

Calendar No. 236

109TH CONGRESS }
1st Session }

SENATE

{ REPORT
109-144

ICE AGE FLOODS NATIONAL GEOLOGIC TRAIL DESIGNATION ACT OF 2005

OCTOBER 19, 2005.—Ordered to be printed

Mr. DOMENICI, from the Committee on Energy and Natural
Resources, submitted the following

R E P O R T

[To accompany S. 206]

The Committee on Energy and Natural Resources, to which was referred the bill (S. 206) to designate the Ice Age Floods National Geologic Trail, and for other purposes, having considered the same, reports favorably thereon with an amendment and recommends that the bill, as amended, do pass.

Strike out all after the enacting clause and insert in lieu thereof the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the “Ice Age Floods National Geologic Trail Designation Act”.

SEC. 2. FINDINGS AND PURPOSE.

(a) FINDINGS.—Congress finds that—

(1) at the end of the last Ice Age, some 12,000 to 17,000 years ago, a series of cataclysmic floods occurred in what is now the northwest region of the United States, leaving a lasting mark of dramatic and distinguishing features on the landscape of parts of the States of Montana, Idaho, Washington and Oregon;

(2) geological features that have exceptional value and quality to illustrate and interpret this extraordinary natural phenomenon are present on Federal, State, tribal, county, municipal, and private land in the region; and

(3) in 2001, a joint study team headed by the National Park Service that included about 70 members from public and private entities completed a study endorsing the establishment of an Ice Age Floods National Geologic Trail—

(A) to recognize the national significance of this phenomenon; and

(B) to coordinate public and private sector entities in the presentation of the story of the Ice Age floods.

(b) PURPOSE.—The purpose of this Act is to designate the Ice Age Floods National Geologic Trail in the States of Montana, Idaho, Washington, and Oregon, enabling the public to view, experience, and learn about the features and story of the Ice Age floods through the collaborative efforts of public and private entities.

SEC. 3. DEFINITIONS.

In this Act:

- (1) ICE AGE FLOODS; FLOODS.—The term “Ice Age floods” or “floods” means the cataclysmic floods that occurred in what is now the northwestern United States during the last Ice Age from massive, rapid and recurring drainage of Glacial Lake in Missoula, Montana.
- (2) PLAN.—The term “plan” means the cooperative management and interpretation plan authorized under section 5(e).
- (3) SECRETARY.—The term “Secretary” means the Secretary of the Interior.
- (4) TRAIL.—The term “Trail” means the Ice Age Floods National Geologic Trail designated by section 4(a).

SEC. 4. ICE AGE FLOODS NATIONAL GEOLOGIC TRAIL

(a) DESIGNATION.—In order to provide for public appreciation, understanding, and enjoyment of the nationally significant natural and cultural features of the Ice Age floods and to promote collaborative efforts for interpretation and education among public and private entities located along the pathways of the floods, there is designated the Ice Age Floods National Geologic Trail.

(b) LOCATION.—

- (1) MAP.—The route of the Trail shall be generally depicted on the map entitled “Ice Age Floods National Geologic Trail,” numbered P43/80,000 and dated June 2004.
- (2) ROUTE.—The route shall generally follow public roads and highways.
- (3) REVISION.—The Secretary may revise the map by publication in the Federal Register of a notice of availability of a new map as part of the plan.

(c) MAP AVAILABILITY.—The map referred to in subsection (b) shall be on file and available for public inspection in the appropriate offices of the National Park Service.

SEC. 5. ADMINISTRATION.

(a) IN GENERAL.—The Secretary, acting through the Director of the National Park Service, shall administer the Trail in accordance with this Act.

(b) LIMITATION.—Except as provided in subsection (f)(2), the Trail shall not be considered to be a unit of the National Park System.

(c) TRAIL MANAGEMENT OFFICE.—To improve management of the Trail and coordinate Trail activities with other public agencies and private entities, the Secretary may establish and operate a trail management office at a central location within the vicinity of the Trail.

(d) INTERPRETIVE FACILITIES.—The Secretary may plan, design, and construct interpretive facilities for sites associated with the Trail if the facilities are constructed in partnership with State, local, tribal, or non-profit entities and are consistent with the plan.

