

FEDERAL CONSISTENCY DETERMINATION**Comprehensive Conservation Plan and Environmental Impact Statement**

for

**Chincoteague and Wallops Island National Wildlife Refuges
Accomack County, Virginia****U.S. Fish and Wildlife Service
Department of the Interior**

This Federal consistency determination (FCD) provides the Commonwealth of Virginia with the U.S. Fish and Wildlife Service's (USFWS, we, our) Consistency Determination under the Coastal Zone Management Act Section 307(c)(1) and Title 15 Code of Federal Regulations (CFR) Part 930, Subpart C, for implementing the Comprehensive Conservation Plan and Environmental Impact Statement (CCP and EIS for Chincoteague and Wallops Island National Wildlife Refuges (NWR), located in Accomack County, Virginia. This CCP would guide management of the refuges over the next 15 years. The information in this Consistency Determination is provided pursuant to 15 CFR §930.39. The USFWS seeks concurrence from the Virginia Coastal Zone Management Program (CZMP) that alternative B (the Service-preferred alternative) as detailed in the draft CCP and EIS is consistent, to the maximum extent practicable, with the enforceable policies of the CZMP.

To streamline the administrative requirements of the CCP development process and environmental review, the USFWS prepared a combined document that evaluates the potential environmental impacts from implementing a CCP. The CCP/EIS was prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), as amended (42 USC §§ 4321-4347); the Council on Environmental Quality regulations for implementing NEPA (40 CFR §§ 1500-1508); and the Department of the Interior (516 DM 8) and Service (550 FW 3) policies. The CCP/EIS also complies with Section 106 of the National Historic Preservation Act of 1966, as amended. Refer to section 1.8 and 1.10.4 of the CCP/EIS for additional information regarding regulatory compliance.

Background

Chincoteague NWR includes approximately 14,032 acres of beach, dune, marsh, and forest habitats. Established in 1943 to provide habitat for migratory birds (with an emphasis on conserving greater snow geese), the refuge today provides habitat for waterfowl, wading birds, shorebirds, and song birds as well as other species of wildlife and plants. The refuge also provides wildlife-dependent recreational opportunities such as fishing, hunting, wildlife photography and observation, interpretation, and environmental education. Today, all but 418 acres are located in Accomack County, Virginia. In addition to the Virginia part of Assateague Island, Chincoteague NWR includes all 427 acres of Morris Island (located between Chincoteague and Assateague Islands), 546 acres of the northern end of Chincoteague Island (known as Wildcat Marsh), all 1,434 acres of Assawoman Island, 174 acres of the northern end of Metompkin Island, and 1,412 acres in fee title and 600 acres in easements on Cedar Island.

Wallops Island NWR is located on the mainland, east of Wattsville in Accomack County, Virginia, immediately adjacent to Highway 175, which provides access to the town of Chincoteague and Chincoteague NWR. Wallops Island NWR is comprised mainly of salt marsh and woodlands and contains habitat for a variety of species, including upland and wetland dependent migratory birds. Wallops Island NWR is managed as a satellite refuge of Chincoteague NWR. Wallops Island NWR is closed to the public except for white-tailed deer hunting. It was opened to public hunting in 2002 to reduce effects of overbrowsing by white-tailed deer, and to reduce the potential of deer collision with vehicles on the adjacent Highway 175 and aircraft at the neighboring National Aeronautics and Space Administration (NASA) flight facility.

Project Description

As detailed in chapter 2 of the CCP/EIS, alternative B (the Service-preferred alternative) would continue established habitat and wildlife management strategies but would pursue additional management activities for resources and public use. A “balanced approach” upholds the statutory and policy framework of the National Wildlife Refuge System (Refuge System) that states that wildlife and wildlife conservation must come first on refuge lands and waters. Figure 2-3 and Figure 2-4 of the CCP/EIS provide an illustration of major spatial elements of the alternative.

Natural Resource Management. Under alternative B, the refuge would protect and maintain all lands it administers, primarily focusing on the needs of threatened and endangered species, with additional emphasis on the needs of migratory birds and resident wildlife. The refuge would continue to preserve approximately 2,650 acres of wetland impoundments, but make adjustments in accordance with a new impoundment management plan that takes into account various factors, such as the habitat needs of black ducks and monarch butterflies, climate change and natural coastal processes, and relocated beach access and parking. Natural coastal processes would continue to shape habitat on the barrier islands. The refuge would continue to protect and enhance the wilderness character of the 1974 proposed wilderness area, and there would be no change in its size (1,300 acres) or location.

Beach Access and Parking. In recognition of the vulnerability of the current parking, the refuge would develop and implement a site design plan for parking and access to a new beach location, approximately 1.5 miles north of the existing beach. In comments on the draft CCP/EIS regarding beach access and parking from the National Park Service (NPS), we concur that “...8.5 acres is not a limit, but a guideline, that can be changed as needed with the actual design of a facility that provides the required 961 spaces and related facilities as part of a well-thought-out plan.” Because USFWS is committed to working with NPS and others to future design, refine and analyze beach relocation infrastructure in a separate NEPA document, if the actual footprint becomes larger, then it can more appropriately be considered at that stage. The new recreational beach would offer accessible parking in close proximity to the beach.

The refuge in consultation with NPS would provide management strategies for maintaining the current beach and parking areas in the interim until the newly located recreational beach is ready for visitor use. The refuge would provide a transition plan for moving from the current beach location to the new beach location, including proposed processes (such as construction in phases) and management strategies to ensure access to a recreational beach is always available for visitors.

Visitor Use and Experience. Existing public uses would continue with some exceptions. Hiking would continue to be allowed on the Service Road north of the new recreational beach parking, but

private vehicles would be restricted unless authorized under special use permit or special day use privileges/openings. A joint NPS and USFWS Visitor Contact Station would be developed near the new recreational beach. Oversand vehicle (OSV) and hiking access would continue via Beach Road across Toms Cove south to Fishing Point September 16 through March 14. Access to Toms Cove for environmental education programs would require a permit. Beach Road would continue to be open to vehicles year-round as far as the vicinity of the South Pony Corral, where we would also provide multi-habitat viewshed, access to trails, and viewing of Chincoteague ponies and wildlife. Construction in this area would include a vehicle turn-around area with parking, crabbing dock, and launch point for non-motorized boats. Assawoman Island would be completely closed to all forms of public use, including fishing, from March 15 through September 15 or thereafter, until the last shorebird fledges. Swan Cove Bicycle Trail would be remain and become part of the new assigned area.

