

# SAVING OUR ENDANGERED ECOSYSTEMS

A Science-Based  
Request for  
Land and Water  
Conservation Fund  
Appropriations in  
Fiscal Year  
2001



Presented by

Defenders of Wildlife

1101 Fourteenth Street, NW

Washington, D.C. 20005

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### **ABOUT DEFENDERS OF WILDLIFE**

Defenders of Wildlife is a leading nonprofit conservation organization recognized as one of the nation's most progressive advocates for wildlife and its habitat. Defenders uses education, litigation, research and promotion of conservation policies to protect wild animals and plants in their natural communities. Known for its effective leadership on endangered species issues, Defenders also advocates new approaches to wildlife conservation that protect species before they become endangered. Founded in 1947, Defenders of Wildlife is a 501(c)(3) membership organization headquartered in Washington, D.C. It has more than 400,000 members and supporters.

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Cover: Blackfoot Valley, Montana. The U.S. Fish and Wildlife Service is requesting LWCF funding for suitable parcels here as part of the Western Montana Project. The area includes northwestern grasslands and savanna, one of the nation's most endangered ecosystems. (Photo courtesy of Montana Partners for Wildlife.)

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**T**his request for Land and Water Conservation Fund (LWCF) appropriations for fiscal year 2001 is based on research by Mayuri V. Sobti. For her Master's thesis from Duke University's Nicholas School of the Environment, Sobti created a database of federal land acquisition projects, devised the methodology for prioritizing the projects based on their biological conservation value and applied it to identifying the most important sites for LWCF funding. Defenders of Wildlife sponsored her work in the interest of furthering the national ecosystem protection agenda set forth in its 1995 publication *Endangered Ecosystems: A Status Report on America's Vanishing Habitat and Wildlife*.

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**A**merica's natural ecosystems — unique communities of interdependent plants and animals — are being destroyed at an alarming rate.

Logged, plowed, grazed, bulldozed, paved, dammed, polluted and invaded by exotic plants and animals, many U.S. ecosystems have already lost more than half of the area they occupied before European settlement. Others have virtually disappeared, declining by as much as 98 percent.

An inevitable consequence of the continuous loss of habitat and subsequent ecosystem degradation in this nation is an ever-lengthening list of endangered species. More than 85 percent of the plants and animals on the U.S. endangered species list are in trouble because of habitat loss. But the reasons for protecting natural ecosystems

go beyond saving individual species to preserving the very quality of life for all Americans.

Healthy ecosystems provide us with rich aesthetic experiences and opportunities for recreation. They support the natural ecological processes that purify our air and water, build fertile soil for our crops, control flooding and maintain biodiversity, the variety of living things that is our ultimate source of food, medicine, fiber and other raw materials. The loss of any of these "ecosystem services" not only compromises our quality of life but also can be quite costly. Replacing the free sewage treatment provided by

**21 Most Endangered U.S. Ecosystems**

<b>South Florida Landscape</b>	<b>Cave and Karst Systems</b>
<b>Southern Appalachian Spruce-Fir Forest</b>	<b>Tallgrass Prairie</b>
<b>Longleaf Pine Forest and Savanna</b>	<b>California Riparian Forests and Wetlands</b>
<b>Eastern Grasslands, Savannas and Barrens</b>	<b>Florida Scrub</b>
<b>Northwestern Grasslands and Savannas</b>	<b>Ancient Eastern Deciduous Forest</b>
<b>California Native Grasslands</b>	<b>Ancient Forest of Pacific Northwest</b>
<b>Coastal Communities in the Lower 48 States and Hawaii</b>	<b>Ancient Red and White Pine Forest, Great Lakes States</b>
<b>Southwestern Riparian Forests</b>	<b>Ancient Ponderosa Pine Forest</b>
<b>Southern California Coastal Sage Scrub</b>	<b>Midwestern Wetlands</b>
<b>Hawaiian Dry Forest</b>	<b>Southern Forested Wetlands</b>
<b>Large Streams and Rivers in the Lower 48 States and Hawaii</b>	

*(For more information about each ecosystem, see the copy of Appendix B from "Endangered Ecosystems: A Status Report on America's Vanishing Habitat and Wildlife" attached to this request for funding.)*

wetlands, estuaries and other aquatic systems with man-made alternatives, for example, would cost billions of dollars.

Yet hundreds of our ecosystems are far from healthy. Computer mapping, satellite imagery and other technical advances that have enhanced our understanding of ecosystems also have pro-

vided graphic scientific evidence of their decline. And the magnitude of decline is “staggering,” according to *Endangered Ecosystems: A Status Report on America’s Vanishing Habitat and Wildlife*, a 1995 Defenders of Wildlife publication that identifies the nation’s 21 most endangered ecosystems.

