

**ENVIRONMENTAL ACTION STATEMENT
CATEGORICAL EXCLUSION**

UNITED STATES FISH AND WILDLIFE SERVICE

Within the spirit and intent of the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act (NEPA) (40 CFR §1500-1508), and other statutes, orders, and policies that protect fish and wildlife resources, the following administrative record is created.

The U.S. Fish and Wildlife Service (USFWS) is proposing to conduct a restoration of the Swan Cove Pool (Figure 1) within Chincoteague National Wildlife Refuge (NWR, refuge). The restoration project will improve approximately 360 acres of estuarine-salt marsh habitat by enhancing and/or restoring currently degraded areas that have been negatively impacted by an under sized culvert restricting sediment deposition and tidal flow. The overarching goal of this project is the restoration of Swan Cove by:

- 1) Restoring the natural connection with Little Toms Cove;
- 2) Increasing marsh resiliency in the cove by increasing sediment deposition and a natural ebb/flood regime to Swan Cove; and
- 3) Increasing resiliency of the Swan Cove ecosystem to sea level rise, large storm events and other ecosystem stressors by increasing the health and acreage of the marsh platform.

To increase the quantity and quality of marsh within the pool, the project design will consider thin layer deposition, sediment redistribution, or other techniques to build back-barrier marsh platforms. Raising elevations to allow for optimum vegetation growth will establish tidal *Spartina* marsh (as a seed source for further natural recolonization). Furthermore, increasing tidal flow and creating the back barrier marsh platform will reduce impacts from catastrophic failures (breaches) of Swan Cove Pool.

The project is expected to improve populations of select priority wildlife species that depend on coastal marshes for their survival. These species are indicators of an important ecosystem that supports many other species and provides benefits to communities, including storm protection, nursery habitat for fish, mosquito control, and recreational opportunities. The project will have an overall net benefit to the ecosystem.

A Categorical Exclusion (CE) describes a category or type of action that do not individually or cumulatively have the potential for significant effect on the human environment. I have determined that the proposed action is categorically excluded from further NEPA documentation requirements consistent with 40 CFR §1508.4, 43 CFR 46.210 and 516 DM 8.5, and that is covered by the following Departmental categorical exclusion(s):

“The construction of new, or the addition of, small structures or improvements, including structures and improvements for the restoration of wetland, riparian, instream, or native habitats, which result in no or only minor changes in the use of the affected local area. The following are examples of activities that may be included.

- (a) The installation of fences.
- (b) The construction of small water control structures.
- (c) The planting of seeds or seedlings and other minor revegetation actions.
- (d) The construction of small berms or dikes.
- (e) The development of limited access for routine maintenance and management purposes.” 516 DM 8.5B(3).

“Grants for categorically excluded actions in paragraphs A, B, and C, above; and categorically excluded actions in Appendix 1 of 516 DM 2.” 516 DM 8.5E(2).


Project Leader

12-11-18
Date

CATEGORICAL EXCLUSION DECISION DOCUMENT

The National Environmental Policy Act (NEPA) process is intended to, “help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment” (1500.1). The stated purposes of NEPA include (42 USC 4321):

- Declaring a national policy which will encourage productive and enjoyable harmony between man and his environment;
- Promoting efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man;
- Enriching the understanding of the ecological systems and natural resources important to the Nation; and
- Establishing the Council on Environmental Quality (CEQ).

The purposes of NEPA and the mission of the U.S. Fish and Wildlife Service (USFWS) express comparable goals. Both contain language designed to result in the conservation and protection of our nation’s resources for the benefit of future generations.

