

RETURN ON THE INVESTMENT FROM THE LAND & WATER CONSERVATION FUND

A Report by The Trust for Public Land



THE TRUST *for* PUBLIC LAND

CONSERVING LAND FOR PEOPLE

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INTRODUCTION

The Land and Water Conservation Fund (LWCF) was first established by Congress in 1965 and reauthorized in subsequent years. The Act designates that a portion of receipts from offshore oil and gas leases be placed into a fund annually for land conservation and recreation. For over forty years, LWCF has done much to create and maintain our system of state, local and national parks -- from local parks to Yellowstone National Park -- and to ensure equal access to parks and recreation for all Americans. The program is divided into two distinct funding pots: Federal acquisition for the protection of our national treasures (national parks, forests, wildlife refuges, and Bureau of Land Management areas) and grants for state and local parks, trails and recreation facilities. This study focuses on the economic benefits of LWCF investments in federal land acquisition.

LWCF INVESTMENT IN FEDERAL LANDS

The Trust for Public Land (TPL) conducted an analysis of the return on the investment of LWCF dollars for federal land acquisition by the Bureau of Land Management (BLM), Fish and Wildlife Service (FWS), Forest Service (FS), and National Park Service (NPS) for a sample of sixteen federal units that received LWCF funding between 1998 and 2009. TPL analyzed the past (i.e., 1998 to 2009) and likely future (i.e., over the next ten years) economic returns generated from LWCF spending on the sample federal units and found that **every \$1 invested returns \$4 in economic value** over this time period from natural resource goods and services alone. In addition to providing natural goods and services, these federal lands are key to local recreation and tourism industries. TPL found that **approximately 10.6 million people visit these sixteen federal units each year and spend \$511 million in the surrounding local communities.**

Sample Selection

National data are not currently available for all parcels of federal lands acquired by the agencies through the LWCF program. In the absence of this data for all federal units, TPL collected the best available information from each agency for a sample of federal units. Selection criteria for federal units included:

- Distribution of units owned and managed by the four federal agencies.
- GIS data on the parcels acquired and LWCF spending available.
- Geographic representation across the country.
- Significant LWCF-funded acquisitions.

Based on these criteria the following 16 federal units were included in the analysis:

Forest Service

White Mountains National Forest

White Mountains National Forest (NF) is located in New Hampshire and Maine. The forest is one of the most popular recreation areas in the highly developed Northeastern U.S. The forest

contains the majestic Presidential Range, which includes Mt. Washington, one of the highest and most visited mountains in the U.S. In addition, the heavily traveled Appalachian National Scenic Trail runs throughout the forest. Moose, black bear, bald eagles and American peregrine falcons find home in the forest, and a thorough network of trails provides easy access to the forest for the 1.7 million campers, hikers, hunters, fishermen, swimmers, boaters, skiers and other outdoor enthusiasts who annually visit the forest. Over 184 species of birds find habitat in the forest and numerous aquatic species such as the Eastern Brook trout and Atlantic salmon are found in the many pristine rivers that run throughout the forest.

Monongahela National Forest

The Monongahela NF is located in West Virginia. The forest is a recreational destination and major tourism attraction in the mid-Atlantic region, particularly for residents of the greater Washington, D.C. metropolitan area. The forest hosts approximately 618,000 visitors annually and provides habitat for a vast array of wildlife. Among the 230 species of birds found in the forest are 89 breeding neotropical migrant species. Additionally, the forest provides habitat for nine federally listed endangered or threatened species, including the Northern flying squirrel, the Virginia big-eared bat and the Cheat Mountain salamander. Fifty other species of rare or sensitive plants and animals are found in the forest as well.

Ouachita National Forest

The Ouachita NF is located in Arkansas and Oklahoma. Recreation opportunities abound in the forest and include hiking, mountain biking, paddling, camping, and fishing. The forest holds 4,000 miles of streams and 1,600 acres of lakes and ponds, and within these streams, rivers and lakes a number of sport fish can be found, including largemouth bass, smallmouth bass, spotted bass, catfish, and others. The forest also protects the water supply of the Little Rock metropolitan area.

