

TESTIMONY OF CYNTHIA DOHNER, REGIONAL DIRECTOR, SOUTHEAST REGION, U.S. FISH AND WILDLIFE SERVICE, DEPARTMENT OF THE INTERIOR, BEFORE THE SENATE ENVIRONMENT AND PUBLIC WORKS SUBCOMMITTEE ON WATER AND WILDLIFE, REGARDING ASSESSING NATURAL RESOURCE DAMAGES RESULTING FROM THE BP/DEEPWATER HORIZON OIL SPILL DISASTER

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Chairman Cardin and Members of the Subcommittee, I am Cynthia Dohner, Regional Director of the U.S. Fish and Wildlife Service's (Service) Southeast Region and the Department of Interior's Authorized Official for the Natural Resource Damage Assessment and Restoration process in the BP/Deepwater Horizon oil spill.

I appreciate the opportunity to appear before the Subcommittee today to testify on the process for assessing damages to natural resources resulting from the BP/Deepwater Horizon oil spill.

Before I begin my statement, I would first like to extend my condolences to the families of those who lost their lives, to those injured in the explosion and sinking of the Deepwater Horizon oil rig, and to those whose livelihoods and communities are being devastated by this oil spill.

The magnitude of the BP/Deepwater Horizon oil spill is unprecedented in the United States and could result in unparalleled injury to the Gulf of Mexico's ecosystem, and its vast and diverse natural resources. Assessments are underway to quantify impacts to numerous species - some of which are threatened or endangered - across five states and along thousands of miles of shorelines and hundreds of thousands of acres of sensitive and critical wetland habitats in wildlife refuges and national parks. The nature and extent of injuries to natural resources, especially in the marine environment, remains uncertain and the full impact of the oil spill likely will not be known for decades.

Response and the Natural Resource Damage Assessment and Restoration Program

When an oil spill occurs, response efforts and the natural resource damage assessment and restoration (NRDAR) process under the Oil Pollution Act and its implementing regulations begin immediately. The U.S. Coast Guard leads response activities related to marine and coastal oil spills while the U.S. Environmental Protection Agency is the lead for inland or hazardous waste spills. These agencies are supported by U.S. Department of the Interior through the U.S. Fish and Wildlife Service, National Park Service, Bureau of Land Management, Bureau of Indian Affairs, the U.S. Department of Commerce through the National Oceanic and Atmospheric Administration, and agencies or officials from Louisiana, Mississippi, Alabama, Florida and Texas. Typically the responsible party also is involved in the response. Response efforts focus on cleaning up or removing the oil to reduce or eliminate the risk to human health and the environment. In certain cases, efforts to restrict oil contamination or migration have the potential to adversely impact the environment. The Service, in coordination with other federal and state

agencies, is very involved in evaluating these projects with the intent of ensuring that adverse impacts are avoided to the maximum extent practicable.

But these response efforts may not fully restore injured natural resources or address the public's lost use of the resources. The NRDAR process focuses on identifying injured natural resources, determining the extent of the injuries, recovering damages from those responsible, and planning and carrying out natural resource restoration activities to pre-spill conditions. NRDAR focuses on restoring the injured resources but also making sure the responsible parties compensate the public for the lost use of those resources. It involves federal and state agencies, and Tribal governments, acting as "trustees" on behalf of the public for those natural resources under their legal jurisdiction. The Oil Pollution Act (OPA) of 1990 was passed in the wake of the *Exxon Valdez* disaster to provide specific legal authority for addressing the consequences of oil spills, including providing trustees with the authority to carry out the responsibilities of NRDAR.

Although the response and NRDAR processes occur independently, assets and plans are coordinated and shared as appropriate, with the ultimate goal of cleaning up the environment, restoring injured natural resources and holding responsible parties liable for the associated impacts, including clean up and restoration.