Regardless of the nature of the action, the first consideration when determining if the agency must undertake a NEPA review is to assess whether or not the procedural requirements of the act are triggered. NEPA applies to a broad range of federal actions, but includes approval of specific projects, such as construction or management activities, located in a defined geographic area that may require approval by permit or other regulatory decision, as well as federal and federally assisted activities. This project fits within that category (as permits will be secured) and therefore is to be considered for NEPA review. The proposed project then must be evaluated for the level of documentation and analysis required under NEPA. The proposed action was evaluated within the larger Chincoteague National Wildlife Refuge (NWR, refuge) Comprehensive Conservation Plan (CCP) and Environmental Impact Statement (EIS) (dated August 2015, and the subsequent final CCP Record of Decision dated November 6, 2015). Project impacts were evaluated within that comprehensive planning document, this action is tiered within the larger park management goals, and objectives stipulated within that CCP/EIS. In an effort to reduce redundancy, much of that information and analysis will be incorporated by reference. Because of that analysis, a review of applicable categorical exclusions (CE) to NEPA was performed to determine applicability. A CE describes a category or type of actions that do not cumulatively or individually have the potential for significant environmental impacts (1508.4). If an action fits within a CE it is not exempt from NEPA; but it is exempted from the requirement to prepare an EA or EIS.

Review of Departmental and agency NEPA procedures indicate the proposed project below would be best reviewed as a “Categorical Exclusion for which Documentation is Required.” This pathway is applicable to actions that again have been found to have no potential for individual or cumulative significant environmental impacts under ordinary circumstances, but whose potential for environmental impacts warrants some level of analysis and formal documentation.

Description of Action

The coastal environment on the Chincoteague National Wildlife Refuge (refuge) is constantly changing in response to sea level rise and other natural processes. In August of 2015, the U.S. Fish and Wildlife Service (USFWS) released their Final Comprehensive Conservation Plan and Environmental Impact Statement (CCP/EIS) for the Chincoteague and Wallops Island National Wildlife Refuges. The Record of Decision was signed on November 6, 2015, selecting Alternative B for implementation. The selected alternative included the relocation of the recreational beach, which is necessary because the parking area has been washed out numerous times in the past and the coastal geomorphic processes will continue to impact the area. The frequency of washouts resulting in beach access closure is expected to increase in the future (USFWS, 2018). The beach management practices resulted in accelerated erosion of the beach shoreline, and the loss of beach sand into Swan Cove Pool via frequent overwash, has exacerbated the thinning and flattening of the dune and beach at the recreational beach, over time. In addition, the beach material is washed into Swan Cove Pool (the area behind the historic recreational beach), and is unavailable for maintaining the back barrier marsh platform, and also unavailable to downdrift transport, thus contributing to the thinning of the beach along the southern part of the island. These beach management practices impeded sand movement that would facilitate marsh development in the Swan Cove Pool area and stabilization of that system.

The Swan Cove Pool was historically a tidal marsh and sub-estuary of Little Toms Cove at the refuge. The sub-estuary was cut off from natural tidal flooding by construction of beach access road (Beach Road). This system has been managed as a freshwater pool barring our ability to allow the system to return to natural conditions. The beach access road completely blocked the main tidal channel connecting Little Toms Cove to Swan Cove. An alternate connection under Beach Road was established through a water control structure (WCS) constructed west of the original tidal channel. This water control structure allows limited tidal exchange with Little Toms Cove, through a narrow ditch through native salt marsh, and a narrow borrow ditch in Swan Cove. The undersized WCS has likely negatively impacted Swan Cove by restricting natural sediment deposition to the marsh platform, and restricting exchange of nutrients, oxygenated water, and salinity with Little Toms Cove. In addition, there is evidence of turbulence and erosion at the site of the current water control structure.

During significant storm events, storm surf from the Atlantic Ocean and Toms Cove over washed into Swan Cove Pool. The pool fills with salt water, which then flows through existing water control structures north into B Pool South (Snow Goose Pool), B Pool North (Shoveler Pool), C Pool (Mallard Pool), and D Pool (Pintail Pool). After a storm event, the salt water returns via the natural north to south drainage pattern; however, the size of the existing water control structures appears to restrict the movement causing water to breach the beach back to the ocean. This resulted in a longer period during which the freshwater plant and animal species were exposed to a saltwater environment and an ephemeral breach north of parking area one (Burgess & Niple, 2017). Because of the increase in the frequency of these events and the movement of the parking area (which negates the need to continue the parking maintenance activities), it is appropriate to restore this system back to as natural a system as possible.

