



**TESTIMONY OF NOAH MATSON
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DEFENDERS OF WILDLIFE
BEFORE THE HOUSE COMMITTEE ON NATURAL RESOURCES
SUBCOMMITTEE ON FISHERIES, WILDLIFE, AND OCEANS
HEARING ON
“RECENT BUDGET TRENDS FOR THE NATIONAL WILDLIFE REFUGE SYSTEM
AND IMPLICATIONS FOR MANAGEMENT ACTIVITIES”
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Madam Chairwoman and members of the subcommittee, I am Noah Matson, Vice President for Land Conservation at Defenders of Wildlife (“Defenders”). Founded in 1947, Defenders of Wildlife is a non-profit, public interest organization with over 1.1 million members and supporters across the nation and is dedicated to the conservation and restoration of wild animals and plants in their natural communities.

I greatly appreciate this opportunity to discuss the recent budget trends of the National Wildlife Refuge System. As the only federal land system in the U.S. dedicated primarily to the conservation of wildlife and habitat, the Refuge System is of paramount importance to Defenders and all Americans, especially the nearly 40 million people who visit and enjoy national wildlife refuges from Guam to Maine, from Puerto Rico to Alaska, each year. These visitors generate more than \$1.7 billion in annual sales to local economies, resulting in employment for more than 27,000 U.S. workers.

Defenders has been substantively involved in National Wildlife Refuge System law and policy for decades, and actively worked for passage of the landmark National Wildlife Refuge System Improvement Act of 1997 (“Refuge Improvement Act”). Defenders has also been actively involved in the formulation of national policy guidance issued since passage of the Refuge Improvement Act, including policies addressing planning, compatibility and appropriateness of secondary uses, biological integrity, diversity and environmental health, wilderness, and recreational use. In addition, Defenders has long been a leader in the Cooperative Alliance for Refuge Enhancement (CARE), a diverse coalition of scientific, conservation, and sporting organizations representing more than 14 million Americans. CARE works with Congress and at local, regional, and national levels to raise awareness of the critical budget crisis now facing the Refuge System.

After following Refuge System appropriations for nearly a decade, coupled with extensive research and visits to dozens of refuges, it is clear to me that persistent budget shortfalls coupled with lack of progress on important policies have led to a troubling erosion of the Refuge

System's ability to achieve its wildlife conservation mission and public outreach objectives. Recent assessments from the Government Accountability Office (GAO) and Management Systems International (MSI) strongly validate these observations. These reports have shed much-needed light on challenges that have been well known by refuge supporters for years. It is my sincere hope that discussion of their conclusions and recommendations will inform and guide meaningful changes necessary to reinvigorate our legacy to wildlife, the National Wildlife Refuge System.

Eleven years ago, Congress passed the sweeping National Wildlife Refuge System Improvement Act to reform a system of lands starving for a mission, critical management standards, and funding. Congress had the foresight to write a timeless piece of legislation that provides direction even in a changing world. Congress wanted the Refuge System to be managed using modern scientific programs. Congress wanted the status and trends of fish, wildlife, and plants to be monitored to detect changes, measure progress and to adapt management. Congress understood the importance of adequate water quality and quantity to the Refuge System. Congress understood the importance of strategically growing the Refuge System to meet its mission and "to contribute to the conservation of the ecosystems of the United States." Finally, Congress required each refuge to have a comprehensive conservation plan, developed with the input of the American public, to ensure that each refuge was managed in a way to best contribute to the mission of the whole system and to achieve its purpose.

Lack of funding and lack of leadership over the last several years has prevented the Refuge System from fulfilling this promise. According to MSI, the Refuge System is underperforming in most of these areas, inhibiting the Refuge System from addressing the threats of today, and leaving the Refuge System unprepared to meet the tremendous challenges of climate change.

I will focus my remarks on overall funding for the Refuge System and the ability of the FWS to address climate change, develop quality comprehensive conservation plans, strategically protect additional habitat, conduct inventory and monitoring programs, and maintain adequate water supplies for the Refuge System.

The MSI report included a comprehensive evaluation of many other aspects of refuge management. A comprehensive analysis of the MSI report is included as an attachment to my testimony.

