

**Testimony of
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United States Fish and Wildlife Service,
Department of the Interior
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Subcommittee on Water, Wildlife, and Fisheries**

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Introduction

Good morning, Chairman Bentz, Ranking Member Huffman, and Members of the Subcommittee. I am Stephen Guertin, Deputy Director for Policy at the U.S. Fish and Wildlife Service (Service) within the Department of the Interior (Department). I appreciate the opportunity to testify before you today on the Service’s proposed Biological Integrity, Diversity, and Environmental Health (BIDEH) regulations and policy updates. For the purposes of this testimony, we will refer to the management objective to ensure biological integrity, diversity, and environmental health as “ecological integrity” and the proposed regulation and policy update as the “BIDEH proposal.”

Ensuring ecological integrity on the National Wildlife Refuge System (Refuge System) is a statutory mandate that has been a focus of national wildlife refuge management for over 25 years. The Service’s BIDEH proposal provides updated approaches for refuge managers to meet current challenges in maintaining ecological integrity on national wildlife refuges. The proposal would support conservation throughout the Refuge System by equipping refuge managers with tools to better address the threats of climate change and biodiversity loss to fish, wildlife, plants, and their habitats. This advances the Service’s mission to work with others to conserve, protect, and enhance fish, wildlife, and plant populations and their habitats for the continuing benefit of the American people.

Last month, Department and Service leadership visited the nation’s first wildlife refuge – Pelican Island National Wildlife Refuge – to commemorate the Refuge System’s 121st birthday. To add to the celebration of more than a century of conservation success, the Department also announced a new addition to the Refuge System, the Everglades to Gulf Conservation Area. The establishment of this new wildlife refuge, the System’s 571st unit, will catalyze conservation within a 4.05-million-acre area in southwest Florida, one of the most biodiverse regions in the world. Working hand-in-hand with willing landowners, the Service will protect habitat for species like the Florida panther, Everglade snail kite, Florida black bear, and more than 100 threatened or endangered species.

Despite being in its infancy, the Everglades to Gulf Conservation Area embodies all the qualities that make the Refuge System such a special network of public lands. It was established, first and foremost, to conserve fish, wildlife, plants, and their habitats. It is the product of years of collaboration between the Service and diverse partners and stakeholders to address a shared conservation concern. It will support local communities, who benefit from healthy fish and wildlife populations, by providing opportunities for outdoor recreation, stimulating local

economies, and keeping working lands working. Finally, it will contribute to broader efforts across the landscape to protect wildlife corridors and enhance climate resilience for wildlife and communities, amplifying its conservation impact.

This concept of individual refuges supporting healthy ecosystems at both the local-and landscape-level is what the BIDEH proposal is all about. The National Wildlife Refuge System Improvement Act (Improvement Act), which was championed by stakeholders across the ideological spectrum, and enacted by Congress with near unanimous support in 1997, directed the Secretary of the Interior (Secretary) to “ensure that the biological integrity, diversity, and environmental health of the Refuge System are maintained.” This important management directive (BIDEH mandate) has shaped the Service’s administration of the Refuge System over the past two decades, considered along with individual refuge purposes and the Refuge System’s broader mission.

At the same time, the threats facing the Refuge System have evolved significantly over the past 20 years. National wildlife refuges are experiencing the unavoidable negative effects of climate change while continuing to face other stressors, such as invasive species and disease. The evidence of these impacts can be seen at refuges in your districts and across the country. These threats erode the Service’s ability to achieve the Refuge System’s conservation mission. Simultaneously, the Refuge System and the healthy ecosystems it protects, are increasingly vital to addressing climate change, biodiversity loss, and boosting climate resilience. By restoring and conserving wildlife habitat across the country, the Refuge System reduces vulnerability to coastal flooding, erosion, drought, and catastrophic wildfire.

Supporting refuge managers in addressing these contemporary conservation challenges requires modern tools and guidance. Updating our implementation of the BIDEH mandate through new regulations and policy revisions is one way that we are working to support conservation throughout the Refuge System. The Service’s BIDEH proposal will provide a more consistent, science-based, and transparent approach for upholding ecological integrity across the Refuge System. Through the proposal, we seek to ensure that units of the Refuge System meet their individual purposes and collective mission. This will ensure that national wildlife refuges remain strongholds of biodiversity and lynchpins to conserving America’s wildlife heritage for future generations.