(e) MANAGEMENT PLAN.—

(1) IN GENERAL.—Not later than 3 years after funds are made available to carry out this Act, the Secretary shall prepare a cooperative management and interpretation plan for the Trail.

(2) CONSULTATION.—The Secretary shall prepare the plan in consultation with—

- (A) State, local, and tribal governments;
- (B) the Ice Age Floods Institute;
- (C) private property owners; and
- (D) other interested parties.

(3) CONTENTS.—The plan shall—

(A) confirm and, if appropriate, expand on the inventory of features of the floods contained in the National Park Service study entitled “Ice Age Floods, Study of Alternatives and Environmental Assessment” (February 2001) by—

- (i) locating features more accurately;
- (ii) improving the description of features; and
- (iii) reevaluating the features in terms of their interpretive potential;

(B) review and, if appropriate, modify the map of the Trail referred to in section 4(b);

(C) describe strategies for the coordinated development of the Trail, including an interpretive plan for facilities, waysides, roadside pullouts, exhibits, media, and programs that present the story of the floods to the public effectively; and

(D) identify potential partnering opportunities in the development of interpretive facilities and educational programs to educate the public about the story of the floods.

(f) COOPERATIVE MANAGEMENT.—

(1) **IN GENERAL.**—In order to facilitate the development of coordinated interpretation, education, resource stewardship, visitor facility development and operation, and scientific research associated with the Trail and to promote more efficient administration of the sites associated with the Trail, the Secretary may enter into cooperative management agreements with appropriate officials in the States of Montana, Idaho, Washington, and Oregon in accordance with the authority provided for units of the National Park System under section 3(l) of Public Law 91–383 (16 U.S.C. 1a–2(l)).

(2) **AUTHORITY.**—For purposes of this subsection only, the Trail shall be considered a unit of the National Park System.

(g) **COOPERATIVE AGREEMENTS.**—The Secretary may enter into cooperative agreements with public or private entities to carry out this Act.

(h) **EFFECT ON PRIVATE PROPERTY RIGHTS.**—Nothing in this Act—

(1) requires any private property owner to allow public access (including Federal, State, or local government access) to private property; or

(2) modifies any provision of Federal, State, or local law with respect to public access to or use of private land.

(i) **LIABILITY.**—Designation of the Trail by section 4(a) does not create any liability for, or affect any liability under any law of, any private property owner with respect to any person injured on the private property.

SEC. 6. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated such sums as are necessary to carry out this Act, of which not more than \$12,000,000 may be used for development of the Trail.

PURPOSE OF THE MEASURE

The purpose of S. 206 is to designate the Ice Age Floods National Geologic Trail, a trail from Missoula, Montana, to the Pacific Ocean, to provide for the public appreciation, understanding, and enjoyment of the nationally significant natural and cultural features of the Ice Age Floods.

BACKGROUND AND NEED

During the Pleistocene Epoch Ice Age, beginning about 1.8 million years ago, North America was repeatedly glaciated by ice sheets that covered much of Alaska, Canada, and the northern United States. The most recent glacial event was the Wisconsin glaciation, which began about 80,000 years ago and ended around 10,000 years ago.

During the last Ice Age a series of catastrophic floods ravaged the Pacific Northwest in what are now the States of Montana, Idaho, Oregon, and Washington. A finger of the Cordilleran ice sheet crept southward into the Idaho Panhandle, blocking the Clark Fork River and creating Glacial Lake Missoula. As the waters rose behind this 2,000-foot ice dam, they flooded the valleys of western Montana. At its greatest extent, Glacial Lake Missoula stretched eastward a distance of some 200 miles, essentially creating an inland sea. Periodically, the ice dam would fail. These failures were often catastrophic, resulting in a large flood of ice and dirt-filled water that would rush down the Columbia River drainage, across northern Idaho and eastern and central Washington, cutting the path that would become the Columbia River Gorge, and then back up into Oregon's Willamette Valley, finally pouring into the Pacific Ocean at the mouth of the Columbia River.