Funding

In June 2008, a report was released by MSI entitled "*An Independent Evaluation of the Effectiveness of the U.S. Fish and Wildlife Service's National Wildlife Refuge System.*" This assessment was requested by the Fish and Wildlife Service ("FWS"), the agency that administers all national wildlife refuges. MSI's goal was to assess and make recommendations for each of the Refuge System's twelve strategic outcome goals, which were finalized in early 2007. The goals are broad but relate to the Refuge System's most essential elements of habitat and wildlife conservation, wildlife-dependent recreation, law enforcement, fire management, welcoming and orienting visitors, wilderness management, conservation planning, facilities maintenance, strategic growth, and maintaining organizational excellence.

In September 2008, a report was released by the Government Accountability Office (GAO) entitled “*Wildlife Refuges: Changes in Funding, Staffing, and Other Factors Create Concerns about Future Sustainability.*” The report details the funding situation for the Refuge System from FY 2002-2007 and elucidates trends at the System level, while emphasizing that particular individual refuges have been more heavily impacted than the national trends might suggest.

In general, I agree with the principal findings of these reports, though there is substantially more story to tell for several of the examined issues. I strongly agree with the MSI Report’s overarching finding that the dramatic decrease in actual purchasing power in recent years has led to the Refuge System’s not being able to “maintain its level of operational activity from one year to the next”, requiring that “services and personnel...be cut back.”

Many of these cutbacks have been truly devastating to our nation’s wildlife refuges. Some of the impacts now being felt across the country include a planned 20 percent reduction in refuge managers, biologists, environmental educators, and maintenance staff, with 350 jobs already eliminated and another 250 on the chopping block; scores of refuges being completely de-staffed; a crippling backlog of \$3.5 billion in shelved operations (\$1 billion) and maintenance (\$2.5 billion) projects; and visitors that increasingly find closed visitor centers and access roads, dilapidated observation platforms, overgrown hiking trails, eliminated visitor education programs, and cancelled hunting or fishing events. These same visitors will almost assuredly not encounter a law enforcement officer, as a deficiency of more than 500 refuge officers has led to a rise in illegal activities such as poaching, drug cultivation, sex crimes and various types of natural resource violations.

GAO found that by FY 2007, after adjusting for inflation, core funding was actually 4.3% above FY 2002 levels. However, viewing funding trends in this way does not fully capture the actual effect of essentially flat budgets on the Refuge System, or its actual budgetary needs. In recent years, the Refuge System needed an additional \$16 million each year simply to keep pace with rising fixed costs, such as salary adjustments, fuel, utilities and rental space. Recently, in response to soaring energy prices, the Refuge System recalculated this annual need to be approximately \$20 million. To put it simply, the Refuge System now needs an additional \$20 million each year simply to pay its staff, put gas in the trucks and keep the lights on. The GAO inflationary adjustment did not address this all-important need and therefore painted a somewhat misleading picture of recent budget trends.

In addition, these numbers mask the enormous needs facing the Refuge System. CARE estimates that the Refuge System needs almost \$800 million per year in operations and maintenance funding to adequately meet its mission. I have included CARE’s report, “*Restoring America’s Wildlife Refuges,*” as an attachment to this testimony to provide details of CARE’s analysis of Refuge System budget needs.

The MSI Report broadly concludes that declining, inadequate budgets coupled with increasing administrative requirements for field personnel has most heavily impacted three areas: the Refuge System’s ability to conduct adequate inventory and monitoring work; the grossly understaffed law enforcement program; and the rate of growth of the Refuge System, which the report notes has “declined markedly over the last five years.” I agree completely that deficiencies in these areas are seriously hamstringing the Refuge System’s potential to deliver on its conservation and public use goals. I would further add, however, that funding shortfalls and

glaring administrative neglect in recent years has created a host of other important challenges that warrant congressional attention, many of which I will discuss below.

Climate Change

From the walrus to waterfowl, global climate change is and will have profound impacts on wildlife and the habitats they depend on. Globally, scientists estimate that 30-40% of known species are at increased risk of extinction due to the impacts of climate change under current emissions. And if we fail to curtail our emissions that figure could rise to as great as 70%. In the United States, species have already begun to feel these effects. The Refuge System is particularly vulnerable, with over 160 coastal refuges at risk from sea level rise, and the bulk of the Refuge System's land in Alaska, which has already seen glaciers melt, boreal wetlands dry up, tree-lines move upslope, and warming-aided pests destroy millions of acres of forests. In addition, the Prairie Pothole region of the Dakotas and parts of Montana, Minnesota, and Iowa, America's "duck factory" and home to a large number of refuges, is expected to lose half of its lakes and ponds essential for waterfowl breeding.

