

ICE AGE FLOODS NATIONAL GEOLOGIC TRAIL; LAND ADJACENT TO WALNUT CANYON NATIONAL MONUMENT; AMEND THE NATIONAL TRAILS SYSTEM ACT; AND INCLUDING IN THE NPS CERTAIN SITES IN WILLIAMSON COUNTY, TN

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HEARING  
BEFORE THE  
SUBCOMMITTEE ON NATIONAL PARKS  
OF THE  
COMMITTEE ON  
ENERGY AND NATURAL RESOURCES  
UNITED STATES SENATE  
ONE HUNDRED NINTH CONGRESS  
FIRST SESSION  
ON  
**S. 206**                      **S. 588**  
**S. 556**                      **S. 955**

JUNE 28, 2005



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**TUESDAY, JUNE 28, 2005**

U.S. SENATE,  
SUBCOMMITTEE ON NATIONAL PARKS,  
COMMITTEE ON ENERGY AND NATURAL RESOURCES,  
*Washington, DC.*

The subcommittee met, pursuant to notice, at 10:35 a.m. in room SD-366, Dirksen Senate Office Building, Hon. Craig Thomas presiding.

**OPENING STATEMENT OF HON. CRAIG THOMAS,  
U.S. SENATOR FROM WYOMING**

Senator THOMAS. We'll call the meeting to order. I apologize for being late. This voting seems to interfere with our activities around here. So, I guess that's the way it is.

At any rate, good morning. May I welcome Deputy Director Don Murphy and our other witnesses to today's subcommittee hearing. The hearing was originally scheduled for June 14, and I'd like to thank everyone for their patience and assistance in rescheduling.

Our purpose for this hearing is receive testimony on four bills, which include studies of potential park units, the expansion of an existing unit, and one new designation: S. 206, a bill to designate Ice Age Floods National Geologic Trail, and other purposes; S. 556, a bill to direct the Secretary of the Interior and the Secretary of Agriculture to jointly conduct a study of certain land adjacent to Walnut Canyon National Monument in the State of Arizona; S. 588, a bill to amend the National Trail System Act to direct the Secretary of the Interior and the Secretary of Agriculture to jointly conduct a study on the feasibility of designating the Arizona Trail as a scenic national trail or a national historic trail; and S. 955, to direct a special resource study to determine the suitability and feasibility of including in the National Park System certain sites in Williamson County, Tennessee, relative to the Battle of Franklin.

So, let's see, before we go on, would you have any opening statements, Senator?

[The prepared statement of Senator McCain follows:]

## PREPARED STATEMENT OF HON. JOHN MCCAIN, U.S. SENATOR FROM ARIZONA

Mr. Chairman, I greatly appreciate the opportunity to offer my comments regarding S. 588, the Arizona Trail Feasibility Act. First let me say that this bill has the full support of the entire Arizona congressional delegation. In the U.S. House of Representatives, my colleague, Congressman Jim Kolbe, has been integral in assembling a companion bill and I commend him for his hard work. S. 588 would authorize the Secretaries of Agriculture and Interior to conduct a joint study to determine the feasibility of designating the Arizona Trail as a National Scenic or National Historic Trail. I am proud to have sponsored a bill that promises to highlight the national recreational value of the Arizona Trail.

The Arizona Trail is a beautifully diverse stretch of public lands, mountains, canyons, deserts, forests, historic sites, and communities. The Trail begins at the Coronado National Memorial on the U.S.-Mexico border and ends in the Bureau of Land Management's Arizona Strip District on the Utah border. In between these two points, the Trail winds through some of the most rugged, spectacular scenery in the Western United States.

For the past 10 years, over 16 Federal, state, and local agencies, as well as community and business organizations, have worked to form a partnership to create, develop, and manage the Arizona Trail. Designating the Arizona Trail as a national trail would help streamline the management of the Trail to ensure that this pristine stretch of diverse land is preserved for future generations to enjoy.

The corridor for the Arizona Trail encompasses the wide range of ecological diversity in the state, and incorporates a host of existing trails into one continuous trail. The Arizona Trail extends through seven ecological life zones including such legendary landmarks as the Sonoran Desert and the Grand Canyon. It connects the unique lowland desert flora and fauna in Saguaro National Park and the pine-covered San Francisco Peaks, Arizona's highest mountains at 12,633 feet in elevation. In fact, the Trail route is so topographically diverse that a person can hike from the Sonoran Desert to Alpine forests in one day. The Trail also takes travelers through ranching, mining, agricultural, and developed urban areas, as well as remote and pristine wildlands.

With over 750 miles of the 800-mile trail already completed, the Arizona Trail is a boon to recreationists. The Arizona State Parks recently released data showing that two-thirds of Arizonans consider themselves trail users. Millions of visitors also use Arizona's trails each year. In one of the fastest-growing states in the U.S., the designation of the Arizona Trail as a National Scenic or National Historic Trail would ensure the preservation of a corridor of open space for hikers, mountain bicyclists, cross country skiers, snowshoers, eco-tourists, equestrians, and joggers.

S. 588 is the first step in the process of national trail designation for the Arizona Trail. If the study concludes that designating the Arizona Trail as a part of the national trail system is feasible, subsequent legislation would be needed to designate the Arizona Trail as either a National Scenic Trail or National Historic Trail.

Thank you, Mr. Chairman. I urge the subcommittee to pass this legislation.

**STATEMENT OF HON. MARIA CANTWELL, U.S. SENATOR  
FROM WASHINGTON**

Senator CANTWELL. Thank you, Mr. Chairman. And thank you for holding today's hearing and session so that we can hear about important projects, particularly one that impacts the Northwest.

I appreciate the opportunity to discuss the Ice Age Floods National Geologic Trail Designation Act. And I also appreciate the opportunity to publicly thank the co-sponsors of this legislation—Senators Smith, Craig, Burns, and Murray. This distinguished list of Northwest Senators supporting this legislation represents a bipartisan regional consensus on the need to authorize this national trail.

I also want to thank Gary Kleinknecht for agreeing to testify in favor of this legislation. Gary and his colleagues at the Ice Age Floods Institute have played such an integral role in bringing attention to the issues, educating the public, and energizing the region around this specific idea.

In many ways, the members of the institute serve as protégés of the University of Washington Professor Harlen Bretz and the USGS geologist Joseph Pardee, who together formed—and, many times, fought for—the incredible hypothesis about this historic experience, the Ice Age Floods. We certainly appreciate their work.

Mr. Chairman, my legislation, S. 206, would authorize the National Park Services to oversee the creation of an Ice Age Floods National Geologic Trail, and the trail would be the first of its kind because of its extent over a four-State area in the Pacific Northwest.

Some 12,000 to 17,000 years ago, at the end of the Ice Age, a series of cataclysmic floods swept across the Pacific Northwest. These epic floods fundamentally changed the geography and way of life in this region of the country. The coulees, buttes, boulder fields, lakes, ridges, gravel bars that they left behind still define the very unique landscape of the Northwest today.

Scientific evidence has shown that, on a number of occasions between 12- and 17,000 years ago, many Pacific Northwest cities were under hundreds of feet of water. More than 500 cubic miles of water were blocked behind a glacial dam in a valley around the present-day Missoula, Montana. Periodically, that ice dam would fail, creating the greatest flooding ever known to science, sending water across four Northwest States. Scientists now believe that 500 cubic miles of water in Ancient Lake Missoula would drain in less than 48 hours, sending water rushing across present-day Montana, Idaho, and Washington at speeds of more than 65 miles an hour.

The impacts on the region have been breathtaking. High-water marks can be seen from foothills outside of Missoula, Montana, identifying the ancient shoreline of Lake Missoula, and previously baffling water ripples mark the landscape throughout Idaho Panhandle and other regions of the Pacific Northwest. In Oregon, there is evidence of water collecting in the Willamette Valley, up as the flood waters trying to squeeze through relatively narrow Kalama Gap.

In my State of Washington, we have benefited from this beautiful scenery, the geological utility of the features molded by some awesome powers of racing floodwaters. The rolling farmlands of eastern Washington are interrupted by house-sized boulders, and scientists know that they have been carried by these torrent waters of flooding that happened in various points in time, and that parts of the Columbia River Channel and the Grand Coulee Dam site were formed, as large part, due to this force of water moving through our State.

The remnants of massive waterfall, which is now known as Dry Falls, in the State of Washington, serve as a present-day evidence of the 3-mile-wide 350-foot waterfall that was part of the old channel of the Columbia River. This would have made—well, basically, this would have dwarfed the size of what we know right now of Niagara Falls.

Mr. Chairman, these impacts are truly one of a kind and significant as it relates to science, geology, and the amazing history that happened. Creating a National Park Service Trail to recognize and interpret and celebrate how these floods were literally shaped and

how they impacted the Northwest, I think, is an unparalleled educational resource for visitors across the country.

I'm glad that, in February, the National Park Service Study, the Ice Age Floods-Study of Alternatives and Environmental Assessment seemed to arrive at the same conclusion. The study determined that the flood's regional interest exceeded the basic requirements as nationally significant resource and that the Ice Age Floods Trail was suitable for inclusion in the national park system and concluded that the geological-trail approach seemed to be very feasible.

To that end, this legislation would authorize this most effective and efficient management alternative that was recommended and the creation of an Ice Age Floods National Geological Trail from Montana to the Pacific Ocean.

Mr. Chairman, I think I'll submit the rest of my comments for the record, but just to say that the business, education, scientific community in the Northwest are very interested in the implementation of this concept, not just for the business and economic issues that are at hand, but because we think it's a great resource to use as an educational tool for many generations to come.

Thank you for holding this hearing and including this on the docket.

[The prepared statement of Senator Cantwell follows:]

PREPARED STATEMENT OF HON. MARIA CANTWELL, U.S. SENATOR FROM WASHINGTON

Thank you Chairman Thomas for holding this hearing today; I appreciate the opportunity to discuss the Ice Age Floods National Geologic Trail Designation Act. I also appreciate the opportunity to publicly thank the cosponsors of this legislation, including Senators Smith, Craig, Burns, and Murray. The distinguished list of Senators supporting the legislation represents a strong, bipartisan, regional consensus on the need to authorize this National Trail.

I also want to thank Gary Kleinknecht (Cline-connect) for agreeing to testify in favor of this legislation. Gary and his colleagues at the Ice Age Floods Institute colleagues have played such an integral role in bringing attention to this issue, educating the public, and energizing the region around this idea. In many ways, the members of the Institute serve as the protégés of University of Washington professor J. Harlan Bretz and USGS geologist Joseph Pardee, who together formed and many times fought to make credible their hypothesis about the historic existence of the Ice Age Floods. We appreciate your work.

Mr. Chairman, my legislation, S. 206, would authorize the National Parks Service to oversee the creation Ice Age Floods National Geologic Trail. The trail would be the first of its kind and extend over a four state area in the Pacific Northwest.

Some 12,000 to 17,000 years ago, at the end of the last Ice Age, a series cataclysmic floods swept across the Pacific Northwest. These epic floods fundamentally changed the geography and way of life in my region of the country. The coulees, buttes, boulder fields, lakes, ridges and gravel bars they left behind still define the unique landscape of the Northwest today.

Scientific evidence has shown that on a number of occasions between twelve and seventeen thousand years ago, many Pacific Northwest Cities were under hundreds of feet of water. As the Cordilleran Ice Sheet progressed south from Canada, more than 500 cubic miles of water were blocked behind a glacial dam in the valley in and around present day Missoula, Montana. Periodically that ice dam would fail—creating the greatest flooding event known to science—sending water ripping across four Northwest States. Scientists now believe the 500 cubic miles of water in Ancient Lake Missoula would drain in less than 48 hours—sending water rushing across present day Montana, Idaho, Washington, and Oregon at speeds of more than 65 miles an hour.

The impacts on the region have been breathtaking. High. water marks can be seen on the foothills outside Missoula, Montana—identifying the ancient shoreline of Lake Missoula. Previously baffling water ripple marks scoured by the awesome power of the floods mark the landscape throughout the Idaho Panhandle and the



Pacific Northwest. In Oregon, there is evidence of water collecting in the Willamette Valley up as the flood waters trying to squeeze through the relatively narrow Kalama Gap.

In my State of Washington, we have benefited from the beautiful scenery and geologic utility of the features molded by the awesome powers of the racing floodwaters. The rolling farmlands and channeled scablands of Eastern Washington are interrupted by seemingly inexplicable house-sized boulders that scientists now know were carried like pebbles and deposited by the torrents of water. Parts of the Columbia River-Channel and the site Grand Coulee Dam, the bookend of the Federal Columbia River Power System, were formed in large part due to the scouring forces of the water. Remnants of a massive water fall, now known as Dry Falls, serves as present day evidence of a three-mile wide 350 foot high waterfall that was part of the old channel of the Columbia River and would have made dwarfed the size and power of Niagara Falls.

Mr. Chairman, these impacts are truly one of a kind and I think its appropriate and necessary for the federal government to play an appropriate coordinating role in working with public and private entities, including Tribal, State, and Local governments to appropriately recognize this amazing geologic history.

Creating a National-Park Service trail to recognize, interpret, and celebrate how these floods literally shaped the face of the Northwest will provide an unparalleled educational resource for visitors from across the country. Better coordination will also spur economic development in local rural communities across Eastern and Central Washington.