The refuge would maintain and where possible expand current hunting opportunities by including additional species, extending hours, and providing special events and opportunities for youth and women. The refuge would add mourning doves, light geese, and non-migratory Canada goose hunting opportunities to the refuge's migratory bird hunting program. Additionally, the refuge would allow migratory bird hunting on Federal holidays within the Commonwealth of Virginia hunting seasons. The refuge would also add turkeys to the big game hunting program and pursue development of a trapping program for furbearers. The refuge would continue sika hunting and would conduct research to identify a desired population size. The refuge would continue to manage opportunities for recreational shellfish and crab harvest.

OSV use would be permitted for priority public uses, including wildlife observation, fishing and to access hunting zones. We propose to develop a new ½-mile, OSV zone to facilitate the six priority uses (March 15 through September 15) south of new recreational beach, and add this to the new assigned area. We would also continue current management of the Overwash and Hook area for shorebirds until the new recreational beach is established, at which time the March 15 through September 15 closure would go into effect. OSV access from September 16 to March 14 would continue via Beach Road. The refuge would allow recreational horseback riding in the OSV zone from approximately September 16 to March 14. The refuge would allow visitor access by foot to the OSV zone from approximately September 16 to March 14.

Partnerships. The refuge would pursue partnerships to enhance land conservation, environmental education and interpretation on the Delmarva Peninsula.

Cultural Resource Management. With partners, the refuge would restore the light keeper's house and historic landscaping at Assateague Lighthouse and develop new cultural resource and interpretation amenities, including a virtual tour of the lighthouse. The refuge would allow access to the cemetery near Beach Road and develop tours and controlled access opportunities for Assateague Village. The refuge would work with NASA to develop a boardwalk and kiosk from the NASA Visitor Center in or adjacent to Wallops Island NWR.

The "Chincoteague ponies" have a strong cultural tie to the community, and the refuge would implement a Chincoteague pony management plan that meets multiple objectives: visitor viewing, habitat management, and pony health. The refuge would allow grazing of the current pony population, with a maximum pony herd size of 150, per the management agreement with the Chincoteague Volunteer Fire Company.

We identified that coordination and consultation with various State agency offices responsible for enforcing the policies of the CZMP is an important action to be implemented by the refuge as it implements the CCP. The CCP/EIS was developed with sufficient detail to account for the greatest potential impacts that could result from proposed actions identified under all alternatives. However, additional NEPA analysis will be necessary for certain types of actions, even once we adopt a final CCP. During the planning process for those plans and actions, we will consult with the Virginia Department of Environmental Quality (VDEQ) to determine if additional FCDs are needed.

Alternative B represents an approach for managing the refuge over a 15-year time frame, and is comprised of a variety of goals, objectives, and strategies that could be accomplished during the life of the plan. While some strategies could potentially be implemented immediately after the Record of Decision is signed, other actions like beach relocation would require additional analysis and documentation prior to implementation. Modifications and designs to manipulate the dunes at the new recreational beach site will be further informed through the next NEPA process which will involve local, state, Federal parties, partners, and other cooperating agencies.

Effect on Resources

Implementation of the preferred alternative would impact the natural and human environments, varying in duration, context, type, and intensity. Chapter 4 and the summary tables comparing consequences (Tables 4-1, 4-5, 4-6, 4-7, and 4-8) of the CCP/EIS detail impacts in the local, regional, and national contexts, over the short- and long-term, and identifies the intensity of beneficial and adverse impacts that would directly, indirectly, and cumulatively result from implementation of alternative B.

In summary, implementation of alternative B would affect the land or water uses or natural resources of Virginia in the following manner:

Air Quality. Moderate, indirect, long-term benefits of air filtering and carbon sequestration would result from managing more than 1,600 acres of mature loblolly pine forest and 2,500 acres of coastal shrubland to improve the health and vigor of trees and vegetation. The main source of emissions at Chincoteague NWR is from gasoline operated passenger cars and trucks, from which the main pollutant is carbon monoxide. Alternative B would not have a significant impact on air quality due to the minor changes in vehicle activity and because the area surrounding Chincoteague NWR meet the National Ambient Air Quality Standards set by the Environmental Protection Agency (EPA) as required by the Clean Air Act. Localized increases in emissions from visitors' vehicles would be negligible compared to current off-refuge contributions to pollutant levels and likely increases in air emissions in the Accomack County airshed from land development over the next 15 years. Any adverse effects on air quality from refuge activities would be more than offset by the benefits of maintaining the refuge in natural vegetation.

Alternative B would relocate beach parking north approximately 1.5 miles from its current location. Final location of the relocated beach parking lots is expected to be closer than the current recreational beach, which may result in decreased vehicle miles travelled (VMT) of passenger vehicles, a positive outcome. However, new uses such as space tourism and separation of existing uses (recreational beach from crabbing and clamming areas) could cause additional vehicle use by visitors which would create seasonal or temporal decreases in air quality.

None of our actions would violate EPA standards, and all actions would be undertaken to ensure compliance with the Clean Air Act. To reduce potential adverse impacts on local air quality, we would follow guidance provided State agencies regarding refuge activities that have the potential to adversely impact air quality in the vicinity, including the minimization of vehicle idling, use of precautionary measures to restrict emissions of volatile organic compounds and oxides of nitrogen, and minimization of fugitive dust.

Water Resources. Long-term, minor to moderate, direct and indirect beneficial impacts on water resources in the refuge vicinity would result from the continued protection of soils, wetlands, and waterways within the refuge boundary. Our increased efforts to inventory and monitor aquatic resources would inform specific refuge management decisions that have the potential to impact water resources in the refuge vicinity.