Over thousands of years, the lake filling, dam failure, and flooding were repeated dozens of times, leaving a lasting mark on the landscape of the Northwest. Many of the distinguishing features of the Ice Age Floods remain throughout the region today. Together, these two interwoven stories of the catastrophic floods and the for-

mation of Glacial Lake Missoula are referred to as the “Ice Age Floods.”

The floods carved out more than 50 cubic miles of earth, piled mountains of gravel 30 stories high, created giant ripple marks the height of three-story buildings, and scattered 200-ton boulders from the Rockies to the Willamette Valley. Grand Coulee, Dry Falls, and Palouse Falls were all created by these flood waters, as were the Missoula and Spokane ground-water resources, numerous wetlands, and the fertile Willamette Valley and Quincy Basin.

In 2001, the National Park Service completed a major Special Resource Study which proposed that an Ice Age Floods National Geologic Trail (the “Trail”) be established. This Trail would represent the largest, most systematic, and most cooperative effort yet proposed to bring the dramatic story of the Ice Age Floods to the public’s attention. S. 206 would designate the Ice Age Floods National Geologic Trail consistent with the recommendations of the 2001 study.

LEGISLATIVE HISTORY

S. 206 was introduced by Senators Cantwell, Craig, Murray, and Smith on January 31, 2005. Similar legislation, S. 2841, was introduced by Senators Cantwell, Craig, Murray, Smith and Wyden in the 108th Congress.

At its business meeting on September 28, 2005, the Committee on Energy and Natural Resources ordered S. 206 favorably reported as amended.

COMMITTEE RECOMMENDATIONS

The Committee on Energy and Natural Resources, in open business session on September 28, 2005, by a voice vote of a quorum present, recommends that the Senate pass S. 206 as described herein.

COMMITTEE AMENDMENT

During the consideration of S. 206, the Committee adopted an amendment in the nature of a substitute. The amendment eliminated a provision in the bill as introduced that would have allowed the Secretary to acquire 25 acres for trail administrative purposes. This provision was unnecessary since other provisions in the bill authorize a trail management office and interpretive facilities within the vicinity of the trail.

The substitute amendment also limits appropriations for development of the trail to no more than \$12 million and makes clarifying and conforming changes.

The amendment is explained in detail in the section-by-section analysis, below.

SECTION-BY-SECTION ANALYSIS

Section 1 entitles the bill the “Ice Age Floods National Geologic Designation Act of 2005.”

Section 2 sets forth congressional findings and defines the purpose of the Act to designate the Ice Age Floods National Geologic Trail.

Section 3 defines key terms.

Section 4(a) designates the Ice Age Floods National Geologic Trail to be established in order to provide for public appreciation, understanding, and enjoyment of the nationally significant natural and cultural features of the Ice Age floods.

Subsection (b) describes the location of the trail, requires the route to be depicted on a map, defines the route, and prescribes the methodology for revising the map.

Subsection (c) requires that the map in subsection (b) be made available for public inspection at appropriate National Park Service offices.

Section 5(a) designates the Secretary of the Interior (Secretary), through the Director of the National Park Service, as the administrator of the trail.

Subsection (b) clarifies that except for certain cooperative agreement authority, the trail is not to be administered as a unit of the National Park System.

Subsection (c) authorizes the Secretary to establish a trail management office in order to facilitate trail management.

Subsection (d) allows for development of interpretive facilities associated with the trail in partnership with State, local, tribal, or non-profit entities consistent with the plan.

Subsection (e) requires the development of a management plan to be created in cooperation with State, local, and tribal governments, the Ice Age Floods Institute, private property owners, and other interested parties. The plan is to be created no later than 3 years after funds are available.

Subsection (f) allows the Secretary to enter into cooperative agreements for management and administration of the trail with the States of Montana, Idaho, Washington, and Oregon. The Trail shall be considered a unit of the National Park System.

Subsection (g) allows the Secretary to enter into cooperative agreements with public or private entities.

Subsection (h) states that nothing in the Act will effect private property rights.

Subsection (i) provides indemnity for private property owners with regards to liability.

Section 6 authorizes to be appropriated such sums as are necessary to carry out this Act, of which not more than \$12 million may be used for development of the trail.

COST AND BUDGETARY CONSIDERATIONS

The following estimate of costs of this measure has been provided by the Congressional Budget Office.