Building the Refuge System

To understand the why the Service is updating its implementation of the BIDEH mandate, it is important to understand why the Refuge System was established and what forces over the past century have shaped it into the system it is today.

This vast network of public lands and waters got its start on a tiny spit of land in the brackish waters along Florida’s Atlantic coast, where, at the turn of the twentieth century, poaching was driving steep declines in populations of pelicans, herons, egrets, and other birds. The demand for feathers was so high that they were reportedly worth more than gold. Concerned citizens, researchers, and conservation organizations sought to address this conservation crisis by advocating for the protection of Pelican Island – a five-acre mangrove island that served as one of the last remaining breeding grounds for brown pelicans on Florida’s east coast.

Working together, these conservation advocates persuaded President Theodore Roosevelt to take executive action designating Pelican Island as a federal bird reservation in 1903. The protection of this tiny bird reserve – a precursor to today’s national wildlife refuge – marked the first time that the federal government set aside land for the sake of wildlife.

This idea of designating public lands as places where wildlife comes first caught on, catalyzing the growth of similar wildlife reserves across the country. By the end of his administration in 1909, President Roosevelt had established more than 50 wildlife reserves. Congress also took action to expand this loose network of protected wildlife habitats.

Through the mid-1900s, this network of conservation lands continued to grow as landmark conservation laws like the 1934 Migratory Bird Hunting and Conservation Stamp Act, championed by hunters, and the Fish and Wildlife Act of 1956 gave the Service the authority and funding to acquire lands for national wildlife refuges. In response to growing recreational pressures, the 1962 Refuge Recreation Act required that any recreational use of a national wildlife refuge be compatible with the primary conservation purpose for which the refuge was established.

In 1966, Congress took action to formally establish the Refuge System. The National Wildlife Refuge System Administration Act of 1966 (Administration Act) laid the groundwork for the Service’s administration of the Refuge System and recognized the need for disparate wildlife refuges to be administered under a unified umbrella. While the Administration Act provided an overarching framework for management of the Refuge System, it failed to unify its units under a single mission or provide clear guidance as to *how* the Refuge System should be administered as a national conservation network.

In the decades to follow, this lack of clear guidance resulted in the growth of major management challenges across the system. The conservation purpose of many national wildlife refuges was compromised as they came under increased pressures for uses that were incompatible with wildlife conservation.

By the 1990s, activities that were incompatible with the wildlife conservation purposes had become common across the Refuge System. Various studies, reports, and lawsuits highlighted the widespread growth of the incompatible uses on the Refuge System, with a 1989 Government Accountability Office Report finding that at least one incompatible use was occurring on nearly 60 percent of the nation’s wildlife refuges. These reports emphasized that without stronger legal mandates to shield national wildlife refuges from external pressures, the integrity of the entire Refuge System was at risk.

In response to these challenges, a bipartisan coalition that included Members of Congress, the Executive Branch, and conservation and sportsmen’s organizations worked together to draft and pass the National Wildlife Refuge System Improvement Act – a visionary organic charter for the Refuge System.

The Improvement Act dramatically reformed and built upon the Administration Act. It established a statutory mission for the Refuge System to “administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources within the United States for the benefit of present and future generations of Americans.” It directed the Secretary, acting through the Service, to manage each refuge to fulfill the mission of the system, as well as individual refuge purposes. The Improvement Act also established a process for determining compatible uses of national wildlife refuges; recognized and gave priority to the “big six” wildlife-dependent recreational uses including hunting, fishing, wildlife observation, photography, environmental education, and interpretation; and provided guidance for refuge planning and strategic growth of the Refuge System. Notably, it also included directives for the Secretary’s administration of the Refuge System, including the BIDEH mandate.

Under the leadership of the late Congressman Don Young of Alaska and Congressman John Dingell of Michigan, the Improvement Act passed the House by a vote of 419 – 1 and the Senate by unanimous consent. It was signed into law by President Clinton in 1997. Even today, nearly 30 years later, the Improvement Act remains one of the strongest legislative charters for the guidance of nature reserves.

The Refuge System Today

The idea of designating public lands and waters where wildlife comes first has resulted in the growth of what is now the largest and most diverse network of conservation lands and waters in the world: the Refuge System.