Management of the Beach Road causeway, which would restrict it from year-round routine visitor use, and eventual modification of that area would have a positive impact on tidal flow and water quality for Swan Cove Pool (F Pool). The increased tidal rhythm through impoundment culverts would now be allowed to mimic the natural tidal rhythm of Toms Cove, which would lead to improved water quality, dissolved oxygen, pH, and salinity levels for the new flow area.

The disturbance of Mallard and Pintail (C and D Pools) to allow for the construction of new public beach parking could have negative impacts on water quality for all impoundments to the south. Since impoundment flow is connected from north to south by culverts, anything that occurs in upper watershed beginning at Pintail Pool (D Pool) would flow through the impoundments south of them. Land-disturbing activities on the refuge, such as management of impoundments and widening of refuge roads, have the potential to result in negligible to moderate, direct, short-term and indirect, long-term adverse impacts on local water quality.

To reduce potential adverse impacts on local hydrology and water quality, we would employ best management practices when conducting land-disturbing activities. As needed, we would consult with State offices regarding permitting applicability and requirements to ensure compliance with applicable Federal and State laws and regulations, as well as local ordinances.

Soils. Long-term, moderate, direct beneficial impacts on soils would result from maintaining the land cover with natural vegetation, minimizing soil disturbance to the maximum extent practicable, and allowing public use only in designated areas. Proposed management actions in alternative B that would affect soils include: change in management for the North Wash Flats (NWF) area, moving of the recreational beach and parking, and widening of the Service Road to permit access to the new recreational beach.

Current management of the NWF removes natural scrub shrub vegetation to create more suitable habitat for coastal nesting shorebirds, such as piping plover and American oystercatcher. Alternative B would cease the vegetation removal and allow for the natural vegetation to grow back in the 300-acre area, improving the habitat for spring and fall neotropical migratory birds. This increased amount of natural vegetation would create a significant beneficial impact for the habitat and soil. Increased vegetation in an area would help to prevent soil erosion and disturbance, as well as improve the soils structure and microbial communities by returning nutrients into the ground.

Negative impacts to soil would result from the construction of the new recreational parking as well as the widening of the new beach access road. Alternative B provides for 8.5 acres of parking in a

new location, for which soil would be impacted. Approximately 18 acres of soil would be impacted from the expansion of the current Service Road to access the new beach parking. Although no soil in either case would be removed from the refuge, leveling and grading practices would be used, with the need to use fill in some areas. If this were to occur, the current soil may be moved or covered with fill. Furthermore, the increased area of hard compact surface (i.e., new road and increased parking) would increase the potential for erosion in those areas during heavy storm and rain events. Mitigation for these impacts would include allowing the natural growth of vegetation around these areas, which would aid for the capture of soil and decreased erosion. Best construction practices would be followed during the parking and road expansions, and mitigation measures such as erosion prevention screens would be employed to minimize impacts. Since the proposed actions associated with the relocated beach parking and road expansion are conceptual and not finalized, specific details for these actions are currently unknown. Recontouring dunes and topography in the area of the proposed recreational beach, and adjacent lands, would have impacts to many resources including geology and soils. Although we will work closely with NPS and the U.S. Army Corps of Engineers (USACE) in designing these future changes, further environmental assessments and analysis for impacts on soils would need to be completed prior to construction. Allowing the existing parking site (8+ acres) to revert to natural conditions would result in a positive impact to soils.

We would employ and maintain sediment and erosion control measures to minimize the potential for soils to migrate during land-disturbing activities. We would continue to maintain existing vegetation and employ erosion control measures as needed along the refuge's shoreline. We anticipate working with other Federal and State agencies to investigate options for reducing erosion of lands along Assateague Island. In the long-term, increased refuge visitation in the designated public use area has the potential to result in negligible and direct adverse impact soils via compaction. To reduce potential adverse impacts to soils, we would consult with State offices regarding permit applicability prior to conducting activities that have the potential to impact tidal wetlands, disturb land, or contaminate soils.

Forested Habitats. Forest habitat on Assateague Island consists largely of monotypic stands of even-aged and mature loblolly pine trees, which are vulnerable to catastrophic loss from insect damage or extreme weather/wind events, without management. We would manage the biological integrity and diversity of 1,600 acres of mature loblolly pine forest on Assateague Island by diversifying the structure and age class using small openings (2 to 10 acres) that favor hardwood regeneration, to support a minimum population of 200 Delmarva Peninsula fox squirrels as well as breeding habitat for brown-headed nuthatch and eastern towhee. Creating a mosaic of pine and hardwood trees of varying age classes and structural diversity would make the forest more resistant to damaging insect outbreaks, and create habitat characteristics more favorable to the Delmarva Peninsula fox squirrel, bobwhite, brown-headed nuthatch, and eastern towhee. The southern pine beetle does not attack hardwood trees and younger age-class trees provide a barrier to bark beetle spread.

Forested habitats have shown the greatest loss of any cover type on the Delmarva Peninsula, and forest cover on the Peninsula is fragmented. Given that most forests in the area are small private woodlots, maintaining an approximately 175-acre block of mature forest with a significant hardwood component on Wallops Island NWR would provide an important habitat type for migrant and resident landbirds. The construction of new lifeguard housing facilities and a boardwalk at or near Wallops Island NWR would result in an adverse impact for forested vegetation such as loblolly pine. This impact would be minimal due to the small size of the facilities

and the boardwalk, but further investigations and environmental analysis to assess impacts would need to be conducted prior to construction. Efforts would be made to assure minimal vegetation would be impacted.

Impacts to forested habitat from new or expanded visitor uses would be minimal since visitors use pre-selected paths and hiking trails which the refuge created to traverse through habitat, and avoid future vegetation impacts. For hunters, impacts to wildlife habitat would be minimal as most species impacted would have already undergone senescence (aging or dying process) or become dormant during the hunting seasons. Further impacts are minimized by not permitting hunters to cut vegetation for shooting lanes or camouflage, and by not permitting the use of permanent hunting structures attached by nails, wire, and other materials that could adversely affect vegetation. No significant impacts would result on the refuge from these visitor services, but current monitoring efforts would continue.

