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August 27, 2012

Wendi Weber, Regional Director
Northeast Region
U.S. Fish & Wildlife Service 300 Westgate Center Drive
Hadley, MA 01035

RE: Prime Hook National Wildlife Refuge
Draft Comprehensive Conservation Plan and Environmental Impact Statement May 2012

Dear Director Weber:

The Delaware Departments of Agriculture, Natural Resources and Environmental Control and Transportation have reviewed the May 2012 Draft Comprehensive Conservation Plan ("CCP") and Environmental Impact Statement for Prime Hook National Wildlife Refuge. We write to offer our comments on the draft CCP and offer assistance in helping the U.S. Fish & Wildlife Service (hereafter, the "Service") meet its vision statement for the Refuge and the goals as stated in the draft CCP.

Prime Hook National Wildlife Refuge (hereafter, the "Refuge") is extremely important to Delaware. Located within the America's Great Outdoors-designated Delaware Bayshore Initiative area, it is home to sensitive natural resources, provides active and passive recreational opportunities for hunters, birders, and other outdoor enthusiasts, and is a mosaic of habitats of local, state, regional, national and international importance. As the Service's vision statement explains, successful management of the Refuge requires a balanced approach to ensure it remains an ecologically diverse and significant area for many years to come:

Prime Hook National Wildlife Refuge will comprise a variety of Delmarva coastal plain habitats, such as barrier island beach, freshwater and tidal wetlands, grassland, shrubland and forest. The refuge will manage, maintain, enhance and, where appropriate, restore habitats for native plants and animals, with an emphasis on migratory birds and rare species. A balanced approach will be used to ensure all wildlife dependent recreational users experience quality opportunities. The refuge will be a leader in conservation, research and community partnerships, adapting to physical and community changes as necessary to maintain the ecological integrity of the refuge and build a stewardship ethic for current and future generations.

The Refuge is also interconnected with its neighbors. As the vision statement says, the Refuge must be a leader in "community partnerships" if the Service is to be a successful steward of these important lands. Challenges facing the Refuge affect the thousands of acres of contiguous productive agricultural land, the coastal communities of Prime Hook Beach, Slaughter Beach and Broadkill Beach, and the

dozens of miles of primary and secondary roadways that surround it. The Service has a tradition of engagement with the local community that dates back to the creation of the Refuge, at which time then-Secretary of the Interior Udall expressed to then-Governor Carvel that "we have no plan or intention to damage lands adjacent to the refuge."

To help ensure that the Refuge remains a gem for generations to come and to further this tradition of partnering with the adjacent communities, our Departments have worked closely with our federal and local partners to document, research and find solutions for emerging issues in and around the Refuge. These comments propose further efforts to partner with the Service to enact near-term and long-term solutions to the problems currently confronting the Refuge. ***We urge the Service to act quickly on these recommendations and stand ready to assist the Service in doing so.***

The Key Issues and Concerns impacting the Refuge Goals as described in the CCP -- Climate Change/Sea Level Rise/Overwash, Mosquito Control, Hunting and Cooperative Farming -- are all significant issues for the Refuge and the residents who surround it. Our respective staffs have spent considerable time reviewing the CCP, its alternative analysis and the impacts that decisions within the Refuge may have on surrounding natural resources, property owners, infrastructure and state program priorities. Department staff attended and facilitated several scientific and technical meetings and workshops focused on the best management practices in and around the Refuge. The topics of these discussions included designing scientific approaches for restoring habitat, methods to provide ingress and egress to the communities, guidelines for safe and effective hunting and opportunities to protect agriculture.

As a result of these discussions, knowledge of Refuge management practices, exchanges with the surrounding communities, and review of the draft EIS, our Departments consider the following modifications, listed below and described in detail afterwards, to be necessary to the CCP to satisfy the Service's vision statement for the Refuge.