Since 1903, the Refuge System has grown to include 571 national wildlife refuges, 38 wetland management districts, and 5 marine national monuments, the latter of which the Service co-manages with the National Oceanic and Atmospheric Administration. Encompassing more than 96 million land acres and 760 million acres of ocean and submerged land, the Refuge System spans 12 time zones as it stretches from the U.S. Virgin Islands to Guam, with at least one unit in every U.S. state and territory.

This vast network of public lands and waters is home to more than 800 species of birds, 220 species of mammals, 250 species of reptiles and amphibians, and 1,100 species of fish, supporting incredible biodiversity. The Refuge System’s protected landscapes are especially important for imperiled species. National wildlife refuges are home to more than 380 threatened and endangered species, some of which cannot be found anywhere else in the world.

We need look no further than our own backyards to appreciate the incredible array of species and landscapes that the Refuge System protects. The Hart Mountain National Antelope Refuge in Oregon, which was established to protect the pronghorn antelope, conserves extensive sagebrush habitats and is home to iconic species like the pronghorn, bighorn sheep, and greater sage-grouse. Just a stone’s throw away, the Humboldt Bay National Wildlife Refuge in northern California protects a mosaic of mudflats, eelgrass beds, salt marsh, and other habitats. This diverse, connected landscape provides vital habitat to hundreds of species of shorebirds, mammals, fish, and marine invertebrates. Across the country, Virginia’s Chincoteague National

Wildlife Refuge has been designated a Globally Important Bird Area for the variety of migratory waterfowl, shorebirds, and other birds it supports.

It's not only fish and wildlife that seek refuge in these special places: so too do people. With more than 100 wildlife refuges within an hour's drive of major cities, the Refuge System provides access to nature for the more than 80 percent of Americans who live in and around cities. For those looking to hunt, fish, hike, bird, or simply enjoy the solitude of nature, the Refuge System provides abundant, high-quality opportunities for all Americans to get outside. National wildlife refuges also play an important role in supporting local communities. It is estimated that annual visits to the Refuge System generate more than \$3.2 billion for local economies and support 41,000 jobs. Further, by protecting and restoring wildlife habitat, national wildlife refuges help protect coastal communities from storms, reduce wildfire risk, improve air and water quality, protect cultural resources, and more.

The bottom line: protecting public lands and waters where fish and wildlife can thrive helps people thrive too.

Addressing Conservation Threats

As the scale of the Refuge System has evolved over the past century, so too have the threats facing our nation's fish and wildlife.

Climate change poses a profound and growing threat to America's fish, wildlife, plants, and their habitats. Climate change impacts, including increasing land and water temperatures, rising seas, increasingly frequent and severe storms, catastrophic wildfires, and extended droughts, are occurring more often, and causing more damage than any time in recorded human history. These impacts are driving transformational changes in ecosystems, impacting when and where food, water, and shelter are available to wildlife. Plants and animals vary in their ability to respond to these impacts, with many already facing increased risk of extinction as ecosystems change faster than species can adapt.

Over the past few decades, national wildlife refuges have begun to experience the effects of climate change while also continuing to contend with other stressors like habitat loss, disease, and invasive species. At Kenai National Wildlife Refuge in Alaska, warmer and drier conditions have brought more beetle infestation and fire disturbance to spruce forests, which can no longer regenerate. A savannah grassland is replacing these forests, altering the region's historic ecosystem. At Colorado's Arapaho National Wildlife Refuge, small mammals like the pika are moving higher and higher up the mountains to beat the heat. Rising seas are eroding important nesting habitat for the endangered loggerhead sea turtle at Cape Romain National Wildlife Refuge in South Carolina and for nesting birds at Breton National Wildlife Refuge in Louisiana.

Taken together, these stressors are driving major losses in biodiversity and making it harder for the Refuge System to achieve its conservation mission. At the same time, the Refuge System is becoming an integral component for addressing those very threats. As fish, wildlife, and plant populations shift to contend with the climate change and other stressors, the Refuge System's healthy, interconnected ecosystems are vital for building and supporting species resilience.

Addressing these contemporary challenges and seizing on the opportunity to increase the resilience of wildlife and ecosystems to conservation threats requires a modern approach.

