STATEMENT OF
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U.S. DEPARTMENT OF THE INTERIOR
SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES
"HEARING TO EXAMINE THE PRESIDENTIAL MEMORANDUM ON MITIGATION"

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Chairman Murkowski, Ranking Member Cantwell, and Members of the Committee, I am Michael J. Bean, Principal Deputy Assistant Secretary for Fish and Wildlife and Parks at the Department of the Interior (Department). It is my pleasure to testify before you today regarding the Department's policies and practices relating to mitigation and the recent Presidential Memorandum on Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment.

The Department is committed to facilitating responsible economic development, both on public lands and elsewhere, while protecting and conserving the natural and cultural resources that Americans cherish. Development and conservation are both essential to support a vibrant and sustainable economy. For decades, the Department has sought to achieve responsible, balanced development through the application of mitigation – seeking to first avoid or minimize adverse impacts to resources of concern though careful siting and innovative design features, and then to compensate for residual impacts to those resources though corresponding offsets. In partnership with other federal agencies and states, the Department has deployed innovative mitigation measures to address some of our most significant resource challenges including large-scale oil and gas development, solar energy generation, and most recently, the conservation of the greater sage grouse. The Department has issued policy direction to ensure that mitigation efforts follow consistent principles and standards throughout its programs and across all lands, and guidance so that the Department can better support responsible economic development, in a manner consistent with both our conservation mission and as the effective steward of many public lands and resources.

Background: A Brief History of Mitigation Policy and Practice

The Department has far-reaching management responsibilities across our nation's lands and waters. The Department serves as the steward for 20 percent of the nation's lands, oversees the responsible development of over 20 percent of U.S. energy supplies, is the largest supplier and manager of water in the 17 Western States, and maintains relationships with over 500 federally-recognized tribes. Over 400 units of the National Park System preserve and protect nearly 27,000 historic structures and more than 700 cultural landscapes as well as nearly 100,000 archeological properties. The Department also oversees national trails, heritage areas, and sacred sites that intertwine public, tribal, and private land ownership. No less important, the Department is charged by law to conserve nearly 1,600 endangered and threatened species, and all of the nation's migratory bird species.

Given the inherent and sometimes difficult conflicts associated with the Department's responsibilities for both facilitating development and conserving the natural and cultural resources of the Nation's lands and waters, effective mitigation of the impacts of development is critical in enabling the Department to fulfill its statutory mandates. Those statutory mandates go back many decades. For example, the Fish and Wildlife Coordination Act of 1934 included requirements that were the first formal expressions in law of a duty to minimize the negative environmental impacts of major water resource development projects and to compensate for those impacts that remained – giving birth to the core ideas of what we now label as environmental mitigation.

The Coordination Act was a response to an era of big dam building and reflected a concern for the impact of those dams on salmon and other anadromous fish. As originally enacted in 1934, it required consultation with the Bureau of Fisheries (as the Fish and Wildlife Service was then known) prior to the construction of any dam to determine if fish ladders or other aids to migration were necessary and economically practical to minimize impacts on fish populations. It required as well the opportunity to use the impounded waters for hatcheries to offset impacts that could not otherwise be avoided.

The duties imposed by the Coordination Act were reinforced and expanded by the National Environmental Policy Act of 1969 (NEPA). Under NEPA and its implementing regulations, all federal agencies have a duty to assess the impacts of the major actions they propose to undertake and to consider reasonable alternatives to reduce or eliminate those impacts. The U.S. Fish and Wildlife Service, as the federal agency charged by Congress in the Fish and Wildlife Act of 1956 with the responsibility for management, conservation and protection of fish and wildlife resources, routinely recommends mitigation measures to other federal agencies through the NEPA process.

The experience gained in implementing the Coordination Act and NEPA informed the promulgation by the Service of a formal mitigation policy in 1981, a policy still in effect today. The following year, in 1982, Congress gave a significant new mitigation responsibility to the Service when it amended the Endangered Species Act (ESA) to authorize permits allowing the taking of endangered species incidental to otherwise lawful activities. Before it may issue such a permit, however, the Service must find that the permit applicant has developed a conservation plan that will mitigate the impacts of such taking "to the maximum extent practicable." These habitat conservation planning provisions of Section 10 of the ESA have proven sufficiently flexible to provide the basis for permitting both small, single-landowner development projects and broader regional conservation plans encompassing multiple projects undertaken by multiple landowners or project proponents.