The impacts to vegetation resulting from the expansion of the beach access road would result in removal of approximately 18 acres of scrub shrub and forest vegetation. The exact footprint and design of the expanded beach access road is unknown at this time, although the amount of impact is a conservative estimate; it accounts for the existing roadway at this location and acknowledges that road construction would be an expansion of a current footprint. Further environmental analysis would be required for the beach access road expansion prior to construction. The removal of vegetation would be mitigated by expanding the road in currently impacted areas as much as possible (i.e., expansion into the current man-made borrow ditches that were created to build the road originally), and where not possible, only impacting minimal scrub shrub or forest vegetation where no threatened or endangered species are known to occur.

Non-forested Habitats. Long-term, moderate, direct beneficial impacts on wetland habitats and vegetation would result from our continued protection and minimal intervention efforts to protect the ecological integrity of the refuge's impoundments, wetlands and marsh, as well as adjacent aquatic habitats.

Vegetation would be altered and/or removed from the vicinity of Mallard Pool (C Pool) and Pintail Pool (D Pool) resulting in a loss of that habitat, mostly myrtle/bayberry shrub. Mitigation for these adverse impacts would result from management of the NWF, as outlined in the section on Soils, that would cease vegetation removal and allow for the natural vegetation to grow back in an area of approximately 300 acres, improving the habitat for spring and fall migratory neotropical birds. In other words, while 8.5 acres of this habitat type would be negatively impacted by construction of the parking lot, 300 acres would be allowed to grow back naturally and improve the overall habitat on the refuge for the native species.

Impacts of OSV and horseback riding would not be significant because access would continue to be limited throughout the season, and vehicles would still be required to stay within the intertidal zone. The opening of the OSV zone from September 16 to March 14 creates negative impacts by exposing the area to potential vegetation trampling and habitat alteration. The closing of the zone to protect nesting shorebirds from March 15 to September 15 has beneficial impacts for vegetation; decreasing the amount of time that trampling would be possible. All of these impacts would not be significant due to the restricted area in which these activities are permitted, and the lack of vegetation that occurs on the beach.

Horseback riding would take place along the Atlantic Ocean beachfront below the high tide zone between September 16 and March 14. This area is devoid of vegetation. It is anticipated however, that allowing this use would have minimal impact to vegetation near parking area assigned for horse trailer parking. Current plant communities that occur in these areas are not rare or highly sensitive to disturbance based on available information. Through the development of brochures, maps, and established travel corridors we would minimize the impacts to vegetation along the entire horseback riding/OSV zone.

The improvement or replacement of all water control structures would have beneficial impact on all freshwater impoundments into Toms Cove and Chincoteague Bay. By updating flow capabilities, of Mallard Pool (C Pool), Shoveler Pool (B-North Pool), and Snow Goose Pool (B-South Pool), water could drain freely into Toms Cove through Swan Cove (F Pool) more efficiently. This would maintain low salinity levels and improve water quality for moist soil vegetation and associated wildlife.

We will consider all appropriate regulations to protect aquatic resources and sensitive buffer areas, and we will avoid and minimize impacts to refuge wetlands and other natural resources whenever possible. The USFWS remains committed to working closely with Federal and State resource agencies, prior to and during any future project construction associated with the CCP/EIS, to continue monitoring and collection of additional environmental data, provide relevant supplemental information as needed, and to apply adaptive management and best management practices as appropriate.

Birds. Long-term, moderate, direct beneficial impacts on birds would result from implementation of the CCP. Habitat conservation and management is the highest priority of the refuge, consistent with the original establishment purposes for the protection of migratory birds. More than 320 species of birds are known to use the refuge regularly for nesting and brood rearing, feeding, resting and staging during migration, or wintering.

Visitor use activities (hunting, fishing, recreational beach use, walking, biking, horseback riding, OSV use) currently occurring on the refuge have been analyzed for impacts to birds. And such activities are expected to have a negative short term impact on birds. These activities are known to create disturbance to migratory and breeding birds and can cause alteration of habitats by trampling vegetation, compacting soils, and increasing the potential of erosion. For other visitor use activities, impacts would be minimal since visitors are required to use pre-selected paths and hiking trails which the refuge created to traverse through habitat, and avoid future vegetation impacts. No significant impacts would result on the refuge from these visitor services, but current monitoring efforts would continue.

Human disturbance to coastal nesting birds would be greatly diminished since the recreational beach would be relocated north, and OSV use would be limited to September 16 to March 14. The moving of the recreational beach and parking areas, along with the expansion of the beach access road, would result in negative impacts to approximately 27 acres of migratory bird habitat, but the impacts would be mitigated. This management strategy would cease vegetation removal from the NWF and allow for natural succession improving habitat for spring and fall migratory neotropical birds. Beneficial impacts for migratory waterfowl are also expected as this management strategy would increase thermal cover for waterfowl in the winter, increase the food sources for water birds and improve shorebird migratory stopover habitat.

The change in hunt management would have positive impacts for bird species on the refuge, mostly by the elimination of predation and competition. Further, adding resident Canada goose and light goose hunting on Assateague Island would reduce their populations on the refuge and their negative impact to habitat.

Fisheries. The refuge has a minimal assemblage of fish species in the freshwater impoundments. The refuge currently manages the impoundment habitats for birds, and not necessarily for fish, but impacts that occur in this habitat for birds would potentially affect fish as well. Since the impoundments are managed annually and on a strict regime through water control structures, the habitat remains a beneficial area for all aspects of the fish lifecycle.

Improvements to the tidal flow of Swan Cove Pool (F Pool) resulting from modification and replacement of water control structures within Beach Road causeway would have a positive impact on fish and other aquatic species. Increased water flow and tidal rhythm would allow fish and aquatic invertebrates such as crabs and mollusks passage into this restored salt marsh.

Mammals. The refuges support populations of mammalian species common to habitats of the Delmarva Peninsula (plus the Delmarva fox squirrel, which is endemic to the area and rare). As a taxonomic group, mammals would benefit from the refuge land protection and management of riparian habitats, forests, grasslands, shrub, and wetlands proposed for listed species, waterfowl, and migratory birds. Likewise, refuge habitats would benefit from careful attention to the impacts on mammals resulting from any of its activities.