The Swan Cove Pool Restoration Project will improve approximately 360 acres of estuarine-salt marsh habitat by enhancing and/or restoring currently degraded areas that have been negatively impacted by an under sized culvert restricting sediment deposition and tidal flow (Figure 1). The overarching goal of this project is the restoration of Swan Cove by:

- 1) Increasing marsh resiliency by restoring a natural ebb/flood regime, to increase sediment deposition and nutrient and oxygen exchange; and
- 2) Increasing the health and acreage of the back barrier marsh platform by amending it with beneficial use of dredged material.

The USFWS contracted with the Louisiana State University Center for Coastal Resiliency to develop a large-scale hydrodynamic simulation based on Hydro-Marsh Equilibrium Model (Hydro-MEM). This modelling effort will provide guidance on the required opening size to improve tidal flooding and draining of Swan Cove. The model results will include:

- Recommendations of locations for tidal channel reconstruction in Swan Cove;
- Potential locations for marsh vegetation plantings to increase recolonization;
- Alternative channel width/depth ratios for restoring a natural tidal prism;
- Predictions of water levels, salinity levels, and local rates of marsh accretion in the cove, following construction of a specific tidal channel;
- The project design will include beneficial use of dredged material, from Chincoteague Inlet, to rebuild back barrier marsh platforms at elevations to allow for optimum *Spartina* growth; and
- Marsh platform reconstruction will facilitate slow, sustained, Assateague Island rollover, and integrity, into the future.

To increase the quantity and quality of marsh within the pool, the project design will consider thin layer deposition, sediment redistribution, or other techniques to build back-barrier marsh platforms. Raising elevations to allow for optimum vegetation growth will establish tidal *Spartina* marsh (as a seed source for further natural recolonization). Furthermore, increasing tidal flow and creating the back barrier marsh platform will reduce impacts from catastrophic failures (breaches) of Swan Cove Pool.

The project is expected to improve populations of select priority wildlife species that depend on coastal marshes for their survival. These species are indicators of an important ecosystem that supports many other species and provides benefits to communities, including storm protection, nursery habitat for fish, mosquito control, and recreational opportunities (USFWS, 2018).

Project Location: Accomack County, Virginia

Potential Impacts of the Action Covered by the CE

Potential impacts from the project were evaluated and addressed within Chapter 4 of the CCP/EIS. The document indicates that the increased tidal flow would lead to improved water quality, dissolved oxygen, pH and salinity. The improvements of water control structures would have beneficial impacts on these impoundments and in turn to Toms Cove and Chincoteague Bay (management action 15b). The increase in habitat quality that results from allowing natural

processes to take over would see a beneficial impact for a number of species (piping plovers, sea turtles). Improvements to the tidal flow would allow fish and aquatic invertebrates, such as crabs and mollusks passage into the restored salt marsh resulting in improvements to multiple trophic levels that rely on that type of ecosystem. An impact may reasonably be expected in association with the release of sediments, nutrients and waters from the impoundments due to increase tidal exchange in the system. This is usually short term in duration and the intensity can be tempered by instituting best management practices. USFWS will work with partners to ensure coordination and minimize impacts to the community.

Public Involvement and Coordination

Public comment is not required when using a CE. However, given a high degree of public interest projects associated with this action, we have posted this CE on our agency website and provided an opportunity for input through this posting. USFWS will work closely with the community in communicating the status of the project as design plans are completed.

The development of the CCP was the result of many years of planning and coordination with the local community, the Town of Chincoteague and Accomack County. While elements of the beach relocation were discussed in detail and had varying levels of support, the bulk of the actions put forth were supported. The concept of improving resiliency, and habitat at the former beach location and within Swan Cove were among those concepts supported within the community.

Mitigation(s)

Construction and disturbance will not coincide with nesting season for sensitive species in the area. Surveys will inform staff of the best timing for implementation. Work that would result in the release of sediment/bacteria or impaired water quality will be timed to minimize any impacts to shellfish and aquaculture activities. USFWS will coordinate with the Virginia Marine Resource Commission to ensure solid communications with all grant holders. All work is subject to securing appropriate permits and plans prior to implementation.

We do not foresee cumulative impacts to archeological sites from the implementation of this project. We will continue to protect archeological resources from any actions associated with the project through Regional Historic Preservation Office review, site locations surveys or evaluations, redesign of the project to avoid sites, consultation with the State Historic Preservation Office, and mitigation of impacts when necessary.

