition of the easements will come from federal tax dollars and any appraisals of the land should be made public.

8–9 This would not be the first time appraisals for conservation easements were made public, as the Wyoming Landscape Conservation Initiative made the appraisals public for the conservation easements it proposed to acquire. This initiative is a Bureau of Land Management program, and also supports making the appraisals public.

II. Limits on Future Water Development

8–10 The proposed action would allow historical water rights to continue but would not allow any water rights to be sold or otherwise separated from the property. Draft EA & LPP at 40, 92. The easements would not allow any alterations to the "points of diversion, timing, or place of use for any water rights." *Id.* The easements would also

8–6. Repeatedly paying for the same conservation through short-term easements would not allow the Service to achieve the habitat goals and objectives needed to sustain migratory bird and other wildlife populations in this area. Because several less-than-perpetual conservation options are available through other Federal and State programs and conservation partners, it is logical that the Service continue to pursue permanent conservation avenues for the BRWCA project.

The Service has periodically tested short-term wetland easements in other areas of the country. A study by Higgins and Woodward (1986) concluded that 20-year contracts merely delayed habitat alteration and that short-term easements have only short-term benefits. (Refer to page 17 in the draft EA.)

8–7. While the Federal Government is in negotiation with a second party, all appraisals have to be kept confidential until the real property rights have been transferred ("Uniform Appraisal Standards for Federal Land Acquisition" and appraisal standards for the Department of Interior, 41 CFR 114–50.305(c)). After the real property rights have been transferred, the appraisal can be made public by the landowner. The easement document will be recorded in the local courthouse, where it is available for public review.

8–8. Whether or not a donation is used as a tax deduction, the Service cannot reimburse the landowner at a later date with any Federal money for anything other than appraisal or closing costs that have been incurred by the donor. (Also, refer to 8–7 above.)

8–9. Refer to response 8–7 above.

8–10. The commenter refers to the statement on page 40 of the draft EA that states, "the easements would not allow any alterations to the points of diversion, timing, or place of use for any water rights." While this statement is true in general terms, specific language included in the conservation easement between the landowner and the Service may include the qualification of "unless prior approval in writing is granted by the U.S. Fish and Wildlife Service." This would allow for mutually agreed to changes in the points of diversion, timing, or place of

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prohibit nonpoint source pollution from residential subdivisions, commercial development, and draining of wetlands. *Id.* The Coalition strongly objects to the conservation easements' effect on private landowners' right to withdraw water and alter the points of water diversion, actions which are governed by state law and are outside the jurisdiction of the FWS.

8–11 Lincoln and Uinta County support the protection of water rights, the beneficial use of water, and proper management of water resources in order to protect them. Lincoln County Comprehensive Plan at App. 3-13, 3-29 – 3-30 (last amended Nov. 13, 2006); Uinta County Comprehensive Plan at 17-18, 22 (2011). Lincoln and Uinta County Conservation Districts also support the efficient and beneficial use of water in their respective Districts, as well as the continued protection of individual water rights. Lincoln Conservation District Land Use & Natural Management Long Range Plan at 15-17 (2010-2015); Uinta County Conservation District Long Rand Plan at 4 (2010-2015).

8–12 Other conservation easement programs, such as those managed by FWS in North Dakota, have shown that private landowners are severely limited on not only their ability to alter points of water diversion, but also on their ability to replace or upgrade water diversions. Any limitations on the right to replace, alter, or upgrade existing water diversions could have a negative impact on private landowners agriculture and ranching operations. Therefore, the Coalition opposes any type of limitations to points of diversions on landowners' existing water rights.

Further, a conservation easement cannot override state law in regards to water rights unless the FWS pays the landowners' for the entire present and future value of their water rights. Congress waived its right to water on public land when water is appropriated to private landowners under state laws. Act of July 26, 1866, 14 Stat. 253; Act of July 9, 1870, 16 Stat. 218, 43 U.S.C. §661 (1976); *see* Dept. of the Interior, Opinion by Office of the Solicitor, *Federal Water Rights of the National Park Service, Fish & Wildlife Service, Bureau of Reclamation & the Bureau of Land Management*, 86 Interior Dec. 553, 565 (June 25, 1979). Federal agencies should, as a matter of policy, acquire water rights in accordance with state law except to accomplish the original purpose of a Congressional reservation or to protect the navigation servitude. Dept. of Interior, Opinion of the Solicitor, *Nonreserved Water Rights - U.S. Compliance with State Law*, 88 Interior Dec. 1055, 1057-60, 1062-64 (Sept. 11, 1981); Dept. Of Interior, Opinion of the Solicitor, *Supplement to Solicitor Opinion No. M-36914 on Federal Water Rights of the National Park Service, Fish & Wildlife Service, Bureau of Reclamation & the Bureau of Land Management*, 88 Interior Dec. 253, 255-56 (Jan. 16, 1981).

A water right under Wyoming law is the right to use the water of the state when it has been acquired by the beneficial application of the water. W.S. §41-3-101.

use of water to accommodate unforeseen changes or events to maintain the purposes and intent of the conservation easement.

The commenter states that water rights "are governed by state law and are outside the jurisdiction of the FWS." The Service agrees that water rights, like land use, are primarily governed by State law. However, the National Wildlife Refuge System Administration Act (Administration Act), 16 U.S.C. §§ 668dd–ee, provides that the Refuge System shall consist of all "lands, waters, and interests therein" administered by the Service as refuges, waterfowl production areas, or otherwise for conservation purposes. The act defines the Refuge System's mission as the administration of "a national network of lands and waters" for the conservation of fish and wildlife and expressly authorizes the acquisition of water rights for refuge purposes, 16 U.S.C. § 668dd(a)(4)(G), and other statutes applicable to the Service also authorize the acquisition of water rights or interests therein. For example, 16 U.S.C. §§ 460l–9(a)(1) authorizes use of Land and Water Conservation Fund money for the acquisition of "land, waters, or interests in land or waters"; 715a, the Migratory Bird Conservation Act, authorizes purchase or rental of "any area of land, water, or land and water," expressly including "the purchase or rental of any interest in any such area of land, water, or land and water"; 718d(c), the Migratory Bird Hunting and Conservation Stamp Act, authorizes the acquisition of "small wetland and pothole areas [and] interests therein"; and 3922, the Emergency Wetlands Resources Act, authorizes purchase of "wetlands or interests in wetlands." Just as acquisition of an interest in land pursuant to these authorities can lawfully restrict or prohibit uses of the land by a landowner that are otherwise allowed by State law, the acquisition of an interest in water rights through a conservation easement authorized by these statutes can provide limits or restrictions on uses of those rights that are otherwise permitted by State law. (Refer to "Cf. White v. Board of Land Comm'rs, 595 P.2d 76, 80 (Wyo. 1979)." Under Wyoming law, water rights are considered "part and parcel" of the lands to which they are appurtenant.)

8–11. The commenter cites provisions of the counties' plans that support the protection of water rights and the beneficial use of water. The Service believes that easement terms providing for the continued historical use of water rights appurtenant to the easement property are fully consistent with these provisions.

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8–13 Beneficial use of the water is the basis, measure, and limit of the right to use the water. *Id.* If an owner of a water right wishes to change its present use, the place of use, point of diversion, or means of conveyance, then he must file a petition with the board of control to obtain permission to make such a change. W.S. §§41-3-104, 41-3-114. The deprivation of the right to the beneficial use of the water or the right to apply for changes in the water right may amount to a taking of an owner's water right and require compensation. *See* Wyo. Const. art. 1, §33; W.S. §§1-26-505, 1-26-516, 1-26-702.

III. Federal Grazing Permits

8–14 The conservation easements purport to allow for traditional agricultural uses such as ranching, grazing, and haying to continue on the private lands. Draft EA & LPP at 4, 43, 94. The Coalition supports the continued use of the lands for agricultural purposes, because such use is important to its member Counties' economy and general lifestyle. *See* Lincoln County Comprehensive Plan at 6; App. 3-11, 3-40; Uinta County Comprehensive Plan at 11, 13. The Coalition would like further assurances that the private landowners' Federal grazing permits on public lands within the project area would not be altered or eliminated by the designation of the Bear River Watershed as a conservation area. Most of Lincoln and Uinta Counties' working ranches hold Federal grazing permits and the continuance of grazing on Federal and non-Federal lands helps to preserve the ranches and maintain the agricultural landscapes in the Counties.

IV. Ranking Priority Areas

8–15 The Draft LPP identifies and maps out the species priority areas and conservation ranking priority areas for the proposed Bear River Watershed Conservation Area. Draft EA & LPP at 114-16, Fig. 13, Fig. 14, Table LPP-5. The maps should also identify the private lands that are within the proposed Conservation Area because these are the lands that are being ranked for prioritization for acquisition. *See id.* at 116, Table LPP-5.

8–16 Further, identifying the private lands would lead to a more accurate identification of refuge lands. The depiction of Cokeville Meadows NWR in Figure 14 is inaccurate because most of that area is privately owned lands that are not part of the refuge. It also appears that these private lands would require a rank of higher priority because it includes lands where multiple conservation targets are present. *See id.* at 114-15, Fig. 13, Fig. 14.

8–12. As noted in the comment submitted, the Service's easements in North Dakota often entail restrictions on the landowners' ability to use water pursuant to State water laws. The validity of these easements has been confirmed in *North Dakota* v. *United States*, 460 U.S. 300 (1983), and many other reported judicial decisions.

8–13. The commenter states that "the deprivation of the right to the beneficial use of the water or the right to apply for changes in the water right may amount to a taking of an owner's water right and require compensation" and "Further, a conservation easement cannot override state law in regards to water rights unless the FWS pays the landowners' for the entire present and future value of their water rights." As stated on pages 4, 12, and 102 of the draft EA, the easement program will consist entirely of easement acquisitions from willing sellers (or donors), who presumably will not agree to the sale (or donation) of an easement if they believe that the restrictions on water use are too burdensome or if they believe that they are not being adequately compensated for present and future restrictions. Acquisition of easements from willing sellers (or donors) is entirely consistent with the policies and decisions cited in the comments submitted.

Although the comments made were specific to Wyoming water law, this response applies to Wyoming, Utah, and Idaho water laws.

8–14. The Service also supports the continued use of lands for agricultural purposes due to their importance to the local economy, ranching heritage, and wildlife value. Service easements allow grazing, would not affect grazing management on any adjacent Federal lands as BRWCA easements will be on private lands only. They would not change the management practices of other private landowners that do not have a Service easement. The conservation easement will clearly spell out permitted and prohibited activities. (Also, refer to comment 8–4.)

8–15. The prioritized areas in the BRWCA in figures 13 and 14 are for private lands that are not under some other form of protection. Language has been added to the final LPP and EA to clarify what is included in the priority areas.

Comment number	LETTER 8 (local government)—Coalition of Local Governments, page 6 of 6	RESPONSE
	Amy Thornburg Bear River Watershed Conservation Area January 4, 2013 Page 6	The maps for the three national wildlife refuges in the watershed depict the approved acquisition boundaries within which the Service has prior authority, separate from the BRWCA project, to work with willing landowners to acquire land in fee title or through an easement.
8–17	Thank you for the opportunity to comment on the Draft EA and LLP Sincerely, /s/ Kent Connelly Kent Connelly, Chairman Coalition for Local Governments cc: Wyoming Congressional Delegation Wyoming Department of Agriculture Director Fearneyhough	**8–16.** The map boundaries for the three national wildlife refuges in the watershed depict the approved acquisition boundary within which the Service has authority to work with willing landowners to acquire land. Private and State lands are not shown due to the scale of the maps, and the map legend in the final LPP has been clarified to reflect this. **8–17.** Thank you for your comments.

Comment number	LETTER 9 (local government)—Franklin Soil & Water Conservation District, page 1 of 2	RESPONSE

Franklin Soil & Water Conservation District
98 East 800 North Suite #5
Preston ID 83263
(208) 852-0562 Ext. 5 email: fswcd@earthlink.net

December 28, 2012

U.S. Fish & Wildlife Service
Amy Thornburg
P.O. Box 25486 DFC
Denver CO 80225-0486

Comments: Draft Land Protection Plan and Environmental Assessment for the Proposed Bear River Watershed Conservation Area

Dear Sir/Ma'am,

The Franklin Soil & Water Conservation District (SWCD) was contacted by a USFWS representative during the scoping process associated with the Bear River Watershed Conservation Area. Since that time we have been following the activities associated with this planning effort.

9–1 As you are well aware, the Federal Land Policy Management Act requires U.S. Fish and Wildlife Services to coordinate planning and implementation activities with state and local governments. You may not be aware that Title 22, Chapter 27 of the Idaho code identifies Soil & Water Conservation District (SWCD) as local government agencies that are the *"primary entities to provide assistance to private landowners and land users in the conservation, sustainment, improvements and enhancement of Idaho's natural resources...."* This level of government is by statutory definition *"...(2)...a means by which funds, including federal, state, private, and other moneys, can be obtained and utilized for the accelerated development of water quality program, multiple use forest land, rangeland, and agricultural land conservation improvements in the state, and provide that these improvements, projects and programs be locally planned, coordinated and implemented through statutory provisions pertaining to soil conservation districts, the state soil and water conservation commission, appropriate state and federal agencies and the owners and operators of privately owned lands.*

9–2 The proposed Bear River Conservation Area will impact four conservation districts in Idaho, yet the plan has no mention of partnering with the affected SWCDs nor does it mention review or consistency determinations between state and/or local conservation plans and policies.

9–3
9–4 We have worked hard during recent years to produce projects that generate an environmental improvement in a very cost effective way. In this process we have earned the respect of the local landusers. Along with our statutory responsibilities this places us in the unique position to assist the USFWS in this program. It is stated that Service staff would administer and monitor the conservation easement program. To us this provides inadequate staff to ensure the success of this plan. Each conservation district has a county office that is frequented by the agricultural community. We ask that a partnership between USFWS and the conservation districts be established utilizing our technically trained staff. Our vision for this includes both assistance during the initial discussions and the monitoring requirements.

9–5 In addition we feel that the selection of Bonneville Cutthroat Trout, Sage Grouse, and Wetlands as the basis for selection of easements limits 1-the participation of willing landowners and 2- the

All FSWCD programs are offered on a non-discriminary basis

9–1. Although Franklin Soil and Water Conservation District is not mentioned by name, it is included in the general statement on page 67 of the draft DEA and page 145 of the draft LPP: "Representatives from local soil and water conservation districts, farm bureaus, universities, counties, and towns were also provided with project information."

The Service provided project information on at least two occasions to representatives from local soil and water conservation districts, farm bureaus, universities, and towns—once before scoping and again before release of the draft EA and LPP. Specifically, members of the planning team gave a presentation to the Franklin County Soil and Water Conservation District at their May 4, 2011, meeting. A presentation was also provided to the Franklin County Commission on May 9, 2011, where a member of the conservation district was present. Service staff gave project updates to the NRCS representative to the conservation district on February 18, 2012, November 28, 2012, and December 4, 2012. Additionally, conversations were held with various conservation district members at the district office on December 5 and 10, 2012.

The Federal Land Policy and Management Act (Public Law 94–579) was enacted to guide the Bureau of Land Management and does not pertain to the Service. However, the Service recognizes the important role of soil and water conservation districts within the Bear River watershed. We look forward to working with the districts to identify good land stewards who may wish to participate in our program and to coordinating our programs to deliver the best possible conservation program in the Bear River watershed.

9–2. The Service will continue to collaborate and coordinate with the Franklin Soil and Water Conservation District.

9–3. The Service understands that working with local conservation organizations and agencies such as the Franklin Soil and Water Conservation District is essential to successful conservation in the watershed.

Comment number	LETTER 9 (local government)—Franklin Soil & Water Conservation District, page 2 of 2	RESPONSE

Franklin Soil & Water Conservation District
98 East 800 North Suite #5
Preston ID 83263
(208) 852-0562 Ext. 5 email: fswcd@earthlink.net

protection of lands that are most at risk of development. The pressures to convert agricultural land to development in the Bear River Watershed are most prevalent in Franklin and Cache Counties.

9–6 In closing we wish to state that the Franklin SWCD's mission is to support high quality and effective projects that engage private landowners in the conservation and enhancement of wildlife and natural resources on their lands. We place high priority on innovative concepts that integrate conservation practices in ongoing agricultural and ranching operations. The proposed plan aligns itself with this mission and we support its continuation and future funding.

Sincerely

Ken P. Bingham

Ken Bingham
Chairman

CC: Representative Marc Gibbs, U.S. Senator James Risch, U.S. Senator Michael Crapo, U.S. Representative Mike Simpson

All FSWCD programs are offered on a non-discriminatory basis

9–4. Nationwide, over the past 50 years, the Service easement program has grown to its current size of more than 3 million acres, which national wildlife refuge personnel successfully manage and monitor (https://portal.doi.net/usfws/realty/Reports/2012_Annual_Report_of_Lands_Data_Tables.pdf).

On approval, the BRWCA project will take several years to implement, allowing time for the Service to adjust staff levels accordingly. However, we will gratefully take the offer for technical assistance with monitoring into consideration for the future.

9–5. The Service feels that the selection of Bonneville cutthroat trout, greater sage-grouse, sage thrasher, wetland and riparian habitat, and the larger groups of species they represent will provide a large range of habitat types for potential acquisition of conservation easements with landowners. We will also be developing ranking criteria for evaluation of the individual parcels owned by landowners interested in selling an easement. Threats and the risk of development will be included in the criteria.

9–6. Thank you for your comments on the BRWCA project and your support for our effort to provide an additional conservation tool for interested landowners.

Comment number	LETTER 10 (nongovernmental organization)—Bear River Land Conservancy	RESPONSE

To: brwca_comments@fws.gov
Subject: Comment Form - Draft Land Protection Plan for Bear River Watershed CA
Date: 01/04/2013 01:19 PM

Name: Dave Rayfield, Board Chair
Organization: Bear River Land Conservancy

10–1 Comment: We are in support of this plan and feel our Land Trust would be a viable partner to help facilitate and manage easements in Cache, Rich, and Box Elder counties. **10–2** We are concerned about statements made in public meetings that seem to indicate a lack of understanding of how this will work and what is involved to get it done.

10–1. Thank you for your comments. We look forward to working with the Bear River Land Conservancy and the other numerous conservation organizations and partners in the watershed.

10–2. We appreciate your acknowledgement of the communication challenges involved in a watershed-level project. The Service recognizes that it will take time to develop understanding about the conservation easement program and the options that are available to landowners.

