H.R. 3994, “FEDERAL LANDS INVASIVE SPECIES CONTROL, PREVENTION, AND MANAGEMENT ACT”; AND H.R. 4751, TO MAKE TECHNICAL CORRECTIONS TO PUBLIC LAW 110–229 TO REFLECT THE RENAMING OF THE BAINBRIDGE ISLAND JAPANESE AMERICAN EXCLUSION MEMORIAL, AND FOR OTHER PURPOSES

LEGISLATIVE HEARING

BEFORE THE

SUBCOMMITTEE ON PUBLIC LANDS
AND ENVIRONMENTAL REGULATION

OF THE

COMMITTEE ON NATURAL RESOURCES
U.S. HOUSE OF REPRESENTATIVES

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## CONTENTS

<table>
<thead>
<tr>
<th>Hearing held on Wednesday, July 9, 2014</th>
<th>........................................</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statement of Members:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kilmer, Hon. Derek, a Representative in Congress from the State of</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washington</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Prepared statement of</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Statement of Witnesses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beck, George, Healthy Habitats Coalition, Fort Collins, Colorado</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Prepared statement of</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Wagner, Mary, Associate Chief, U.S. Forest Service, Department of</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Agriculture</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Prepared statement of</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Williams, Lori, Executive Director, National Invasive Species Council, Department of the Interior</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Prepared statement of</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional Materials Submitted for the Record:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Parks Conservation Association (NPCA), July 8, 2014, Letter submitted for the record in support of H.R. 4751</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>Representatives of the powersports industry and off-highway vehicle enthusiasts, July 7, 2014, Letter submitted for the record in support of H.R. 3994</td>
<td>53</td>
<td></td>
</tr>
</tbody>
</table>

Wednesday, July 9, 2014
U.S. House of Representatives
Subcommittee on Public Lands and Environmental Regulation
Committee on Natural Resources
Washington, DC

The subcommittee met, pursuant to notice, at 10:06 a.m., in room 1324, Longworth House Office Building, Hon. Rob Bishop [Chairman of the Subcommittee] presiding.
Present: Representatives Bishop, Gohmert, McClintock, Lummis, Daines, LaMalfa; Grijalva, Bordallo, and Garcia.

Mr. BISHOP. All right, the hearing will come to order. I apologize for being late. Whenever Raul gets here before I do, there is something that has really, really gone wrong here.

The Chair notes the presence of a quorum. The Subcommittee on Public Lands is meeting to hear testimony on two bills. Under the rules, the opening statements are limited to the Chairman and the Ranking Member. However, I ask unanimous consent to include any other Members’ opening statements in the hearing record, if submitted to the clerk by the close of business today.

I also ask unanimous consent that Members that are not on the full committee or the subcommittee be allowed to sit at the dais and take part in the proceedings.

[No response.]

Mr. BISHOP. And hearing no objections, we are—or so ordered.

There are two bills we are going to hear. We are actually going to hear Mr. Kilmer’s bill first. I am going to save any kind of comments I have on my bill to a later time. So I will yield to Mr. Grijalva.
If you want to do it the same way, fine. If you want to talk now, you want to talk later, we will give you that option, as well.

Mr. Grijalva. Let me, Mr. Chairman, just, if no objection, file my extensive comments on your legislation for the record. And pleased to see Mr. Kilmer’s very necessary reminder of a sad legacy in our history. And, with that, yield back.

Mr. Bishop. OK, thank you. With that, we appreciate those who have joined us today. We are going to deal with Mr. Kilmer’s bill first, which is H.R. 4751, to rename Bainbridge Island Japanese American Exclusion Memorial.

Mr. Kilmer, we welcome you here.

Mr. Kilmer. Thank you.

Mr. Bishop. We will recognize you for 5 minutes to discuss your legislation.

STATEMENT OF THE HON. DEREK KILMER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WASHINGTON

Mr. Kilmer. Thank you, Chairman Bishop and Ranking Member Grijalva, for providing me the opportunity to testify today in support of House Resolution 4751. I thank the other members of the subcommittee for being here today.

And this bill is legislation that will make technical corrections to legislation that passed into law in 2008 by the 110th Congress. The 2008 law included the site now known as the Bainbridge Island Japanese American Exclusion Memorial, which is located in the district that I represent, as a unit of a National Historic Site.

The memorial was established to recognize that, in the wake of the attack on Pearl Harbor, Bainbridge Island was the first place in the country where Japanese Americans were forcibly removed from their homes in response to concerns about the security of U.S. Navy facilities in the Puget Sound, where the 270 Japanese-Americans were forced to leave their homes, their neighbors, their friends, and their community to travel great distances in order to be held in internment camps. These individuals committed no crime, yet were deprived of their rights, simply because of who they were.

While this is a dark chapter in our Nation’s history, we have an obligation to ensure that future generations remember what took place here, so that these mistakes are not repeated.

While the Park Service manages three sites related to Japanese-American incarceration, the Bainbridge Island Japanese American Exclusion Memorial is the only site administered by the Park Service that commemorates the forcible removal of Japanese-Americans.

In April of this year, the Bainbridge Island City Council and the Bainbridge Island Metropolitan Park and Recreational District, which jointly owned the memorial, officially renamed it the Bainbridge Island Japanese American Exclusion Memorial. In order to eliminate any confusion, and ensure that the official name of the site is formally recognized, H.R. 4751 would update the law to reflect the renaming of the Bainbridge Island Japanese American Exclusion Memorial.

Finally, I would be remiss if I didn’t mention that Bainbridge Island’s Japanese-American community recently lost one of their
great leaders, Dr. Frank Kitamoto, who dedicated much of his life to educating others about the experience of Japanese-Americans during World War II. He played an instrumental role in advocating for the installation of the memorial.

Thank you, Chairman Bishop and Ranking Member Grijalva, for inviting me to speak on behalf of this bill, and I am more than happy to stand for any questions, if you have them.

[The prepared statement of Mr. Kilmer follows:]

PREPARED STATEMENT OF THE HON. DEREK KILMER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WASHINGTON ON H.R. 4751, A BILL TO MAKE TECHNICAL CORRECTIONS TO PUBLIC LAW 110-229 TO REFLECT THE RENAMING OF THE BAINBRIDGE ISLAND JAPANESE AMERICAN MEMORIAL TO BAINBRIDGE ISLAND JAPANESE AMERICAN EXCLUSION MEMORIAL, AND FOR OTHER PURPOSES.

Thank you, Chairman Bishop and Ranking Member Grijalva for providing me with the opportunity to testify today in support of H.R. 4751. I thank the other members of the subcommittee for being here today.

H.R. 4751 is legislation that will make technical corrections to legislation passed into law in 2008 by the 110th Congress. The 2008 law included the site now known as the Bainbridge Island Japanese American Exclusion Memorial, which is located in the district that I represent, as a unit of the Minidoka National Historic Site.

The memorial was established to recognize that, in the wake of the attack on Pearl Harbor, Bainbridge Island was the first place in the country where Japanese Americans were forcibly removed from their homes. At that time, given concerns about the security of U.S. Navy facilities in the Puget Sound, more than 270 Japanese Americans were forced to leave their homes, their neighbors, and their friends to travel great distances in order to stay in internment camps. These individuals committed no crime, yet were deprived of their rights simply because of who they were. While this is a dark chapter in our Nation’s history, we have an obligation to ensure that future generations remember what took place here so that those mistakes are not repeated.

While the Park Service manages three sites related to Japanese American incarceration, this is the only memorial administered by the Park Service that commemorates the forcible removal of Japanese Americans.

In April of this year, the Bainbridge Island City Council and the Bainbridge Island Metropolitan Park and Recreational District, which jointly own the memorial, officially renamed it the “Bainbridge Island Japanese American Exclusion Memorial.” In order to eliminate any confusion and ensure that the official name of the site is formally recognized, H.R. 4751, would update the law to reflect the renaming of the Bainbridge Island Japanese American Exclusion Memorial.

Finally, I would be remiss if I did not mention that Bainbridge Island’s Japanese American community recently lost one of their great leaders, Dr. Frank Kitamoto, who dedicated much of his life to educating others about the experience of Japanese Americans during World War II. Dr. Kitamoto played an instrumental role in advocating for the installation of the memorial.

Thank you, Chairman Bishop and Ranking Member Grijalva for inviting me to speak on behalf of H.R. 4751.

Mr. BISHOP. Thank you. I appreciate that.

I understand from the agencies that you have submitted written comments, that you do not have oral comments on this bill. Is that correct?

Ms. WILLIAMS. Yes. The Department of the Interior submitted a statement in support of the bill, and we don’t have further comments to support it.

Mr. BISHOP. All right. Then we will turn to the committee and see if there are any questions.

Mr. Grijalva, do you have any questions for this bill?

[No response.]

Mr. BISHOP. Ms. Bordallo, do you have questions for this bill?
Ms. Bordallo. Yes.
Mr. Bishop. OK.
Ms. Bordallo. This is 3994, right?
Mr. Bishop. No.
Ms. Bordallo. No?
Mr. Bishop. 4751.
Ms. Bordallo. Then I do not have any questions, Mr. Chair.
Mr. Bishop. We are letting you off too easy here on this one. I don't have any questions for you, either.
Mr. Kilmer. Thank you.
Mr. Bishop. I think we are all looking forward to supporting the bill that you have.
Mr. Kilmer. Thanks very much. Thank you.
Mr. Bishop. With that, we appreciate it. You know, if you would like to stay with us for the rest of the day, you would be welcome to.

[Laughter.]
Mr. Bishop. No one has ever taken me up on that offer, but——
Mr. Kilmer. I will join them. Thank you, sir.
Mr. Bishop. You are new. I thought I could get away with that.
[Laughter.]
Mr. Bishop. All right, appreciate you with that. With that we will turn to the next bill, which is H.R. 3994, dealing with invasive species. And this is, once again, where I am pleased to be able to introduce this particular bill, as we have a unique problem in the United States with invasive species that spill over not only on public lands, but they also go on private lands and state lands, threatening their status and health, as well.

And we obviously need to do something better. Even though we appropriate substantial funds for eradication, the status quo simply is not working. And that we also have to be realistic that there is not an unlimited supply of where we are going to go, it has to be thinking outside the box in some particular way.

And I know you actually put yourself on the record. Is there anything you wanted to add, as well, just verbally?
Mr. Grijalva. No.
Mr. Bishop. OK. With that, we will turn to the witnesses who are up here. I appreciate you coming before us. We will, first of all, turn to Lori Williams, who is representing the Interior Department. Then we will go over to Ms. Mary Wagner from the Forest Service and, finally, Dr. George Beck. And we will ask for your testimony in that order. Your written testimony is in the record, is already included, and we will add any kind of oral testimony. We just ask you to maintain it within the 5-minute limits that are in front of you.

Ms. Williams, we will turn to you first.

STATEMENT OF LORI WILLIAMS, EXECUTIVE DIRECTOR, NATIONAL INVASIVE SPECIES COUNCIL, DEPARTMENT OF THE INTERIOR

Ms. Williams. Thank you so much. I am Lori Williams. I am Executive Director of the National Invasive Species Council. That council provides coordination and planning and policy support for the over 13 Federal departments and agencies on invasive species.
issues, and we also support a 30-member, non-Federal advisory committee, which, at one time, George Beck was the chairman of. So, greetings to George, and thank him for all his help.

First, I just want to thank Chairman Bishop and the Ranking Member for the opportunity to provide our statement, and for the attention you brought to this issue. It is an extremely serious issue; it has huge impacts across the landscape. And, as you said, invasive species do not discriminate. They go on private, public lands and waters. And we are very, very appreciative of the attention brought to this challenging issue.

That being said, the Department of the Interior does have some concerns about H.R. 3994, as drafted, and I am just going to summarize those briefly today and make some major points, and I would be glad if my statement, with some more particular concerns, will be in the record.

First, a little bit about the Department, which is actively engaged in preventing, controlling, and managing invasive species to avoid and minimize significant harm that they cause to our Nation’s resources, including Federal lands managed by the Department’s bureau. Every bureau within the Department has a responsibility for managing invasive species. Relative to this legislation, the Bureau of Indian Affairs supports tribal government efforts to control invasive species, the Bureau of Land Management, the Bureau of Reclamation, the U.S. Fish and Wildlife Service, and the National Park Service all have programs focused on managing this problem. So you can see how widespread it is throughout our country.

These bureaus also partner with states, tribes, and the private sector to support efforts to prevent and control invasive species. By addressing invasive species through coordination, partnerships, and collaborative actions, the Department works to leverage limited resources to counter the impacts of invasive species across the landscape.

Given the complexity and scope of invasive species impacts, the Department supports a comprehensive approach that includes prevention, early detection, rapid response, control, coordination, research, and restoration. One method just doesn’t fit all of the various species.

So, in our view, H.R. 3994 would directly impact all of the agencies I just mentioned, and perhaps more within the Department, and their programs to deal with invasive species. The President’s Fiscal Year 2014 budget included an increase of about $23 million to support invasive species activities. These and other programs were described in more detail in a statement submitted by the Department for the subcommittee at your oversight hearing on invasive species on May 16, 2013. So I won’t go into a lot of detail on the programs, and I’ll just make a few comments about the bill.

It does appear that H.R. 3994, from our reading, could reduce flexibility from Federal program and land managers to craft solutions to their site-specific problems. It could also require costly and possibly redundant analyses and reports and administrative agreements, while at the same time capping the administrative funding that could be spent, and would likely result in less funding going to prevention, education, and research factors that we believe, in
addition to control and management, are critical to successfully addressing invasive species issues.

For example, a number of provisions in the bill would reduce flexibility to address invasive species, both at the programmatic level and for Federal land managers. The 5-percent net reduction of invasive species, although a worthy goal required by Section 3(b), may not accomplish the intended goal of reducing the overall harm caused by invasive species, as it may preclude agencies from prioritizing actions to address the most harmful species, given the limited resources, and those new challenges we can’t anticipate.

In addition, Subsection 5(a) focuses on the cost of control, rather than the effectiveness of control, protection of human health and safety, and protection of native species, all of which we believe need to be considered when choosing a control method. This may limit options for land managers to craft their solutions to invasive species that vary so much by site, conditions, and climate.

Moreover, departmental control programs and projects are often carried out already in conjunction with state, tribal, and local partners, by focusing solely on cost and net reduction, rather than on the overall effectiveness of the effort in a region. These provisions could unintentionally reduce Federal agency options to find innovative control methods and ways to work with our partners.

So, in summary, as I am running out of time, these are just some of the major concerns we have with the way the bill is drafted. However, we very much appreciate the attention brought to this issue, the oversight hearing that you held, and want to continue to focus to work with you to limit and reduce the very severe problems caused by invasive species to our resources.

Thank you.

[The prepared statement of Ms. Williams follows:]

PREPARED STATEMENT OF LORI WILLIAMS, EXECUTIVE DIRECTOR, NATIONAL INVASIVE SPECIES COUNCIL, DEPARTMENT OF THE INTERIOR

H.R. 3994, “THE FEDERAL INVASIVE SPECIES PREVENTION, CONTROL AND MANAGEMENT ACT”

Thank you, Chairman Bishop and Ranking Member Grijalva, for the opportunity to provide the Department of the Interior’s (Department) views on H.R. 3994, The Federal Invasive Species Prevention, Control and Management Act, introduced on February 5, 2014. While the Department supports the intent of the legislation to improve the management and control of invasive species on the lands and waters that it manages, as discussed below, we have concerns with the bill as introduced.

INTRODUCTION

The Department of the Interior (Department) is actively engaged with preventing, controlling and managing invasive species to avoid and minimize the significant harm invasive species cause to our Nation’s natural resources, including the Federal lands managed by the Department’s bureaus. Every bureau within the Department has a responsibility for managing invasive species. Relative to this legislation, the Bureau of Indian Affairs (BIA) supports tribal government efforts to control invasive species; the Bureau of Land Management (BLM), the Bureau of Reclamation (BOR), the U.S. Fish and Wildlife Service (FWS), and the National Park Service (NPS) also have programs focused on management of aquatic and terrestrial invasive species that infest water systems and lands they manage.

These bureaus also partner with states, tribes and the private sector to support efforts to prevent and control invasive species. By addressing invasive species through coordination, partnerships, and collaborative actions, the Department works to leverage limited resources to counter the impacts of invasive species across the
landscapes. Given the complexity and scope of invasive species impacts, the Department supports a comprehensive approach that includes prevention, early detection and rapid response, control, coordination, research and restoration—as the most effective ways to protect our lands and waters from invasive species.

H.R. 3994 would directly impact the invasive species programs of the BIA, BLM, BOR, NPS, and FWS, and could indirectly affect other agencies' invasive species activities. The President's fiscal year 2014 Budget for the Department included an increase of about $23 million to support these high priority programs, which were described in more detail in a statement submitted by the Department for the subcommittee's oversight hearing on invasive species on May 16, 2013.

**COMMENTS ON H.R. 3994**

As indicated at the beginning of this statement, the Department has concerns with the legislation. As written, it appears that H.R. 3994 would reduce the flexibility of Federal program and land managers to craft solutions to their site specific problems; require costly and redundant analyses, reports and administrative agreements—while capping administrative funding; and would likely result in less investment going to prevention, education, and research, factors that are critical to successfully addressing invasive species issues.

For example, a number of provisions in the bill would reduce flexibility to address invasive species both at the programmatic level and for Federal land managers. The 5-percent net reduction of invasive species required under Section 3(b) may not accomplish the goal of reducing the overall harm caused by invasive species, as it may preclude agencies from prioritizing actions to address the most harmful species and new challenges. In addition, Subsection 5(a) of the bill focuses on the cost of control rather than the effectiveness of control, protection of human health and safety, and protection of native species. This may limit options available to land managers who need to have a full range of treatment options available to control invasive species, which will vary by site, conditions and climate.

Moreover, Departmental control programs and projects are often carried out in conjunction with state, tribal, and local partners. By focusing solely on cost and net reduction rather than overall effectiveness, these provisions could unintentionally reduce Federal agency options to find innovative, effective, and collaborative solutions to invasive species management. Coordination across jurisdictions is critical to invasive species prevention and control.