It is instructive that the FWS did not ask MSI to evaluate the Refuge System's ability to meet the challenges of climate change. A GAO report released last fall concerning the federal resource agencies' ability to respond to the management implications of climate change found that federal resource agencies, including FWS "have not made climate change a priority, and the agencies' strategic plans do not specifically address climate change." So it is little wonder that the MSI report, which used the Refuge System's own strategic plan as the framework for the evaluation, seemingly ignored how climate change is affecting the Refuge System and failed to assess how existing Refuge System budgets and policies affect the Refuge System's ability to cope with the impacts of global warming.

The GAO report on climate change and federal resource agencies also found that FWS and other agencies lacked "specific guidance for incorporating climate change into their management actions and planning efforts." Finally, that report documented that FWS and other agencies lacked "computational models for local projections of expected changes and detailed inventories and monitoring systems for an adequate baseline understanding of existing local species. Without such information, managers are limited to reacting to already-observed climate change effects on their units, which makes it difficult to plan for future changes."

The failure of the MSI report to directly evaluate these and other factors associated with climate change leaves us with lingering questions regarding how the Refuge System is responding to this critical management challenge. However, the report made important observations related to planning, land acquisition, water quality and quantity, and inventory and monitoring that have direct bearing on the FWS ability to accomplish its mission and meet the environmental challenges facing the Refuge System, from habitat loss to climate change.

While the Refuge System faces enormous funding and policy deficiencies, the System's importance to wildlife will only be magnified as climate change and other environmental problems stress plants and wildlife and compromise habitats. Of all the federal land agencies, the FWS is perhaps best positioned to adapt to changing land-uses and climatic conditions. The Refuge System enjoys broad public support, has great flexibility in acquiring and restoring select

habitats, is nested within an agency that wields the essential tools for conserving wildlife across jurisdictional boundaries, and has a long history of active management that may become increasingly necessary. These positive attributes should be utilized and supplemented by providing the Refuge System with the resources it needs to address serious challenges like climate change, which must necessarily begin with better biological and hydrological monitoring.

I am confident that with Congress's input and oversight, the Refuge System can meet these serious challenges. It is clear that national policy direction is needed for the Refuge System and other federal resource agencies to strategically address the impacts of climate change. It is equally clear that the Refuge System, and its sister agencies, are already facing funding holes so large that a large commitment of additional resources is urgently needed to address the added threat of climate change. I urge Congress to work with the executive branch to meet these dual needs.

Comprehensive Conservation Plans (CCPs)

Comprehensive conservation plans are the chief vehicle for implementing the important provisions of the Refuge Improvement Act. CCPs are the public's chief means for understanding and participating in an individual refuge's management direction. According to the MSI report, the majority of refuge managers regard CCPs as useful tools "for clarifying objectives, guiding habitat management decisions, and clarifying public use decisions." CCPs are an essential and indispensable element of refuge planning, management and decision-making that should not be rushed, but rather developed with the highest possible quality and level of consideration.

The MSI Report notes that many FWS regions are not on pace to meet a congressionally imposed deadline for completion of all CCPs by 2012. To avoid missing the deadline, the Refuge System is working hard to implement a recently finalized plan entitled "*2012 Plan, An Action Plan to Meet Our Legislative Mandate.*" At the same time the FWS has crafted a plan to complete CCPs on time, however, the administration has cut the refuge planning budget in its budget requests in the last few years, and the current planning budget is 14% lower than in FY 2006.

Though the MSI report rated the FWS "effective" at completing "quality and useful CCPs on schedule and with full engagement of partners", there was little basis in MSI's methodology to rate the "quality" of CCPs. Defenders has analyzed and commented on dozens of CCPs over the last ten years, and have found that the quality varies widely, both between FWS regions and within regions. Because CCPs are designed to enhance public understanding of Refuge decision-making, in the future we would recommend that the FWS evaluate stakeholder and public perceptions of CCP quality and utility.

Of particular concern is that climate change is virtually ignored in nearly all CCPs completed to date. This finding is echoed in the 2007 GAO report on climate change and resource agencies. The fact that refuge managers continue to give high utility evaluations to CCPs despite the absence of climate change analysis is perhaps telling.

An analysis of the effects of climate change is a central and required element of refuge planning under the Refuge Improvement Act. For example, the FWS is required during the CCP process

to identify and describe the “significant problems that may adversely affect the populations and habitats of fish, wildlife, and plants within the planning unit and the actions necessary to correct or mitigate such problems.”