Chequamegon-Nicolet National Forest

The Chequamegon-Nicolet NF is located in northern Wisconsin. With its 1,200 lakes, the national forest offers plenty of paddling, prize fishing, canoeing, boating, and swimming, in addition to recreation opportunities afforded by its 800 miles of trails. The Wisconsin Wild Waterways program has been supported through annual funding from the LWCF. In the past few years, over 10,000 acres of undeveloped shoreline along several critical lakes and streams have been protected through this program.

Fish & Wildlife Service

Umbagog National Wildlife Refuge

Umbagog National Wildlife Refuge (NWR) is located in northern New Hampshire. The refuge is the westernmost link in the chain of Rangeley Lakes, famed for their excellent recreational opportunities as well as for possessing some of the finest wildlife habitat in the two states. The refuge protects unique habitat for many wetland-dependent and migratory species, including bald eagle, peregrine falcon, and black duck; and many species of state concern, including common loon, northern harrier, woodcock, and others. The refuge also offers a scenic wilderness escape for recreationists. Kayakers, canoeists, and anglers explore numerous coves and bays on the refuge and dozens of rivers, streams, and lesser ponds that surround the lake. Hunters, hikers, nature

photographers, and wildlife watchers all find extensive opportunities in the refuge's remote expanses.

Bon Secour National Wildlife Refuge¹

Bon Secour NWR is located in Mobile and Baldwin Counties in southwestern Alabama on the Gulf of Mexico. Refuge beaches serve as nesting sites for green, loggerhead, and Kemp's Ridley sea turtles. Habitats include beaches and sand dunes, scrub forest, fresh and saltwater marshes, fresh water swamps, and uplands. More than 400 species of birds have been identified and banded at the refuge during migratory seasons. The largest are usually ospreys and several species of herons. At the other extreme, seven species of hummingbirds have been identified. Mammals such as red fox, wild pig, coyotes, armadillos and others are also present. The majority of the refuges 124,000 annual visitors engage in hiking, beach use, and saltwater fishing.

Minnesota Valley National Wildlife Refuge

Minnesota Valley NWR, in Minnesota, is located in the urban and suburban areas of the Twin Cities, and serves as an oasis of marshland among the scattering of highways, office buildings, and residences making up the metro area. To date, more than 250 species of birds have been sighted at the refuge, and nearly 150 birds nest in the refuge, including bald eagles and peregrine falcons. This avian diversity is complemented by at least 50 species of mammals including coyote, muskrat, and woodchuck, and 30 species of reptiles and amphibians including the green frog, snapping turtles, and the bull snake. One of only a small number of urban wildlife refuges in the nation, the refuge allows critical habitat to flourish in the midst of 3 million people.

Lower Rio Grande National Wildlife Refuge

Lower Rio Grande NWR is on the most southern tip of Texas, where the Rio Grande empties into the Gulf of Mexico. The refuge is one of the most biologically diverse in the national wildlife refuge system; species that call the refuge home include the elusive ocelot, striking Mexican bluewing butterflies and colorful green jays. This wildlife corridor refuge follows the final 275 miles of the Rio Grande. Along the way, it provides important habitat for a variety of wildlife that cannot be seen anywhere else in the U.S.

Nisqually National Wildlife Refuge²

Nisqually NWR is located where the freshwater of the Nisqually River meets the saltwater of south Puget Sound, creating the Nisqually River Delta, in Washington. The delta is a biologically-rich and diverse area that supports a variety of habitats including the estuary, freshwater wetlands and riparian woodlands. The refuge is famous for the more than 275 migratory bird species that use the refuge for migration, wintering, or breeding. It also provides rearing and migration habitat for steelhead trout and several salmon species, and habitat for a variety of threatened and endangered species. The Black River Unit, southwest of Olympia, provides high quality habitat for Coho and Chinook salmon, steelhead trout, migratory birds, and a diversity of other species. Situated between Olympia and Seattle and within 100 miles of more than 4 million people, the refuge is visited each year by more than 150,000 people who come to enjoy and learn about these sensitive

¹ Caudill, James and Erin Henderson. 2005. Banking on Nature 2004: The Economic Benefits to Local Communities of National Wildlife Refuge Visitation. U.S. Fish and Wildlife Service Division of Economics.

² Carver, Erin and James Caudill. 2007. Banking on Nature 2006: The Economic Benefits to Local Communities of National Wildlife Refuge Visitation. U.S. Fish and Wildlife Service Division of Economics.

natural resources. The refuge provides environmental education programs for 5,000 school children every year.