Short- and long-term, minor, direct adverse impacts to mammals would result from noise disturbance and the reduction of food and cover caused by construction. The refuge would also implement new hunting and trapping programs for raccoon and red fox populations. These new programs would minimize predation on nesting piping plovers and other coastal birds – a beneficial outcome for birds, yet adverse for mammals.

Refuge strategies for conserving and maintaining biological integrity, diversity, and environmental health, restoring native plant communities, improving habitat conditions for the endangered Delmarva Peninsula fox squirrel, and controlling invasive or nuisance species would be management actions that have net beneficial impacts to mammals. The actions would directly or indirectly benefit mammalian populations over the long term by ensuring the continuation of quality natural habitats for resident mammalian wildlife.

Controlling invasive plant species, particularly those that quickly colonize an area and form dense, monotypic stands such as phragmites, would benefit mammals by maintaining the balance of food resources and native vegetative communities with which they evolved or adapted to for cover, nesting, and diverse food resources. For smaller, insectivorous mammals, maintenance of native plant diversity and structural integrity by controlling invasive species would have a positive impact as those species rely on biodiversity and availability of invertebrate food resources that are only associated with native floral assemblages.

UFWFS recognizes the U.S. Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) as the expert in reducing mammalian predation on natural resources. Chincoteague NWR and APHIS agree to work together and with other interested parties to benefit threatened and endangered wildlife, bird species of management concern, and wildlife nesting habitat. The objective of the project is to: (1) conduct avian and mammalian predator management throughout the refuge complex to support the refuge's effort to enhance migratory

bird populations of selected bird species, and to carry out wildlife management objectives of the complex; (2) assist the complex with the management and eradication of invasive species such as nutria; and (3) assist the complex with the monitoring and management of wildlife disease surveillance and outbreaks.

Hunting is an important visitor use activity that results in a net positive impact for mammals by helping control the current sika elk and white-tailed deer populations. Overall it serves both a wildlife-dependent recreational use and a method of population control that would benefit other non-hunted mammals, conserve migratory bird habitats, reduce vehicle/deer collisions, and reduce overbrowsing of vegetation.

Negative impacts from hunting on non-hunted mammals, such as voles, moles, mice, shrews, and bats, are expected to be negligible. Except for some species of migratory bats, these species have very limited home ranges and hunting would not affect their populations regionally. Impacts of hunting to migratory bat species would be negligible. These species are in torpor or have completely passed through Virginia by peak hunting season in November through January. Vehicles are restricted to roads and harassment or taking of any wildlife other than legal game species is not permitted.

Amphibians and Reptiles. Other than the Federal listed species of turtles, 20 other amphibian and reptile species have been recorded on the refuge. Although no specific management policies are set in place for these species, the management of other species and habitats where these 20 species have been recorded would have direct impacts on these species. These species are commonly found in areas of the refuge with very limited visitor use, such as forest, vernal pools, refuge impoundments, and salt marsh areas. Impacts from visitor use actions such as hunting would not be significant due to the hibernation or torpor actions by cold-blooded reptiles and amphibians that limit their activity during the current hunting season when temperatures are low. Research is conducted on island dwarfisms in toads, a phenomenon common on Mid-Atlantic barrier islands, and what possible variables could cause this trait.

Incidental mortality of reptiles and amphibians occurs on refuge roads between March and October. However, we expect negligible impacts since best management practices would be implemented in the design and engineering of the roads and parking lots. For example, underground crossings, culverts, and timing of construction could be viable options to mitigate potential adverse impacts. Therefore, it would not affect their overall populations. Illegal harvest of reptiles and amphibians for the pet trade and/or consumptive use can and could have a negative impact on these populations. The dewatering of the impoundments from May through August concentrates fish, amphibian and reptile species in deeper channels. Waterbirds such as snowy egrets, glossy ibis, terns, and herons take advantage of this abundant food supply.

Invertebrates. The alteration of Mallard and Pintail (C and D Pools) in order to allow the building of approximately 8.5 acres of recreational beach parking would have a negative impact on invertebrates, mainly monarchs, due to the removal of Bidens. Although this would be a permanent negative impact, it would not be a significant impact because of the small acreage that would be affected, and because there are several nearby habitats where monarchs could nectar, including Shoveler and Snow Goose (B Pools). The planting of seaside goldenrod seedlings along small dunes in the vicinity of the former recreational beach, as well as on the backsides of dunes along Wild Beach and Toms Cove Hook would have a beneficial impact towards monarchs, and

could work to mitigate the negative effects of Bidens removal. Seaside goldenrod is the most important nectar source for monarchs on the refuge, and also acts a nesting location.

Improvements to the tidal flow of Swan Cove Pool (F Pool) resulting from modification and replacement of water control structures within Beach Road causeway would have a positive impact on aquatic invertebrates and fish species. Increased water flow and tidal rhythm would allow fish and aquatic invertebrates such as crabs and mollusks passage into this restored salt marsh.

Control of mosquitoes may have adverse impacts on birds, fish, amphibians, bats, and other wildlife since they are a known food source for these species. This impact would not be significant because it only occurs in a small area. Limiting disturbance and management activities would increase the number of snags and woody debris available as refuge forests continue to age. Protection of freshwater marsh, shrub, and aquatic habitats would have moderate, direct long-term impacts on invertebrate populations.

Public Uses and Access. In general, there are both beneficial and adverse impacts to all visitor uses that would result from elements either currently occurring, or proposed changes under alternative B. The refuge would continue to promote wildlife-oriented recreational opportunities that are compatible with the purpose for which the refuge was established, and would also maintain a recreational beach and many of the other recreation uses that are currently available at the refuge. The benefits of providing these activities would include helping to meet existing and future demands for outdoor recreation, interpretation, and education in the region. Visitors that are interested in these uses would benefit from high quality opportunities to engage in them. Another action that would likely benefit all users is the proposed implementation of a visitor survey every 5 years, which would allow visitors to share feedback on visitor use activities and to indirectly benefit from that information shaping refuge management over time. In addition, identifying and removing old abandoned structures on the refuge would enhance public safety and views.