Department of the Interior/U.S. Fish and Wildlife Service's Role in NRDAR

The Department of the Interior (DOI) is trustee for a large part of our nationally owned public lands and many natural resources. These include lands such as National Parks and National Wildlife Refuges; lands managed by the Bureau of Land Management; tribal lands and natural resources held in trust by the federal government; waters managed by the Bureau of Reclamation; and federally protected plants and animals such as migratory birds, marine mammals, marine turtles, and federally-listed threatened and endangered species. The agencies within the DOI responsible for the management of trust resources are the U.S. Fish and Wildlife Service, Bureau of Indian Affairs, Bureau of Land Management, Bureau of Reclamation, and National Park Service. DOI is currently pursuing approximately 550 NRDAR cases across the country and the Service serves as the lead DOI bureau in more than 95 percent of those cases.

Lands and natural resources under the trusteeship of the DOI are among the resources most impacted by the BP/Deepwater Horizon oil spill. A Department of the Interior Coordination Team, which includes representatives from the U.S. Fish and Wildlife Service, National Park Service, Bureau of Land Management, Bureau of Indian Affairs, U.S. Geological Survey and the Office of the Solicitor, is currently working to implement and further develop a long-range plan for coordinating NRDAR activities within the Department for the Deepwater Horizon oil spill, but also looking at ways of identifying and implementing - with our partner state and federal trustee agencies - shorter term NRDAR restoration projects as appropriate.

NRDAR Process

The NRDAR process involves three primary phases: 1) pre-assessment, 2) injury assessment and restoration planning, and 3) restoration implementation. During the pre-assessment phase,

trustees collect time-sensitive data to determine if any trust resources have been injured or are likely to be injured by the oil spill.

The injury assessment and restoration planning phase involves identifying and quantifying the extent and magnitude of injuries by conducting economic, physical and biological studies. During this phase trustees are also considering potential restoration options based on factors such as likelihood of success, technical feasibility, cost effectiveness, and restoration projects that may already be developed in regional restoration plans. This phase concludes with the trustees' selection of restoration projects following approval by the trustee council and with public input. These projects are designed to fully compensate the public for the injury to natural resources by restoring, rehabilitating, replacing, or acquiring the equivalent of injured natural resources to achieve the condition that would have existed had the oil spill not occurred, the impact of which will be reassessed throughout the restoration implementation phase and for decades after through a long-term monitoring plan. Examples of restoration projects include restoring bird breeding habitat, reconstructing wetlands and barrier islands, restoring fisheries, and increasing public awareness and access to natural resources. The responsible parties are liable for the cost of assessment and restoration work and often work cooperatively with the trustees during this process.

The final phase, restoration implementation, involves recovering damages for injured natural resources and using those damages to implement restoration projects. OPA requires the trustees to use funds obtained through a settlement or litigation to restore, replace or acquire the equivalent of the injured resources and the services provided by those resources. Injury to species and habitats is measured from the moment the oil impacts the natural resources until the injured resources are returned to their pre-spill or baseline condition. Determining the extent and magnitude of injury requires a rigorous scientific process that can take several years to complete. Many factors such as the amount and type of oil, where it is released, the nature of cleanup actions, the size of the impact area, and the sensitivity of the natural resources determine the amount of time it will take to complete the assessment. Nonetheless, the process is nimble enough to accomplish restoration projects even before the full assessment is completed, provided those projects prevent additional or ongoing injury, are reasonable, and approved by the trustees. These projects may be used to offset the total liability.

NRDAR Activities Related to Deepwater Horizon Oil Spill

Federal and state entities with natural resource trust responsibilities have initiated an NRDAR process to assess natural resource injuries caused by the spill and to identify appropriate restoration actions. To guide this process through the preliminary stages, the trustees have formed a Trustee Steering Committee to facilitate cooperation and coordination among the participating state and federal agencies. The committee includes representatives from Texas, Louisiana, Mississippi, Alabama, Florida, the Department of Commerce, and the Department of the Interior. Because they have jurisdiction over natural resources in the area, the Departments of Defense and Agriculture along with affected tribes in the Gulf are also invited to participate in the NRDAR action. A memorandum of understanding establishing the Deepwater Horizon Oil Spill Trustee Council that will ultimately oversee the steering committee and the NRDAR process is currently being developed.

