

# Draft Compatibility Determination

## Title

Draft Compatibility Determination for Right-of-Way Permit for Fiberoptic Upgrades, for Brightspeed of Eastern North Carolina in Dare County, North Carolina on Alligator River National Wildlife Refuge.

## Refuge Use Category

Rights-of-way and Rights to Access

## Refuge Use Type(s)

Rights-of-way (utility).

## Refuge

Alligator River National Wildlife Refuge (Refuge)

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

The refuge was administratively established to protect and conserve migratory birds and other wildlife resources through the protection of wetlands, in accordance with the following laws:

“...for the development, advancement, management, conservation, and protection of fish and wildlife resources...” 16 U.S.C. §742f(a)4 (Fish and Wildlife Act of 1956)

“...for the benefit of the United States Fish and Wildlife Service in performing its activities and services...” 16 U.S.C. §742f(b)1 (Fish and Wildlife Act of 1956)

“...suitable for (1) incidental take of fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species...” 16 U.S.C. §460k-1 (Refuge Recreation Act of 1952)

“...the Secretary...may accept and use...real...property. Such acceptance may be accomplished under the terms and conditions of restrictive covenants imposed by donors...” 16 U.S.C. §460k-2; 16 U.S.C. §§460k-460k-4 (Refuge Recreation Act of 1952)

“...conservation, management, and restoration of fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans...” 16 U.S.C. §668dd(a)(2) (National Wildlife Refuge System Administration Act of 1966)

“...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. 3582 (Emergency Wetland Resources Act of 1986)

## **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?

No.

What is the use?

The right to use and possibly alter the landscape through construction, maintenance, and operation of a fiberoptic telecommunications line along Navy Shell Road.

Is the use a priority public use?

No

Where would the use be conducted?

The proposed right-of-way and utility line would be in the southeastern portion of the Refuge adjacent to the northeast corner of the Dare County Bombing Range (Range; Figure 1). The project area includes approximately 1,100 linear feet of Navy Shell Road, west of State Highway 264 as it approaches the Range's boundary (Figure 1).

When would the use be conducted?

Due to the relatively small scope of this work, the installation of the fiber cable for this portion of road would take approximately two weeks. It is anticipated that work would begin soon after receipt of concurrence from the Refuge. Once planned, a detailed work schedule would be discussed with and approved by the Refuge manager.

How would the use be conducted?

The fiber cable would extend from the existing vault at the northwest corner of Navy Shell Road and Highway 264 near the existing culvert. It would run along the north side of Navy Shell Road for approximately 57 feet, pass under the culverts, and then cross roughly 22 feet over the gravel road. Once on the south side, the cable would be installed approximately five feet from the edge of the gravel road and would connect to the east tower. Fiber would continue to the new fiber vault on Dare County Bombing Range. Tree removal would not be necessary for the installation of the fiber cable. The disturbed area would be restored to current grade Best Management

Practices, in accordance with the North Carolina Handbook for Erosion and Sediment Control Planning and Design Manual (North Carolina Department of Environmental Quality 2013), would be employed during construction to minimize erosion and control sedimentation during construction.

A Special Use Permit (SUP) would be required for any temporary construction activities and would reiterate stipulations in this compatibility determination.

Why is this use being proposed or reevaluated?

The U.S. Navy requested Brightspeed of Eastern North Carolina, LLC (Brightspeed) update its telecommunications line and associated infrastructure. The shoulder of Navy Shell Road is the only solution to install the upgraded 96 fiber optic cable to their east tower. Because the Dare County Bombing Range is located entirely within the Refuge boundaries, there is not an alternative option to access the property without crossing Refuge areas.

### **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 (USFWS 2008).

#### **Assessment of current resources and capacity**

Preparation of the compatibility determination, environmental assessment, and coordination with other offices, public involvement, and assembly of the package for concurrence with the requested use requires some Refuge staff time. Document preparation for the application package to be submitted to the Division of Realty, coordination, review, and monitoring would likely require 180 to 190 hours of Refuge staff time. Consultation with the Division of Ecological Services Raleigh Field Office and an Intra-Service Section 7 Endangered Species Act Biological Evaluation would be necessary, as endangered species occur in the project vicinity. Cultural and archaeological resource consultation is also required. Some resources, such as staff time and transportation expenses, would be required for monitoring the project during construction. There are no anticipated expenditures for equipment, facilities, improvements, maintenance, and other materials and supplies for this project.

