

Draft

Compatibility Determination

Title

Draft Compatibility Determination for removal of spoil from Savannah National Wildlife Refuge.

Refuge Use Category

Other Uses

Refuge Use Type(s)

Dredge or Fill

Refuge

Savannah Coastal National Wildlife Refuge

Refuge Purpose(s) and Establishing and Acquisition Authority(ies)

“...as a refuge and breeding ground for birds and wild animals subject to future use in navigation if necessary and to valid existing rights if any” (Executive Order 5748, dated April 6, 1927).

“...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds” 16 U.S.C. 715d (Migratory Bird Conservation Act)

For lands acquired under the Refuge Recreation Act for “ (1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species.” 16 U.S.C. 460k

“...for the conservation of the wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions” 16 U.S.C. 3901(b), 100 Stat. 3583 (Emergency Wetlands Resources Act of 1968)

“...for the development, advancement, management, conservation, and protection of fish and wildlife resources” 16 U.S.C. 742f(a)(4))

“...for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude” 16 U.S.C. 742f(b)(1) (Fish and Wildlife Act of 1956)

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System (Refuge System) is to administer a

national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans (Pub. L. 105-57; 111 Stat. 1252).

Description of Use

Is this an existing use?

Yes

This Draft compatibility determination (CD) reviews and replaces the CD originally completed on November 1, 1995 and renewed in 2012 for removal of sand (spoil) from a U.S. Army Corps of Engineers (USACE) dredge disposal site located on Onslow Island on the Savannah NWR on location known as containment area 1N.

What is the use?

The Service granted the USACE a special use permit issued in 1973, that remains in effect, the right of entry to dispose and/or remove spoil material on the Refuge (Jasper County, South Carolina). This CD would allow for local government agencies or private party access for the removing, dredging, discharging, placing, or other movement of material from one location to another.

Is the use a priority public use?

No

Where would the use be conducted?

The use would be conducted specifically at the Dredge Material Confinement Area (DMCA) 1N on Onslow Island located on the Savannah NWR with access from the highway SC 170/GA 25. This area contains approximately 55 acres of spoil material (less than 1% of the roughly 31,000 acre refuge). This area has been utilized as a dredge disposal site since 1973 with frequent access and utilization of heavy equipment and personnel. Travel is restricted to the existing access road located behind a locked gate.

The area is disturbed habitat but nevertheless can and does attract migratory birds and provides shorebird nesting habitat. The habitat consists of open water, grassed berms, and exposed sand and mud flats. The borrow area retains water which provides feeding grounds for wading birds such as the great egret (*Ardea alba*), the great blue heron (*Ardea herodias*), white ibis (*Eudocimus albus*), and green heron (*Butorides virescens*). When water is drawn down naturally through evaporation or through the water control structure on the northeast corner of the DMCA (as managed by the USACE) shallow water and mud flats provide shorebird habitat for such species as Wilson's plover (*Anarhynchus wilsonia*), American avocet (*Recurvirostra americana*), and spotted sandpiper (*Actitis macularius*). Other wildlife

expected to utilize the area include waterfowl, reptiles, and small mammals. See Figure 1 for map of area evaluated in this determination.

When would the use be conducted?

The use may be conducted throughout the year, during daylight hours only and upon permissions provided by the USFWS and concurred with by the USACE. The duration of the activity would be variable but would generally occur over a couple weeks to one month. Visitor utilization is limited to non-motorized access, on Wednesdays only. USACE would be responsible for oversight of the excavation to ensure integrity of the DMCA is not compromised.

How would the use be conducted?

The dredged material would be conveyed with heavy equipment and personnel to the DMCA 1N location for storage and/or extraction. The specifics of equipment required is dependent on the needs of the contractor but may contain dump trucks, semi-trucks, excavators, and other heavy machinery. There is one access road off the paved highway SC 170/GA 25 that is the only access route. The number of personnel involved is the purview of the contractor and no Service staff should be needed for the use; Service staff would be involved with issuing of Special Use Permits (SUPs), access keys/codes, and occasional evaluation of the site and use for compliance.