Helping wildlife adapt to a rapidly changing climate, which the Refuge System is well positioned to do with its wildlife-first mandate, will necessarily involve many facets. But thoughtful long-range planning certainly tops the list. Because global climate change is a significant problem that will adversely affect wildlife and habitat and may threaten the wildlife, ecosystems, and natural processes on refuges nationwide, the anticipated effects of climate change and prudent management responses should be carefully considered and described during the CCP process. As such, climate change needs to be added to FWS evaluative criteria.

Land Protection

According to the Forest Service, an estimated 6,000 acres of open space are lost each day, a rate of 4 acres per minute. Congress recognized the need for the Refuge System to protect additional habitat when it passed the National Wildlife Refuge System Improvement Act which directs the Secretary of the Interior to “plan and direct the continued growth of the System in a manner that is best designed to accomplish the mission of the System, to contribute to the conservation of the ecosystems of the United States, to complement efforts of States and other Federal agencies to conserve fish and wildlife and their habitats, and to increase support for the System and participation from conservation partners and the public.”

Despite this clear mandate strategic land and water acquisitions have ground to a near halt in recent years. The determination by MSI that the Refuge System has been “ineffective” at strategically growing the Refuge System is, while fully accurate, nonetheless a serious understatement. The MSI Report does an excellent job of cataloguing and summarizing the many ways in which the Refuge System fails in this goal, including problems with databases, political motivations and a bureaucratic mess of an appraisal processes.

The MSI Report finds that the significant decline in land acquisitions in recent years is due in part to political motivations, such as the administration sharply reducing the amount of acquisition funding it requests from Congress. For example, in FY 2008 the administration requested funding for only two properties, despite hundreds of available parcels and an obvious ecological need to buffer or connect existing conservation lands with new acquisitions.

Current development trends threaten to overwhelm the value that refuges and other conservation lands hold for wildlife and ecosystem integrity. Furthermore, current protected areas, including state and federal wildlife refuges and parks, were established in a manner that, at this time, does not benefit the whole of biodiversity or the maintenance of landscape-level ecological processes, as many of America’s natural areas exist as fragmented parcels, surrounded by land or water unsuitable for most wildlife. In addition, with the effects of climate change now bearing down upon already stressed fish, wildlife and plant populations, it is essential that we prioritize strategic land acquisition as the logical means to develop an interconnected system of conservation lands.

MSI observed that the very few parcels that are acquired in recent years typically “[do] not match the priorities identified by the Refuge System’s Land Acquisition Priority System

[LAPS].” This is partly due to the fact that the administration is not requesting projects, leaving Congress to make land protection decisions without the benefit of Refuge System priorities. There is also a disturbing level of divergence between acquisition requests made by the Refuge System and the priorities listed in the LAPS system. The MSI Report made clear that this divergence has now progressed to the point where the Refuge System “no longer appears to be using a transparent criteria-based system to prioritize land purchases.” Defenders believes that the Refuge System should develop and then work to implement a prioritization system that emphasizes the acquisition of parcels that contribute to greater habitat connectivity, provide buffers around core habitats, possess adequate water quantity and quality, and work to protect currently under-represented ecosystems and species – all of which should be in the context of climate change.

The MSI report also criticized the land appraisal process, stating it “cannot be relied upon to produce timely or accurate appraisals, [which] causes available land deals to be lost.” Since real estate appraisal responsibilities were removed from the various DOI agencies in 2003 and reestablished at the department level, rising costs and bureaucratic inefficiencies have cost the FWS many land acquisition opportunities. The move was made with the promise of greater efficiency, but since that time costs have doubled and response time has been agonizingly slow. For example, if a landowner wishes to sell property to an interested refuge, they can now expect to wait from nine to eighteen months before a final appraisal is completed. The FWS must first send its request to DOI’s Appraisal Services Directorate (ASD), which in turn accepts bids from a restricted number of contractors for appraisal services. A number of factors have resulted in higher overall cost since the transfer of the appraisal function to DOI, including the self-imposed limitation on the number of bidding contractors that drives prices up, and the higher average salaries of ASD employees. Further, final appraisals have an expiration date, or “date of value”, of one year. So after much bureaucratic paperwork and other delays, the FWS may only have a few months to organize funding and make an offer to the landowner before the appraisal expires. Clearly, this is a broken system in need of serious common-sense reform. The DOI should restore the appraisal function to the agencies for greater efficiency, cost savings, and response time. An added benefit is that staff at the agency level is often more connected with the resource base and more in touch with the lands they are working to protect and the mission they are striving to uphold.

