

**Compatibility Determination**  
**For Public and Private Buried Utility Lines, Road**  
**and/or Bridge Improvements, or Temporary Road**  
**ROW Expansions Occurring on FWS Easement**  
**Properties or Fee-Owned WPAs, Sand Lake**  
**National Wildlife Refuge and Wetland**  
**Management District**

**Refuge Use Category**

Rights-of-way and Rights to Access

**Refuge Use Type(s)**

Rights of way Utility, Utility Permits, and Rights to Access (environmental, hazard, and safety monitoring)

**Refuge**

Sand Lake Wetland NWR and Sand Lake Wetland Management District

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

Migratory Bird Hunting and Conservation Stamp Act, March 16, 1934, (16 USC Sec. 718-718h, 48 Stat. 452) as amended August 1, 1958, (PL 85-585; 72 Stat. 486) for acquisition of

"Waterfowl Production Area",

Wetland Loan Act, October 4, 1961, as amended (16 USC 715k- 3 - 715k-5, Stat. 813), funds appropriated under the Wetland Loan Act are merged with duck stamp receipts in the fund

and appropriated to the Secretary for the acquisition of migratory bird refuges under the provisions of the Migratory Bird Conservation Act, February 18, 1929, (16 USC Sec. 715, 715d- 715r, as amended).

"...as Waterfowl Production Areas" subject to "...all of the provisions of such Act [Migratory Bird Conservation Act] ... except the inviolate sanctuary provisions..." 16 USC 718(c) (Migratory Bird Hunting and Conservation Stamp)

"...for any other management purpose, for migratory birds." 16 USC 715d (Migratory Bird Conservation Act)

"...for conservation purpose..." 7 USC 2002 (Consolidated Farm and Rural Development Act)

## National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System, otherwise known as 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

What is the use?

Rights-of-way (road). The right to use and possibly alter the landscape through construction, maintenance, and operation of a road.

Rights-of-way (utility). The right to use and possibly alter the landscape through construction, maintenance, and operation of water or fuel pipeline, power line, telecommunications line or tower, or other utility.

Utility permits. One-time authorization, by a special use permit, to install or repair a utility (e.g., power line, water line, or buried cable) on lands under control by the Service.

Rights to Access (environmental, hazard, and safety monitoring). The right to access areas and possibly alter the landscape through construction, maintenance, and operation of equipment and facilities for monitoring environmental, hazard, and/or safety conditions.

Is the use a priority public use?

No

Where would the use be conducted?

This use includes requests for projects on wetland, grassland, FmHA, or conservation easements or fee-owned Waterfowl Production Areas and refuges in Brown, Spink, Faulk, Potter, Walworth, Edmunds, Campbell, and McPherson Counties in South Dakota.

Sand Lake NWR and WMD receives requests to temporarily alter upland sites in conjunction with highway and utility maintenance projects to improve safety. These activities may be outside the existing right-of-way, but a formal ROW expansion is not needed because of the only temporary impacts to Service interests.

When would the use be conducted?

It is expected that these uses will be conducted as a one-time event in the late spring,

summer, or early fall when frost no longer exists and conditions have dried sufficiently to minimize grass disturbance. There is little or no future maintenance.

### How would the use be conducted?

This use would be conducted by issuing Special Use Permit (SUPs) to requesting entities. An application including a detailed proposal outlining needed equipment, dimensions of excavations, restoration techniques, and project maps would be submitted by the entity wishing to conduct a project to the refuge manager. Upon receiving the application, the refuge manager would work with the requester to determine if alternative routes avoiding Service realty interests were suitable. If alternative routes are deemed to be unsuitable, the refuge manager would initiate the appropriate NEPA considerations and cultural resources review based on USFWS regionally adopted cultural resource review protocols. The manager would also conduct a section 7 review and consult with USFWS ecological services field office staff as appropriate. Upon completion of the appropriate reviews the manager would issue or deny the request for an SUP. SUPs would only be issued if the proposed methodology did not conflict with ongoing research, monitoring, management, or cause undue disturbance. Extremely sensitive wildlife species and habitats must also be protected. This would be ensured by formulating project specific special conditions and stipulations for each SUP. Examples of these conditions and stipulations could include:

- Planning alternative routes within the Service's realty interests
- Restricting the location of equipment staging areas and spoil piles
- Restricting the type of equipment used
- Restricting the allowable methods of installation, such as requiring directional boring underneath wetland or native prairie if feasible.
- In areas where directional boring is not feasible, require trenches to be backfilled and compacted to the normal contour of the wetland bottom or uplands. No excess, non-compacted fill will be permitted in protected wetland basins.
- Restricting the time of year construction can take place
- Limiting the daily duration of construction activities
- Requiring the use of native species in any restoration seed mixes
- Require best management practices to mitigate effects from erosion during construction and while vegetation is restored.