**Table 1. Costs to Administer and Manage the Right-of-Way for fiberoptic utility line.**

<b>Category and Itemization</b>	<b>One-time Cost</b>	<b>Recurring Annual Expenses</b>
Staff time (law enforcement, administration and management)	\$11,755	0
Monitoring	\$624	0
<b>Total one-time expenses</b>	<b>\$12,379</b>	0
<b>Total recurring annual expenses</b>	0	0
<b>Offsetting revenues</b>	0	0
<b>Total expenses</b>	<b>\$12,379</b>	0

**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 compatibility determination 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.” The listed resources below would not be more than negligibly

impacted by the action and have been dismissed from further analyses.

The following federally protected species may occur within or near the project area:

- American alligator (*Alligator mississippiensis*) – Threatened, similarity of appearance
- Red wolf (*Canis rufus*) – Endangered, experimental population
- Eastern black rail (*Laterallus jamaicensis jamaicensis*) – Threatened
- Monarch butterfly (*Danaus plexippus*) – Proposed threatened
- Northern long-eared bat (*Myotis septentrionalis*) – Threatened
- Red-cockaded woodpecker (*Picoides borealis*) – Threatened
- Tricolored bat (*Perimyotis subflavus*) – Proposed endangered

A draft threatened and endangered species Intra-Service Consultation was also completed, and no expected impacts were identified.

There are no identified historic properties or cultural resources located within the project area.

This project supports the following goals and objectives from the Refuge's Comprehensive Conservation Plan (US Wildlife Service 2008, pg. 90):

“Limit impacts to refuge resources by coordinating on development and maintenance of [utility line and highway] corridors continuously.”

#### Short-term impacts

Impacts from the installation of the underground fiberoptic line would be minimal. Existing infrastructure would be used when possible (e.g., cable vault). Impacts include ground and noise disturbance associated with operating equipment during the burying of underground cable along the road edges and across the road (Shannon et al. 2015). Once the fiberoptic line is installed, the area would be graded as needed and seeded. This would disturb the graveled road shoulder with most wildlife disturbance occurring only during construction. Once the area is graded, compacted, and seeded, wildlife use would resume (Tablado and Jenni 2017). The installation is expected to be a one-time event, minimizing overall disturbance. There is no short-term maintenance anticipated or required.

The project area is also disturbed due to the existing roadway. Alligators are regularly seen in the canals and along v-ditches on the refuge. Any proposed work would occur at a pace that would allow individuals to move to other habitats if temporary displacement occurs. Red wolves, bobcats (*Lynx rufus*), American black bears (*Ursus americanus*), and white-tailed deer (*Odocoileus virginianus*) are known to use the project area mostly as a travel corridor and could avoid the area during any disturbance. It is possible that some migratory birds could be affected by the disturbance, but the project would not involve construction in any nesting or denning

area. Red-cockaded woodpeckers and eastern black rails have not been detected in the project area.

Northern long-eared bats are active year-round in the North Carolina coastal plain with foraging, roosting, and maternity colonies being observed. Roost trees for maternity sites have been documented in a variety of species in wetland forests (Jordan 2020). Tricolored bats often roost in mature riparian forests and along corridors away from roads. While there is less known about tricolored bats roosting habitats in the North Carolina coastal plain, they have been documented using culverts and bridges in the region. Due to the proposed right-of-way being off a state highway and along the roadway, we do not anticipate much habitat occupancy of nearby trees by either species. There is no anticipated removal of trees in the proposed construction plans. However, there is a small culvert there that can be proactively checked for bat activity before work begins.

Noise and air pollution from construction activities, particularly from equipment emissions, may cause disturbance to wildlife and visitors. With wildlife, this would result in temporary impacts. These impacts could include temporary disturbance and/or displacement of wildlife during construction, trampling of on-site vegetation, temporary increase in noise, and decreased quality of visitor experience. Disturbance to wildlife, especially birds, has been shown to cause animals to alter their habitat usage patterns and amount of time spent foraging (Pease et al. 2005, Shirkey et al. 2020). These disturbances would occur on less than one acre or approximately less than 0.0001% of the total acreage of the refuge and would be temporary. Within a relatively short period of time, wildlife displaced during construction would resume full use of the area or move to adjacent similar habitats (Berger 2010). Short-term disturbances associated with construction are expected to be temporary and localized. Currently, vehicle traffic from visitors engaged in various activities throughout the work site creates similar disturbances and increases are not anticipated to be significant.