- 1) To limit flooding of the coastal communities and mitigate effects on adjacent agricultural land, the Service should pursue prompt closing of the breaches in Unit II and preserve them as closed until a functioning, self-sustaining tidal marsh can be established in Unit II, and consider marsh restoration options for Unit III that will provide quality and diverse habitat.
- 2) To maintain quality of life for neighboring communities while reducing public exposure to hazardous vector-borne diseases, the Service should continue to permit, in the manner currently performed, the judicious application of insecticides for control of larval and adult mosquitoes..
- 3) The Service should ensure that Delawareans of all ages and physical abilities have adequate access to hunting opportunities on the Refuge that are compatible with management on adjacent state lands and with non-consumptive public uses on the Refuge.
- 4) The Service should establish a balance between cooperative farming opportunities and upland forest restoration that considers the mutual benefits of agricultural production and habitat diversification.

Climate Change/Sea Level Rise/Overwash (Breach Closure and Marsh Restoration)

The Service must consider its stewardship responsibilities in the context of the surrounding tidal and ephemeral lands that are susceptible to tide, wave, storm, and sea level rise forces. As we have discussed with the Service previously, the impact of these forces on the surrounding communities has been amplified by the Service's historic water management practices. Restoring a functional barrier beach and dune system is critical to both the migratory waterfowl management focus of the Service and the protection of surrounding natural resources and communities.

The current hydrological dynamics resulting from the open breach, and its confounding impacts, currently prevent any meaningful marsh restoration efforts. In order for the Service to meet the objectives of Alternative B, the Service's preferred alternative, there must be some method of controlling the hydrology to prevent further marsh habitat loss from Units II and III. The breaches also negatively impact neighboring private farmland by facilitating the expansion of salt water intrusion and causing ditches to act as conduits bringing salt water further inland. It is estimated that more than 500 acres of farmland have experienced salt damage. Further and importantly, the repeated flooding of the community of Prime Hook has hurt the quality of life of residents and is a serious public safety concern.

To be clear, it is the State's position that the breaches must be closed in the short-term to allow a managed and phased approach to achieve long-term marsh restoration, as well as mitigate the impacts on neighboring farmland and homes. Our goal of closing the breaches has been frustrated by a number of factors over the last few years, but the state is prepared again to contribute toward a solution.

The ongoing deepening and maintenance of the main channel of the Delaware River and Bay by the Army Corps of Engineers could play a role in the future management of the Refuge. The original plan for deepening the channel has included restoring Kelly Island (near Bombay Hook) and nourishing Broadkill Beach. Over the past year, the Department of Natural Resources and Environmental Control ("DNREC") has been engaged in serious discussions with the Corps and the Service about alternative projects that could use material made available by dredging navigation channels to replace eroded sand or lost wetlands. This type of project could be a savings to the state and funding partners. It could also assist in the sustainability of our coastal communities.

Given the uncertainty around the timing and funding of the Main Channel deepening project, it may make the most sense to use the material from the deepening for a planned project to construct the beach and dune at Broadkill Beach. That could make available State resources in the near-term to apply towards the closure of the breaches at Fowler's Beach. Beyond that, restoration and enhancement of Prime Hook wetlands and State-owned impoundments to the north could be evaluated as suitable locations for additional material from the deepening. We will continue to work with the Corps and the Service to evaluate options, including the use of state resources to close the breach at Fowler's Beach.

Another issue regarding marsh restoration is that, while it is highly unlikely that Unit II could be restored to the managed freshwater systems of the past due to the extended input of salt water from the Delaware Bay and future periodic vulnerability to future tidal storm surges, it is possible that Unit III could be restored as freshwater and brackish wetlands. Such a restoration would provide needed diverse and valuable habitat in the Bayshore landscape. We request that our preferred freshwater and brackish wetland management regime for Unit III be further and fully evaluated to determine feasibility based on hydrological modeling findings and interrelated restoration practices.

Stabilizing the dunes and closing the breaches is a crucial first step not only to habitat restoration but other constructed and natural assets in the area. Without this stabilization, there is a constant threat to the roadway infrastructure in the area, particularly access to Prime Hook and Broadkill beaches. Prime Hook Road is the primary access road to the Refuge and the only public access to the community of Prime Hook. During extreme weather events when the roadway floods, the State and County negotiate with land owners several miles to the south to provide access across their property for emergency vehicles to serve the community of Prime Hook.