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**F**ull funding for LWCF, the main source of money for state and federal land acquisition projects in the United States, gives us an unprecedented opportunity to save key unprotected areas in our endangered ecosystems.

Full funding of the Land and Water Conservation Fund (LWCF) would make \$900 million — more than double the typical annual allotment — available for land acquisition in 2001. With these funds we can counter habitat loss, the number-one threat to species and ecosystems in America, by strategically adding properties to our system of protected public lands.

More than 45 million acres of privately owned land lie within the current boundaries of lands managed by the U.S. Forest Service, U.S. Fish and Wildlife Service and National Park Service. Millions more are interspersed throughout Bureau of Land Management lands. LWCF funding makes it possible for the agencies to offer fair-market value for these inholdings and other important parcels most threatened by development or most needed to close the gaps in existing public land systems. By choosing these land

acquisition projects with the goal of conserving the 21 most endangered ecosystems identified by Defenders of Wildlife, we can make the most biologically sound investments with LWCF dollars.

At present, the four federal land-managing agencies (Bureau of Land Management, U.S. Fish and Wildlife Service, U.S. Forest Service and National Park Service) do not have a common goal such as ecosystem conservation nor a standardized, science-based system for prioritizing acquisition projects. Each agency chooses parcels to meet its own goals and its own set of prioritization criteria rather than coordinating their purchases to maximize the conservation potential of the entire system of public lands.

Given the value of land acquisition as a conservation tool and the prospect of full and permanent funding for LWCF offered by several pending legislative proposals, the need for the

agencies to adopt a coordinated and biologically based method for prioritizing federal acquisitions is urgent. The Fish and Wildlife Service is leading the way with its Land Acquisition Priority System, which includes the conservation of

endangered ecosystems among the criteria for ranking sites. A more systematic, interagency approach is crucial to ecosystem-based conservation of the natural resources within our public lands system.

### LWCF: New Hope for an Old Promise

The Land and Water Conservation Fund (LWCF) was established by Congress in 1964 to provide the states and the four federal land-managing agencies (National Park Service, U.S. Forest Service, U.S. Fish and Wildlife Service and Bureau of Land Management) money for purchasing public lands out of proceeds from surplus federal real estate sales and motorboat fuel taxes. Because the need was so great, a subsequent authorization added proceeds from offshore oil- and gas-drilling fees.

The authorized annual funding level for LWCF has grown from \$100 million to \$900 million. However, the full amount seldom has been approved for spending by Congress. LWCF allocations are subject to the appropriations process, the annual legislative battle of politics and priorities. Over the past 15 years more than \$12 billion in LWCF money has been diverted to deficit reduction and other programs. Land protection efforts nationwide have been thwarted as a result. Pristine areas have been lost to development, plants and animals have been added to state and federal endangered and threatened species lists, and ecosystems have deteriorated.

In 1999, the Clinton administration responded to the pressing need to fulfill the promise of LWCF by launching the Lands Legacy Initiative to substantially increase funding for LWCF in fiscal year 2000. Through this initiative \$464 million was provided for acquisitions through LWCF in fiscal year 2000. For fiscal year 2001, the President is requesting \$600 million for land acquisition and

proposing a mechanism to dedicate and protect LWCF funding in future years.

In addition, several proposals for permanently funding LWCF and providing even more funds for wildlife protection are now circulating on Capitol Hill. In the U.S. House of Representatives, House Resources Committee Chairman Don Young (R-Alaska), ranking Democratic member George Miller of California, Billy Tauzin (R-Louisiana) and John Dingell (D-Michigan) have led the charge in pushing for the Conservation and Reinvestment Act (CARA), H.R. 701, which would require a significant portion of oil and gas royalties from offshore drilling on the Outer Continental Shelf to be spent for conservation. (H.R. 701 passed the House floor on May 11 with a vote of 315 to 102.) In the Senate, Barbara Boxer (D-California) introduced S. 2567, an identical bill, and Mary Landrieu (D-Louisiana), Frank Murkowski (R-Alaska), Trent Lott (R-Mississippi), John Breaux (D-Louisiana) and Dianne Feinstein (D-California) introduced S. 2123, a similar bill.

These bills provide landmark levels of funding for LWCF and other conservation programs, but impose new procedural hurdles and offer no guarantee that LWCF funds would be fully spent each year. Defenders is working to change the problematic provisions in these bills. Meanwhile, the ranking Democrat on the Senate Energy Committee, Jeff Bingaman of New Mexico, has introduced his own bill, S. 2181, which provides true mandatory funding for LWCF without any new restrictions.