As noted above, the bill also requires a number additional plans, analyses, reports, and agreements that are unnecessary or redundant, while at the same time capping administrative costs. These include a comparative economic assessment to be completed for each site specific control program, required by section 5(b), which we believe would be administratively burdensome; and a memorandum of understanding, required by section 6(a), to be developed with each cooperating partner. Department land management agencies currently have a number of existing cooperative agreements, contracts, or other arrangements with their partners that might have to be recreated to meet this requirement. The cost and time required to satisfy these provisions could delay or disrupt successful ongoing collaborative programs.

H.R. 3994 would reduce funding for critical invasive species prevention, outreach and education, inventory and research programs. As written, H.R. 3994 does not appear to account for costs associated with documenting the presence and abundance of invasive species (inventory), tracing the relative success of treatments, or reporting the results in a standardized way so that progress and methods can be tracked and evaluated. Section 4 of the legislation would also restrict spending for investigations, outreach, and education. Public outreach and education have proven to be an effective tool in reducing new introductions; and research is needed to develop novel control methods or identify unknown impacts of invasive species that may need priority attention. The Department also opposes the administrative cost cap as it would diminish the effectiveness of invasive species programs. Oversight and program management are essential parts of invasive species activities and are included as administrative costs of the program.

In addition, by focusing primarily on control and management, the bill could also divert funding from addressing harmful invasive species that cannot be controlled through on the ground management, but may be addressed through pathway interdiction and other means. Research has shown that the most cost effective and efficient approach to managing invasive species is to prevent their establishment in the first place; second, to detect infestations early and respond with rapid response to achieve eradication; and then manage infestations through control activities. By primarily focusing on control and management, the bill may reduce efforts to address species that cannot be managed by on the ground control efforts—but may be ad-
dressed through pathway interdiction or other means, including aquatic species such as zebra and quagga mussels and Asian carp. It will also constrain the existing ability of land management agencies to adaptively manage invasive species control efforts around prevention, research, restoration, and partnership goals.

Finally, the Department is also concerned that the environmental, cultural, and other impacts of invasive species control activities would not be adequately considered given the bill’s broad categorical exclusion for many invasive species control efforts from environmental analysis under the National Environmental Policy Act (NEPA). The Department does not support such an expansive categorical exclusion, which would both eliminate an important opportunity for public involvement in land management decisions and ignore existing regulatory authority to conduct programmatic NEPA reviews. The categorical exclusion could also be detrimental to tribal interests if used without tribal consultation.

CONCLUSION

The Department appreciates that H.R. 3994 provides additional recognition of the importance of controlling invasive species on Federal lands managed by its bureaus. However, the Department is concerned that the bill is unnecessarily restrictive and could unintentionally undermine important invasive species partnerships and programs. Mr. Chairman, thank you for the opportunity to testify on this legislation. I would be happy to answer any questions.

COMMENTS ON H.R. 4751, A BILL TO MAKE TECHNICAL CORRECTIONS TO PUBLIC LAW 110–229 TO REFLECT THE RENAMING OF THE BAINBRIDGE ISLAND JAPANESE AMERICAN MEMORIAL TO BAINBRIDGE ISLAND JAPANESE AMERICAN EXCLUSION MEMORIAL, AND FOR OTHER PURPOSES

Mr. Chairman, thank you for the opportunity to present the views of the Department of the Interior on H.R. 4751, to make technical corrections to Public Law 110–229 to reflect the renaming of the Bainbridge Island Japanese American Memorial to Bainbridge Island Japanese American Exclusion Memorial.

The Department supports enactment of H.R. 4751.

H.R. 4751 would update the law enacted in 2008 (Section 313 of Public Law 110–229) that included the Bainbridge Island Japanese American Memorial within the boundary of Minidoka National Historic Site. This 8-acre memorial was built on land owned jointly by the city of Bainbridge Island and the Bainbridge Island Park and Recreation District and is administered by the National Park Service in partnership with municipal and non-profit entities. The City Council and the Park and Recreation District recently renamed the memorial, adding the word “Exclusion” to its title. Passage of H.R. 4751 would ensure that there is consistency between the official name of the memorial and the memorial that the National Park Service is authorized to administer under Public Law 110–229. There will be only nominal cost associated with this legislation.

We believe it was appropriate for the local authorities to add the word “Exclusion” to the memorial’s name. Less than 4 months after the bombing of Pearl Harbor, the Japanese Americans living on Bainbridge Island, due to the island’s close proximity to U.S. Navy facilities in Puget Sound, were the first 276 people of over 100,000 to be “excluded” under Executive Order 9066. The signs that were posted on Bainbridge Island that alerted the Japanese Americans that they had 6 days’ notice to prepare for departure for an unknown length of time clearly stated that Bainbridge Island was “Civilian Exclusion Area No. 1.” Ultimately, exclusion orders would forcibly remove Japanese Americans from their homes in Alaska, the western halves of Oregon and Washington, the entire state of California, and the southern portion of Arizona. Nearly two-thirds of those incarcerated were American citizens.

The National Park Service presently manages three other sites that interpret Japanese American incarceration: Manzanar National Historic Site in California, Minidoka National Historic Site in Idaho (not including the Bainbridge Island memorial, in Washington), and the Tule Lake unit of World War II Valor in the Pacific National Monument in California. These sites were once the physical location of the Japanese American incarceration camps. The Bainbridge Island Japanese American Exclusion Memorial tells a related, but different, story. Bainbridge Island was not an incarceration camp; it was the very first place where Japanese Americans were taken from their homes, excluded from the mainstream population, and sent to incarceration camps. The Bainbridge Island memorial commemorates this history. It is not just a memorial to the Japanese Americans who lived on Bainbridge Island, as the original name implies; it is a memorial to all Japanese Americans who were
“excluded” from the general population during the war, and unjustly denied their liberty and property.

Mr. Chairman, that concludes the Department's testimony on H.R. 4751.

Mr. BISHOP. Thank you. All right, Ms. Wagner, we will turn to you. We will take her extra—she went over 40 seconds; we will take it off of your number.

[Laughter.]

Mr. BISHOP. From the Forest Service, please, you are recognized.

STATEMENT OF MARY WAGNER, ASSOCIATE CHIEF, U.S. FOREST SERVICE, DEPARTMENT OF AGRICULTURE

Ms. WAGNER. Good morning, Chairman Bishop, Ranking Member Grijalva, members of the committee. In reference to the written statement, I am just going to offer a few points this morning on H.R. 3994, and the importance of invasive species management.

So, first, I want to start with an appreciation for your work to craft a bill that addresses this important topic, and appreciate the work of the committee to address concerns that we have previously identified. I want to applaud your recognition that this issue is of great import to the Nation.

USDA supports the goals and the use of collaborative partnerships set out in the Federal Lands Invasive Species Control, Prevention, and Management Act. Our written statement details the efforts of USDA agencies committed to the prevention, detection, control, management, and eradication of invasive species, and to restoring the structure and function of terrestrial and aquatic systems on all lands.

We work to provide research, protection, technical, and financial assistance, partnerships, and treatment to reduce the impacts of invasive species. The Forest Service works extensively at local, county, state, tribal, and Federal levels, as well as with private stakeholders and non-governmental organizations to proactively implement invasive species management approaches across the broader landscape.

Through an all-lands approach, the Forest Service provides a wide range of technical and financial assistance to help manage invasive species. The wide-ranging authorities of the Forest Service allow us to work with partners to combat invasive species across all lands, public and private. We also develop methods, tools, and approaches through which these harmful exotic species can be detected, prevented, controlled, and eradicated.

To ensure the continued production of needed goods, services, and values from our Nation's terrestrial and aquatic systems, the Forest Service takes a strategic approach for managing invasive species across all program areas, much the same as the Council and Department of the Interior. This approach includes four main elements: prevention, detection, control and management, and restoration and rehabilitation. And, in our experience, all four elements are necessary to respond to invasive species.

We believe USDA's collaborative approach to invasive species management enhances our ability to work together by building on
each other’s strengths and authorities, and appreciate the bill’s language directing a partnership approach.

We are concerned that the categorical exclusion in Section 5 is overly broad, and could call into question our collaborative work with partners and other stakeholders. The Forest Service has successfully established categorical exclusions under existing authorities recently under restoration, and we could support a call for rulemaking to establish an appropriate and necessary categorical exclusion for invasive species. This would enable us to focus on gaps of our current categorical exclusions, and strengthen relationships as we do that.

The 2014 Farm Bill provides for a designation of insect and disease treatment areas. And projects, if they meet certain criteria, can be categorically excluded from documentation in an EA or EIS. And there are also limitations on the use of the categorical exclusion in that bill. Perhaps that approach would be valuable to assess. So we would welcome, and we are interested in working with the subcommittee to address these concerns. Thank you.

[The prepared statement of Ms. Wagner follows:]

PREPARED STATEMENT OF MARY WAGNER, ASSOCIATE CHIEF, U.S. FOREST SERVICE, U.S. DEPARTMENT OF AGRICULTURE

Mr. Chairman and members of the subcommittee, thank you for the opportunity to testify before you today on the role of the Forest Service in protecting forests and grasslands from invasive species. The Forest Service is only one of several agencies of the U.S. Department of Agriculture (USDA) committed to the prevention, detection, control, management and eradication of invasive species, and to restoring the structure and function of affected aquatic and terrestrial ecosystems on all lands. As such, the USDA supports the goals and use of collaborative partnerships set out in the Federal Lands Invasive Species Control, Prevention, and Management Act and looks forward to working with the subcommittee to address some concerns.

BACKGROUND

Invasive species are among the most significant environmental and economic threats facing our Nation. Aquatic and terrestrial invasive plants, pathogens, vertebrates, invertebrates, algae, and fungi have become established on millions of acres across North America. These infestations are degrading watershed condition and ecosystem functionality, reducing forest and rangeland productivity, increasing the risk of wildfire and soil erosion, causing declines in recreational use and enjoyment, negatively impacting human health and safety, threatening native fish and wildlife populations and their associated habitats, causing declines in property values, and undermining the economy at all levels. Invasive species cause billions of dollars in damage each year in the United States. Pimentel et al. (2001) estimated damage from invasive species worldwide totaled at more than $1.4 trillion per year. Burgeoning global trade and transportation have facilitated the spread of many species among continents well beyond their native range. With the number of people living in, enjoying, and using forests, grasslands, and water resources continually increasing, the likelihood of invasive species spreading through transportation and recreational activities is also rising. As a result, many species of invasive plants, pathogens, vertebrates, invertebrates, and other harmful exotic species have been introduced to our Nation’s aquatic and terrestrial ecosystems. Many of these have become established within these ecosystems.

RESPONSIBILITIES AND CAPABILITIES OF THE FOREST SERVICE

The Forest Service plays an important role in the Nation’s efforts to address the threat of invasive species across the landscape through our National Forest System, State and Private Forestry, Research and Development, and International program areas. In this testimony we will explore how individually and collectively these programs work together to address invasive species threats.

With internationally recognized land management and scientific expertise, the Forest Service is well suited to address the many challenges of invasive species. The Forest Service continues to play an important national and international leadership
role in advancing the understanding of the invasive species problem. The wide ranging authorities of the Forest Service allow us to work with partners to combat invasive species across all lands, public and private. We also develop methods, tools, and approaches, through which these harmful exotic species can be detected, prevented, controlled, and eradicated.

At the national, regional, state and local levels the Forest Service works extensively with county, state, tribal, Federal, and private stakeholders to proactively implement invasive species management activities across the broader landscape. Through an "all lands approach" the Forest Service provides a wide range of technical and financial assistance to help manage invasive species. The Forest Service works closely with state forestry agencies to implement State Forest Action Plans to protect forest from threats.

The Forest Service has also been a major financial supporter for the establishment of Cooperative Weed Management Areas (CWMAs) and Cooperative Invasive Species Management Areas (CISMAs) for nearly two decades, under the National Fish and Wildlife Foundation’s “Pulling Together Initiative” grant program. This Federal grant program led to the establishment and sustainability of dozens of CWMA and CISMA areas across the Nation to expand public and private partnerships against invasive species.

In each region of the country, the Forest Service is also a partner in implementing priority invasive species management actions identified in state invasive species management plans, supporting the implementation of the invasive species components of State Wildlife Action Plans, helping to develop local and regional invasive species management strategies, and providing local support to prevent the spread of invasive species. As an example, the Forest Service plays several important roles in implementing the USDA obligations and priorities under the national Quagga-Zebra Mussel Action Plan, developed through a Federal-State collaboration to prevent and control the spread of these high-risk invasive mussels across the United States. These partnerships help achieve our agency watershed restoration and protection goals.

The Forest Service also provides interagency leadership and support as a member of the Federal Interagency Committee for the Management of Noxious and Exotic Weeds, the Aquatic Nuisance Species Task Force, and the Federal Interagency Committee for the Management of Invasive Terrestrial Animals and Pathogens. In addition, the Forest Service serves as an active member of the Invasive Species Committee of the Association of Fish and Wildlife Agencies. Through these partnerships the Forest Service continues to expand national and state efforts to address the invasive species threat.

FOREST SERVICE INVASIVE SPECIES MANAGEMENT ACTIVITIES

As one of the largest Federal land management agencies in the country, the Forest Service has the responsibility for the stewardship of over 193 million acres of public lands within the National Forest System. This vast and nationally significant system extends from Alaska to the Caribbean, and includes examples of nearly every type of aquatic and terrestrial ecosystem in North America. These lands and waters are under tremendous pressures from aquatic and terrestrial invasive plants, algae, pathogens, fungi, vertebrates, and invertebrates. Effective management of these harmful exotic species which threaten the National Forest System and all lands is a critical part of the agency’s land stewardship responsibility.

The recognition that national forests and grasslands play a key role in the local, regional, and national battle against aquatic and terrestrial invasive species is reflected by the annual expansion of on-the-ground management efforts to address a wide range of invasive species challenges. To accelerate this expansion, a new national Invasive Species Management Policy for the National Forest System was issued to the field in late 2011. It is viewed as a comprehensive national policy for invasive species management in the Federal land management sector. The new policy defines and clarifies the authorities, scope, roles, and responsibilities associated with National Forest System management activities against aquatic and terrestrial invasive species. A few examples of the requirements in this new policy include:

- Requiring that Forests work closely with local communities, including state, local, and tribal interests, to address a variety of invasive species challenges across the landscape.
- Increasing program transparency, performance accountability, and management effectiveness against priority aquatic and terrestrial invasive species at all levels.
• Requiring the use of invasive species-free materials and products, and the de-
contamination of vehicles and equipment to reduce the spread of aquatic and
terrestrial invasive species to, and from, national forests and grasslands.
• Prioritizing prevention, and early detection and rapid response, activities to
maximize management efficiency over time.

Forest Service invasive species management performance is outcome driven, with
a focus on treating and restoring priority areas to improve watershed condition and
reduce the long-term impacts of invasive species. To achieve this, national forests
and grasslands typically treat nearly 400,000 acres of priority aquatic and terres-
trial invasive species infestations annually using an integrated management ap-
proach. Since 2007, more than 2 million acres of lands and waters have been
restored to protect against aquatic and terrestrial invasive species across National
Forest System lands and waters; with very high treatment efficacy rates each year.

The Forest Service’s State and Private Forestry programs provide a wide range
of assistance to states, tribes, and others to better manage private and other public
natural resources. The Forest Service provides technical and financial assistance to
state natural resource and agricultural agencies, tribal governments, and other
Federal land management agencies to respond to and manage forest pests that
threaten the Nation’s 851 million acres of rural and urban forests of all ownerships.
The Urban and Community Forestry program works with community partners in
the detection, monitoring, containment, and when possible, eradication of invasive
species and provides funding and technical assistance to states to support canopy
restoration and management.

We also work closely with sister USDA agencies to coordinate prevention and
management of invasive species across all lands. USDA has the largest Federal role
in invasive species management because of its responsibility to offer technical as-
sistance to responsible agencies who quarantine goods coming into the country;
manage more than 183 million acres of national forests and grasslands; conduct re-
search; and provide technical assistance to the private sector and in large agricul-
tural pest control projects. The USDA Agricultural Research Service (ARS) conducts
research in extremely diverse areas involving prevention, control and management
of invasive species. For example, ARS provides research in support of action agen-
cies such as the Animal and Plant Health Inspection Service (APHIS), to reduce the
rate of introduction of invasive species, and to rapidly detect, identify and eradicate
incipient species.

APHIS is a multi-faceted agency with a broad mission area that includes pro-
tecting and promoting U.S. agricultural health, regulating certain genetically engi-
neered organisms, administering the Animal Welfare Act and carrying out wildlife
damage management activities. APHIS’s mission has expanded over the years to in-
clude protection of public health and safety as well as natural resources that are
vulnerable to invasive pests and pathogens.

The Natural Resources Conservation Service (NRCS) has become a conservation
leader for all natural resources, ensuring private lands are conserved, restored, and
more resilient to a changing climate. NRCS helps agriculture producers and private
landowners tackle invasive species problems in four major ways: technical and fi-
nancial assistance to manage invasive species; conservation initiatives that work at
a landscape scale to address natural resource concerns, including invasive species;
Conservation Innovation Grants with partner entities to support development and
implementation of innovative approaches and strategies to address invasive species;
and Plant Materials Center research geared toward invasive plant species manage-
ment and restoring areas where invasive plant species have been removed.

The Forest Service Forest Health Protection program directs and implements
measures to prevent, detect, contain, and suppress unwanted native and invasive
insects, pathogens, and plants affecting trees and forests. Since the start of fiscal
year 2014, State and Private Forestry programs have provided $1.8 million in essen-
tial matching funds and technical assistance to state governments to combat eco-
nomically significant weed threats to state and private forest lands. Since 2000, the
Forest Service, working in partnership with states and other Federal agencies, has
implemented a national Slow the Spread (STS) strategy to minimize the rate at
which gypsy moth spreads into uninfested areas. The STS program has reduced the
spread of gypsy moth more than 60 percent from the historical level of 13 miles per
year. In only 12 years, this program has prevented impacts on more than 100
million acres.