I am glad that the National Park Service in their February 2001 study, "Ice Age Floods-Study of Alternatives and Environmental Assessment," seemed to arrive at the same conclusions. The study determined that the floods region exceeded the basic requirements as a nationally significant resource, found the Ice Age Floods Trail suitable for inclusion into the National Parks System, and concluded the Geologic Trail-approach to be feasible.

To that end, this legislation would authorize the most effective and efficient management alternative of that report—the creation of the Ice Age Floods National Geologic Trail from Montana to the Pacific Ocean.

The 2001 Study noted that the National Parks Service does its best work when it collaborates on interpretation of resources with public and private entities throughout a given region—this legislation provides the authority NPS to play that role. My legislation would provide for an Interagency Technical Committee that would be the forum for collaboration between the NPS, federal agencies, private entities, civic organization landowners, and state, local, and tribal governments.

This collaboration is important for the planning needed to appropriately interpret the geologic features across the trail. While Congress always reserves the right to provide additional funding in collaboration with the Trail collaborators, a modest half million dollars is authorized for the administration of the Geologic Trail through the National Parks Service.

Despite the 2001 study being chock-full of reasons to authorize the creation of a federally designated Ice Age Floods National Geologic Trail, I understand that the Park Service will testify against the bill today. While I will be interested in exploring this issue during questioning, I look forward to working with the Administration to address these issues.

I am proud to note that the federal government has an entire region ready and waiting to collaborate—in fact, the 2001 study noted the strong regional support for federal designation. To date, more than 30 entities spanning state and local governments, Chambers of Commerce, and other civic and community organization support creation of the trail concept.

Through this modest federal investment local, state, tribal, and private resources can be better leveraged and coordinated to tell the story of this one of a kind geologic story in the way that state and local communities best see fit. I look forward to the testimony that we will hear today from the Ice Age Floods Institute and the National Park Service and thank the subcommittee for the opportunity to share this legislation and important scientific story with you.

Senator THOMAS. Okay, thank you, Senator.  
Senator Alexander.

**STATEMENT OF HON. LAMAR ALEXANDER, U.S. SENATOR  
FROM TENNESSEE**

Senator ALEXANDER. Thanks, Mr. Chairman, and thank you for holding the hearing.

I'm here especially today to welcome my friend Mayor Tom Miller, of the city of Franklin, Tennessee, who's—who will be testifying during the hearing. And I'll have a statement to put in the record at the time, but I simply wanted to applaud him, call to the chairman's attention—the whole Senate's attention—the tremendous effort that the mayor and the city of Franklin are making to preserve the Franklin Battlefield.

The Battle of Franklin, just before the Battle of Nashville, were two historic turning points in the Civil War. Six generals lost their lives in the Battle of Franklin, 9,000 soldiers. Franklin was one of the most rapidly growing areas in our State. And so, we have a fight on our hands to try to be able to keep that, preserve the battlefield there in the city. Ultimately, others in the community are really doing an excellent job trying to balance the competing needs of proper development and proper reservation.

So, I'm here today to welcome the mayor and to thank the chairman and Senator Frist and others for a resolution to study whether the battlefield should be included in the National Park Service.

Thank you for your time.

[The prepared statement of Senator Alexander follows:]

PREPARED STATEMENT OF HON. LAMAR ALEXANDER, U.S. SENATOR FROM TENNESSEE

Thank you Chairman Thomas. First, let me welcome Mayor Tom Miller of the City of Franklin, Tennessee. Mayor Miller is an old friend of mine, and he has been integral to efforts at protecting and preserving the historic Franklin Battlefield. Mr. Mayor, I really appreciate your leadership in the historic preservation underway in Franklin, and I thank you for taking the time to travel to Washington to tell us a bit more about your efforts and plans.

Tennessee is second only to Virginia in the number of battles, engagements, and skirmishes during the Civil War, and the Battle of Franklin was one of the most important battles of the war. On November 30, 1864, Confederate soldiers led by Confederate General John Bell Hood charged the fortified Union line north of the Carnton Plantation in Franklin.

The ensuing battle resulted in more than 9,000 casualties and decimated the Army of Tennessee, including six Confederate generals. Two weeks later, the Confederate defeat in the Battle of Nashville effectively ended the war in the western theater. The Battle of Franklin was truly a turning point in the War Between the States, and a critical moment in both Tennessee and U.S. History.

The Franklin Battlefield was named this year as one of the "10 most endangered" Civil War battlefields in the nation by the Civil War Preservation Trust, America's largest non-profit organization devoted to the preservation of our nation's endangered Civil War battlefields.

Efforts to protect this vital piece of our history have gained momentum in recent years, particularly as the City of Franklin has wrestled with the challenges of rapid development and economic growth. This development has overrun some of the sites of the Battle of Franklin, and other sites are being encroached on. Mayor Miller, City Aldermen, and local and national groups have responded well. With Mayor Miller's leadership, the City of Franklin has pledged \$2.5 million to acquire a piece of the battlefield near the Carnton Plantation. Local businesses and land owners have been supportive with money, land, and their time. I commend their efforts.

I am proud to have cosponsored the Franklin National Battlefield Study Act with Senator Frist. The importance of the Franklin Battlefield and the local efforts in preservation merit study by the National Park Service, and the issues faced in Franklin will certainly have a bearing on future park feasibility studies. As more communities face municipal growth and prosperity, historic sites in Tennessee and other states will be in jeopardy.

Franklin, Tennessee is already working to develop an appropriate balance between development and preservation, and I applaud the efforts of Mayor Miller and others in the community.

Senator THOMAS. Who won the battle?

Senator ALEXANDER. Who won the Battle of Franklin? Well, six Confederate generals were killed, so that gives you an idea of—the Confederates charged, and the Union won, as I remember the history.

Senator THOMAS. Thank you, sir. I appreciate it.

Welcome to Deputy Director of the National Park Service, Mr. Murphy, if you will, please.

**STATEMENT OF DONALD W. MURPHY, DEPUTY DIRECTOR,  
NATIONAL PARK SERVICE**

Mr. MURPHY. Thank you, Mr. Chairman, Senator Alexander, Senator Cantwell.

Mr. Chairman, I would like my written testimony, which we have already provided for you, to be entered into the official record, if you will.

Senator THOMAS. It will be entered.

Mr. MURPHY. I'll be taking up each of these bills, in turn. I'll be starting my testimony on Walnut Canyon.

The administration does not object to the enactment of S. 556. We also believe that any funding requested be directed toward completing previously authorized studies. Currently, 30 studies are in progress by the Department of the Interior, which hopes to complete and transmit 15 of these to Congress by 2005.

Additionally, if the committee moves forward with S. 556, we suggest that the bill be amended in section 4(e) to make the report to Congress due 18 months after funds are made available. Also, section 4 may need to be further amended to specify that the draft study be available for public comment, in accordance with the National Environmental Policy Act, and remove any potential violations of the recommendations clause, U.S. Constitution, article 2, section 3, by clarifying that any recommendations be made to Congress by the Secretaries would be discretionary, rather than mandatory. And, of course, we'll be happy to work with the committee and the U.S. Department of Justice to develop alternate language for these portions of the bill.

Moving on to the Arizona Trail, the Department—that's bill S. 588—it's a bill to direct the Secretary of the Interior and the Secretary of Agriculture to jointly conduct a study on the feasibility of designating the Arizona Trail as a national scenic trail or a national historic trail. The Department supports S. 588, with an amendment regarding the appropriations language in the bill, and an amendment which would require the map described in subparagraph (a) to also be made available for public inspection in the appropriate offices of the U.S. Forest Service. However, while the Department supports the authorization of the study, we also believe that any funding requested should be directed toward completing previously authorized studies.

And moving on to the Battle of Franklin, this, of course, is a bill authorizing a study for the suitability and feasibility of designating sites relating to the Battle of Franklin in Williamson County, Tennessee, as a unit of the National Park System and for other purposes. The Department supports S. 955, with an amendment that would conform the bill to other similar study bills. And, while the Department supports the authorization of the study, we would also

ask that funding requested should be directed toward completing previously authorized studies.

As stated earlier, S. 955 would authorize the Secretary to complete a study on the suitability and feasibility of designating these sites relating to the Battle of Franklin as a unit of the national park system.

In its 1993 report, the Civil War Sites Advisory Commission identified the site of the 1864 Battle of Franklin as a Class A battlefield, representing a high level of military importance. The Commission reported that the site represents an area that had a decisive impact on military campaign and a direct impact on the course of the war. The Commission also reported that the Franklin Battlefield is currently a fragmented site, with very little historical integrity remaining from that period.

We suggest one amendment in section 4 of the bill to have the study completed 3 years after funding is made available, rather than 3 years after enactment. This will make the bill consistent with other similar bills.

And now, Mr. Chairman, the comments on designating 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 of the Northwest caused by the Ice Age floods. We believe that we can enhance the interpretation of these features, as described later in the testimony, without establishing a new entity within the National Park Service or spending Federal funds on development of interpretive sites or land acquisition.

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 flood 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.

As part of an enhanced interpretation program, the park could, for example, make available to park visitors information about other flood features in the four-State region covered by the proposed trail. The National Park Service is involved in two other efforts, both of them in Wisconsin, to preserve and interpret the landscapes resulting from the last advance of the continental glaciers. That's 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.

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. In addition, other National Park Service units in the vicinity of the proposed trail, such

as the new Lewis & Clark National Historic Park, which includes areas along the lower Columbia River, could be brought into the effort to promote interpretation of these flood features.

We acknowledge that 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, included a 2-year special-resource study of the Ice Age floods. The study did find that the flood features met criteria for national significance and suitability for addition to the National Park System, as Ms. Cantwell said, but we felt that the size, breadth, and multitude of ownership throughout the region make the area not feasible to consider for a traditional national park, monument, or designation.

And, as stated earlier in my testimony, we are ready and willing to enter into agreements with partners, and to find ways to interpret this very significant geological event in the history of the world.

Mr. Chairman, this concludes my testimony on these four bills. I'm prepared to take any questions the committee might have.

[The prepared statement of Mr. Murphy follows:]

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

S. 206

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.

S. 556

Mr. Chairman and members of the subcommittee, thank you for the opportunity to appear before you today to present the Administration's views on S. 556, a bill to direct the Secretary of the Interior and the Secretary of Agriculture to jointly conduct a study of certain lands adjacent to the Walnut Canyon National Monument in the State of Arizona.

The Administration does not object to the enactment of S. 556. We also believe that any funding requested should be directed toward completing previously authorized studies. Currently, 30 studies are in progress by the Department of the Interior, which hopes to complete and transmit 15 to Congress by the end of 2005.

S. 556 directs the Secretary of the Interior and the Secretary of Agriculture, utilizing a third party consultant, to jointly conduct a study of approximately 31,000 acres surrounding Walnut Canyon National Monument (monument). The study would evaluate how best to manage federal and State lands adjacent to the monument in the long term in order to protect the natural, cultural, and recreational values important to this area of Arizona. The bill directs the Secretaries, as well as local land managers, the Flagstaff City Council and Coconino County Board of Supervisors to review and comment on the draft study. The bill requires a report that includes findings, conclusions and recommendations for future management of the study area to be transmitted to Congress no later than 18 months after enactment. We estimate the total cost of the study to be approximately \$300,000, to be divided between the National Park Service and the U.S. Forest Service.

Walnut Canyon National Monument was established on November 30, 1915, by Presidential Proclamation with the specific purpose of preserving the prehistoric ruins of ancient cliff dwellings. The monument was expanded in 1938 and 1996 and now occupies approximately 3,600 acres. The purposes for which the area was originally established have expanded to include protection of natural and cultural resources that are known to be significant to contemporary native tribes and the ecological communities and geological resources that make the canyon an outstanding scenic resource. The monument and the surrounding lands of the Coconino National Forest provide a significant natural sanctuary and greenbelt surrounding the city of Flagstaff.

The National Park Service released a Draft General Management Plan (GMP) for Walnut Canyon National Monument for public comment in 2003. Many of the issues identified for resolution in S. 556 were also identified as needs in the Draft GMP. The plan is being revised to address comments about boundary issues and is expected to be finalized after completion of consultations with the Fish and Wildlife Service in the next several months. The archeological and prehistoric resources preserved in the monument are nearly pristine, and provide not only scientific opportunities but also challenges for preservation.

For several years, local communities adjacent to the monument have debated how the land surrounding the monument would be best protected from future development. A number of years ago, the Coconino County Board and the Flagstaff City Council passed resolutions concluding that the preferred method to determine what is best for the land surrounding the monument is by having a federal study conducted. Included within the lands to be studied that surround the monument are approximately 2,000 acres of State trust lands. We should note that it is our understanding that Arizona law prohibits state lands to be donated and that the Arizona Supreme Court has determined that the Arizona Constitution prohibits the disposal of certain state land except through auction to the highest and best bidder. Should the study's conclusions involve these types of actions concerning state lands, we would have to await a determination on how the citizens of Arizona and their representatives would recommend proceeding.

We understand the concern that National Forest System (NFS) lands between the Monument and the City of Flagstaff might eventually be sold or exchanged; allowing urban development to creep closer to the Walnut Canyon watershed, originally prompted local support for this proposed study. The proposed study area is within two miles of the campus of Northern Arizona University and is a prime recreation area for students, as well as for Flagstaff area residents. In fact, the area is the second most-used area for recreation in the greater Flagstaff area, behind only the San Francisco Peaks.