The contractor would capture surveys before and after borrowing to quantify the material removed. The contractor would be required to harvest material in accordance with USACE specifications.

Why is this use being proposed or reevaluated?

This use is being reevaluated pursuant to the Service Compatibility Policy (603 FW 2.11 H), which require review and reevaluation of non-priority refuge uses every ten years. This action would be conducted periodically and only upon request throughout the timeframe of this determination.

Availability of Resources

To comply with the Refuge Recreation Act (Public Law 87-714), the Project Leader must determine whether sufficient resources—financial, staffing, facilities, or other infrastructure—are available to support the proposed use without materially interfering with the refuge purpose(s) or the mission of the National Wildlife Refuge System. This determination should be informed by a review of current capacity and, where applicable, the refuge’s Comprehensive Conservation Plan (CCP).

The use is conducted exclusively by the contractor; the reliance of existing refuge personnel should be minimal. Refuge staff would primarily be responsible for writing

and issuing SUP's, other administrative functions and communications with the contractors, and periodic site visits to ensure compliance with established refuge regulations and project stipulations.

Assessment of current resources and capacity

Refuge staff are needed to administer activities such as Special Use Permit administration as well as to ensure that the stipulations are met, and to monitor and evaluate impacts of the refuge use. We estimate that these functions require [25 percent of an FTE for 1 of refuge employee. The refuge typically supports less than one of these proposed activities annually at an estimated recurring cost of labor, estimated at \$1000 - \$2000/year when activity is planned.

Impacts of changes to resources and capacity

The availability of resources is subject to change and the level of use provided may vary based on current staffing, partner support, funding, or infrastructure conditions. Costs may increase over time, in relation to changes in the costs for equipment, maintaining facilities, etc. A substantial increase to the number of requests may also create the need for additional resources to administer the use. The Project Leader would use sound professional judgment in evaluating whether the refuge or its partners can develop, operate, and maintain the use in a compatible manner.

For other refuge uses, if resource conditions shift such that the refuge can no longer sustain the use in a compatible manner, the Project Leader may modify or suspend the use pursuant to 50 CFR 25.21. The public would be notified of any changes to refuge uses, including temporary modification or suspension, re-evaluation of compatibility and/or discontinuing of refuge uses.

Anticipated Impacts of the Use

Potential impacts of a proposed use on the refuge's purpose(s) and the Refuge System mission

The effects and impacts of the proposed use to refuge resources, whether adverse or beneficial, are those that are reasonably foreseeable and have a reasonably close causal relationship to the proposed use. This CD includes the written analyses of the environmental consequences on a resource only when the impacts on that resource could be more than negligible and therefore considered an "affected resource." Socioeconomics, air quality, and geology would not be more than negligibly impacted by the action and have been dismissed from further analyses.

A draft Section 7 consultation analysis found that the use would have "no effect" on

the following Threatened and Endangered Species that may be local to the general area of the proposed activity: Tricolored Bat (*Perimyotis subflavus*), West Indian Manatee (*Trichechus manatus*), Eastern Black Rail (*Laterallus jamaicensis jamaicensis*), Southern Hognosed Snake (*Heterodon simus*), Eastern Indigo Snake (*Drymarchon couperi*), Pondberry (*Lindera melissifolia*), or Monarch Butterfly (*Danaus plexippus*). Section 7 consultation on file with Refuge office. None of these species is expected to be found on this highly disturbed and altered habitat.