Forest Health Protection and partners from cooperating states conduct an annual
collaborative forest pest surveys on over 400 million acres of Federal and cooper-
tive forest land. Additionally, we have developed a pest Web site (http://
foresthealth.fs.usda.gov/portal/FPексAPE) and the annual report, Major Forest Insect

In fiscal year 2013, Forest Service Research and Development delivered 193 invasive species tools including the identification of key pathways for invasion by new forest pests; best management practices for significantly reducing invasive plants spread during timber harvesting operations; evaluating the establishment of a biological control agent for emerald ash borer (EAB); and a model of future pest risk that can be used to make prevention efforts more cost effective.

The Forest Service International Programs also work to protect our forests from invasive species damage. For example, the program works with Chinese counterparts who have partnered with us to address one of the most destructive invasive forest pests, the EAB. The Forest Service continues to work with ARS to better understand why the borer is so resilient and pervasive. This will help predict and prevent potential future outbreaks by related wood boring beetles. With an aim of identifying biocontrol mechanisms, a partnership was formed between the Forest Service’s Northern Research Station, the ARS and counterparts in China. With support from International Programs, the team is working to find natural enemies of EAB in its native range.

STRATEGIC APPROACH TO INVASIVE SPECIES MANAGEMENT

To ensure the continued production of needed goods, services, and values from our Nation’s terrestrial and aquatic ecosystems, the Forest Service takes a strategic approach for managing invasive species across all program areas. This approach includes prevention, early detection and rapid response, control and management, restoration and rehabilitation, and technical assistance.

Prevention

The most effective strategy to protect forests, waterways, and grasslands from invasive species is to prevent invasive species introduction and establishment. Containing known infestations is also important for blocking the spread of invasive species from infested lands to surrounding areas. We coordinate with Federal and state regulatory agencies to understand pathways for introductions, implement quarantine regulations, survey for invasive species, and educate the public about invasive pest threats and how to prevent the spread of invasive species.

Forest Service researchers in partnership with APHIS are working with industry partners to reduce the introduction of invasives into the United States through shipments of wood products and packaging and the live plant trade. Additionally, Forest Service scientists and managers at the Eastern and Western Threat Centers are working closely with domestic and international partners to develop a comprehensive database for prediction, prevention, and proactive management of invasive plants. A public education campaign developed by the Forest Service in partnership with Wildlife Forever recruits hunters, anglers, and recreational boaters to help prevent the spread of aquatic invasive species such as quagga and zebra mussels and Eurasian milfoil.

Early Detection and Rapid Response

As a critical second-line of defense against invasive species threats, the Forest Service develops and implements efficient survey and monitoring tools and technologies to facilitate early detection of aquatic and terrestrial invasive species across the landscape, including in urban areas, and to rapidly assess their potential impact on the environment. Using a coordinated and collaborative approach with local, state, tribal, and other Federal partners, the Forest Service is then able to respond rapidly to new infestations to eradicate or contain those populations before the can spread.

The Forest Service has supported development of a mapping system used nationally by cooperating agencies and weed management organizations to document distribution of invasive species, and has developed an integrated user interface to efficiently collect and map inventory and treatment information for all terrestrial and aquatic invasive species across the National Forest System. Additionally, Forest Service scientists developed a test capable of detecting the fungal pathogen that causes white-nose syndrome (WNS) in bats. The test is being used to identify infested caves, so that Forest Service and other land managers might selectively restrict access to those caves and mines to help slow the spread of WNS.

Control and Management

The Forest Service directly intervenes to manage populations of invasive species that threaten forest and grassland health and sustainability. Rapid response fol-
lowing early detection is used to eradicate new infestations. If eradication is not feasible, Integrated Pest Management (IPM) and adaptive management techniques are implemented to help maintain ecosystem function. This includes research and management to increase the resilience of threatened ecosystems to mitigate the impacts of pests. Using new research tools, and the authorities and requirements defined within our new Invasive Species Management Policy (Forest Service Manual 2900), the Forest Service coordinates closely with external stakeholders to implement effective control and management activities on millions of priority areas throughout the National Forest System.

For example, the Jackson and Buffalo Ranger Districts of the Bridger-Teton National Forest in Wyoming include the majority of the land within the Jackson Hole Weed Management Association, where the Forest Service identified approximately 7,000 priority acres for early detection and immediate eradication efforts. In total, the Forest Service successfully eradicated 15 priority species from those 7,000 acres. When oak trees started dying in the San Francisco Bay Region, the Forest Service Pacific Southwest Research Station developed a collaborative research response that helped identify the cause—a water mold previously unknown to science. The combined efforts of the Forest Service with APHIS and numerous partners via the California Oak Mortality Task Force have reduced the human-assisted spread of Sudden Oak Death and helped communities in the 14 infested coastal counties in California and Oregon deal with the infestation.

**Restoration and Rehabilitation**

Restoring landscapes that have been impacted by invasive species or associated management activities is necessary for improving ecosystem integrity and function and may reduce vulnerability to invasive species establishment in the future. Restoring and maintaining the health, functions, and productivity of areas affected by invasive species is consistent with management guidance on restoring national forests and the effective use of native species.

For example, in order to restore cutthroat trout populations to streams, non-native trout are replaced with genetically pure cutthroat populations. After a decade of restoration efforts, Cherry Creek, on the Gallatin National Forest, now contains the largest genetically pure population of this cutthroat trout subspecies in the upper Missouri River drainage area. The Forest Service strives to utilize cost-effective methods; however we note the importance of providing discretion to land managers to choose appropriate methods, in full consideration of a balance of land management objectives. There may be situations in which the lowest cost option for invasive species management is not the best option for achieving multiple objectives on the landscape.

**Technical Assistance**

The U.S. Forest Service has some concerns that we welcome working with the subcommittee to address. We are concerned with establishing categorical exclusions without input from those most affected by their application, and are concerned that the categorical exclusion in section 5(c) is overly broad and could call into question our collaborative work with partners and other stakeholders. The Forest Service has successfully established categorical exclusions under existing authorities, such as those focused on restoration, and could support a call for a rulemaking to establish any appropriate and necessary categorical exclusions for invasive species. This would enable us to focus on gaps in current categorical exclusions and strengthen our relationships with our partners and other stakeholders.

**CONCLUSION**

The invasive species issue is considered a high priority by all program areas of the U.S. Forest Service. We believe the Forest Service collaborative approach to invasive species management enhances our ability to work together by building on each other's strengths and authorities. In addition, our Forest Service personnel work closely with local, county, state, and tribal governments; Cooperative Weed Management Areas; Cooperative Invasive Species Management Areas; our departmental partners NRCS, ARS and APHIS; and other organizations in the public and private sectors to promote a collaborative approach to mitigate, manage, and if necessary, adapt to aquatic and terrestrial invasive species threats across the landscape.

I would like to thank the Chairman and subcommittee members for your interest in invasive species management, and look forward to working with you to refine some aspects of this bill. I welcome any questions you may have for me at this time.
Mr. Bishop. Thank you. I appreciate it. We will now turn to Dr. George Beck from the Healthy Habitats Coalition. I understand you are also at Colorado State University. Is that correct?

Dr. Beck. That is correct, sir.

Mr. Bishop. We will recognize you for 5 minutes, please.

STATEMENT OF GEORGE BECK, HEALTHY HABITATS COALITION, FORT COLLINS, COLORADO

Dr. Beck. Thank you, Chairman Bishop, Ranking Member Grijalva, and members of the subcommittee. I again thank you for the opportunity to testify before you today. My name is Dr. George Beck, I am a professor of weed science at Colorado State University. And today I represent the Healthy Habitats Coalition, and we are a diverse coalition dedicated to improving invasive species management in our country.

In spite of almost three decades of effort by many organizations working to persuade the Federal Government to do a better job of controlling and managing invasive species, insufficient progress has been made. Zebra and quagga mussels, New Zealand mud snails, Burmese pythons, feral hogs, emerald ash borers, Asian carp, they are all spreading very rapidly. And some invasive species, such as cheatgrass, alter a habitat so significantly as to cause a decline in native species, and specifically, the greater sage-grouse, to the point of potentially being listed as endangered.

Indeed, impacts caused by invasive species are daunting. And the list of invasive species is long, but quite manageable, including managing cheatgrass to successfully recover sage-grouse habitat. Health Habitats Coalition collective experience is with invasive weeds, and I will focus on them to show the need for substantial improvement, and how H.R. 3994 will rectify the situation.

The data in this table show the number of infested acres treated and restored, and the increase of infested acres for six Federal agencies that have responsibility to manage invasive species. And these data are from the year 2009. As you can see, only 3.2 percent of existing infested acres were treated and restored in 2009. And weed scientists indicate and agree that invasive species spread at about an average rate of 12 percent, and this is annual expansion. Next slide, please.

Treating, restoring only 3.2 percent of acres annually, coupled with the 12 percent increase, indicates that acres infested with weeds on Federal land will double by 2017 and will surpass 100 million acres by 2018. Next slide.

Federal agencies are acquiring about three-and-a-half times more acres of invasive weeds annually than they are treating and restoring. This plan will never be successful, and will continuously produce more and more infested acres, thus preventing realization of land management goals and objectives.

Just as importantly, these ever-expanding acres of invasive weeds on federally managed lands will serve as a constant source of propagules to disperse to new locations. HAC recommends that Federal agencies treat and restore at least 15 to 17 percent of ex-
isting infested acres annually to overcome this management deficit. And that would equate, then, to a net reduction of 5 percent. Next slide.

The data in this table show that within 10 years 19.2 million acres would be treated and restored using this plan I just described, which represents the 39 percent decrease of infested acres, as opposed to an over 120 percent increase, using their current approach.

In addition to treating and restoring many more acres annually than Federal agencies currently do, they also must be more efficient and effective with taxpayer dollars. Next slide.

H.R. 3994 will provide the much-needed stimulus for Federal agencies to create and implement comprehensive and effective invasive management programs to improve invasive species management in our country.

The legislation also creates a fiscal paradigm shift by requiring at least 75 percent of existing invasive species funds to be spent on the ground to decrease their populations. It also limits the administrative expenses to 10 percent or less, and allows up to 15 percent of the funds to be spent on research and development and educational efforts. This outstanding formula will significantly enhance fiscal and biological efficiency.

Prevention is the keystone of invasive species management. It is recognized under the definition of managing it, and is essential because we must constantly be vigilant of pathways for introduction of new invasive species to avoid their occurrences in our country. Preventing existing populations of invasive organisms in the United States from spreading to new locations, however, also is a very powerful and critical prevention measure that is often overlooked.

H.R. 3994 represents the necessary solution to our national invasive species problem. This legislation will allow Federal, state, and local government land managers, private enterprise, and private land owners to work together to achieve continuity by implementing a cooperative and borderless solution for this insidious problem. The time for action is upon us. We must stop kicking this can down the road.

Chairman Bishop, Ranking Member Grijalva, thank you again for the opportunity to testify at today's hearing.

And I am happy to answer any questions.

[The prepared statement of Dr. Beck follows:]

PREPARED STATEMENT OF DR. GEORGE BECK, HEALTHY HABITATS COALITION, FORT COLLINS, COLORADO
PROFESSOR OF WEED SCIENCE AT COLORADO STATE UNIVERSITY
H.R. 3994, A NEW PARADIGM FOR INVASIVE SPECIES MANAGEMENT

Chairman Bishop, Ranking Member Grijalva, members of the subcommittee, thank you for the opportunity to testify before you today. My name is Dr. George Beck and I am a professor of weed science at Colorado State University. I am appearing before you today representing the Healthy Habitats Coalition, a diverse coalition of land managers, conservation organizations, private companies, and academics such as myself, focused on improving invasive species management by all sectors in our country, but especially by Federal land management agencies. I would
like to take this time to describe the problem and how passage and implementation of H.R. 3994 will rectify this issue.

**Invasive Species Overview and Situation to Date**

Invasive species is an insidious and occasionally sinister economic and environmental issue—it is not new. Canada thistle, for example, was first declared noxious in the United States in 1795 in Vermont. A little overgrazing by one user, in this instance, opened the door for invasion of the common area by Canada thistle, which in turn decreased everyone else’s ability to raise the sustenance needed to survive. It was the tragedy of the commons where one person’s use of the environment influenced the next person’s use and invasive species continue to plague us in this fashion to this day.

In the 1980s, many western states public and private land managers were highly dissatisfied with how Federal land management agencies were managing noxious and invasive weeds. The Intermountain Noxious Weed Advisory Council (INWAC) was formed in 1987. INWAC was a grass roots organization whose goal was to educate Federal agency decisionmakers and Congress about the problems associated with noxious and invasive weeds and the need for much enhanced management by Federal agencies in particular. In 1990, INWAC helped write and secure passage of Section 2814 of the Federal Noxious Weed Act, which requires all Federal agencies to manage noxious weeds in cooperation with state and local governments. Furthermore, the law specifically requires that any National Environmental Policy Act (NEPA) assessment that must be produced be completed within 1 year and Section 2814 presently remains the law of the land. Some Federal agencies have not yet complied with Section 2814.

In 1996, INWAC along with several noted invasive species scientists from across the United States met with President Bill Clinton’s Science Advisors to voice their dissatisfaction with the management of invasive species by Federal agencies. The administration at that time disagreed but a letter of protest about invasive species management in the United States signed by 500 scientists was an outcome of that meeting and found its way to the highest administrative offices. As a result, Executive Order 13112 was issued by President Clinton in 1999. The National Invasive Species Council (NISC) was formed, which was comprised of eight of the President’s Cabinet Secretaries and co-chaired by the Secretaries of Agriculture, Commerce, and Interior. E.O. 13112 created the Invasive Species Advisory Committee (ISAC) which along with NISC staff created all the National Invasive Species Management Plans over the past 13 years. ISAC also wrote and published a guidance paper for all Federal agencies clearly defining what constitutes an invasive species—i.e., what is, and just as importantly, what is not an invasive species (see Addendum).

The National Invasive Weed Awareness week in Washington, DC started in 2001 and evolved recently into the National Invasive Species Awareness Week. The goal was to heighten the awareness about invasive species among Federal agency decisionmakers and Members of Congress. We were successful and our elected leaders in particular understand that invasive species indeed is an insidious issue albeit, a competing priority that has fallen short of the action that is clearly needed.

**Current status and necessary steps to take:**

In spite of almost three decades of work with the Federal Government to control and manage invasive species, little progress has been made and what progress that has occurred is grossly insufficient on a national scale. A multitude of taxa require our immediate management attention; zebra and quagga mussels, New Zealand mudsnails, Burmese pythons, feral hogs, emerald ash borers, gypsy moths, Asian carp, snakehead fish, and some invasive species such as cheatgrass, impact native species like the Greater Sage-grouse causing their populations to be imperiled increasing the probability of it being listed as endangered! The list of invasive species is daunting but manageable. The Healthy Habitat Coalition’s collective experience is with invasive weeds and we will focus on the continued growth of weed species, as examples, and the need for better control and management measures on lands and waterways throughout the country. The data in Table 1 outline the amount of infested acres, the amount of acres treated, and the increase of infested acres for the six major Federal agencies who have jurisdiction over invasive species.
These data clearly show that only 3.2 percent of existing acres infested with invasive weeds were treated and restored in 2009. Weed scientists indicate that a typical rate of spread for weeds is 12 to 16 percent annually (Duncan and Clark 2005). Treating and restoring only 3.2 percent of infested acres annually coupled with a 12 percent increase indicates that the FY 2009 infested acres on federally managed lands will double by 2017 and will surpass 100 million acres by 2018 (Table 2). Because the rate of invasive weed spread apparently is not recognized or at least accounted for, Federal agencies are acquiring 3.5 times more acres of invasive weeds annually than they are treating and restoring. This is a plan that decidedly will never be successful and will continuously produce more and more infested acres thus, preventing realization of land management goals and objectives. Just as importantly, these ever-expanding acres of invasive weeds on federally managed lands will serve as a constant source of propagules to disperse to neighboring lands and those distant to the infested site—this includes continued expansion of cheatgrass, which could lead to listing the Greater Sage-grouse as endangered! HHC recommends that Federal agencies treat and restore at least 15 percent of their infested acres annually to successfully decrease acres of invasive weeds on lands they manage on behalf of the American public. Additionally, our Nation must create a borderless collaboration among Federal agencies, states and their land management agencies, and private land owners and land managers for invasive species management. Invasive species do not recognize political borders and we must overcome the barriers that prevent borderless collaboration to be successful.
Table 2. Performance Assessment of Invasive Weed Management by Federal Agencies Over a 10-Year Period

<table>
<thead>
<tr>
<th>Year</th>
<th>Elapsed Years</th>
<th>Beginning Infested Acres</th>
<th>Acres Treated &amp; Restored (3.2% of Begin)</th>
<th>Infested Acres After Treatment</th>
<th>12% Annual Increase</th>
<th>Year End Infested Acres</th>
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</thead>
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<tr>
<td>2009</td>
<td>1</td>
<td>49.48</td>
<td>- 1.60</td>
<td>47.88</td>
<td>+ 5.75</td>
<td>53.63</td>
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<tr>
<td>2010</td>
<td>2</td>
<td>53.63</td>
<td>- 1.74</td>
<td>51.89</td>
<td>+ 6.23</td>
<td>58.12</td>
</tr>
<tr>
<td>2011</td>
<td>3</td>
<td>58.12</td>
<td>- 1.89</td>
<td>56.23</td>
<td>+ 6.75</td>
<td>62.98</td>
</tr>
<tr>
<td>2012</td>
<td>4</td>
<td>62.98</td>
<td>- 2.04</td>
<td>60.94</td>
<td>+ 7.31</td>
<td>68.25</td>
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<td>2013</td>
<td>5</td>
<td>68.25</td>
<td>- 2.21</td>
<td>66.04</td>
<td>+ 7.92</td>
<td>73.96</td>
</tr>
<tr>
<td>2014</td>
<td>6</td>
<td>73.96</td>
<td>- 2.40</td>
<td>71.56</td>
<td>+ 8.59</td>
<td>80.15</td>
</tr>
<tr>
<td>2015</td>
<td>7</td>
<td>80.15</td>
<td>- 2.60</td>
<td>77.55</td>
<td>+ 9.31</td>
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<td>2016</td>
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<td>- 2.81</td>
<td>84.05</td>
<td>+ 10.09</td>
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<td>2017</td>
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<td>- 3.05</td>
<td>91.09</td>
<td>+ 10.93</td>
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</tr>
<tr>
<td>2018</td>
<td>10</td>
<td>102.02</td>
<td>- 3.31</td>
<td>98.71</td>
<td>+ 11.85</td>
<td>110.56</td>
</tr>
</tbody>
</table>

