

Draft Compatibility Determination

Title

Draft Compatibility Determination for a utility bundle Right-of-Way and Special Use permit along State Highway 4, Lower Rio Grande Valley National Wildlife Refuge.

Refuge Use Category

Rights-of-way and Rights to Access

Refuge Use Type(s)

Utility Rights of Way and Utility Permits

Refuge

Lower Rio Grande Valley National Wildlife Refuge, Cameron County, TX

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

As excerpted from the enabling legislation used to authorize acquisition of the Lower Rio Grande Valley National Wildlife Refuge (refuge), the following are the refuge's purposes:

"... 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)

"... particular value in carrying out the national migratory bird management program." [16 U.S.C. 667b] (An Act Authorizing the Transfer of Certain Real Property for Wildlife, or other purposes)

"... suitable 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-1] *"... 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] (Refuge Recreation Act [16 U.S.C. 460k-460k-4], as amended)

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

The Lower Rio Grande Valley and Santa Ana National Wildlife Refuges Comprehensive Conservation Plan (CCP) of 1997 satisfies the CCP requirement of the National Wildlife Refuge System Improvement Act of 1997 and identifies the following five goals of the Refuge:

- To restore, enhance, and protect biological diversity.
- To protect and obtain additional water rights, improve water management, and protect, restore, and enhance wetlands.

- To improve water quality and reduce contaminant related fish and wildlife resource losses.
- To protect, maintain, and plan for cultural resources.
- To offer compatible wildlife dependent public uses, recreational opportunities, and interpretation and education.

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?

No. The current Texas Department of Transportation (TXDOT) State Highway 4 (SH4) Right-Of-Way (ROW) was modified in 2021 to accommodate the 3 phase Magic Valley Electric Cooperative power line (US Fish and Wildlife Service 2021). This use is being expanded to allow additional bundled utilities within the existing SH4 ROW that service facilities between Brownsville, TX and the eastern terminus of SH4. This use will support facilities owned and operated by Space Exploration and Technologies Corporation (SpaceX).

What is the use?

The proposed use is a utility bundle ROW that would be entirely within the existing SH4 ROW corridor. This use will require the Service to issue a right-of-way permit and special use permit to a utility operator, such as Magic Valley Electrical Cooperative (MVEC) or SpaceX. A Special Use Permit will be required to construct underground utilities within the TXDOT SH4 right-of-way.

A ROW is defined in 340 FW 3 as *“a use that will encumber real property by granting a right to use and possibly alter the landscape through the construction of a facility such as a road, power line, pipeline, or building”* on lands under control by the United States Fish and Wildlife Service (Service). The Service’s Southwest Regional Director is authorized to permit the use of a ROW on national wildlife refuges in accordance with applicable authorities and regulations (e.g., 16 U.S.C. 715s and 50 CFR § 29). The issuance of a ROW across units of the National Wildlife Refuge System (Refuge System) is governed by the provisions of 50 CFR § 29.21. ROW permits of this nature are issued for terms of 50 years, or so long as it used for the purpose granted, or for a lesser term when considered appropriate.

Is the use a priority public use?

No

Where would the use be conducted?

The project extends approximately 11 linear miles along the TXDOT SH4 right-of-way within the refuge’s Vista Del Mar, Tulosa Ranch, and Boca Chica tracts in Cameron County, Texas. The

proposed utility bundle ROW is entirely within the already disturbed public highway right-of-way corridor. No impacts to interior Refuge lands are proposed or anticipated. Deviations from the proposed project, if any, will be discussed with and approved by the Refuge manager. A map of the proposed utility ROW is attached in the “Figures” section.

When would the use be conducted?

The proposed utilities would be permanently installed after a special use permit is issued to initiate construction within the existing public highway ROW corridor. Construction would take approximately 16 months after the special use permit is issued. To the extent practical, vegetation clearing will occur outside of the migratory bird nesting season (March – September) during daylight hours. Maintenance within the ROW would occur periodically as needed after the installation. The utilities would be operational 24 hours per day and 365 days per year after construction is complete.

How would the use be conducted?

Project proponents and contractors, such as SpaceX, would conduct all construction or maintenance activities. Work crews are typically two groups of 7-10 individuals at a time. Most of the construction will be underground, using trenching and/or directional drilling. The water, force main sewer, and communication lines would be trenched or directionally bored underground. Directional boring, also known as horizontal directional drilling, is a trenchless method of installing underground utilities. A drill rig would install conduit carrying the utility lines underground. Vaults would be installed to provide access to the lines for maintenance and/or repair.