Over the past decade, the Refuge System's responsibilities have grown, reflecting the importance of these public lands and their unique conservation mission to Americans. The Refuge System has added multiple new refuge units, millions of acres of marine national monuments, and new initiatives like the Urban Wildlife Conservation Program. Visitation to national wildlife refuges has grown almost 47 percent since Fiscal Year (FY) 2011, with the Refuge System hosting a record-breaking 68 million visits in FY 2023.

At the same time, funding to support the Service's stewardship of these important conservation lands and the services that they provide for the public has lagged. When adjusted for inflation, annual budgets coupled with rising fixed costs have resulted in a dramatic decrease in the Refuge System's operational capacity. This erosion of human capacity greatly reduces the Refuge System's ability to achieve its conservation mission at a time when conserving and restoring America's fish, wildlife, and plant resources is more important than ever. The Service's FY 2025 budget request includes \$602.3 million in funding for the Refuge System, which would help rebuild capacity to conserve species and habitats and to connect visitors with nature.

Another way that the Service seeks to address modern-day conservation challenges and opportunities is to equip refuge managers with improved tools and guidance for achieving the Refuge System's conservation mission in a changing world. The Service's BIDEH proposal is one such tool.

BIDEH

Over the course of the Refuge System's history, Congress has given the Service many tools to respond to the conservation challenges of the moment. The BIDEH mandate is perhaps the most innovative of these tools.

The BIDEH mandate borrows key terminology from conservation biology and emphasizes the need for the Service to consider how best to maintain the ecological integrity of the Refuge System in administering its individual units. This includes protecting the broad array of fish, wildlife, and habitat resources found on refuges and associated ecosystems. It brings a management focus to maintaining biodiversity across multiple scales and recognizes the need to identify and develop comprehensive strategies to address threats. The BIDEH mandate also demonstrates clear congressional intent that the Service should apply the latest science to maintain the ecological integrity of individual refuges and the System. The inclusion of this ecological mandate remains one of the most unique and distinctive features of the Improvement Act.

In 2001, the Service issued a policy (601 FW 3) that provided internal direction for agency implementation of the BIDEH mandate. The policy defined key terms and described the relationship between individual refuge purposes, the Refuge System mission, and maintaining ecological integrity. It provided refuge managers with guidance for maintaining existing levels of ecological integrity and determining when and how to restore ecological integrity, as well as guidance for addressing external threats to refuge ecosystems.

When we adopted this policy in 2001, we did not anticipate the extent of climate change impacts on national wildlife refuge ecosystems or the need to clarify in regulation our interpretation of, and authority to implement, the BIDEH mandate. More than two decades later, we have a need to provide guidance that assists refuge managers in better addressing these threats through the improved implementation of the BIDEH mandate.

BIDEH Proposal

On February 2, 2024, the Service published a proposal in the *Federal Register* to revise the existing BIDEH policy and implement a new rule that continues to guide the management of national wildlife refuges to maintain ecological integrity, as envisioned by Congress almost three decades ago. The BIDEH proposal codifies and standardizes the processes that many refuge managers already follow in making management decisions related to ecological integrity, and it provides critical clarification for balancing the many existing considerations and legal requirements affecting refuges.

With this proposal, the Service seeks to provide a more consistent, transparent, and science-based approach for upholding ecological integrity at individual refuges and across the Refuge System. We seek to codify our continued commitment to managing refuge ecosystems as components of larger landscapes and seascapes, particularly in the face of a changing climate. We also seek to emphasize that managing the Refuge System through a landscape-scale lens necessitates strong collaboration and coordination with partners and stakeholders at all levels. This proposal does not depart from managing refuges to achieve their individual conservation purposes; rather, it reinforces our commitment to protecting and enhancing biodiversity to support individual refuge purposes and the system's broader mission.

Our BIDEH proposal endeavors to achieve these goals by providing refuge managers with a framework that they can use to evaluate and implement management actions to connect habitats, protect vulnerable and migratory species, sustain ecological functions, increase resilience, incorporate indigenous knowledge, and adapt to climate change. The updated policy and new regulations accomplish these objectives in several ways.