Construction methods may include cable-plowing, utilizing a vibrating cable-plow, or narrow trenching equipment. In each case, the surface disturbance is minimal and the temporary cable or trenching scar will grow over with grass or marsh vegetation within a year or two.

Construction methods for temporary ROW expansion projects include stripping away the vegetation and topsoil, removing enough of a hill to satisfy the sloping requirements, placing riprap, re-spreading the topsoil, and reseeding the vegetation to the manager's specifications.

## Why is this use being proposed or reevaluated?

This use is being reevaluated because the reevaluation date has passed for the previous compatibility determination (U.S. Fish and Wildlife Service 2005). This use is being reevaluated in accordance with U.S. Fish & Wildlife Service policy (603 FW 2.11 H). With over 700,000 acres of conservation easements and fee-title land, Sand Lake Wetland Management District has a large presence on the landscape.

Sand Lake Wetland Management District receives frequent requests from utility companies to construct or maintain buried pipelines, electric cables, communication lines, natural gas lines, and/or rural or potable water lines or systems on fee and easement properties. These requests are generally part of an overall area-wide project to provide better services to the people residing in the area. When these types of projects are proposed in Sand Lake Wetland Management District (part of the Prairie Pothole Region), it may not be possible to avoid all Service interests (fee and easement) and therefore, some Service property interests may be temporarily impacted during the construction period.

The ability to issue SUPs to utility companies would serve as the mechanism by which basic services can be extended to more rural Americans, while enabling the Service to continue in its mission and protect its realty interests. This proposal is for buried utilities as opposed to above ground utilities because it has been reported the presence of infrastructure is often what negatively effects wildlife (Bernath-Plaisted and Koper 2016) and burying that infrastructure can avoid potential impacts (Ferrer and Hiraldo 1991, Richardson et al. 2017).

## Availability of Resources

No special equipment, facilities, or improvements are necessary to support this use. No offsetting revenues will be generated by this use. We anticipate the requests for this use to be very minor (1-10 per year). Staff time will be needed to evaluate the proposed use, to prepare the site-specific permits and to ensure compliance with the permit authorization and stipulations, as well as checking for satisfactory restoration of any disturbed sites after the sites have been revegetated. The restoration efforts will be completed by the applicant as specified by the District manager. The approximate cost to administer this use is \$90.00/permit, one hour to process and one hour for compliance. Financial and staff resources are sufficient to administer the use.

## Anticipated Impacts of the Use

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.”

Threatened and Endangered species and other special status species, air quality, floodplains, visitor use and experience, cultural resources, and refuge management and operations will not be more than negligibly impacted by the action and have been dismissed from further analyses.

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

The uses authorized under this compatibility determination must result in impacts that are only very minor and temporary in nature. In other words, there will be NO long-term negative impacts to Service land or water interests.

A Special Use Permit will be required for each request for either type of disturbance. In addition, each request would require Section 7 Evaluation, NEPA considerations in the form of a Categorical Exclusion, Environmental Assessment or Environmental Impact Statement, Section 106 of the National Historic Preservation Act Clearance, Environmental Action Statement, and Finding of Appropriate Use

Examples of work authorized under this Compatibility Determination include:

- Trenched and backfilled areas to accommodate buried pipelines and cables
- Buried utility lines or PVC water lines using a cable plow
- Excavated trenches using a backhoe equipped with a “trenching” bucket (approximately 8 inches wide)
- Use of crawler-type equipment to shave hills and back-sloping associated with highway safety projects which may extend beyond the existing ROW.
- Placing riprap slightly outside an existing ROW for the purpose of erosion control.

### Short-term impacts:

Temporary wildlife disturbance from human and equipment presence will be minimal as minimal time will be spent by installers in each area. Due to the noise levels and human presence during construction, wildlife may temporarily be displaced to adjacent similar habitats, but are expected to resume full use of the area, once construction is complete (Beale 2007, Berger 2010). The physical presence of infrastructure in grasslands has been shown to be more detrimental to nesting grassland songbirds than anthropogenic noise (Bernath-Plaisted and Koper 2016). By allowing buried utility lines, infrastructure will not be present aboveground and will have fewer impacts than if above-ground utility lines were allowed. Water quality of nearby waterbodies may be temporarily and slightly reduced due to possible silt deposition if a rainstorm washes the exposed areas for a short period of time after backfilling the trenches. Soils and geology may be temporarily and slightly impacted for the same reasons. These impacts are likely to be minimized as directional boring is often the preferred method when installing near waterways. In particularly sensitive areas it will be a special condition to an issued SUP. Habitat and vegetation will be impacted in the short-term from the surface disturbance required by the proposed use. Disturbed areas will be revegetated by the permittee with a native seed mix approved by the refuge manager. Impacts to vegetation in the disturbed area are expected to be unnoticeable within a year or two depending on how much moisture the area experiences. Naeth et al. (2020) reported within 2 years of a large pipeline installation soil and plant communities were on a trajectory toward baseline prairie conditions. Any backfilled areas will be re-contoured to what they were prior to disturbance. Given the infrequent nature of this type of use and the temporary nature of all the analyzed short-term impacts, these impacts are considered minimal.

