



**The U.S. Fish and Wildlife Service is requesting comments on a Compatible Use Determination for a right-of-way for a water supply line. Comments must be received by Tuesday May 5<sup>th</sup>, 2020. All comments must be submitted in writing and must be mailed to the following address:**

**Craig Sasser  
Refuge Manager  
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**Compatible Use Determination**

*Right of Way for Water Supply Line*

Refuge Name: Waccamaw National Wildlife Refuge

County: Horry County, South Carolina

**Establishing and Acquisition Authorities:**

Migratory Bird Conservation Act of 1929, 16 USC, Subpart 715- 715Y, as amended, “for use as an inviolate sanctuary, or for any management purpose, for migratory birds.” (16 USC, Subpart 715d (Migratory Conservation Act).

Fish and Wildlife Improvement Act 1978,  
Fish and Wildlife Service Coordination Act of 1958,  
Emergency Wetland Resources Act of 1986 (100 Stat.3582-91).

For lands acquired, the Fish and Wildlife Act of 1956, 16 USC, Subpart 742 (a)-754 as amended, the purpose of the acquisition is for the development, advancement, management, conservation, and protection of fish and wildlife resources, 16 USC Subpart 742 (a) (4), for the benefits of the U.S. Fish and Wildlife Service (Service) (USFWS) in performing its activities and services. Such acceptance may be subject to the terms of any restrictions of alternative covenant or condition of servitude...”, 16 USC Subpart 742f(b) (1) (Fish and Wildlife Act of 1956).

**Refuge Purpose(s):**

The primary purposes for Waccamaw National Wildlife Refuge (NWR) are to: (1) protect and manage diverse habitat components within an important coastal ecosystem for the benefit of threatened and endangered species, freshwater and anadromous fish, migratory birds, and forest wildlife, including a wide array of plants and animals associated with bottomland hardwood habitats; and (2) provide compatible wildlife-dependent recreational activities, including hunting, fishing, wildlife observation, wildlife photography, and environmental education and interpretation for the enjoyment of present and future generations.

**National Wildlife Refuge System Mission:**

The mission of the System, as defined by the National Wildlife Refuge System Improvement Act of 1997, 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.”* (National Wildlife Refuge System Administration Act of 1966, as amended) [16 U.S.C. §668dd-668ee].

**Description of use:****(a) What is the use? Is the use a priority public use?**

Grand Strand Water and Sewer Authority (GSWSA) has requested a right-of-way (ROW) permit to construct, install, and maintain a high-density polyethylene (HDPE) water line with an inner diameter of 48” and an outer diameter of 54”. The proposed ROW will use an existing utility corridor to minimize impacts to the Refuge. The purpose of the proposed ROW is to increase the capacity of the water supply system between a treatment plant located on the west side of the Waccamaw River and the east side of the river. This proposed use is not a priority public use as defined by the National Wildlife Refuge Improvement Act of 1997.

**(b) Where will the activity/use would be conducted?**

The proposed distance for the ROW request across the Refuge consists of approximately 2,000 linear feet in length on the west side of the Waccamaw River and approximately 6,631 linear feet on the east side of the Waccamaw River (see Figure). The area of the requested ROW is 8,631 feet x 42 feet. The total width of the ROW needed for the installation consists of; 12 feet wide area for the equipment to work exclusively from mats, a 20 foot wide area for the open trench and side cast of excavated material, and 10 feet for larger equipment needs, alignment shifts and construction needs. Of this total area, 32 feet will be located within the boundary of an existing Santee Cooper/Waccamaw NWR Easement. The additional 10 feet will be an expansion of the existing ROW/Easement and located on the adjacent south side of the Santee Cooper ROW. After installation, the soil elevation will be returned to pre-project elevations.

# Waccamaw National Wildlife Refuge GSWSA & Santee Cooper ROW's



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**(c) When would the use be conducted?**

Installation of the water line will be proceed after a ROW has been issued. Planned events that fulfil the stated purposes of the Refuge, such as annual Refuge hunts, will be prioritized. The duration of the ROW will be in perpetuity unless the purpose for the ROW changes.

**(d) How would the use be conducted?**

GSWSA has secured permission from Santee Cooper to overlay the existing Santee Cooper ROW; however with this overlay agreement, GSWSA will be required to align their ROW to the outer southern limits of the ROW. GSW&SA will need an additional 10 feet outside of the overlay to ensure that they have enough ROW to complete their construction.

