



National Natural Landmarks Program

Supporting Conservation of America's Natural Heritage

The National Natural Landmarks (NNL) Program

was established to encourage and support the voluntary conservation of sites that illustrate the nation's geological and biological history, and to strengthen the public's appreciation of America's natural heritage. The program offers participants the opportunity to share information, solve problems cooperatively, and conserve important natural areas. Since 1962, the NNL Program has involved private, municipal, state, federal, and other landowners working together to conserve natural resources. Land acquisition by the federal government is not a goal of this program; NNLs are owned by a variety of land stewards, and participation in the program is voluntary.

National Natural Landmarks are selected for their outstanding condition, illustrative value, rarity, diversity, or value to science and education. NNLs include public and private lands with a wide variety of uses. The NNL designation is made by the Secretary of the Interior after in-depth scientific study; all new designations must have owner permission.

The National Park Service (NPS) administers the program, reports on the condition of the NNLs, and acts as an advocate for the protection of designated sites. The NNL designation may be removed if the values for which a site was designated are lost or destroyed, or if there was an error in the evaluation or designation procedures.



Big Springs, designated a NNL in 1980, is the only first-magnitude spring in the country that issues forth from rhyolitic lava flows. Located within the Targhee National Forest in Idaho, it is the source of the south fork of the Henry's Fork River.

Awareness Helps to Conserve Landmark Resources

Recognition of nationally significant resources and support by the National Park Service has helped to conserve many landmark sites. Greater visibility and awareness of landmarks is accomplished through dissemination of information to State Heritage Programs, transportation departments, conservation organizations, and other federal agencies. Information on the general location of NNLs and the significance of landmark resources is provided on the Internet; this is done to enable planners of large public works projects to avoid impacts to NNLs whenever possible.

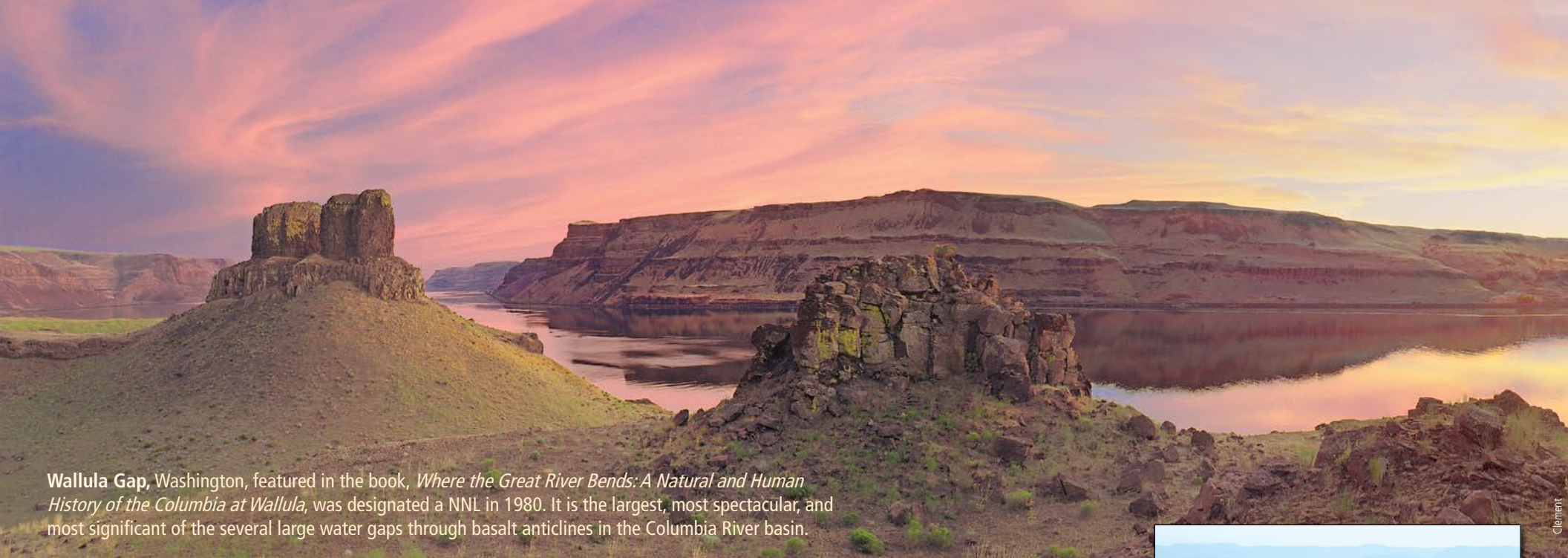
In addition to their geological and biological significance, many NNLs exhibit exceptional scenery. An annual

photo contest is held to encourage interest in visiting landmarks that are open to the public, and to photograph and learn about these outstanding sites. Winning photographs are displayed in a National Natural Landmarks calendar, which gets wide distribution throughout the United States and abroad.