### Long-term impacts

Long-term impacts from this project would be primarily associated with future maintenance of the fiber optic line. Repairing breaks or other problems could result in future excavation in relatively small areas. Brightspeed would coordinate future maintenance activities with the Refuge Manager or designated staff.

Red wolves use roadways as potential travel corridors, but there are not anticipated long-term impacts from the proposed work. Any disturbance would be temporary, and adults would be able to move away from activities. Beale (2007) found that wildlife displaced due to temporary construction activity typically return to the area once disturbance ceases; therefore, long-term impacts to wildlife are expected to be negligible. Regular coordination with the red wolf team would continue to occur in case habitat usage patterns change.

## Public Review and Comment

The draft compatibility determination would be available for public review and comment for 14 days from June 3, 2026 to June 17, 2026. The State of North Carolina, the Catawba Indian Nation, the Pamunkey Indian Tribe, and the Tuscarora Tribe have been consulted on the potential project. The public will be made aware of this comment opportunity electronically through newspapers with local and statewide distribution. A hard copy of this document will be posted at the Coastal North Carolina NWR Headquarters at 100 Conservation Way, and at the Dare County Library in Manteo. It will be made available electronically on the refuge website <http://www.fws.gov/refuge/alligator-river>. Please let us know if you need the documents in an alternative format. Concerns expressed during the public comment period will be addressed in the final determination.

## Determination

Is the use compatible?

Yes

## Stipulations Necessary to Ensure Compatibility

These stipulations were prepared to ensure that the refuge purposes and the National Wildlife Refuge System mission can be achieved with the proposed project.

Stipulations include:

1. Prior to beginning construction, Brightspeed and/or the contractor(s) shall provide proof that all other required Federal and State permits were acquired.
2. Access and staging for construction will be restricted to the ROW and during daylight hours.
3. All equipment and vehicles will be brought onsite in clean and well-maintained conditions to ensure no leaks of toxic materials or introduction of exotic species to the area.
4. All work-related trash, excess materials, and equipment will be removed promptly following construction completion.
5. Within the project area, Brightspeed shall be responsible for full compliance with required sedimentation and erosion control measures.
6. Excavations must be refilled with adequate soil for settlement to restore the original landscape. All areas disturbed during construction shall be graded to original contour and elevation. If reseeded is needed, Brightspeed would use seed mixes with plant species native to the area and approved by the Refuge manager.
7. Brightspeed must apply for and obtain a Pesticide Use Permit for any

vegetative maintenance using herbicides on the ROW before work is conducted. Otherwise, use of herbicides, pesticides, or other solvents would be prohibited unless reviewed and approved by Refuge Manager. No storage tanks shall be used or stored in ROW.

8. Prior to any ground disturbance, the culverts in the project area would be checked for present wildlife. Any observations would be shared with the Refuge manager who would coordinate additional activities if needed.
9. The project area (i.e., ROW width) would be surveyed and marked prior to any construction activities. Markings are required to stay in place until project completion to ensure no activities/impacts occur outside the ROW. All markers would be removed and properly disposed of upon construction completion.
10. Project will comply with all state and federal environmental policies. The project must comply with other Federal, State, and local permitting requirements and regulations relating to environmental and cultural resource protection. Terms and conditions of the ROW permit/easement will allow modification to ensure compatibility (603 FW 2.11 (H) (3)).
11. All fees/requirements of the application process must be satisfied.
12. Brightspeed would apply for and obtain a Special Use Permit prior to any maintenance activities to ensure any disturbance to wildlife and habitat and impacts to public use are avoided or minimized. No annual or routine management activities will be permitted that disturbs or alters soils unless written permission is obtained from the refuge.
13.
  - a. By accepting this permit the Permit Holder agrees to the special stipulations, the general terms and conditions of Title 50 subpart 29.20 below. Consistent with regulations at 50 CFR 25.21(h), the U.S. Fish and Wildlife Service (Service) reserves the right to modify terms and conditions of this permit in the future, as necessary to ensure the continued compatibility of this use.
  - b. "As-Built" Survey: Permit Holder must provide an "as-built" survey along with the Certificate of Construction Completion. If there is no deviation from the proposed construction survey, a licensed surveyor must submit a written certification that there are no deviations from the original survey. If there is any deviation from the approved permitted plans, Permit Holder must provide written rationale for these deviations. Note that any deviations may trigger the Service's right to modify terms and conditions of this permit to ensure the continued compatibility of this use.
  - c. The permit may be amended only by a written instrument signed and executed by the Assistant Regional Director and the Permit Holder.

