Written Statement of
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Mister Chairman and members of the subcommittee, my name is Noah Matson and I am the Vice President for Landscape Conservation and Climate Adaptation for Defenders of Wildlife. Thank you for the opportunity to provide input to the Subcommittee on "Oil and Gas Activities within Our Nation's Wildlife Refuge System." This is an extremely important issue facing the National Wildlife Refuge System and the incredible wildlife the Refuge System was established to protect and I appreciate the Subcommittee's interest in the issue.

I have been following this issue for almost 15 years. In 2000 I sent one of my staff to a number of national wildlife refuges in Louisiana to help Defenders of Wildlife better understand how and why oil and gas development occurs on national wildlife refuges and what the impacts of that development are. What my staff discovered was nothing short of shocking.

I have included a number of photographs from our visit to these refuges in Louisiana. As my staff toured these refuges with Fish and Wildlife Service staff, they discovered a brine spill near a well that refuge staff previously was not aware of. My staff came back with pictures of 55 gallon drums oozing black toxic chemicals; open waste ponds topped with sheens of oil; abandoned, rusting storage tanks; and rusted pipes and well heads that provided no confidence they would not leak in the future.

On many national wildlife refuges development of privately owned oil and gas minerals recounts the "wild west." The existing single paragraph of Fish and Wildlife Service regulations pertaining to private mineral rights on national wildlife refuges is so full of qualifiers and discretion that it is completely inadequate for the Service to be able to reasonably manage surface activities connected with oil and gas exploration and development in order to protect the fish and wildlife values of

affected wildlife refuges, federal trust resources, federal property, and the health, safety and enjoyment of the visiting public.

Oil and gas exploration and development is extensive and is damaging refuge resources

According to the Fish and Wildlife Service, over 200 national wildlife refuges have existing oil and gas infrastructure including 103 refuges and 4 wetland management districts that have active oil and gas wells. In total there are more than 5,000 wells with almost 1,700 of those wells actively producing oil and gas. I consider these minimum figures. From my experience, and confirmed by the Government Accountability Office (GAO), the Fish and Wildlife Service does not have an adequate system for tracking oil and gas development within wildlife refuges.

St. Catherine Creek National Wildlife Refuge in Mississippi is high on the list of refuges with the most oil and gas wells, with nearly 500, over 60 of which are active. Oil and brine spills have led to significant soil and vegetation damage on the refuge. One such spill occurred in 1993, when a massive leak of briny water, pulled up from oil and gas operations, flooded 21 acres of sensitive coastal habitat. The salt levels left in the soil were high enough to cause acute and chronic affects to tree species and aquatic organisms that persist to this day.

More recently, in 2012, Hagerman National Wildlife Refuge in Texas experienced a leak of oilfield brine into a mature woodlands. The brine spill killed over 80 hardwood trees – two of these trees were estimated to be over 150 years old. The Fish and Wildlife Service estimated it would cost over $150,000 to restore the damaged habitat.

Just last month, the Service staff at the Catahoula National Wildlife Refuge in Louisiana discovered numerous spills and leaks at an oil production facility on the refuge. The Service is still assessing the extent and scope of the damage.

The impacts of oil and gas development are not limited to large spills – even frequent small spills can be deadly over time. According to the Service, a study of Atchafalaya and Delta National Wildlife Refuges in Louisiana found that "levels of oil contamination near oil and gas facilities are lethal to most species of wildlife, even though refuge staff were not aware of any large spills."

Overall, the impacts of oil and gas development on wildlife, ecosystems, and wildlife refuge management are well known and include:

- Destruction, degradation, and fragmentation of wildlife habitat through clearing and construction of wells, well pads, seismic lines, storage tanks and ponds, pipelines and other infrastructure and the movement of heavy drilling equipment across sensitive habitat.
- Leaks and spills of oil, brine, produced water, contaminated drilling muds, and other toxic chemicals that harm wildlife, vegetation, water quality, air quality and human health.
- Introduction of invasive species that compete with native plants, wildlife and habitat.
- Disturbance of wildlife during construction and operation of facilities.