James Campbell National Wildlife Refuge

James Campbell NWR is located on the northern end of Oahu, Hawaii. Much of its 1,100 acres are wetlands that are ideal for waterfowl. The area provides essential habitat for more than 100 bird species, including endangered species such as the Hawaiian stilt, Hawaiian coot, Hawaiian moorhen, and the Hawaiian duck. The refuge's rich variety of species attracts birdwatchers from across the globe.

National Park Service

Cuyahoga Valley National Park

Cuyahoga Valley National Park is located in northeastern Ohio. The conserved forests, farmlands, and wetlands within the park offer visitors a remarkable array of outdoor recreation, wildlife-viewing opportunities, and spectacular scenery including peaceful creeks, waterfalls, open prairie, and dense hardwood forests, all within easy access of a major metropolitan area. The park is a major year-round outdoor recreation attraction, more than 2.8 million people visited the park in 2008, making it the sixth most visited National Park in America and the single most visited NPS site in the Midwest.

Petroglyph National Monument

Petroglyph NM, near Albuquerque, New Mexico, preserves the archaeological evidence of an ancient civilization and allows visitors to view the exciting mix of wildlife and plant species found in the desert. Another major feature of the monument landscape is its unique volcanic landscape formed by volcanic activity in the area more than 100,000 years ago. Today, trails allow hikers to walk alongside the bases of the volcanoes without damaging these resources, which are considered sacred ground by the Pueblos.

Acadia National Park

Acadia National Park is spread about a group of islands on Maine's Atlantic coast. These islands have a rich and diverse landscape ranging from mountains and forests to rocky coasts and bogs. The park's fascinating ecology and 120-miles of hiking trails make Acadia one of the most popular national parks in the U.S. with 2.23 million visitors in 2009. Woodlands cover much of the park and attract scores of species of birds, including bald eagles and peregrine falcons. Wetlands, lakes, and streams are abundant in the park. Fresh and saltwater marshes, forested wetlands, shellfish flats, and other wetland types make up a fifth of the park's area and provide critical habitat to support the range of wildlife. Freshwater plants, including state-listed endangered species, grow in many of the park's wetlands. Migratory birds frequent the park's wetlands alongside numerous species of frogs and salamanders. Trout, bass, and salmon swim in its lakes and streams, and Maine's famous lobsters are sometimes found near the park's rocky coast.

Bureau of Land Management

Carrizo Plain National Monument³

Carrizo Plain National Monument (NM) is located in central California. Visitors are annually drawn to its spectacular spring wildflower displays, about 80,000 visitors came to take in the wildflower display in 2009. Birders seek out Soda Lake, one of America's largest undisturbed alkali wetlands, home to waterfowl and shorebirds including sandhill cranes and long-billed curlews. Other wildlife enthusiasts delight in an area that offers the largest remaining contiguous habitat for many animal species, such as pronghorn antelope and Tule elk. In fact, the Carrizo Plain has the largest concentration of endangered species in all of California. These species include the San Joaquin kit fox, the California condor, the blunt-nosed leopard lizard, the San Joaquin antelope squirrel, and the giant kangaroo rat. Rare plant species include the California jewel-flower, Hoover's wooly-star, and San Joaquin woolythreads.

Santa Rosa Mountains NM⁴

Santa Rosa Mountains NM is located in Southern California, approximately 100 miles east of Los Angeles. The monument has a dramatic landscape rising abruptly from near sea level in the valley to the San Jacinto Peak at 10,834 feet. Five distinct "life zones," from Sonoran Desert to Arctic Alpine provide exceptionally diverse biological resources. The monument runs northwest to southeast along the edge of the Coachella Valley, a broad, low elevation valley comprising the westernmost limits of the Sonoran Desert. Nine cities, (Palm Springs, Cathedral City, Rancho Mirage, Indian Wells, Palm Desert, La Quinta, Indio, Coachella, and Desert Hot Springs) lie within this valley--an area of rapid growth and increasing urbanization. The monument provides a "picturesque backdrop" and an abundance of recreational opportunities that are important regional economic resources for the Coachella Valley and mountain communities.