Comment number	LETTER 11 (nongovernmental organization)—Bear River Watershed Council	RESPONSE

Bear River Watershed Council

Leaders in Conservation Issues for the Bear River Basin

January 4, 2013

Amy Thornburg, Planning Team Leader
U. S. Fish and Wildlife Service
PO Box 25486
Denver, CO 80225-0486

Re: Public Comments for the Bear River Watershed Conservation Area

Dear Ms. Thornburg,

Thank you for the opportunity to submit comments on the proposed U.S. Fish & Wildlife Service's (Service) Bear River Watershed Conservation Area. The Bear River Watershed Council (BRWC) has been advocating for environmental protection for the Bear River Basin since 2001. Our mission is to help maintain the ecological integrity, protect biodiversity and restore native wildlife and habitat to one of the West's most important conservation corridors—the Bear River watershed.

11–1 BRWC fully supports the proposed Bear River Watershed Conservation Area as stated in the draft Environmental Assessment and Land Protection Plan. BRWC encourages the Service to
11–2 seek out and engage landowners that have been (or will be) identified as owning 'lands of significant wildlife habitat and conservation value' that protect and enhance the wildlife corridor that links the Greater Yellowstone Ecosystem and the High Uintas Wilderness area. In addition, BRWC, as a part of its mission, is willing to assist the Service in reaching out to these 'high value' landowners and engaging them as potential participants in the BRWCA.

11–3 BRWC commends the Service for proposing the Bear River Watershed Conservation Area and recommends that the Service approve it as proposed. Thank you for your time and attention, Ms. Thornburg.

Sincerely,

Mark Blaiser
executive director
Bear River Watershed Council

11–1. We agree that the Bear River watershed contains many important wildlife migration corridors, is one of the most important conservation areas in the West, and that working with private landowners will be essential to protecting it for the future

11–2. We look forward to working with the Bear River Watershed Council and the other conservation organizations and partners in the watershed.

11–3. Thank you for your comments on the BRWCA project and your support of our effort to provide an additional conservation tool for interested landowners.

LETTER 12 (nongovernmental organization)—**Greater Yellowstone Coalition,** page 1 of 6

Greater Yellowstone Coalition

People protecting the lands, waters, and wildlife of the Greater Yellowstone Ecosystem, now and for future generations.

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162 N. Woodruff Ave. • Idaho Falls, Idaho 83401 • (208) 522-7927 • www.greateryellowstone.org

December 17, 2012

Planning team leader
Amy Thornburg
U.S. Fish and Wildlife Service
Division of Refuge Planning
134 Union Boulevard, Suite 300
Lakewood, Colorado 80228
amy_thornburg@fws.gov

Project email: brwca@fws.gov

RE: Comments on the Draft Environmental Assessment and Land Protection Plan for the Proposed Bear River Watershed Conservation Area

To Whom It May Concern:

The following are the comments of the Greater Yellowstone Coalition ("GYC") on the draft environmental assessment ("EA") and Land Protection Plan ("LPP") for the Proposed Bear River Watershed Conservation Area ("BRW"). We appreciate the opportunity to comment on this proposal. GYC is a 501(c)(3) non-profit organization dedicated to protecting the wildlands, wildlife, and other outstanding natural resources of the Greater Yellowstone Ecosystem. GYC has offices in Idaho, Wyoming, and Montana with more than 27,000 members and supporters nationwide. GYC's members regularly use and enjoy the lands and waters of southeast Idaho for a variety of activities such as fishing, hiking, boating, hunting, wildlife viewing, spiritual renewal, biological and botanical research, photography, and other pursuits.

GYC has been involved with conservation issues in the BRW for more than 17 years, including conservation efforts on both public and private lands. Most notably GYC participated in the negotiations that led to the 2002 PacifiCorp Bear River Settlement Agreement ("SA") and is a signatory of that agreement. GYC is an active member of the Bear River Environmental Coordination Committee, which was established by the SA. We are also an intervener in the Federal Energy Regulatory Commission's licensing process for Twin Lakes Canal Company's proposed Bear River Narrows Dam and a successful protestant in defeating the state water right application for the proposed dam. In addition to these activities, GYC has been involved with other relevant issues including impacts in the BRW from public lands grazing, phosphate mining, oil and gas development, and protecting Forest Service roadless lands in the BRW.

Comment number	LETTER 12 (nongovernmental organization)—Greater Yellowstone Coalition, page 2 of 6	RESPONSE
12–1	GYC is supportive of conserving the lands, waters, and wildlife of the BRW. Our participation in the Bear River ECC is testament to this, including our support of acquiring conservation easements on private lands. However, unlike the proposed LPP, conservation easements acquired with ECC funding require legally binding, verifiable, and enforceable habitat protections and improvements. This requirement insures that easements funded by the ECC are truly "conservation" easements, not just cash payments to landowners, which allow them to continue business as usual. Unfortunately business as usual, particularly for agricultural operations, will generally fail to meet the goals noted in the EA and LPP. Those goals include the following: • maintain healthy populations of native wildlife species including migratory birds and threatened and endangered species; • protect and maintain water quality and quantity; • conserve aquatic, riparian, wetland, and upland habitats associated with the full diversity of Bear River ecosystems; • provide habitat connectivity and migratory corridors; • promote partnerships to coordinate implementation of watershed-level wildlife conservation actions; and • increase resiliency of the watershed to sustain wildlife and important habitat through climate and land use changes. EA at 8.	**12–1.** The Service recognizes that there is a variety of conservation easements options in the watershed. Unlike the Greater Yellowstone Coalition, Service easements will not have some of the stipulations required by Environmental Coordination Committee. Our minimally restrictive easement program will provide an option to the other programs with more restrictive easements that are currently available and will provide an additional funding source for landowners. It is generally accepted that reducing fragmentation is an important first step in conserving habitat in the Bear River watershed. If the conditions of Service easements are so restrictive that landowners are unwilling to participate, there is little chance for successful conservation on a landscape scale. The Service used a prioritization model, based on four focal species, to identify easement acquisition areas with the highest conservation value. We believe that by working with local conservation interests the Service can achieve its stated goals. The diversity and amount of wildlife currently found on private property is a testament to the importance of the agricultural community. The Service realizes that not all agricultural practices are beneficial to wildlife and that there has been habitat degradation due to agricultural use. Restoration and enhancement activities are accomplished with willing landowners through the Service's Partners for Fish and Wildlife Program to change management practices and improve habitat conditions. Examples of past Partners projects include fence and water developments that improve livestock grazing management, irrigation diversion upgrades that allow for traditional water withdrawal and fish passage in streams, and irrigation infrastructure rehabilitation to maintain and enhance created wetlands (refer to page 12 of the draft EA).
12–2	We believe that the LPP must insure that wildlife habitat values continue on properly managed land and thus must require changes to land management on the lands being placed under easement, such as changes in grazing management, fencing, water delivery, and other conservation measures that improve habitat. In order for conservation easements to be considered for funding from the ECC, it must be demonstrated that conservation values are maintained or improved. GYC suggests that the LPP include language that all conservation easements will include stipulations to meet the goals noted in the Purpose and Need sections of the EA and LPP. Easement stipulations should require, at a minimum: • maintenance of good quality fish and wildlife habitat (based on qualitative data), and • measurable improvements in habitat conditions on lands where improvement is needed. We believe that any easement approved under the LLP must meet these minimum standards for this proposal to be in the public interest.	**12–2.** Refer to response 12–1.
12–3	**Compliance with NEPA** Enacted upon "recognizing the profound impact of man's activity on the interrelations of all components of the natural environment," the National Environmental Policy Act ("NEPA") seeks to "promote efforts which will prevent or eliminate damage to the environment." 42 U.S.C. § 4331; id. § 4321. NEPA implements its environmental protection objectives by requiring federal agencies to analyze the environmental impacts of a particular action before committing resources to the project. Id. § 4332(2)(C). "By focusing both agency and public attention on the environmental effects of those proposed actions, NEPA facilitates informed	**12–3.** LPPs for large conservation areas typically have two alternatives: (1) a no-action alternative (no acquisition); or (2) an acquisition option to establish a new unit of the Refuge System. In some cases, the acquisition option includes the purchase of fee-title land from willing sellers. Early conversations with landowners within the BRWCA indicated little to no support for fee-title acquisition.

Comment number	LETTER 12 (nongovernmental organization)—Greater Yellowstone Coalition, page 3 of 6	RESPONSE

12–4

decisionmaking by agencies and allows the political process to check those decisions." New Mexico v. Bureau of Land Mgmt., 565 F.3d 683, 703 (10th Cir. 2009). NEPA requires the U.S. Fish and Wildlife Service ("Service") to take a "hard look" at all of the potential environmental consequences of the LPP – direct, indirect and cumulative – and the consequences of connected actions. 40 C.F.R. § 1500.1(b). "The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment." Id. § 1500.1(c).

As a general observation, the EA does not disclose and analyze the effects of the proposed LPP, but rather it provides a description of the LPP. It appears to GYC that the Service first developed the LPP and then cut and pasted it into the various sections of the EA. We make this observation based on the fact that outside of some formatting difference, the EA and LPP are virtually identical documents. We do not believe the product of this process, and therefore the EA, comports with NEPA's requirement that the Service take a "hard look" at the effects of the proposed LPP.

In order for the EA to meet NEPA's fundamental requirement to take a "hard look" at the effects of the LPP, the Service should provide a true analysis of the direct, indirect, and cumulative impacts anticipated.

Purpose and Need

12–5

The EA would lead the public to believe that through selecting Alternative B (the proposed action) and implementing the LPP, nearly 1 million acres of land within the watershed will be protected. In contrast the EA suggest that not going forward will spell doom for the watershed. Both suppositions could be true, however, it appears that simply selecting Alternative B and implementing the LPP would not necessarily lead to the outcomes the Service suggests or hopes for. For example, in describing the benefits of Alternative B the EA states:

> "Development for residential, commercial, or industrial purposes such as energy and aggregate extraction would not be permitted on properties under a conservation easement. Alteration of the natural topography and conversion of native grassland, shrubland, wetland, and riparian lands to cropland would be prohibited. Conservation easements would prohibit the draining, filling, or leveling of protected lands."

EA at 15. Other information contained within the EA, however, contradicts this statement. As examples, the EA notes:

- "Existing uses of the proposed lands would continue to have some negative effects on soils. On lands zoned for agriculture, soil problems such as compaction, trampling, and erosion caused by farming equipment, cattle grazing, and vehicle use on range lands would continue." EA at 40.
- "The proposed easement program would preclude mining and oil and gas exploration or development requiring surface occupancy on easement land ***only*** when the landowner owns the subsurface rights. In many places, including the Bear River watershed, the subsurface estate has been severed from surface ownership, and the landowner does not own the subsurface rights." EA at 45 (emphasis added).

12–4. The intensity and timing of effects from alternative A, the no-action alternative, would vary by the location within the watershed. The intensity of development would be much greater and would occur sooner in the Cache Valley than in the more rural areas. The Service also used The Nature Conservancy's Comprehensive Action Plan and Utah State University's report, "Maintaining the Bear River Migratory Bird Refuge," as part of the prioritization and threat analysis for the watershed.

The level of impact from alternative B would be greatly dependent on the degree of completeness the program achieved. If only a small acreage was conserved through the easement program, the long-term effects would be negligible (refer to page 49 of the draft EA).

For BRWCA, as for other land protection projects, an environmental assessment had to be developed first so the information in it can be used for project analysis and to determine the acquisition priorities required for the LPPs. Since the BRWCA LPP is the final decision document, the information contained in the EA was brought forward into the LPP to provide background for the prioritization and spatially explicit modeling used for the project.

12–5. The following text from the draft EA and LPP refers to the development of new infrastructure and to conversion from current uses to different uses.

> "Development for residential, commercial, or industrial purposes such as energy and aggregate extraction would not be permitted on properties under a conservation easement. Alteration of the natural topography and conversion of native grassland, shrubland, wetland, and riparian lands to cropland would be prohibited. Conservation easements would prohibit the draining, filling, or leveling of protected lands." (Refer to page 16 of the draft EA and page 126 of the draft LPP.)

Service easements would be acquired largely on agricultural lands. The text excerpt below was included in "effects common to both alternatives" because some impacts would be anticipated from agricultural operations regardless of whether there is

Comment number	LETTER 12 (nongovernmental organization)—Greater Yellowstone Coalition, page 4 of 6	RESPONSE

- "Most land with potential for wind energy development in each State would still be available under the proposed action." EA at 45.

12–6 It appears that the primary impact to lands, waters, and wildlife within the BRW that the LPP might prevent if approved and implemented would be slowing down the conversion of agricultural lands to residential and commercial uses. This may be a laudable goal; however as the EA also makes clear, the wildlife values of agricultural lands have already been degraded, and will continue to be degraded even if the LPP is implemented. Furthermore, the preservation of agricultural lands and lifestyles is not one of the purposes for the action. EA at 8. It appears that if the primary purpose of implementing the LPP is to conserve agriculture and agricultural lands, then the Service is obligated to inform that public of that fact in the purpose and need statement.

12–7 As noted, preventing the conversion of agricultural lands to other types of development may be a laudable goal; however the threat to agricultural lands from conversion to other uses is most likely restricted in geography within the BRW. The EA and LPP ignore this fact, however, repeatedly stating generally that "[p]opulation growth is expected throughout much of the region, with most of the growth centered in the Cache Valley." EA at 35, 39, 49; LPP at 87, 98. The LPP would be a much improved and useful document if it identified which lands are most at risk. To do this the LPP should first determine where those lands are, the threats to them, and the actions required (such as easements) to conserve those lands. That information could then have been used in the EA's analysis.

12–8 As presented in the LPP and EA, much of the money for easements could be spent on rural lands that have little if any threat from development simply because the costs of easements on those lands would be less than on lands under more intense development pressures. EA at 39. We suggest that the Service add a section in the LPP which identifies those areas within the BRW that are most at risk and provide a ranking system that prioritizes funding for easements on those at-risk lands. This prioritization requirement should also include a ranking by the Service of lands within the BRW that have the highest fish and wildlife values. The draft EA should then be amended to explain (disclose) the ranking system and the effects of the ranking system on land conservation in the BRW.

Alternatives

12–9 The specific requirements of NEPA have been laid out more precisely in longstanding regulations issued by the Council on Environmental Quality. They require that federal agencies shall "[u]se all practicable means, consistent with the requirements of the Act and other essential considerations of national policy, to restore and enhance the quality of the human environment and avoid or minimize any possible adverse effects of their actions upon the quality of the human environment." 40 C.F.R. § 1500.2(f). As part of this policy, agencies shall "[u]se the NEPA process to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment." Id. § 1500.2(e).

The alternatives section "is the heart of the environmental impact statement." Id. § 1502.14. This section requires federal agencies to "[r]igorously explore and objectively evaluate all

an easement. (Refer to response 12–1 for habitat improvement and assessment process information.)

"Existing uses of the proposed lands would continue to have some negative effects on soils. On lands zoned for agriculture, soil problems such as compaction, trampling, and erosion caused by farming equipment, cattle grazing, and vehicle use on range lands would continue."

The Service wants to purchase conservation easements on lands with high wildlife value. Mineral development is typically disruptive to these values. Therefore, the Service will seek easements where the probability of mineral development is low or the surface owner retains the subsurface rights. In cases where the surface owner retains the mineral rights below their property, the conservation easement will prohibit the exploration, development, or extraction of minerals on or below the surface.

Within much of the Bear River watershed, surface rights and mineral rights are under separate ownership. The owners of subsurface rights must be provided reasonable access to the surface for exploration and extraction activities; however, they are required to negotiate with the surface owners to devise a strategy that minimizes impacts to surface values.

Should the Service become interested in property where the mineral rights are owned by a third party, we will assess the potential for mineral development. If it is determined that the likelihood of mineral extraction is acceptable, the Service will move forward with purchase of a conservation easement. Once the Service purchases an easement on a piece of property, we gain standing in negotiations with the mineral developers. Should a developer propose exploration or extraction activities, we will work with the landowner to help ensure that all activities are carried out in a manner that minimizes impacts to surface values.

12–6. Based on available information from State fish and game agencies, the Intermountain West Joint Venture, the North American Waterfowl Management Plan, and the three national wildlife refuges in the watershed, the Service believes there are many areas of high-quality habitat on private lands that benefit wildlife including the four focal wildlife species. The mission of the Refuge System is to administer a national network of lands and

Comment number	LETTER 12 (nongovernmental organization)—Greater Yellowstone Coalition, page 5 of 6	RESPONSE

reasonable alternatives," and compare the environmental impacts of each alternative course of action. Id. § 1502.14(a). Thus, at the earliest possible time in the process, NEPA calls on agencies to "[s]tudy, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources . . . ." Id. § 1501.2(c). For those alternatives eliminated from detailed study, the NEPA document must briefly discuss the reasons for their elimination. Id. § 1502.14(a).

12–10 The LPP seems to be designed to get the smallest bang for the buck. The LPP as described in the EA is poised to allow "business as usual" on agricultural lands, along with all the accompanying impacts that currently occur on those lands. The LPP also proposes the expenditure of hundreds of millions in public funds to acquire easements yet there would be no guaranteed public access to lands. It is difficult to determine just exactly what the public receives, outside of views of "working" agricultural lands from the highway, for these hundreds of millions of dollars.

12–11 The EA only includes this proposed action and the required no-action alternative, which does not appear to meet NEPA's requirement to include a reasonable range of alternatives. Given NEPA's requirement, the EA should include an alternative which analyzes the purchase of both easements and fee-title acquisitions of lands important to fish and wildlife. Importantly fee-title acquisitions would provide more protections than easements since the Service could then remove grazing, cropping and other agricultural practices that harm fish and wildlife habitat.

Easement Monitoring

12–12 One significant omission in the EA and in the LPP is the failure to discuss funding mechanisms the Service will need to ensure the conditions and stipulations of easements are being followed. Specifically, how will stewardship activities for easements be funded in perpetuity? While the EA notes that monitoring of easements is part of the LPP, there is virtually no discussion of what this monitoring consists of and what will result from noncompliance with easement conditions. The entire discussion of stewardship monitoring consists of one sentence repeated in several places in the EA and LPP: "Monitoring activities would include periodically reviewing land status through correspondence and meetings with the landowners or land managers to make sure that the stipulations of the conservation easements are being met." EA at 16.

More troubling is how the EA downplays the costs associated with the monitoring of easements. Clearly, the costs associated with monitoring easements are much more than "such as expenditures for fuel and staff for monitoring." EA at 48; LPP at 97. For example, GYC's limited experience with long-term monitoring and compliance costs associated with conservation easements on relatively small parcels of land placed under easement – one thousand acres or less – can cost $30,000 to $50,000. While there may be efficiencies of scale for larger tracts of land, it would seem that the costs of monitoring and enforcing stipulations could be in the hundreds of thousands of dollars, perhaps more. The EA should provide a discussion of this issue with an accounting of where funding for such monitoring would come from, and the certainty, or lack of certainty, for that funding.