S. 206—Ice Age Floods National Geologic Trail Designation Act

S. 206 would establish the Ice Age Floods National Geologic Trail. Assuming appropriation of the necessary or authorized amounts, CBO estimates that the National Park Service (NPS) would spend \$14.5 million over the next five years to develop the new trail and to manage it under cooperative agreements with non-federal partners. Enacting S. 206 would not affect revenues or direct spending.

S. 206 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act and would impose no costs on state, local, or tribal governments.

Under S. 206, the proposed Ice Age Floods National Geologic Trail would be established as an auto route primarily along existing highways and other public lands in Montana, Idaho, Washington, and Oregon. The new trail would not become a unit of the National Park System but would instead be managed in partnership with state officials and other public and private entities. Finally, the bill would authorize the appropriation of \$12 million for development of the trail.

Assuming appropriation of the authorized amounts, CBO estimates that the NPS would spend \$12 million over the 2006–2010 period to design and construct a trail management office, visitor facilities, and interpretive programs. In addition, CBO estimates that the NPS would spend about \$500,000 a year, assuming appropriation of the necessary amounts, to prepare a general management plan for the trail and to provide assistance to nonfederal partners who help to manage trail facilities and programs.

The CBO staff contact for this estimate is Deborah Reis. This estimate was approved by Peter H. Fontaine, Deputy Assistant Director for Budget Analysis.

REGULATORY IMPACT EVALUATION

In compliance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee makes the following evaluation of the regulatory impact which would be incurred in carrying out S. 206. The bill is not a regulatory measure in the sense of imposing Government-established standards or significant economic responsibilities on private individuals and businesses.

No personal information would be collected in administering the program. Therefore, there would be no impact on personal privacy.

Little, if any, additional paperwork would result from the enactment of S. 206, as ordered reported.

EXECUTIVE COMMUNICATIONS

The views of the Administration on S. 206 were included in testimony received by the Committee at a hearing on the bill on June 28, 2005 as follows:

STATEMENT OF DONALD W. MURPHY, DEPUTY DIRECTOR NATIONAL PARK SERVICE, DEPARTMENT OF THE INTERIOR

Mr. Chairman, thank you for the opportunity to present the Department of the Interior's views on S. 206, a bill to designate the Ice Age Floods National Geologic Trail.

The Department opposes S. 206 in its current form. Although we recognize the national significance of the geologic features in the Northwest caused by the Ice Age Floods, we believe that we can enhance the interpretation of these features, as described later in this testimony, without establishing a new entity within the National Park Service or spending Federal funds on development of interpretive sites or land acquisition. Devoting limited National Park Service funds to those purposes would detract from the Administration's priority of reducing the deferred maintenance backlog in existing units of the National Park System.

The cataclysmic floods that occurred 12,000 to 17,000 years ago, at the end of the last ice age, were some of the largest ever documented by geologists. These floods, which were caused by the ice and water bursting through ice dams at Glacial Lake Missoula, left a lasting mark of geologic features on the landscape of parts of Montana, Idaho, Washington, and Oregon, and have affected the pattern of human settlement and development in parts of the Northwest.

In 2001, a study team headed by the National Park Service and composed of 70 representatives of a broad range of public and private entities, concluded a two-year special resource study of the Ice Age floods. The study found that the floods features met the criteria for national significance and suitability for addition to the National Park System, but that the size, breadth, and multitude of ownerships throughout the study region make the area not feasible to consider for a traditional national park, monument, or similar designation. However, the study found that it is feasible to interpret the floods story across the affected areas. It evaluated four management alternatives that would each provide a collaborative and coordinated approach for the interpretation of the Ice Age floods story to the public. The study's preferred alternative called for Congressional designation of the floods pathways as a national geologic trail and authorization of National Park Service management of the trail in coordination with public and private entities.

S. 206 would largely implement the study's preferred alternative. It would designate the Ice Age Floods National Geologic Trail, to be managed by the National Park Service, along floods pathways. The trail would be an auto tour route along public roads and highways linking floods features starting in the vicinity of Missoula in western Montana, going across northern Idaho, through eastern and southern sections of Washington, across northern Oregon in the vicinity of the Willamette Valley and the Columbia River, to the Pacific Ocean.