In some cases, simple recognition of NNL resources has led to conservation by owners who may not have realized the value or extent of these resources. Wakulla Springs, a Florida state park, cited NNL designation as being helpful with securing non-NPS grants to study and improve wastewater practices that were threatening water quality and tourism at the springs.

NNL designation does not require sites to be open to the public; however, many landmarks allow public access and some are open for tours. Pride in the NNL designation is evident in prominently displayed bronze plaques, incorporation of the phrase "National Natural Landmark" into logos, and notation of NNL designation on brochures and signs.



Wallula Gap, Washington, featured in the book, *Where the Great River Bends: A Natural and Human History of the Columbia at Wallula*, was designated a NNL in 1980. It is the largest, most spectacular, and most significant of the several large water gaps through basalt anticlines in the Columbia River basin.



Enthusied project partners share the ribbon cutting at Orono Bog NNL.

Ongoing Partnerships are Key to Conservation Success

The primary goals of the National Natural Landmarks (NNL) Program are to recognize landmark resources and support their conservation. To meet these goals, the NNL Program staff assists with grant applications, publishes an annual report on the status of landmarks, and may identify specialists to advise landmark owners on how to care for their sites. While providing funding for NNLs is not the norm, the program staff has been very successful in helping NNL owners obtain grants to fund conservation work and outreach projects. Recently funded and completed projects include interpretive walkways and exhibits, mapping of significant resources, videos, books, and eradication of non-native plant species. These projects help to conserve landmark resources as well as educate people about our country's diverse natural history.

Landmark Resources on Film and in Print

A film on the geology of the Ellenville Fault-Ice Caves NNL has been produced using a grant from the National Park Service (NPS) Challenge Cost Share Program. The film includes actual footage of the site's geological features combined with computer animation to demonstrate how specific geological formations were created. This site is located within the Shawangunk Mountains of Sam's Point Preserve in New York. It is owned by the Open Space Institute and managed by The Nature Conservancy. Tens of thousands of people visit this landmark annually to hike, enjoy the scenery, and explore the ice caves.

The unique region of the northwest's Wallula Gap will be detailed in a book titled *Where the Great River Bends: A Natural and Human History of the Columbia at Wallula* that is being supported in part by a grant from the NPS Challenge Cost Share Program. The book is a collaborative effort by Whitman College, the



A film on the geological resources of the Ellenville Fault-Ice Caves NNL will be shown at the site's Conservation Center.

Northwest Interpretive Association, Keokee Publishing, and the NPS. Multiple authors will contribute to the project, which is thought to be the first book published on the natural and cultural history of the landmark and the surrounding area. The Wallula Gap NNL is the site of expansive lava flows at the Oregon-Washington state line that once dammed Montana's glacial Lake Missoula, which are visible today as 800 foot-high cliffs along the Columbia River.



Garden of the Gods, Colorado, designated a NNL in 1971, is an outstanding illustration of the characteristics of sedimentary rocks, including structure, color and mineral composition. The site also nicely illustrates the vertical forces that produce the Front Range of the Rocky Mountains, as seen in the background of this photograph. This landmark is a Colorado Springs city-owned park.

Miller



The boardwalk at Orono Bog NNL expands public access and protects the bog's surface.

Protecting and Telling the Story of the Orono Bog

The Orono Bog NNL is a classic northern sphagnum bog that is uniquely accessible for teaching and research. Located in a glacial depression near Bangor, Maine, the site illustrates a series of vegetation communities from lowland and bog to upland forest. The accessibility and use of the site makes protecting vegetation especially challenging. The Orono Land Trust, University of Maine, City of Bangor, and the National Park Service NNL Program collaborated on a project to protect and interpret the landmark's fragile resources. Funding included a grant from the NPS Challenge Cost Share Program.