Easement Enforcement

12–13 As a subset of easement monitoring, the EA and LPP should also provide a description of the mechanisms the Service will employ to insure compliance with the terms and stipulations of

waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans. For the BRWCA project, conservation easements will be sought where there is a congruence of high-quality wildlife habitat, willing sellers, and available funding. The highest quality habitat that is suitable and appropriate for conservation is largely located on agricultural lands. As noted on page 6 of the draft EA, it is recognized that "private lands are heavily used by wildlife and that properties that are adjacent to public lands provide crucial migration corridors and linkages to a variety of habitats. As climate conditions and land use patterns change over time, many key off-refuge habitat areas will likely become both increasingly important for wildlife and increasingly subject to development pressures."

12–7. It is difficult to forecast long-term growth patterns along with changes in climate and shifts in wildlife population distributions. The acquisition prioritization model (refer to figure 14 on page 113 of the draft LPP) seeks to select areas of the highest predicted population of the four focal species in the areas of lowest human impact (such as roads, development, and power lines). The BRWCA project will likely require decades to fully implement and will require ongoing evaluation of threats and conservation priorities. Ranking criteria will provide additional detail that includes an assessment of threats and will be used to ground truth the acquisition priorities.

12–8. The possible terms, conditions, and requirements of Service conservation easements, along with ranking criteria and priorities in general, for the BRWCA project were discussed extensively in all of the public meetings. The final conservation easement document, along with the ranking criteria developed by the refuge and realty staffs, will incorporate the requirements and biological needs of the trust wildlife resources in the BRWCA with what landowners have indicated through comments at meetings and in letters that will be acceptable to them. Also, refer to response 12–7 above.

12–9. The National Environmental Policy Act document for the BRWCA is an environmental assessment, not an environmental

Comment number	LETTER 12 (nongovernmental organization)—Greater Yellowstone Coalition, page 6 of 6	RESPONSE

conservation easements. The Service should make it clear to the public, and to the landowners with whom it enters into easements, that the stipulations in easements are perpetual and enforceable. This section should also disclose that there are legal avenues the Service can and will take to enforce easements in order to protect the public's interest.

Omission of References

12–14 The EA should be redrafted to insure that statements made as fact are substantiated by appropriate references. As it is, many statements are made about the positive effects of the proposed action without benefit of a reference. The "Bibliography" included with the EA and LPP appears to be little more than a list of documents, technical reports, and publications which may or may not be relevant to the information contained in the reports.

Accuracy of Information in the EA

12–15 Two minor issues that need to be remedied include misstatements about grizzly bears and phosphate. In several places the EA notes that the threatened grizzly bear occurs within the

12–16 BRW. See EA at 3, 7, 8, 32, and 33. GYC, organizationally, follows grizzly bear issues very closely across the Greater Yellowstone Ecosystem and we are unaware of any sightings or other information that indicates there have been grizzly bears within the Bear River watershed since they were listed in 1975.

12–17 Elsewhere the EA states that 40 percent of U.S. phosphate reserves are located in southeastern Idaho. EA at 49. That is not the case. Southeast Idaho phosphate reserves account for only about 14 percent of U.S. reserves.[1] If these two erroneous, yet easily verifiable facts are included in the EA, we have to assume there may be other inaccuracies that place in question whether the EA meets NEPA and CEQ requirements that the Service take a "hard look" at the environmental issues relevant to this proposal.

Thanks for the opportunity to comment.

Sincerely,

Marv Hoyt
Idaho Director

[1] See http://minerals.usgs.gov/minerals/pubs/commodity/phosphate_rock/mcs-2012-phosp.pdf Last viewed December 12, 2012.

impact statement, and therefore has different requirements than what were cited for an environmental impact statement by the commenter. The decision of whether to establish a new unit—in this case, a conservation area—of the Refuge System is a decision about whether to proceed with establishment or not. Thus, LPPs for conservation areas typically involve two alternatives: (1) a no-action (nonacquisition alternative); and (2) an acquisition option that will establish a new unit of the Refuge System.

When the decision to establish a new refuge is being made, Service policy is to acquire land only when other means, such as zoning or regulation, of achieving project conservation goals and objectives are not appropriate, available, or effective. When lands are to be acquired, the minimum interest necessary to reach management objectives is considered. If fee title is required, full consideration will be given to extended-use reservations, exchanges, or other alternatives that will lessen the impact on the landowner and the community.

The BRWCA project will use voluntary conservation easements that are acquired from willing sellers only. The easement program will, to a large extent, maintain the existing conditions for the landowners and the general public, will not significantly affect the human environment, and will not have a close causal connection to a change in the physical environment (40 CFR 1508.27).

12–10. While the Service's minimally restrictive easements do not require landowners to provide access to the property, the easements will help to sustain habitat and important migration corridors for wildlife populations so that wildlife viewing, hunting, and fishing opportunities remain available throughout the area for future generations. Also, refer to responses 12–1 and 12–7.

12–11. Refer to responses 12–1, 12–7, and 12–9.

12–12. Properties with Service easements are monitored annually to verify compliance, and the method of monitoring varies by location and terrain. In the open terrain of the Dakotas, much of the monitoring can be done by flying over the easement properties. In mountainous terrain of Montana where there are fewer easements, the refuge manager usually has a face-to-face meeting with landowners once a year. Landowners can

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contact refuge staff with questions or concerns as they arise. The BRWCA project will take decades to implement, and initially the three existing refuge staffs could conduct the annual monitoring using Refuge System base funding.

Preliminary planning for the project identified the need for additional staff and for funding to support operational costs. The project's overall operational costs will depend on the number of easements and landowners participating in the program. Depending on the availability of funding and interested landowners, additional staff may be required.

12–13. Refer to response 12–12 above. Reference to the perpetual nature of Service easements is made in more than ten places in the draft EA and LPP. In addition, there was extensive discussion about this topic during the six public scoping meetings and the six public comment meetings on the draft EA and LPP. The conservation easement document will also state that the agreement is perpetual in nature.

12–14. The Service's planning team included appropriate references throughout the draft EA and LPP documents wherever they were relevant and required. Additional clarification can be provided for the commenter if there are specific instances where more information is required.

12–15. Grizzly bears are listed as being present in Lincoln County, Wyoming, in the southeastern portion of the watershed and, therefore, were considered in the development of the EA and LPP documents and in the Endangered Species Act section 7 consultation for the BRWCA project (http://ecos.fws.gov/tess_public/countySearch!speciesByCountyReport.action?fips=56023).

12–16. Different terminology is used in the two reports. Based on a report from the Idaho Department of Environmental Quality, the EA states that nearly 40 percent of the U.S. phosphate reserve is located in southeastern Idaho, whereas the U.S. Geological Survey report cited by the commenter refers to the amount of phosphate rock ore that was mined by six firms.

12–17. Thank you for your comments.

Comment number	LETTER 13 (nongovernmental organization), National Wildlife Refuge Association, page 1 of 2	RESPONSE

National Wildlife Refuge Association

January 4, 2013

Dan Ashe, Director
United States Fish & Wildlife Service
1849 C Street, NW
Washington, DC 20240

Noreen Walsh, Regional Director
United States Fish & Wildlife Service
Mountain-Prairie Region
PO Box 25486
Denver, CO 80225-0486

Robyn Thorson, Regional Director
United States Fish & Wildlife Service
Pacific Region
911 NE 11th Avenue
Portland, OR 97232

Re: Bear River Watershed Conservation Area

Dear Director Ashe and Regional Directors Walsh and Thorson:

The National Wildlife Refuge Association (NWRA) is pleased to submit the following comments on the Draft Environmental Assessment and Land Protection Plan for the Bear River Watershed Conservation Area (BRWCA) in Utah, Wyoming and Idaho.

13–1 The resident and migratory wildlife of the Bear River Watershed, and the ranchers, farmers, sportsmen and urban and rural citizens that rely on the landscape for their livelihoods and quality of life, face a common threat. Population growth in the watershed has jumped by double-digit percentages in Wyoming and Idaho since 2000. The Cache Valley in Utah has grown by 64% since 2000, and is expected to double by 2050. Water quality and quantity have already been adversely affected by this growth, and many wildlife species have felt the impact of declining range and degraded habitat. This 4.5-million-acre watershed – where the health of the natural environment and the wildlife that depend on it are so closely entwined with a regional culture and traditional way of life – is exactly the type of landscape where the U. S. Fish & Wildlife Service should be creating collaborative conservation areas that offer creative and balanced solutions to these issues. We enthusiastically support the Bear River Watershed Conservation Area proposal.

Landscape-scale conservation initiatives such as the BRWCA rely on broad partnerships between federal and state agencies, landowners, nonprofit organizations and other stakeholders to achieve meaningful conservation outcomes. NWRA supports the partnership objectives articulated in the Draft Environmental Assessment, and we encourage the Service's continued leadership in fostering a culture of collaboration among agencies in the federal family for the benefit of the watershed. We commend you on forwarding a plan that brings together two regions, three states, three existing national wildlife refuges, and many public and private partners.

5335 Wisconsin Avenue NW, Suite 521, Washington, DC 20015 ■ 202-417-3803 ■ www.refugeassociation.org ■ CFC #10076

13–1. The Service agrees that the challenges and opportunities in Bear River watershed will require strong collaborative partnerships with State and Federal agencies, organization, and landowners to deliver successful landscape-scale conservation. We look forward to working with NWRA on the efforts to develop a conservation easement program.

Monitoring of easements and the long-term commitment to working with landowners are essential to the success of the program. While BRWCA would take decades to implement, and initially the annual monitoring could be conducted by the three existing refuges staff using Refuge System base funding. As funding becomes available and the number of interested landowners grows, additional staff may be required.

Comment number	LETTER 13 (nongovernmental organization), National Wildlife Refuge Association, page 2 of 2	RESPONSE

Secretary Salazar
Director Ashe
January 4, 2013
Page 2

Conservation easements are the right land protection tool for the Bear River watershed. Ranchers and farmers in the West have a legacy of exceptional land stewardship, and sportsmen and conservationists throughout the region have long-recognized that the majority of wildlife conservation objectives can be achieved by keeping ranchers and farmers on their land, and their land in productive use. Conservation easements are achieving broad acceptance throughout the country as an alternative to full fee public land ownership. This approach brings landowners into the project as partners rather than opponents. Because of the BRWCA proposal's exclusive reliance on good management practices on private lands, it is essential that the conservation easement terms encourage landowner participation by addressing the pragmatic operational needs of landowners while also providing and protecting habitat values. NWRA hopes to continue to work with the regional leadership and refuge managers in the watershed to help craft conservation easements for the BRWCA that achieve an effective balance between wildlife protection objectives and the operational needs of landowners.

As the use of conservation easements grows within the Refuge System, it is important that the agency supports the infrastructure for effective easement monitoring and enforcement. When the United States acquires a conservation easement, it also acquires the permanent obligation to work with the landowner across the range of easement terms. Growth in the number of easements will add to the scope and complexity of this obligation. The emphasis should rightly be placed on monitoring – the investment of staff resources in the development and maintenance of trusting relationships with landowner partners – so that enforcement issues are minimized. Problems between easement partners are far easier to prevent than they are to solve.

13–2 Thank you for this opportunity to comment on the Draft Environmental Assessment and Land Protection Plan. The regional leadership in Regions 6 and Region 1, as well as National Wildlife Refuge System staff at Bear River Migratory Bird Refuge, Cokeville Meadows National Wildlife Refuge and Bear Lake National Wildlife Refuge and the Southeast Idaho Complex, has done a superb job on the planning, drafting, outreach and public rollout of this proposal. We congratulate them for their effort, and we strongly support the creation of the Bear River Watershed Conservation Area.

Very truly yours,

David Houghton
President

13–2. Thank you for your comments on the BRWCA project and for your support and partnership in the effort to provide an additional conservation tool for interested landowners.

Comment number	LETTER 14 (nongovernmental organization) Name of Organization: Sagebrush Steppe Land Trust, page 1 of 6	RESPONSE

sagebrush steppe
LAND TRUST

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Sagebrush Steppe Land Trust is a private, nonprofit 501(c)(3) charitable organization incorporated in 2004, and a "qualified organization" within the meaning of section 170(h)(3) of the IRS Code.

Federal Tax Identification Number: 82-6092501.

Working to protect and enhance our quality of life, now and for future generations, through conservation of natural and working landscapes in Southeastern Idaho.

123 N Main, Suite 4
PO Box 1404
Pocatello, Idaho 83204
(208) 241-4662
www.sagebrushlandtrust.org

December 21, 2012

Amy Thornburg
Planning Team Leader
National Wildlife Refuge System, Region 6
US Fish and Wildlife Service
PO Box 25486
Denver, CO 80225-0486

RE: Public comment for Proposed Bear River Watershed Conservation Area

Dear Ms. Thornburg,

This letter is in response to the US Fish & Wildlife Service (Service) public meetings that have been held in regarding the Draft Environmental Assessment and Land Protection Plan (Document) for the proposed Bear River Watershed Conservation Area (BRWCA). The Sagebrush Steppe Land Trust (SSLT) is generally in favor of the proposed BRWCA; however, SSLT is concerned that some information presented at the public meetings contradicts the Service's Proposed Action within the Document. SSLT strongly urges that solutions to remedy this situation be put in place.

Additionally, SSLT would like to comment on the conservation easement acquisition and monitoring procedures, as well as the Landscape Conservation Cooperatives (LCCs). The comments provided in this letter are based upon information presented at the public meetings in Montpelier, Idaho on December 6, 2012 and Preston, Idaho on December 7, 2012. Our comments have been broken into three general areas:

1. Conservation Goals and Objectives
2. Conservation Easement Acquisition and Monitoring
3. Landscape Conservation Cooperative

14–1

1. Conservation Goals and Objectives

Some statements made by the Service during the public meetings are in direct conflict with the information represented in the Document.

During the public meetings, it was clearly and repeatedly stated that the purpose of the Service's conservation easement program is to stop residential development. In response to this statement at the Preston meeting, one owner claimed he has mostly river bottom land, which floods on a regular basis. He then asked whether his land would be eligible for an easement. The answer the Service provided was "yes," although it would not rank high within the Service ranking system since it is not readily developable. This response conflicts with the Document, which states that,

> "The ***main considerations*** in acquiring an easement interest in private land are the biological significance of the area, the biological needs of wildlife species of management concern, existing and anticipated threats to wildlife resources, and landowner interest in the program." (Page 12)

14–1. The Service regrets that there was any confusion about the easement program; some of the confusion may come from the terminology Although river bottom lands and floodplains make up a small percentage of western landscapes, they generally provide important habitat for a number of wildlife species and would likely rank out as high priorities for the conservation easement program. Since the development right is what is being purchased, the appraisal value will reflect the value of the development potential of a floodplain, which is generally lower than uplands that can be readily developed.

Comment number	LETTER 14 (nongovernmental organization) Name of Sagebrush Steppe Land Trust, page 2 of 6	RESPONSE

To further emphasize their answer to the landowner, the Service representatives provided a metaphor of landowner rights as a "bundle of sticks," with each stick being an individual right. The Service claimed their main interest is the development rights stick. This contradicts the intent of the easement program as it is written in the Document. For example, the Document state that:

> "The importance of riparian habitat to wildlife far exceeds its abundance," and,

> "Although riparian areas occupy only a small portion of the total landscape in the western United States, they tend to be more productive than other ecosystems." (Page 76)

The Document also states that,

> "Retaining the role of riparian habitats in providing travel corridors for wildlife would become an increasingly important part of effective mitigation plans for human development…**The Bear River is the lifeblood of the three national wildlife refuges located along the course. Large populations of water fowl, shore birds and native fish depend on the refuges and adjacent habitat areas to meet their breeding, mitigation and feeding needs. The proposed action would protect privately owned wetlands, irrigated meadows, and fields that now provide wildlife habitat."** (Page 42)

Given the scarcity and high value of riparian property, it appears the criteria presented at the public meetings of the Service only considering surface development rights in regards to conservation easement purchases is inadequate and does not coincide with the program's intent.

A landowner also asked if the Service program would allow "chaining or dragging" sagebrush to create more grass for grazing. The answer provided was ambiguous; suggesting that the landowner could negotiate with the easement manager at a date after the easement is in place. The answer provided may be in direct conflict with the Document, which states that,

> "Alteration of the natural topography and conversion of native grassland, shrub land, wetland and riparian land to crop land would be prohibited." (Page 15)

14–2 Converting sagebrush to grass by dragging would be destructive to the natural condition of the habitat. Conversion of shrub land to grass land specifically is not addressed and most certainly will lead to conflict and legal challenges. The question regarding the alteration of shrub land to create more grazing **was not answered. Unless this question is clearly and definitively answered within the terms of the** conservation easement, the easement is open for judicial interpretation.

14–3 Questions concerning subsurface rights and their effect on conservation easements were asked during both public meetings. In particular, one landowner has leased his oil and gas rights for exploration for five years and was wondering if he would still be able to sell a conservation easement. The Service responded by saying that the Service recognizes oil and gas exploration as real issues and exploration will not affect a landowner's ability to place a conservation easement on the property. Conversely, the Document states that,

> "Now, the greatest threat to grasslands and sagebrush ecosystems come from oil and gas development, increasing urban agricultural development and invasive species." (Page 29)

Additionally, the Document states that,

14–2. While the conservation easement document is still being developed, as stated by the commenter, the wholesale "alteration of natural topography and conversion of native grassland, shrubland, wetland and riparian lands will be prohibited." In some cases, vegetation treatments, such as for restoration activities or invasive plant control, may be needed to improve habitat for wildlife. An easement will allow vegetation management activities that the Service determines are beneficial to wildlife and their habitats and are compatible with the purposes of the easement. Written approval would be required before conducting the vegetation management.

14–3. The following language on mineral rights has been added in the final EA to provide clarification:

The Service wants to purchase conservation easements on lands with high wildlife value. Mineral development is typically disruptive to these values. Therefore, the Service will seek easements where the probability of mineral development is low or the surface owner retains the subsurface rights. In cases where the surface owner retains the mineral rights below their property, the conservation easement will prohibit the exploration, development, or extraction of minerals on or below the surface.

Within much of the Bear River watershed, surface rights and mineral rights are under separate ownership. The owners of subsurface rights must be provided reasonable access to the surface for exploration and extraction activities; however, they are required to negotiate with the surface owners to devise a strategy that minimizes impacts to surface values.

Should the Service become interested in property where the mineral rights are owned by a third party, we will assess the potential for mineral development. If it is determined that the likelihood of mineral extraction is acceptable, the Service will move forward with purchase of a conservation easement. Once the Service purchases an easement on a piece of property, we gain standing in negotiations with the mineral developers. Should a developer propose exploration or extraction activities, we will work with the landowner to help ensure that all activities are carried a manner that minimizes impacts to surface values.