Solution to Federal Agency Performance Managing Invasive Weeds

Federal agencies must treat and restore at least 15 percent of existing infested acres in any given year to overcome their management deficit (Table 3). Table 3 is similar to Table 2 but is based upon treating and restoring 15 percent of infested acres annually. Within 10 years, 19.2 million acres would be treated and restored, which represents a 39 percent decrease of acres infested with invasive weeds on federally managed lands as opposed to their current thrust where over 100 million new acres would be infested (Table 2) over the same time period! In addition to treating and restoring many more acres annually than Federal agencies currently do, they also must be more efficient and effective with taxpayer dollars. A paper addressing this issue is included in the addendum.
TABLE 3. A POSITIVE OUTCOME IF FEDERAL AGENCIES TREAT AND RESTORE AT LEAST 15 PERCENT OF ACRES INFESTED WITH INVASIVE WEEDS ANNUALLY

<table>
<thead>
<tr>
<th>Year</th>
<th>Elapsed Years</th>
<th>Beginning Infested Acres</th>
<th>Acres Treated &amp; Restored (15% of Begin)</th>
<th>Infested Acres after treatment</th>
<th>12% Annual increase</th>
<th>Year End Infested Acres</th>
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<tr>
<td>2009</td>
<td>1</td>
<td>49.48</td>
<td>- 7.42</td>
<td>= 42.06</td>
<td>+ 5.1</td>
<td>= 47.16</td>
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<tr>
<td>2010</td>
<td>2</td>
<td>47.16</td>
<td>- 7.07</td>
<td>= 40.09</td>
<td>+ 4.81</td>
<td>= 44.90</td>
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<tr>
<td>2011</td>
<td>3</td>
<td>44.90</td>
<td>- 6.73</td>
<td>= 38.17</td>
<td>+ 4.57</td>
<td>= 42.74</td>
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<tr>
<td>2012</td>
<td>4</td>
<td>42.74</td>
<td>- 6.40</td>
<td>= 36.34</td>
<td>+ 4.35</td>
<td>= 40.69</td>
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<tr>
<td>2013</td>
<td>5</td>
<td>40.69</td>
<td>- 6.10</td>
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<td>+ 4.15</td>
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<tr>
<td>2014</td>
<td>6</td>
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<td>- 5.80</td>
<td>= 32.94</td>
<td>+ 3.95</td>
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<tr>
<td>2015</td>
<td>7</td>
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<td>- 5.58</td>
<td>= 31.36</td>
<td>+ 3.76</td>
<td>= 35.12</td>
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<tr>
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<td>8</td>
<td>35.12</td>
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<tr>
<td>2017</td>
<td>9</td>
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<td>- 5.01</td>
<td>= 28.42</td>
<td>+ 3.41</td>
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<tr>
<td>2018</td>
<td>10</td>
<td>31.83</td>
<td>- 4.77</td>
<td>= 27.06</td>
<td>+ 3.25</td>
<td>= 30.30</td>
</tr>
</tbody>
</table>

Invasive Species Management by Federal Agencies

It is abundantly clear that the management by Federal agencies for invasive species is not sufficient to slow the growing problem. The very nature of invasive species is to increase their populations in their new home seemingly without bounds until habitats are saturated (Figure 3) thus; current invasive species management by agencies is grossly insufficient.
H.R. 3994, Federal Lands Invasive Species Control, Prevention, and Management Act, will provide the much needed stimulus for Federal agencies to create and implement comprehensive and effective invasive species management programs that will launch an era of cooperation and collaboration by private and public entities to improve invasive species management in our country. H.R. 3994 requires the Secretaries of Agriculture and Interior to create and adequately fund invasive species management programs for the land management agencies under their direction. While H.R. 3994 focuses on USDA and USDI land management agencies, it clearly states that the bill does not usurp invasive species management efforts by other Federal departments and agencies. Fiscal accountability is of paramount importance and the bill further requires that at least 75 percent of the developed invasive species budgets be spent on-the-ground to decrease their populations while up 15 percent can be spent on education, awareness, and research, and up to 10 percent can be spent on administration. This is an outstanding formula that will significantly enhance fiscal and biological efficiency. Prevention is the foundation for invasive species management and H.R. 3994 emphasizes this essential management component. Pathways of introduction for invasive species must be managed but preventing existing populations of invasive organisms in the United States from spreading to new locations also is a very powerful and critical prevention measure.

Many university professors with extension appointments have spent considerable time over the past 25 years educating and training the Federal land management workforce about invasive species and their management. To be sure, there are some shining lights within the Federal system with regard to invasive species management. For example, The U.S. Fish and Wildlife Service spent about 42 percent of their FY09 “invasive species budget” to control and manage invasive species and the National Park Service spent 100 percent of their FY09 “invasive species budget” on control and management, and the majority of these monies were spent on invasive weeds. So it is clear that if an agency or department desires to manage all taxa associated with this insidious problem, they can do so! Furthermore, if those agencies with land holdings in the western United States associated with Greater Sage-grouse habitat would effectively manage cheatgrass, habitat recovery for the bird likely would ensue thus, aiding bird populations and avoiding the draconian land use changes that would be associated with endangerment status. We possess the knowledge to succeed but we must summons the will to do so and H.R. 3994 provides the means to be successful!
Chairman Bishop, Ranking Member Grijalva, thank you again for the opportunity to testify at today’s hearing and present the facts related to invasive species. I am happy to answer any questions.

**ADDENDUM**

**FY09 NATIONAL INVASIVE SPECIES COUNCIL INVASIVE SPECIES EXPENDITURES COMPILATION**

<table>
<thead>
<tr>
<th>Department</th>
<th>2009 Actual</th>
<th>2010 Estimate</th>
<th>2011 Budget</th>
</tr>
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<tbody>
<tr>
<td>Prevention</td>
<td>$0</td>
<td>$441</td>
<td>$441</td>
</tr>
<tr>
<td>Early Detection &amp; Rapid Response</td>
<td>$95</td>
<td>$688</td>
<td>$609</td>
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<tr>
<td>Control and Management</td>
<td>$202</td>
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<tr>
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<td>$466</td>
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<td>$256</td>
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<td>$53,034</td>
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<td><strong>USDA Total</strong></td>
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<td><strong>$1,408,886</strong></td>
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<tr>
<td><strong>SUM</strong></td>
<td><strong>$2,504,052</strong></td>
<td><strong>$2,666,460</strong></td>
<td><strong>$2,537,605</strong></td>
</tr>
</tbody>
</table>

*DHIS customs & border control spent $584,457 thousand in FY09 and $599,428 thousand in FY10 on agricultural-related costs, including for interception of regulated invasive species.*
FY09 NISC budget:
The National Invasive Species Council staff assembled an annual “invasive species budget” by collecting data from Federal agencies and placing that information into one of seven categories that are associated with the National Invasive Species Management Plan. In FY09, the Federal Government spent $1.563 billion (Figure 1) on invasive species stating that $642 million was spent on control and management, which is one of the NISC budget categories. HHC members have years of experience helping to design weed management strategies and systems and our calculations differ substantially from the Federal data. From Table 1, Federal agencies indicate they treated and restored 1,603,805 acres infested with invasive weeds in FY09. Our calculations suggest the following when Early Detect and Rapid Response (EDRR) is budgeted at $1,000/acre, restoration at $300/acre, and control with a herbicide at $100/acre:

$291,000,000 spent on EDRR ÷ $1,000/acre = 291,000 acres EDRR treated;

$50,520,000 spent on restoration ÷ $300/acre = 168,400 acres restored;

1,603,805 acres - 291,000 EDRR treated-acres - 168,400 acres restored = 1,143,505 acres remaining for direct weed control. Calculating at $100/acre to control invasive weeds with a herbicide equates to $114,350,500 spent by Federal agencies to decrease their population abundance, which is the first logical step in any weed management system. Based on HHC calculations, far less appears to have been spent on control and management than the data stated by the Federal agencies (Figure 2).

FIGURE 1. NISC FY09 INVASIVE SPECIES BUDGET
APHIS projects to control invasive insects and taxa other than invasive weeds comprise about two-thirds of the control and management budget categories. There remains about $305 million that cannot be readily placed into one of the NISC budget categories and it is highly likely that Federal agencies are spending more per acre to control invasive weeds than is necessary because they are not using the most cost-efficient tools and high labor expenses.

**Financial Costs/Acre and Impacts to Budgets**

Regardless of whether working for private enterprise or government, land management personnel must stretch limited budgets yet be effective simultaneously. Labor most often is the most expensive portion of any weed management project. It is incumbent upon land managers to use methods that minimize labor costs and this is especially so with public land managers because they are dependent upon tax dollars to execute their programs.

Using herbicides or biological control agents to decrease the population abundance of a target invasive weed represent those approaches that utilize the least labor to effect initial/continued reduction of targets species. Biocontrol is developed with public funds and this is the primary reason that it seems inexpensive to the end user, including Federal agencies. Biocontrol is a very attractive and highly useful approach to control invasive weed species but success has been inconsistent in space and time. There are numerous successful biocontrol endeavors and the literature has many examples. The Fire Effects Information System Web site managed by USDA-Forest Service is one of the best and most complete information sources for the biology and management of many invasive weed species (http://www.fs.fed.us/database/feis/). Another outstanding source of information on managing invasive weeds recently became available—Weed Control in Natural Areas in the Western United States by Joseph DiTomaso et al. (2013). It too describes where and upon what species biocontrol has been successful and extensively outlines all management options. If biocontrol is the method of choice, land managers must carefully research choices for their effectiveness. The spatial and temporal variation associated with biocontrol performance can be due to many genetic and environmental reasons from habitat preference by the biocontrol agent to the production of new genotypes from previously geographically separated genotypes now growing in proximity to one another, and many as yet to be discovered reasons.

Fire too can be a good tool to decrease populations (DiTomaso et al. 2006) of some invasive weeds, most notably annual grasses and forbs such as cheatgrass (*Bromus tectorum*) or medushead (*Taeniatherum caput-medusae*) and yellow starthistle (*Centaurea solstitialis*). As with other integrated management systems for weeds, use of fire to manage invasive weeds must be integrated with other tools such as seeding to provide competition to ward off recovering weed species and allow completion of land management goals and objectives. Burning mixed brush-cheatgrass
stands destroys some to many weed seeds and allows for about one season to establish desirable vegetation before cheatgrass re-establishes and dominates the site again (Evans and Young 1978; Young and Evans 1978; Young 2000). Establishing competitive perennial grass species may successfully keep cheatgrass from re-establishing. If, however, the system is left alone after burning, cheatgrass or medusahead will re-invade. Burning stands of yellow starthistle also will provide excellent population control if combined with herbicide treatment and seeding (DiTomaso et al. 2006b). Burning stands of perennial weeds such as Canada thistle, leafy spurge, Russian and other knapweeds, or tamarisk rarely is effective because of the plants’ capability to re-grow from its root system and dominate a site again. These and other similar invasive weeds may recover soon enough after a prescribed burn to preclude establishment of seeded species. If fire is used to control perennial forbs or grasses, herbicides likely will have to be integrated into the management system to allow sufficient suppression of the target weed for a long enough time to give seeded species the opportunity to establish.

Of all the methods used to decrease weed population abundance, herbicides are the most researched and arguably the best understood. In the course of their development, consistent spatial and temporal performance is an extremely important consideration for a product to reach the consumer. Because of known performance developed from extensive research and the decreased labor associated with their use, herbicides often represent the most cost-effective means to use taxpayer dollars to decrease invasive weed populations so land restoration or rehabilitation may proceed.

The decision to do nothing seems inexpensive and harmless on the surface but nothing could be farther from reality. The problem with invasive species is their populations always seem to expand and cause harm, albeit, a species can be problematic in one location or setting and not another (Beck et al. 2008). Most invasive species and certainly invasive weed populations develop in a sigmoid curve pattern and after a lag time following introduction, their populations increase exponentially until site saturation when their populations are limited by resource availability (Figure 1).

FIGURE 1

The problem is one never knows where on the curve the population at any given population lies. Even with cheatgrass, the invaded location/site might be new and at the bottom of the curve when population control is most easily obtained or it could be at beginning of the exponential phase but it is difficult at best to make such a determination. The best response is to NEVER DO NOTHING because doing nothing can be the most expensive decision one can make due to the subsequent population growth by the invasive weed and the resulting havoc it wreaks.
upon the native plant community and the animals it supports! Doing nothing simply yields the site to the invasive species.

**Importance of Prevention, Early Detection and Rapid Response/Eradication**

Prevention often is thought of as the most powerful form of weed management and indeed, the least expensive weed to control is the one that is not present—however, prevention is not free. The perception that prevention is simply steps taken to keep stuff out that currently does not exist in a particular location is accurate for certain and possibly represents the greatest cost savings to taxpayers. Cleaning equipment between uses and locations seems a logical prevention approach along with using certified weed seed-free hay, forage, mulch or gravel, and careful screening of ornamental and agricultural introductions can be of tremendous benefit in the battle against invasive species. Prevention, however, can be expensive when it arbitrarily impedes trade and benefit: risk assessment is an important if not an essential component to screening programs so decisions that impact trade are transparent, logical, and acceptable.

Prevention also means decreasing population abundance of existing weed infestations so they are not a source for new ones to develop some distance—close or far—from the infested site. It is quite appropriate to think of extending prevention as a management strategy to efforts that decrease target populations in an infestation that is part of a project area. In fact, this may be the best “first light” under which to examine prevention efforts; i.e., how to keep current infestations from serving as sources for future infestations. The silo or stovepipe approach to any weed management program is dangerous and invasive species management always should be thought of as a continuum among the strategies and methods used to manage such species. All this must be kept in mind because prevention and EDRR are the first lines of defense against invasive species.

**Economics and Pest Expansion Models Can Help Set Program Priorities**

Almost every person recognizes that it is much simpler to pull a single, newly found noxious weed than let it go and try to eradicate the large infestation that undoubtedly will occur over time. It is puzzling then that people tend to wait because “that weed is not causing me a problem...now” knowing well that it inevitably will do so. The sooner an incipient patch of an invasive weed is controlled, regardless of proximity to the source, the less expensive it is to control, the greater the success will be, and most likely one will have eradicated a new or small, dispersed population. Data in Table 1 shows the increasing control cost associated with waiting in a hypothetical example of a newly found patch of spotted knapweed. The data also compare the decision to control manually vs using an herbicide and both include seeding costs.

**TABLE 1. COST COMPARISON OF CONTROLLING SPOTTED OR DIFFUSE KNAPWEED PHYSICALLY OR CHEMICALLY, DEMONSTRATING THE IMPORTANCE OF EARLY DETECTION AND RAPID RESPONSE**

<table>
<thead>
<tr>
<th>Initial patch size</th>
<th>Herbicide cost*</th>
<th>Application cost*</th>
<th>Time for handpull or dig</th>
<th>Handpull or dig cost</th>
<th>Seed cost</th>
<th>Total cost herbicide + seeding</th>
<th>Total cost handpull/dig + seeding</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 ft²</td>
<td>$0.003</td>
<td>$0.20</td>
<td>0.25 h</td>
<td>$3.00</td>
<td>$0</td>
<td>$0.20</td>
<td>$3.00</td>
</tr>
<tr>
<td>100 ft²</td>
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<td>$0.40</td>
<td>0.5 h</td>
<td>$6.00</td>
<td>$0.46</td>
<td>$6.46</td>
<td>$6.46</td>
</tr>
<tr>
<td>1 acre</td>
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<tr>
<td>10 acres</td>
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<td>$200</td>
<td>1,450 h</td>
<td>$17,420</td>
<td>$2,000</td>
<td>$2,240</td>
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<tr>
<td>100 acres</td>
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<td>$2,000</td>
<td>$20,000</td>
<td>$23,400</td>
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</tbody>
</table>

*Cost comparisons based upon: Milestone herbicide $300/gal; $20/A application cost; labor $12/h; seed cost $200/A.

For 10 and 100 ft² initial patch size, application method spot spray; only labor calculated.

These data clearly show that the decision to wait to respond to a new weed infestation can be very costly. Regardless of the method, the cost of management increases several thousand times but the cost of manual control exceeds the cost of using an herbicide by 800 to 1,500 percent! This example shows the value of monitoring to find incipient invasive weed populations so they can be effectively con-
trolled or eradicated at a fraction of the expense compared to waiting for impact and havoc to occur. These data also show the dramatic fiscal savings associated with using a herbicide compared to hand pulling or similar manual methods of control. The decisions to act quickly when new or small infestations are found and to use a herbicide to affect target weed population decrease represent efficient and responsible use of taxpayer dollars and the stretching of limited budgets.

While this example is hypothetical, Tables 2 and 3 present data comparing the costs (late 90s) associated with different methods to decrease target weed populations on Colorado and Montana rangeland. Diffuse knapweed (*Centaurea diffusa*) was targeted in Colorado where hand pulling twice annually was compared to mowing three times annually, to mowing twice followed by herbicide in fall, to herbicide application alone. Control of diffuse knapweed rosettes and bolted plants was best 1 year after treatments were exerted where a herbicide was used alone or in combination with mowing compared to mowing alone or hand pulling. Herbicides alone were about 1 percent of the total cost of hand pulling and the latter was completely ineffective.