Contemporary understanding of mitigation has thus benefited from decades of scientific advances and experience implementing the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), and other laws, in particular the Clean Water Act (CWA), Section 404 of which requires a permit from the Army Corps of Engineers for the discharge of dredged or fill material in wetlands and other waters of the United States. Because much of the lands in Alaska contain wetlands under the jurisdiction of the CWA, the Department works closely with the Army Corps of Engineers to ensure mitigation requirements are consistent with

CWA permitting. For other resources – such as key subsistence use areas on the North Slope of Alaska – the Bureau of Land Management (BLM) identifies appropriate mitigation actions during project design based on Departmental and agency policy, Resource Management Plans, Regional Mitigation Strategies, and through public review and engagement with state and local governments, tribes, Alaska Native corporations, and other stakeholders.

Improving Mitigation Effectiveness

Early mitigation efforts had a mixed record of success. That so many of the anadromous fish populations of the Pacific Northwest are now in danger of extinction is compelling evidence that the fish ladder and hatchery solution to the challenge of big dams did not prevent dramatic resource losses. In addition, an extensive literature[1] documents the frequent failure of early wetland compensatory mitigation efforts due to poor siting, inadequate monitoring, lack of long-term assurances, and other problems. The Corps of Engineers and the Environmental Protection Agency dealt constructively and broadly with these issues in a widely praised mitigation rule issued in 2008 by the previous administration.

That 2008 rule articulated many of the principles that have been subsequently incorporated into the Department's policies, improving consistency, transparency and predictability on how mitigation measures will be applied. For example, the 2008 mitigation rule ensures a level playing field among providers of compensation by holding all forms of compensatory mitigation to equivalent standards regardless of whether the compensation is provided by a mitigation bank, an in-lieu fee program, or by the permit applicant. The 2008 rule also focuses on how and where compensatory mitigation is planned, implemented, and managed to improve its ecological success and sustainability. The Department's policy, and bureau policies in development, will reflect and build upon this extensive history of mitigation as applied under Section 404 of the Clean Water Act.

In the fall of 2013, Secretary Jewell released Secretarial Order 3330, *Improving Mitigation Policies and Practices of the Department of the Interior*. Secretary Jewell directed the Department and each of its bureaus to follow a common set of principles for its mitigation decisions and to use a landscape-scale approach to guide the siting of compensatory mitigation efforts.

The Departmental policy issued last fall was one of many steps to be completed in response to Secretary's Order 3330, reaffirming the Department's authority to require and determine the scope of compensatory mitigation; establishing a goal for the conservation outcomes of mitigation investments; enumerating standards when implementing landscape-scale mitigation approaches, and; outlining responsibilities of bureaus and offices in fulfilling the goals established in SO 3330. Furthermore, consistent with Secretarial Order 3330 and the Departmental Policy, the Department's bureaus are also working to revise and finalize their mitigation policies to ensure they are responsive to emerging best practices and compatible with similar policies being developed by sister agencies and states. On March 7, 2016, the FWS announced proposed revisions to its mitigation policy to provide a broad and flexible framework to promote efficient and effective conservation measures that addresses the potential negative effects of development, while facilitating review and approval of development projects. The

public will have the opportunity to review and comment on the revised policy through May 9, 2016.

The Departmental policy was issued contemporaneously with issuance by the President of a Presidential Memorandum, *Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment.* This memorandum is consistent with and reinforced the mitigation work already ongoing at the Department, encourages private investment in restoration and public-private partnerships, and helps foster opportunities for businesses or non-profit organizations with relevant expertise to successfully achieve restoration and conservation objectives across all lands. The memorandum was designed to ensure consistency and transparency as agencies across the Federal government develop mitigation measures. The Department is committed to working collaboratively and sharing its experience in developing mitigation measures that provide certainty and predictability to project proponents. The Department is continuing its work with partner agencies, including the Department of Agriculture and Environmental Protection Agency, to share and adopt a common set of best practices to create a regulatory environment that allows us to build the economy while protecting healthy ecosystems.