Comment number	LETTER 14 (nongovernmental organization)—**Sagebrush Steppe Land Trust,** page 3 of 6	RESPONSE

"Development for residential, commercial, or industrial purpose, such as energy and aggregate extraction would not be permitted on properties under the conservation easement. (Page 15)

According to the Document,

"The proposed easement program would preclude mining, oil and gas exploration or development requiring surface occupancy on easement land only when the landowner owns the subsurface rights. In many places, including the Bear River Watershed, the subsurface estate has been severed from surface ownership, and the landowner does not own the subsurface rights. In these cases, the easement the Service acquires from the landowner is junior to the subsurface rights.

For easements that have been put in place on land where the owner has not sold or leased the mineral subsurface estate, the Service easement would be senior to any subsurface interests later acquired by a developer. Because development of the mineral estate could significantly change the resources the Service is attempting to protect, the Service would require that the developer access mineral from offsite as a term of the easement." (Page 45)

14–4 Not only is this in conflict with the development rights "bundle of sticks" metaphor used at the public meetings, but it also creates a ridiculous situation with the logical solution being either to sell or lease the subsurface estate before attempting to sell a conservation easement. Any landowner who controls both surface and subsurface rights would want to be as whole as a landowner who only owns the surface right. The intent of not allowing surface development is admirable, but unless the service is willing to buy another "stick," (subsurface rights) the approach is not practical.

"The proposed action would help valuable ecosystem services.....Further more it would eliminate the need for expensive restoration of disturbed land and habitat." (Page 46)

The attempt to save on expensive restoration by purchasing a surface right and trying to eliminate a subsurface right without incurring a cost is patently unfair to the landowner who owns surface and subsurface rights.

14–5 The landowners, farmers, and ranchers are our neighbors, friends and associates. They are current stewards of the land and, as such, they need to be respected and given complete and truthful answers to their questions and the effects of the Service program.

The SSLT mission is complementary to the effort being put forth by the Service. But the misinformation disseminated at the Service public meetings is greatly concerning. In order for SSLT to accomplish our work, trust with the landowners and the community is paramount. Land conservation is not as simple as pulling one stick from a bundle. Long-term land conservation uses conservation easements as one piece in an ongoing effort to maintain and preserve native habitats and ecosystems. Landowners need to understand these conservation measures and must be committed to them, least our efforts are spent enforcing easements rather than achieving lasting conservation outcomes. The Service reinforces this reality by stating that,

"If effective land conservation measures are not employed, certain farming practices may adversely affect wetlands. Sediment runoff from tilled fields and heavily grazed pastures decrease the life of ponds and wetlands and impair water quality." (Pages 29 and 79)

14–4. According to the "Uniform Appraisal Standards for Federal Land Acquisition," 41 CFR 114–50.305(c), private property or property rights shall not be purchased without just compensation. The Service is required to conduct fair-market appraisals on all land transactions to protect both private and public interests. The rights being acquired for conservation easements are "development rights" and, by law, that is what must be used to determine easement value. BRWCA is a voluntary program; landowners that consider it unfair would be able to choose other programs that may better suit their needs. (Also, refer to response 14–3.)

14–5. The BRWCA team has worked with a number of agencies and conservation organizations through a variety of outreach methods, including 12 public meetings, to provide information that is as complete and consistent as possible and to minimize misunderstanding. While there may be some points of confusion with such a large complex project, the Service respectfully disagrees with the statement that misinformation was disseminated at the public meetings. Trust, credibility, and commitment are essential for the long-term success of any conservation program including BRWCA.

The Service very much respects the landowners and their legacy of wildlife habitat conservation in the Bear River watershed. The Service's easement program has grown to include easements on more than 3 million acres over the past 50 years. While the conservation program is not as simple as "pulling one stick out of the bundle," the minimally restrictive easements have been successful in preserving native habitat and ecosystems in a number of areas.

Comment number	LETTER 14 (nongovernmental organization)—**Sagebrush Steppe Land Trust,** page 4 of 6	RESPONSE
14–6	The key phrase "effective land conservation measures" is critically important and requires a holistic view of the property being considered for an easement. SSLT works with the existing land stewards to develop mechanisms to ***promote*** conservation, which allows the stewards to farm and ranch their property. The conflicts between the Document and the Service's public presentation need to be resolved. Should this effort go forward allowing discrepancies between verbal promises and actual offers, there will be large scale mistrust from landowners towards conservation across the watershed, making both our jobs harder or impossible., and meaningful conservation outcomes harder to achieve.	**14–6.** The Service looks forward to working with organizations and land stewards, including the Sagebrush Steppe Land Trust, to promote conservation. The Partners for Fish and Wildlife Program helps to further develop effective land conservation measures with interested landowners in the watershed. (Also, refer to response 14–5.)
14–7	2. Conservation Easement Acquisition and Monitoring The Service should partner with local land trusts for easement acquisition, baseline preparation, and monitoring in order to achieve the protection of conservation values presented within the Document and to promote partnerships. On page 102, the Document provides a summary of the LPP "Objectives and Action": The purposes of establishing the Bear River Watershed Conservation Area are to: • maintain healthy populations of native wildlife species, including migratory birds and threatened and endangered species: • protect and maintain water quality and quantity; • conserve aquatic, riparian, wetland, and upland habitats associated with the full diversity of Bear River ecosystems; • provide wildlife habitat connectivity and migratory corridors; • **promote partnerships to coordinate implementation of watershed-level wildlife conservation actions;** • increase the resiliency of the watershed to sustain wildlife and important habitat during climate and land use changes.	**14–7.** Promoting partnerships to coordinate implementation of watershed-level wildlife conservation actions has been essential in the planning and development of the BRWCA project thus far and will be crucial to the long-term success of the program.
14–8	As a land trust, we are in the business of negotiating, implementing and monitoring conservation easements. One effective approach to meeting your goal of promoting partnership is to work with the existing land trusts in Wyoming, Idaho, and Utah to negotiate easement and conservation values, prepare proper baselines, and contract long term monitoring. The easements would be held by the Service and the selection of properties would be controlled by the Service, but the day-to-day work would be accomplished by local existing land trusts. There are examples of working models, such as the Bureau of Land Management working with a local land trust to negotiate, document and monitor easements along the South Fork of the Snake River on their behalf. Land trusts are dependent upon the landowners and residents of each service area. Land trusts work with landowners to understand and promote conservation, partly by making landowners active members of the land trusts. Landowners who simply sell an easement and are not engaged in the conservation	**14–8.** The Service looks forward to continuing to work with other conservation partners and stakeholders on a variety of efforts in the area. We will be responsible for the negotiation, documentation, and monitoring of easements using Service funding. In addition to documentation of baseline conditions, properties with Service easements are monitored annually to verify compliance. The method of monitoring varies by location and terrain. In the open terrain of the Dakotas, much of the monitoring can be done by flying over the easement properties. In the mountainous terrain of Montana where there are fewer easements, the refuge manager usually has a face-to-face meeting with landowners once a year. Landowners can contact refuge staff with questions or concerns as they arise.

Comment number	LETTER 14 (nongovernmental organization)—**Sagebrush Steppe Land Trust,** page 5 of 6	RESPONSE

process tend to forget why the easement is in place and eventually view it as a costly mistake. Landowners who become engaged in conservation are on the ground spokesmen for the cause.

Regarding SSLT's approach to baseline documentation, SSLT's is considerably more thorough and more useful than simple photo documentation.

The Document states that,

> "Photo documentation would be used at the time the easements are established to document baseline conditions." (Page 15)

SSLT uses photos to document broad scale conditions, such as boundaries, man-made features and building sites. SSLT also uses maps to document wetlands and hydrology, geological conditions and features, soils, and ecological features. We prepare detailed documentation of plant and animal species and their distribution.

Conservation easements are perpetual and by contract irreversible. The funds used to acquire the easement are irretrievable. The cost of long term monitoring is perpetual. In contrast, the Document states that,

14–9 "There would not be any irreversible or irretrievable commitments of resources associated with establishing the conservation easement program; however, any easements that are acquired with Land and Water Conservation Funds would require an irretrievable and irreversible commitment of resources (such as expenditures for fuel and staff for monitoring) for the long-term administration of the easement provisions." (Page 97)

Long-term monitoring is a crucial component of any conservation easement and should be undertaken on a regular and yearly basis with complete documentation of each monitoring visit. The monitoring documentation allows the Service to insure the conservation easement terms and conditions are intact. The resources expended to acquire conservation easements are gone once they are expended. The easement also has perpetual costs in long-term monitoring and legal defense. The Land and Water Conservation Fund is not perpetual. Proper planning requires perpetual funding be in place before committing funds for acquisition of easements.

14–10 One solution to this issue is that long-term monitoring costs be contracted as a partnering service. This would preclude the necessity of allocating funds on a yearly basis. SSLT could monitor each property every year, using a fee-for-service approach. Monitoring reports would be prepared after each site visit and would fully document that the property is in compliance with the easement terms, or note areas on the property as infractions if they are out of compliance. The report would also note areas of significant change due to natural conditions.

A succinct conservation easement coupled with a thorough baseline document and regular monitoring will allow the Service to hold effective easements with minimum conflict and maximum conservation value.

3. Landscape Conservation Cooperative

14–11 Given the purpose and directive of the LCCs, in the instance of establishing the BRWCA, one LCC rather than three LCCs should be used.

14–9. The terms "irreversible" and "irretrievable" are used in EA in the context of effects on natural resources (http://nepa.energy.gov/documents/Vol1_Ch8_FinalEIS-0409.pdf).

Irreversible: When primary or secondary impacts from use would limit future use options. Irreversible commitment applies primarily to nonrenewable resources, such as minerals or cultural resources, and to those resources that are renewable only over long time spans, such as soil productivity.

Irretrievable: When use or consumption would be neither renewable nor recoverable for use by future generations. Irretrievable commitment applies to the loss of production, harvest, or natural resources.

14–10. The BRWCA project will take decades to implement, and initially the three existing refuge staffs could conduct the annual monitoring using Refuge System base funding. Depending on the availability of funding and interested landowners, additional staff may be required at some point in time. Service staff currently carries out the negotiation, documentation, and monitoring of easements; however, the Service will consider the possibility of collaborating with other organizations for these roles in the future.

14–11. As stated by the commenter, the LCCs and their boundaries were established by Secretarial Order No. 3289 on September 14, 2009, by Interior Secretary Ken Salazar. Therefore, it is not within the scope of this project to alter the boundaries. Although the project is more complex due to the coordination requirements—across three States, two U.S. Fish and Wildlife Service regions, multiple programs, and the three LCCs—the resulting BRWCA is a true collaborative effort on a landscape scale.

Comment number	LETTER 14 (nongovernmental organization)—Sagebrush Steppe Land Trust, page 6 of 6	RESPONSE

The draft LPP states that the Service would work with the Great Basin, Great Northern, and Southern Rockies LCCs to, "…develop and refine predictive population models…" for the proposed BRWCA. Working with three LCCs to develop a model for the BRWCA will result in a model that is not specific to the needs of the BRWCA. This will ultimately result in a weaker model.

Secretarial Order No. 3289 establishes the LCCs, which is a network of public–private partnerships that provide shared science to ensure the sustainability of American land, water, wildlife and cultural resources. Additionally, LCCs seek to identify the best practices, efforts, gaps, and to avoid duplication through improved planning and design.

Given the purpose and directive of the LCCs, it seems that in the instance of establishing the BRWCA, involving three LCCs should be altered to allow one LCC to do a complete job.

Conclusion

14–12 The Sagebrush Steppe Land Trust is generally in favor of the proposed BRWCA; however, the Sagebrush Steppe Land Trust is concerned that some information presented at the public meetings contradicts the Service's Proposed Action within the Document. The Sagebrush Steppe Land Trust strongly argues that solutions to remedy these situations be put in place. The Sagebrush Steppe Land Trust urges the Service to explore options to work with the conservation organizations already working in the Bear River Watershed to further conservation efforts, increase efficiencies of effort, and create lasting and meaningful conservation outcomes.

The Sagebrush Steppe Land Trust will continue our work in the middle section of the proposed Bear River Watershed Conservation Area and look forward to a productive and lasting relationship with the Service.

Sincerely,

Garry Ratzlaff, Board President Sagebrush Steppe Land Trust

cc: Tracy Casselman, Project Leader
cc: Bob Barrett, Project Leader
cc: Tim Koerner, Project Leader
cc: Kevin O'hara, Conservation Planner

14–12. We will take the comments on how to improve and clarify the language used in the documents into consideration.

Thank you for your general support and for providing comments on the BRWCA project.

Comment number	LETTER 15 (nongovernmental organization)—The Nature Conservancy #1, page 1 of 4	RESPONSE

The Nature Conservancy
Protecting nature. Preserving life.™

The Nature Conservancy in Utah
559 East South Temple
Salt Lake City, UT 84102

tel [801] 531-0999
fax [801] 531-1003
nature.org/utah

October 16, 2012

The Honorable Ken Salazar
Secretary of the Interior
1849 C Street, N.W.
Washington DC 20240

Dear Mr. Secretary:

We are writing to support an exciting new program in Utah, Wyoming and Idaho's Bear River Watershed. The Nature Conservancy has been working in the Bear River watershed for a number of years because of its high ecological value. The Fish and Wildlife Service (FWS) recognized that value years ago through establishment of three refuges on the Bear. Through those refuges, the FWS has already made a huge contribution to Bear River conservation, but now realizes to truly sustain the existing refuges and the health of this system, it is critical to support conservation on the private lands of the Bear.

We have been partners with the Fish and Wildlife Service in the Bear River watershed for a number of years working to understand and communicate the ecological importance of the Bear, including the key role of working farms and ranches. While the Nature Conservancy can contribute our expertise and some private dollars, the scale at which we need to work to conserve these working lands requires an investment from our federal partners. Establishing the Bear River Watershed as a Conservation Area would provide important recognition of this area as a priority and hopefully bring critically needed federal dollars.

More specifically, we think a designation of a Bear River Watershed Conservation Area is an excellent tool for the following reasons:

15–1 1) ***This is an easement program***. In our experience, landowners are looking for the means to stay on the land - an easement program with willing sellers, who also control public access, is one of the best tools to achieve this goal.

2) ***FWS easements can contribute to a larger easement program***. Our vision is to provide Bear River landowners, interested in easements, the option of working with FWS, the Natural Resources Conservation Service (we have several Wetland Reserve Program easements in process) or a private conservation organization. We hope with this range of options, we can offer to each landowner to the best fit for them.

3) ***These easements are likely to be locally popular*** as the private lands remain subject to local property tax and continue to sustain working operations that are important to the fabric of the community.

15–1. Based on the input received from landowners and other partners in the watershed, we agree that easements are the most promising conservation tool due to their voluntary nature, the landowner control of access, and the maintenance of the working landscape and property tax base of local communities through the numerous partnerships.

Comment number	LETTER 15 (nongovernmental organization)—The Nature Conservancy #1, page 2 of 4	RESPONSE
15–2	We believe establishment of a Bear River Watershed Conservation Area is critical to furthering the collaborative effort that already exists on the Bear River with existing partners including PacifiCorp, Trout Unlimited, and other government entities. Please feel free to contact us if you would like to discuss our support for this project. Sincerely, Dave Livermore Utah State Director Andrea Erickson Wyoming State Director Toni Hardesty Idaho State Director	**15–2.** Thank you for your comments on the BRWCA project and for your support and partnership in the collaborative effort to provide an additional conservation tool for interested landowners.

Comment number	LETTER 15 (nongovernmental organization)—The Nature Conservancy #1, page 3 of 4	RESPONSE
15–3		15–3. We note and greatly appreciate the comments on the importance of the resources of the Great Salt Lake and the Bear River system and the efforts of The Nature Conservancy to protect the system through the conservation action plan process and many other methods.

Whole System Template

Name of Whole System: Great Salt Lake/Bear River System

Evidence of iconic system that inspires people:
The Great Salt Lake (GSL) is a natural area of hemispheric importance, hosting 5-8 million migratory and nesting birds annually on its nearly 500,000 acres of wetlands. It is immediately adjacent to more than a million people who both recreate and utilize the lake resources to sustain communities and businesses. It's abundance of wildlife (and spectacular sunsets!) are treasured by all Wasatch Front residents. The Bear River is home to three national wildlife refuges as it travels through three states (Utah/Wyoming/Idaho). Since the 1850s, it has been of vital importance to both agriculture and wildlife and is the single largest water source for the Great Salt Lake.

Ultimate Outcome (10+yrs):
Develop a comprehensive system of state management for the lake system that will be protective of the system's natural components (water quality, wetlands/riparian/open water condition, water quantity) while allowing only those extractive uses that are sustainable and do not degrade the natural elements of the lake. By working with partners along the 500 mile Bear River to conserve sufficient wetlands and riparian areas to maintain and increase populations of birds and remove barriers to native fish, while maintaining existing agricultural values, GSL health will be supported.

Objective (3-5 yrs; at least one):
1) By the end of 2016, the State of Utah shall have numeric standards in place for the open waters and wetlands that are protective of the species, communities and system processes identified in the GSL CAP.
2) By the end of 2016, five key strategies from the Bear River CAP (floodplain protection, barrier removal, adequate water for wetlands, wetland easements, and invasives removal) will be implemented.

Strategy in support of an Objective (at least one):
1) Incorporate the completed CAP "Lake Health Report" data into Utah's 10-Year Comprehensive GSL Management Plan and other state agency management plans, and manage the lake system and components according to the scientific definition of "Good" condition in the report.
2) Working with USFWS, PacifiCorp, Bear River Land Conservancy and NRCS increase acreage under easement by 3,000 acres.

3) Working with Trout Unlimited, UDWR, and others remove 13 of 26 barriers on Yellow Creek enhancing movement opportunities for several at-risk native fish

External enabling conditions that will contribute to achieving at least one Objective:
The State of Utah has begun to focus its agencies' attention on lake management and is trying to figure out what preservation of this public trust asset means. The legislature has established a Great Salt Lake Advisory Council to assist in this effort (TNC is a member). On the Bear River, there is a strong set of existing partners who have been working together since completion of the Tri-state CAP. There is also a track record of working together to implement the CAP and growing support among agencies and landowners of the Bear's conservation value.

At least one demonstration project supporting a regional or global strategy:
Global Solutions: Protecting and Restoring Natural Systems & Using Nature Sustainably.
The State of Utah and stakeholders (TNC included) spent two years setting the lake's first numeric discharge standard of any kind – in this case, for selenium. A process for defining standards for mercury is currently underway. The Bear River was site of a Southwest Climate Change Initiative (SCWII) climate workshop. We are now implementing those recommendations, which include the above objectives/strategies.