While the Department believes that the proposed auto tour route highlighting floods features is a viable concept, we do not support establishing a new program within the National Park Service to lead this effort. Although the study called for sharing the cost of the Ice Age Floods National Geologic Trail among a variety of public and private sources, it estimated that under the alternative that S. 206 would implement, the role that National Park Service would play would cost about \$500,000 per year in operating expenses. The study also suggested that the share of capital development costs for the trail from all Federal sources might run between \$8 million and \$12 million over a period of several years.

The study assumed that State and local governments would pay for parcels of land needed for improvements such as roadside pullouts and wayside exhibits where rights-of-way proved inadequate, so it did not suggest a

Federal contribution toward land acquisition. However, S. 206 would authorize the National Park Service to acquire up to 25 acres of land, which would entail additional Federal expenditures.

Rather than establishing a new entity for the purpose of interpreting the Ice Age Floods, we recommend amending S. 206 to provide for expansion of interpretation of floods features at Lake Roosevelt National Recreation Area, an existing unit of the National Park System located in the State of Washington about midway along the route of the trail proposed by S. 206. Lake Roosevelt National Recreation Area contains the lake formed by Grand Coulee Dam, built across one of the coulees formed by the Ice Age Floods. The floods are the primary natural history interpretive theme at Lake Roosevelt. The recreation area also assists Washington State Parks in interpretation at Dry Falls State Park, one of the most significant floods features along the proposed trail. As part of an enhanced interpretation program, the park could, for example, make available to park visitors information about other floods features in the four-state region covered by the proposed trail.

The National Park Service is involved in two other efforts, both in Wisconsin, to preserve and interpret the landscapes resulting from the last advance of continental glaciers—the Ice Age National Scientific Reserve and the Ice Age National Scenic Trail. The national scientific reserve, authorized in 1964, preserves outstanding features of the glacial landscape that are owned and managed by the Wisconsin Department of Natural Resources under a cooperative agreement with the National Park Service and is an affiliated area of the National Park System. The Ice Age National Scenic Trail in Wisconsin, authorized in 1980 as a part of the National Trails System, is a 1,200-mile hiking trail that traces glacial landscape features left by the advance and melting away of the last continental glaciers during the Wisconsin Glaciation approximately 15,000 years ago. This scenic trail is a hiking trail and differs from auto tour route that is proposed to be established in this bill as the Ice Age Floods National Geologic Trail.

In addition to expanding interpretation at Lake Roosevelt, the National Park Service could devote resources from other existing programs to promoting education and interpretation of sites associated with the floods. For example, the National Park Service's Rivers, Trails, and Conservation Assistance program could provide technical assistance to State and local entities that want to enhance interpretation of sites in their areas. And, the National Park Service's National Register of Historic Places program could develop Ice Age Floods as one of its "Discover Our Shared Heritage" on-line travel itineraries. In addition, other National Park Service units in the vicinity of the proposed trail, such as the new Lewis and Clark National Historical Park which includes areas along the

lower Columbia River, could be brought into the effort to promote interpretation of floods features.

As the National Park Service's study suggested, interpretation of the floods should involve a collaborative and coordinated approach involving a broad range of public and private entities. One of the management alternatives considered by the study was having the state legislatures of Montana, Idaho, Washington, and Oregon designate representatives to a four-state commission that would promote the coordinated interpretation of the floods story at the state and local level. We think that is an option that merits a second look. In addition, with or without a state-sponsored commission, tourist organizations could form a four-state consortium to generate interest in visiting these sites. The Ice Age Floods Institute, a non-profit scientific organization devoted to increasing understanding of the story of the Ice Age Floods, has played and will continue to play a large role in promoting public education about the floods.

We would be happy to work with the committee to develop the appropriate language for amending S. 206 to provide for expanded interpretation of Ice Age Floods features by Lake Roosevelt National Recreation Area rather than designation of a new national entity and establishment of a new program managed by the National Park Service.

Mr. Chairman, that concludes my statement. I would be pleased to answer any questions that you or other members of the committee may have.

CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, the Committee notes that no changes in existing law are made by the bill S. 206, as ordered reported.