Assuming that overall visitation would not change as a result of the beach relocation, as the same number of spaces would be preserved, and the short-term transition between the locations would be carefully managed outside the peak visitation period, there would not be a measurable or negative impact. The expansion of several visitor services, such as hunting, may result in increased visitation but is not expected to be significant. We would maintain access to a recreational beach, incorporate Americans with Disabilities Act standards and universal access into new buildings, and develop bilingual/multilingual materials. These commonalities serve to either maintain or increase the beneficial economic impacts of tourism for the region by improving the accessibility of the refuge.

In terms of timing and location, visitor use and access would continue to be regulated to protect federally listed species and their habitats, such as the piping plover, tern, and shorebird habitat on Toms Cove Hook. As a result, potential users of this area would be adversely affected by the closures. The main visitor use constraints would occur from the continued closure of Toms Cove Hook and the Overwash area from March 15 through September 15 for alternative B. Conversely, management actions to sustain and increase wildlife populations, in coordination with partners, could provide additional opportunities (benefits) for all six of the wildlife-dependent uses.

Visitors would experience continued access to the refuge by bicycle, foot, and private vehicle. Access to several areas of the refuge, including the Woodland Trail, Lighthouse Trail, Herbert H.

Bateman Educational and Administrative Center, and Wildlife Loop and associated trails, would be maintained. Private motor vehicle access to Assateague Island would be maintained and the refuge would work with the town of Chincoteague to allow golf carts on the refuge and public roads, in order to provide a variety of modes of transportation to and in the refuge, thereby enhancing overall access to the refuge. Visitors would benefit directly from having multiple access options (walking, biking, shuttle system, and automobiles) from the pursuit of a well-planned transportation system by the refuge, in partnership with the town of Chincoteague. All visitors would benefit, because even those that still use automobiles would benefit from reduced roadway congestion and more available automobile parking.

Under alternative B, the relocation of the recreational beach and seasonal closure of the Beach Road causeway would result in reduced access to Toms Cove for non-motorized boats; however, this would be offset because refuge would develop a launch point at new Beach Road/South Pony Corral site. In addition, relocation of the recreational beach would benefit bicyclists' access and beach access via bicycle, with introduction of new on-road bicycle lanes that would provide improved, safer, and more direct access and could result in an increase in overall beach visitation, and reduced beach parking demand. However, this may be offset by more visitors choosing to bike to the beach, resulting in more crowded bicycle trails.

Under alternatives B, a slight increase in hunters due to new hunting opportunities could result in increased violations and safety concerns for other visitors. However, the use by hunters occurs during the off-season for the majority of visitation and, the increase in hunter education and the introduction of bilingual hunting regulations would help mitigate such violations and concerns. Relocation of the beach would change the use of part of the Wildlife Loop such that Loop non-motorized traffic would need an alternative or to share the right of way with beach traffic. This could result in adverse impacts in the form of increased crowding, discomfort, and safety incidents.

Visitors would experience continued communication and outreach, which would have educational benefits and let them be aware of different visitor service restrictions or opportunities; continued access to the Assateague Lighthouse; and continued staffing of visitor programs as well as wildlife and maintenance programs that provide visual, safety, and other benefits to visitors.

Consistency Determination

The CZMP contains the following applicable enforceable policies. For each enforceable policy, specific actions to be implemented under alternative B are described.

Fisheries Management. Administered by Virginia Marine Resources Commission (VMRC) and Virginia Department of Game and Inland Fisheries (VDGIF), this program stresses the conservation and enhancement of shellfish and finfish resources and the promotion of commercial and recreational fisheries (Code of Virginia §28.2-200 through §28.2-713, §29.1-100 through §29.1-570, or §3.1-249.59 through §3.1-249.62).

We anticipate conducting additional investigation, assessment, and analysis of management alternatives to reduce adverse impacts to shellfish and finfish habitat especially in the Toms Cove area. In consultation and cooperation with the NPS and the VMRC, we determined that the commercial harvest of horseshoe crabs that takes place on refuge lands does not contribute to the refuge's migratory bird purpose, does not contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, and is not beneficial to refuge resources; consequently, the use cannot

be permitted. We state we will enhance our existing partnerships (which include VMRC and VDGIF), and we will maintain and assess expansion of current fishing opportunities including shellfishing and crabbing.

Subaqueous Lands Management. Administered by VMRC, this program establishes conditions for granting permits for encroachments in, on, or over State-owned submerged lands throughout the Commonwealth (Code of Virginia §28.2-1200 through §28.2-1213).

We anticipate conducting additional consultation with the VMRC prior to implementing actions that would affect subaqueous lands or qualify as encroachments on property of the Commonwealth. We agree with VMRC that potential conflicts could arise in areas where the Commonwealth leases State-owned subaqueous lands for oyster or clam fishing activities adjacent to or near the refuges, and would require additional coordination with appropriate State and Federal partners. While the Federal government may have some jurisdiction up to a 1/2-mile wide corridor around the refuges which may overlap with State-owned bottom lands, these subaqueous lands are outside USFWS jurisdiction. We would consult with State agencies early in the project planning phase to ensure consistency with the enforceable policies of the CZMP. Permitting and site plan approvals would be acquired prior to implementing construction activities with the potential to adversely impact subaqueous lands.

Wetlands Management. Administered by VMRC and VDEQ, the wetlands management program preserves and protects tidal wetlands (Code of Virginia §28.2-1301 through §28.2-1320 or § 62.1-44.15.5).

The protection of wetlands is of high management priority for our agency and at this refuge. We strive to avoid adverse impacts on wetlands and surface waters. However, where avoidance cannot be achieved, we strive to minimize adverse impacts by minimizing land disturbance and impervious cover. As identified in our CCP/EIS, we would establish a long-term monitoring program to inform management actions aimed to protect wetlands on the refuge and adjacent to the refuge. In the future, we anticipate consulting with the State for individual projects for which site-specific planning has not yet been completed.