### TABLE 2. COST OF DIFFERENT CONTROL METHODS FOR DIFFUSE KNAPWEED ON COLORADO RANGELAND IN 1997 AND SUBSEQUENT CONTROL 1 YEAR AFTER ORIGINAL TREATMENTS WERE APPLIED (SEBASTIAN AND BECK 1999)

<table>
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<tr>
<th>Treatment</th>
<th>Rate</th>
<th>percent Control rosettes¹</th>
<th>percent Control bolted¹</th>
<th>Hours</th>
<th>Rate/hr or acre²</th>
<th>Cost/acre</th>
<th>Total cost/acre</th>
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<td>Handpull</td>
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<td>0 c</td>
<td>0 d</td>
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<tr>
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<td>3 times/year</td>
<td>0 c</td>
<td>0 d</td>
<td>1.6</td>
<td>$50/A</td>
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<td>$150</td>
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<tr>
<td>Mow + Tordon</td>
<td>2 times + 1 pt/A</td>
<td>84 a</td>
<td>100 a</td>
<td>1.1+0.4</td>
<td>$50 + 31/A</td>
<td>$100 + 31</td>
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</tr>
<tr>
<td>Banvel+2,4-D</td>
<td>1+2 pt</td>
<td>0 c</td>
<td>89 c</td>
<td>0.4</td>
<td>$22/A</td>
<td>$22</td>
<td>$22</td>
</tr>
<tr>
<td>Control</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

¹Compare means within a column; means followed by the same letter are similar (p=0.05).
²Rate costs based upon the following: $9/hr labor; mowing $50/A; Tordon $86/gal; Transline $31/gal; Banvel + 2,4-D $90/gal; $20/acre all ground herbicide applications (each plot 300 ft². 4 reps = 1200 ft² total/treatment).

The second experiment (Table 3) was conducted in Montana on spotted knapweed and was similar to the Colorado experiment except biocontrol also was evaluated and the treatments were exerted for 2 years and data collected shortly (1 to 2 months) thereafter. Hand pulling kept 100 percent of plants from going to seed (bolted plants were targeted for pulling), but controlled only about one-half of spotted knapweed plants. Herbicides alone kept 93 to 100 percent of plants from going to seed and controlled 79 to 100 percent of spotted knapweed plants. Mowing in combination with herbicides or hand pulling combined with herbicide use produced similar results to herbicides alone. Biocontrol was ineffective but insufficient time had passed to allow their successful establishment much less spotted knapweed population decrease. As with the Colorado study, the use of herbicides alone was less than 1 percent of the cost associated with hand pulling and controlled almost twice as much knapweed.

Both of these experiments show the strong monetary and weed control advantages associated with using herbicides to decrease target weed populations. All government land managers, regardless of the level of government, must demonstrate fiscal responsibility to taxpayers and that not only translates into total dollars spent but also what benefit or return was realized from the expenditures.
TABLE 3. COST OF DIFFERENT CONTROL METHODS INVOKED FOR 2 CONSECUTIVE YEARS FOR SPOTTED KNAKWEED IN MONTANA AND SUBSEQUENT CONTROL 1 YEAR AFTER INITIAL TREATMENTS APPLIED AND 1 MONTH AFTER FINAL TREATMENTS (BROWN ET AL. 1999)

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Rate</th>
<th>Plant growth stage</th>
<th>Application Dates 1997</th>
<th>Dates 1998</th>
<th>8/4/98%1 percent decrease in flowering</th>
<th>8/4/98%1 percent control of plants</th>
<th>Cost/acre2 for 2 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handpull (boiled plants)</td>
<td>Twice</td>
<td>Early &amp; late bud</td>
<td>6/20 &amp; 7/20</td>
<td>6/20 &amp;</td>
<td>100 a</td>
<td>56 d</td>
<td>$13,900.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7/22</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tordon + handpull (rosettes +</td>
<td>0.5 pt</td>
<td>Bolt</td>
<td>6/2</td>
<td>--- &amp;</td>
<td>100 a</td>
<td>98 ab</td>
<td>$97.50</td>
</tr>
<tr>
<td>mature)</td>
<td>+ once</td>
<td>late bud</td>
<td></td>
<td>7/21</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mow</td>
<td>Twice</td>
<td>Early &amp; late bud</td>
<td>6/20 &amp; 7/20</td>
<td>6/19 &amp;</td>
<td>99 a</td>
<td>0 f</td>
<td>$200.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7/17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mow + Tordon</td>
<td>Once +</td>
<td>Late bud</td>
<td>7/20</td>
<td>---</td>
<td>100 a</td>
<td>100 a</td>
<td>$75.37</td>
</tr>
<tr>
<td>0.5 pt</td>
<td>+</td>
<td>Fall regrowth</td>
<td>9/29</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mow + Curtail</td>
<td>Once +</td>
<td>Late bud</td>
<td>7/16</td>
<td>---</td>
<td>100 a</td>
<td>93 a</td>
<td>$77.67</td>
</tr>
<tr>
<td>1 qt</td>
<td>+</td>
<td>Fall regrowth</td>
<td>9/29</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tordon</td>
<td>0.5 pt</td>
<td>Fall regrowth</td>
<td>9/29</td>
<td>---</td>
<td>100 a</td>
<td>96 ab</td>
<td>$25.37</td>
</tr>
<tr>
<td>Curtail</td>
<td>1 qt</td>
<td>Fall regrowth</td>
<td>9/29</td>
<td>---</td>
<td>100 a</td>
<td>79 c</td>
<td>$27.67</td>
</tr>
<tr>
<td>Tordon</td>
<td>1 pt</td>
<td>Bolting</td>
<td>6/2</td>
<td>---</td>
<td>99 a</td>
<td>98 ab</td>
<td>$30.75</td>
</tr>
<tr>
<td>Curtail</td>
<td>2 qt</td>
<td>Bolting</td>
<td>6/2</td>
<td>---</td>
<td>93 b</td>
<td>93 b</td>
<td>$35.37</td>
</tr>
<tr>
<td>Cyphocoleus achatites</td>
<td>30/plot</td>
<td>Flowering</td>
<td>8/27</td>
<td>---</td>
<td>0 d</td>
<td>0 d</td>
<td>$60.00</td>
</tr>
<tr>
<td>Tordon + Cyphocoleus achatites</td>
<td>0.5 pt</td>
<td>Bolt</td>
<td>6/2</td>
<td>---</td>
<td>46 c</td>
<td>46 e</td>
<td>$113.58</td>
</tr>
<tr>
<td>+</td>
<td>30/plot</td>
<td>Flowering</td>
<td>8/27</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Untreated</td>
<td>0 d</td>
<td>0 d</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$0.00</td>
</tr>
</tbody>
</table>

1Compare means within a column; means followed by the same letter are similar (p=0.05).
2Costs based upon the following: handpulling $9.00/hr; Cyphocoleus achatites $1.00/weevil; mowing $50/acre; Tordon $85/gal; Curtail $30.70/gal; ground application $20.00/acre.

Control Risks vs. Harm Caused by Invasive Weeds

Duncan and Clark (2005) cite numerous examples of the environmental and economic impacts caused by invasive weeds. Pimentel et al. (2005) calculated that invasive species impact the U.S. economy by more than $120 billion annually and $36 billion of this was caused by invasive weeds. The problems associated with invasive weeds are very clear and very expensive. The harm, real or potential, from invasive species is always a much greater risk than the tools used to control any invasive taxa but especially invasive weeds. If this was not the case, the species in question would not be considered invasive. Invasive species alter evolved relationships among organisms that share a habitat or ecosystem, which is highly significant biologically, ecologically, and economically!

Herbicides are the most efficacious, most economical, and most consistent means of decreasing the population abundance of invasive weeds. A common theme is readily apparent when attempting to recover an infested habitat; i.e., a land manager must first decrease the population of the invasive weed before beginning any seeding operation or the latter effort will fail. Other site characteristics also may be in need of attention to fully realize restoration and these too should be addressed before expecting establishment of seeded species. Many of these characteristics could be very expensive to repair and thus, all the more reason to use the most economi-
cally viable tool to decrease invasive weed populations to use taxpayer dollars to the greatest extent possible.

One serious concern about using herbicides to decrease target invasive weed populations is their effect on native plants, especially native forbs and shrubs. Many people believe that using an herbicide that will control invasive weedy forbs will strongly select for grasses and eliminate native forbs and shrubs, which are essential components of any native plant community. This is in fact not the case and the weed research community is developing databases to define the injury to native grasses, forbs, and shrubs caused by herbicides used to control invasive weeds. Erickson et al. (2006) sprayed Paramount (quinclorac) or Plateau (imazapic) directly onto the western fringed prairie orchid (Platanthera praeclara) in fall when it was senescing to mimic when these herbicides would be used to control leafy spurge (Euphorbia esula) and data were collected on orchid survival and fecundity 10 and 22 months after treatments (MAT) were applied. Neither herbicide influenced orchid survival. Plateau decreased orchid height by 43 percent at 10 MAT but this effect was no longer apparent at 22 MAT. Plateau also decreased raceme length by 58 percent and flower number by 70 percent 22 MAT. Quinclorac, however, had no such effects on the orchid and the researchers concluded that it was safe to use Paramount to control leafy spurge in the presence of the western fringed prairie orchid and while Plateau caused temporary stunting and decreased fecundity of the orchid, most of these symptoms disappeared the second year following treatment.

Rice et al. (1997) studied the effects of plant growth regulator herbicides (picloram, clopyralid, and clopyralid + 2,4-D) on native grasses, forbs, and shrubs applied to control spotted knapweed (Centaurea maculosa; C. stoebe) in Montana over an 8-year period at four sites. Herbicides were applied once in either spring or fall to control spotted knapweed in 1989 and re-treated again in 1992 to control the recovering invasive weed. Plant community data were collected annually over the 8-year period and compared back to the floristic composition of each study site determined before initiation of the experiments. Herbicides controlled spotted knapweed very well (98–99 percent control) and shifted the plant community to dominance by grasses but the depression on plant community diversity was small and transient. By the end of the third year after initial treatment, there were no differences in species diversity among treatments and some herbicide-treated plots began to surpass and outperform untreated plots in plant community diversity measurements. They also found that late-season herbicide application after forbs had entered summer-drought induced dormancy minimized the impact on plant community diversity. The effects of the pyridine herbicides (picloram and clopyralid) on the native plant community diversity were small and temporary and minimal compared to the reported impacts caused by spotted knapweed on the plant community (Tyser and Key 1988; Tyser 1992).

University researchers worked with Dow AgroSciences to test a new pyridine herbicide, Milestone (aminopyralid), effects on native grasses, forbs and shrubs (http://techlinenews.com/ForbShrubToleranceMilestone.pdf) at 14 locations throughout the western United States. Individual tolerance rankings were established for 90 native forb and 19 native shrub species to Milestone applied at 5 or 7 fl oz/acre in spring, late summer, or fall. Of the 90 forb species studied in this experiment, 23, 14, 19, and 34 were ranked as moderately tolerant (15–50 percent stand reduction), moderately tolerant (less than 15 percent stand reduction) 1 year following application, respectively. Many of these forbs recovered by the end of the second year following application and only 19 of the 90 forbs were ranked either as moderately susceptible or susceptible at that time. Interestingly, shrubs generally were more tolerant of Milestone than were forbs. Of the 19 shrubs in the study, 74 percent were ranked as moderately tolerant or tolerant 2 years after herbicides were applied and Rosaceae shrubs were generally the most susceptible species. These data also demonstrate the transitory nature of injury to native forbs and shrubs caused by herbicides used to decrease the populations of invasive weeds.

Recently, weed scientists at Colorado State University finished an oil site reclamation project in western Colorado to decrease cheatgrass population abundance and recover the habitat for wildlife. Cheatgrass presence on western rangelands increases fire frequency and intensity and wildfires dramatically alter Greater Sage-grouse habitat. Cheatgrass populations in the study were decreased in fall, 2010 with one of five different herbicides then native perennial grasses and forbs were sown in 2010 shortly after herbicide application or 1 year later in 2011. When data were analyzed in 2012, density of seeded grasses was dependent upon the herbicide used to control cheatgrass in 2010 and the year that seeding was done (Table 4).
TABLE 4. DENSITY OF SEEDED GRASS SPECIES WAS DEPENDENT UPON HERBICIDE USED IN 2010 TO CONTROL CHEATGRASS AND YEAR OF SEEDING

<table>
<thead>
<tr>
<th>Site</th>
<th>Yr Sd</th>
<th>Herbicide</th>
<th>Bluebunch wheatgrass</th>
<th>Indian ricegrass</th>
<th>Sandberg bluegrass</th>
<th>Squirreltail</th>
<th>Western wheatgrass</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Plants/plot (100 ft²)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>Non-</td>
<td>Journey (imazapic + glyphosate)</td>
<td>1.5 pt</td>
<td>3 nt</td>
<td>6 k-p</td>
<td>3 nt</td>
<td>1.3 pt</td>
</tr>
<tr>
<td></td>
<td>treated</td>
<td>Landmark (chlorsulfuron + metsulfuron)</td>
<td>12 h-m</td>
<td>0 t</td>
<td>0 t</td>
<td>0 t</td>
<td>12 p-t</td>
</tr>
<tr>
<td>2011</td>
<td>Journey</td>
<td>0 t</td>
<td>0 t</td>
<td>1.2 p-t</td>
<td>1.2 p-t</td>
<td>0 t</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>Landmark</td>
<td>22 b-h</td>
<td>9 i-n</td>
<td>30 b-f</td>
<td>3 i-q</td>
<td>17 c i</td>
<td>27 b-g</td>
</tr>
<tr>
<td>2011</td>
<td>24 b-h</td>
<td>0 t</td>
<td>0 t</td>
<td>19 c i</td>
<td>19 c i</td>
<td>0.9 g-t</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>Matrix</td>
<td>15 e-j</td>
<td>13 g-k</td>
<td>15 f-j</td>
<td>33 b-e</td>
<td>14 g-k</td>
<td>21 b-h</td>
</tr>
<tr>
<td>2011</td>
<td>27 b-g</td>
<td>0 t</td>
<td>0 t</td>
<td>74 a</td>
<td>1.3 p-t</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>25 b-h</td>
<td>1.6 p-t</td>
<td>17 c-j</td>
<td>1.1 p-t</td>
<td>15 g-k</td>
<td>12 h-k</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>41 ab</td>
<td>0 t</td>
<td>0.2 st</td>
<td>0 t</td>
<td>20 c-h</td>
<td>2.1 p-t</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>Plateau</td>
<td>4 m-r</td>
<td>1.5 p-t</td>
<td>3 n-t</td>
<td>4 n-s</td>
<td>0.6 rst</td>
<td>0.4 nst</td>
</tr>
<tr>
<td>2011</td>
<td>3 n-t</td>
<td>0 t</td>
<td>0 t</td>
<td>3 n-t</td>
<td>0 t</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>Spike</td>
<td>24 oct</td>
<td>1.4 p-t</td>
<td>2 p-t</td>
<td>0.5 nst</td>
<td>1.8 p-t</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>36 bc</td>
<td>0 t</td>
<td>0.9 g-t</td>
<td>0 t</td>
<td>41 ab</td>
<td>3 n-t</td>
<td></td>
</tr>
</tbody>
</table>

Journey (imazapic + glyphosate), Landmark (chlorsulfuron + metsulfuron), Matrix (rimsulfuron) controlled 87 to 100 percent of cheatgrass 1 and 2 years after application and seeded species established best where these herbicides were used because they effectively decreased cheatgrass populations. Our data show that several native grasses established well when sown into herbicide soil residues. Native forbs also emerged through herbicide residues but did not establish as well as grasses (Table 5).

TABLE 5. FORB SPECIES DENSITY IN 2012 WAS DEPENDENT UPON THE HERBICIDE USED TO CONTROL CHEATGRASS IN 2010 AND THE YEAR OF SEEDING

<table>
<thead>
<tr>
<th>Site</th>
<th>Yr Sd</th>
<th>Herbicide</th>
<th>Gooseberry leaf globosemallow</th>
<th>Leoleaf</th>
<th>Dusty penstemon</th>
<th>Lewis flax</th>
<th>Sulphur buckwheat</th>
<th>Low fleabane</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Plants/plot (100 ft²)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>Control</td>
<td>0 k</td>
<td>0 j-k</td>
<td>0 k</td>
<td>0.8 h-k</td>
<td>0 k</td>
<td>0 k</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>5 c-f</td>
<td>3.5 d-g</td>
<td>3.7 d-g</td>
<td>2.6 e-i</td>
<td>0 k</td>
<td>0 k</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>Journey</td>
<td>0 k</td>
<td>2.4 e-j</td>
<td>0 k</td>
<td>7 b-d</td>
<td>0 k</td>
<td>3.1 e-h</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>0 k</td>
<td>12 a-b</td>
<td>0.2 j-k</td>
<td>8 b-c</td>
<td>0 k</td>
<td>0 k</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>Landmark</td>
<td>0 k</td>
<td>0.8 j-k</td>
<td>0 k</td>
<td>0 k</td>
<td>0 k</td>
<td>1.1 b-k</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>0.2 j</td>
<td>0.8 h-k</td>
<td>0 k</td>
<td>1.5 g-k</td>
<td>0 k</td>
<td>0 k</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>Matrix</td>
<td>0 k</td>
<td>3.4 a-h</td>
<td>0 k</td>
<td>0 k</td>
<td>0 k</td>
<td>0 k</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>0 k</td>
<td>1.7 g-k</td>
<td>0 d-e</td>
<td>16 a</td>
<td>0 k</td>
<td>0 k</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>Plateau</td>
<td>0 k</td>
<td>2.5 e-i</td>
<td>0 k</td>
<td>0.5 j-k</td>
<td>0 k</td>
<td>0.2 j-k</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>0.9</td>
<td>0.4 j-k</td>
<td>2.1 f-k</td>
<td>3.4 d-g</td>
<td>0 k</td>
<td>0 k</td>
<td></td>
<td></td>
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<td>2010</td>
<td>Spike</td>
<td>0 k</td>
<td>0 k</td>
<td>0 k</td>
<td>0 k</td>
<td>0 k</td>
<td>0 k</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>0 k</td>
<td>0 k</td>
<td>0 k</td>
<td>3.4 e-h</td>
<td>0 k</td>
<td>0 k</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Our data clearly show that herbicides can be used to decrease cheatgrass populations and such areas can be recovered to native plant species. Different herbicides will favor the establishment of different native plant species and this selection pressure is not limited to favoring only perennial grasses—forbs too are differentially favored. Our data also strongly suggest that public and private land managers with cheatgrass infestations can effectively manage such sites and recover them for native species, including the Greater Sage-grouse—they just need the will and stimulus to do so.