The Forest Service has developed a Land Resource Management Plan for the Coconino National Forest, amended in early 2003, that closed the area to motorized access and removed the land encircling the Monument from consideration for sale

or exchange. The Flagstaff-area Regional Land Use and Transportation Plan (RLUTP), approved by the Flagstaff City Council and the Coconino County Board of Supervisors in 2002, limits growth and does not allow for development within the study area. RLUTP specifically precludes two key sections of Arizona State Trust land between Flagstaff and the Monument as suitable for development. Those lands are identified in the plan for open space and greenways. These plans would be an important source of information to be considered during the study process.

If the Committee moves forward with S. 556, we suggest that the bill be amended in section 4(e) to make the report to Congress due 18 months after funds are made available. Also Section 4 may need to be further amended to specify that the draft study be available for public comment, in accordance with the National Environmental Policy Act, and to remove any potential violations of the Recommendations Clause, U.S. Const. art. II, sec. 3, by clarifying that any recommendations to be made to Congress by the Secretaries would be discretionary rather than mandatory. We will be happy to work with the Committee and the U.S. Department of Justice to develop alternate language for these portions of the bill.

Thank you for the opportunity to present the Administration's views on this bill. That completes my remarks and I will be happy to answer any questions you may have.

#### S. 588

Mr. Chairman and members of the subcommittee, thank you for the opportunity to appear before you today to present the Department of the Interior's views on S. 588, a bill to direct the Secretary of the Interior and the Secretary of Agriculture to jointly conduct a study on the feasibility of designating the Arizona Trail as a national scenic trail or a national historic trail.

The Department supports S. 588 with an amendment regarding the appropriations language in the bill and an amendment which would require the map described in subparagraph (A) to also be made available for public inspection in the appropriate offices of the U.S. Forest Service. However, while the Department supports the authorization of this study, we also believe that any funding requested should be directed toward completing previously authorized studies. Currently, 30 studies are in progress, and we hope to complete and transmit 15 to Congress by the end of 2005. We estimate the total cost of this study to be approximately \$300,000, and recommend that paragraph D on Page 3 of the bill be amended to change the authorization to \$300,000 with \$150,000 made available to each Secretary.

S. 588 directs the Secretary of the Interior and the Secretary of Agriculture to jointly conduct a study of the Arizona Trail which connects Arizona's north and south borders across mountain ranges and deserts for approximately 790 miles. The study would determine whether or not the trail would be eligible to be designated as a scenic or historic trail, joining the current system of 24 nationally designated scenic and historic trails created by the National Trails System Act of 1968.

These trails provide for outdoor recreation needs, promote the enjoyment, appreciation, and preservation of open-air, outdoor areas and historic resources, and encourage public access and citizen involvement. If the feasibility study recommends designation as a national scenic or historic trail, an act of Congress adding the trail to the National Trails System may follow. If the Arizona Trail were recommended for national trail designation, the study would also recommend the most effective and efficient management of the trail.

National scenic trails are continuous, primarily non-motorized routes of outstanding recreational opportunity. Although the National Trails System Act does not include specific criteria for assessing proposed national scenic trails, we suggest that the study team use the following five criteria in making their determination:

Significance: There should be nationally significant cultural, historic, natural, recreational, or scenic features along the trail.

Length: The trail should be at least 100 miles long and continuous.

Accessibility: The trail should complement other trails and recreation areas, and provide access where possible to nearby urban areas.

Desirability: There should be an anticipated need for the trail, and it should be capable of attracting visitors from across the nation. It should offer an outstanding scenic and enjoyable outdoor recreational experience. There should be extensive local and regional support for the project.

Trail Use: National Scenic Trails should be designated for hiking and other compatible non-motorized uses.

National historic trails commemorate historic and prehistoric routes of travel that are of significance to the entire Nation. There are three criteria that must be met



to be recommended as a national historic trail. The trail or route must be established by an historic use or determined to be historically significant as a result of that use; it must be of national significance with respect to any of several broad facets of American history and have had a far-reaching effect on broad patterns of American culture; and it must have significant potential for public recreational use or historic interest based on historic interpretation and appreciation. From what we know of its characteristics, the Arizona Trail is more likely to meet the criteria for a scenic trail rather than an historic trail.

If designated by Congress either as an historic or scenic trail, we suggest that an independent non-profit trail partner organization be created to partner with the federal agency chosen to administer the trail.

The Arizona Trail was conceived in 1985 as a continuous, 790-mile non-motorized trail from Mexico to Utah. Approximately 85% of the trail crosses federal land, 10% crosses State lands, and the remainder of the trail crosses private, municipal or county lands. The Trail was established as a primitive long-distance hiking, horseback, and mountain biking trail that links all of Arizona's major physiographic zones (the mountains, canyons, deserts, forests, historic sites, and mesas) to local communities and Arizona's major metropolitan areas. The Arizona Trail's significance is found in the diversity of resources, landscapes and recreational opportunities that it represents.

In 1993, the U.S. Forest Service, National Park Service, Bureau of Land Management, and Arizona State Parks developed a cooperative agreement to work together to develop this non-motorized trail. Since then more than 710 miles of trail have been opened to the public, maps and trail resource information have been developed, and routine trail maintenance has been carried out, while efforts continue to open the remaining 80 miles of trail. In 1994, the non-profit Arizona Trail Association (ATA) was founded "to coordinate the planning, development, management, and promotion of the Arizona Trail for the recreational and educational experiences of non-motorized trail users."

The ATA has worked on a variety of issues and serves as the focal point for trail advocacy, preservation, planning and development. ATA volunteers do trail maintenance, fund-raising and planning. In all of their efforts, they work closely with landowners and local governments to assure that private property owners are aware of trail activities, and trail users respect property rights. The ATA has quickly proven to be a vibrant, creative, resourceful, and dynamic group of 500 members coordinating more than 40,000 hours of volunteer labor per year, in recent years.

An important characteristic of all National Trails is the partnerships they generate. The Arizona Trail already has strong regional, state and local advocates, all of whom have worked hard at creating and maintaining a trail featuring the incredible natural and cultural diversity of the State of Arizona. The ATA has worked hard to raise funds and involve local communities, governments and businesses as they have worked to develop the trail.

With all these efforts already underway, we believe that conducting a feasibility study for national designation is a next, logical step in the management and protection of this important resource corridor across Arizona. Although limited to one State, the Arizona Trail has already proven its recreational value to the nation.

Thank you again for the opportunity to present the Department's views on S. 588. That completes my remarks and I would be happy to answer any questions you may have.

#### S. 955

Mr. Chairman, thank you for the opportunity to present the views of the Department of the Interior on S. 955, a bill to authorize the Secretary of the Interior (Secretary) to study the suitability and feasibility of designating sites relating to the Battle of Franklin in Williamson County, Tennessee, as a unit of the National Park System, and for other purposes.

The Department supports S. 955 with an amendment that would conform the bill to other, similar study bills. While the Department supports the authorization of this study, we also believe that any funding requested should be directed toward completing previously authorized studies. Currently, 30 studies are in progress, and we hope to complete and transmit 15 to Congress by the end of 2005. We estimate the total cost of this study to be \$250,000.

S. 955 would authorize the Secretary to complete a study on the suitability and feasibility of designating sites relating to the Battle of Franklin as a unit of the National Park System. The Battle of Franklin on November 30, 1864, was a pivotal turning point of the Civil War.

After the fall of Atlanta in the summer of 1864, General John Bell Hood, commander of the Confederate Army of Tennessee, attempted to draw Union General William Tecumseh Sherman northward by threatening the Union supply line to Chattanooga. Hood sought to move the war out of Georgia in an effort to reclaim lost Confederate territory, most importantly Nashville. Sherman followed Hood for only a short time, deciding to turn his attention back towards Georgia where he would soon embark on his "March to the Sea." In his stead, Sherman detached George H. Thomas and the Army of the Cumberland to protect Tennessee against Hood's advance.

In November 1864, Hood pressed forward into Tennessee and confronted a Union force under the command of Major General John M. Schofield at Spring Hill. After several skirmishes there Hood immediately followed Schofield to the small town of Franklin, which had been a Federal military post since the fall of Nashville in early 1862. At Franklin, Schofield positioned most of his 28,000 men behind extensive breastworks covering more than two miles of mostly open fields. Late in the afternoon on November 30, Hood, with an army of 18,000, hastily ordered a frontal assault against the well-positioned Union forces. After five hours of fierce fighting, much of it after dark, the Union army soundly defeated Hood's army which suffered 6,261 casualties, including the loss of 12 generals and 54 regimental commanders. Among those killed was General Patrick Cleburne, considered by many historians to be the Confederacy's top battlefield commander. The Union's casualties numbered 2,326. With his army largely intact, Schofield ordered a nighttime withdrawal of Union forces to Nashville.

Although the Battle of Franklin was a major setback for the Confederates, Hood wasted little time, advancing his remaining forces to Nashville where on December 15 and 16, 1864, the Union Army of the Cumberland under Thomas swept Hood's army from the field, essentially putting an end to the war in Tennessee.

In its 1993 report, the Civil War Sites Advisory Commission identified the site of the 1864 Battle of Franklin as a "Class A" battlefield, representing a high level of military importance. The commission reported that the site represents an area that had a decisive impact on a military campaign and a direct impact on the course of the war. The commission also reported that the Franklin battlefield is currently a fragmented site with very little historical integrity remaining from the battle period.

There are many sites in and around the city of Franklin and nearby areas in Tennessee that have an association with the battle. Perhaps most prominent among these are the many buildings that served as field hospitals to treat the wounded and dying such as the Carter House, which served as the Union army headquarters during the battle and was later used as a field hospital. The house and outbuildings were purchased by the State of Tennessee in 1951, opened to the public in 1953, and is a Registered Historic Landmark. The scars of war are visibly apparent as the buildings still show more than a thousand bullet holes from the battle.

We suggest one amendment in section 4 of the bill to have the study completed three years after funding is made available, rather than three years after enactment. This will make the bill consistent with other similar study bills.

Mr. Chairman, this concludes my prepared remarks. I would be pleased to answer any questions you or other members of the Subcommittee may have.

Senator THOMAS. Okay, thank you very much. Appreciate that.

A couple of questions. You mentioned two or three previously authorized studies. Are they ongoing? How long does a study take? Why aren't they completed?

Mr. MURPHY. Previously authorized studies—I mentioned in the bills that there were some previously authorized studies, and some of them have been funded, and some of them haven't, and that was why I was stating in my testimony, at the beginning—we are asking that if funds are made available, that funding be done in a priority way that we can complete some of the studies that are done. Each of these studies average anywhere from \$250,000 to \$300,000 to complete, and there is not all—there have not always been funds available to—we've gotten the authorization to go ahead with these studies, but appropriations have not always followed. And that's what I was referring to.

Senator THOMAS. I see. So, they are authorized to be funded, but have not been funded.

Mr. MURPHY. That's correct.

Senator THOMAS. I see. I suppose it makes a difference which study it is, but how long, generally, does it take to make a study of these kinds?

Mr. MURPHY. It usually takes anywhere from 2 to 3 years, and, on average, costs \$300,000. And that's on average. Some studies take a lot less time, because there's already pre-work that's been done. And we build upon other studies and other information that's available; but, on average, it takes about 3 years.

Senator THOMAS. I see. With regard to S. 206, the Ice Age, does the Park Service currently operate any interpretive services associated with this proposed trail?

Mr. MURPHY. As I said earlier, at Lake Roosevelt there is some interpretive information on the flood. And, of course, I mentioned the two sites in Wisconsin that we work on, as well. So, there are three areas, and we look to expand those, as well, and that's why we ask that the bill could be amended to allow for that expansion of interpretive efforts that are already underway.

Senator THOMAS. I see, okay. In S. 556, Walnut Canyon, is the primary purpose to identify lands to prevent encroachment, or do you anticipate finding additional resources worthy of protection?

Mr. MURPHY. Well, I think it's probably a little bit of both. I think that—and the study will identify that. I don't think it's primarily to do either of those things, but both of those would be components of the studies, and, depending upon what the study finds—for example, if it finds that the existing Walnut Canyon is in danger from encroachment, that would be one of the things that would be included to justify, perhaps, expanding the boundaries or somehow better protecting the existing Walnut Canyon boundaries.

Senator THOMAS. I see. I'm sure there are different situations. Some of us are a little concerned about continued expansion. We need to get up a situation where we have a little exchange so that we don't have a net gain, continuously, of Federal lands in a lot of these—

Mr. MURPHY. I think we would agree with that, and that's why the study's important to identify those things. And I don't think there's any prejudgment about expansion here at all.

Senator THOMAS. This Arizona Trail study, how many other trails are there that the National Park Service has been asked to study? It seems like we hear about the trail thing an awful lot, and I'm sure they're valuable, but how many units are we going to be looking at? Do you have any idea?

Mr. MURPHY. I can certainly find that information out for you. I have, in my notes here, that we're studying at least three other trails right now, but we can provide, for the record, the exact number.

Senator THOMAS. You know, there's merit in all these things. I just think we have to begin to set some priorities, in terms of how much activity and operations the Park Service can undertake.

Civil War sites, same thing, seems like, and there's tons of Civil War sites. And I know they're all very valuable. Do you have any idea how many Civil War sites are set aside for Federal protection?