## **D**efenders evaluated the acquisition projects proposed for LWCF funding in FY 2001 and identified 19 top-priority projects for protecting our most endangered ecosystems.

Recognizing that the agencies do not have a science-based system or even a common goal for evaluating land acquisition projects, Defenders of Wildlife devised a ranking system with the goal of conserving endangered ecosystems. Defenders obtained information on more than 300 federal acquisition projects proposed for 2001 from the national and regional offices of the four federal land management agencies. To identify the top-priority projects in the most endangered ecosystems, each project was evaluated and ranked using a three-tiered sequential prioritization system consisting of the following filters:

### **Filter 1: Biological Conservation Goal.**

The goal of each of the proposed acquisitions was evaluated to identify those with solid biological conservation goals and to weed out those proposed primarily for recreation, historic preservation or other purposes.

### **Filter 2: Endangered Ecosystem**

**Protection.** The locations of sites with biological conservation goals were overlaid on maps of

the 21 most endangered ecosystems. Projects that did not contribute to the conservation of these ecosystems were eliminated.

### **Filter 3: Biological Conservation Value.**

Each acquisition project with a biological conservation goal within an endangered ecosystem was evaluated for its biological conservation value. The sites were ranked based on multiple factors: uniqueness of habitat, habitat quality, number of threatened and endangered species, number of endangered ecosystems, degree of fragmentation, contribution to connectivity and imminence of development or other threats.

Top-priority projects were identified for 18 of the 21 most endangered ecosystems (for three ecosystems none of the proposed projects met the conservation criteria of the evaluation process). Defenders considers these 19 acquisition projects critical to endangered ecosystem protection and highly recommends them for funding through LWCF in 2001 (see chart, opposite).

**T**he 19 projects on the following page are but a fraction of the lands that need to be protected. More than 150 of the projects evaluated would help conserve endangered ecosystems and contribute to the overall goal of creating a viable national network of protected lands to sustain our ecosystems.



**TOP-PRIORITY ECOSYSTEM-SAVING PROJECTS RECOMMENDED FOR FUNDING  
THROUGH THE LAND AND WATER CONSERVATION FUND IN FY 2001**

Acquisition Project	Endangered Ecosystem	Agency*	State	President's Budget Request
<b>Big Cypress National Preserve</b>	South Florida Landscape	NPS	FL	\$3 million
<b>Waccamaw NWR*</b>	Longleaf Pine Forest and Savanna	FWS	SC	Not in budget
<b>Grand Bay NWR</b>	Eastern Grasslands, Savannas and Barrens	FWS	MS	Not in budget
<b>Western Montana Project</b>	Northwestern Grasslands and Savannas	FWS	MT	Not in budget
<b>Carrizo Plain Natural Area</b>	California Native Grasslands	BLM	CA	\$5 million
<b>Austin's Woods (Brazoria, NWR, San Bernard NWR)</b>	Coastal Communities	FWS	TX	\$1.5 million
<b>Lower Rio Grande NWR</b>	Southwestern Riparian Forests	FWS	TX	\$1.5 million
<b>San Pedro Ecosystem</b>	Southwestern Riparian Forests	BLM	AZ	\$3 million
<b>Otay Mountain/Kuchamaa</b>	Southern California Coastal Sage Scrub	BLM	CA	\$1 million
<b>Hakalau Forest NWR</b>	Hawaiian Dry Forest	FWS	HI	\$4 million
<b>Upper Snake/South Fork Snake River</b>	Large Streams and Rivers	BLM	ID	\$2 million
<b>Balcones Canyonlands NWR</b>	Cave and Karst Systems	FWS	TX	\$4.5 million
<b>Northern Tallgrass Prairie Habitat</b>	Tallgrass Prairie	FWS	MN/ IA	\$2 million
<b>Potrero Creek</b>	California Riparian Forests and Wetlands	BLM	CA	\$2 million
<b>Lake Wales Ridge NWR</b>	Florida Scrub	FWS	FL	\$2 million
<b>Michigan Lakes and Streams</b>	Ancient Eastern Deciduous Forest	FS	MI	\$1 million
<b>Big Sur Ecosystem</b>	Ancient Forest of the Pacific Northwest	FS	CA	\$1 million
<b>Shiawasee NWR</b>	Midwestern Wetlands	FWS	MI	Not in budget
<b>Tensas River NWR</b>	Southern Forested Wetlands	FWS	LA	Not in budget

\*NWR = National Wildlife Refuge; BLM = Bureau of Land Management; FS = Forest Service; FWS = Fish and Wildlife Service; NPS = National Park Service