- Conflicts with important wildlife refuge management activities, for example by inhibiting necessary prescribed fire operations near oil and gas facilities.
- Conflicts with other priority forms of public use and enjoyment of refuge resources like wildlife dependent recreational activities.

Taxpayers are being left with the cleanup bill

There at least 3,300 inactive wells on national wildlife refuges. A substantial proportion of those wells are likely abandoned, or will be abandoned, and in many if not most cases, the Fish and Wildlife Service does not have adequate assurances that the responsible party will properly plug the wells and reclaim the sites.

Let's assume conservatively for purposes of discussion that only 1,000 of these inactive wells are abandoned and orphaned – with no known operator. The state of Louisiana requires a $25,000 bond for operators of 1-10 wells. If you assume that it costs just $25,000 to plug and reclaim a single well, then taxpayers could be stuck with a $25 million bill from deadbeat drillers to cover restoration costs. The real experience of the Fish and Wildlife Service, however, suggests the costs of plugging and reclaiming well sites is much, much more.

At the Lower Rio Grande Valley National Wildlife Refuge in Texas, Fish and Wildlife Service staff spent 15 years negotiating with the Texas Railroad Commission, which governs oil and gas activities in the state, about plugging three abandoned wells on the refuge. In 2011 the abandoned well sites were finally cleaned up and equipment were removed from the refuge at the cost of $1.2 million – or $400,000 per well.

At St. Catherine Creek National Wildlife Refuge in Mississippi, refuge staff discovered a leaking oil well in 2012. The well had been improperly plugged and abandoned in 1983. The state's policy transferred responsibility for re-plugging the well site and cleanup to the current surface owner – the Fish and Wildlife Service. The Environmental Protection Agency (EPA) ultimately assumed jurisdiction and all costs of the cleanup because of its size. Re-plugging the well alone cost $95,000 (well above the $10,000 bonding requirements in Mississippi, or the $25,000 bonding requirement in Louisiana for a single well). Site restoration cost an additional $165,000. In total, it cost taxpayers $260,000 to cleanup, plug, and restore a single abandoned well site because of inadequate state and federal regulations.

As a well declines in productivity it is usually sold, often multiple times, making it difficult to track down responsible parties and enforce cleanup costs. Each subsequent owner is often a lower budget operation that is trying to squeeze the last drops of oil or natural gas at the least cost out of the ground. The last owners often disappear or claim bankruptcy.

The future restoration costs and liabilities of the 5,000 wells on national wildlife refuges will cost hundreds of millions of dollars. These costs should be borne by the private mineral owners and

operators. Existing federal and state regulations are not adequately protecting either irreplaceable national wildlife refuge resources or federal taxpayers from these liabilities.

Existing Federal and State Regulations are Inadequate

The examples I have provided of past damage to national wildlife refuges from private oil and gas exploration and development, and the lack of adequate financial assurances to properly manage, plug, restore and reclaim well sites once they have been abandoned, clearly demonstrate that the current system of state and federal oil and gas regulations applicable to national wildlife refuges is not properly protecting the surface resources that belong to the American people. States prioritize well site inspections, enforcement, and reclamation dollars to state and private surface lands above areas owned or managed by the federal government. And even if they could be expeditiously tapped, state bonds for oil and gas development do not adequately cover the full cost of plugging abandoned wells, pulling pipelines, storage tanks and other infrastructure, and restoring sites to natural habitat.

As of 2011, the Texas Railroad Commission had only 153 inspectors to monitor 263,233 producing oil and gas wells. In order to visit each well once per year, each inspector would have to visit seven wells a day – a near impossible task given travel times, necessary follow up on violations and a myriad of other factors. And visiting a well once a year is hardly adequate to ensure compliance with state standards. Other states have fewer inspectors per well. Relying on states to protect the property and wildlife interests of the federal government and the American taxpayer within national wildlife refuges simply will not work.