Regulatory Standard

The BIDEH proposal provides, for the first time, a clear regulatory standard directing refuge managers to ensure ecological integrity. This proposed standard promotes management of the Refuge System as an ecologically interconnected network of lands and waters, supporting the Refuge System mission and individual refuge purposes. The proposal empowers refuge managers to holistically conserve refuge ecosystems; promote natural processes; and address the contemporary threats of climate change and other stressors.

It also instructs refuge managers to use their professional judgment and the best available science to ensure that management actions benefit wildlife conservation by contributing to ecological integrity. This mandate reinforces the importance of using the latest science to inform refuge management, with the intent of bolstering science-based management actions to combat climate change and biodiversity loss and promote ecological integrity.

Definitions

Both the proposed regulations and policy revisions include updated definitions for “biological integrity”, “diversity”, and “environmental health” that reflect the climate reality facing national wildlife refuges. In the 2001 BIDEH policy, the definitions for “biological integrity” and “environmental health” both reference “historic conditions.” Under that policy, historic conditions serve as a benchmark for maintaining and restoring ecological integrity, guiding refuge managers to tailor management activities on refuges to meet that historic condition.

While the new BIDEH proposal acknowledges the importance of historic conditions as a reference point, the revised definitions for each of these three key terms explicitly recognize the impacts of climate change and other stressors on refuge ecosystems. This change acknowledges that in many cases, sustaining historic conditions to maintain ecological integrity on national wildlife refuges may no longer be possible.

Management Directives

The proposal also features several key management directives for maintaining ecological integrity across the Refuge System, providing a framework through which refuge managers can determine and implement management actions in a consistent way to meet refuge purposes, ensure ecological integrity, and fulfill the Refuge System mission. These directives are based on five key principles for managing refuges and ecosystems and they emphasize the key themes of addressing climate change, using the best available science, and empowering refuge managers:

1. The proposed regulations empower refuge managers to address climate change impacts on wildlife and habitats using climate mitigation and adaptation strategies. This directive provides refuge managers with the flexibility to use different strategies to address climate impacts on species and habitats at their individual refuge that meet the proposed regulatory standard.
2. The proposed regulations direct refuge managers to conserve and connect habitats, emphasizing the importance of maintaining ecological connectivity to support biodiversity. In doing so, this directive prioritizes the use of natural processes to meet refuge habitat management and planning goals, but recognizes that in some cases, other strategies may be necessary to meet these goals.
3. The proposed regulations codify the Service’s ability to supplement natural processes to achieve wildlife management goals when habitat conditions and natural processes are insufficient. While the proposal prioritizes the use of natural processes to manage wildlife populations, this directive and the accompanying policy update clearly provide refuge managers with the flexibility to use additional management tools to meet conservation goals.
4. The proposed regulations integrate another mandate of the Improvement Act, one that can be a key component to ensuring the ecological integrity of some refuges: that the Service uphold and, where necessary, acquire water rights, in accordance with all relevant local, state, and federal laws. The inclusion of this directive in the BIDEH proposal emphasizes the importance of exercising refuge water rights, in accordance with

federal and state water laws, to meet refuge purposes and uphold ecological integrity. Securing water resources for wildlife refuges is especially important today, as climate change drives changes in water availability for wildlife.

5. The proposed regulations direct refuge managers to promote and maintain healthy soil, air, and water, recognizing the fundamental importance of non-living components of an ecosystem.

Impacts to Certain Management Activities

The BIDEH proposal also provides guidance for certain management activities and uses that have a particular propensity to affect ecological integrity. Specifically, the proposal addresses agricultural uses, predator control, conservation translocations, use of genetically engineered organisms (GEOs), invasive species management, pesticide use, and mosquito control.

We have heard concerns about this section of the proposal, including from Members of Congress. We recognize that some of our partners and stakeholders are concerned about how the guidance we provide for these management practices could limit public uses of the Refuge System. It is important to emphasize that this proposed rule does not supersede any of our other statutory obligations under the Improvement Act related to public uses and coordination with partners.

The proposal does not supersede the Improvement Act's requirement that the Service provide opportunities for wildlife-dependent recreational uses of the Refuge System. Hunting, fishing, wildlife observation, photography, environmental education, and interpretation remain the priority public uses of the Refuge System, and this proposal would not reduce opportunities for those uses.

The proposal does not supersede the requirements that the Service cooperate and collaborate with Federal agencies and State fish and wildlife agencies in managing national wildlife refuges, nor does it undermine the requirement that the Service coordinate with adjacent landowners.