I believe it is of utmost importance for Congress to respond quickly and aggressively to the political motivations that have led to a virtual cessation of land acquisitions for the Refuge System. Unfortunately, this has occurred at the very moment when American wildlife is under unprecedented pressure and in great need of additional habitats to ensure its sustainability and restoration. I recommend that Congress strongly support fully funding the Land and Water Conservation Fund and increasing the price of the Migratory Bird Hunting and Conservation (Duck) Stamp, the two primary land acquisition funding sources.

Inventory and Monitoring Programs

Unique in having a legislative mandate to monitor the status and trends of fish, plants, and wildlife populations, the Refuge System should serve as a model for holistic, science-based monitoring and the development of adaptive management responses. Collecting baseline inventory data and conducting monitoring on every wildlife refuge is essential in identifying conservation targets, detecting environmental changes, identifying the most vulnerable species

and habitats, developing objective criteria for prioritizing activities and decision-making, and developing, implementing, and evaluating plans using adaptive management principles. Unfortunately, as the MSI Report shows, the reality is that current inventory and monitoring efforts lack standardization, priority, and funding. According to the report, only 11% of refuge managers surveyed describe current inventory and monitoring efforts as “mostly or fully sufficient.”

The solution to this problem is part funding and part policy. Clearly, the Refuge System would benefit from more biologists. Over 200 refuges have no onsite biologist to speak of. This is a glaring problem for a system of lands designed for the conservation of fish, wildlife and habitat.

However, current inventory and monitoring efforts could be made more effective. As the MSI report recommends, monitoring efforts should be better coordinated and standardized and focus inventory and monitoring “systems toward the management needs of regional priorities.” Some regions of the FWS have begun this process but more needs to be done. In addition, standardization and coordination of inventory and monitoring systems should be accomplished in conjunction with other federal, state, tribe, academic, and private sector programs.

Water

Water is an essential ingredient to all life and, consequently, the life blood of the Refuge System. The MSI Report concludes it is “unable to evaluate” the Refuge System on its efforts to secure adequate water resources because so little information exists on which to gauge effectiveness. It states the System “does not currently operate a well defined and structured water resources program. There is currently no individual or office designated to coordinate the Refuge System’s water rights and water quality activities.” Coupled with the fact that the Refuge System provides no national water policy guidance or standardized monitoring protocol to its land managers, perhaps MSI could have reasonably concluded that the Refuge System is “ineffective” or at the very least, seriously underperforming in its congressionally mandated effort to deliver adequate water quantity and quality to all refuges. Viewed holistically, the Refuge System’s water troubles emanate from a failure to implement sound policy and protocol, but also the inability to adequately address these challenges due to a severe lack of resources.

Compared to other federal land management agencies, the Refuge System typically manages areas that are wetter, lower in elevation, and higher in biodiversity; often freshwater wetlands or coastal marshes. Unfortunately, with increasing water demands from agricultural and urban development, many refuges are struggling to secure enough water to meet their conservation targets. The authors of the Refuge Improvement Act showed foresight in addressing the emerging water crisis on wildlife refuges, a crisis now exacerbated by climate change, intense regional droughts and increasing human demand. The Act unequivocally states that “adequate water quantity and water quality” must be maintained to “fulfill the mission of the system and the purposes of each refuge.”

The Refuge System must develop a national water policy that standardizes protocol for water assessments and helps land managers secure and defend water rights on wildlife refuges. In the face of increasing human demand, droughts, floods, and altered timing and volume of water flows, the Refuge System needs to anticipate and appropriately plan for future water challenges. As part of this planning effort, the Refuge System should secure the hydrologists and equipment,

and foster the institutional commitment necessary to thoroughly catalogue existing water use along with current and projected needs. Currently, some FWS regions have no dedicated hydrologists or water monitoring programs at all. With such limited capacity, it is not surprising that many wildlife refuges, particularly in the East, have not documented current water usage or projected future needs. Documentation will be absolutely critical if refuge water rights are legally challenged as water supplies dwindle. Thorough documentation of usage is essential not only to defend one's rights, but also to assert what refuges actually need. Some of the necessary inventory and monitoring can be done in conjunction with partners, but all data needs to be standardized and accessible in a centralized database.