Otay Mountain Wilderness

Otay Mountain Wilderness is located in San Diego County, California, a renowned "hotspot" of biological diversity, with more native plant and bird species than any other county in the U.S. No fewer than 13 federal-listed species inhabit this landscape, including the California gnatcatcher, least Bell's vireo, willow flycatcher, and quino checkerspot butterfly. The wilderness offers hiking and wildlife viewing opportunities to visitors and residents of the state's second fastest growing county.

LWCF Spending & Acquisitions

In these 16 federal units, from 1998 to 2009 a total of 131,000 acres were acquired through LWCF using \$357 million in funding (this is nominal spending, that is, not in today's dollars). Exhibit 1 breaks out the acres acquired each year.

³ Haeefe, Michelle, Nada Culver, and Alice Bond. 2008. The Carrizo Plain National Monument and Strong Local Communities. The Wilderness Society. April 2008.

⁴ Bureau of Land Management and U.S. Forest Service. 2003. Santa Rosa and San Jacinto Mountains National Monument Proposed Management Plan and Final Environmental Statement. October 2003.

Year	Acres
1998	16,100
1999	6,560
2000	5,830
2001	61,800
2002	7,330
2003	7,090
2004	10,600
2005	7,170
2006	5,690
2007	2,690
2008	420
2009	246
Total	131,000

NATURAL GOODS & SERVICES

These protected lands provide a multitude of natural goods (e.g., grazing on grasslands) and services (e.g., water filtration and flood protection by wetlands). We considered the natural goods and services provided by 12 distinct ecosystems found within the lands acquired. As shown in Exhibit 2, the most commonly acquired land cover type was deciduous forest at 32 percent.

Land Cover	Acres	Percentage
Open Water	3,050	2%
Developed	3,474	3%
Barren Land	6,490	5%
Deciduous Forest	41,600	32%
Evergreen Forest	20,700	16%
Mixed Forest	26,700	20%
Shrub/Scrub	15,100	11%
Grasslands/ Herbaceous	3,260	2%
Pasture/ Hay	1,130	1%
Cultivated Crops	1,910	1%
Woody Wetlands	2,090	2%
Emergent Herbaceous Wetlands	6,050	5%
Total	131,000	100%

The natural goods and services provided, and their monetary values, were determined using the benefits transfer methodology.⁵ That is, TPL conducted a thorough literature review of the types of goods and services provided by the 12 ecosystem types identified above. We then used the economic values of the different ecosystem types identified in that literature to estimate a per acre economic value of the goods and services provided. We estimated the per acre value of the following natural good and services: protecting water quality and supply; flood protection; fish production; habitat provision; storm protection; carbon sequestration; grazing; aesthetics; pollination; dilution of wastewater; and erosion control across various geographies.

Based upon these per acre values, 131,000 acres of conserved land provide \$2 billion in total economic value from date of purchase (i.e., beginning in 1998) to 2019 (i.e., 10 years from today) in the form of natural goods and services.

While this study is the first to estimate the return on investment for LWCF it is not the first to value the natural goods and services benefits provided by federal lands. For example, a recent study estimated the dollar value of natural goods and services provided by the National Wildlife Refuge System alone to be approximately \$30.6 billion each year (2009\$).⁶

⁵ The benefits transfer method is used to estimate economic values for ecosystem services by transferring available information from published studies in another location and/or context. The basic goal of benefit transfer is to estimate benefits for one context by adapting an estimate of benefits from some other context. Benefit transfer is often used when it is too expensive and/or there is too little time available to conduct an original valuation study, yet some measure of benefits is needed. It is important to note that benefit transfers can only be as accurate as the initial study.

⁶ Ingraham, Molly and Shonda Gilliland Foster. 2008. The value of ecosystem services provided by the U.S. National Wildlife Refuge System in the contiguous U.S. *Ecological Economics*. 67:608-618.

Natural Goods & Services: Water Quality & Quantity

Federal lands play an important role in water supply across the country. The Forest Service estimates the marginal value of water flowing from national forests, in both offstream and instream uses, is at least \$3.7 billion per year. The annual value of water from national forest lands is greatest in the Pacific Northwest and Pacific Southwest Regions.

These water supply benefits can be demonstrated on the ground. The Ouachita National Forest provides Lake Winona, by rainfall, a high-quality, soft and pure water that serves 159,000 customers daily in the metropolitan Little Rock area. According to Central Arkansas Water (the water utility that owns Lake Winona) the surrounding Ouachita National Forest provides valuable protection for Lake Winona. Central Arkansas Water's other, unprotected, water source is vulnerable to increased pollution loading due to land use changes, requiring costly management programs.