The Delaware Department of Transportation ("DelDOT") was recently successful in obtaining funding through the Public Lands Highways Discretionary Program (PLHD) to construct culverts along Prime Hook Road, adjacent to the Prime Hook Wildlife Refuge. This project has two key objectives: to reduce flooding and to aid in the preservation of the wetland. This project will hopefully reduce the amount of overtop flooding that occurs on the Prime Hook Road by allowing tidal and storm flows to move under rather than over the roadway. There is still much work and analysis to be completed before the culverts can be installed, including how additional water exchange beneath Prime Hook Road will affect tide levels south of Prime Hook Road. However, these culverts will do little to alleviate the long term flooding if the breaches are not sufficiently closed. The more complex option of elevating Prime Hook Road would require extensive hydraulic analysis, may not be feasible, and would likely require significant funding that is currently not available.

The DNREC Delaware Coastal Programs and the Service co-sponsored a two day workshop in April 2012 at the St. Jones component of the Delaware National Estuarine Research Reserve to discuss habitat restoration at the Refuge with a particular emphasis on coastal wetland restoration. In attendance were state, regional and national experts in coastal beach and wetland systems, as well as members of the affected public. Information about the workshop may be found at the following web address: <http://www.dnrec.delaware.gov/coastal/DNERR/Pages/CTP%20Pages/Prime-Hook-Restoration-Workshop.aspx>

The draft CCP was already in press at the time of the workshop referenced above and as a result does not reflect the scientific discussion and conclusion reached at the workshop regarding the various methods of habitat restoration that are discussed in the CCP. We will support similar future collaborative efforts to develop restoration strategies for Units II and III. This includes identification of suitable sources of fill material that can be deposited on the interior of the Units, which is a key component to any restoration effort. The Departments will continue to work with the Service on the technical analysis and pre-permitting assistance necessary to prepare for breach closure and wetland restoration. We will provide this information under separate cover.

Mosquito Control

Mosquito control operations for the State of Delaware are the responsibility of DNREC's Delaware Mosquito Control Section (DMCS). The need to control mosquitoes is driven by public health protection, socio-economic interests, and quality-of-life issues of Delaware residents and visitors, which are all important considerations needing attention and effective actions, and are often intertwined. It has been DMCS's and the State's position that good nuisance control is also good disease prevention.

The Refuge's marshes are part of a rich mosaic of coastal lands along Delaware Bay that also includes state, county, municipal and private lands, all capable of producing intolerable numbers of saltmarsh

mosquitoes. This requires all landowners or managers to do their fair share in helping to contend with a regional situation.

The DMCS has historically implemented and is currently employing progressive mosquito control techniques on the Refuge that have been deemed compatible with the Service's mission. For decades, the mosquito control practices have essentially been the same, and in part have been developed with the Service's collaboration and/or their assistance. Only EPA-registered mosquitocide products are used for which the EPA has scientifically determined that proper use "poses no unreasonable risks to human health, wildlife or the environment" and that any adverse impacts to non-target organism populations, if such occur at all, would be minimal.

The draft CCP proposes eliminating adulticide spraying on-refuge except for "declared human health emergencies." The proposed mosquito policy would unduly increase or complicate the DMCS's spray threshold criteria by trying to add measures of arbovirus presence beyond what the DMCS already uses; or by trying to newly incorporate measures of mosquito predator abundance that would be dubious at best; or by making more cumbersome the DMCS's operational spray decisions. These changes would make mosquito control efforts more complicated, will increase mosquito control costs for the State, and, most importantly, will result in less effective mosquito control and all its attendant consequences – the most serious consequence being an increased health risk to humans.

In summary, the current methods are the most practicable, efficacious, cost effective, and environmentally compatible means of controlling nuisance and health-threatening mosquitoes, and these current practices should be allowed to continue as presently performed.

Additional details are provided in Attachment A, which is an Executive Summary of a complete response document on mosquito control issues. The DMCS will submit to the U.S. Fish and Wildlife Service under a separate cover an extensive and complete set of comments relative to mosquito control, including specific revisions necessary to the CCP and the scientific basis for those changes.