Why is TNC uniquely positioned to make a difference?
TNC has positioned itself on the Great Salt Lake Advisory Council as an influential member – successfully fundraising for and promoting key research (Lake Health Report), as well as an economic analysis of the consumptive and non-consumptive uses of the lake to serve as baseline information for the state and all parties in decision-making and permitting. TNC is both the catalyst and glue for conservation action on the Bear River. We were able to bring many partners together through the CAP process and are keeping them together for plan implementation and thinking about the implications of climate change on the system. No other organization has the capacity or expertise to serve this role.

Whole system leadership and support within TNC:
The Great Salt Lake/Bear River is a priority in Utah's Strategic Plan and is supported by our Utah Director, staff and Trustees.

The Nature Conservancy
Protecting nature. Preserving life.

The Nature Conservancy in Utah
559 East South Temple
Salt Lake City, UT 84102

tel [801] 531-0999
fax [801] 531-1003
nature.org/utah

January 3, 2013

Amy Thornburg
Project Coordinator
USFWS
P.O. Box 25486
Denver, CO 80225

Dear Ms. Thornburg,

Thank you for the opportunity to provide comments on the Draft Environmental Assessment and Land Protection Plan for the proposed Bear River Watershed Conservation Area. We are in full support this program and appreciate the vision of the U.S. Fish and Wildlife Service (FWS) to work beyond their borders for the health of the entire Bear River system. The DEA and LPP are key next steps towards making that vision a reality. We offer the following comments in support of this work going forward.

Comments and suggestions on the draft document:

16–1 ***Page IX, Summary:*** We suggest adding state and local land trusts to the list of partners.

16–2 ***Page 4, Draft Vision Statement:*** We are supportive of the Draft Vision Statement as well as the project's objectives and actions (page 102).

16–3 ***Page 6, Figure EA-2:*** It might be more appropriate to label this "management entities" instead of "stewardship." For example, state lands are managed to generate school revenue, not necessarily for conservation.

16–4 ***Page 10, Related Actions and Activities:*** This section could use a little introduction, e.g., "Programs of others that are already active in the watershed can complement the FWS easement program." Also, it would be more accurate to note our activities beyond purchase of the easement as:

1) The Nature Conservancy is coordinating agricultural and conservation partners to map and treat invasive weeds in Cache and Box Elder Counties that impact wetland and riparian systems.

2) The Nature Conservancy has conducted a landscape-scale geospatial assessment of wetlands through the identification and mapping of 'wetland complexes' in the Bear River watershed in southwest Wyoming to quantify the relative importance of these complexes in terms of biodiversity, recreational potential, agricultural influence, current condition, and vulnerability to future environmental changes.

16–5 ***Page 11, U.S. Department of Agriculture:*** It would be helpful if the numbers provided for each of the programs could be roughly broken out for projects in the Bear River watershed.

16–6 ***Page 12, The Wetland Reserve Program:*** This program also includes an easement option.

1

16–1. Comment noted. "State and local land trusts" were added to the final document.

16–2. Thank you for your comment.

16–3. "Stewardship" is a commonly used term for Service cartography for describing various types of landownership and will be retained for this map.

16–4. Comment noted. We added to the final document an introduction to the "Related Actions" section. In addition, the final document contains a description of The Nature Conservancy's important activities in the watershed.

16–5. A breakdown of the USDA information for the watershed was not readily available to the Service.

16–6. Comment noted. We made these changes in the final document.

Comment number	LETTER 16 (nongovernmental organization)—The Nature Conservancy #2, page 2 of 3	RESPONSE
16–7	Page 12, U.S. Department of the Interior: It would be useful to know how many Utah Partners for Fish and Wildlife dollars have been spent in the watershed.	**16–7.** We added to the final document the Partners for Fish and Wildlife information specific to the watershed.
16–8	Page 13, Figure EA-3: On this map or another, it would be useful to have FWS Regions 1 and 6 boundaries.	**16–8.** Comment noted. However, in the final document we have identified the Region 1 (Idaho) and Region 6 (Utah and Wyoming) portions of the project on page 8 in the "Decisions to be Made" section, rather than on a map.
16–9	Page 15, Alternative B: We support the proposed action.	**16–9.** Thank you for your comment.
16–10	Page 18, second paragraph: A number of mountain ranges are mentioned but not identified on Figure EA-4. It would be helpful to include them on the map.	**16–10.** Comment noted. We added the names of mountain ranges to the EA–4 map in the final document.
16–11	Page 19, Figure EA-4: The Randolph and Woodruff portion of Rich County should be included in the Upper Bear Region.	**16–11.** Comment noted. We changed the Upper Bear Region on map EA–4 in the final document.
16–12	Page 25, Figure EA-7: Figure EA-7 provides key visual information that helps readers understand the Bear River watershed's importance for large-scale wildlife connectivity.	**16–12.** Thank you for your comment.
16–13	Page 27, Wetlands: Wetlands represent only 0.2% of the land area of Utah not 5%.	**16–13.** Comment noted. We corrected the wetlands percentage of 0.2 percent in the final document.
16–14	Page 35, Socioeconomic Environment: According to figure EA-2 on page 36, the 14-county region (excluding the three out-of-watershed counties) has a population of 601,825 rather than 2.9 million as stated on page 35.	**16–14.** Comment noted. We corrected the population number in the final document.
16–15	Page 37, second paragraph: Richmond, Smithfield and North Logan should be included in the lower Bear according Figure EA-4.	**16–15.** Comment noted. We changed the Lower Bear Region description and map EA–4 in the final document.
16–16	Page 49, Past Actions: Add The Nature Conservancy and Bear River Land Conservancy as additional organizations that have been working to acquire easements in the watershed.	**16–16.** Comment noted. We added The Nature Conservancy and Bear River Land Conservancy to the final document.
16–17	Page 102, Proposed Easement Program: We appreciate the recognition of the importance of landscape-scale conservation and suggest including perpetual non-USFWS conservation easements toward the goal of establishing conservation easements on up to 920,000 acres in the BRWCA. Including non-USFWS easements will more accurately reflect the amount of perpetual private lands conservation occurring in the BRWCA.	**16–17.** While we will collaborate with a number of partners to provide conservation options in the watershed, with approval of the BRWCA project, the Service has the authority to acquire up to 920,000 acres of Service easements from willing sellers. This acreage will be in addition to the lands conserved by the ongoing efforts of the partners in the watershed.
16–18	Page 116, Monitoring and Adaptive Management: We appreciate the thought and effort behind Figure 14 that maps the conservation priority areas; and, the need to acquire conservation easements on the "best of the best." We aren't aware of another effort that has attempted to	**16–18.** Thank you for your support and assistance in acquiring data and information used by the Service for developing conservation priorities. We look forward to continuing to work with The Nature Conservancy to conserve the Bear River watershed.

Comment number	LETTER 16 (nongovernmental organization)—The Nature Conservancy #2, page 3 of 3	RESPONSE
16–19	develop an integrated conservation priority map for the entire watershed. As the process moves forward, we hope there will be opportunities to work with the FWS to refine the map and priorities in light of other conservation partner's efforts. Sincerely, Joan Degiorgio Northern Mountains Regional Director The Nature Conservancy of Utah Graham McGaffin External Relations Manager The Nature Conservancy of Wyoming Will Whelan Director of Government Relations The Nature Conservancy of Idaho	**16–19.** Thank you for your thorough review and comments.

Comment number	LETTER 17 (nongovernmental organization)—Trout Unlimited	RESPONSE

Jim DeRito
Bear River Project Manager

25 North Main Street
Providence, UT 84332
Phone: 208-360-6165
email: jderito@tu.org

January 4, 2013

Amy Thornburg, Planning Team Leader
U. S. Fish and Wildlife Service
PO Box 25486
Denver, CO 80225-0486

Re: Bear River Watershed Conservation Area

Dear Amy,

I am writing to provide comments on the Service's proposed Bear River Watershed Conservation Area (BRWCA). I was able to attend a couple of the public meetings that you held in the watershed during December 2012. Thank you for those very informative meetings. I received a copy of the draft Environmental Assessment and Land Protection Plan for the proposal.

Trout Unlimited has focused on fisheries protection, conservation, and restoration in the Bear River Watershed across the states of Idaho, Utah, and Wyoming since 2004. TU has successfully implemented dozens of projects that have reconnected and restored fish habitat with an emphasis on Bonneville cutthroat trout (BCT). Most of those projects have been on private ranch and farm lands where we've been able to improve infrastructure for irrigation water delivery and at the same time improve fish passage. In total, several million dollars have been invested in these projects, many of them supported with Service funding.

17–1 The Service's proposal would be a great tool to help farmers and ranchers continue and improve upon their operations while conserving fish and wildlife in the Bear River Watershed. TU agrees with the Service's use of the Bonneville cutthroat trout as one of the focal species for determining priority areas for easement consideration. We're glad that TU has been able to supply BCT data used in those modeling efforts. TU will continue to work with the Service to provide the latest and most comprehensive BCT data and conservation planning assessments for the watershed.

17–2 TU fully support the Service's proposal. We recommend that the Service's directors approve the establishment of the BRWCA and define the project boundary to encompass all of the Bear River Watershed as proposed.

Sincerely,

Jim DeRito

Conserving, protecting, and restoring North America's coldwater fisheries

17–1. We appreciate the willingness of Trout Unlimited to share its extensive data and knowledge about the Bonneville cutthroat trout. The information provided was essential to the prioritization process for the project's focal species. The Service looks forward to working with Trout Unlimited on fish conservation projects in the future.

17–2. Thank you for your comments on the BRWCA project and for Trout Unlimited's support for our effort to provide an additional conservation tool in the watershed for landowners interested in protecting fish and other wildlife.

Comment number	LETTER 18 (nongovernmental organization) Name: Yellowstone to Uintas Connection, page 1 of 2	RESPONSE

Yellowstone to Uintas Connection

January 1, 2013

Amy Thornburg
Fish and Wildlife Service
P.O. Box 25486 DFC
Denver, Colorado 80225-4792

Re: Draft Environmental Assessment and Land Protection Plan
Proposed Bear River Watershed Conservation Area

Dear Amy:

18–1 I have attended the scoping meeting in Montpelier and reviewed the above-referenced Draft Plan. I support the retirement of development rights on private property to protect wildlife habitat. However, I have major concerns based on my familiarity with livestock grazing and farming practices on private land relating to fish and wildlife habitat. The literature is replete with examples of degradation of streams, riparian areas and upland habitats due to livestock grazing. Productivity declines and habitat structure is altered with introduction of non native plant and invasive species. Fish habitat and water quality are sacrificed because livestock will remain in riparian areas until the forage is removed and continue to return throughout the season resulting in removal and loss of willows, aspen and cottonwoods and loss of herbaceous cover. I observe private land management in our area closely and see no attention to managing to sustain productivity, sage grouse cover that meets the Connelly et al (2000)[1] guidelines for vegetation structure. The land is basically stripped each summer till the snow comes, streams and springs are polluted with livestock waste and sediment and experience high temperatures that do not support cutthroat trout.

18–2 Without quoting all the well known science regarding these issues, we believe it is imperative that your selection of properties for protection must include provisions in the evaluation process and on an ongoing basis to protect against the degradation of fish and wildlife habitat. Suggested criteria are described below:

18–3
1. Prioritize parcels by the analysis of critical areas provided in your Draft Plan, ranking those in the most critical areas with both habitat for cutthroat trout and sage grouse above those with habitat for just one of the species.

2. Prioritize parcels by proximity to other protected lands such as public lands, private lands already protected, and wildlife refuges.

18–4
3. Prioritize parcels by current management and habitat condition, i.e. are grazing practices leaving functional buffers along riparian areas including adjacent meadows and floodplains with herbaceous vegetation height meeting Connelly et al (2000) guidelines of 7" to provide hiding cover for sage grouse during nesting and brood-rearing. Is the buffer of sufficient width to provide the needed filtering of ediment and e. coli as recognized by the Idaho Agricultural Pollution Abatement Plan which specifies BMPs for this purpose. Of course riparian areas with full protection from livestock would be ranked higher.

[1] Connelly, J.W., M.A.Schroeder, A.R. Sands and C.E. Braun. 2000. Guidelines to manage sage grouse populations and their habitats. Wildlife Society Bulletin 28(4):967-985.

Box 280 Mendon, Utah 84325 435-881-5404
Y2uconn@hughes.net

18–1. Not all agricultural activities are compatible with providing the high-quality wildlife habitat that will be considered for easements under the BRWCA. Overgrazing of riparian areas and some farming practices can have serious negative effects on the capacity of that vegetation to regenerate. However, an easement will prevent other types of potentially harmful habitat alteration, and landowners participating in the BRWCA will be encouraged to discuss opportunities for habitat management or restoration through the Partners for Fish and Wildlife Program, as well as through USDA programs.

18–2. The Service agrees that it will be imperative to develop ranking criteria for evaluating properties.

18–3. The model used to determine conservation priorities for acquisition selected areas with multiple conservation targets (focal species, areas with lower human disturbance, and highest connectivity to other protected areas). The discussion of the prioritization process is revised to provide clarification in the final document.

18–4. Comments noted. We will be assessing a variety of information in the process of establishing ranking criteria. High-quality sagebrush and riparian habitat areas will be essential for the successful conservation and number of BRWCA focal species.

Thank you for your comments.

LETTER 18 (nongovernmental organization)—**Yellowstone to Uintas Connection,** page 2 of 2

4. Prioritize parcels by management that is providing for willow, aspen and cottonwood recruitment.

We appreciate the opportunity to comment.

Sincerely,

John Carter, Manager

Comment number	RESPONSE

PACIFICORP ENERGY
A MIDAMERICAN ENERGY HOLDINGS COMPANY

1407 West North Temple
Salt Lake City, Utah 84116

January 18, 2013

Attn: Amy Thornburg, USFWS Planning Team Leader

Dear Ms. Thornburg:

Mark Stenberg notified me today that you require our comments on letterhead, rather than as an email as submitted. Please accept the following comments originally submitted by e-mail on 4 Jan 2013:

19–1 PacifiCorp Energy Hydro Resources staff had the opportunity to attend two of the public meetings (Logan, UT and Montpelier, ID) held for your Land Protection Plan project in the Bear River Watershed. PacifiCorp appreciates the opportunity to engage with your staff in this process, and looks forward to the successful completion of your Environmental Assessment and

19–2 future potential funding for conservation lands within the Bear River Watershed. We hope that the final project will consider conservation lands held either by easement or in fee title. We are aware of lands within the Bear River watershed that may be of interest to your future program, and are encouraged by the opportunity to potentially work with the USFWS Team on conservation projects in the future.

19–3 Please keep PacifiCorp Energy Hydro staff Eve Davies (eve.davies@pacificorp.com) and Mark Stenberg (mark.stenberg@pacificorp.com) on your mailing list as this project continues forward.

Regards,

Eve Davies

Eve Davies, Principal Scientist
Hydro Resources, PacifiCorp Energy
1407 W. North Temple
Salt Lake City, UT 84116
801-220-2245

19–1. While the Service will seek easements from willing sellers for the BRWCA project, there may be opportunities to work with organization partners to consider conservation of fee-title parcels.

19–2. We look forward to the opportunity to work with PacifiCorp on Bear River conservation projects in the future.

19–3. We will keep PacifiCorp on the mailing list. Thank you for your comments.

Comments from Individuals

The Service tracked the number of individuals who expressed each type of comment and responded to those that were substantive and of strong public interest. Under each comment topic, questions, agreement comments, and disagreement comments that are related are grouped together, followed by the Service's response.

MOST COMMON COMMENTS

The most frequent comments expressed in the individual comments were about conservation easements and the possible opportunities, restrictions, or requirements that may be included as part of the Service's Bear River Watershed Conservation Area (BRWCA) easement program. The process used for appraisals, land value determinations, and property tax effects were, together, the most common easement-related comment category.

General comments on easements and agricultural management activities such as grazing, haying, and fencing were also areas of high interest. Prioritization of easement acquisition, wildlife objectives, and collaboration with and comparison to other conservation programs in the watershed were the other main categories for public comments.

BRWCA PROJECT

Comments

- Did the landowners come to you and ask to start this project?
- Since the U.S. is in a recession, where did this idea come from?
- If the project was conceived in 2007, why has it taken so long to get the project going?

Response: The initial discussions about a conservation project began in response to the similarity of issues and challenges facing the three national wildlife refuges in the watershed. A number of landowners and conservation partners also approached refuge staff with their concerns about conservation needs in the Bear River watershed. The Service requires a careful review and planning process to develop a land protection project such as BRWCA, and it take a number of years to accomplish.

Comment

- How many landowners do you think will participate?

Response: There has been a fair amount of interest thus far coming from landowners. However, the eventual amount of acres conserved through easements for the project is unknown and largely dependent on the level of long-term interest by landowners and the money available from the Land and Water Conservation Fund.

Comments

- How many acres are in the BRWCA project?
- How and who came up with the boundary?

Response: The Bear River Watershed Conservation Area encompasses about 4.8 million acres, over half of which is in Federal ownership. The proposed project focuses on 920,000 acres that are adjacent to or encompass portions of lands managed by the U.S. Fish and Wildlife Service, USDA Forest Service, and Bureau of Land Management. Important habitat in private ownership is located within and next to lands managed by Federal entities as well as on lands adjacent to the Bear Lake, Bear River, and Cokeville Meadows National Wildlife Refuges. In addition, the Service will try to coordinate with other entities whenever possible to identify areas of common interest.

Comments

- How wonderful to hear about this conservation easement acquisition plan. This river is so vital to this watershed, providing critical riparian habitat in an otherwise tough environment.
- As we go into an easement, we get to decide on the future of our land.
- I strongly support the move to conserve land via the conservation easements within the BRWCA.
- The wildlife that shares this landscape with us is an important part of what we appreciate about this place. Our hope for the program is that it succeeds in keeping large blocks of the landscape intact for the benefit of both agriculture and wildlife.
- I am glad the easement program will stop development.
- Development has its place, but it doesn't take the loss of too many ranches before we permanently lose the character of our rural landscape.
- We would like to do what we can to make sure that the next generations can have what we have, and we believe that this program can play an important role in that outcome for landowners who want to participate.
- A program of this nature can help preserve the way of life we value in southeastern Idaho, where ranching, farming, and outdoor recreation are major components of the local economy.
- We are troubled about the reputation the U.S. Fish and Wildlife Service has with the ranching community. The reintroduction of wolves into the Greater Yellowstone Ecosystem has been problematic for ranchers and has caused a huge eco-

nomic strain. Not only has it affected ranchers, it has affected the elk herds and moose populations in the area.