Sources: Sedell, James, Maitland Sharpe, Daina Dravnieks Apple, Max Copenhagen, and Mike Furniss. 2000. *Water & The Forest Service*. U.S. Forest Service. FS-660.

Central Arkansas Water. 2007. *Lake Winona Brochure*.

Central Arkansas Water. 2007. *Lake Maumelle Watershed Management Plan*. Prepared by Tetra Tech, Inc. May 2007.

RETURN ON INVESTMENT

TPL estimated the return on the present value (i.e., the value of past investments in today's dollars) of \$537 million invested in 131,000 acres of land conservation through LWCF from 1998 to 2009 by comparing this investment to the \$2 billion in economic value of natural goods and services generated by these lands in the past (i.e., 1998 to 2009) and into the future (i.e., over the next ten years). That is, every \$1 invested returns \$4 in economic value. These goods and services would continue to be provided well beyond the next ten years increasing the total return on investment beyond that calculated in this analysis.

ADDITIONAL ECONOMIC BENEFITS

In addition to providing natural goods and services, these federal units are key to local recreation and tourism industries. Visitors to these areas spend money on things like food and lodging in the region.

National Forests⁷

Visits to America's national forests lands are an important contribution to the economic vitality of rural communities. About 174 million recreation visits to national forests are taken annually. Regional spending by these recreation visitors is nearly \$13 billion each year. As visitor spending ripples through the economy it sustains over 224,000 full and part time jobs.

National Parks⁸

Outdoor recreation at NPS units provides an economic boost to surrounding communities. In 2008, the national park system received 275 million recreation visits. These visitors spent \$11.6 billion in regional economies. Their spending supported 205,000 jobs and \$4.4 billion in labor income.

National Wildlife Refuges⁹

Wildlife based recreation at national wildlife refuges contributes to regional economies. In fiscal year 2006, 34.8 million people visited national wildlife refuges in the lower 48 states for recreation. Their spending generated sales of \$1.7 billion in regional economies. This spending supported 27,000 jobs and \$543 million in employment income.

BLM Managed Lands¹⁰

Recreational use on the public lands managed by BLM helps support the economies of Western communities and states. More than 55 million people now live within 25 miles of BLM managed lands, and two-thirds of these lands are within 50 miles of an urban area. Visits to recreation sites on BLM managed lands have significantly increased over the years, from 51 million in 2001 to 57 million in 2008.

Increased Tourism, Recreation & Spending

The modest investment in protection of land through LWCF supports the already impressive level of tourist visits to federal lands and local spending. About 10.6 million tourists visit the 16 federal units studied each year, spending \$511 million in the respective local economies annually. The top five federal units, of the 16 considered in this analysis, in terms of number of visitors and spending include:

- **Acadia National Park** – Over the past 10 years LWCF has invested \$3.85 million dollars in land acquisition in the park.¹¹ Over that same time period we estimate 22.0 million visitors recreated in the park and spent \$1.40 billion in the local economy.

⁷ U.S. Forest Service. 2010. National Visitor Use Monitoring Results USDA Forest Service National Summary Report: Data collected FY 2005 through FY 2009. Updated April 25, 2010.

⁸ Stynes, Daniel. 2009. National Park Visitor Spending and Payroll Impacts 2008. East Lansing, MI: Department of Community, Agriculture, Recreation and Resource Studies, Michigan State University and National Park Service.

⁹ Carver, Erin and James Caudill. 2007. Banking on Nature 2006: The Economic Benefits to Local Communities of National Wildlife Refuge Visitation. U.S. Fish and Wildlife Service Division of Economics.

¹⁰ Bureau of Land Management. 2009. The Bureau of Land Management's Outdoor Recreation and Visitor Services Accomplishments Report 2006-2008. Recreation and Visitors Services.

¹¹ These figures represent appropriations for each unit over the last 10 years, and may overstate actual expenditures due to rescissions, across the board reductions, and reprogrammings.