GSWSA will dig a trench and side cast fill material before installing the water line. Excess fill material will be transported to a preapproved disposal site in an upland area. GSWSA will maintain soil stabilization by using best management practices for wetland construction including installing and maintaining silt fences, constructions outside of flood prone seasons, maintaining clean and well maintained equipment, and managing equipment fueling in a safe and environmentally manner. The ROW after construction will continue to be managed for emergent/shrub-scrub vegetation as it has been by Santee Cooper to prevent inference with utility functions and allow access for infrastructure maintenance.

**(e) Why is the use being proposed?**

The Santee Cooper ROW was in place at the time of the Refuge acquisitions of tracts (13, 17 & 51). GSW&SA has requested a new ROW Permit to install a new water line to meet the demand for potable water to the greater Grand Strand and surrounding communities. GSW&SA selected this utility ROW for the proposed water line alignment because the area has already been cleared of trees and this is the shortest distance across the Waccamaw River and flood plains and it's within a close proximity to the water treatment facility. This ROW request will overlay a current Santee Cooper ROW with a 10 foot expansion requested immediately adjacent to this existing ROW. There will be a habitat conversion of the additional 5 acres (outside the existing ROW). This area will be needed for any minor realignment(s) or equipment clearance and/or access are necessary during construction

**Pre-construction Measures**

To prevent the introduction of invasive species, construction equipment (including mats) will be cleaned prior to arriving at the project site. The cleaning process will consist of removing dirt and vegetation from the equipment using compressed air and/or a pressure washer at an off-site location. The contractors will document the cleaning history for each piece of equipment in a log, which will be made available to Refuge staff upon request. Contractors may use the equipment cleaning log provided in Appendix A. Equipment found to be in non-compliance with cleaning requirements will be denied access to the project site.

## **Construction Measures**

The mulch and hay required for the project will be composed of certified weed-free material to prevent the introduction of invasive species. The contractors will be responsible for sourcing certified weed-free mulch. The Refuge Manager must approve sources prior to purchase. In addition, applicable documentation must be submitted to the Refuge manager.

During construction, erosion control measures such as silt fencing and hay bales will be used in wetland/upland transition zones to prevent erosion and sedimentation from entering wetlands.

A section 106 consultation has been completed and coordinated through the Regional Historic Preservation Officer. Any changes to the proposed ROW area must be reviewed and approved by the RHPO. The Refuge Manager will contact the Regional Archeologist should issues/concerns arise related to historic or Tribal resources during excavation. The following clauses shall be included as terms of the Right-of-Way Permit.

(a) Should previously unrecorded cultural resources or human remains be found on Service land, clearing and/or construction activities will be halted and the Regional Archaeologist and Refuge Manager contacted immediately.

(b) Should human remains be encountered in an unmarked grave, Refuge Law Enforcement will be contacted immediately. The Regional Archaeologist, Refuge Manager, County Sheriff's Office, and the Department of Archives and History shall also be contacted. Should human remains be identified as Native American, consultation with the Catawba Indian Nation will be initiated per the Native American Grave Protection and Repatriation Act.

(c) If, during the course of excavation, the permittee notes illegal excavation or archaeological resource removal, this information shall be immediately provided to the Refuge Manager.

(d) If, during the course of excavation, the permittee deliberately damages a recorded site, the permittee is responsible for the resultant site damage assessment and mitigation. The mitigation may include, but is not limited to, site restoration and data recovery.

Disturbed areas will be seeded and managed by GSWSA until the area has stabilized. Disturbed areas in transition zones must be "hydro-seeded" with native plant species, which must be approved by the Refuge Manager.

## **Post-Construction Measures**

The Refuge Manager will monitor the proposed ROW during the post-construction phase. The area will be considered "stabilized" when the composition and density of vegetation is consistent with the undisturbed portion of the preexisting ROW. If there is evidence of significant erosion and/or invasive species, the contractors and/or permittee will be required to take action in accordance with the guidance provided by the Refuge Manager and the USFWS herbicide/pesticide use and chemical use reporting requirements. GSWSA will be fully responsible for the installation and maintenance of the ROW and the transmission lines in perpetuity.

### **Availability of Resources:**

The station has adequate resources to administer and manage this activity, which will consist of approximately one staff day(s) per year. No additional resources will be needed to complete the project.