Short-term impacts

Expected short-term impacts include wildlife disturbance both with equipment and personnel and noise, soil compaction or erosion, and addition and removal of spoil that introduces changing water and sediment depth. Birds exhibit various behavioral and physiological responses to human disturbance and may avoid areas with high levels of human activity (Burger 1981). Temporary flushing of birds from feeding or resting may be unavoidable during consistent human activity (Haverra et al. 1992). The Service may temporarily disallow extraction or removal during periods of heavy waterfowl use or shorebird nesting to protect wildlife. These short-term impacts are consolidated within one area of the Refuge and near other suitable habitat for wildlife that may disperse to areas less active. No significant beneficial or adverse short-term impacts are likely to be associated with the use. The short-term impacts are expected to be minimal with disturbances to visitors, wildlife, soil, and vegetation.

Long-term impacts

This use has occurred in the area since 1973 and it is likely that wildlife still frequenting the site have become habituated to the disturbance or are otherwise able to tolerate the activity. Species' ability to tolerate humans varies based on multiple factors, such as adaptation to urbanization and body mass (Samia et al. 2015). The site is within a major shipping channel with multiple, and continually expanding, factories, and a highway which conveys consistent and frequent vehicle traffic including semi-trucks.

Wildlife do experience various long-term effects due to disturbance. Disturbance from visitors can cause an individual or group of shorebirds to alter their normal behavior, change habitat use, and may reduce productivity and survival rates (Mengak and Dayer 2020). Disrupted foraging behavior from frequent flushing can cause decreased body mass (Gibson et al. 2018).

The habitat on Onslow Island has seen habitat disturbance and alteration throughout the years from contribution of the dredge activity and through nearby human activity. However, some wildlife species have been able to adapt to changing conditions and

utilize the resource successfully. Bird species are regularly observed utilizing the area for overwintering habitat, rest, and finding suitable conditions for nesting. Wildlife that require less disturbance or specialized habitat can find more acceptable conditions elsewhere on the Refuge with the varied habitats available.

Birds and other wildlife have been documented becoming habituated to human activity and noise through continuous or frequent exposure. It is expected that most wildlife in the area are habituated to noise associated with a variety of human activity common in the area, including this use. As noted, this use has occurred consistently for many over 50 years and the Service does not expect the proposed use to cause adverse impacts to specific species or habitat types. The use is contained within the designated area and would be short term in its impact duration. The area has been consistently managed and monitored by the Service since it has been operated as a DMCA site per the 1973 agreement with the USACE. The Service would continue to monitor the use through the issuing of SUPs which would limit timing, access, and the result of disposal and/or excavation of spoil.

Public Review and Comment

The draft compatibility determination would be available for public review and comment for 14 days from April 13, 2026 to April 27, 2026. A hard copy of this document would be posted at the Savannah National Wildlife Refuge Visitor Center at 694 Beech Hill Lane and it would be made available electronically on the refuge website <https://www.fws.gov/refuge/savannah>. Please let us know if you need the documents in an alternative format. Concerns expressed during the public comment period would be addressed in the final determination.

Determination

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

1. Permittee, or their assigns, would contact appropriate Refuge personnel prior to any work on the Refuge and provide information on location, timing, and planned methods and duration of work.
2. The U.S. Army Corps of Engineers (USACE) would be consulted prior to any work to ensure compliance with their rules and regulations.
 - a. Any best practices required by the USACE would be added to the special use permit issued by the Service to the permittee.