As previously noted, concurrent with the release of the Presidential Memorandum, the Department issued formal policy and guidance to its bureaus and offices to best implement mitigation measures associated with legal and regulatory responsibilities and the management of Federal lands, waters, and other natural and cultural resources under its jurisdiction, using the best available science and landscape-scale approaches. The Departmental policy is intended to improve permitting processes and help achieve beneficial outcomes for project proponents, impacted communities and the environment. By implementing this policy, the Department will effectively avoid, minimize, and compensate for impacts to Department-managed resources and their values, services, and functions; provide project developers with added predictability and efficient, timely environmental reviews; improve the resilience of our Nation's resources in the face of climate change; encourage strategic conservation investments in land and other resources; increase compensatory mitigation effectiveness, durability, transparency, and consistency; and better utilize mitigation measures to help achieve our goals.

When assessing appropriate mitigation options, the Department relies upon a long established general mitigation hierarchy – first seeking to avoid impacts, then minimizing them, and then compensating for unavoidable impacts that could impair resource functions or values. The Department works proactively with project proponents to assist them in designing and siting projects so that proposed projects can have fewer adverse impacts to resources of concern. For example, for broad-scale siting, the BLM's Land Use Plan decisions, Rapid Ecoregional Assessments, and many geospatial files provide a means to identify areas, at a landscape scale, with little to no resource conflicts and where siting may result in fewer potential impacts. By avoiding adverse impacts in the first place, there is no less need to take further action to minimize or compensate for such impacts. As another example, the U.S. Fish and Wildlife Service's voluntary Wind Energy Guidelines provide a structured, scientific process for addressing wildlife conservation concerns at all stages of land-based wind energy development. They provide developers with resources to evaluate risk and make siting and operational decisions, resulting in fewer projects planned in high risk areas. They also incorporate best

management practices to assist wind energy developers in minimizing impacts to wildlife resources.

Frequently, however, it is not practical to avoid adverse impacts altogether. In these cases, the Department works with project proponents to minimize impacts by altering design features and implementing best management practices. Finally, the Department may consider implementing compensatory mitigation to benefit important, scarce, and sensitive resources when adverse impacts are expected to remain. Compensatory mitigation is not considered until after all appropriate and practicable avoidance and minimization measures have been applied, consistent with the general mitigation hierarchy and the 2008 Mitigation Rule. Together, cooperative work with the applicant and the implementation of the mitigation hierarchy can lead to successful development projects with improved outcomes for local communities, the project proponent, and the environment.

Deploying Effective Mitigation

The principles and approaches described above have been instrumental in achieving effective mitigation outcomes. For example, the Department has mitigated project impacts by responsibly siting solar development through the Western Solar Plan, which established Solar Energy Zones for development, identified key design features, and called for regional mitigation strategies to direct compensatory investments. In March 2014, the BLM released the first of these regional mitigation strategies for the Dry Lake Solar Energy Zone in Nevada. This strategy supported the BLM's first ever competitive offer of public lands for solar energy development, a sale that brought in $5.8 million in high bids from project developers. By identifying mitigation responsibilities upfront, the BLM provided increased certainty to project developers and increased the efficiency of its public review of these projects. Just recently, employing this mitigation approach, the Bureau completed this review and approved the three projects within 10 months, less than half the amount of time approval took under the previous project-by-project system.

Innovative mitigation approaches are also helping the Department and eleven Western states conserve greater sage-grouse habitat and support sustainable economic development across the West. This past September, the U.S. Fish and Wildlife Service concluded that the iconic rangeland bird did not warrant protection under ESA, due to the collective efforts by the states, partner agencies, and other partners. The U.S. Forest Service and BLM issued Records of Decisions finalizing 98 land use plans to outline a framework for sage-grouse conservation, including required mitigation for certain impacts to greater sage grouse habitat and the commitment to collaboratively develop mitigation strategies with states and partner agencies across the sagebrush landscape. These collaborative strategies will identify and direct mitigation investments to protect and restore sage-grouse habitat in areas of highest value. A similar cooperative partnership in Wyoming has led to the approval of the first greater sage-grouse mitigation bank earlier this year.

Similarly, a recent landmark agreement among the U.S. Fish and Wildlife Service, the BLM, and Barrick Gold of North America in Nevada established a conservation bank that allows the mining company to accumulate credits for successful mitigation projects that protect and

enhance greater sage-grouse habitat on the company's ranch lands. As a result, Barrick gained certainty that the credits from early conservation actions can be used to offset impacts to habitat from the company's planned future mine expansion on public lands. The Barrick agreement sets an important precedent for public-private mitigation partnerships and a model for the development of advance mitigation strategies at the federal and state levels. Moreover, the agreement is particularly noteworthy because it uses a transparent and repeatable methodology to measure both project impacts and the benefits of compensatory actions to offset them.