#### *Resources involved in the administration and management of the use:*

Annual monitoring of the ROW will require one day per year. Refuge staff will coordinate with the permittee on an annual basis to review and approve vegetation management and herbicide use, which will be documented in a Pesticide Use Plan. Refuge staff will also have to maintain, repair, and monitor impacts from vehicles to ensure erosion and soil disturbance are negligible. The station has adequate resources to administer and manage these activities, which will consist of approximately eight to ten staff days per year. No additional resources will be needed to complete the project provided that Permittee is compliant with permit conditions.

#### *Special equipment, facilities, or improvements necessary to support the use:*

The USFWS will be required to provide equipment to maintain access roads for Refuge operations. If improvements are required for ROW maintenance, the Permittee will be required to get a Special Use Permit prior to any construction.

*Maintenance costs:* Waccamaw National Wildlife Refuge will not be responsible for the maintenance of the ROW, including any invasive species infiltration and erosion that may result from construction and maintenance activities. The USFWS will maintain Refuge access only, which has an estimated cost of \$3,000/year. Any damage to access roads, security gates, boundary signs, shoreline stabilization, and/or soil disturbance during routine water line maintenance or inspections will be repaired by the permittee.

*Monitoring costs:* Monitoring costs will be limited to routine field inspections and pesticide use documentation which will consist of an additional two staff days per year.

### **Anticipated Impacts of the Use:**

Due to the circumstances of the proposed project, permitting of this ROW will most likely not have a significant impact on the habitat (plant species composition); however, the forested wetlands that exist within the additional area requested on the southern border of the Santee Cooper ROW will be cleared and will transition into a wetland habitat type equivalent to that which already exists within the cleared Santee Cooper ROW. The additional clearing totals five acres spread over the 8,000+ linear area of the ROW. Existing tree species within the proposed disturbance area include bald cypress (*Taxodium distichum*), sweetgum (*Liquidambar styraciflua*), red maple (*Acer rubrum*), and black gum (*Nyssa sylvatica*), with tree age class and ranging from approximately 10 to 20 years.

### Direct Impacts:

The short-term direct impacts from this project include soil and vegetation disturbance during the excavation and installation of the water line. If the construction takes place between the months of April and July, the disturbed area will most likely revegetate and impacts to nesting birds will be minimized. If construction is not completed until after July, it will not revegetate until the following season. Secretive marsh bird and pollinator habitat will be impacted in the new ROW until revegetation is complete.

There are no known threatened or endangered species in the project area. Consequently, a Section 7 Threatened and Endangered Species consultation was requested of the USFWS Ecological Services Program. That consultation is attached to this determination and records a determination that this action would have “no effect” on species protected by the Endangered Species Act of 1973.

### Indirect and Cumulative Impacts:

Indirect impacts may include the infiltration of invasive plant species via the introduction of seed/rhizomes and plants or through the exposure of unvegetated soil. For example, a newly introduced stand of phragmites (*Phragmites australis*) exists within the Santee Cooper ROW as a result of prior construction activity. Tree removal along the river’s shoreline has contributed to soil erosion within every ROW that crosses the Refuge. The conversion of forested wetland to emergent marsh systems may also lead to increased habitat fragmentation. Linear projects like the proposed pipeline are often responsible for habitat loss and fragmentation; however, because most of the pipeline is being buried within an existing ROW, the impacts from fragmentation will be limited to the expansion area (1).

Air quality may be affected during the construction phase of this project due to engine emissions from heavy equipment. This is expected to be insignificant due to the small scope of the project.

Impacts to water quality, similar to air quality, are expected to be short in duration and related to construction activities. Proposed mitigation measures are listed in the pre-project, construction, and post-construction sections and are included in the ROW Permit Conditions.

The cumulative impacts from ROWs include loss of mature, forested wetlands. Approximately five acres of forested wetlands will be cleared within the project area, which will result in a transition into emergent wetland habitat just as has occurred with the existing ROW. Currently there are 24,582 acres of palustrine forested wetland habitat within the Refuge. The linear distribution and small amount of area of disturbance compared to the overall amount of habitat type minimizes the impact of the habitat shift.

GWSA has received all necessary State and Federal permits for the project and has conducted a Threatened and Endangered Species survey for the proposed ROW project area. They have also received a Section 106 with the Catawba and Eastern Shawnee Tribes.

(1) Notice Nature. (n.d.). Wildlife, Habitat, & Development: Guidelines for Protecting Biodiversity in Development. Retrieved March 2020, from [www.noticenature.ie/files/Construction.html](http://www.noticenature.ie/files/Construction.html)