Mr. MURPHY. Yes, I think I have it somewhere here in my notes, if—because we have several battle—or Civil War sites across the United States. I'll be happy to provide that for the record, as well.

Senator THOMAS. I wish you would. I think you'll find there's more than several, whatever "several" means, but it's—and that's great, but we're going to have to start setting some priorities on all these things, and so on. So, okay, thank you.

Senator Cantwell.

Senator CANTWELL. Thank you, Mr. Chairman. Thank you, Mr. Murphy, for your testimony.

I just want to see if I can understand, from your testimony today, the difference between the original 2001 analysis of what should be done, and alternatives, and what you're recommending today.

Mr. MURPHY. Right.

Senator CANTWELL. So, could you tell me the difference between—for the previous study recommendations?

Mr. MURPHY. Well, I think what the previous study recommended, and what I stated in my testimony, is that the study certainly found that—the geologic features that you so eloquently described, and that the study described, as well—are certainly significant and are the kind of resources that you typically see in the National Park Service and in the system. And so, the study found that they're the kind of thing that could certainly be included, but, because of the—again, because of the breadth of the area that's involved, and how spread out it is, and the noncontiguous nature of some of the areas, we simply felt, after considering what the study said, that perhaps it would be better to use existing units of the National Park Service to interpret that geologic occurrence, and to interpret what happened there, without creating another unit of the National Park System, that it would be far more cost effective, that we could still provide the education and interpretive information within existing units. I described Lewis & Clark, for example, the new park along the Columbia River, as well as Lake Roosevelt and the efforts that are underway in Wisconsin. And with an expansion of those, I think we—the National Park Service sincerely feels that we can still tell that story very well without creating another unit.

Senator CANTWELL. So, in that regard, you're saying, then, use a couple of designations that are already there in a couple of places.

Mr. MURPHY. That's correct. Use the existing national parks, like Lake Roosevelt, like Lewis & Clark, expand the interpretive efforts there, use our Rivers and Trails assistance programs to work with State and local governments to provide the technical assistance that would help them also develop other interpretive and educational programs. It's a really important service that the National Park Service provides. We do it all over the Nation. And local communities find it very helpful. We assist in finding grants, we assist in finding educational and interpretive materials, and give guidance on how to develop these programs; and we just feel that would be a much more cost-effective way of approaching this, and still telling the same story, rather than, as I said, creating another unit in the National Park System.

Senator CANTWELL. So, that would be a different recommendation than the 2001 alternatives that were discussed. I think what I'm hearing you say is, use existing resources that are already there. So, for example, in the interpretive center that—part of the Lewis & Clark Trail in Idaho—you'd have something there that would say something about the Ice Age floods, and maybe at Lake Roosevelt, you'd have something that would say something about the Ice Age floods. Those are designations, and, in some cases, may even be areas where the geological significance of the Ice Age flood aren't even most apparent, or most interesting.

I'm trying to understand whether you oppose the concept of a trail that designates the Ice Age Flood Trail, and the path that it took, and the great significant markers of that, obviously, interpreted by science and geologists, about what the most interesting geological features of that flood activity were. Are you saying that concept, juxtaposed with what was originally recommended in 2001, is not a concept today, that—let's just put some markers at these various spots—which, again, may or may not even be contiguous to telling the story.

Mr. MURPHY. Yes.

Senator CANTWELL. And, certainly, those sites are already telling a different story.

Mr. MURPHY. Right.

Senator CANTWELL. To me, then, you wouldn't really have an Ice Age Flood Trail; you'd have some data about the Ice Age activity, at a couple of different sites. And I don't even know if you're recommending, today, like, how many of those sites would you want—you mentioned two. I don't know if you're saying there are more, or—

Mr. MURPHY. Well, there certainly could be more, and, as I was saying, working with our Rivers and Trails Assistance Program, you could certainly add more and work with local communities to effect the same outcome of providing the interpretation and the education in those significant areas. But what my testimony is really focusing on is whether or not we should add another unit to the National Park System to tell this extremely important story, or whether or not there are other means to tell it. And my testimony, and the position of the Department is, is that we feel that we can certainly tell this story, but not support adding another unit to the National Park System. That's really the crux of the matter.

Senator CANTWELL. Am I out of time, Mr. Chairman?

Senator THOMAS. Go ahead.

Senator CANTWELL. Thank you, Mr. Chairman.

I guess I'm a little surprised. I want to get to where the issues are, because, in the 2001 study, the executive summary said, "However, it is feasible to interpret the flood story along the flood pathway across Montana, Idaho, Washington, and Oregon, provided that there is some degree of cooperation, and that the entities within those states participate." So, that was the feasibility recommendation.

I guess I look at the Oregon National Historic Trail as a multi-State reasonable example of collaboration. Are we talking about something similar to that, or are we saying, now, we're going to wait?

Mr. MURPHY. I don't at all want to give the impression that this is—the testimony relates to not thinking that these entities shouldn't cooperate for the story, but I'm trying to be specific—my testimony really does relate to whether or not, then, the National Park Service should be the responsible entity, in terms of management and operation of that trail, and whether or not it should become another unit of the National Park System. And the testimony is, is that we believe we can get that end, that was described in the 2001 feasibility study, without it becoming a unit of the National Park System. And I just gave some examples of how that happened. There are others, and there are other ways that the State and local governments across the States and across other local jurisdictions can cooperate to effect this trail without it becoming a unit of the National Park System.

Senator CANTWELL. But would it be a trail—is my question?

Mr. MURPHY. Well, it certainly could be, but it doesn't have to be a unit of the National Park System. That's the crux of our position in the Department.

Senator CANTWELL. Right, and I want to distinguish, since we are talking about four States, that the significance of it is that's a trail.

Mr. MURPHY. Yes, I understand.

Senator CANTWELL. Thank you, Mr. Chairman.

Senator THOMAS. Thank you.

Senator Alexander.

Senator ALEXANDER. No questions.

Senator THOMAS. No questions?

Thank you, Mr. Murphy. Appreciate it. We'll be looking forward to talking to you on these.

Mr. MURPHY. Thank you, Mr. Chairman.

Senator THOMAS. Now let's invite our panel No. 2 to come up, please: Elizabeth Archuleta, chairman, Coconino County Board of Supervisors, Flagstaff, Arizona—probably didn't pronounce that properly; Mr. Tom Miller, mayor of the city of Franklin, Tennessee; and Mr. Gary Kleinknecht, president, Ice Age Floods Institute, from Washington State; and Mr. Larry Snead, executive director, Arizona Trail Association.

Welcome, to each of you. We'll just go by the way you're listed on the panel here. And I don't know whether they have the little thing turned on, but we'll try and hold your statements to 5 minutes, if you can, please. And, if they're longer than that, we'll put your complete statements in the record.

Ms. Archuleta.

**STATEMENT OF ELIZABETH ARCHULETA, CHAIRMAN,  
COCONINO COUNTY BOARD OF SUPERVISORS, FLAGSTAFF, AZ**

Ms. ARCHULETA. Yes, thank you, Mr. Chairman.

Thank you, Mr. Chairman and members of the National Parks Subcommittee. On behalf of Coconino County and the Flagstaff community, thank you for the opportunity to speak to you on the future of Walnut Canyon.

I would also like to extend our gratitude to our Arizona Senators for their continued energy and invaluable support of the Walnut

Canyon Study Act of 2005. Specifically, we would like to thank Senator McCain for his efforts on behalf of this bill.

Before your committee is a bill that would direct the Secretary of the Interior and the Secretary of Agriculture to jointly conduct a study of certain land adjacent to Walnut Canyon National Monument, to evaluate the significance of the public uses and resource values of the study area, and to make a recommendation for the future management of the study area. Private land within the study area will not be affected.

The land referred to as a study area, as pictured in the map in your materials, is comprised of approximately 31,000 acres, and includes Federal land, Arizona State land, private land, which, again, will not be affected, and the Walnut Canyon National Monument.

Land within Walnut Canyon National Monument is managed by the National Park Service. All other non-private land within the study area is managed by the National Forest Service or the Arizona State Land Department.

The study area surrounding Walnut Canyon contains important natural habitats, abundant and diverse flora and fauna, and truly unique archeological, topographical, scenic, and, in many ways, sacred grounds full of tradition and culture. The distribution, diversity, and location of historic sites are unique, and include the only cliff-dwelling architecture of the Northern Sinagua. Many contemporary tribes look at this area as the home of their ancestors, and want to see it protected.

The natural and cultural resources within the monument are known to be significant to American Indian tribes, as evidenced by oral history, continuing practices, and the archeological record. In addition, land under management by the National Forest Service enjoys many valued public uses. The area's unique characteristics also make it very desirable for development. The possible encroachment of development on land surrounding Walnut Canyon National Monument became a topic of significant community discussion in the fall of 2001. The issues of protection in perpetuity, management, and the appropriateness of current resources became focal points of the dialog.

Due to widespread public interest and the diverse groups with vested interest in the land, there was extensive discussion to identify the most inclusive public-input process. On February 12, 2002, the Coconino County Board of Supervisors and the Flagstaff City Council conducted a joint meeting to discuss the issues.

A "staff group" was then formed, including staff from the National Park Service, the U.S. Forest Service, the Arizona State Game and Fish Department, the city of Flagstaff, and Coconino County. Three public-input meetings were scheduled during the summer of 2002 to provide the public with agency introductions, resource information, known land uses, alternative land designations and options, an open house, and one-on-one public discussions. Upon conclusion of the meetings, there was a consensus that preservation within the study area was in the public interest, and current uses in the area should be retained. However, there was no agreement as to which agency's management objective was best qualified to address these concerns in order that they may best do

that job. There was also no consensus on what the final boundary should look like.

Concurrently, a phone survey was conducted, including residents of the city of Flagstaff, as well as unincorporated areas of Coconino County. The results were remarkably similar to those of the public-input meetings, with the vast majority of the participants being in favor of continued protection and continuation of current uses. In addition, hundreds of letters and calls from citizens were received for consideration. This public process, along with the team efforts of the staff group, resulted in a joint resolution by the Coconino County Board of Supervisors and the Flagstaff City Council calling for a study.

On December 17, 2002, this is when the Board of Supervisors passed the resolution that is also in your packet. It was the public's desire, arrived at through an open process, with citizen, Federal, State, and local participation, to determine the best manner in which to protect these lands and resources in perpetuity while allowing the continuation of current resources and uses.

Ultimately, upon completion of the land-management study by an experienced third-party consultant, we envision recommendations will be made collaboratively with the Secretary of the Interior, the Secretary of Agriculture, the Forest supervisor of the Coconino National Forest, the superintendent of the Flagstaff area national monuments, the Flagstaff City Council, and the Coconino County Board of Supervisors. The study will, one, evaluate the significance of the public values and resources of the study area, as pertaining to the management objectives of the Forest Service and National Park Service; two, identify opportunities for maintaining existing public uses; and, three, recommend a range of options for best managing and conserving the same.

Good stewardship of our land is a public value. In this spirit, we implore you to authorize the Walnut Canyon Study Act of 2005.

Mr. Chairman and distinguished members of the committee, on behalf of the Flagstaff community and Coconino County, thank you for your audience and for your consideration. And I would be happy to answer any questions you have.

Senator THOMAS. Thank you very much.

Mr. Miller.

**STATEMENT OF TOM MILLER, MAYOR, CITY OF FRANKLIN, TN**

Mr. MILLER. Mr. Chairman, Senator Alexander, Senator Cantwell, we thank you for the invitation to testify today about S. 955, which is a bill to direct the Secretary of the Interior to conduct a feasibility study regarding the inclusion of sites related to the Battle of Franklin in the National Park System.

I'm Tom Miller, mayor of Franklin, Tennessee. Today, I will briefly share with you the significance of the Battle of Franklin, as well as the current situation and local support for this effort.

The Battle of Franklin took place on November 30, 1864, forever changing our community's history and that of our Nation. Today, Americans are renewing their love of country while exploring our history and historic sites. Of the 384 significant conflicts that occurred during the Civil War, only 3.7 percent are considered principal battles. Franklin, while considered one of these principal bat-



bles, has a story that is lesser known than many others that it matches in significance, such as Gettysburg and Manassas. And, unfortunately, much of the battlefield, itself, has been lost to development.

The community has been given an historic opportunity to take a step toward righting the wrong and reclaiming a significant piece of the battlefield. On the afternoon of November 30, General Hood, over the objection of at least three generals, ordered the Army of Tennessee to charge the well-fortified Union lines directly in front of them. During the roughly 5 hours of the battle, mostly fought in the dark, six Confederate generals were lost, and over 9,000 casualties were recorded. A private who fought that day said of the battle, "The private soldier sleeps where he fell, piled in one mighty heap. I cannot tell the number of others killed and wounded. God only knows that. We'll all find out on the morning of the final Resurrection." By the end of November 30, the Army of Tennessee was no longer a cohesive fighting force.

In addition to the crucial role the Battle of Franklin played in the demise of the Confederacy, several key interpretive themes are identified in the Franklin Battlefield Preservation Plan recently completed through a grant from the American Battlefield Protection Program. These themes include the level of carnage, the significant loss of generals, Hood's recklessness, and as non-combat-related themes, such as the community-as-hospital, occupied Franklin, and reconstruction.