Similarly, the Fish and Wildlife Service's current grossly inadequate regulations, procedures, and capacity are not up to the task as well. For example, Upper Ouachita National Wildlife Refuge in Louisiana has over 1,000 wells – more than any other national wildlife refuge. Yet the refuge has no dedicated staff to manage that development, does not know the full extent of mineral rights owners, and does not require special use permits or operators to post a bond.

Basic information and procedures like this are not only essential to provide balanced and reasonable protection for the wildlife and recreational values that our national wildlife refuges provide, but they are customary on other land ownerships. Unfortunately, the Service has acted for far too long as if it has had no authority whatsoever to impose even minimal reasonable restrictions on private mineral development that are necessary to reduce serious harm to refuge resources. This is simply wrong, and we commend the Fish and Wildlife Service for finally recognizing they in fact have the authority and are willing to develop a thoughtful and comprehensive approach to protect the resources they were charged with protecting, while providing reasonable access to private mineral rights.

The Fish and Wildlife Service's single paragraph in the Code of Federal Regulations (50 CFR §29.32) regarding non-federal oil and gas development reads as follows (emphasis added):

> Persons holding mineral rights in wildlife refuge lands by reservation in the conveyance to the United States and persons holding mineral rights in such lands which rights vested prior to the acquisition of the lands by the United States shall, to the greatest extent practicable, conduct all exploration, development, and production operations in such a manner as to prevent damage, erosion, pollution, or contamination to the lands, waters, facilities and vegetation of the area. So far as is practicable, such operations must also be conducted without interference with the operation of the refuge or disturbance to the wildlife thereon. Physical occupancy of the area must be kept to the minimum space compatible with the conduct of efficient mineral operations. Persons conducting mineral operations on refuge areas must comply with all applicable Federal and State laws and regulations for the protection of wildlife and the administration of the area. Oil field brine, slag, and all other waste and contaminating substances must be kept in the smallest practicable area, must be confined so as to prevent escape as a result of rains and high water or otherwise, and must be removed from the area as quickly as practicable in such a manner as to prevent contamination, pollution, damage, or injury to the lands, waters, facilities, or vegetation of the refuge or to wildlife. Structures and equipment must be removed from the area when the need for them has ended. Upon the cessation of operations the area shall be restored as nearly as possible to its condition prior to the commencement of operations. Nothing in this section shall be applied so as to contravene or nullify rights vested in holders of mineral interests on refuge lands.

The qualifiers, lack of definition, and absence of any procedural requirements in this regulation render them virtually meaningless and stand in sharp contrast to the National Park Service's (NPS) comprehensive and substantive oversight of the same category of activities. Promulgated in 1979, and currently being updated, NPS's rules at 36 C.F.R. § 9.30 establish a detailed and precautionary approach to the approval and subsequent management of non-federal oil and gas operations on NPS lands. At the core of this program is the requirement that oil and gas operators submit a detailed plan of operations, with precise information concerning the location, extent, and duration of proposed activities and associated infrastructure; the affected environment and anticipated environmental consequences; technologically achievable alternatives to the proposed operations; measures to protect surface and subsurface waters; and many other standards. NPS also retains the authority to reject inadequate or incomplete plans of operations.

Additionally, NPS's regulations require specific authorization for any use of water within NPS lands, establish substantive reclamation requirements and operating standards, mandate registration of oil and gas related commercial vehicles with the agency, require guaranteed performance bonds, provide for specific damage clauses, and allow public participation and comment on a proposed plan of operations.

The courts have upheld the Park Service's approach. According to the GAO:

> In *Dunn McCampbell Royalty Interest, Inc. v. National Park Service*, 964 F. Supp. 1125 (S.D. Tex. 1995), *aff'd on other grounds*, 112 F.3d 1283 (5th Cir. 1997), the court ruled that the National

> Park Service has authority to reasonably regulate private owners' access to their oil and gas interests located beneath park system lands, by requiring approval of a plan of operations before commencement of exploration or production activities. The court relied on language in the National Park Service Organic Act directing the Park Service to "protect and regulate" national parks so as to "conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations," as well as language directing the Department of the Interior to issue regulations "as . . . deem[ed] necessary or proper for the use of the parks . . . under the jurisdiction of the National Park Service."