- **White Mountain NF** – Over the past 10 years LWCF has invested \$6.98 million dollars in land acquisition in the forest.¹² Over that same time period we estimate 17.0 million visitors recreated in the forest and spent \$1.07 billion in the local economy.
- **Cuyahoga Valley National Park** – Over the past 10 years LWCF has invested \$7.80 million dollars in land acquisition in the park.¹³ Over that same time period we estimate 26.5 million visitors recreated in the park and spent \$0.54 billion in the local economy.
- **Ouachita NF** – Over the past 10 years LWCF has invested \$6.50 million dollars in land acquisition in the forest.¹⁴ Over that same time period we estimate 11.3 million visitors recreated in the forest and spent \$0.56 billion in the local economy.
- **Chequamegon-Nicolet NF** – Over the past 10 years LWCF has invested \$24.1 million dollars in land acquisition in the forest.¹⁵ Over that same time period we estimate 7.26 million visitors recreated in the forest and spent \$0.57 billion in the local economy.

In addition, LWCF investments increase visits to federal lands and local spending. For example, on average, the creation of an additional 10,000-acre wilderness area would yield approximately 11,000 visitor days per year in the East, and about 3,850 visitor days per year in the West.¹⁶ The following illustrate how LWCF has increased visits and local spending at specific federal units.

Monongahela National Forest¹⁷

In 2010, a 448 acre tract located above Bartow was added to the Monongahela National Forest. The property is located on a bluff adjacent to a stretch of the historic Staunton-Parkersburg Turnpike, a heavily traveled route over the Allegheny Mountains during the Civil War. The property's turnpike route extends from the base of Allegheny Mountain at Staunton, Virginia over the mountain into West Virginia to the Ohio River in Parkersburg, West Virginia. The Turnpike, a designated National Scenic Byway, links battlefields at Rich Mountain, Cheat Summit, and Camps Allegheny and Bartow, and is promoted through the Staunton-Parkersburg Turnpike Alliance. The Alliance preserves Turnpike history and promotes tourism and visitors to the area. The \$900,000 purchase price was entirely funded by an appropriation from the federal LWCF.

“Adding this historic Civil War corridor to the Monongahela National Forest will help boost tourism and create economic opportunities in Pocahontas County,” said House Natural Resource Committee Chairman Nick Rahall. “I will continue to lead efforts in the Congress to fully fund the federal Land and Water Conservation Fund, which stimulates local economies while preserving West Virginia’s rich natural, cultural, and historic heritage for future generations to enjoy.”

Umbagog National Wildlife Refuge

In 2001, 6,220 acres under one ownership were added to the Umbagog NWR. The property, which was purchased for \$3.25 million from Boston-based Hancock Timber Resource Group,

¹² Ibid

¹³ Ibid

¹⁴ Ibid

¹⁵ Ibid

¹⁶ Loomis, John, and Robert Richardson. 2001. Economic Values of the U.S. Wilderness System: Research Evidence to Date and Questions for the Future. *International Journal of Wilderness*. 7(1).

¹⁷ West Virginia Highlands Conservancy. Monongahela National Forest Expands. *West Virginia Highlands Voice*. May 2010.

consists of five forested parcels that all lie within the acquisition boundary that was established for the Refuge in 1992. Congress appropriated funding from LWCF to purchase the land and add it to the refuge.

"This acquisition marks a tremendous step forward for the Umbagog National Wildlife Refuge because it links together many of the existing refuge holdings and includes critical wetlands," said refuge manager Paul Casey. "Its protection guarantees that this area will continue to provide irreplaceable breeding habitat for wildlife populations and will also allow for significantly improved public access."

FWS analyzed the increase in recreational opportunities and levels of visitation due to land acquisition in the refuge.¹⁸ They found that acquisition would increase visitation for fishing, hunting, use of trails and water, other wildlife viewing and observation, and snowmobiling on trails activities. It is estimated that protection would increase recreational use on these acres by 84 percent.

State & Local Parks Benefits

While the focus of this study is on the economic benefits of federal LWCF investments, several other studies have documented the economic benefits from state and local parks and recreation, which are supported through the LWCF state grants program. For example, the National Association of State Park Directors reports that America's state park system contributes \$20 billion to local and state economies. According to the National Recreation and Park Association, studies have shown that for every \$1 million invested in parks and recreation infrastructure, at least 20 jobs are created.

¹⁸ U.S. Fish and Wildlife Service. Land Protection Plan for Umbagog National Wildlife Refuge. October 2008.

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