Last year in Alaska, the BLM issued a Record of Decision for the Greater Mooses Tooth 1 project, the first oil and gas development project on Federal lands in the National Petroleum Reserve in Alaska. The decision issued by the BLM provided for up to 33 development and injection wells on a single well pad and incorporated a responsible package of mitigation measures, including a suite of best management practices to avoid or minimize project impacts and a voluntary $8 million contribution from the project proponent into a compensatory mitigation fund. Inclusion of this mitigation package helped to solve significant resource issues, including ensuring that the permitted project minimized impacts to the subsistence use in the project vicinity for local communities. The compensatory mitigation fund provides an important opportunity to help bolster subsistence resources across the landscape. Following approval of the project, the BLM continues to work with local Native communities, industry, state and Federal agencies, and the public to develop a regional mitigation strategy that will increase predictability and certainty for future development while ensuring ongoing protection of important resources in the northeast corner of the 23-million acre reserve.

Fostering Private Investment

There are opportunities for private investment to play an important role in expanding mitigation options, reducing mitigation costs, and improving mitigation effectiveness. For example, as long ago as the 1980s, entrepreneurial investors began to recognize that it might be possible to anticipate and meet future mitigation needs under the Clean Water Act associated with future transportation projects, commercial development, or other activities. By restoring or enhancing wetlands in advance of such projects, they hoped to be able to offer project proponents a mitigation alternative in the form of purchasing credits earned for such anticipatory measures. From this recognition the concept of mitigation banking was born. In brief, a mitigation bank is a location-appropriate site where natural resources (typically wetlands or endangered species) are conserved (sometimes after being displaced at a separate location) and managed in perpetuity for the purpose of suitably offsetting unavoidable impacts to the same types of resources elsewhere.

Mitigation banking has come to play a very important role in the administration of the Clean Water Act. More than 1,400 mitigation banks have been approved by the Army Corps of Engineers. Details regarding each of these banks, as well as related "in-lieu fee" mitigation programs are available on the Army Corps of Engineers RIBITs web site (RIBITS stands for Regulatory In-lieu fee and Banking Information Tracking System). According to a 2015 study by the Army Corps' Institute for Water Resources, 41% of the projects for which compensatory mitigation was required during the period 2010 to 2014 met those mitigation requirements through the purchase of bank credits. Another 11% did so by using credits from in-lieu fee mitigation programs. Thus, project proponents clearly perceive these forms of compensatory

mitigation to be preferable to the traditional approach in which the permittee carries out its' own compensatory mitigation action. Although there are many fewer endangered species mitigation banks, such banks are becoming increasingly common for compliance with ESA as well.

Building on the Department's commitment to mitigation and public-private partnerships, and as a part of the President's Build America Investment Initiative, Secretary Jewell announced the establishment of the Natural Resources Investment Center (Center) to spur partnerships with the private sector to develop creative financing opportunities that support economic development goals while advancing our resource stewardship mission. The Center will facilitate this effort by building on current activity to incentivize private investments in the infrastructure and conservation of water, species, habitat, and other natural resources. The Center will use market-based tools and innovative public-private collaborations to increase investment in water conservation and critical water infrastructure, as well as promote investments that conserve important habitat in a manner that advances efficient permitting and meaningful landscape-level conservation.

The Center will harness the expertise of the Department's bureaus, including the Bureau of Reclamation, U.S. Fish and Wildlife Service, Bureau of Land Management, National Park Service, Bureau of Indian Affairs and U.S Geological Survey, and will tap external private sector experience to deliver on its objectives. The Center would be a critical tool for outreach and ingenuity, ensuring that the policy frameworks and projects the Department is undertaking not only accommodate the various market forces at play, but act as incentives for market investment in restoration and conservation.

Conclusion

Advancing safe and responsible development and promoting the conservation of America's Federal lands and natural and cultural resources for generations to come is a shared responsibility for all of us. The Department is working to ensure mitigation is applied consistently, predictably, and effectively, so that permit applicants and developers can proceed with projects that achieve their need while protecting our Nation's valuable natural and cultural resources.

Thank you for your interest and for the opportunity to testify today, I am happy to answer any questions.

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[i] Compensating for Wetland losses under the Clean Water Act, National Research Council (2001).