Franklin, as an urban battlefield, has a unique opportunity to interpret the story of not only the fighting itself, but of the aftermath and the impact on the community. Since this battle was the last major conflict of the war, in a very real sense, the reconciliation of our great Nation began in Franklin, Tennessee—North and South, blacks and whites, brothers and brothers.

Several of the sites associated with the Battle of Franklin are part of the national—excuse me—of the Franklin Battlefield National Historic Landmark. This includes four noncontiguous properties associated with various aspects of the conduct of the Battle of Franklin—the sites, the Carter House, the Carnton Plantation, and the adjacent Confederate Cemetery, Winstead Hill, and Fort Granger. Additional information about these sites has been submitted for the record, including a map.\*

Today, this battlefield has a chance for reclamation. Private citizens and the city of Franklin are working side by side to undertake one of the largest Civil War battlefield reclamation projects in the country. We intend to acquire the Country Club of Franklin property, consisting of 112 acres used as a golf course. It is the largest single remaining parcel of the battlefield. This property, which was the eastern flank of the battlefield, is adjacent to the Carnton Plantation and the Confederate Cemetery.

The city of Franklin will purchase the golf course, with the intention of turning this property, and other already publicly owned properties, into a battlefield park. The country club property will serve as the starting point for visitors to the Battle of Franklin.

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\*The additional information and map have been retained in subcommittee files.

From here, they will get an overview of the battle before visiting the many other important related sites.

We are asking the National Park Service to undertake a feasibility study to consider the inclusion of these sites in the National Park System. We see opportunities for shared resources with Stones River National Battlefield Park, in Murfreesboro, Tennessee, and we offer a wealth of interpretive resources from our own community, such as the Battle of Franklin Historians, and the Civil War National Heritage Area, and Middle Tennessee State University. The city of Franklin has local support in both our community, as well as other areas around the county.

Franklin's Charge, a nonprofit coalition of preservation-related organizations, formed to secure half the funding, which will be matched by the city, for the purchase of the country club property. I'm very pleased to report today that the \$5 million purchase price of the property has been raised.

Franklin's Charge includes representatives from the Save the Franklin Battlefield, Historic Carnton Plantation, the Heritage Foundation of Franklin and Williamson County, the Carter House, Williamson County Historical Society, the Williamson County African American Historical Society, the Harpeth River Watershed Association, Tennessee Land Trust, Tennessee Preservation Trust, and Tennessee Civil War National Heritage Area.

S. 955 is timely and warranted, providing the opportunity to properly assess these resources and chart an appropriate course of action. Therefore, the city of Franklin is in full support of the legislation introduced by Senators Frist and Alexander, which has the opportunity to benefit the citizens of this great country for generations to come.

Thank you for your consideration. I'm available to answer any questions you may have.

Senator THOMAS. Thank you very much.

Mr. Kleinknecht.

**STATEMENT OF GARY KLEINKNECHT, PAST PRESIDENT, ICE AGE FLOODS INSTITUTE, KENNEWICK, WA**

Mr. KLEINKNECHT. Thank you, Mr. Chairman, for holding this hearing and for the opportunity to testify. I would also like to thank Senator Cantwell for sponsoring S. 206.

I am Gary Kleinknecht, past president of the Lake Lewis Chapter of the Ice Age Floods Institute. I am currently president of the board of directors of the Institute. I am here today to speak in support of S. 206.

My testimony will exceed the time limit today, so I would like to submit my entire statement for the record.

Senator THOMAS. It will be included.

Mr. KLEINKNECHT. Thank you.

I also have several letters and documents of support that I would like to submit as testimony, if I may.

Senator THOMAS. Fine.

Mr. KLEINKNECHT. Thank you.

About a century ago, a young high school teacher in Seattle, Washington, became fascinated with the geology of the State. He became so interested in the topic that he enrolled in the University

of Chicago and earned a Ph.D. in geology. With his new career, he began a lifelong relationship with eastern Washington and the shrub-steppe of the Columbia Plateau. He spent summers hiking across this arid region, cataloging its geology. He found what appeared to be river channels carved into the native volcanic basalt bedrock. But the channels were dry, or had vastly undersized creeks flowing through them. He crossed broad areas of exposed basalt that were bordered by thick deposits of windblown topsoil, appearing as if some gigantic force had swept away the topsoil from the bedrock.

He discovered a huge cataract, 400 feet high and over 3 miles across, with a series of plunge-pool lakes stretching 20 miles downstream. He also recorded large angular boulders resting on hill-sides hundreds of feet above dry valley floors. These were granite and other rock types, some weighing over a hundred tons. The nearest possible source for such rocks is over a hundred miles away.

To geologist J. Harlen Bretz, only one thing could explain these features. That thing is fast-flowing water, an unimaginable amount of water. Bretz originally called it the Spokane Flood, singular, but we now know that there were perhaps as many as 100 outbursts, and we call them the Missoula, or the Ice Age, Floods.

The Pacific Northwest was the scene of the greatest series of cataclysmic outburst floods known to science. To be sure, other flooding occurred as continental ice melted, but nowhere else is there such dramatic evidence of repeated floods of this magnitude.

Due, in part, to the efforts of Ice Age Floods Institute members, numerous State and local government officials, as well as other community organizations, have voiced their support of the trail concept to celebrate these amazing events. In fact, the Washington state legislature unanimously passed Senate Joint Memorial 8000 earlier this year. The memorial asks Congress to pass legislation creating the Ice Age Floods National Geologic Trail.

The benefits of the Ice Age Floods National Geologic Trail to the citizens of the Pacific Northwest in particular, and to the American public in general, are several. The development of tourism will boost local, in large part rural, economies. Establishment of interpretive centers will attract tourists from within and without the four Northwest States.

A study conducted for the Ice Age Floods Institute's Glacial Lake Missoula Chapter in 2002 examined the potential impact of an Ice Age Floods Interpretive Center located in Missoula, Montana. A conservative estimate of the amount of money generated by such an interpretive center by tourists from out of the State was over \$2 million per year. Missoula is an eastern gateway of the trail. Many hundreds of miles of trail in numerous small towns and cities, with restaurants, hotels, and campgrounds lie to the west, in Washington, Idaho, and Oregon.

Another related project provides similar information. Plans for the Hanford Reach Heritage Center, in Richland, Washington, are nearing completion. The Center, which is working in partnership with Washington State Parks and other groups, including our institute, will dedicate a significant portion of its display area to the topic of the Ice Age floods and could become an interpretive anchor

for the floods trail. An economic study estimates between \$5 million and \$11 million per year will be generated by tourists visiting that facility.

Thank you.

[The prepared statement of Mr. Kleinknecht follows:]

PREPARED STATEMENT OF GARY KLEINKNECHT, PAST PRESIDENT, ICE AGE FLOODS  
INSTITUTE, KENNEWICK, WA

Thank you, Mr. Chairman, for holding this hearing and for the opportunity to testify. I would also like to thank Senator Cantwell and Senator Burns, Senator Craig, Senator Murray and Senator Smith for their sponsorship of S. 206.

I am Gary Kleinknecht, past president of the Lake Lewis Chapter of the Ice Age Floods Institute. I am currently president of Board of Directors of the Institute. I am here today to speak in support of S. 206, the Ice Age Floods National Geologic Trail Designation Act of 2005.

My testimony will exceed the time limit today, so I would like to submit the unspoken portion of my testimony for the record. I also have several letters and documents of support that I would like to submit as testimony, if I may.

About a century ago a young high school biology teacher in Seattle, Washington became fascinated with the geology of the state. He became so interested in the topic that he enrolled in the University of Chicago and earned a PhD in Geology. With his new career he began a life long relationship with eastern Washington and the shrub-steppe of the Columbia Plateau. He spent summers hiking across this arid region, cataloging its geology. He found what appeared to be river channels carved into the native volcanic basalt bedrock, but the channels were dry or had vastly undersized creeks flowing through them. He crossed broad areas of exposed basalt that were bordered by thick deposits of windblown topsoil, appearing as if some gigantic force had swept away the topsoil from the bedrock. He discovered a huge dry cataract, 400 feet high and over three miles across, with a series of plunge pool lakes stretching twenty miles downstream. He also recorded large angular boulders resting on hillsides hundreds of feet above dry valley floors. These were granite and other rock types, some weighing over 100 tons. The nearest possible source for such rocks is over 100 miles away!

To geologist J Harlen Bretz only one thing could explain these features. That thing is fast flowing water, an unimaginable amount of water. Other geologists determined that during the final millennia of the latest glacial period, huge lakes were formed behind glacial dams in the mountain valleys of western Montana. The largest of these glacial lakes contained 500 cubic miles of water, the equivalent of Lakes Erie and Ontario combined. Bretz's evidence for flooding was the result of ice dam collapse from the tremendous pressure exerted by a lake that reached a maximum depth of 2000 feet. Originally, Bretz wrote of one flood and called it the Spokane Flood. Today we refer to the Missoula floods or the Ice Age floods. There is evidence that as many as 100 floods burst from behind successive ice dams, reshaping the landscape of much of the Pacific Northwest as recently as 13,000 years ago.

Over the past eight decades many other geologists have examined and reexamined Bretz's evidence. And they have found more evidence of floods. But the conclusion remains essentially the same. The Pacific Northwest was the scene of the greatest series of cataclysmic outburst floods known to science. To be sure, other flooding occurred as continental ice melted, but nowhere else is there such dramatic evidence of repeated floods of this magnitude. Only in recent decades have those of us outside the realm of geologic academia been exposed to this amazing story.

In 1994 the Ice Age Floods Institute was organized as an educational nonprofit group dedicated to bringing the story of the Ice Age Floods to the public. For the past decade the Institute has conducted public field trips and programs on the floods and worked to make the public aware of this fascinating legacy of natural history. Our membership extends throughout the region of the floods from western Montana to the mouth of the Columbia River.

In 1999 a number of Ice Age Floods Institute volunteers as well as other interested parties participated in the Ice Age Floods Study of Alternatives and Environmental Assessment, a special resource study undertaken by the National Park Service. The report on the study, which was published in 2001, recommends that an Ice Age Floods National Geologic Trail be established. S. 206 is the product of this cooperative effort.

Due in part to the efforts of Ice Age Floods Institute members, numerous state and local government officials as well as other community organizations have voiced their support of the trail concept in written statements. In fact the Washington

State Legislature unanimously passed Senate Joint Memorial 8000 earlier this year. The memorial asks Congress to pass legislation creating the Ice Age Floods National Geologic Trail.

The National Park Service is often referred to as our nation's "story teller". It has broad experience and expertise in the management of other trail systems such as the Lewis and Clark Trail, Oregon Trail and Selma to Montgomery Trail. We in the Ice Age Floods Institute are confident that the National Park Service will do an excellent job of coordinating and partnering with the many federal, state, local, tribal and private groups throughout the trail region to interpret these truly amazing events.

The benefits of the Ice Age Floods National Geologic Trail to the citizens of the Pacific Northwest in particular and to the American public in general are several. The development of tourism will boost local, in large part rural, economies. Establishment of interpretive centers will attract tourists from within and without the four Northwest states. A study conducted for the Ice Age Floods Institute's Glacial Lake Missoula Chapter in 2002 by the Small Business Institute in the School of Business at the University of Montana examined the potential impact of an Ice Age Floods interpretive center located in Missoula, Montana. A conservative estimate of the amount of money generated by such an interpretive center by tourists from out of the state was over \$2,000,000 per year. Missoula is an eastern gateway of the trail. Many hundreds of miles of trail and numerous small towns and cities with restaurants, hotels and campgrounds lie to the west in Idaho, Washington and Oregon.

Another related project provides similar information. Plans for the Hanford Reach Heritage Center in Richland, Washington are nearing completion. The center, which is working in partnership with Washington State Parks and other groups, will dedicate a significant portion of its display area to the topic of the Ice Age floods and could become an interpretive anchor for the floods trail. An economic study conducted for the planning of the center estimates between \$5,000,000 and \$11,000,000 per year will be generated by that facility.

Existing tourism will also be benefited by the creation of the National Geologic Trail. Much of the floods region that sustains agriculture has its own tourism industry and will benefit from the new visitors traveling on the Trail. Washington's and Oregon's wine industries are successful, in part, due to the soils that were deposited by the floods in the Yakima, Walla Walla and Willamette Valleys.

The National Geologic Trail will also provide educational benefits. Fifty years ago only a handful of geologists knew about these floods. Today the floods story is part of mainstream geology and the general public is becoming aware of this fascinating topic. A trail will provide a vehicle to reach more and more people, not only through tourism, but also as destinations for local school field trips and potential environmental centers. Interpretive programs will be developed to reach citizens of all ages.

The trail will also make it more likely that producers of educational television programs and videos and travel book authors will address the topic of the Ice Age Floods. A NOVA one-hour science program on the topic of these floods is scheduled to be aired in September of 2005. Several videos on the floods are currently available and a tour-guide book of the floods in the Mid-Columbia Region is in the process of being published and should be available by early 2006. As more people learn about the floods, the market for such educational programs and materials will grow.

Early in the effort to promote the designation of the trail there was concern about private property rights. Land acquisition and violation of property owner rights are not what this legislation is about. This bill limits the amount of land that may be acquired by the Secretary of the Interior to a total of 25 acres for administrative and public information purposes. Any land so acquired must also be from a willing seller. The bill also states that trail designation creates no new liability for property owners.