LITERATURE CITED

Mr. BISHOP. Thank you. I appreciate all of you joining us today. We will now open up for questions. Mr. Grijalva, do you have any?

Mr. GRIJALVA. Yes, thank you. Ms. Williams, I think you mentioned Section 4 of the legislation that places restrictions on the level of public outreach and education. Explain to us why this component is important in combating the issue of invasive species.

Ms. WILLIAMS. Right, thank you. One of the things you hear, outreach and education. There are several kinds of outreach and education, and one really important kind of outreach is to help educate the public on what behaviors cause the spread of invasive species. For instance, one of the major pathways of the spread of the quagga and zebra mussels across the West that Dr. Beck mentioned is the movement of recreational boats. It is very important...
to fund that education effort. There is no way to regulate every single boat. So a lot of it is public education. So that is an example of where education is more than education in this instance; it is really a pathway interdiction, which is the key to—one of the keys to prevention.

Mr. GRIJALVA. Thank you. Following up on that, Chief Wagner, buffalo grass is a huge problem in the district I represent in southern Arizona. It impacts the Coronado National Forest, the Ironwood Forest and National Monument, and the Saguaro National Park. It takes a lot of time. I think it’s a 3-year effort to—of intensive manual labor to get rid of about 25 square miles in the Oregon Pike.

Following up on the question about the public interaction, and it continues to be a huge threat both to public and private lands in the region. How does your agency work with local communities, and is this restriction I just asked about in the question hinder the ability to bring its community effort on to something like this?

Ms. WILLIAMS. So the Forest Service established national policy direction for invasive species management. And it suggests and directs, at the local level, the state level, the regional level, and the national level, a really collaborative approach, and working with others to address this problem.

We have had a long tenure and financial support for cooperative weed management areas, or cooperative invasive species management areas. And that is local, state, and Federal partners all working locally together to address the species that are impacting lands of interest, and pooling resources and delivering the education, the prevention, the eradication, the treatment, and control, all together, in many cases.

Mr. GRIJALVA. What would—that effort you described, and the example that uses the buffalo grass, how would this legislation affect that?

Ms. WILLIAMS. The legislation just codifies and requires that partnership approach in every way we address invasive species. So I think it affirms and backs and supports many of the local efforts that have generated some of the successes that you have talked to.

Mr. GRIJALVA. Dr. Beck, one question. You are testifying on behalf of the Healthy Habitats Coalition today. And the DuPont Corporation is one of the partners. My question is what is DuPont’s interest in invasive species and in pursuing this legislation? Is there a specific herbicide or chemical that they produce that is currently not allowed on Federal land?

Dr. BECK. I think—I apologize for my hearing. You were asking about—is there a DuPont chemical that—

Mr. GRIJALVA. Or a herbicide or a pesticide that they have—

Dr. BECK. Yes, that is—

Mr. GRIJALVA [continuing]. That is currently not allowed on Federal land.

Dr. BECK. As far as I know, there is just one, and it is a compound that is brand new, and I just don’t think there has been enough time to review it yet. But, other than that, I think most of the compounds can be used. There is a variation from agency to agency, and the time it takes for—when material appears on the market—
Mr. GRIJALVA. Their reliance on the categorical exclusion, would that facilitate the use of any compound?

Dr. BECK. I don’t know, I would have to say. But the idea behind the categorical exclusion was related to early detection and rapid response. So we would certainly——

Mr. GRIJALVA. Yes, you are protecting waterways, 1,000 feet from. If you are looking at long-term environmental effects of a use of a particular chemical, don’t you think that is important to know ahead of time?

Dr. BECK. Oh, absolutely. I think—first of all, we follow FIFRA, and the label—that we will not make errors, the label is—the guidelines and it will address how close any particular body of water you can get with the material, and there is a long list to choose from.

Mr. GRIJALVA. Thank you, Doctor.

Mr. BISHOP. Thank you. Mr. McClintock, do you have questions?

Mr. MCCLINTOCK. Yes. Thank you, Mr. Chairman. Dr. Beck, you painted a damning picture of the Federal land management practices with respect to invasive species. What would you say are the reasons that the Federal Government has been such a poor land manager?

Dr. BECK. Well, the picture about being poor land management is largely related to the insufficient funds that find their way out to the hinterlands, if you will, to solve whatever problem. In the case of invasive species—and my specialty is weeds—there is a pit-tance of money that finds—I mean, and I know it is a large sum back here, but by the time it gets out to where it is being put to work, they are grossly insufficient.

Mr. MCCLINTOCK. Ms. Williams?

Ms. WILLIAMS. I think you would also want to compare the rate of control and management on state lands. These problems—some of these species have been here quite a long time; you are already behind before you start. Funding has been limited. That is why we need to take the collaborative approach that we do.

I don’t think there has been a showing that just switching the percentage of money going out to the field, even if this, in fact, does this, will have a demonstrable effect. I would rather sit down and really figure out what strategies, working with the states, would be beneficial, and how we better allocate our resources, rather than coming up with an arbitrary percentage.

Mr. MCCLINTOCK. Well, on that point, the Central Valley of California has been laid waste by water diversions under the ESA for delta smelt and salmon, yet the principal cause of the decline of these populations appears to be bass that just love to eat those things.

Ms. WILLIAMS. I think that is one reason it is so important to do the research to figure out what are the real impacts of the species, are they impacting native and endangered species. I think that is where we want to keep the research and looking at all avenues of this early detection method response research, working with the public. All of those are important to identify the real impacts.

Mr. MCCLINTOCK. We have the same problem up in the Sierra. The critical habitat has been declared for a species of frog and a species of toad up there. Again, the principal cause is not human
activity, it is invasive populations—again, non-native species of bass that just love to eat those things.

Why don’t we take simple reforms, like opening up a bass for unlimited takes, for example? Why don’t we open up these invasive species for unlimited takes?

Ms. Williams. In some cases that has happened. You look at the Asian carp. The Asian carp they have dealt with, in many cases, allowing unlimited takes of those species. And so that is something that should be considered in a comprehensive plan, I agree with you.

Mr. McClintock. Well, the House did send legislation to the Senate earlier this year and in the prior session to do precisely that. And it has been crickets over there. I yield back.

Mr. Bishop. Thank you. Ms. Bordallo, do you have questions?

Ms. Bordallo. Thank you, Mr. Chairman. I thank you and Congressman Horsford for the introduction of H.R. 3994. Invasive species has very serious and negative consequences on our environment and our ecosystem. On Guam we know all too well the impact of a number of invasive species on our way of life. The most popularly known are the brown tree snakes; they have decimated our bird population. Fire ants threaten our animals and ecosystems. And the rhino beetles threaten the coconut trees.

I am concerned that this bill does not quite get to the heart of the problem, which is research and preventative methods and strategies. So, currently, we are in the throws of fighting the coconut rhino beetle, and additional research is needed. In the meantime, we have also prioritized public education so that the public can help with an active and informed role in stymieing the growth of the rhino beetle population.

So, my first question is for Ms. Williams. This bill caps spending on investigations, outreach, and public awareness at 15 percent of funds in any given year, while also setting 75 percent of funding for control and management. So I am concerned that arbitrary limits on public awareness and preventative strategies could have an overall invasive species prevention efforts. So, could you please explain the potential impact of this legislation on ongoing scientific research and prevention strategies?

Ms. Williams. Yes, we are unsure of the exact impact, but we are concerned that, in certain circumstances with a species that is widespread—like a cheatgrass—you really do want to put most of your effort in on-the-ground control methodologies. But for other species, where on-the-ground just doesn’t even provide control or, as you said, for the rhino beetle or one of the other species where you really need to try to stop a pathway of spread and contain that, you might want to spend quite a bit more money on public education and outreach and maybe even exploring a harvest program, like the other congressman mentioned.

So you just really want to have the flexibility, but maybe very strong measures that you want to meet to deal with invasive species so we can respond to the frustration that is out there that we are not adequately dealing with these species.

Ms. Bordallo. Thank you. If you could make your answers brief, I have so little time here.
My second question is for Ms. Wagner. How could this bill address and prioritize prevention?

Ms. Wagner. The four strategies that I mentioned that are kind of at the heart of our strategic approach, prevention is featured as one of those. And I don't think there is any question that one of the most effective ways to protect forest waterways and grasslands from invasive species is to prevent them in the first place. And I think that is what citizens do with RVs and boats and those pathways needs to be addressed.

Ms. Bordallo. And this would also include early detection?

Ms. Wagner. Yes.

Ms. Bordallo. Yes. And the final question is for either Ms. Williams or Ms. Wagner. This bill sets a 5-percent net reduction of invasive species populations on lands managed by the Secretaries of the Interior and Agriculture. Now, how could this net reduction requirement work, given, where there are not baselines of invasive species populations or quantitative impact?

Ms. Williams. I guess I am not sure how it would work. In many cases we don't have the comprehensive inventory of invasive species on public lands. And I don't see how this bill would provide for even getting to that starting point.

Ms. Bordallo. Ms. Wagner, you feel the same way?

Ms. Wagner. What I might add is that a 5-percent net reduction in some populations, in some geographic locations, may be very doable. For other species, like white nose syndrome, it would be difficult to say if a 5-percent reduction is possible.

Ms. Bordallo. Mr. Chairman, before I close off, I just want to mention that the brown tree snakes are the most popular known, when it comes to Guam, and funding has been reduced, while the population is increasing. And I yield back.

Mr. Bishop. Thank you. Mr. Gohmert.

Mr. Gohmert. Thank you, Mr. Chairman, and thanks to all the witnesses for being here.

Ms. Williams, I want to direct my questions to you. I had written you back last year, because we have a huge problem in the South with a species called giant salvinia. And, as you point out in response, beginning at page—bottom of page 5 of your letter, here is what—your letter asks five specific questions. Well, I have four-and-a-half pages there of discussion about invasive species about the different prevention that is helpful. You mentioned that was really helpful for you to tell me that.

But I have been trying to figure out what your Federal council does. And the best I can find out is we pay for you guys to have a real nice annual meeting, and people come in, and you sit around and talk. But I can't find that you have done a blessed thing to actually specifically stop an invasive species. And, in fact, at page 4 of your letter you say, “Neither NISC nor its staff has the capacity to coordinate the great number of site and species-specific efforts that are occurring across the country.”

What, in heaven’s name, are you doing? Give me one species that your Council has actually slowed the invasion of. Just one. Tell me what you have done, your Council, specifically.

Ms. Williams. Well, if you talk about the Council, the Council is actually the Secretaries and the department heads of the 13 de-
partments that work on invasive species. The goal—and the criticism of the Federal Government, it wasn’t working together, and it didn’t have a master plan.

Mr. GOHMERT. OK. But my question was very specific, and give me one species that your gathering together has helped stop or slow, because I am not finding anything. And when I originally found out about, wow, a National Invasive Species Council, where all these people come together, we need a coordinating agency that will bring together state, Federal, local people to help stop this thing that could actually end up—and has, in some cases, just completely overwhelmed a water facility, a lake, a place where, in one case, they are getting drinking water, they can’t get it any more.

And I thought this is ideal, they will coordinate all these efforts. And what I get is a seven-page letter back dancing around the issue, and it brings me back to this, that when we need to cut funding to help in areas where we can actually do some good, it looks like your Council is basically primed to be eliminated, because you are not coordinating anything.

We wanted you to come in and help with the Federal, state, local, and you point out in here, “However, NISC agencies, such as Fish and Wildlife Service, have been involved with the”—yes, we have gotten Fish and Wildlife to come in. We needed somebody to help coordinate the efforts. And if that is not you, I think we ought to eliminate your Council completely, and spend it on somebody who will get out there in the field, who will coordinate. End your little Federal meeting with all the money we are wasting on you guys coming together and talking about it. End the money that would send me a seven-page letter and only at the end say, “Here are the five things you asked for.”

In my letter I asked, “Have any of the Federal agencies at NISC’s direction engaged in a coordinated effort to address the spread of giant salvinia? What has NISC done to encourage planning and action at the local and state level to address the spread of giant salvinia?” And I got nothing. So, unless you can tell me something specific that you guys at the Council have done as you come together—and we pay all this money for you to coordinate—tell me one specific invasive species you have helped coordinate the attack against, and maybe we will find that there is a reason for having this Council.

But otherwise, we are better off spending that money to bring in Fish and Wildlife, having them get with the local Texas Parks and Wildlife and the local people at the lakes, to work together. Because I don't get the impression that you have ever actually done that. Have you?

Ms. WILLIAMS. The Council, as I said, is for coordination and planning. What we have done is——

Mr. GOHMERT. And I am asking you what planning have you specifically done on any species.

Ms. WILLIAMS. I will be glad to send you——

Mr. GOHMERT. Please.

Ms. WILLIAMS [continuing]. The National Invasive Species Management Plans, the guidelines on early detection and rapid response, the guidelines on control and management, the encouragement for best management practices, the work we have done to
foster regional coordination, the support of state invasive species councils.

Mr. GOHMERT. Thank you.

Mr. BISHOP. We will have other rounds here, as well. Mr. Garcia?

Mr. GARCIA. Thank you, Mr. Chairman. You know, my district represents the Southern Everglades. And so we have a huge problem with invasive species. It is something that I have even had on what was my farm. We once caught a 12-foot python that had consumed three of my chickens—or our chickens at the time. So it is a huge problem, particularly in South Dade.

So, I would like to ask all of you. What can we do to sort of involve citizens more in a proactive way in this issue, as a first question. And I will leave it to those of you who want to answer.

And then, you know, in this legislation there is some controversial use of pesticides or strong chemicals. What is the alternative to that? I understand what is here in the legislation we are looking at, but give me an alternative to that. And is there an alternative to that?

Thank you, Mr. Chairman. How about we go from the right to left, or from the left to right? Go ahead.

Dr. BECK. As far as alternatives to chemicals, there are other strategies, of course. Biological——

Mr. BISHOP. Mr. Beck, is your microphone on?

Dr. BECK. It says it is on.

Mr. BISHOP. Pull it closer to your mouth.

Dr. BECK. Sorry.

Mr. BISHOP. I am having a difficult time hearing you.

Dr. BECK. That better?

Mr. BISHOP. That is much better, thank you.

Dr. BECK. I can even hear that. There are alternatives to chemicals.

The law also—or, excuse me, the bill also requires that integrated pest management approaches be used for whatever the organism is, and that is typically a combination of things. And that includes all of the management strategies like prevention, and not just control and management.

Not all organisms have a biological control available to manage their populations. There is always a physical method, maybe like in the case of weeds, hand pulling. Unfortunately, in many cases like that, then the cost of managing that problem skyrockets to $1,000 or so an acre. So, many times a pesticide, as part of the management plan, is representative of something that is economically more efficient.

As far as what we can do to educate the public, or get the public involved, is that very thing, is education. The Federal Government is not the only source of information. I work for a land grant institution, and I am busier than you can imagine. I have been this way for 28 years, educating the public. So there is lots of opportunity outside of the scope of H.R. 3994 to provide education for the public to get them involved.

In fact, the law even says at the very end that it is not meant to usurp or preclude any other efforts that are ongoing at the moment. So even when it comes to research and things like that, we have other arms—USGS, USDA, ARS—that can and should be con-
ducting what research needs to be done. Forest Service has their own research arm. And so, I think there is plenty of opportunity outside of the scope of the bill to achieve that goal.

Mr. GARCIA. And I want to hear from you, Ms. Wagner and Ms. Williams. But one of the things we have done, for example, we have, like, the invasive lion species in the Florida Keys. And so we have lion species hunts. We have now—the idea of re-regulating some issues—for example, traps, fish traps, have not been something that we legally allow, so they now use lobster traps to catch these lionfish. But they have now become a delicacy on the menus. So there are no limits, and it obviously pleases our hunter friends.

You know, when you look at coral reefs that have human usage—right, divers are always on them—they are clear of lionfish precisely because divers know they can take them out. And so the diving community has protected the asset themselves.

I am sorry, Ms. Wagner.

Ms. WAGNER. I will just mention a couple of other opportunities for citizen involvement. I mentioned earlier in my oral comments the suite of authorities the Forest Service uses. And among those are things like volunteer agreements, or working with youth conservation corps. And many times, when they are out in the field, an invasive species project is part of the work that they do. So that’s a really active connection, do something on the land, educate kids, build a constituency who understands the impacts and takes responsibility for addressing invasive species.

Ms. WILLIAMS. Yes, a couple comments. First on the overall—the Everglades, one thing that we have been careful of at the national level, as important as national coordination is, many of these issues need to be solved at a regional level. And we have been very supportive of the work in the Everglades. And right now they are coming up with an invasive species management plan, the task force down there. They have been in communication with us, and we want to provide any support we can, and recognize that effort in the revision of our management plan. So that is an example of national working with regional and local.

Our Invasive Species Advisory Committee, the meeting he was talking about, one of the meetings—they have put together a paper on using harvest incentives as an incentive to remove invasive species. I would be glad to send that very good paper to the members of the committee. And there will be a journal article about that to explore these—use them. Use them, if you——

Mr. BISHOP. Ms. Williams, please. You are out of time. Thank you.

Mr. GARCIA. Thank you very much, Mr. Chairman. Thank you all for your service.

Mr. BISHOP. Mrs. Lummis, you are recognized as long as you say absolutely nothing about Colorado State University.

Mrs. LUMMIS. Fair enough.

Mr. BISHOP. All right, thank you.

Mrs. LUMMIS. Fair enough, Mr. Chairman. Thank you, Chairman Bishop. And thanks for your hard work on H.R. 3994. Wyoming is half Federal lands. We have major issues with noxious weeds and pest management. And it affects ranching, it affects wildlife, it affects sage-grouse habitat and wildlife—and wildfire prevention, like
Dr. Beck pointed out. So I am supportive of the bill, and appreciate your work on it.

I would like to take some time today to talk about larger wildfire issues with Associate Chief Wagner from the Forest Service, so thank you for being here. Now, what I understand is Department of Defense has halted the transfer of surplus military equipment to states and local governments because of a new EPA interpretation of regulations barring the transfer of Federal vehicles that don’t meet emissions standards.