3. A special use permit would be issued that outlines the administrative and management restrictions required to conduct the use. The permit would provide specific details.
 - a. Further conditions would be detailed in the permit that are required by the USACE to preserve the integrity of the containment area.
4. Access permission would be specific to the permittee and 3rd party contractors previously identified by the permittee. Keys, codes, and any other access devices shall not be duplicated or shared without consent from the Refuge.
5. Access, excavation, and spoil hauling shall be conducted during daylight hours only.
6. Upon completion of the permitted activity, the access road would be evaluated by the permittee and an agency representative and, if needed, would be repaired to a condition present prior to the activity.
7. The Refuge Project Leader retains the authority to halt or spoil removal operations at any time if conditions change that would likely increase the potential for negative impacts to Refuge resources.
8. All operations under this use would comply with National Environmental Policy Act, Endangered Species Act Section 7, National Historic Preservation Act Section 106 requirements, and other applicable compliance requirements.
9. This Special Use Permit may be cancelled at any time at the discretion of the Project Leader for non-compliance with the conditions of the Permit.
10. Failure to abide by any part of this special use permit; violation of any Refuge-related provision in Titles 43 or 50, Code of Federal Regulations; or violation of any pertinent state regulation (e.g., fish or game violation) would be considered grounds for immediate revocation of this permit and could result in denial of future permit requests for lands administered by the U.S. Fish and Wildlife Service. This provision applies to all persons working under the authority of this permit (e.g., assistants or contractors). Appeals of decisions relating to permits are handled in accordance with 50 Code of Federal Regulations 36.41.
11. The permittee is responsible for ensuring that all employees, party members, contractors, aircraft pilots, and any other persons working for the permittee and conducting activities allowed by this permit are familiar with and adhere to the conditions of this permit.

Justification

The stipulations outlined above would help ensure that the use is compatible at Savannah National Wildlife Refuge. Spoil removal, as outlined in this compatibility determination, would not conflict with the national policy to maintain the biological diversity, integrity, and environmental health of the refuge. Based on available science

and best professional judgement, the Service has determined that the spoil removal at Savannah NWR, in accordance with the stipulations provided here, would not materially interfere with or detract from the fulfillment of the National Wildlife Refuge System mission or the purpose of the Refuge. Furthermore, the action is consistent with the 1973 agreement between the USFWS and the USACE for the use of the area as a dredge spoil containment area for the deposit and removal of spoil from the Savannah River.

Signature of Determination

Refuge Manager Signature and Date

Signature of Concurrence

Assistant Regional Director Signature and Date

Mandatory Reevaluation Date

2036

Literature Cited/References

Burger, J. 1981. The effect of human activity on birds at a coastal bay. *Biological Conservation* 21:231-241.

Gibson, D., M. K. Chaplin, K. L. Hunt, M. J. Friedrich, C. E. Weithman, L. M. Addison, V. Cavalieri, S. Coleman, F. J. Cuthbert, J. D. Fraser, W. Golder, D. Hoffman, S. M Karpanty, A. Van Zoeren, and D. H. Catlin. 2018. Impacts of anthropogenic disturbance on body condition, survival, and site fidelity of nonbreeding Piping Plovers. *The Condor: Ornithological Applications*, 120:566-580

Haverra, S.P., Boens, L.R., Georgi, N.M., and Shealy, R.T. 1992. Human disturbance of waterfowl on Keokuk Pool, Mississippi River. *Wildlife Society Bulletin*, 20, 290-298. https://www.jstor.org/stable/3783033?seq=8#metadata_info_tab_contents

Mengak, L., and A. A. Dayer. 2020. Defining human disturbance to shorebirds using

manager and scientist input. *Environmental Management*, 65(1), 62–73.
<https://doi.org/10.1007/s00267-019-01230-2>

Samia, D., S. Nakagawa, F. Nomura, T. Rangel, and D. T. Blumstein. 2015. Increased tolerance to humans among disturbed wildlife. *Nature Communications* 6.

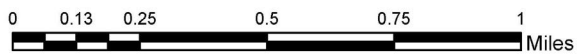
United States Fish and Wildlife Service (USFWS), 1995, *Compatibility Determination for Spoil Removal from Savannah National Wildlife Refuge*, Department of the Interior, Fish and Wildlife Service, Savannah Coastal Refuges, Hardeeville, South Carolina.



U.S. Fish and Wildlife Service (USFWS). 2011. *Savannah Coastal Refuges Complex Comprehensive Conservation Plan*. Department of the Interior, Fish and Wildlife Service, Savannah Coastal Refuges, Hardeeville, South Carolina.

Figure 1. Location Map of Savannah NWR Spoil material removal area



Savannah National Wildlife Refuge



-  Savannah NWR Boundary
-  DMCA 1N