Another issue that concerns some westerners is the amount of federally owned land in western states that is not on the local tax rolls. The trail concept uses public land to generate tourism trade. This is another way to put public land to work for the public.

For the above stated reasons, I and the Ice Age Floods Institute urge the United States Congress to pass S. 206, the Ice Age Floods National Geologic Trail Designation Act of 2005.

Senator THOMAS. Thank you very much.  
Mr. Snead.

**STATEMENT OF LARRY SNEAD, EXECUTIVE DIRECTOR, ARIZONA TRAIL ASSOCIATION, PHOENIX, AZ, ACCOMPANIED BY LYN WHITE**

Mr. SNEAD. Mr. Chairman and members of the National Parks Subcommittee, I am very pleased and honored to have this opportunity to offer my testimony on S. 588, the Arizona Trail Feasibility Study Act.

My name is Larry Snead, and I'm the executive director of the Arizona Trail Association.

Before I tell you about the Arizona Trail, I'd like to talk for just a minute about the Arizona Trail Association. Founded in 1994, the Arizona Trail Association was founded as a nonprofit organization dedicated to the completion of the Arizona Trail, a trail that is becoming one of the premier long-distance trails in the country. Our supporters greatly value the recreational resources of the Arizona Trail and are dedicated to ensuring its development and maintenance for the future enjoyment of others.

For the past 10 years, the Arizona Trail Association has coordinated over 2,000 volunteers, and has partnered with more than 16 Federal, State, and local agencies, as well as many businesses and organizations, all working together to plan, develop, and manage the Arizona Trail. In 2004 alone, a total of over 47,000 volunteer hours were recorded.

A good example of the volunteer hours is—one of our board of directors is here today, Lyn White, to assist me in the testimony.

On behalf of the Arizona Trail Association, our volunteers, and all Arizona Trail users, I thank the committee for providing this hearing.

To my side, where Lyn is standing, is a general map of the Arizona Trail. This map is the same one that's in a packet of the written testimony that we provided you, but it will provide you a chance to review this as I make just a few additional comments.

The Arizona Trail is a non-motorized trail that stretches for 800 miles through some of the State's most renowned mountains, canyons, deserts, and forests. The trail links these special landscapes with people and communities. The trail begins in the Coronado National Memorial, at the U.S./Mexico border, and goes north, ending at the Arizona/Utah border. As it connects these two points, the trail winds through some of the most rugged, spectacular landscapes in our country.

The Arizona Trail was first envisioned by Flagstaff Arizona school teacher and outdoor enthusiast Dale Shewalter in the 1980's. Today, Dale's vision of a continuous border-to-border trail across Arizona's unique landscapes has become a reality for hikers, equestrians, mountain bicyclists, and cross-country skiers who wish to experience the magnificent scenery Arizona has to offer.

The Arizona Trail encompasses a wide range of ecological diversity as it crosses the State, passing through seven life zones, including such legendary landmarks as the Sonoran Desert and the Grand Canyon. It connects the lowland desert flora and fauna of Saguaro National Park and the pine and often snow-covered San Francisco Peaks, Arizona's highest mountains, which are over 12,000 feet in elevation. Seven hundred and eighteen miles of the Arizona Trail have been completed, signed, and are currently open

to the public. We have 82 miles remaining to build, all of which will be on public land.

The Arizona Trail passes through four national parks, memorials, and monuments, four national forests, with 12 different ranger districts, land managed by two different BLM field offices, one State park, and six wilderness areas.

The Arizona Trail corporate community is very supportive of the Arizona Trail, and ATA is really pleased to have that kind of support, especially from Arizona icon companies, such as Phelps Dodge and Arizona Public Service, Salt River Project, Resolution Copper, REI, Wells Fargo, Southwest Gas, and National Bank of Arizona, just to mention a few.

Thank you for the opportunity today to speak to you about the Arizona Trail. It is truly a recreational resource of national significance, and has all the qualifications to be a national scenic trail, which will become evident should a feasibility study be authorized by Congress.

Before closing, I'd like to thank Senator John McCain and Senator John Kyl, who have been invaluable in their support of the Arizona Trail and have brought this legislation forward to this day.

Mr. Chairman and distinguished members of the subcommittee, on behalf of the Arizona Trail Association Board of Directors, I would ask that you support the passage of S. 588.

Thank you. And, with that, I'm available for questions.

[The prepared statement of Mr. Snead follows:]

PREPARED STATEMENT OF LARRY SNEAD, EXECUTIVE DIRECTOR, ARIZONA TRAIL ASSOCIATION, PHOENIX, AZ

Thank you, Mr. Chairman.

Mr. Chairman and Members of the Senate National Parks Subcommittee, I am very pleased and honored to have the opportunity to offer my testimony on S. 588, the Arizona Trail Feasibility Study Act. My name is Larry Snead and I am the Executive Director of the Arizona Trail Association.

ATA

Before I tell you about the Arizona Trail, I'd first like to talk about the Arizona Trail Association. Founded in 1994, the Arizona Trail Association (or ATA) is a non-profit organization dedicated to bringing the Arizona Trail to completion—a trail that is now becoming one of the premiere long-distance trails in the county. Our supporters greatly value the recreational resource of the Arizona Trail and are dedicated to ensuring its development and maintenance for the future enjoyment of others.

For the past decade, the Arizona Trail Association has coordinated over 2,000 ATA volunteers and more than 16 federal, state and local agencies, as well as many businesses and organizations, to plan, develop and manage the Arizona Trail. In 2004 alone, a total of 47,258 ATA volunteer hours were recorded in 2004.

On behalf of the Arizona Trail Association, our volunteers, and all Arizona Trail users, I thank the committee for providing this hearing.

AZ TRAIL

Mr. Chairman, to my side is a general map of the existing Arizona Trail.

The Arizona Trail is a scenic, non-motorized trail that stretches for 800 miles through some of the state's most renowned mountains, canyons, deserts and forests. The Trail links these special landscapes with people and communities. The Trail begins in the Coronado National Memorial at the U.S./Mexico border and ends at the Arizona/Utah border in the North. As it connects these two points, the Trail winds through some of the most rugged, spectacular landscape in the Western United States. The Arizona Trail encompasses a wide range of ecological diversity in the state, extending through 7 life zones, including such legendary landmarks as the Sonoran Desert and the Grand Canyon. It connects the lowland desert flora and

fauna in Saguaro National Park and the pine-covered San Francisco Peaks, Arizona's highest mountains at 12,633 feet in elevation.

The Arizona Trail was first envisioned by Flagstaff schoolteacher and outdoor enthusiast, Dale Shewalter, in the 1970's. Today, Dale's vision of a continuous border-to-borer trail traversing Arizona's unique landscape has become a reality for hikers, equestrians, mountain bicyclists, and cross-country skiers who wish to experience the magnificent scenery Arizona has to offer.

718 miles of the Arizona Trail have been completed, signed and open to the public. We have 82 miles remaining to build, all of which is on federal land.

The Arizona Trail passes through 4 National Parks, 4 National Forest, land managed by 2 BLM Field Offices, 1 State Park and 6 Wilderness Areas. 70% of the Arizona Trail is on National Forest, 10% on BLM, 10% on Arizona State Trust Land, 8% on National Parks and 2% private (the Babbitt Ranches north of Flagstaff and the Babbitt Foundation is in the process of donating an Arizona Trail easement to Coconino County).

The Arizona corporate community is very supportive of the Arizona Trail and the ATA is pleased to have the support of Arizona icon companies such as Phelps Dodge, Arizona Public Service, Salt River Project, Resolution Copper, REI, Wells Fargo, Southwest Gas, and National Bank of Arizona.

With the help of our supporters, the ATA has completed the fieldwork, editing, and photography for the Official Arizona Trail Guidebook to be available in fall 2005, and I would be happy to provide a copy to the subcommittee. I am also pleased to provide you with an ATA report on the progress of the Arizona Trail project.

Thank you for the opportunity today to speak to you about the Arizona Trail. It is truly a recreational resource of national significance and has all the qualifications to be a National Scenic Trail which will become evident should a feasibility study be authorized by Congress.

Before closing, I'd like to thank Senators John McCain and Jon Kyl who have been invaluable in their support of the Arizona Trail and have brought this legislation forward to this day.

Mr. Chairman and distinguished members of the Subcommittee, on behalf of the Arizona Trail Association Board of Directors I would ask that you support the passage of S. 588.

With that, I am available to answer questions.

Senator THOMAS. Okay, thank you very much.

Welcome, Lyn. What is your other chart?

Ms. WHITE. This map shows the topography. It's the same. You can see the trail.

Senator THOMAS. Oh, I see.

What is the big orange one up in the corner. Is that a reservation?

Ms. WHITE. That's the Navajo Reservation.

Senator THOMAS. Okay. Well, thank you so much. We appreciate that very much.

Ms. Archuleta, what—

Ms. ARCHULETA. Yes.

Senator THOMAS. This is a proposed expansion, then, of an existing area?

Ms. ARCHULETA. No, sir. Actually, if the monument was to be expanded, that would have to be determined by the resource study. But, basically, it's the study area. The intention is to be able to see which management would best preserve—protect the area and also preserve the current uses, such as hunting, biking, grazing. The public was very specific about wanting to continue those uses of the land.

Senator THOMAS. What is already there, in terms of this land? How is it controlled?

Ms. ARCHULETA. By the U.S. Forest Service and the Arizona State Land Department.



Senator THOMAS. I see. So, this is not an expansion; it's a change of classification?

Ms. ARCHULETA. It would—the classification would be determined by the study.

Senator THOMAS. I see.

Ms. ARCHULETA. So, if the study did say yes, this certain area of the monument should be expanded, then we'd have to talk about that. But what we're hoping is that the study will tell us whether the monument needs to be expanded; but, more than that, tell us what type of management would best continue those uses and also protect the monument.

Senator THOMAS. I see. Okay, thank you.

Mr. Miller, what—this site that you talk about, then, part of it is a golf course. Would that continue to be a golf course?

Mr. MILLER. No, sir. It would be closed upon the acquisition of the property, which, now that we have the funding, we'll acquire that in October of this year, and the golf course will close. It will be immediately converted to an open field, in anticipation of developing a battlefield park.

Senator THOMAS. And your golfers?

[Laughter.]

Mr. MILLER. Well, this—we have gone elsewhere.

Senator THOMAS. I see. Oh, well. Having been one of those who never could get associated with a game where the guy who hits the ball the most loses, I don't feel strongly about it.

[Laughter.]

Mr. MILLER. Well, on the cost per stroke, I would imagine that it's pretty cheap golf.

Senator THOMAS. You mentioned, interestingly enough, 384 sites that you said were significant as historic sites?

Mr. MILLER. Yes, sir. The battlefield historians have identified 367, I believe it is—

Senator THOMAS. Sixty-seven?

Mr. MILLER [continuing]. Battlefield sites. But only less than 4 percent of those are considered significant.

Senator THOMAS. I see.

Mr. MILLER. The Battle of Franklin is one of those—

Senator THOMAS. That's only 15. Really?

Mr. MILLER. Yes, sir.

Senator THOMAS. I wonder how many are designated as battlefield sites. Do you have any idea?

Mr. MILLER. I do not know.

Senator THOMAS. I think it's more than 15, but I'm not sure.

You mentioned that money had been raised. Tell me again who raised the money.

Mr. MILLER. Half of the money, half of the \$5 million was raised by the local community.

Senator THOMAS. Yes.

Mr. MILLER. And the city of Franklin challenged the local community by saying we would match them dollar for dollar up to \$2½ million of the purchase price.

Senator THOMAS. So, this is local money, then.

Mr. MILLER. This is all local money, yes, sir.

Senator THOMAS. I see. Very good. Well, very interesting. Thank you.

Mr. Kleinknecht, the Park Service, as they said this morning, has reluctance on this legislation. If it fails, what do you see, in terms of the degradation of resources? What do you see as happening, over time, without this act?

Mr. KLEINKNECHT. Well, the floods, as a topic, is—it's going to be interpreted. State and local efforts have already done so. The problem that I see in not developing a trail is, we're not going to put the story together as one entire unit. We're talking about four separate States. Within those States we have various local governments that have some of the property that the floods features are on. And, in my eyes, the purpose of a trail is to put this thing together as a cohesive story of the force of nature and how it's shaped the planet we live on, at least the part in the Pacific Northwest.

If the bill won't pass, we keep on keeping on, but the best won't happen.

Senator THOMAS. Now, this, then—simplified, this same water that began, where, in Montana?

Mr. KLEINKNECHT. Yes, well, essentially, the Bitterroot Valley and neighboring valleys.

Senator THOMAS. That same pathway went all the way to the coast?

Mr. KLEINKNECHT. Well, it took whatever pathway it wanted.

Senator THOMAS. Mr. Snead, there are a number of trails. What would you say is most significant about the designation of this trail?

Mr. SNEAD. Well, first of all, there's no other national scenic trail that is in the Sonoran Desert.

Senator THOMAS. You don't have the Continental Divide Trail?

Mr. SNEAD. The Continental Divide Trail goes into New Mexico out of the Sonoran Desert as the Pacific Crest Trail is in the Mojave Desert.

Senator THOMAS. I see.

Mr. SNEAD. So, this adds—it adds the Sonoran Desert, and it adds the Grand Canyon.