Thirteen technical working groups have been established by the trustees based on broad resource categories that include natural resources, human use of impacted natural resources, and cultural sites. Each group is developing studies to assess injuries pertaining to its resource area taking into account impacts from the oil spill and response actions. In addition to these studies, the trustees are reviewing and, as appropriate, incorporating the vast amount of monitoring data on the Gulf of Mexico to better understand and assess injuries that may potentially result from the BP/Deepwater Horizon oil spill.

Bird Technical Working Group

The NRDAR trustees are in the review or implementation process for 11 study plans for birds. Some of these efforts, like the beach bird and aerial bird studies, provide data on a wide range of birds. Other studies focus on impacts to particular groups of birds, such as secretive marsh birds and colonial waterbirds, while one study is devoted to piping plover, a species on the federal list of threatened and endangered species. A twelfth study, focusing on wintering waterfowl, is currently being developed.

Water Column Technical Working Group

The long-term release of oil and dispersants in the open water of the Gulf has contributed to a complex exposure regime for biological resources (i.e., plankton, fish, invertebrates, turtles, mammals and birds) in the water column. The Water Column Technical Working Group is working to determine the fate and transport of the oil, taking into account the application of dispersants, both on the surface and by subsurface injections. Initial data collection has focused on physical and chemical characteristics of water, oil, dispersant, and possibly other response-related water additives, in both impacted and non-impacted areas. Physical and chemical measurements of temperature, salinity, dissolved oxygen, fluorescence, light, currents, and other conditions are being taken.

Fish Technical Working Group

The Fish Technical Working Group has the responsibility of evaluating injuries to fish, shellfish, and their supporting habitats. Due to the complexity of the Gulf fishery, this group has divided into several subgroups to evaluate injuries to various ecosystem components, such as coastal zone fisheries, deepwater fisheries, shellfish, and bottom-dwelling organisms. In addition to studies to assess broad fishery impacts, the trustees are developing plans to assess injuries to specific species of concern, such as threatened Gulf sturgeon and whale sharks.

Marine Mammals and Sea Turtles Technical Working Group

The Marine Mammal and Sea Turtles Technical Working Group is implementing plans for conducting aerial surveys of offshore marine mammals and sea turtles and assessing potential injuries to manatees. Plans have been developed for assessing potential injuries to turtles in the water, nesting females, eggs, and hatchlings. These plans focus on the loggerhead and Kemp's Ridley sea turtles and encompass nesting populations along the Gulf coast. In addition to impacts from oil, these plans address potential injuries from spill response activities.

Submerged Aquatic Vegetation Technical Working Group

Submerged aquatic vegetation are rooted vascular plants that, except for some flowering structures, live and grow below the water surface. They include seagrasses growing in the Gulf of Mexico and saline estuaries, as well as brackish and freshwater plant species. These plants provide food and habitat for many aquatic animals, help maintain water quality, and protect shorelines from erosion. Pre-impact samples and data within these vegetation communities are being collected to document pre-oiling conditions, where possible, for the purposes of assessing potential injury.

Coral Technical Working Group

Both shallow and deep-water corals from Texas to Florida may be affected by the spill. This includes the Florida Reef Tract, the most extensive living coral reef system in North American waters and the third largest system in the world, extending approximately 530 km from Martin County, on the Atlantic coast, to the Dry Tortugas, west of Key West, in the Gulf of Mexico. Several coral reef monitoring programs have existed for years and those efforts help form the foundation of our current work to document pre-impact condition of the corals.

Shoreline Technical Working Group

Shoreline assessment provides information on the degree and extent of oiling on intertidal shoreline habitats and vegetation. The primary intertidal shoreline habitats being examined include marsh, dune, beach, man-made structures, mud and tidal flats, debris, rip rap, and forested wetlands. We expect to use this information to develop a statistically rigorous sampling effort to determine the magnitude of injury to natural resources in the intertidal zone. Shoreline assessments have been conducted on much of the Louisiana coast by state and federal trustees, and efforts are now increasing to assess shorelines in Mississippi, Alabama, Florida, and Texas.