The Refuge System similarly has a strong organic act, the National Wildlife Refuge System Improvement Act (16 U.S.C. 668dd-668ee) that declares that the mission of the Refuge System is to "administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans." The Refuge Improvement Act directs the Secretary of the Interior to "ensure that the biological integrity, diversity and environmental health of the System are maintained," and authorizes the Service to issue regulations to carry out the Act.

Though a more thorough legal analysis during the rulemaking process would be helpful, the Fish and Wildlife Service clearly has the authority to establish reasonable regulations to protect federal property and to achieve its wildlife conservation mission.

The Fish and Wildlife Service is compelled to improve regulations pertaining to the surface development of non-federal mineral rights underneath national wildlife refuges

The Government Accountability Office has studied the problems surrounding the exploration and development of non-federal oil and gas on national wildlife refuges fully three times since 2001 and has provided a compelling basis for the Fish and Wildlife Service to enact changes to its regulatory structure. A third of all national wildlife refuges have some form of oil and gas development occurring within their boundaries, the vast majority of which involve the development of private oil and gas interests. That development regularly causes harm to wildlife, habitat, water and air quality, other priority public use and enjoyment of wildlife refuges, and interferes with important refuge management priorities. Existing state and Fish and Wildlife Service regulations, controls, and capacity are grossly inadequate for properly protecting important and irreplaceable wildlife refuge resources. Based on these facts, the Fish and Wildlife Service, in order to meet the conservation mandates established by Congress in managing the National Wildlife Refuge System, desperately needs to update and expand its regulations to reasonably manage and provide a nationally consistent approach to the development of non-federal oil and gas resources within the boundaries of national wildlife refuges.

Defenders of Wildlife looks forward to working with the Fish and Wildlife Service to ensure reasonable and balanced regulations are enacted.

Attachment – Photographs from National Wildlife Refuges with non-federal oil and gas development

A typical well pad results in acres of direct habitat loss that cannot support wildlife. This habitat is likely never to be reclaimed.

Atchafalya National Wildlife Refuge, Louisiana

A tank battery reflected in spilled oil.

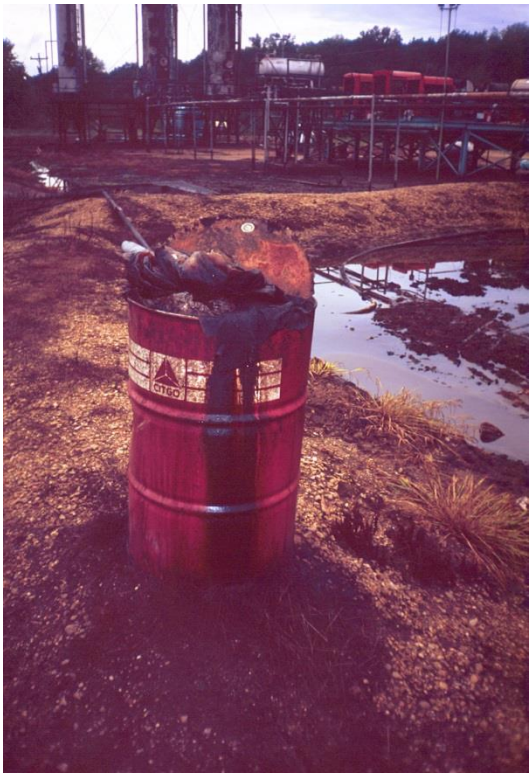
Catahoula National Wildlife Refuge, Louisiana

Pipe slowly leaking oil, destroying surrounding wetlands. Old, rusting, leaking pipes plague refuges in Louisiana.

Atchafalya National Wildlife Refuge, Louisiana

An old storage tank with rusty holes, covered with duct tape, discarded and left on site at one of the well head sites. Clean-up of abandoned sites is almost unheard of on Louisiana refuges.

Atchafalya National Wildlife Refuge, Louisiana



Discarded 55-gallon drum oozing oil, open waste or containment pond, and large-scale development.

Catahoula National Wildlife Refuge, Louisiana