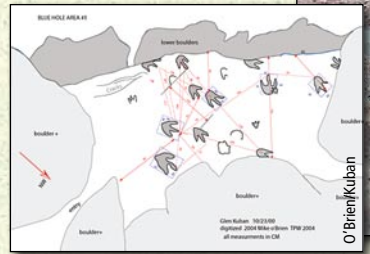
The result is a mile of raised, wheelchair-accessible boardwalk, seven interpretive stations, brochures, wayside exhibits, and a website (www.oronobogwalk.org). Numerous additional partners and volunteers participated in construction and various other aspects of the project, including the Maine Conservation Corps and Charleston Correctional Facility. The boardwalk and exhibits allow for visitors to experience and learn about the unusual plants and animals at the site while protecting its nationally significant resources. Volunteers and seasonal interns greet visitors, answer questions, and lead nature walks. The boardwalk has become a premier destination in the Bangor/Orono area.

Tracking Dinosaurs at Dinosaur Valley State Park

The outstanding display of fossil dinosaur footprints at Dinosaur Valley NNL provides information about herding, habits, and the locomotion of the Sauropods that once roamed the area. The footprints, or tracks, are preserved in the Paluxy River bed near Glen Rose, Texas. However, they are slowly being erased by the erosive forces of the river, making long-term preservation of the track data essential for future study and interpretation of the site. About 80% of the tracks have been mapped using hand sketches, but these paper sketches are fragile and subject to loss. The NNL status of the site made it eligible for a NPS Challenge Cost Share Program grant. As a result of this funding, the NPS collaborated with Purdue

University, the Texas Parks and Wildlife Department, and the Friends of Dinosaur Valley to develop a project that will include an interactive on-line map of track locations with links to photographs, illustrations, and descriptions of the resource. This project will archive 67 years of track documentation to make it easily available for researchers, site managers, and visitors.

Digital maps, like the one below, will record and preserve location data as the tracks are slowly eroded from the riverbed at Dinosaur Valley NNL.



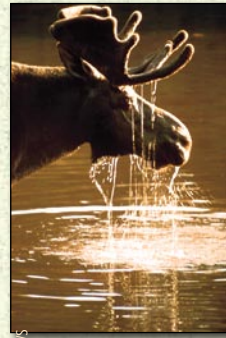
O'Brien



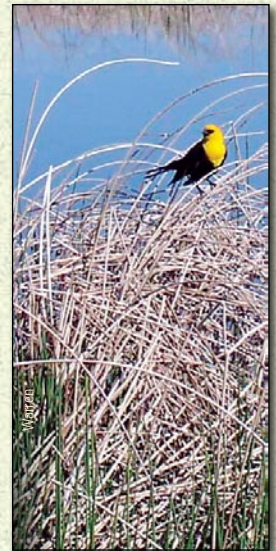
Hadley

Partners Protect the Red Rock Lakes-Centennial Valley Ecosystems

The Red Rock Lakes NNL includes 40,000 acres of the Centennial Valley in southwestern Montana within the Greater Yellowstone Area. The NNL is managed as a National Wildlife Refuge (NWR) and contains a series of undisturbed ecosystems that are relatively free of non-native plant species. The large lakes, marshes, conifer forests, and mountain meadows are significant for their outstanding waterfowl production and habitat for moose, trumpeter swans, and bald and golden eagles. Wolves, grizzly bears, wolverines, and lynx also travel through the valley, and the magnificent scenery attracts thousands of visitors each year. Infestations of non-native plants are increasing in number and frequency, however. If left unchecked, these species may degrade wildlife habitat, reduce recreational opportunity, and cause overall degradation of this healthy, scenic landscape.



Landowners and managers throughout the Centennial Valley have created a unique partnership to aggressively treat invasive non-native plants. The NNL status of the site allowed the NPS to provide a Challenge Cost Share Program grant to fund surveying, mapping, and the treating of new infestations of invasive plants in areas where they would be most detrimental to wildlife. Early identification and removal of non-native plants reduces the overall cost to eradicate invasive species, and protects wildlife habitat, scenic values, and working landscapes throughout the valley. Partners in this ongoing project include Beaverhead County, The Nature Conservancy, Red Rock Lakes NWR, and the Centennial Valley Association.



Wagon

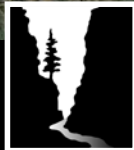
Red Rock Lakes National Wildlife Refuge, designated a NNL in 1976, contains a series of relatively undisturbed, high-altitude ecosystem types, including alpine meadows, bogs, saline marshes, and forests.

Kosher

For more information please visit our web site at:

 www.nature.nps.gov/nnl

Information provided on the NNL Program web pages includes a guide to landmarks by state, frequently asked questions, the regulations that govern the program, including the designation process, and contact information for NNL Program staff. There may also be links to the web sites of landmarks that are open to the public, NNL Program publications, articles on landmarks by others, and photographs of landmark resources.



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