Response: The project will use voluntary conservation easements on privately owned land throughout the Bear River watershed to protect important wetland, riparian, upland, and sage-steppe habitat found on agricultural lands from conversion to other uses. As a voluntary legal agreement between a landowner and the Service, an easement is a perpetual conservation agreement would purchase from willing landowners. The conservation easement program does not change the Service's role in managing federally listed threatened and endangered species.

Comments

- The Federal Government shouldn't own land if it isn't for a post office, armory, naval yard, or courthouse. The Federal Government already controls so much land in the western United States.
- According to the U.S. Constitution, this is not the proper role of the Federal Government—these are matters that should be left to private landowners and local governments.
- Funding comes from Congress, but congressional representatives from Utah do not want more federally held land.

Response: The BRWCA project is based entirely on minimally restrictive conservation easements with willing sellers. The private landowner retains ownership of the land. The Service would retain a limited interest (development rights) through the easement.

Comments

- Is there a chance to reverse the Cokeville Meadows National Wildlife Refuge back to all easements?
- Why can't the Government give up land or reverse and sell the ground?

Response: Selling (divesting) easements or fee-title lands is prohibited unless approved by an act of Congress.

Comment

- Why is Seedskadee National Wildlife Refuge not included in the possible easements?

Response: Seedskadee National Wildlife Refuge is outside the Bear River watershed, which is the focus of the BRWCA project.

CULTURE and HERITAGE

Comment

- The EA narrative failed to mention that man was also found among the biological community. The Bear River is important to celebrating the history of Native American and early settlers to this area. The native Indian population was thriving and used that area for food, shelter, and clothing.

Response: The Bear River watershed has a very rich history. Although it was not possible to include all of it in the draft EA and LPP, there is a brief discussion of the cultural resources, historic periods, and events over the past 12,000 years on pages 43, 82, and 109.

Comments

- I am at the age where I am unable to run the cattle operation the way I used to. It probably won't be many years until this land passes on, so I would be interested in putting the property under a conservation easement in perpetuity to keep it from development.
- Many landowners in our area would appreciate the ability to sell a conservation easement to raise some capital for operations, expansion, retirement, or just to make it easier to pass their property on to the next generation.
- Allowing ranchers to sell their development rights while maintaining the integrity of the ranch is a win-win situation.

Response: Conservation easements provide financial benefits for landowners that enable them to preserve the natural and historical value of their farms, ranches, and open spaces and to pass this legacy on to their children and grandchildren (refer to page 55 of the draft EA).

EASEMENTS—Appraisal, Land Value, and Property Tax

Comments

- Do you look at current uses of land or its developmental value?
- Do you look at crop and non-crop land as equal value?
- How do you appraise recreational property versus agricultural land?
- Since the easements restrict what I can do on my own property, it would eventually lower the price of my land.
- Appraisals should be based on the habitat value of the land.
- Maybe in the future, the price of openness would be greater than housing development.
- The landowner would lose in the long run, since the land prices continue to increase.
- Easements are not good for this area because the land value is lower in rural areas.

Response: The "Uniform Appraisal Standards for Federal Land Acquisition," 41 CFR 114–50.305(c),

states private property or property rights shall not be purchased without just compensation. It is the policy of the U.S. Fish and Wildlife Service to protect both private and public interests by means of market value appraisals as the basis for all land transactions. Each property will be appraised individually and may have a different value from other properties in the area. The land value is tied to the land use. In accordance to Federal law, the Service appraises the market value of conservation easements, which is the development value.

Comment

- Is there still value if my land is in a floodplain or if the power company floods my bottomland?

Response: Many areas that lie within a floodplain are important to waterfowl, waterbirds, neotropical migrants, and a variety of other wildlife species. Therefore, these areas will likely have a high wildlife value and will be a conservation priority for the Service, depending on how they meet the ranking criteria.

Comments

- Does the Government do the appraisal?
- Who pays for the appraisal, survey, and title search?
- Whom do I call to find out about my appraisal?
- Can I request multiple appraisals?

Response: The Service will hire an outside contractor to appraise the potential easement property. The appraiser provides a copy of the appraisal to the landowner and the Service at the same time. If a landowner wants an additional appraisal, he or she has the right to obtain one at his or her own expense. If the Service determines that a survey is necessary, we will pay that cost.

Comment

- Can an appraisal be made public?

Response: According to acquisition and appraisal standards for the Department of Interior, 41 CFR 114-50.305(c), while the Federal government is in negotiation with a second party, all appraisals have to be kept confidential until the real property rights have been transferred. After the transfer, the appraisal can be made public by the landowner. The easement document will be recorded in the local courthouse where it is available for public review.

Comments

- Would an easement lower the property value, which would lower the property taxes?
- Does an easement change the tax base, such as for greenbelt acreage?
- Your property becomes worth nothing after you put an easement on your land.

Response: The land value is tied to the land use. The speculative development value would be removed from the property with a Service easement. However, the landowner retains ownership, so the property stays on the local tax roll. Since the tax rate is based on the agricultural value of the land, the tax rate would likely remain the same.

Comment

- Would the sale of a Federal easement be taxed?

Response: Federal gains are taxed. The Service does not provide tax advice, and landowners need to discuss tax implications with their financial advisors.

Comments

- With the conservation easement value changing land values, would it raise taxes?
- You need to provide tax information in the EA about the 1031 tax-deferment land exchanges for landowners.

Response: If the land value increases due to a conservation easement, capital gains tax can apply. The Service does not provide tax advice. However, general information on 1031 land exchanges is available through the Internal Revenue Service (www.irs.gov/uac/Like-Kind-Exchanges-Under-IRC-Code-Section-1031).

Comment

- The government gets the property "owners" revenue in taxes and the government also gets control over the property; this action is not constitutional.

Response: The Service's conservation easement program is strictly on a voluntary basis with interested landowners, who would retain ownership of their property. The Service would retain a limited interest (development rights) in perpetuity.

EASEMENTS—General

Comment

- What are the types of easements that will be purchased?

Response: The Service will buy perpetual wildlife conservation easements from willing sellers. There will be no fee-title acquisitions sought by the Service.

Comments

- I am interested in selling a conservation easement in Bear Lake County.
- Why would a landowner want to participate in the program?

Response: The collaborative efforts of conservation partners in the Bear River watershed are needed to preserve this working landscape for people and wildlife in perpetuity while providing financial benefits for landowners.

Comments

- Who will hold the easements—the Service or a third party?
- Who is going to take control of the land in the years to come?
- Your job will be to look after all the easements—as a manager, what do you do?
- It is good that the Service will be going to the easements once per year to check on the do's and don'ts (easement status).

Response: The Service will hold the easements and be responsible for prioritization of easement acquisition, monitoring, and enforcement. The refuges and Partners for Fish and Wildlife staff will be available to work with any landowners on questions about management.

Comments

- Is there an existing or draft contract (easement document) that interested landowners can review?
- Is there a draft of the restrictions that would be applied to an easement to benefit wildlife?

Response: The Service's planning team is in the process of developing a conservation easement for the BRWCA project. It will be similar to other Service easements (refer to links below). The BRWCA easement will contain specific information that addresses the Bear River's biological resources and incorporates considerations that will work for landowners in the area.

Sample easements:
www.fws.gov/refuges/realty/pdf/Sample-Wetland-Easement.pdf
www.fws.gov/refuges/realty/pdf/Sample-Grassland-Easement.pdf

Comment

- Can any citizen file lawsuit against a landowner having a conservation easement, given its public interest in the land?

Response: No. An outside interest would need to come to the Service. The individual landowner could not be sued by the outside interest.

EASEMENTS—Grazing, Fencing, Farming, and Haying

Comments

- These easements will allow multiple uses (grazing) and are better than other easements.
- If you had a ranch, the easement is so restrictive that you would not be able to do anything on your land.

Response: A BRWCA conservation easement will allow multiple uses, and for some landowners this easement may be better than other easements. However, the Service realizes there is not a single easement that satisfies the requirements of all landowners. Therefore, the availability of other easement programs is important, so landowners have choices and potentially can use one that satisfies their individual needs.

Comments

- Would you tell landowners how to manage their ranches and grazing?
- What if there is a dry year—can I graze wetlands that are dry in the summer?
- Can I influence whether or not grazing is allowed?
- How is this program different from grazing on a national wildlife refuge?

Response: A Service conservation easement does not include limitations on grazing, so any grazing management the Service would like to incorporate would be proposed through the Partners for Fish and Wildlife program and would be strictly voluntary for the landowner. The Partners program has the responsibility to work with landowners and other organizations to provide funding and technical assistance for projects that benefit wildlife species that are the responsibility of the Service. The Service views grazing as a tool to improve or maintain habitat conditions to benefit specified wildlife species. Landowners will be able to graze their wetlands in dry years. However, an easement would prohibit detrimental activities such as draining, burning, or filling. Grazing that is not determined to be beneficial to wildlife on a national wildlife refuge can be removed by the manager. Removal of uses permitted under a conservation easement document would have to go to court and would involve a lawsuit to remove.

Comment

- What would be expected in terms of fencing riparian areas to keep livestock out?

Response: At this point, fencing to exclude livestock grazing in riparian areas would not be a requirement of the easement. The Service can assist landowners interested in implementing best management practices through the Partners for Fish and Wildlife program. Participation in the Partners program is voluntary, and details for each project are in the individual landowner agreements. Other avenues to use best management practices could include other Federal programs, programs managed by State agencies, and habitat restoration and

enhancement activities through nongovernmental organizations.

Comments

- Is a conservation easement strict in terms of farming?
- Can I rotate crops?
- Could I burn the sagebrush or spray vegetation in uplands within a conservation easement?

Response: Currently, the Service does not have wording in easements that specifies the type of crops that can be planted or how often the same crop can be planted. Destruction or removal of native vegetation through activities such as spraying, farming, and burning would be prohibited by the easement. Conversion of habitat types, (i.e. from sagebrush to crops or grassland) would be prohibited under the easement

Comments

- Are there restrictions about haying?
- What if there is a dry year—can I hay wetlands that are dry in the summer?

Response: Haying dates will be established and directed in the easement document; haying before the specified date is a violation. Landowners will be able to hay their wetlands in dry years within the terms of the easement.

Comments

- Agriculture will be under attack by the new landlord if this ground is turned over to the Government. Statewide, grazing permits are revoked or given to others. How can anyone really believe that the Service will allow agriculture to operate for the benefit of the farmers when history proves otherwise?
- As a former Cache Valley resident, I support the BRWCA, which will protect both agricultural lands and wildlife habitats.
- We particularly like the fact that this will be a program based on conservation easements, which will keep ranch and farmland in productive private ownership, while protecting wildlife habitat.

Response: Agriculture will not be under attack by the conservation easement program because participation is strictly voluntary, and if a landowner does not like the requirements of the easement, they do not have to participate. The BRWCA easements will prevent the lands with high wildlife value from being converted from an agricultural use to housing, industrial parks, or other development—rather than attacking agriculture, the easements would protect agricultural lands with high quality wildlife habitat.

EASEMENTS—Infrastructure

Comment

- What do you mean by "infrastructure" and "development"?

Response: Infrastructure, such as houses or power lines, is associated with commercial or residential development that fragments wildlife habitat and decreases its value or makes it unsuitable for a number of species.

Comments

- If conservation easement, what restrictions exist for groupings of structures?
- Do I have to put all my land into the easement or can I carve out a piece in case I wanted to put up a house?
- Does an easement bar construction, such as a farmer building a barn or shelter?
- An easement will not allow you to expand your building on the ranch.

Response: Areas where landowners know they would like to build a barn or additional housing in the future can be excluded, or "carved out," from the area of the property included in the conservation easement when it is established.

EASEMENTS—Energy and Minerals Development

Comments

- What about energy development, something that is vital to civilization. Will the Service tolerate energy development?
- Can there be drilling on an easement?
- Any there any requirements when drilling on an easement?
- How does it not impact wildlife resources to build an oil well on easement land?
- If an oil company chooses to ignore the recommendation to save habitat, can anything be done about it?
- Does a conservation easement make it tougher for drilling companies to drill?
- With your experience in the Dakotas, what did the oil companies do to deal with conservation easements?
- I'm worried that habitat protection will become more restrictive, and there will be too many hoops to jump through to get minerals.

Response: If the Service were interested in property where the mineral rights were owned by a third party, we would assess the potential mineral development. If it was determined that the likelihood of

mineral extraction would be acceptable, the Service would move forward with purchase of a conservation easement. The Service wants to purchase conservation easements on lands with high wildlife value. Mineral development is typically disruptive to these values; therefore, the Service will seek easements where the probability of mineral development is low or the subsurface rights are retained by the surface owner.

Once the Service purchases an easement on a piece of property, we gain standing in negotiations with the mineral developers. Should a developer propose exploration or extraction activities, we will work with the landowner and the oil company to help ensure that all activities are carried out in a manner that minimizes impacts to surface values.

In addition, surface rights and mineral rights are under separate ownership within much of the Bear River watershed. The owners of subsurface rights must be provided reasonable access to the surface for exploration and extraction activities. However, they are required to negotiate with the surface owners to devise a strategy that minimizes impacts to surface values.

Comments

- If I own the mineral rights, can I (landowner) develop those mineral rights on a conservation easement?
- Can I build a gravel pit on an easement?

Response: In cases where the surface owner retains the mineral rights below the property, the conservation easement will prohibit the exploration, development, and extraction of minerals on or below the surface.

EASEMENTS—Perpetual nature

Comments

- Is there a length of time for the easement?
- What happens to the easement if I sell the land—does the person buying the property have to assume the easement?

Response: The easements are perpetual, that is, forever. The Service seeks to buy conservation easements from willing sellers on privately owned lands that are currently providing valuable wildlife habitat. The terms of the perpetual nature of Service easements are clearly spelled out in the easement document and continue to be in place after changes in ownership. The easement contracts specify perpetual protection of habitat for trust species (migratory birds and threatened and endangered species) and restrict development.

Service conservation easements are legal, binding contracts for both the landowner and the Service. The terms defined in the easement document will remain constant despite changes in landowners or in refuge personnel.

Comments

- The easement program is "too forever."
- We need to protect our land for the animals forever.
- If the Government buys easement rights, I can't expand my operation for future generations.
- What if an opportunity for the land under easement comes up later that I did not expect? I should have the opportunity in 15 years to buy back my easement rights from the Government.
- A perpetual easement won't be able to adapt to changes in wildlife migration corridors or land use.
- I can't do an easement if all the choices are made for the future, and if it's not financially profitable for me.

Response: Repeatedly paying for the same conservation through short-term easements would not allow the Service to achieve the habitat goals and objectives needed to sustain migratory bird and other wildlife populations in this area. Because several less-than-perpetual conservation options are available through other Federal and State programs and conservation partners, it is logical that the Service continue to pursue permanent conservation avenues for the proposed BRWCA project.

Maintaining connectivity between protected lands is important for adapting to changes in land uses, climate, and migration patterns. The collaborative conservation efforts in the watershed will help provide for wildlife in the region over the long term.

The rights to a perpetual easement cannot be bought back by the landowner. Therefore, the program will rely solely on voluntary participation from landowners. Conservation easements can provide the capital for landowners to acquire other lands. In addition, the reduced cost of an easement property could make it more affordable for a family member to buy. However, the Service understands that the BRWCA program of perpetual conservation easements will not work for everyone and that careful thought and consideration must be made before the decision is made about whether to proceed with an easement. There are a number of other short-term programs available to landowners that do not want a perpetual easement.

EASEMENTS—Public Access

Comments

- Do conservation easements have any requirements for public access?
- If I sell an easement, have I given up my right to allow or deny public access?

- Can the public access the land as Government land?
- It is good that public access on conservation easements can be restricted by the landowners.
- An issue in Utah is the public access that is granted through water rights. Will the BRWCA easements require access to water?

Response: Only Service personnel would be able to go on an easement property; no other entities would have access without landowner permission. Information about easement owners is not made available to the public or posted on Service maps.

EASEMENTS—Water

Comments

- Do I maintain my water rights when I sell an easement to the Government?
- Are minimum stream flows required?
- If I am irrigating wet meadows on land that becomes an easement, must I continue irrigating forever?

Response: Under BRWCA easements, landowners will retain their historical water rights on the easement property. Historical water use will be maintained in accordance with current practices. Minimum stream flows are not required, but the habitat must be protected under the conditions of the easement, for example, no drainage of wetlands. Specific language included in the conservation easement between the landowner and the Service may include "unless prior approval in writing is granted by the U.S. Fish and Wildlife Service." This would allow for mutually agreed-to changes in points of diversion, timing, or place of use of water to accommodate unforeseen changes or events to maintain the purposes and intent of the easement.

Comments

- How does runoff from residential development differ from runoff from farming?
- Will you have requirements to keep farmers from polluting streams in conservation easements?

Response: The types of contaminants may differ between residential and agricultural runoff. However, an easement would help prevent potentially harmful habitat alteration that could increase runoff. Landowners interested in the BRWCA project would have opportunities to discuss habitat management or restoration with biologists from the Service's Partners for Fish and Wildlife Program to improve water quality and reduce runoff.

Comment

- In regards to the Cache County Water Plan, will easement acquisition work be coordinated so that identified water project sites would be avoided?

Response: The Service will work the local governments to try to determine the best methods to protect wildlife habitat in the area. Conservation easements are designed to provide habitat protection that is important for various wildlife species in the watershed. Easements may not be acquired on lands that have been identified for future water development sites if these lands are to be inundated by water in a way that would provide little or no wildlife habitat value for the BRWCA focal species.

Comment

- How does the Service participate in best management practices for preserving water quality?

Response: Best management practices will be accomplished through landowner involvement in programs such as the Service's Partners for Fish and Wildlife program, the Farm Bill, the Department of Agriculture programs, or State wildlife initiatives. These programs provide cost sharing to fund habitat enhancements with a special emphasis on projects that simultaneously benefit agricultural production and wildlife habitat.

EDITS

Comment

- There were several comments detailing editorial suggestions or errors in the document.

Response: The Service appreciates the editorial comments. Each of the suggested changes was reviewed, and where appropriate, was incorporated into the final LPP and EA.

FEE-TITLE ACQUISITION

Comments

- Does the Service have any interest in getting into fee-title acquisition?
- Fee-title lands go off the tax rolls.

Response: The Service will not seek fee-title purchases. The BRWCA will use perpetual wildlife conservation easements from willing sellers. Ownership of an easement property will remain with the private landowner. Since local taxes are based on agricultural values, which do not change with a Service easement, the easement property will remain essentially the same on the tax rolls.

Comment

- I am working with a bird refuge—is the BRWCA easement program better economically than a fee-title purchase?