## **Justification**

The stipulations outlined above would help ensure that the use is compatible at Alligator River National Wildlife Refuge. This utility right-of way 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 utility right-of-way at Alligator River National Wildlife Refuge, 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. Terms and conditions of the permit may be modified to ensure continued compatibility of the right-of-way.

## Signature of Determination

Refuge Manager Signature and Date

## Signature of Concurrence

Assistant Regional Director Signature and Date

## Mandatory Reevaluation Date

2076

## Literature Cited/References

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Berger, R. P. 2010. *Fur, Feather, Fins & Transmission Lines: How transmission lines and rights-of-way affect wildlife*. Third Edition. Manitoba Hydro. 97 pp.

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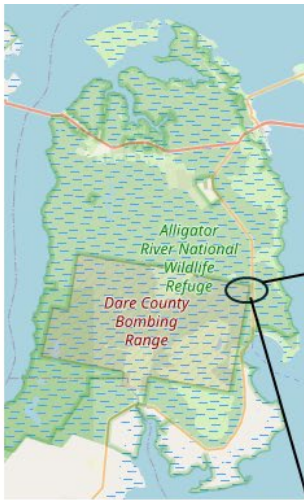
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Tablado, Z., and L. Jenni. 2017. Determinants of uncertainty in wildlife responses to human disturbance. *Biological Reviews* 92: 216-233.  
<https://onlinelibrary.wiley.com/doi/pdf/10.1111/brv.12224>

U.S. Fish and Wildlife Service. 2008. Alligator River National Wildlife Refuge Comprehensive Conservation Plan. United States Department of Interior, Southeast Region, Atlanta, GA, 248pp.



Job Location: <b>1301 NAVY SHELL RD MANNSHARBOR NC</b>		Narrative/Special Remarks									
		<p><b>Placing appx 1,000' of buried 96 strand fiber across Fish and Wildlife property PIN: 976400402762</b></p>									
		<p>DEVELOPER CONTACT</p> <p>Held Order Information</p> <p>Service Order #      Customer Terminal:</p> <p>Customer Name:      Cable Assignment:</p> <p>Customer Address:      F#:</p> <p>   Cross Connect:</p>									
		<p>Misc. Information</p> <p>List all associated projects      Permit Information</p> <p>   Right of Way Required YES</p> <p>   State Permit Required NO</p> <p>   County Permit Required NO</p> <p>   City Permit Required NO</p> <p>   Additional Permit Information</p> <p>Site Location ID # (BYAPP)</p> <p>Trench Open Date</p> <p>Cell Shallow NO</p> <p>Cell CZ</p> <p>FW Contractor:      NOTIFY CONVERSATION MEMBER</p>									
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FW PROJECT	WFMT PROJECT	COMMUNITY NAME	ENGINEERING CONTACT	CONTRACT ENGINEER	CONSTRUCTION COORDINATOR	SPLICING COORDINATOR	ISSUE: 1	<p><small>EVERY USE OF ANY OF OUR SERVICES PROVIDED BY BRIGHTSPEED, BRIGHTSPEED NETWORKS AND PROFESSIONAL SERVICES SHALL BE THE PROPERTY OF BRIGHTSPEED NETWORKS AND SHALL BE SUBJECT TO OUR TERMS AND CONDITIONS. BRIGHTSPEED NETWORKS AND PROFESSIONAL SERVICES SHALL NOT BE RESPONSIBLE FOR ANY DAMAGE TO PROPERTY OR PERSONS CAUSED BY THE USE OF OUR SERVICES.</small></p>			
<b>B-162964</b>		NAME: MANNSHARBOR CITY: MANNSHARBOR	NAME: Clay Jones PHONE: 252-450-3508	NAME: ERIC REEL COMPANY: OUTSOURCE	NAME: Reggie Atwood PHONE: 980-376-1534	NAME: PHONE:	VC Q213: MANNHARBOR	SECTION: DESO			
							TOWNSHIP:	CROSS KEY: MANNHARBOR KEY:			
							NAME:	SCALE:      DATE: <b>SHEET: 1 OF 3</b>			

Figure 1. Location of proposed fiberoptic right-of-way along Navy Shell Road at Alligator River National Wildlife Refuge.