Consideration of water quality and quantity should be a component of all future land and water acquisitions. Priority should be given to parcels with high-quality habitat that also have senior water rights, where possible. It would also be prudent to identify overlap between willing sellers of water rights and areas where the Refuge System has identified a need for additional water. Of course, an inventory and monitoring of related factors will be necessary first. The DOI should encourage and provide guidance to all its land managers to work with neighboring landowners and upstream users on various water measures, including water conservation techniques and the improvement of water quality through, for example, the reduction of contaminants or sediment inputs. In some isolated cases, wildlife refuges themselves adversely impact water quality by releasing large volumes of nutrient-laden waters from freshwater impoundments into larger water bodies. For the FWS to achieve its goal of managing refuges within a landscape-level context, the Refuge System should develop habitat management strategies and population targets that minimize pollution of local watersheds.

Conclusion

One can look at the findings of the MSI and GAO reports as either half empty or half full. When you realize all the potential that is being lost due to budget and policy neglect by the current administration, it is certainly half empty. But when you think about how much the dedicated workforce is actually doing to keep this system together for wildlife, it is amazing what they have been able of accomplish on so little. The current situation, however, is unsustainable.

The Refuge System is truly at a crossroads. By next year, if funding does not turn around, the Refuge System is scheduled to lose twenty percent of its workforce, when compared to staffing levels just four years ago. But these losses are not of expendable federal bureaucrats; these are refuge managers, wildlife biologists who monitor endangered species such as Florida manatees, red wolves, and whooping cranes, interpretive rangers who teach and guide schoolchildren, and essential maintenance personnel who keep each refuge functioning smoothly. Without these people, America's Refuge System must continue to cut educational programs, eliminate hunting and fishing access, close offices, allow equipment and visitor infrastructure to fall into disrepair, and significantly reduce management and monitoring of wildlife and non-native, invasive plants.

When wildlife refuges have insufficient staff, it affects activities outside the refuge boundaries. Refuge staff are unable to dedicate sufficient attention to threats beyond refuge boundaries, such as huge rafts of incoming marine debris, water rights issues, upstream water contamination, adjacent landfill sites, or planned commercial developments. Further, when staff levels are reduced to only one or a few staff per refuge, those people are unable to partner with other interested stakeholders, which dramatically and adversely affects volunteer involvement and

leveraging of additional dollars. For example, consider that the reasonably well-staffed San Luis Refuge Complex in central California often triples its annual budget through creative partnerships. With these extra resources, more trees are getting planted, invasive species are being eradicated, and refuge staff are better able to closely monitor external threats. This situation demonstrates how much is possible when sufficient staffing is available to capitalize on partnership opportunities, and how much is being lost at other wildlife refuges without adequate staffing.

The National Wildlife Refuge System is critical to the future of wildlife and wildlife-focused recreation in America. Refuges provide wildlife with comparatively intact tracts of land that serve as a “refuge” from human development and other pressures, and can serve as the backbone of a wider effort across the landscape to protect, restore, and connect wildlife habitat. As recommended by the MSI report, refuges should “become fulcrums for influencing conservation actions in larger landscapes.”

With an appropriate investment in resources and sound policy direction, I believe the Refuge System can be a fulcrum for conservation across the landscape to meet the conservation needs of today, and the serious challenges of climate and other global environmental changes ahead. In addition to dramatic increases in funding, I have outlined a number of actions that will improve the management of Refuge System including:

- Establishing a national strategy for the FWS and other resource agencies to address the impacts of climate change on wildlife and natural resources.
- Ensuring the quality of CCPs does not suffer in order to meet the Congressional deadline for their completion, and developing guidance for incorporating climate change into CCPs.
- Developing a strategic growth policy for the Refuge System to prioritize land protection efforts in the context of climate change and other threats to wildlife and habitat and increasing funding from the Land and Water Conservation Fund and Migratory Bird Conservation Stamp to support land protection.
- Standardizing and coordinating inventory and monitoring programs so they provide needed feedback on management actions and environmental change.
- Establishing a national water resources policy to ensure that the Refuge System is able to maintain the water quality and quantity it needs to accomplish its mission in the face of increased industrial, agricultural, and residential water withdrawals and climate change induced drought.

On behalf of Defenders of Wildlife, I thank you for the opportunity to share my perspectives on these critical issues. We look forward to working with this subcommittee and others in Congress on the policy reforms that are necessary to ensure the National Wildlife Refuge System reaches its full potential, and to invest in the Refuge System at a level commensurate with the remarkable benefits it provides to American wildlife, people and economies.