Now, that seems absurd, given that they are out there—they are being retrofitted by states and local firefighters to go fight fires, where there is a much higher carbon emission than could ever occur from a military vehicle that is being retrofitted. In fact, in Wyoming, nearly 40 percent of our wildland firefighting vehicles are excess military vehicles. Our guys spend the winter months in this Quonset hut in—outside of Cheyenne, retrofitting those vehicles. And, all over the state, that is what the local folks are doing to retrofit them, because it is less costly than buying commercial vehicles.

And I used to be the Director of the Office of State Lands, under which the Department of State forester resides, so I ran those agencies. I know exactly what they are doing in those buildings, and how much it saves us, in terms of our costs of firefighting. And, given the schizophrenic way that land is situated in the West, where you have private land, state land, Federal land, all right next to each other, and you’ve got these wildfires jumping from private land to state land to Federal land, we all have to work together to fight these wildfires.

And I have done it personally. I have been out on fire lines. I have had it jump from state land, when I was the Director of the State Lands, to my own personal private land, to the Federal land, and have been out drenched in ash, firefighting with Federal folks and with state folks and with the neighbors. It is just a phenomenal effort.

So, I want to visit with you about it, because it really hits home, personally, to me. Run me through, if you would, Ms. Wagner, how Federal land wildfire suppression is connected to local response, and how much the Forest Service relies on state and local agencies to respond to fires.

Ms. WAGNER. So, two comments. One, you have identified a very important issue: Federal excess property and the Federal firefighter property programs are absolutely vital to equipping local volunteer and local jurisdictions to participate in fire suppression. I know that Defense and EPA are in conversations. Our Chief and Under Secretary are monitoring that situation. We are hopeful and confident that resolution will take place, and there will be the ability to use that equipment to equip local firefighters and departments.

Mrs. LUMMIS. I like your word “confident.” Tell me what gives you that confidence.

Ms. WAGNER. The dialog and some movement on the Federal firefighter program. I believe Defense and EPA released a statement yesterday. I have not seen that statement. I will make a com-
mitment to keep you apprised of the progress that is being made on that.

You are daylighting an important issue, and I think it is shared by a number of folks. So, people working together will come up with a solution, I am pretty confident of that. I will keep you apprised.

Mrs. LUMMIS. Thank you. And I will very much appreciate being kept apprised, because the state foresters are people that I worked with and we rely on just unbelievably, enormously—our budgets in state forestry all around the West in firefighting are enormous. And I think a lot of times the Federal Government and we in Congress think, oh, we are putting out all this money for firefighting. If you think we are putting out a lot of money, you should see what the states and locals are doing. And the volunteer hours, there is no way we could fight these fires without the local volunteers. And those local volunteers are relying on that equipment.

So, thank you for your confidence, and I hope your confidence bears the fruit we need. Thank you. My time is up.

Look how precise I was about my timing, Mr. Chairman. I hope I get brownie points in the second round, maybe.

Mr. BISHOP. You will.

Mrs. LUMMIS. Thanks.

Mr. BISHOP. You will. You may even get some brownies.

Mr. Daines, you have questions?

Mr. DAINES. Mr. Chairman, thank you. And regarding the Colorado State University, I have to say my son is a proud Ram graduate—engineering degree—recently. Dr. Beck, we are very happy parents. Even though I am a Montana State University Bobcat, we are happy parents. We have a Ram in the family as well, now.

But—so greetings from Montana. In fact, on Monday I was with our smoke jumpers in Missoula, getting a briefing as we are getting ready for fire season. What a tremendous group of professionals there. Very, very impressed with what they do. And 95 percent success rate when they drop those jumpers in to stop the fires before they become wildfires.

But, as you know, we have over 7 million acres of forest land in Montana that is at risk of mortality from insects. I remember growing up in Montana, we saw the beetle kill come through back in the 1970s and 1980s. We are seeing similar kinds of invasive species now across the state.

We have heard from the Forest Service and other Federal land management agencies that they spend millions of dollars on the NEPA analysis, including excessive analysis on some of these treatments for invasive species, in order to protect their decisions from these habitual litigants. It seems like any more in Montana the trial lawyers are running our forests, instead of forest management professionals and the people of Montana.

Do you have any sense of how many dollars are spent, how much goes toward invasive species management, roughly?

Ms. WAGNER. Our overall investment is about $55 million in treatment.

Mr. DAINES. In treatment?

Ms. WAGNER. Mm-hmm.
Mr. DAINES. And this H.R. 3994, what I am glad to see, it provides some streamlining of NEPA analyses on these projects, so we can spend more time actually addressing invasive species here, instead of having to look over our shoulders at the trial lawyers and these habitual litigants. And I hope this will reduce this analysis paralysis that we are seeing, and thereby improve our forest health, and protect public safety and infrastructure, certainly.

Additionally, both the Department of the Interior and the Forest Service tout the working relationships with local, state, and our tribal governments. However, I do hear from my constituents in Montana there can be a lot of improvement in Federal land management if local governments had more input and authority. H.R. 3994 protects the ability for local and state governments to enter into partnerships under the new streamlined regulatory framework provided under this bill.

I will start with Ms. Wagner and then to Ms. Williams. Can you tell me how important it is for the Federal agencies to partner with our local and state governments?

Ms. WAGNER. I don't think there is any question that invasive species takes all of us. It doesn't recognize boundaries. And I think some of the most successful efforts are really those grass roots local entities, cooperative weed management associations or areas, cooperative invasive species management areas, locals working together across boundaries, county local municipalities, volunteers, working with their state partners and Federal partners to address the issues, I think that is where the real success is generated in a lot of cases.

Mr. DAINES. How significant do you think the threat of litigation is, in terms of the way you run your processes?

Ms. WAGNER. It is really somewhat situational. The majority of our expenses relative to environmental analysis, we think, are important disclosures of impacts, and citizens are interested, and all of that. The majority of our decisions aren't actually litigated or appealed. But in those cases where we have an environment—and Montana has one of those environments—where we are in a bit of that——

Mr. DAINES. Yes, I probably should have targeted Montana there, where the——

Ms. WAGNER. Yes

Mr. DAINES [continuing]. Part of the Ninth Circuit Court, which tends to be a flashpoint, certainly, of activism——

Ms. WAGNER. I do know that, in many cases where projects have been developed collaboratively——

Mr. DAINES. Yes.

Ms. WAGNER [continuing]. Local, state, and Federal partners are all working together with non-governmental organizations and other citizens, we are having a great rate of success of prevailing in those lawsuits, or not being litigated at all, because of the way the projects were developed.

Mr. DAINES. Ms. Williams, do you have a thought on that, as well?

Ms. WILLIAMS. Well, I would agree with everything Ms. Wagner said, and I would have to get back to you with the specifics of litigation.
But one thing the Bureau of Land Management and other agencies are exploring is programmatic EISs, so that that would reduce the cost and necessity to do an individual EIS for each of their projects. So that is one alternative to a categorical exclusion we might want to look at.

Mr. DAINES. OK, I would appreciate some follow-up on that.
Chairman Bishop, I have heard from our Montana tribal governments that they want to be better partners with the Federal agencies in managing invasive species on the reservation or in areas that neighbor the reservations. H.R. 3994 does not explicitly allow for tribal governments to take advantage of the benefits of invasive species treatments under the bill, and I hope that we can maybe fix that in mark-up on this legislation.

Mr. BISHOP. Thank you. Yes, we can.
Mr. DAINES. OK. Thanks, Mr. Chairman.

Mr. BISHOP. It is good of you to be looking out for your constituents that way. We will increase that, we will do that.

Mr. DAINES. Thank you, Mr. Chairman.
Mr. BISHOP. Thank you. With that—and I should have extended the ban on Colorado State comments further on than just Ms. Lummis, but I appreciate that.

Mr. DAINES. Go Rams.
Mr. BISHOP. Yes, OK. And if we can get you out of the Ninth Circuit, we can solve a whole lot of other problems.

Mr. LaMalfa, I appreciate you coming here. Would you like me to go first with some questions to give you time to catch up? I realize you came in from another meeting. Let me ask a few, if I could.

Ms. Wagner and Ms. Williams, I was going to ask you how many acres we are talking about that are infested, but Dr. Beck had the numbers up there. Do you dispute the numbers that he has shown, as far as infestation or restoration reclaiming efforts?

Ms. WAGNER. So, Mr. Beck's data was 2009, I believe. We currently estimate infested acres on national forests at 20 million acres. We treat about 400,000 acres per year. And out of that 400,000 acres treated per year, we believe that about 300,000 of those acres are actually restored and reclaimed, meaning resilient to further infestations.

Mr. BISHOP. Ms. Williams, do you have a different number than Dr. Beck had in his figures?

Mr. WILLIAMS. I would like to provide that for the record, because I have five different agencies. And so, if I could provide those figures for the record, I would be glad to do that.

Mr. BISHOP. Ms. Williams, how much does it cost you, your agency, to treat an acre of infested weeds, on average?

Mr. WILLIAMS. I would have to get back on the record for that.

Mr. BISHOP. Ms. Wagner, do you have that number?

Ms. WAGNER. We have a range, and it is very situational.

Mr. BISHOP. Give me the range.

Ms. WAGNER. Interior Alaska, expensive——

Mr. BISHOP. Give me the range.

Ms. WAGNER. About $100 per acre to over $2,000 per acre. But, on average, we would say $250 to $300 per acre, on average.

Mr. BISHOP. Thank you, I appreciate that.
Ms. Williams, can you have a net 5-percent reduction applied to Asian carp, zebra mussels, and other invasive animals?

Mr. Williams. I think that would be very difficult at this point, without having better baseline data about their populations——

Mr. Bishop. You don't have the baseline data of those invasive animals?

Mr. Williams. Asian carp we would. Quagga and zebra mussels we might, but there are many other——

Mr. Bishop. So if you have—let's just do those two. You would be—a bill that—you would have the ability to get a 5-percent reduction in those invasive animals. You have the baseline, you could find out what the effective rate would be.

Mr. Williams. We could calculate what that would be.

Mr. Bishop. All right.

Mr. Williams. I don't think we would have the resources to——

Mr. Bishop. OK. Ms. Williams, how much do you spend right now on investigation, outreach, and education? What percent of your budget goes to that?

Mr. Williams. I would have to get that for the record.

Mr. Bishop. I need that, because that was the comment that you wrote about Section 4. You made that comment without knowing what you are now spending on that area?

Mr. Williams. What it does is set an arbitrary limit.

Mr. Bishop. No, I am asking. Do you know what—what you have just told me is you don't know how much you are spending on that area right now, even though that was one of your criticisms——

Mr. Williams. I need to provide the record——

Mr. Bishop. Yes, you do need to provide that. Thank you.

Let me ask you, then, the other one. How much do you spend on administration right now?

Mr. Williams. I would need to provide that, because of the five different agencies, for the record.

Mr. Bishop. So you gave me a written comment and came up with oral comments, and those were your criticisms, but you don't know what the answers are to those two? That is disconcerting, that you would actually come up without having that kind of data available. Because I think it is essential to the questions that you are raising in your written and oral testimony.

Dr. Beck, let me go to a couple of questions for you, then. What ways—in broad terms—let's do this briefly, and there will be other rounds here. H.R. 3994, how could that help Federal land management achieve and reduce populations of invasive species better than we are doing under current status quo law?

Dr. Beck. I believe that more money would get out to the areas where it needs to be spent to manage the problems specifically, rather than drastically—insufficient budgets that—and it doesn't matter which agency. By the time it gets out to the West, in particular, it seems like it is minuscule, compared to what it was.

Mr. Bishop. And your testimony was, “If we keep on going on the current status, the direction we are doing, what we come up with is”—what were the numbers—“150 million acre increase”?

Dr. Beck. No, about 120 percent increase.

Mr. Bishop. OK.
Dr. Beck. And that is using a fairly conservative figure. Spread rates for weeds vary from about 5 percent to 25 percent. So it is species-oriented.

Mr. Bishop. All right. I have less than a minute. I will try and do this as quickly as we can. What is meant by a 5-percent annual reduction in invasive species population? What does that mean?

Dr. Beck. What it means is that you account for the rate of spread that inevitably will occur, and you must exceed that rate of spread to achieve a 5-percent decrease. So in the case of my example on weeds, if they are increasing at 12 percent, the target should be 17 percent to achieve that 5-percent reduction. Otherwise, all we are doing is not even slowing down the rate of spread.

Mr. Bishop. So, 5 percent is not 5 percent. Five percent is determined by the situation in which it comes to reach that particular goal.

Dr. Beck. That is very correct.

Mr. Bishop. In which case you would have to have the baseline and you have to know what your effective goal actually is.

Dr. Beck. That, too, is correct.

Mr. Bishop. All right. There will be another round of questions here.

Mr. LaMalfa, do you have questions? And I will yield to you. We will recognize you.

Mr. LaMalfa. Thank you, Mr. Chairman. Pardon me, panelists and Mr. Chairman, for—there was a conflicting Ag. Committee meeting a while ago, so I didn't get to hear testimony.

So, if it is not too redundant, Dr. Beck, when we see this ever-proliferating invasive species of noxious weeds—I am a farmer in northern California. We—it is a huge problem for a lot of my colleagues, as well, ranching. What is the relationship with the public land versus private lands that are managed differently—I would say better. What are you finding in your travels is the overall view of public land, the way it is managed, and how it keeps up with these invasive species, the noxious weeds, et cetera, versus private land?

Dr. Beck. Oftentimes public lands are a source of the problem. In the Federal lands, of course, being a rather large amount, particularly in the western United States, then becomes a sizable issue. But it is also state and county lands. But public lands are not as well attended to as private lands.

Mr. LaMalfa. In one of the statements here it did talk about how most of our tax dollars that flow through Federal agencies for management, the vast majority doesn't actually get to the end use, that it is lost along the way. Can you comment on that?

Dr. Beck. I taught a workshop—now, let's just use this as an example—back in May in Montrose, Colorado, on the West Slope. And there was a wide variety of people there. Amongst them was someone new who worked for the Forest Service near Paonia. And she was in charge of the invasive species program. And apparently she only gets $7,000 a year for the entire forest to deal with all the issues and every manner—paying for vehicles, whatever tools they are going to use, the labor. Very insufficient.

Mr. LaMalfa. Ms. Wagner, following up on that same question, you have a budget for this that the Congress, via the taxpayers,
provide. How do you feel about how the end result comes along versus the dollars that are lost along the line in the administration? What do you think—and what H.R. 3994 is trying to do, how will that be a tool for you?

Ms. Wagner. I appreciate the question. So, as we assess our appropriated dollars and what we invest in, we would say roughly 75 percent of our appropriated dollars do go to treatment on the ground. That differs from Mr. Beck’s—or Dr. Beck’s characterization. So we would like to follow up with some specific detailed information about our expenditures that would be helpful to that.

Mr. LaMalfa. May I—Mr. Chairman, is that consistent with what we have been understanding, that 75 percent gets to the ground?

Mr. Bishop. I think you should ask Dr. Beck that question.

Mr. LaMalfa. Yes, OK. Well, I guess we have a dispute here on that, because we are stewards of tax dollars and we want results. And so, Dr. Beck, please follow up on that.

Dr. Beck. Well, I would—in this case that I used as an example, I can’t imagine $7,000 being 75 percent of anything, and certainly not 75 percent of what started out from here, and I think that is part of the problem is, as money flows, it just gets touched by a whole bunch of folks before it gets to the people who need it. These people are my heroes, they are trying to get this job done out on the ground.

Mr. LaMalfa. OK. Back to Ms. Wagner on that. Now, it requires an infusion of tax dollars from the U.S. Treasury. But if we are able to do more timber harvests and get more of those receipts in that seem to be so difficult to accomplish these days—I know at least in California—how much more income could we be generating that stays within the system?

And can we do more things that—do you need our help to have that money stay within the U.S. forest system to go much farther toward these goals from more timber receipts, et cetera? What can you tell me there?

Ms. Wagner. I would say that the Forest Service has a very strong interest in ensuring that we are creating resilient ecosystems. And in our forested ecosystems, active management, thinning, creating resilient forests, that is a very important goal for us.

When we sell timber or have proceeds—that generate value, we return a percentage of that to the Treasury. We keep a percentage of it for reforestation or Knutson-Vandenberg-type activities, which includes invasive species treatment in that impacted area, and brush disposal.

Mr. LaMalfa. And these are all concurrent. If there is a timber harvest going on, you are accomplishing timber value, you are accomplishing forest safety, health, fire——

Ms. Wagner. Yes.

Mr. LaMalfa [continuing]. Danger improvement, all that. In addition, at the same time, invasive species are being mitigated, as well.

Ms. Wagner. They would be treated in that project area, yes.

Mr. LaMalfa. So if we are doing more of this, we are having a lot more effect, plus positive timber receipts at the same time.
Ms. WAGNER. Mm-hmm.
Mr. LAMALFA. OK, thank you. I yield back.
Mr. BISHOP. Thank you, appreciate the questions. Ms. Lummis, do you have another set of questions for these witnesses?
Mrs. LUMMIS. Mr. Chairman, I would like to just ask Dr. Beck a couple of questions.
Could you rank the biggest invasive species issues facing the Rocky Mountain West right now?
Dr. BECK. Well, one that jumps to mind is cheatgrass. I mean it is enormous, to be sure. But, I mean, I have been asked that question, “Where do we start managing cheatgrass?” And my response was a little short, but I said, “Well, it really doesn’t matter, but somewhere.” And what I really mean by that is I would start off with something visible, so you can show the public that we are effective at this. But that is probably one of our biggest problems in the western United States.
Mrs. LUMMIS. OK. Let’s focus on that right now. How might the Federal Government go about working with local land owners and state lands to better manage cheatgrass?
Dr. BECK. I can—I have a project I just finished, and the BLM was involved in that project. And it is because they are trying their level best to manage the problem. And this is an area close to Grand Junction. So there is involvement there. And I certainly don’t want to leave anyone with the impression that the agencies aren’t doing anything, but they just have insufficient funds to achieve the job at the right level.
Mrs. LUMMIS. Yes, it is an enormous problem. Livestock grazing actually helps manage cheatgrass, would you agree?
Dr. BECK. Absolutely.
Mrs. LUMMIS. And can livestock be used in a way that is a benefit to suppression of endangered species?
Dr. BECK. Well I am certain in a form of habitat improvement they could be used—I mean one must be, of course, prudent about how they manage their livestock. But typically, grazing—the lands in the western United States, especially in the Great Plains, evolved with grazing. So that is going to create the most resilient systems. And if we avoid grazing, then it is a disturbance. We consider, on the short grass step, the lack of grazing to be a disturbance, which is quite interesting, in and of itself.
Mrs. LUMMIS. What about using either sheep or goats to manage leafy spurge in the area where there are trees along creeks or rivers in the West that would respond poorly? Meaning the trees would respond poorly to Tordon or something. Can you use sheep and goats to graze down and control leafy spurge that way?
Dr. BECK. Absolutely.
Mrs. LUMMIS. Have you done that in Colorado?
Dr. BECK. Yes, yes, we have. I did about a 6-year research project. Now we use sheep, goats tend to eat more forbs than sheep, so they are a little bit more efficient. But we found eight sheep grazing for 10 days, in combination with flea beetles on this particular project, we eliminated leafy spurge. It was a pretty good project.
Mrs. LUMMIS. Would something similar work before cheatgrass has headed out in areas where cheatgrass has come in following a forest fire?