Response: Fee-title acquisition has been authorized within the approved acquisition boundaries of the Bear Lake, Bear River, and Cokeville Meadows

Refuges. Outside of the approved boundaries, within the remainder of the BRWCA, acquisition would be through conservation easements only. There are significant differences for both the landowner and the Service between acquisition of a conservation easement versus land in fee title. The existing refuges have different authorizations, funding sources, refuge purposes, and restrictions than the BRWCA. If the land in question were within the approved acquisition boundary of one of these refuges, all of the differences would need to be considered. A higher payment would be made to the landowner for fee-title land versus a conservation easement. Land with a conservation easement would remain in private ownership, and the landowner would remain responsible for paying property taxes, controlling noxious weeds, as well as the many other responsibilities of landownership.

FUNDING

Comment

- How did the Service develop the numbers for the upper payment for easements and current appraised value versus future value (page 103 in the draft EA)?

Response: The per-acre cost for conservation easements will vary by location in the watershed, habitat type, and the type of restrictions or rights acquired through the easement. Easements would be valued by a qualified outside appraiser using an adjusted land value (Service policy 341 FW6) based on a percentage (usually between 20 percent and 50 percent) of the full fee-title value of the land. Land values within the proposed conservation area vary from $400 per acre to $3,700 per acre, depending on whether the land is upland or wetland, irrigated or nonirrigated, and location in the watershed. Based on a watershed-wide average cost of $810 per acre, the one-time initial cost for acquisition of easements is estimated at about $745 million if all the potentially approved acreage were eventually acquired.

Comments

- Do our taxes pay for this project?
- It is wrong for our Government to spend money on this when it would have to go further into debt to do it.
- Taxpayers' money is certainly needed elsewhere.
- What is the royalty versus tax process?

Response: The primary source for acquisition of easements in the BRWCA will be Land and Water Conservation Funds. These funds are not derived from general taxes; rather, they are derived primarily from Outer Continental Shelf oil and gas lease revenues, royalties from motorboat fuel taxes, and the sale of surplus Federal property. Land and Water Conservation Funds are intended for land and water conservation projects, and funding is subject to annual appropriations by Congress for specific acquisition projects.

Comment

- I understand it is customary for a landowner to contribute money toward an easement—what amount is needed?

Response: There is not a contribution, or match, requirement for Service easements.

OTHER PROGRAMS

Comments

- The BRWCA program will be beneficial to landowners because it is not as restrictive as the nongovernmental easement programs.
- If nongovernmental organizations like The Nature Conservancy already have easement programs in the area, why do we need the BRWCA program?

Response: The Nature Conservancy is the leading conservation organization working around the world to protect ecologically important lands and waters for nature and people. Each organization and land trust easement program has areas identified for conservation. The BRWCA program potentially has different areas identified, different funding sources, and different conservation easement requirements for protection when compared with other organizations' priorities. The requirements of each easement program vary, and the BRWCA will provide an additional option for landowners. Currently, development is the greatest threat to wetlands and associated habitat in Utah, Idaho, and Wyoming. It will take the efforts of a variety of agencies, organizations, land trusts, and landowners to provide successful habitat conservation in the Bear River watershed.

The BRWCA program has potential funding from money that is available to Federal entities—the Land and Water Conservation Fund. The Service has responsibility for monitoring, enforcing, and prioritizing the BRWCA's conservation easements. These easements will identify what detrimental activities cannot be done, but the easements will not have management plans because of the associated costs.

Comments

- Are Trout Unlimited and Ducks Unlimited affiliated with the BRWCA project?
- Do you ever work land exchanges in the process, or do you transfer money and that's it?

Response: Trout Unlimited assisted greatly in providing data and expertise for the BRWCA prioritization process for Bonneville cutthroat trout.

The Service works with Ducks Unlimited to protect waterfowl habitat throughout the United States and will continue to work with them throughout the Bear River watershed. The Service hopes to work with a variety of conservation organizations and agencies that already have successful projects underway and will consider any opportunities to work with these groups.

Comments

- If I have a BRWCA conservation easement, can I participate in other programs?
- Can Trout Unlimited and other wildlife organizations do projects on the BRWCA easements?

Response: Landowners are allowed to participate in other programs as long as the practices proposed are not in violation of the BRWCA easement provisions. Programs that could be used include the Service's Partners for Fish and Wildlife program, Farm Bill funding, State habitat restoration or enhancement programs, and habitat improvement efforts with nongovernmental organizations.

Comments

- Will the Service be working with the State and other Federal agencies to manage their lands?
- How will the easement program affect neighbors that do not participate?
- If all of my neighbors agreed to the easement and I did not, what kind of value impact would that have on my land?

Response: The Service's BRWCA conservation easements will not affect other nearby landowners' management activities, whether on private, State, or Federal lands.

Comment

- I've been told that the Service in Utah does not have way to handle these easements and likely would sell them to The Nature Conservancy or other organizations. We recommend that the Service work closely with a land trust agency to execute and monitor the conservation easements.

Response: Selling (divesting) a Service easement is prohibited unless approved by an act of Congress and, therefore, is unlikely. The ability of the Service to purchase, execute, and enforce conservation easements is proven by our track record of administering these easements since we began purchasing them in the late 1950s. The Service is currently responsible for administering more than 3 million acres of easements within the United States. The Service will coordinate activities with other entities whenever possible to identify areas of common interest, but the wording, monitoring, and enforcement is the responsibility of the Service's Refuge System for perpetuity.

PRIORITIES

Comment

- You should manage the whole basin.

Response: It is the established policy of the Service to acquire the minimum interest in land necessary to conserve wildlife habitat and trust wildlife resource in the Bear River watershed (refer to page 16 in the draft EA).

Comments

- How are lands prioritized?
- Does proximity to other easements or protected lands affect the priority of potential easement lands?
- Is there a minimum acreage or distance from a water body?
- Do you consider the water rights associated with an easement when setting priorities?
- Does a 5-year oil and gas contract disqualify me from selling a conservation easement?
- If a landowner sells an easement to the Service and the landowner keeps the water rights, but then sells the water rights to another entity, would that defeat the purpose of the conservation easement?
- Why would you want an easement without the water rights?
- Do you ever buy water rights in place of land?

Response: Priority areas are primarily determined by the four focal species and their habitats. The ranking criteria will assess the potential of easement parcels to conserve aquatic, riparian, wetland, and upland habitats associated with the four focal species of the BRWCA. The proximity, or connectivity, of potential easement parcels to other protected lands will be a consideration in the prioritization and ranking criteria used for acquisition. Likewise, the availability of water on a potential easement property will be an important consideration. A variety of property sizes will likely be needed to conserve high-priority habitat.

Comments

- Is the land around a refuge a higher priority for easement acquisition just because of the location?
- Would a landowner within the approved refuge boundary have a higher priority than someone outside the boundary if their lands were both high priorities?

Response: The national wildlife refuges were originally established because of their importance to Service trust resources (migratory birds and threatened and endangered species). Likewise, the BRWCA seeks to protect habitat for focal species.

The Service will assess the conservation priorities, land parcels and priorities of interested landowners, and funding sources available on a case-by-case basis. Habitat connectivity of the refuges to adjacent protected lands to allow wildlife movement and migration will be a key consideration.

Comment

- If you are trying to help wildlife and nothing changes (the habitat is not improving), how are the easements helping wildlife?

Response: The Service would work to protect high-quality habitat using conservation easements from willing sellers on privately owned lands that are valuable to wildlife now. Easement contracts would specify perpetual protection, through restriction of development, of habitat used by trust species such as migratory birds and threatened and endangered species. Landowners that are interested in improving the quality of the habitat on their property would have the opportunity to work with the Partners for Fish and Wildlife program, or other programs that are available.

Comments

- What are the long-term goals for this project?
- Make sure the easements are written with the primary habitat objective clearly spelled out, so that those who monitor them can easily evaluate and enforce the conditions of the easement.
- What does success look like?

Response: Implementation of a landscape-scale collaborative effort within the BRWCA would maintain the populations of trust wildlife resources, and conserve the significant wildlife, aesthetic, and cultural values of the region in perpetuity. Habitat improvement projects with interested landowners through the Partners for Fish and Wildlife program would benefit the watershed.

The prioritization process used to determine the highest conservation value areas for wildlife, the easement documentation, and the ranking criteria to evaluate individual parcels will provide for clear evaluation and monitoring.

TIMELINE

Comment

- What is the time from decision to payment?

Response: On approval of the BRWCA, the funding of the project, along with other Federal, State, and local projects, will be determined through congressional appropriations.

Comment

- Can the Service approach landowners or does landowner have to approach the Service?

Response: Generally, landowners approach the Service when they are interested in an easement and will need to be placed on a waiting list if the funds are not immediately available.

WILDLIFE

Comments

- If more land goes into conservation status, wildlife may take over.
- Private landowners in the West have increased habitat. Habitat is not the problem for some species; for example, sage-grouse could benefit from control of their predators.
- Could habitat values be decreased if there too many grouse or other species?

Response: The diversity and amount of wildlife currently found on private property is a testament to the importance of the agricultural community in the watershed. There is a variety of State programs available to landowners that assist with wildlife issues such as depredation.

Comments

- Is the biggest interest on wetlands and water-related birds now?
- What about sagebrush hills and upland animals such as sharp-tailed grouse, sage sparrow, deer, and elk? It is on the foothills where most of the land development is taking place and where there is critical winter habitat for these species. I encourage you to broaden your scope of interest to include this important landscape.
- Would the easements be focused on migratory birds and endangered species?

Response: The four focal species (greater sage-grouse, sage thrasher, American avocet, and Bonneville cutthroat trout) are used as surrogate species whose habitats represent the similar requirements of the other migratory birds, endangered species, and upland species you mention. The wetland, riparian, and upland habitat types they depend on were used to determine priority areas for acquisition. A conservation easement on sagebrush habitat that was used by Service trust resources such as sage thrasher and greater sage-grouse could also benefit sharp-tailed grouse, sage sparrow, deer, and elk by protecting important upland habitat and winter range.

Comment

- We agree that this is a unique area, including migration routes for many different species of waterfowl and other wildlife.

Response: Wetland and riparian areas provide some of the most important resting, staging, feeding,

breeding, and nesting areas for millions of migratory birds in the Pacific and central flyways (Downard 2010). The Bear River is essential to the survival of the Bonneville cutthroat trout, millions of birds and many other species.

Appendix F

Section 7 Biological Evaluation

Intra-Service Section 7 Biological Evaluation Form - Region 6

Originating Person: Bob Barrett, Project Leader, and Howard Browers, Wildlife Biologist, Bear River Migratory Bird Refuge
Project Name: Bear River Watershed Conservation Area
Date Submitted: February 11, 2013
Telephone Number: 435-734-6451 (B. Barrett), 435-734-6433 (H. Browers)

I. **Service Program and Geographic Area or Station Name**:
Division of Refuges, Regions 1 and 6.

II. **Location**:
The Bear River Watershed Conservation Area located in Bannock, Bear Lake, Caribou, Franklin, Oneida, and Power counties in Idaho; Box Elder, Cache, Rich, and Summit counties in Utah; and Lincoln and Uinta counties in Wyoming.

III. **Species/Critical Habitat**:

Several federally listed species reside in or have ranges that overlap the Bear River Watershed Conservation Area, including:

Endangered
Black-footed ferret

Threatened
Canada lynx
Grizzly bear
Ute ladies'-tresses
Maguire primrose

Proposed
Wolverine
Yellow-billed cuckoo

Candidate
Greater sage-grouse
Wolverine
Whitebark pine

IV. **Project Description:**

The U.S. Fish and Wildlife Service proposes to establish a new unit of the National Wildlife Refuge System in southeast Idaho, northeast Utah, and southwest Wyoming. The new unit would be called the Bear River Watershed Conservation Area (BRWCA; see Figures 1 and 2). The project boundary encompasses the entire Bear River Watershed which is roughly 4.7 million acres, within which the

Service would strategically acquire conservation easements from willing sellers on up to 920,000 acres of private land.

The Service would seek to protect habitat through perpetual conservation easements; we would not seek fee-title acquisitions. The easement program would rely on voluntary participation from landowners. Grazing, haying and prescribed burning would continue on any land included in the easement contract. Land within an easement would remain in private ownership and, therefore, property tax and management activities such as invasive plant control, grazing and burning would remain the responsibility of the landowner. Public access to the land would also remain under the control of the landowner.

This project proposal originates from the recognition that water availability and quality is crucial for conserving the fish and wildlife species within the Bear River watershed. It is recognized that private lands are heavily used by wildlife, and those adjacent to public lands provide crucial migration corridors and linkages to a variety of habitats. As climate conditions and land use patterns change over time, many key off-refuge habitat areas will likely become increasingly important for wildlife, and at the same time subject to development pressures. The proposed BRWCA project is a landscape-scale, strategic habitat conservation effort designed to protect the significant values of this highly diverse ecosystem. These values include:

- One of the most significant resting, staging, feeding, breeding and nesting areas for large populations of migratory waterfowl and water birds on both the Pacific and Central Flyways:
    - White-faces ibis (46% of the North American population)
    - Tundra swan (32% of the western population)
    - American avocet (over 16% of the North American population)
    - Black-necked stilt (over 18% of the North American population)
    - Marbled godwit (over 24% of the North American population)
- Habitat for species such as the Greater sage-grouse, Columbian sharp-tailed grouse, Bonneville cutthroat trout, Northern leatherside chub, pronghorn, and in the high country, grizzly bear, Canada lynx, wolverine, and gray wolf;
- An important source of water both along the river course and as the major surface water source of the Great Salt Lake; and
- Maintain migration linkages for wide-ranging mammals.

The lands in the wide valleys of the Bear River watershed have been converted to pastures and agricultural fields. Water is extensively diverted and used for irrigation of alfalfa, pasture land and small grains. Future water developments are being discussed and planned that could divert more water from the Bear River. Oil and gas/geothermal exploration and development are expanding in portions of the Basin. Residential development is affecting prime agricultural lands and wildlife habitat. For example, in some areas of the Cache Valley in Utah, the population is expected to double by 2050. The Service seeks to work with ranchers, conservation organizations, and other agencies to conserve wildlife habitat and working lands for future generations.

The purposes of establishing the BRWCA are to:

- Maintain healthy populations of native wildlife species including migratory birds and threatened and endangered species;
- Protect and maintain water quality and quantity;
- Conserve riparian, aquatic, wetland, and upland habitats associated with the full diversity of Bear River ecosystems;
- Provide wildlife habitat connectivity and migratory corridors;
- Promote partnerships to coordinate implementation of watershed-level wildlife conservation actions; and
- Increase resiliency of the watershed to sustain wildlife and important habitat through climate and land use changes

Four Focal Species were selected to represent habitats in the watershed that will receive priority for purchase of conservation easements. The sage grouse and sage thrasher were selected as focal species for shrub-steppe; the Bonneville cutthroat trout was selected to represent riparian and stream/river habitats; and the American avocet was selected to represent wetland habitats.

The proposed BRWCA has been classified into three categories from the highest to the lowest resource conservation priority based on modeling results:

High conservation rank: key wetland, riparian, grassland, and shrub habitat where the highest densities of the four focal species occur.

Medium conservation rank: key wetland, riparian, grassland, and shrub habitat where the moderate to high densities of the four focal species occur.

Low conservation Rank: key wetland, riparian, grassland, and shrub habitat where the low to moderate densities of the four focal species occur.

Priorities for easement purchase will be based on these conservation ranks (Figure 3).

V. **Determination of Effects:**

The following aspects of the proposed action were primarily relied upon for purposes of informing the following effect determinations.

The minimally restrictive BRWCA easements will involve the acquisition of development rights. The proposed conservation easement has limited authority to prevent the destruction of existing wildlife habitat by restricting commercial or residential development and associated infrastructure by the landowner. The proposed conservation easement would also have limited authority to prevent the conversion of habitat types by restricting activities including, but not limited to, burning, draining, and mechanical and chemical application on covered lands. Other agricultural activities such as grazing, weed control and public access would continue to be controlled by the landowner regardless of whether there is a conservation easement on the property or not. Baseline agricultural activities that are legally occurring on private lands can continue with or without the implementation of the proposed conservation easement program.

Therefore, these activities are not considered as the effects of other activities that are interrelated or interdependent with the proposed action.

Black-footed Ferret

The historic range of the endangered black-footed ferret includes the far eastern portion of the watershed. Where ferrets have been re-introduced they are considered an experimental-nonessential population. Black-footed ferrets are not known to currently occur in the watershed; however unconfirmed sightings of naturally occurring ferrets are occasionally reported to state fish and wildlife agencies. Purchase of conservation easements in the watershed containing shrub-steppe habitat would likely have no direct effect on ferrets, but could result in future beneficial effects to the ferret by protecting habitat that is re-occupied. For these reasons, the proposed action is not likely to adversely affect the ferret.

Grizzly Bear, Canada Lynx, and the Wolverine

The grizzly bear and the Canada lynx, both listed threatened, may be found in the high country. Grizzly bear occurrence in the watershed would be rare; however, the range of the grizzly bear takes in a small portion of the watershed in Lincoln County, Wyoming in the far northeastern portion of the watershed. Canada lynx occur in higher elevation forested areas of the watershed. The wolverine, which is proposed for listing, may also occur in higher elevation forested areas of the watershed. Most of the land that these species are likely to inhabit is already owned and managed by the US Forest Service or Bureau of Land Management (Figure 4). Purchase of conservation easements under this project will not likely directly benefit these species; however, there may be some indirect benefits through purchase of easements that contribute to protection of habitat connectivity and travel corridors. For these reasons, the proposed action is not likely to adversely affect these species.

Greater Sage Grouse

The greater sage-grouse, a candidate for listing, is found throughout the basin but primarily in the middle and upper portions of the watershed. The greater sage-grouse and sage thrasher were chosen as focal species to represent shrub-steppe habitat in the watershed. Prioritization modeling was used to identify those areas of high value to the sage grouse and the sage thrasher. Shrub-steppe habitats that have been identified as high value to these two species would be high priority for purchase of conservation easements. Conservation easements would prevent the conversion of shrub-steppe habitat to other land uses. Therefore, protection of shrub-steppe habitats in the watershed through a conservation easement program should be beneficial to the sage-grouse, sage thrasher and a variety of other Federal trust species such as migratory birds. For these reasons, the proposed action is not likely to adversely affect these species.

Yellow-billed Cuckoo

The range of the yellow-billed cuckoo, a candidate recently proposed for listing, includes the Bear River watershed. If found in the watershed, cuckoos would be present during the breeding season where they would be nesting in woody riparian habitats. The species migrates to South America in the fall. The occurrence of cuckoos in the watershed is currently unknown, but implementation of the proposed project is likely to protect riparian areas potentially used by the

cuckoo for breeding. For these reasons, the proposed action is not likely to adversely affect this species.