Senator THOMAS. I see.

Mr. SNEAD. And that's the thing that really makes it unique, is the diversity in the State.

Senator THOMAS. You cite on your chart the uncompleted trail. How are you going to complete it across the Grand Canyon?

Mr. SNEAD. Well, we're in the process of—we're completing it right now. We have a 5-year plan, and we are—

Senator THOMAS. No bridge.

Mr. SNEAD. What's that?

Senator THOMAS. No bridge.

[Laughter.]

Mr. SNEAD. No bridge.

Senator THOMAS. No bridge.

Mr. SNEAD. No bridge, that's correct. We're using existing trails. The North Rim Trail has already been built and signed. The Inner Canyon, the South Kaibab and the North Kaibab, has been designated by the Park Service as the Arizona Trail.

Senator THOMAS. I see. I was looking right above Flagstaff there. I thought that was Grand Canyon. Well, thank you very much.

Senator Cantwell.

Senator CANTWELL. Thank you, Mr. Chairman.

Mr. Kleinknecht, thank you for your testimony. And I know it's hard, particularly when individuals haven't seen the geography of this area, to really totally comprehend the scientific significance and the magnitude of the floods, but certainly when you think about Dry Falls and the fact that it's much bigger than Niagara Falls, and you realize that it's a dry fall today, it's very interesting, from a geological perspective.

I know that NOVA is doing a 1-hour science program on this particular region, too, on its significance—but I wonder if you could help the committee today. Is there anything else on the planet, that has been discovered thus far, as far as the cataclysmic level of flooding and impact on a geography, on the planet?

Mr. KLEINKNECHT. I am told, by some of the leading geologists in the country in the Pacific Northwest, that this is the biggest such event ever on the planet. In fact, a couple of letters that I'm going to submit as supporting testimony find only that there are similar features on Mars. In fact, in the 1990's, when NASA was conducting some research on the rovers that were going to be landed on Mars, they came to the Channeled Scablands of eastern Washington to use that as an analog.

There is evidence of another flood, cataclysmic—similar story of an ice dam breaking—in Siberia. However, in terms of a series and the volume and that sort of thing, this is a one-of-a-kind.

Senator CANTWELL. And the study of that, from a geological perspective and understanding is really—where would you say?—in its infancy or—

Mr. KLEINKNECHT. It's a toddler.

[Laughter.]

Mr. KLEINKNECHT. Very briefly, if I may—in the 1920's, J. Harlen Bretz first hypothesized this huge outburst flood—one flood, he thought, initially—and he was ridiculed by the geologic community. He was brought to Washington, D.C., and skewered in 1927. And he had started his career at the University of Washington as a professor, and eventually moved to his later—or earlier alma mater, the University of Chicago. He was awarded the Penrose Medal in the 1970's, I believe it was, in his 96th year. The Penrose Medal is the highest award a geologist can be awarded.

Back to my story, the story started with Bretz fighting for his professional credibility. And really not until the 1970's did it become mainstream geology that these kind of things actually happened. And so, yes, this thing is growing rapidly. It's in its youth and will continue to grow, I'm sure, over the coming decades.

Senator CANTWELL. What are some of the—I know you mentioned economic benefits, but just from the pure geological field-trip understanding, to have this kind of a cataclysmic event be able to actually be studied and analyzed by geology students and—

Mr. KLEINKNECHT. I hate to say this, but it's true: you have to see it to believe it. It is truly a mind-boggling experience to try to understand the force of the water that shaped that part of the country.

I'm a high school teacher by profession. I was just told, this spring, by a graduating senior, that she was a little bit mad at me, because everywhere she drives in eastern Washington now, she's catching herself gawking rather than looking at the road. And I've plead guilty to that for years. It's an amazing thing.

Senator CANTWELL. Isn't there—just, if I could, Mr. Chairman—is there any other geological cataclysmic event that—okay, besides flooding, because we—you just described that you don't know of anything else like this on Earth—is there any other kind of cataclysmic event that you think that we are analyzing today or have done a good job of interpreting for either science, education, or public-interesting purposes?

Mr. KLEINKNECHT. I could think of a few examples, I suppose. Mount St. Helens, Yellowstone National Park has the huge caldera, the work that has gone on to identify the meteorite that apparently landed near the Yucatan Peninsula and established the KT boundary and the end of the dinosaurs. We're talking significant stuff. I suppose, to someone who's not been exposed to the flood story, I may sound a little wacko. But come take a look.

Senator CANTWELL. Well, I thank you, Mr. Kleinknecht. I think that you just described what the challenge is. Some of the other examples, I think, have enjoyed either long historic interpretations or activities, such as Mount St. Helens or other volcanic activity, so we've responded to that. And I think we—I think it is about wrapping people's mind around the particular geological significance, and getting them to understand that. So, thank you very much for your testimony.

Mr. KLEINKNECHT. Thank you.

Senator CANTWELL. Thank you, Mr. Chairman.

Senator THOMAS. Okay. Thank you.

Well, thank all of you for being here. We truly appreciate you taking the effort to come. And I know this is not a very long presentation for all the travel you've done, but I hope you'll contact some of your folks while you're here and talk about these issues so that we can go forward with them.

And I guess, more than anything, thank you for what you do locally to promote these things. I mean, that's where it really needs to begin, and that's where we get the kind of recommendations that should be taken up here, after they've been worked on, and will continued to be worked on, in the local areas.

So, thank you all for being here. And if we have any further questions, why, we'll get them to you.

Thank you so much. The committee is adjourned.

[Whereupon, at 11:35 a.m., the hearing was adjourned.]

## APPENDIXES

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### APPENDIX I

#### Responses to Additional Questions

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ICE AGE FLOODS INSTITUTE,  
July 7, 2005.

Senator CRAIG THOMAS,  
Senate Subcommittee on National Parks.

DEAR SENATOR THOMAS: Below are my responses to the questions you sent me concerning S. 206. Thank you, again, for the opportunity to offer testimony on this matter.

Yours truly,

GARY KLEINKNECHT.

*Question 1.* An Ice Age Trail currently exist in the Midwest. Will the geologic relationship between the two sites be told in any interpretive displays? Do you anticipate any future effort to join the two trails to form a single scenic or historic trail?

Answer. The connection between the Ice Age Floods National Geologic Trail in the Northwest and the Ice Age National Scenic Trail in Wisconsin is that both present the effects of great ice sheets that occurred during the Pleistocene Epoch, but the stories are quite different. The Ice Age Floods Trail will interpret evidence left by a series of outbursts of tremendous volumes of water mainly from a huge ice-dammed lake in the mountain valleys of western Montana. These outburst floods amounted to the greatest series of floods recorded in the world and dramatically shaped the land across four states. The Ice Age Scenic Trail interprets features left by glaciers advancing and retreating across Wisconsin.

Because of the Ice Age connection, it would be reasonable to make some reference to both areas in interpretive exhibits and literature, but physically or administratively connecting the two trails doesn't seem practical. The two units are some 1200 miles apart.

*Question 2.* What type of interpretive facilities currently exist along the trail and what type do you envision having to construct to adequately interpret the area for visitors?

Answer. As envisioned, the Ice Age Floods National Geologic Trail would emphasize using and enhancing existing interpretive facilities and would use major features on existing public lands in order to present the floods story to the public. Several interpretive facilities of varying scale and sophistication currently exist at important locations across the four Northwest states. Examples include facilities at Cabinet Gorge, Dry Falls, Palouse Falls, the Columbia Gorge Discovery Center and Crown Point. The Hanford Reach Heritage Center is currently in the design and development state. Most of these interpretive efforts are state and/or local facilities.

However, the specific locations of trail routes and any new or enhanced facilities will be determined by the Management and Interpretive Plan called for in S. 206. The Plan would be accomplished through a public process and would include the Ice Age Floods Institute and the various land-holding and interpretive and scientific groups that have already participated or are now ready to participate in planning. Under the plan, actual development should be organized to proceed in logically ordered phases, recognizing needs, priorities and locating funding from appropriate sources.

A tentative list of high-priority facilities and projects would probably include the following:

1. An addition to the Montana Natural History Center in Missoula, Montana, which is located at the eastern gateway to the floods region. Visitors traveling from the east along Interstate 90 will be introduced to the floods story and to Glacial Lake Missoula at this location.

2. Enhanced interpretive installations in the vicinity of the ice dam and outbursts at Farragut State Park and Cabinet Gorge Dam near the Idaho-Montana border.

3. Enhancement or replacement of Washington State Parks' Dry Falls Visitors Center, which is at one of the most significant geological sites.

4. The new Hanford Reach Heritage Center in Richland, Washington, which is a project of the Richland Public Facilities District and is currently in the design and development stage. The Center will devote a large portion of its display space to floods interpretation along with other aspects of the region's natural and cultural history. The U.S. Fish and Wildlife Service is a principal partner due to its responsibilities for the Hanford Reach National Monument, and provisions for the Service and other public agencies have already been included in the plans. For the National Park Service, this may be an opportunity to secure office space for trail staff in centrally located facility.

The NPS is not involved in either the construction, operation or funding of this facility.

5. Development of an interpretive Kiosk at the Port of Walla Walla's proposed Wallula Gap overlook at Wallula, Washington.

6. Additional floods interpretive displays added to the Columbia Gorge Discovery Center at The Dalles, Oregon.

7. Enhanced wayside exhibit at Oregon State Parks' Crown Point facility overlooking the Columbia River Gorge.

8. Additional exhibits about the floods at the Oregon Museum of Science and Industry At Portland, Oregon.

There are also several federal wildlife refuges, such as the Turnbull and the Columbia Wildlife Refuges in Washington State, which are significant for their floods features and have already installed some related interpretive signing.

The National Park Service will not be involved in the operation of any of the facilities mentioned above. As the manager and coordinator of the trail, the guiding principle is for the NPS to partner with the various federal agencies and the state, local and tribal governments and private groups that are already doing, or are prepared to do pieces of the interpretive job. The NPS will not be engaged in managing increased landholdings and facilities, but will be promoting good coordination and continuity of the interpretive message presented to the public.

Erecting signs, development of a public trail map and brochure will be needed to mark the various highways that will be the trail route. Costs for road signs and waysides are envisioned as being shared by the NPS, the various state Departments of Transportation and other interested partners. Use of Federal D.O.T. enhancement funds and coordination with each of the state DOT's would be sought wherever possible.

*Question 3.* The National Park Service is opposed to this legislation. What, if any, degradation of the resources do you foresee if this legislation fails to pass in the 109th Congress?

*Answer.* The current opposition of the NPS does not seem to recognize that the basic concept of this project is that it will be a significant partnership of groups and agencies that already are committed to explain special features of the natural landscape. With the legislation, the National Park Service would be the coordinator for the presentation of the floods phenomenon and the one unifying partner of the many interested partners across the four Northwest states.

We don't expect to see significant degradation of resources resulting from a failure of this legislation to pass. However, if the bill fails to pass, there would very likely be a reduced level of activity by the various partners that are currently working to develop interpretive efforts. The resulting degradation would be in the form of omission, confusion and possibly error in presentations undertaken without the framework that would have been provided by S. 206.

Since the release of the Ice Age Floods Alternatives Study Report in 2001, interest in presentation of the floods story has grown immensely. The various partners involved in the interpretive efforts mentioned in my previous answer have been working under the assumption that there will be an Ice Age Floods National Geologic Trail as recommended in the Alternatives Study Report and as originally supported by the Department of the Interior and the National Park Service as the "Most Effective and Efficient Management Alternative" when the final report was transmitted to Congress in August 2001. Partners have often expressed concern that they want their interpretive efforts to meet National Park Service standards, and that they

want to be a part of a single, encompassing, well-coordinated project, with unambiguous national designation.

Failure to develop the national trail will result in fragmented efforts. This story crosses four western states, each with a unique part of the story to tell. From personal experience we know that most people tend to see the story of the floods from the perspective of what is in their own local area. To a Montanan the floods are mainly Lake Missoula. To an Idahoan they are the Ice Dam. To a Washingtonian they are the Channeled Scablands. To an Oregonian they are the Columbia Gorge or the Willamette Valley. For the whole story to be told in a unified fashion there must be a coordinating, overseeing entity. We believe that the National Park Service, given their national expertise in resource interpretation, can best serve this role.

*Question 4.* Is any of the area currently recognized by state or county statute as resources worthy of protecting?

Answer. Several floods sites are already recognized for their interpretive value. Washington's Palouse Falls and Dry Falls are both state parks. Idaho's Farragut State Park is located at the point of flood outburst. Oregon's Crown Point Scenic Corridor and Glacial Erratic State Park are similarly recognized as significant to the floods story. Benton County Parks (Washington) owns over one square mile land atop Bader Mountain as a preserve for public hiking and intends to partner with the Ice Age Floods Institute and perhaps others to develop a floods related viewpoint and install floods interpretive signs.

*Question 5.* What role do you see the Ice Age Floods Institute related to the possible designation of the Ice Age Floods Trail?

Answer. The Ice Age Floods Institute is an educational 501(c)(3) non-profit volunteer group. Our mission is to promote public awareness and understanding of the Ice Age Floods. Our efforts will continue to be educational in nature.

If the trail is established as an NPS unit, the Institute would logically be the group that should become the principal affiliated private organization, and we believe that we would be effective in that capacity.