Categorical Exclusion for the Proposed Action

This proposed action is covered by the following categorical exclusions: 516 DM 8.5B(3), and 8.5E(2).

“The construction of new, or the addition of, small structures or improvements, including structures and improvements for the restoration of wetland, riparian, instream, or native habitats, which result in no or only minor changes in the use of the affected local area. The following are examples of activities that may be included:

- (a) The installation of fences.
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- (c) The planting of seeds or seedlings and other minor revegetation actions.
- (d) The construction of small berms or dikes.
- (e) The development of limited access for routine maintenance and management purposes.” 516 DM 8.5B(3), and;

“Grants for categorically excluded actions in paragraphs A, B, and C, above; and categorically excluded actions in Appendix 1 of 516 DM 2.” 516 DM 8.5E(2).

The action is categorically excluded from further NEPA analyses, because it has been determined to be a class of action which does not individually or cumulatively have a significant effect on the human environment.

Justification

This action will result in no or negligible environmental effects on site, or in the vicinity of the restoration site, as the project involves restoring natural flows and ultimately restoration of important habitat that supports a number of species. The project will cause some short-term negligible effects in the installation of water control structures and in the placement of sediments to raise marsh surface but natural processes should take over and assist in the overall recovery of the system, leading to a more stable and resilient marsh and beach system. Staff will will monitor water quality and sediment transport and USFWS will work with state and local entities to communicate any short terms disturbances.

References

Burgess & Niple. (2017). *CNWR Water Control Structures Design*.

Burgess & Niple. (2017). *Hydraulic Analysis Report*. U.S. Fish and Wildlife Service.

USFWS. (2015). *Chincoteague NWR Final CCP/EIS*.

https://www.fws.gov/refuge/Chincoteague/what_we_do/finalccpeis.html

USFWS, NPS. (2018). *Recreational Beach Relocation EA*.

USFWS, (2018). *Conserving Coastal Marshes, Good for wildlife, good for people*

CHECKLIST FOR NEPA COMPLIANCE

Extraordinary Circumstances (43 CFR 46.215)

The CEQ Regulations (40 CFR 1508.4) require agency procedures to provide for extraordinary circumstances in which a normally excluded action may have a significant environmental effect and require additional analysis and action. Any action that is normally categorically excluded must be evaluated to determine whether it meets any of the extraordinary circumstances below; if it does, further analysis and environmental documents must be prepared for the action. If extraordinary circumstances do apply, a CE may not be used. In such circumstances, the project must be either modified so that extraordinary circumstances no longer apply, or the agency must prepare an EA or EIS (46.205). Significant impacts as referred to in the list of extraordinary circumstances below should be interpreted to mean significant adverse impacts.

Extraordinary circumstances for the project were screened by the following criteria:

- a. **Have significant adverse effects on public health or safety?** No, the project should improve ecological quality in the area over time. The project may result in a release of nutrients, sediments and bacteria from this closed embayment pool initially but efforts will be made to ensure that the release is managed and coordinated to minimize harm to shellfish beds and the adjacent cove. All impacts would be short term in nature.
- b. **Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (EO 11990); floodplains (EO 11988); national monuments; migratory birds; and other ecologically significant or critical areas?** The project will restore the unique geographic characteristics of the system by restoring water flow and sediment depositional processes. While wetlands and floodplains will be impacted in the short term, a Statement of Findings for the protection of wetlands and floodplains (EO 11990 and 11988) is generally not prepared when the project goals and objectives are to restore natural processes with a net benefit to the protection of floodplains and wetlands. Natural and cultural resources will benefit as system is restored and natural coastal processes are maintained. No adverse effects are anticipated.
- c. **Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA section 102(2)(E)]?** Controversial environmental effects or conflicts are not anticipated. Restorations of this nature have been undertaken across the country and impacts are relatively known.
- d. **Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?** No unique or unknown risks are anticipated. Restoration work of this nature has been conducted many times and while there is always some uncertainty, design and planning will be used to reduce any risk to known issues that are linked to work of this type.