### Long-term impacts:

No negative long-term impacts are expected for wildlife and aquatic species, habitat and vegetation, and geology and soils. Long-term socio-economic impacts are expected to be positive, as allowing this use will increase the quality of life of rural Americans and poise rural communities to prosper with increased safety of roads, access to potable water, electricity, modern communication methods and educational resources, such as those available through the Internet.

## Public Review and Comment

The draft compatibility determination will be available for public review and comment for 14 days for the Summer/Fall of 2023 (exact days are to be determined). The public will be made aware of this comment opportunity as a hard copy of this document will be posted at the Refuge Headquarters or Visitor Center (39650 Sand Lake Dr Columbia, SD 57433). It will also be made available electronically on the refuge website (<https://www.fws.gov/refuge/sand-lake>). 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

Is the use compatible?

Yes

### Stipulations Necessary to Ensure Compatibility:

1. Issuance of a permit does not preclude the requirements for obtaining necessary permits and/or approvals from other County State, or Federal Agencies and from local landowners.
2. Permits will be issued subject to the revocation and appeals procedure contained in Title 50, Part 25 of the Code of Federal Regulations.
3. The proposed activities will result in no impacts to wetlands protected by FWS easements. No wetlands or any part thereof will be filled with any material, leveled by any equipment, drained by any means including pumping or by divert water, or burned.
4. Any work within protected wetland basins will be backfilled and compacted to the normal contour of the wetland bottom. No excess, non-compacted fill will be permitted.
5. Upland impacts to area protected by FWS grassland easements will be only temporary. Any disturbed areas will be leveled, seeded and restored to pre-work condition as specified by the District Manager.
6. The authorization under the permit issued in accordance with this determination is for the initial construction only; any future maintenance or repairs will require additional consultation with the Wetland Management District office and will require a supplemental permit issued prior to the initiation of any remedial work.
7. District staff will monitor installation and restoration activities for compliance with conditions of the special use permit. At any time, refuge staff may accompany the surveyors to determine potential impacts.

8. The refuge manager can terminate or modify the terms of a special use permit if the permittee is out of compliance or to ensure wildlife and habitat protection.
9. In accordance with the Archeological Resources Protection Act (16 U.S.C. 470aa), the removal or disturbance of archeological or historic artifacts is prohibited. The excavation, disturbance, collection, or purchase of historical or archaeological specimens or artifacts on refuge lands is prohibited. If evidence of historical, archaeological, or paleontological sites are discovered during the activities authorized by the SUP, the permittee shall immediately stop activities and contact the refuge manager.
10. Additional stipulations may be added to address specific concerns with individual projects.

## Justification

The proposed activity is considered minor, incidental, short-term with minimal temporary disturbance and insignificant permanent and cumulative impacts. Prior to issuing any permit, the manager will have worked with the applicant to avoid as many impacts as possible and then to minimize any impacts to Service interests. The impacts are deemed to be minor and only temporary and complete site restoration will occur, usually within the next growing season.

Where possible and without compromising any preservation program goal or objective, and without affecting (in the long term) any land interest held by the Service, it is critically important that Sand Lake Wetland Management District be able to accommodate these requested uses which are designed to improve highway safety or the quality of life in rural America.

The stipulations outlined above would help ensure that the use is compatible at Sand Lake Wetland Management District. Public and Private Buried Utility Lines occurring on FWS Easement Properties or Fee-Owned WPAs, 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 Public and Private Buried Utility Lines and Permits to Access occurring on FWS Easement Properties or Fee-Owned lands at Sand Lake National Wildlife Refuge and Wetland Management District, 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 Sand Lake National Wildlife Refuge Wetland Management District.

Signature of Determination

\_\_\_\_\_  
Station Manager

\_\_\_\_\_  
Date

## Signature of Concurrence

\_\_\_\_\_  
Assistant Regional Director

\_\_\_\_\_  
Date

### Mandatory Reevaluation Date

2033

### Literature Cited/References

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