Terrestrial and Freshwater Technical Working Group

The Terrestrial and Freshwater Working Group is responsible for assessing potential damage to natural resources above the mean high tide line, including terrestrial and freshwater habitats. Assessments are in development for terrapins, beach mice, otter, mink, alligator, crocodile, and possibly coastal dunes.

Human Uses Technical Working Group

The Human Uses Technical Working Group is responsible for the assessment of potential direct, human-use injuries related to this event, including impacts to outdoor recreation, commercial navigation, travel, and increases in market prices for consumer goods, such as seafood. We are currently implementing three studies – general shoreline use, recreational boating, and shoreline fishing. We are also collecting information on navigation delays from port authorities, seafood markets on prices, fishery closures, public health advisories, and changes in numbers of visitors.

Chemistry Technical Working Group

The Chemistry Technical Working Group has developed a Quality Assurance Plan (QAP) and protocols for sampling and fingerprinting water, stranded oil, and oil in vegetation or on other environmental media for the purpose of documenting the presence and current condition of oil believed to be from the BP/Deepwater Horizon event on shorelines in different habitats in the Mississippi River delta region. The number of samples collected will be commensurate with the

extent of oiling and/or conditions at each site. Samples collected by the trustees are being analyzed to determine the general and specific character of the oil in accordance with the QAP and data will be delivered in accordance with the approved data sharing agreement between the trustees and BP.

Cultural Resources Technical Working Group

Most of the trustees' Cultural Resources Working Group efforts have focused on the compilation of information regarding archaeological sites, historic buildings, traditional cultural properties, historic or cultural landscapes, and traditional resource uses; conducting baseline resource inventories/condition assessments; developing protocols to document and treat different types of historic properties; and establishing a framework for consulting with other Trustees, the State Historic Preservation Offices, and Indian Tribes pursuant to Section 106 of the National Historic Preservation Act.

Data Management Technical Working Group

The Data Management Technical Working Group serves all resource groups by helping collect and securely store data gathered during NRDAR activities. The Group also provides data and reports to trustees.

Aerial Imagery Technical Working Group

The trustees are relying on a variety of aerial and satellite imagery to facilitate injury studies for many of the Technical Working Groups. DOI scientists have taken the lead in evaluating existing imagery, assisting in imagery interpretation, and identifying additional imagery needs.

The trustees are finalizing and implementing the first round of injury studies from data that was collected in the first few weeks of the spill. We are now planning for the assessment of future injuries that may result as seasons and species assemblages change. We also are developing additional studies to evaluate broad injuries across the Gulf of Mexico ecosystem.

The collective effort and integration of all technical working groups will provide a comprehensive picture of the nature, extent, and magnitude of natural resource injuries across the Gulf of Mexico ecosystem. Our comprehensive assessment will provide the basic information to guide Gulf-wide restoration efforts through the NRDAR process. The trustees plan to utilize existing restoration efforts underway throughout the Gulf to achieve the most expedient and beneficial restoration of the ecologically and economically important Gulf of Mexico ecosystem.

The NRDAR process underway in the BP/Deepwater Horizon oil spill is built upon many of the lessons learned from the 1989 *Exxon Valdez* spill in Alaska. For example, trustees are posting study plans on the internet to increase transparency; conducting frequent calls with study plan leaders, lead scientists and others to assist in developing a broad, integrated ecosystem perspective; and reviewing the myriad restoration possibilities in the Gulf to ensure injury assessment studies are providing relevant data related to these possibilities.

Funding Mechanism

At the beginning of this oil spill, DOI bureaus, including the U.S. Fish and Wildlife Service, National Park Service, and U.S. Geological Survey, immediately deployed personnel and resources to collect pre-spill or baseline data necessary for an NRDAR claim. The Bureau of Land Management and Bureau of Indian Affairs later joined these efforts. There are three main funding mechanisms for the NRDAR process: (1) collection through payments by the responsible parties; (2) reimbursements from the Oil Spill Liability Trust Fund (OSLTF); and (3) reimbursements from DOI's NRDAR.