- e. **Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?** No additional actions are anticipated beyond this restoration.
- f. **Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects?** The project was reviewed within an Environmental Impact Statement (in August of 2015, the USFWS released their Final Comprehensive Conservation Plan and Environmental Impact Statement (CCP/EIS) for the Chincoteague and Wallops Island National Wildlife Refuges. The Record of Decision was signed on November 6, 2015, selecting Alternative B for implementation) covering the larger refuge vision for the work. That document enveloped the breadth of impacts within its analysis. Further, a cumulative impact analysis can be found within Section 4.16 of the EIS.
- g. **Have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by the bureau?** The EIS evaluated this concern (Section 4.14.1) across the refuge and this project in particular would not affect listed properties. Further analysis for impacts on cultural resources may need to be completed prior to construction to evaluate archeological resources should extensive ground disturbance occur. The area of ground disturbance associated with the project would largely lie within the already disturbed road prism and thus is not likely to be of concern. As project design details are developed, Section 106 review will be completed utilizing that detail.
- h. **Have adverse effects on species listed or proposed to be listed on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species?** Several listed species utilize this beach system; however, the impacts of the parking lot relocation and restoration were addressed within Section 4.6.2 of the EIS. Natural processes would allow for over wash to occur in the location of the existing recreational beach, resulting in fresh sand and shell which is prime habitat for coastal nesting birds, turtles, and seabeach amaranth. Restoration will provide additional stability to beach configuration, reduce human disturbance and provide additional forage area for important bird species. A Section 7 review was initiated in conjunction with the Virginia Field Office. As project design details are developed, Section 7 review will be completed utilizing that detail.
- i. **Violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment?** No laws will be violated. Additional permits (Clean Water Act, Storm water management) will be needed to proceed with the project but those will be secured as design processes and prior to any implementation.
- j. **Have a disproportionately high and adverse effect on low income or minority populations (EO 12898).** As described in chapter 3 of the EIS, within the study area, low-income and minority communities reside outside of the town of Chincoteague in the more rural areas of Accomack County. Given the distance between the refuge and environmental justice communities, they would not be affected as residents, for the most part, but these communities were evaluated for environmental justice impacts as visitors to the refuge and as employees of town businesses. According to the Springsted Report referred to in the Economic Analysis section, 85 percent of travel related expenditures in Accomack County

occur in Chincoteague, and it has nearly 600 jobs supported by refuge-related visits. Given the importance of the town of Chincoteague to the county economy, the economic impacts to the town described in the economic impacts section can be considered to be felt more broadly within the county as a whole. Economic impacts resulting from this project would not disproportionately affect low-income communities.

- k. Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (EO 13007).** No impact is anticipated; however, further analysis for impacts on cultural resources may need to be completed prior to construction to evaluate archeological resources should extensive ground disturbance be necessary to complete the project. The area of ground disturbance associated with the project would largely lie within the already disturbed road prism and thus is not likely to be of concern.
- l. Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and EO 13112).** The Refuge has an established invasive species monitoring and control program. Disturbance associated with the project may create pockets of invasive species in disturbed areas, which will require treatment. Monitoring will detect these invaders early and control will be undertaken.
- m. Have material adverse effects on resources requiring compliance with Executive Order 11988 (Floodplain Management), Executive Order 11990 (Protection of Wetlands), or the Fish and Wildlife Coordination Act?** As stated above, the nature of the project is to restore wetland functions, thus while it will result in disturbance to floodplains and wetlands, a Statement of Findings is not generally conducted when the project work is developed for the direct benefit to wetland and flood plain functioning. Effect will not be adverse but beneficial.

The responses to the exceptions above indicate that no extraordinary circumstances exist, and an EA/EIS is not warranted for this project. Should design details identify any concerns at a later date, the project impacts will be reevaluated.

Decision

Within the spirit and intent of the Council of Environmental Quality's regulations for implementing the National Environmental Policy Act (NEPA) and other statutes, orders, and policies that protect fish and wildlife resources, I have established the following administrative record and have determined:

- The proposed action is covered by a categorical exclusion as provided by 43 CFR §46.210 or 516 DM 8.5. No further NEPA documentation will therefore be made.**

Service signature approval

Signature *Way AS*
Title *Refuge Manager*

Date: *12-11-18*

Figure 1 - Swan Cove Restoration Project
Chincoteague National Wildlife Refuge