As provided in Section 5 of S. 206, the Institute would participate in the Interagency Technical Committee's work to assist in the development of the required Management and Interpretation Plan for the trail.

The IAFI is considering the establishment of a related foundation that may promote research into floods topics, perhaps by providing grants and scholarships, and we have discussed supporting the reprinting of significant floods-related publications.

We will continue to promote the development of K-12 curriculum materials to reach teachers and students.

As in the past, the IAFI will continue to conduct public field tours to floods sites and to present programs to local audiences. We have reached thousands of people, including K-12 teachers, over the last nine years.

An important role for the IAFI is to promote professionalism and peer review in the study of the floods. IAFI members who are experts in the various aspects of floods study will be available to ensure accuracy of interpretive efforts, and to assist writers and producers in the preparation of materials for general audiences.

A number of IAFI members are involved in tourism and the hospitality industry. In a variety of ways, we could provide technical assistance in the development of relationships, activities and materials to promote tourism related to the trail and the floods.

Given all these initiatives, in our role as a non-profit educational organization, the IAFI would be an augmentation and a complement to the NPS management of the trail, not a replacement of the important coordination and collaboration role the NPS would play.

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CITY OF FRANKLIN,  
Franklin, TN, July 12, 2005.

Senator CRAIG THOMAS,  
Chairman, Subcommittee on National Parks, U.S. Senate, Committee on Energy and Natural Resources, Washington, DC.

DEAR SENATOR THOMAS: I am writing on behalf of Mayor Tom Miller in response to the questions you posed in your letter dated June 28, 2005. I am the Historic Preservation Officer for the City of Franklin, Tennessee.

*Question 1.* How many visitors would you expect to travel to the site on an annual basis if it is designated as a unit of the national park system?

Answer. The Stones River National Park in Murfreesboro, which is about 30 miles from Franklin, has over 200,000 visitors per year. We would fully expect to attract

this many or more if the Battle of Franklin sites are designated as a unit of the national park system.

*Question 2.* Are any structures currently located on the site of the Battle of Franklin and what would happen to those structures if this legislation is enacted?

Answer. The potential battlefield park is currently operated as a golf course by the country club. It has a clubhouse and other buildings associated with the operation of the club and golf course. With the exception of the clubhouse itself, which will become a battlefield interpretation center, the other structures associated with the club will be removed.

*Question 3.* Do you expect to raise funds from private donors for the acquisition and management of the site?

Answer. As indicated in my testimony, a group of preservation-related non-profit organizations has come together under the name Franklin's Charge to raise money for the battlefield acquisition. To date, they have raised nearly \$2.5 million, which the City will match in order to acquire the property.

*Question 4.* For how long has the site been used as a golf course and what impact has such use had on the integrity of the battlefield?

Answer. The country club began in the early 1970s and has operated since that time. As would be expected, grading and other alterations to the site have occurred. However, the site's context retains a great deal of integrity because it is bound by the Carrnton plantation property, the Harpeth River and the historic Lewisburg Pike.

*Question 5.* Does the City of Franklin interpret the Battle of Franklin?

Answer. Currently, the City operates two parks related to the Battle of Franklin: Winstead Hill and Fort Granger. At these sites, interpretive signage and other special educational events are used to educate the public. The City participates as a partner with the private sector on projects related to the interpretation of the battlefield, such as producing brochures and other initiatives. Additionally, the Board of Mayor and Aldermen recently appointed a task force to oversee the implementation of the recently completed Battlefield Preservation Plan. The American Battlefield Protection Program of the National Park Service funded the plan.

Please contact Mayor Miller or me if we can provide additional information. He can be reached at 615.791.3217 or at mayor@franklin-gov.com. I can be reached at 615.550.6733 or at shanonw@franklingov.com.

Sincerely,

SHANON PETERSON WASIELEWSKI,  
*Historic Preservation Officer.*



## APPENDIX II

### Additional Material Submitted for the Record

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DEPARTMENT OF HYDROLOGY AND WATER RESOURCES,  
THE UNIVERSITY OF ARIZONA,  
*Tucson, AZ, June 24, 2005.*

Senator CRAIG THOMAS,  
*Chairman, Senate Subcommittee on National Parks, U.S. Senate, Washington, DC.*

DEAR DISTINGUISHED COMMITTEE MEMBERS: I write in regard to the Ice Age Floods National Geologic Trail designation legislation that is before your committee. The proposed legislation will create a most worthy entity to be managed as a trail by the National Park Service. The science in regard to this trail, which I have pursued for nearly 40 years, will be absolutely fascinating for the nation's public. The Trail will document what is arguably to the most spectacular geological phenomenon to have occurred on our planet in the past 20,000 years. The region was inundated by the largest and most energetic flows of fresh water that we know about in Earth history. About 16,000 years ago, these floods produced amazing landscapes that can best be appreciated by following their course from sources in western Montana through northern Idaho and into the Channeled Scabland of east-central Washington. The trail further follows the flooding pathway down the Columbia River valley between Washington and Oregon, ultimately leading to the abyssal plains of the Pacific Ocean.

For the past two years I have been involved with a British television documentary team in making a program about these great floods. The production cost has run to nearly \$2 million, and it only begins to introduce the magnificence of this story. How much more educational and enjoyable it will be for our citizens and visitors to follow this fantastic flood story by their travel along its actual path.

The Ice Age Floods National Geologic Trail will be a tremendous resource for science education. In the mid-1990s I worked with NASA scientists from the Pathfinder Mars Landing Mission to use the flood landscape of eastern Washington to prepare for the Mars landing. The landing site was in an ancient Mars flood channel, and the Ice Age Floods terrain was our only Earth analogue to this fantastic find on Mars. I think this will all have immense appeal for those who experience the Ice Age Floods National Geologic Trail.

I most strongly urge the formal designation of the Ice Age Floods Geologic Trail as a fantastic opportunity to bring the nation's public to this most fascinating geological story.

Sincerely,

VICTOR R. BAKER,  
*Regents' Professor.*

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STATEMENT OF EUGENE KIVER, PROFESSOR, DEPARTMENT OF GEOLOGY, EASTERN  
WASHINGTON UNIVERSITY, CHENEY, WA

I wish to lend my enthusiastic support to the establishment of an Ice Age Floods National Geologic Trail administered by the National Park Service. We in the United States are blessed by an amazing variety of natural features, many of which are highlighted in the National Park System. Missing from the great variety that is showcased in our Park System is one of the most incredible geologic events to affect the earth's surface and that impacted the four-state area in the Pacific Northwest.

I am Dr. Eugene P. Kiver, Ph.D., R.G. and am Professor Emeritus of Geology at Eastern Washington University in Cheney, Washington. I have taught geology full time for 32 years and part time for the past 4 years making a total of 36 years of teaching and geological research experience. I am a Registered Geologist in the

State of Washington. I have authored or co-authored over 100 professional publications, technical reports, and geologic field guides, many of which deal with the subject on hand. I am also the lead author in "The Geologic Story of the National Parks" textbook published in 1999 by John Wiley & Sons, Inc.

The recognition that a catastrophic flood of epic proportions occurred on the face of the Earth was not believed by most of the scientific community when first introduced by J Harlen Bretz in the 1920s. No such event had ever been documented in the geologic record thus spawning a suspicion that this unorthodox explanation would not hold up to careful scrutiny. The story of the winning over of the skeptics by the use of solid and thorough field evidence through decades of careful work is in itself a major story in the history and methodology of Science. Finer details are still being refined and will be for many generations making the topic relevant and exciting to both scientists and lay people alike.

Other areas around the globe have since been discovered where catastrophic floods, particularly those related to the recent Ice Age, are now known. The Missoula Flood events in the Pacific Northwest remain one of two large areas in the world affected, the other being in a relatively inaccessible area in Siberia on the Asian Continent. The type example of large-magnitude flood processes and by far the best-studied area is the Channeled Scabland of eastern Washington and the associated areas in nearby states. Each region along the floodpath has its own special story; hence the idea of a national geologic trail is a logical way to enable lay people, educators, and scientists to integrate the evidence located in widespread geographic locations.

Because the geologic story involves a vast landscape that stretches from northwestern Montana, northern Idaho, and through Washington and Oregon and hundreds of miles out into the Pacific Ocean, this is not the type of story that can be documented at one locality. Thus a broad geographic perspective is needed where bits of evidence along the 800-mile-long flood path can be examined. Humans are basically driven by the need to explore and who seek out new experiences and knowledge. Learning is a lifetime endeavor for those who have a healthy need to better know the past. We need to provide those opportunities to those who pursue these rich experiences.

The impact of a collapsing ice dam in northern Idaho that unleashed some 500 cubic miles of water in a few days excites the imagination and appreciation for the rich history found in the landscapes of our northwestern states. The enormity of the floods would seem initially to be a story from Hollywood or Science Fiction. Yet the story is real. As a scientist who has studied these phenomena for over 30 years I feel that the story should be shared with others. I encounter great enthusiasm of students and community groups where I frequently present the topic. The idea of a wall of water hundreds of feet deep roaring across the landscape and in some cases exceeding the Interstate speed limits excites those who learn the story. When one compares the effects of the 25-foot-high Dec. 26, 2004 tsunamis in the Sumatra region with the hundreds of feet of water during the Ice Age floods it initially defies the imagination until the incredible landforms and the flood story are understood. To enrich the lives of our present and future citizens and visitors from other countries by making these experiences available would be a significant contribution and would contribute to our legacy for future generations.

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STATEMENT OF ROY BRECKENRIDGE, STATE GEOLOGIST, IDAHO; EDMOND DEAL, STATE GEOLOGIST, MONTANA; VICKI S. MCCONNELL, STATE GEOLOGIST, OREGON; AND RON TESSIERE, STATE GEOLOGIST, WASHINGTON

The Ice Age Floods that occurred periodically during the time of the great Cordilleran Ice Sheet profoundly influenced the shape of the land along the Columbia River basin from Montana to the mouth of the Columbia River. These glacial and flood events are responsible for the much of the present landscape and scenery as well as being the source of numerous geologic, soil, and water resources of the four state region. The floods were so large that it was not until we began to capture satellite images of the earth's surface that scientists were able to determine the full extent of the floods and to confirm earlier geologist's field observations and interpretations. These large-scale natural events have left us with a fascinating and important geologic legacy whose evidence remains visible to this very day.

As the State Geologists of the four states affected by the Ice Age Floods we enthusiastically support the concept of developing a geologic trail to trace the path of the floods across our states. Such a trail would offer unparalleled opportunities to become an in-situ learning laboratory for the general public as well as furthering scientific research on the causes and effects of the floods. We understand and support

the vision for partnering with tribal, state, and local entities to increase the scope of the trails and the possibilities for education and research.

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INTERNATIONAL MOUNTAIN BICYCLING ASSOCIATION,  
Boulder, CO, June 30, 2005.

Senator CRAIG THOMAS, *Chairman*,  
Senator DANIEL AKAKA, *Ranking Member*,  
*Senate Committee on Energy and Natural Resources, National Parks Subcommittee,*  
*Dirksen Senate Office Building, Washington, DC.*

DEAR CHAIRMAN AND RANKING MEMBER: The International Mountain Bicycling Association (IMBA) strongly supports S. 588, the Arizona Trail Feasibility Study Act. The Arizona Trail exemplifies how a trail can unify a community while accommodating many diverse interests.

IMBA, a national education and advocacy organization, represents 32,000 individual members and 550 affiliated bike clubs. IMBA works to create, enhance, and preserve trail opportunities for mountain bikers coast to coast.

The Arizona Trail has been designed and planned with shared uses in mind—hiking, bicycling, and equestrian use. This stands in contrast to the single-use, hiking-only approach adopted by proponents of the North Country National Scenic Trail and the complete ban on bicycling on the Pacific Crest National Scenic Trails. IMBA believes that most national scenic trails, which consume significant public resources and funds, should serve more than single user groups. IMBA will continue to support hiking-only sections of national trails, but because national scenic trails span thousands of miles, we believe there is enough room for all trail users to benefit.

Mountain bikers have been instrumental in building and maintaining the Arizona Trail. Only this year, two new segments of the Arizona Trail were completed through the efforts of IMBA-affiliated mountain biking clubs in Arizona. The Arizona Trail is a remarkable example of what can be achieved when all non-motorized trail users work together.

From the beginning, Arizona Trail advocates have welcomed and included mountain bike use. The Arizona Trail was originally conceived as a non-motorized, multi-user trail. Although parts of the Arizona Trail travel through Wilderness Areas, where mountain biking is not permitted, the Arizona Trail Association has committed to building alternative routes that will accommodate mountain bikes. In turn, cyclists have always respected those portions of the Arizona Trail upon which mountain bikers are not permitted.

We were very pleased when the National Park Service agreed to allow bicycling on its section of the Arizona Trail north of the Grand Canyon. As you may know, the NPS bans bicycling from most trails; however, they made a decision to make this important connection shared-use.

IMBA members are stellar public servants who collectively contribute almost one million hours of volunteer trailwork on public and private lands annually. IMBA believes that the bicycling community will increase its contribution of labor and resources as the Arizona Trail continues to evolve.

We respectfully ask the committee to pass the Arizona Trail Feasibility Study Act.  
Signed,

MIKE VAN ABEL,  
*IMBA Executive Director,*  
*Representative.*  
SONYA OVERHOSER,  
*IMBA Arizona.*

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