Future projects with the potential to impact wetlands and waterways include the proposed engineering of new water control structures to improve tidal flow to Swan Cove Pool (F Pool); improve or replace all water control structures to maximize flow capabilities; relocate the recreational beach and parking (and necessary road widening and infrastructure); and, construct in the Beach Road/South Pony Corral area a vehicle turn-around with parking, crabbing dock, and launch point for non-motorized boats. Early in the planning phase for each of these projects, we would consult with VMRC and VDEQ (and appropriate partners) to identify the most appropriate best management practices to be employed to ensure the protection of wetlands and surface waters, as well as identify permitting or plan approvals required prior to project implementation.

Dunes Management. Administered by VMRC, the purpose of this program is to prevent the destruction and/or alteration of primary dunes (Code of Virginia §28.2-1400 through §28.2-1420).

There have been a number of significant storms recorded over the last 200 years, some which have caused great damage to the refuge, such as the March 1962 nor'easter that destroyed most of Assateague Island's natural foredune, and the storm in January 1992,

which destroyed much of the dune line on the lower portion of the island and greatly reduced the primary dune line to the north. On Chincoteague NWR, the primary dunes have been altered and managed with NPS for 40 years. In the NPS assigned area, NPS tried different strategies, including planting dune grass, repairing dunes, relocating dunes and eventually rebuilding only dunes that were mandatory for protecting NPS infrastructure. As the dunes were built, overwhelmed by storms and knocked down, and then rebuilt, it became obvious to park and refuge managers that the artificial dune system failed to prevent significant facility and infrastructure damage. In addition, it was evident that the recreational beach had begun to narrow, restricting the area available for beach use, especially during high tide.

The proposed relocation of the recreational beach and associated parking would be in response to historic and anticipated impairment to the current recreational beach and parking from natural hazards, such as heavy storm damage to parking lots, overwash events, sea level rise, and the natural movement of barrier beach land forms. The relocation is intended to provide a sustainable situation so that the habitat and recreation portion of the beach can be sustained for as long as possible for both the wildlife of the refuge, and the visitors to the seashore. The refuge would develop and implement a site design plan for parking and access to a new beach location, approximately 1.5 miles north of the existing beach. In comments on the draft CCP/EIS regarding beach access and parking from NPS, we concur that "...8.5 acres is not a limit, but a guideline, that can be changed as needed with the actual design of a facility that provides the required 961 spaces and related facilities as part of a well-thought-out plan." Because USFWS is committed to working with NPS and others to future design, refine and analyze beach relocation infrastructure in a separate NEPA document, if the actual footprint becomes larger, then it can more appropriately be considered at that stage. Recontouring dunes and topography in the area of the proposed recreational beach, and adjacent lands, would have impacts to resources including geology and soils. Since Accomack County has not yet adopted the model Coastal Primary Sand Dune Zoning Ordinance, VMRC is charged with reviewing the impacts associated with any projects that may fall within the Coastal Primary Sand Dunes/Beaches of Accomack County. VMRC has stated that authorization for activity on dunes or beaches on Assateague or Wallops Island federal property would most likely not be required, unless the activity would affect land or water use, or natural resources, of Virginia's coastal zone around the federal property. Nevertheless, we anticipate consulting with the State for individual projects for which site-specific planning has not yet been completed.

Non-point Source Pollution Control. Administered by the VDEQ, the Virginia Erosion and Sediment Control Law and Regulations are intended to minimize non-point source pollution entering Virginia's waterways (Code of Virginia §10.1-560 et seq).

As identified in our CCP/EIS, we would occasionally manage nonnative plant species using herbicides. We would take all appropriate steps to minimize the potential to contaminate soils or cause runoff into wetlands or water when applying herbicide, including using the minimum effective dosage, using application methods that minimize non-target effects, applying during optimal growth stage for effectiveness, applying in optimal weather conditions, and adhering to licensing requirements and other Federal, State, and local regulations. We would minimize the potential for adverse impacts to the environment and humans by using only approved herbicides, developing and following a spill plan, and using

the herbicide as instructed by the manufacturer and according to pesticide use plans approved by our regional contaminants coordinator.

Hazardous materials and wastes would be stored, transported, and disposed of in accordance with applicable laws and regulations. We would consult with VDEQ regarding identification of approved solid waste and hazardous waste disposal sites, as well as opportunities to reuse and recycle non-hazardous materials.

Early in the planning phase for facility maintenance and construction projects, we would consult with VDEQ to identify the most appropriate best management practices to limit potential for non-point source pollution generation, as well as identify permitting or plan approvals required prior to project implementation. Actions with the potential to disturb 2,500 square feet or more of land and/or generate non-point source pollution include relocation of the recreational beach and parking (with clearing and grading activities, installation of staging areas, parking lots, roads, buildings, utilities, borrow areas, soil stockpiles, and related land-disturbing activities), and construction in the Beach Road/South Pony Corral area of a vehicle turn-around with parking, crabbing dock, and launch point for non-motorized boats.

Point Source Pollution Control. Administered by the State Water Control Board, the National Pollutant Discharge Elimination System permit program regulates point source discharges to Virginia's waterways (Code of Virginia §62.1-44.15).

None of the actions proposed in our CCP/EIS are anticipated to generate a new point source discharge, or alter of any existing point source discharge, into Virginia's waterways. We would consult with VDEQ regarding future maintenance or construction projects to determine which actions would be considered a new point source discharge and proceed with permitting and project approvals as needed.

Shoreline Sanitation. Administered by the Department of Health (VDH), this program regulates the installation of septic tanks to protect public health and the environment (Code of Virginia §32.1-164 through §32.1-165).

We anticipate conducting regular maintenance on the existing septic system serving the refuge's visitor contact station to ensure its proper functioning. We anticipate consulting with VDH regarding septic system maintenance, groundwater well operation, and potential upgrades to ensure protection of public health and the environment.

Air Pollution Control. Administered by the State Air Pollution Control Board, this program implements the Federal Clean Air Act through a legally enforceable State Implementation Plan (Code of Virginia §10.1-1300 through 10.1-1320).