Funding Committed by BP as a Responsible Party:

In May 2010, BP provided \$45 million to state and federal Trustees for the beginning phase of the injury assessment process. DOI and NOAA were allocated a total of \$20 million in advance funding. The two agencies agreed to split the \$20 million evenly. So far, DOI has obligated most of its \$10 million for personnel costs, equipment and supplies, and contracts with outside experts to implement assessment plans. Recently, the NRDAR trustees asked BP to replenish the advance funds and are now providing them with a preliminary accounting of funds obligated to date.

In addition, the Service has established a specific account through our reimbursable process for these NRDAR activities. The establishment of this account will ensure that the damage assessment activities that the trustees determine are needed to document injuries and determine the amount of restoration required will be able to continue moving forward in a timely fashion. Funding these extraordinary efforts is challenging for agencies within DOI.

OSLTF Funding:

In addition to DOI's request to BP to replenish its advance funding, DOI also requested and received a commitment of roughly \$4.7 million from the OSLTF. DOI has obligated more than \$1.5 million in funding of its \$4.7 million request from the U.S. Coast Guard managed OSLTF to support our initial baseline data collection along with agency and state coordination work, and individual bureaus also spent some of their base funding to support initial work. DOI has further requested an additional \$15 million from the OSLTF to continue funding assessment activities. We expect that BP and the other responsible parties in the Deepwater Horizon oil spill will be held accountable for all reasonable assessment costs including those provided by the OSLTF, the DOI NRDAR fund, and by individual DOI bureaus

DOI NRDAR Funding:

To date, DOI bureaus have received \$900,000 in funding from the DOI NRDAR fund. An additional \$5 million from the DOI NRDAR fund has been provided for DOI's Deepwater Horizon Damage assessment activities. DOI's NRDAR fund, which receives both Congressional appropriations and recovered assessment costs from previous NRDAR cases, has made significant funding commitments to other important NRDAR cases being pursued by DOI bureaus. However, \$6 million is being held in reserve so that it can be directed to this event.

Ultimately, we expect that BP and the other responsible parties in the Deepwater Horizon oil spill will be held accountable for all reasonable assessment costs including those provided by the OSLTF, the DOI NRDAR fund, and by individual DOI bureaus.

Third Party Involvement

An NRDAR is fundamentally a legal claims process and litigation must be anticipated. Although more than 95 percent of NRDAR claims are resolved cooperatively with court approved settlements, the remaining five percent are resolved through litigation.

In an effort to ensure the most scientifically robust and complete assessment, the trustees regularly engage a variety of scientific and subject matter experts based on the type of expertise needed. For example, the Service often hires non-governmental bird experts to work with its staff experts in developing bird injury studies. These experts provide valuable input and can help provide an accurate and thorough assessment of the injury. The Service encourages these experts to publish their findings in peer reviewed journals.

Trustees actively seek quality information and data from sources inside and outside the government related to plan development and data interpretation. Data generated by experts outside of the NRDAR process are often valuable in establishing baseline conditions, accurately quantifying the full extent and magnitude of the injuries, and developing properly scaled restoration options. Finally, restoration under the NRDAR process can be and often is fully integrated into ongoing or regional planning efforts, and can be used to enhance or complement those efforts.

Conclusion

The scope and magnitude of natural resource injuries and other impacts resulting from the BP/Deepwater Horizon oil spill are extraordinary and still not fully known. We do not know at this time the extent of the injuries, but we believe that in all likelihood, they will affect fish, wildlife and plant resources in the Gulf, and possibly in other areas across the country, for years or more likely decades to come. This spill has illuminated the need to collect better information about wildlife, fisheries, physical processes, and habitats, not only during a spill event, but in advance of potential oil spills and after a spill is contained, to quantify more effectively the damage and understand the cumulative effects of the stressors that act on the Gulf Coast ecosystem.

Finally, I would like to underscore how proud I am of our employees and volunteers, and the extraordinary effort they are putting forth to respond to this unprecedented event and their continuing work and dedication to protect and restore the American public's natural resources of the region.

Mr. Chairman and Members of the Subcommittee, thank you for the opportunity to testify today, and I will be happy to answer any questions you may have.