Bonneville Cutthroat Trout

The Bonneville cutthroat trout was selected as a focal species to represent aquatic/riparian habitats. Riparian habitats adjacent to Bonneville cutthroat trout occupied steams would be a high priority for conservation easements. Purchase of these conservation easements protecting riparian habitats with well-established woody riparian vegetation or other streamside habitat may also be beneficial to yellow-billed cuckoo as noted above. For these reasons, the proposed action is not likely to adversely affect this species.

Ute Ladies' Tresses

Ute ladies' tresses (*Spiranthes diluvialis*) is found within the project area. When Ute ladies'-tresses was listed in 1992 it was known primarily to be found in moist meadows associated with perennial stream terraces, floodplains, and oxbows at elevations between 4300-6850 feet (1310-2090 meters). Surveys since 1992 have expanded the number of vegetation and hydrology types occupied by Ute ladies'-tresses to include seasonally flooded river terraces, sub-irrigated or spring-fed abandoned stream channels and valleys, and lakeshores. In addition, 26 populations have been discovered along irrigation canals, berms, levees, irrigated meadows, excavated gravel pits, roadside barrow pits, reservoirs, and other human-modified wetlands. New surveys have also expanded the elevational range of the species from 720-1830 feet (220-558 meters) in Washington to 7000 feet (2134 meters) in northern Utah. Over one-third of all known Ute ladies'-tresses populations are found on alluvial banks, point bars, floodplains, or ox-bows associated with perennial streams. The project may affect Ute ladies' tresses in a positive manner by protecting associated habitat types from destruction. Because the continuation of existing grazing practices is not an effect of the proposed Federal action, adverse effects to the Ute ladies' tresses caused by private grazing practices are outside the scope of this effect determination. For these reasons, the proposed action is not likely to adversely affect this species. Maguire Primrose Maguire primrose is a threatened plant that grows in rocky areas and on cliff faces in highly localized areas near Logan, Utah. The proposed project will have no effect on McGuire's primrose due to its specific habitat needs and isolated locations that are not likely to be affected by the proposed project.

Whitebark Pine

Whitebark pine, a candidate species, is a coniferous tree occurring in subalpine to alpine sites above 8,000 feet. The proposed project will have no effect on the whitebark pine as it is unlikely that easements purchased are likely to include whitebark pine habitat.

VI. Effects Determination and Response Requested

		ID	UT	WY
A. Listed species				
No Effect				
Maguire primrose	Concurrence	Y	Y	Y
May Affect, Not Likely to Adversely Affect				
Black-footed ferret	Concurrence	Y	Y	Y
Grizzly bear	Concurrence	Y	Y	Y
Canada lynx	Concurrence	Y	Y	Y
Ute ladies' tresses	Concurrence	Y	Y	Y
B. Proposed Species				
May Affect, Not Likely to Adversely Affect				
Wolverine	Concurrence	Y	Y	Y
Yellow-billed cuckoo	Concurrence	Y	Y	Y
C. Candidate Species				
No Effect				
Whitebark pine	Concurrence	Y	Y	Y
May Affect, Not Likely to Adversely Affect				
Greater sage-grouse	Concurrence	Y	Y	Y

Name of Reviewing ES office (Idaho)

Date 2/13/13

Name of Reviewing ES office (Utah)

Date 2/13/13

Name of Reviewing ES office (Wyoming)

Date 2/13/13

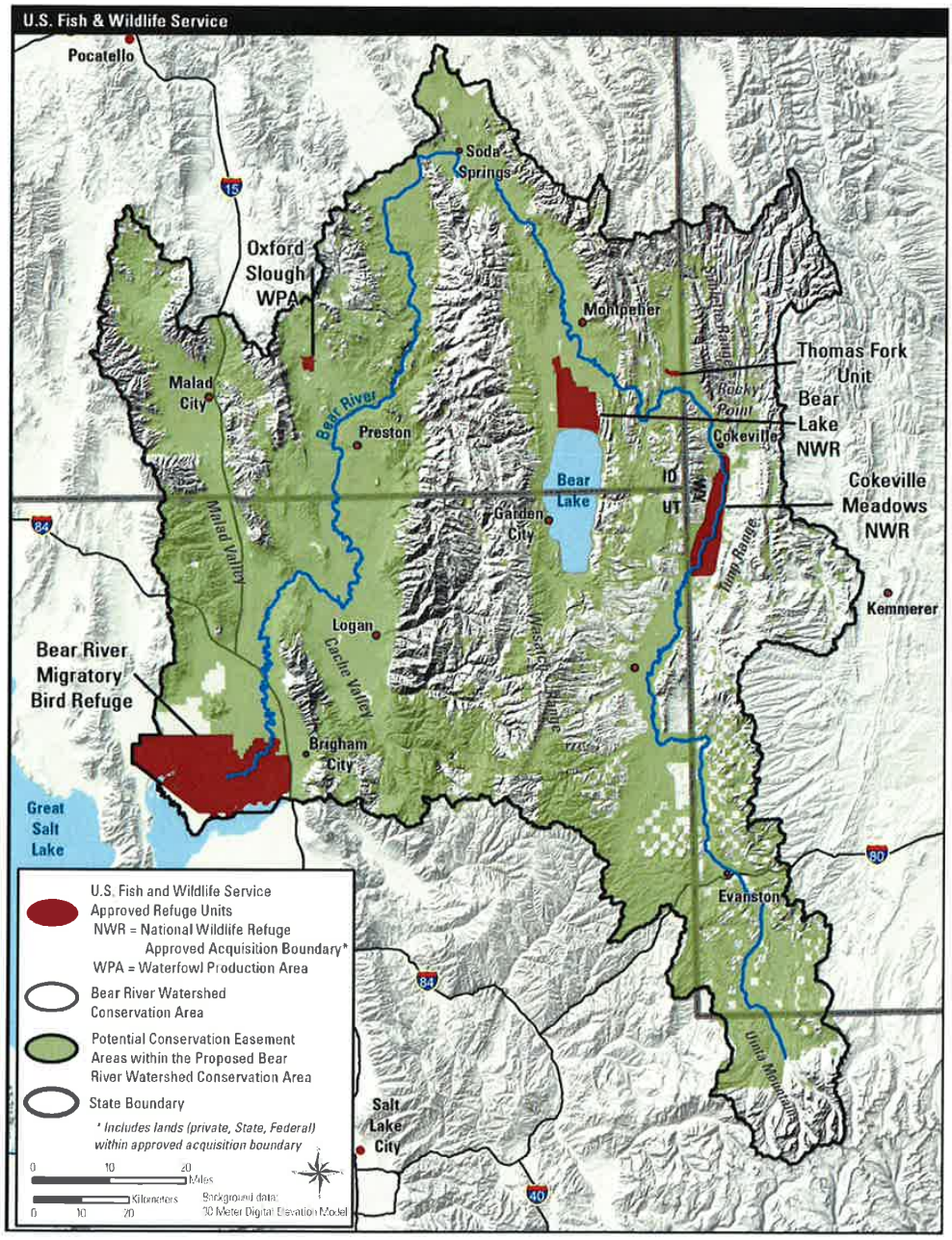

Figure 1. Bear River Watershed Conservation Area boundary map.

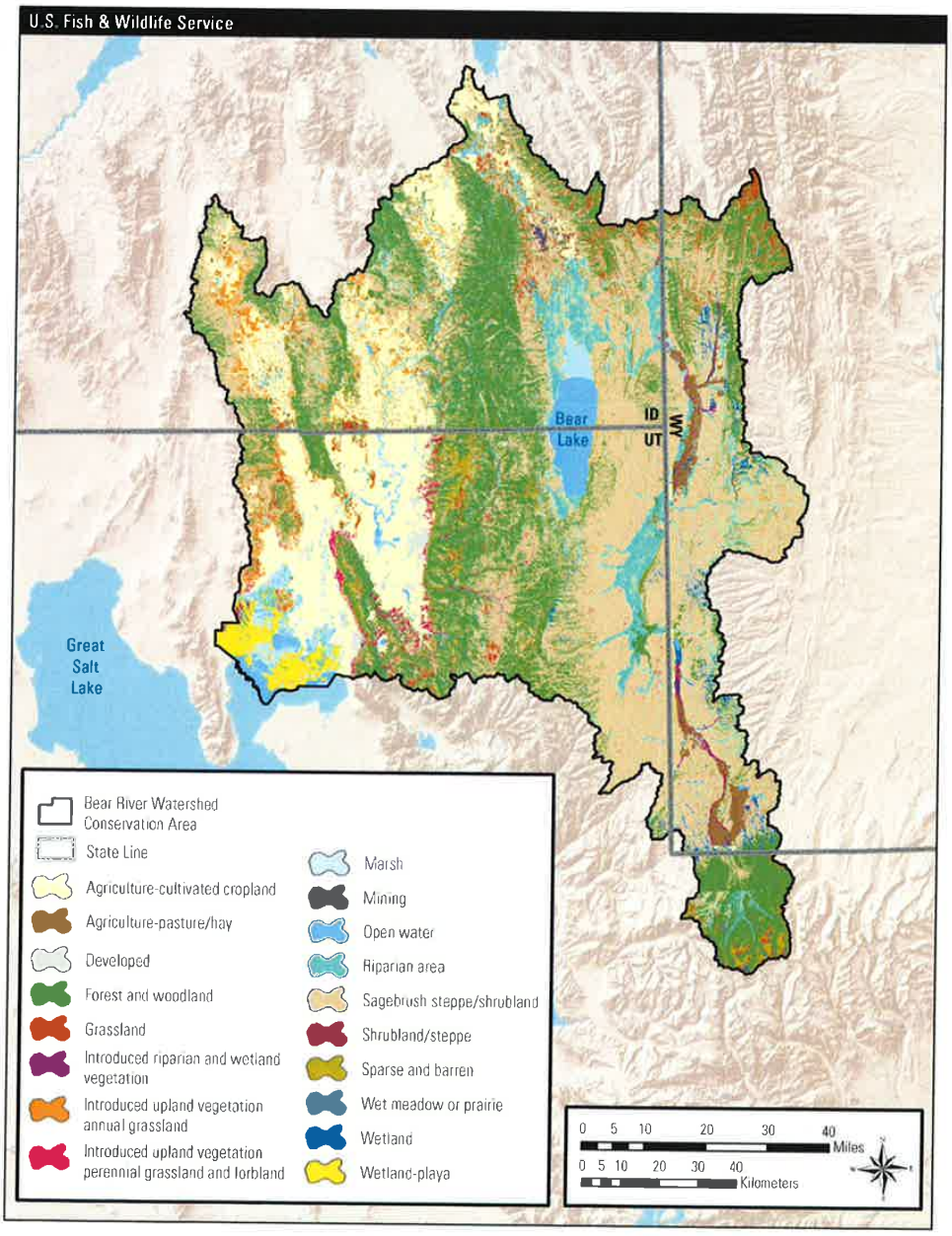

Figure 2. Bear River Watershed Conservation Area habitat map.

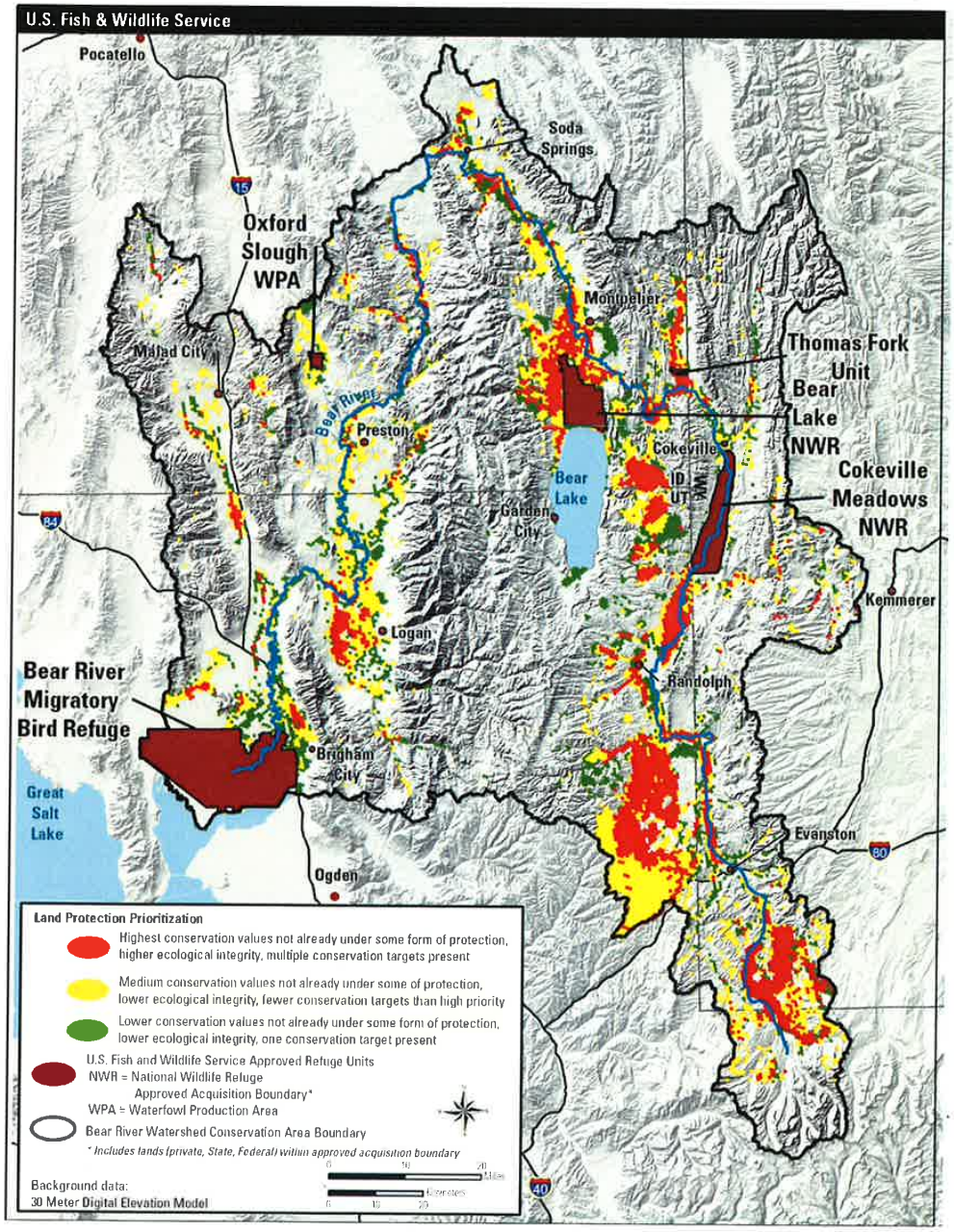

Figure 3. Bear River Watershed Conservation Area Land Protection Prioritization map.

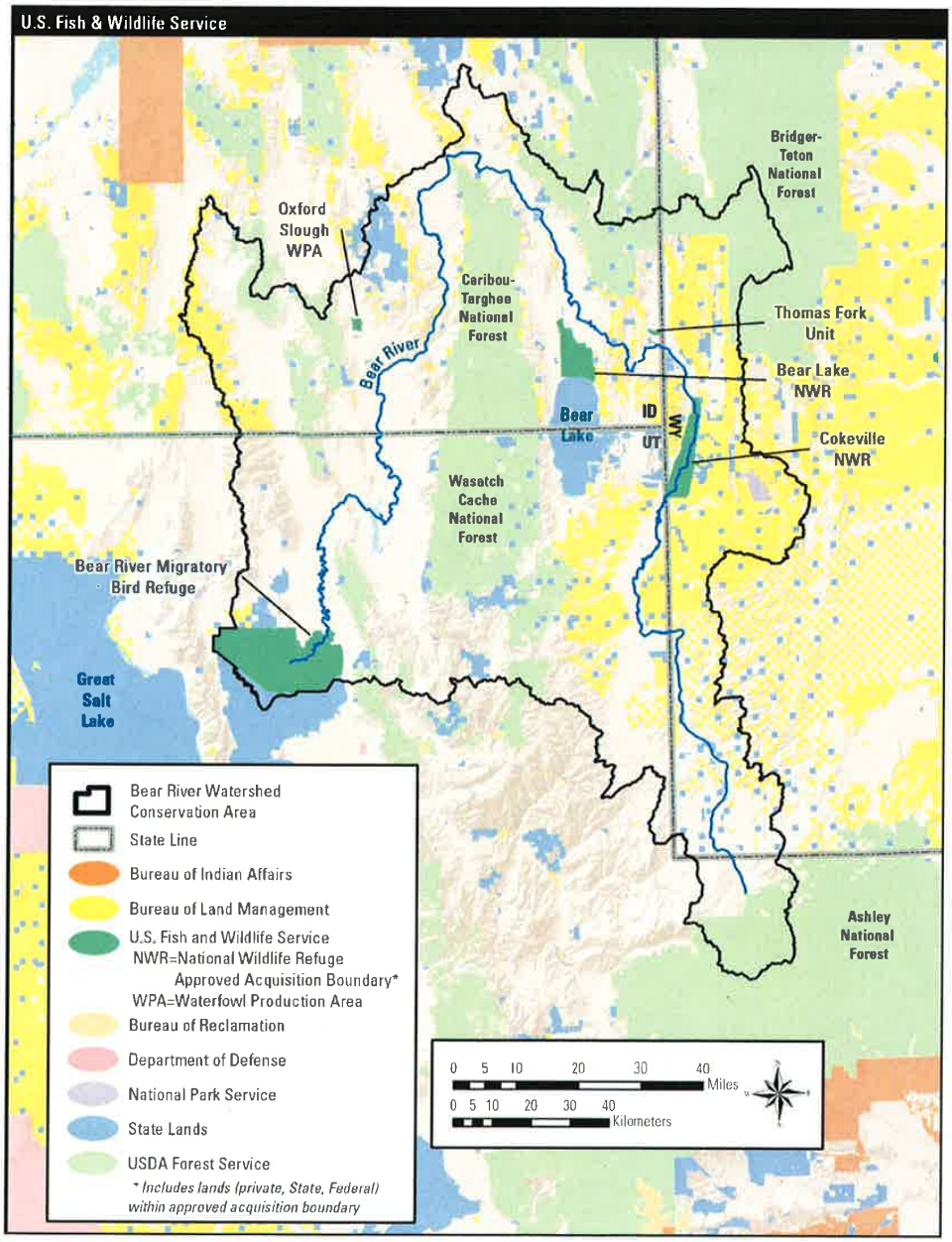

Figure 4. Bear River Watershed Conservation Area land ownership map.

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