The proposal does not alter the Improvement Act's statutory construct with respect to Alaska, which defers to the Alaska National Interest Lands Conservation Act (ANILCA) in times of conflict between the two laws.

Further, the proposal does not ban the use of any of the management practices discussed above on national wildlife refuges. As we state throughout the BIDEH proposal, we recognize that relying on natural processes alone may not always be sufficient to address the challenges facing national wildlife refuges. In some cases, refuge managers may deem it necessary to use tools like cooperative agriculture or native predator control to fulfill refuge purposes, meet the Refuge System's mission, and ensure ecological integrity. We appreciate that each refuge is different and recognize that the judicious application of each of these management tools can, in certain cases, reap benefits for wildlife and refuge neighbors and visitors.

However, given the threats facing refuge ecosystems and the potential for these management activities to further impact those ecosystems, it is important to provide increased clarity and

guidance for when, why, and how we apply these management practices. In all cases, we seek to emphasize the importance of using the best available science to inform decision-making and to ensure that ecological integrity remains a key consideration, along with individual refuge purposes, in making management decisions.

The core tenets of this guidance are not new. The proposal requires that these management activities are implemented consistent with the proposed management directives, meaning that they are subject to the principle that the Service defers to natural processes and favors management that mimics natural processes. This requirement is consistent with existing Service policy on Cooperative Agriculture and other refuge policies. For instance, the Service's policy on Cooperative Agricultural Use (620 FW 2) states that cooperative agriculture is only used as a habitat management tool where wildlife refuges cannot meet management objectives through natural processes.

Although we direct a default position for each of these management practices, these positions are largely consistent with existing Service policies and with the Refuge System's approach to permitting uses of national wildlife refuges. The regulatory standard provides refuge managers significant flexibility to implement these management activities as conservation tools on their refuge on a case-by-case basis, in accordance with the best available science. This flexibility will be increasingly important to support climate resilience in our land management practices.

The proposal also reiterates existing requirements to evaluate the necessity for and potential impacts of these proposed management activities on ecological integrity, in accordance with the National Environmental Policy Act (NEPA). Refuge managers already conduct NEPA, compatibility determinations, and refuge planning when deciding which management tools to use, and they should already be incorporating ecological integrity considerations into those procedures. This proposal does not change those processes or require a brand-new process for decision-making.

Ultimately, we believe that standardizing and clarifying the existing processes that refuge managers are required to follow in making decisions regarding best management practices and their influence on ecological integrity, will decrease workload, provide consistency, improve transparency to the public, and facilitate science-based decision-making.

Coordination with Partners and Stakeholders

Finally, the proposal emphasizes the need to collaborate with State and Tribal partners, adjacent landowners, and other stakeholders to ensure ecological integrity. National wildlife refuges are part of a larger tapestry of lands and waters, and achieving landscape-scale conservation necessitates close partnerships and coordination with partners and stakeholders. This proposal underscores our commitment to cooperate and coordinate with States, Tribes, and private landowners, all of whom are critical partners in our shared efforts to secure our nation's wildlife heritage.

Next Steps

The Service's BIDEH proposal is available for public comment through May 6, 2024, and we appreciate the robust public engagement in the proposal to date. The public comment period

provides an important forum for the Service to solicit feedback from our partners, stakeholders, and the public on our proposed actions, and we are actively working to ensure that all interested parties have an opportunity to share their feedback on this important proposal.

In response to several requests for an extension of the public comment period, including from members of this Committee, the Service extended the initial 30-day public comment period by 60 days. During this extended public comment period, we are continuing to explore additional opportunities to share information and answer questions about the proposal with any interested parties, including Tribes, States, sportspeople's organizations, and conservation organizations. We look forward to reviewing all comments once the comment period closes and using that input to guide our path forward.

Conclusion

Mr. Chairman, the Service appreciates the subcommittee holding this oversight hearing and your interest in the Refuge System. We look forward to continuing to work with you to achieve the Refuge System's mission and secure a future that is prosperous for fish and wildlife for the continuing benefit of the American people who we serve. Thank you again for the opportunity to appear before you today, and I would be happy to respond to any questions that you or other Members of the Subcommittee may have.