Dr. BECK. Yes. The grazing would help. What I have noticed, just practicing weed management, if you will, is you can mow, you can graze off cheatgrass multiple times, and it will reset new seed, but at a drastically decreased rate. So, ultimately, something besides just grazing would have to be done. But that certainly could be a component of such a management system.

Mrs. LUMMIS. With cheatgrass being so prevalent and invasive after a wildfire, the better course of action is to not have the wildfires go so massively across these mountains, and especially in areas where bark beetle kill creates an environment in which a forest fire or a canopy fire can thrive. Is that a fair statement?

Dr. BECK. I believe so. I am not an expert on fire, but yes, that is probably a fair statement.

Mrs. LUMMIS. Is it a fair statement to say that cheatgrass is a chief invasive species after a wildfire?

Dr. BECK. Oh, absolutely. I mean it has to be present there to begin with, but fire rarely destroys seed. It is kind of a misnomer that some people have. Fire actually stimulates the germination of seeds. Some brilliant biochemists in the early parts of this century identified the compound in green plant smoke that stimulates seeds to germinate.

Mrs. LUMMIS. And how does cheatgrass invasion affect endangered species such as sage-grouse?

Dr. BECK. There is a pretty direct relationship there. It seems like, because cheatgrass causes fire, you are destroying nesting habitat and habitat where they would seek hiding from predators. But it is also the—brood success seems to be at the base of the problem with the sage-grouse. And after fires, most of the anthills that—which are—ants are a primary food source for the chicks—those are eliminated after the fire.

Mrs. LUMMIS. I didn't know that. Thank you, Mr. Chairman. I learned something today.

Mr. BISHOP. I am going to take his 30 seconds over off of my time, because that was the question I wanted to ask. I appreciate that. We have a lot of people talking about sage-grouse in the future. You know, 43 percent of my state is actually controlled by the BLM. And yet, if we are not going to actually deal something with invasive species that create wildfires, which is the greatest source of lack of habitat, then we are fooling ourselves thinking that Fish and Wildlife can actually superimpose a requirement when we don't have the vehicle to do it. So I appreciate that comment. I would seriously put me at 4 minutes, and we will go on from there.

Dr. Beck, let me ask you a couple other questions. Let's go on to the NEPA categorical exclusion language that is in there. What is the purpose of the NEPA categorical exclusion language in the legislation?

Dr. BECK. Well, I think the purpose behind that is to provide the tools, the necessary tools, for early detection and rapid response. And, obviously, this would be the rapid response. So, in the case of a weed, it may be a new infestation of cheatgrass. When it first
shows up, the categorical exclusion then would allow the use of a herbicide to get rid of that.

Mr. Bishop. So, there are a lot of groups out there that are opposed to categorical exclusions for political reasons. I want you to address this, simply from a scientific standpoint that you bring with both the coalition, as well as your work at the college. What, therefore, then, are the environmental costs of the NEPA delay that is in treatment, compared to the environmental risks by using a categorical exclusion to expedite those treatments?

Dr. Beck. Well, without the categorical exclusion, or some kind of mechanism similar to that, the agencies would lose the opportunity to exterminate that plant, or eradicate it from the environment. I will use a case. Right now we are working with a private rancher on a 15,000-acre ranch on the western parts of Colorado. And we discovered two paper-sized patches of cheatgrass. And as we can tell, they are the only ones. And so, my advice to them—and we are actually going to provide them with the compounds to do this—is to spray it and get rid of it before it goes over the entire ranch.

Mr. Bishop. All right. So, from your scientific point of view, which is the greater risk? Is it the risk of delay or the risk of actually doing something quicker under categorical exclusion?

Dr. Beck. My scientific perspective is the risk associated with not acting as quickly as possible far exceeds the risk of using the chemical.

Mr. Bishop. All right. You work with—Dr. Beck, you work with many Federal land managers in the field. Are they, in general, more supportive of these kinds of reforms that we are talking about than the agency testimony you have heard today?

Dr. Beck. Very much so. They are very, very frustrated, not only with insufficient budgets, but also some of the process associated with using the new tools that become available. And again, the variation from agency to agency is pretty extraordinary.

Mr. Bishop. Ms. Wagner, the Forest Service seems to be a little bit more effective and efficient in dealing with invasive species than the Department of the Interior. Do you list that simply because of the different topography in which you deal? What is your success, relative to the other agency, what is the purpose for that, or reason for that?

Ms. Wagner. For the Forest Service, we are part of four other agencies in USDA who have a very aggressive stance. USDA, overall, spends over $1 billion in invasive species program delivery and management over the course of a year. The Forest Service is devoted to land stewardship.

I would say permittees oftentimes are that front line of early detection.

Mr. Bishop. I appreciate that. I am going to cut myself off here for the timing element. Just add some categorical exclusions, and you will be doing great.

Mr. LaMalfa, do you have some other questions?

Mr. LaMalfa. Yes, I do. Thank you, Mr. Chairman. Ms. Wagner, in my area here in northern California, and also part of Nevada, we have a newer problem here with a—something called the chytrid fungus has affected the mountain yellow-legged frog and
Yosemite toad and those populations, as have a lot of amphibians around the world, have been affected by this fungus. And so, recently, the Fish and Wildlife Service has chosen to list them under the ESA. So now we have that to deal with in these forested areas, where you are coming on the heels of the gigantic rim fire in the Yosemite area last year. I am really concerned we are going to run out of options on how to manage the areas for the forestry practices we need to be doing along with all the invasives. And I suppose we could count the chytrid fungus as an invasive problem, as well.

So, can we count on you, as the rules are being developed, or what have you, for how that is going to be combated?

My concern is that people’s involvement, their activity in that forest is going to be limited, even though people, human activity, had nothing to do, really, with the chytrid fungus taking effect there. We still need to do perhaps even more forest management for the fire purposes, for the invasive purposes, and whatever positives can be done to remedy the chytrid fungus. Can we count on you to be an ally in the arguments that we should not stop human activity in these areas because of all these invasives, especially because of this listing now for the toad and the yellow-legged frog?

Can we count on your advocacy to say, “Look, don’t stop these harvest activities and other things that we need to be doing in the forest; they don’t really have anything to do with the fungus”?

Ms. Wagner. Sir, I am going to have to admit I don’t know about this fungus and these listed species, but I will follow up and get more information about the intersection between these species, the listing, and our forest management activities.

Mr. LAMALFA. Please take that back with you to—because, again, we don’t know what the rules are going to be on the no-forest intervention by people, or what have you. We don’t know what is going to come on that. It really shouldn’t be that, because it is a fungus, and that should be addressed somehow that way.

As well, getting back to this area of Nevada and northern California, where we have a sage hen situation, I hope we can get ahead of it here. We are talking about cheatgrass and other issues. But also, we want the sage hen to recover, and it requires certain types of species, and not the ones that have taken over, as far as the grasses, et cetera. But also, we have a wild horse problem, where we have a management plan that—they have targets there for what the wild horse population should be. Some is on Forest Service, some is on BLM, that really aren’t even coming close to being met.

Would you, for your part, consider the wild horse, in its overpopulation, to be one of the invasive species?

Ms. Wagner. I am honestly not sure if—I don’t believe it is considered an invasive species. Wild horse and burros are something that we collaborate with our colleagues at Department of the Interior to manage on public lands. I am going to have to get versed in answering your question, and I will follow up with you on that.

Mr. LAMALFA. OK. Because, again, you know, everybody likes the wild horses in the romantic tone, I guess. A lot of ranchers
don’t like that there are 10 times the population as supposed to be sustainable in some of these zones of the right amount of wild horses, in addition to grazing, in addition to maybe areas where none of it should be going on. So it is having a very devastating effect on the ecology of that land, as well as the neighbors there that have for over 100 years in some cases been able to operate cattle operations, as well.

So, it really needs to be looked at that way, and get to the right size population on the horse population. Otherwise, I think it is another invasive species, as any other are in that context.

So, Mr. Chairman, I will yield back.

Mr. Bishop. Do you have other questions? All right. And I appreciate the question. Certainly it is not an endangered species, and it is not a native species. I think invasive is the only thing that is left, isn’t it?

Dr. Beck, let me come back to you for just a second. When we talk about 75 percent going for on-the-ground control and management, what activities are included in that term? What do we mean by that term? And—well, first, what do we mean by that term?

And then the second follow-up is what currently is being done that could be curtailed by this type of definition?

Dr. Beck. On-the-ground is a very broad term. My perspective on that would be—obviously, one is decreasing the population of the target species. And it doesn’t matter what technique, but it could be a herbicide, it could be something physical, it could be biological control.

But it also involves, then, if there is labor associated with that, that is also a cost associated with the on-the-ground control. Vehicle cost and whether it be gasoline, depreciation, that has to be figured in in the on-the-ground cost, as well.

Mr. Bishop. So is there something that would be curtailed by delineating 75 percent going on the ground?

Dr. Beck. I think we could partner better on education. There is a distinct need for research, but there is a pile of research that we could coordinate. There seems to be a lot of redundancy about invasive species, which—for years, that was not a bad thing. But I think now it is to the point that duplication of effort—those are things that we could divert money from.

So in education—I am an educator. I have a deep appreciation of that. But we can work with the land grant institutions throughout the country to help provide some of the education, and then relief to the Federal agencies that are doing that. And I think that would be a benefit, and provide them with the opportunity to put more money on the ground.

Mr. Bishop. So we may be talking about also the difference between the cost of using a herbicide, for example, versus manual eradication?

Dr. Beck. Oh, yes, absolutely. The cost of control—I mean the reason we developed herbicides—and they are ancient, they go clear back to just salt. But the reason we use them is to save labor. And typically, it is, you know, somewhere between 50 and 70 percent of the price of raising a crop is still weed control. We can be much more efficient by using a herbicide, and to suppress the populations is one of the first logical steps in the management program.
Mr. Bishop. All right. I thank you for that.

Ms. Williams, let me just end by expressing some frustration I have with your Department—not just you, but the entire Department of the Interior—and the kinds of testimony that they are coming and giving us.

As I look at the written testimony, the only two things that actually are put in definitive statements are that this bill would actually limit your flexibility and cap your administrative costs. Everything else is done in subjunctive case: it might, it could, it should, it would have, and oftentimes. Even in your oral testimony, you made 2 sentences that were definitive, and 10 sentences, once again, in subjunctive case. That does not help with that kind of testimony.

And the two questions that I asked you, for not having those answers ready, and coming up here not prepared with those answers when it was the crux of one of your criticisms, is unacceptable. I am very dismayed with the testimony that we are getting from the Department. It is not just this particular hearing; it seems to be a pattern. But I would hope that the testimony would be more specific, and not having to report for the record, especially when you are the one who added—your Department added those criticisms in the written testimony. That is unacceptable.

With that, I do want to thank all of you for coming here and participating in this hearing. This is another issue that is extremely significant. We have to get control of invasive species, or we—we have to. There is no other way around it. And, obviously, what we are doing in the status quo is not working. There needs to be a better way.

I guess I could ask one last thing. Dr. Beck, when we first started talking about these things, the Coalition actually requested or hoped that there would be a whole lot more money that could be put into this. In our budgetary climate, that is not acceptable, that just doesn't work. Money, and pouring more money at it, is not going to be the solution. We have to be more intelligent and more effective in the way we use the funds. And that is why I appreciate the Coalition's efforts to try and craft language in here that makes sure that we direct the funds where they need to be, and the definitions that we have in here from both on-the-ground, as far as categorical exclusion, that becomes significant to it.

I want to thank you. I need you to wait for just 1 minute, because there is one concluding sentence I have to have. I wish I could remember what it is. And it is going to be something like there are other questions people may have for you, they will be coming back to you, and—that is not it. Oh, yes. And so, we may have additional—you are even worse than parliamentarians on the Floor, I am sorry. They don't like me to ad lib, either. Members of the subcommittee will have additional questions. We would like you to respond to that in writing.

With that, the hearing record is going to be open for 10 days to receive those kinds of responses or questions, if indeed they have.

Thank you all for showing up, thank you for traveling great distance to be here. I appreciate your participation in this hearing as we go forward with these, this piece of legislation, as well as the Kilmer piece of legislation.
And, with that, unless there are other questions—but there is no one here to—it is just you all and I, right? I don’t have any other questions for you. So, with that, the hearing is adjourned.

[Whereupon, at 11:34 a.m., the subcommittee was adjourned.]

[ADDITIONAL MATERIALS SUBMITTED FOR THE RECORD]

LETTER SUBMITTED FOR THE RECORD IN SUPPORT OF H.R. 4751

NATIONAL PARKS CONSERVATION ASSOCIATION (NPCA),
JULY 8, 2014.

House Subcommittee on Public Lands and Environmental Regulation,
Washington, DC 20515.

Re: Please Support H.R. 4751: Bainbridge Island Japanese American Exclusion Memorial

DEAR MEMBERS OF THE HOUSE PUBLIC LANDS AND ENVIRONMENTAL REGULATION SUBCOMMITTEE:

Since 1919, the National Parks Conservation Association (NPCA) has been the leading voice of the American people in protecting and enhancing our National Park System. On behalf of our more than 800,000 members and supporters nationwide, I write to urge you to support H.R. 4751 when it comes before the subcommittee tomorrow, July 9. H.R. 4751 would make technical corrections to Public Law 110–229 to reflect the renaming of the Bainbridge Island Japanese American Exclusion Memorial.

On the morning of March 30, 1942, 227 Bainbridge Island men, women and children—most of them U.S. citizens—were escorted by armed soldiers to the Eagledale ferry landing. They solemnly boarded the ferry Kehloken and departed on a lonely journey with an unknown destination and fate. They were exiled by Presidential Executive Order 9066 and Civilian Exclusion Order No. 1 because they were Nikkei—persons of Japanese ancestry. With only 6 days notice they were forced to hastily sell, store, or make arrangements for all of their possessions, businesses and property. They were allowed to take only what they could carry or wear.

The word “exclusion” is so vital to completely tell this sad chapter of American history, because not only were 120,000 Japanese Americans forcibly removed and placed behind barbed wire in internment camps, but anyone with a drop of blood of Japanese ancestry was forbidden to remain in the exclusion zone. We should remember and honor everyone who suffered from this unconstitutional violation of civil liberties, and vow to never let fear, hysteria and prejudice deprive anyone of life, liberty and equal protection under the law.

It is the desire of a multitude of groups on Bainbridge Island; the Bainbridge Island Japanese American Exclusion Memorial Association, the Bainbridge Island Japanese American Community, and the survivors of those excluded from the community of Bainbridge Island as well as the City Council of the city of Bainbridge Island, the Bainbridge Island Historical Museum, the Bainbridge Island Chamber of Commerce and the Board of Commissioners of the Bainbridge Island Metropolitan Park & Recreation District that the memorial name be corrected. This unit of the National Park System should expressly acknowledge the exclusion experienced by these American citizens by correcting the name of the memorial to the Bainbridge Island Japanese American Exclusion Memorial.

Thank you for considering our views.

Sincerely,

CRAIG D. OBEY,
Senior Vice President, Government Affairs.
LETTER SUBMITTED FOR THE RECORD IN SUPPORT OF H.R. 3994

JULY 7, 2014.

Hon. ROB BISHOP, Chairman,
House Subcommittee on Public Lands and Environmental Regulation,
1324 Longworth House Office Building,
Washington, DC 20515.

DEAR CHAIRMAN BISHOP:

As representatives of the powersports industry and off-highway vehicle (OHV) enthusiasts we write in support of, and to thank you for introducing, H.R. 3994, the “Federal Lands Invasive Species Control, Prevention and Management Act.”

As you know, this legislation would reduce the impact that invasive species have on public lands by directing the Secretaries of Interior and Agriculture to plan and implement invasive species programs that reduce invasive species populations by 5 percent annually. The bill also specifies that no less than 75 percent of budgeted funds be used each year for on-the-ground control and management of invasive species, making sure that as much funding as possible is used to treat the problem. Finally, the bill would require the appropriate Secretary to use sound scientific data when making decisions on methods of invasive species control.

Invasive species can have a dramatic negative impact on public lands.Unless threats from invasive species are dealt with quickly and thoroughly, in some cases irreversible damage can occur to some of our Nation’s most outstanding natural treasures. Your legislation will make sure that existing resources are utilized as effectively as possible and mitigation efforts will have the best possible chance for success.

This issue is very important to the motorized recreation community both because invasive species jeopardize access for OHV recreation, and because responsible OHVers value public lands and want them to remain healthy and vibrant for posterity. Again, thank you for introducing this legislation and we look forward to working with you as it progresses through the legislative process.

Sincerely,

LARRY SMITH,
Executive Director,
Americans for Responsible Recreational Access.

DUANE TAYLOR,
Director, Federal Affairs,
Motorcycle Industry Council.

TOM YAGER,
Vice President,

KATHY VAN KLEECK,
Senior Vice President, Government Relations,
Specialty Vehicle Institute of America.