As identified in our CCP/EIS, none of our actions would violate EPA standards for air quality. All actions would be undertaken to ensure compliance with the Clean Air Act. To reduce potential adverse impacts on local air quality, we would follow guidance provided the VDEQ's Division of Air Program Coordination and/or Tidewater Regional Office regarding construction project design and implementation, including the minimization of vehicle idling, use of precautionary measures to restrict emissions of volatile organic compounds and oxides of nitrogen, and minimization of fugitive dust. On a project-specific basis, we would consult with State agencies regarding permit requirements for boilers or

fuel-burning equipment that may be used during facility maintenance or construction activities. We would continue to coordinate with State offices regarding prescribed burning as needed.

Coastal Lands Management. Pursuant to the Coastal Zone Management Act of 1972, as amended, Federal activities affecting Virginia's coastal resources or coastal uses must be consistent with Virginia's CZM Program. While Chesapeake Bay Preservation Areas (CBPA) are not designated on Federal lands, this does not relieve Federal agencies of their responsibility to be consistent with the provisions of the Chesapeake Bay Preservation Area Designation and Management Regulations (Regulations), as one of the enforceable programs of the CZM Program. Federal actions on installations located within Tidewater Virginia are required to be consistent with the performance criteria of the Regulations on lands analogous to locally designated CBPAs. Projects that include land disturbing activity must adhere to the general performance criteria of the Regulations, especially with respect to minimizing land disturbance (including access and staging areas), retaining indigenous vegetation and minimizing impervious cover.

In addition to the above requirements, any land disturbance over 2,500 square feet must comply with state erosion and sediment control and state/local stormwater management requirements.

The refuge has lands analogous to either the Resource Protection Area (RPA) or the Resource Management Area (RMA), but as a Federal resource, not included in either. Nevertheless, we would consult with State offices to ensure the protection of coastal lands to the extent practicable. We would consult with VDEQ regarding best management practices, minimizing land disturbance and impervious cover, and the protection of native vegetation. As stated earlier, we will consult with the appropriate agencies to ensure that projects that include land disturbing activity adhere to the general performance criteria of the Regulations, especially with respect to minimizing land disturbance (including access and staging areas), retaining indigenous vegetation and minimizing impervious cover.

Although not required for the purposes of consistency, in accordance with 15 CFR §930.39(c), we considered the advisory policies of the CZMP as well.

Geographical Areas of Particular Concern. Coastal natural resource areas (e.g., wetlands; aquatic spawning, nursery, and feeding grounds, significant wildlife habitat areas, public recreational areas, and underwater historic sites) are vital to estuarine and marine ecosystems and receive special attention from the Commonwealth because of their conservation, recreational, ecological, and aesthetic values. Coastal natural hazard areas are vulnerable to continuing and severe erosion and are susceptible to wind, tidal, and storm-related damage.

The diversity of conservation, ecological, recreational, and aesthetic values associated with Chincoteague and Wallops Island NWRs are detailed in chapter 3 of the CCP/EIS. As a unit of the Refuge System, the paramount purpose of this refuge is to serve as an inviolate sanctuary for migratory birds. The refuge has been opened for six priority wildlife-dependent recreational uses, as well as general and specialized uses; each of these uses has been found to be compatible with the refuge's purpose (see appendix P).

As discussed earlier in this FCD, we anticipate consulting with VDEQ regarding coastal or shoreline structures (including septic system maintenance, groundwater well operation, and potential upgrades to ensure protection of public health and the environment) on the

refuge in the future. We aim design and site facilities where the potential for property damage due to storms or shoreline erosion can be minimized.

Implementation of alternative B would have no direct impact on commercial ports, commercial fishing piers, or community waterfronts in the refuge vicinity.

Shorefront Access Planning and Protection. The Commonwealth values maintenance of shorefront access for public recreational uses, while protecting the historic features of waterfront properties.

Implementation of alternative B would have no direct impact on Virginia's 25 miles of public beaches.

Implementation of alternative B would be consistent, to the maximum extent practicable, with the 2007 Virginia Outdoors Plan. Our partnership efforts with the the NPS and others exemplify our commitment to accommodate public uses of the refuge that are appropriate and compatible. We would increase the availability and quality of wildlife-dependent recreational uses on the refuge, as well as increase our outreach efforts through partners with shared conservation goals.

Implementation of alternative B would have no direct impact on waterfront recreational land acquisition opportunities in the Commonwealth.

As detailed in chapter 3 of the CCP/EIS, the refuge has a long history of human settlement and development. We would use a proactive approach to interagency coordination for the protection of the refuge's cultural resources. Through our partnerships, we would promote cultural resource stewardship and appreciation both on and off the refuge in educational programs and interpretive media.

Finding

Based on this information, data, and analysis, the USFWS finds that alternative B (the preferred alternative) of the CCP/EIS for Chincoteague NWR and Wallops Island NWR is consistent, to the maximum extent practicable, with the enforceable policies of the CZMP. Although not required for the purposes of consistency, we find that alternative B is in line with the CZMP advisory policies when following them will not materially interfere with, or detract from, the fulfillment of the National Wildlife Refuge System mission or the purposes for which the refuge was established.

Concurrence Response

The entire draft CCP and EIS were available on the refuge's website for a 90-day public review and comment period, from May 15, 2014 through August 15, 2014. We also mailed paper and CD-ROM copies of the draft CCP and EIS to VDEQ for their review on May 15, 2014. VDEQ is responsible for coordinating Virginia's review of Federal environmental documents prepared pursuant to NEPA and responding to appropriate Federal officials on behalf of the Commonwealth.

VDEQ will coordinate the review of this FCD (and CCP/EIS) with agencies administering the enforceable and advisory policies of the CZMP. Additionally, VDEQ can publish a public notice of this proposed action on its website in accordance with 15 CFR §930.2. After review and compilation of agency responses, the VDEQ can concur with our consistency finding, provided all

applicable permits and approvals are obtained. Details about applicable permits and approvals will be provided in their letter, and would be available for public review at the refuge upon request.