Hunting

Hunting in Delaware is an activity that is more than simply recreational; it is a deeply-rooted tradition, and is part of the state's social and cultural heritage. As hunting opportunities diminish when private habitats are lost or converted to other uses, preserving the ability to hunt on accessible state and federal refuge lands becomes indispensable. It is important to maintain adequate access for all hunters, regardless of age, physical ability or income.

Two of the three alternatives (alternatives B and C) propose eliminating permanent hunting structures. The elimination of fixed blinds and stands in favor of free roam hunting or blind sites (a designated area where hunters may use their own blind) may benefit the avid and adventurous hunter but will impede the more casual hunter or those who cannot afford a boat blind or pop-up blind. While blind sites and free roam hunting increase the flexibility of hunters to choose their hunting location, they also increase the likelihood of hunter conflicts and conflicts with passive recreationalists, including birders, as individuals tend to stray from their designated areas when a fixed blind or stand is not present. Additionally, the use of blind sites increase the amount of vegetation damage in the area surrounding the blind site, in part due to hunters frequently use existing natural vegetation as camouflage when a constructed blind is not present. With regard to deer stands, these structures are preferred by many for safety reasons and ease

of use. Further, we are concerned that Alternatives B and C may limit hunting opportunities for people with disabilities. For these reasons, the Service is encouraged to diversify hunting opportunities on the Refuge to include both free roam hunting and retain some of the constructed blinds and stands.

Additionally, the Service's preferred alternative includes changes to the days and times when waterfowl hunting is permitted. The proposed elimination of Fridays as a hunt day and the decision to close hunting at noon on permissible hunt days are likely to exclude many hunters. The Service is urged to reevaluate the days and times for waterfowl hunting to continue to include Fridays and to extend the hours until 3:00 pm or later. This would allow hunters more flexibility to enjoy their past-time and be compatible with management on our adjacent state Prime Hook Wildlife Area.

We fully support expanded hunter access and opportunity that is performed in balance with non-consumptive uses such as wildlife viewing. More details on the issues above and comments on other proposed changes to hunting, compiled by the DNREC Division of Fish and Wildlife, are included in Attachment B.

Cooperative Farming

A 2006 lawsuit raised the issue that farming on Refuge lands had not been properly evaluated as an activity compatible with the Refuge's mission. In 2009, the Refuge was ordered to cease farming until the practice was evaluated through the NEPA and CCP process. Having evaluated cooperative farming during this CCP process, the Refuge should consider reinstating certain agricultural practices which are compatible with habitat management goals. This would economically benefit the adjacent agricultural community by reinstating crop production, while providing benefits to wildlife with some ecologically diverse areas of early successional habitat (grassy field borders), as opposed to complete reforestation, as stated in the in Service's preferred alternative.

Additional comments regarding the benefits of cooperative farming to wildlife habitat are provided in Attachment B from the DNREC Division of Fish and Wildlife. Comments specific to Refuge management practices and salt damaged cropland are provided in Attachment C from the Department of Agriculture.

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In closing, the Delaware Departments of Agriculture, Natural Resources and Environmental Control and Transportation wish to commend the Service on its extensive outreach strategy. Refuge personnel have been tireless in their efforts to involve bayfront residents, state and local government agencies, the scientific and agricultural communities and other interested parties.

We appreciate the opportunity to comment on the draft CCP and anticipate having our comments fully addressed in the final CCP document. Our agencies are willing to provide technical support and other assistance needed by the Service to fulfill our mutual goals and objectives within the CCP. We are committed to partnering with the Service to define and shape Refuge's future, which is so inextricably linked with our state, our residents and visitors and the Delaware Bayshore landscape.

Sincerely,



Edwin Kee
Secretary
Department of Agriculture



Collin O'Mara
Secretary
Department of Natural Resources
and Environmental Protection



Shailen Bhatt
Secretary
Department of Transportation

Cc: Michael Stroeh

Attachments: Attachment A
Attachment B
Attachment C
Map of affected farmland
Letter from Secretary Udall