The only Refuge infrastructure near the project area is an informational kiosk and overlook area about 200 yards south of the proposed route on the Tulosa Ranch Tract. This kiosk will not be affected by the project. Wildlife-dependent recreational uses include wildlife observation and photography, environmental education and interpretation, fishing, as well as other recreational uses such as beachcombing or picnicking. These wildlife-dependent uses would not be affected by the project. Therefore, the proposed project would not affect or impair the Refuge System mission or Refuge goals and objectives because the public would continue to have access to Refuge lands for these uses.

Why is this use being proposed or reevaluated?

The purpose of the utility bundle ROW is to provide a designated utility bundle corridor within the existing TXDOT HS4 ROW. The utility bundle ROW will provide improved and reliable utilities via underground lines to Starbase and SpaceX properties along Hwy 4. There is no existing water line or force main sewer line to Starbase and limited telecommunication lines and bandwidth. Underground potable water, force main sewer, and communication lines are needed to provide reliable utilities for Starbase. Currently potable water and wastewater are trucked to and from the site, respectively. Burying utilities underground is a common practice nationwide to ‘harden’ utilities against storms and other natural disasters to provide more resilient infrastructure.

Anticipated Impacts of the Use

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

The proposed project would not affect or impair the Refuge System mission or Refuge goals and objectives because there would not be adverse impacts to the conservation and recreational goals of the refuge. The refuge's protection of biodiversity and cultural resources, and the public would continue to have access to Refuge lands for authorized uses. No other adverse cumulative impacts are anticipated from the project.

Short-term impacts

Impacts due to the utility line construction would be temporary and negligible. All construction will be completed within the existing SH 4 public highway right-of-way corridor. Disturbance impacts during construction (e.g., vegetation clearing, noise from construction equipment, vehicular traffic, etc.) will be localized and short in duration (e.g., 12-16 months) and will occur during daylight hours. Installation of underground lines will consist of directional boring, digging a trench, laying conduit, running conduit, and installing flush mounted vehicle rated vault cabinets. All new work will be conducted within the disturbed right-of-way corridor of SH4. No new impacts to refuge habitats, including federally listed species, will occur. No material stockpiles and equipment staging areas will be located on the Refuge. The road is not anticipated to be closed during construction. A cultural resources survey was performed in January 2024 for the entire TXDOT SH4 ROW, and it was determined the project would not impact cultural resources. Best management practices would be implemented to reduce the potential for erosion or sediment runoff into Refuge lands and reduce the potential for water quality impacts. The short-term impacts are therefore insignificant and discountable because the project does not detract from the five goals of the Refuge, as stated above.

Long-term impacts

The project would not result in long-term visual impacts since the utility lines would be installed underground in an existing ROW area that has already been developed. Long-term impacts on the Refuge's purpose and the System missions are not expected as operation of the utilities would not require public access restrictions of the Refuge. The utility lines will be located within the existing, disturbed highway right-of-way corridor and outside of native Refuge habitat. Overall, no long-term impacts to Refuge lands would occur with the proposed use.

Public Review and Comment

The draft compatibility determination will be available for public review and comment for 30 days concurrent with the associated Draft Categorical Exclusion: State Highway 4 Utility Bundle Right of Way Permit and Special Use Permit, Cameron County, Texas from May 21, 2025, to June 4, 2025. A copy of the CD and request for public comment was also published on the Refuge's main website and posted at the Refuge Headquarters for review and comment.

Determination

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

1. All activities associated with the proposed use would occur within the already disturbed SH 4 right-of-way corridor. No brush clearing or other impacts to interior refuge habitats will occur during the utility line installations.
2. Materials stockpiles and equipment staging areas would not be placed on Refuge lands.
3. Vegetation clearing within the SH4 ROW will occur outside of the nesting bird season (March – September) to the extent practical.
4. Best management practices would be used during construction to avoid or reduce potential impacts to water quality from erosion or sediment runoff.
5. Construction boundaries would be clearly demarcated to avoid inadvertent impacts to Refuge lands.
6. Work will only occur during daylight hours from 6 am to 8 pm to the extent practical.
7. Equipment to be used in construction would be cleaned and free of dirt or grass prior to arrival onsite to prevent the spreading of invasive plants or noxious weeds.
8. The right-of-way permit request must be reviewed by the Southwest Region Division of Realty and approved by the Regional Director to ensure compliance with Service regulations and policy concerning right-of-way permits on national wildlife refuges.
9. Compliance with Endangered Species Act, Migratory Bird Treaty Act, NEPA, and all other applicable federal statutes and regulations would be met.
10. The project proponent would coordinate with the refuge manager or refuge liaison during construction to ensure no unanticipated impacts occur and that the project is being carried out as proposed.

Justification

The National Wildlife Refuge Improvement Act of 1997 prohibits any new use of a refuge or any expansion, renewal, or extension of an existing use without a finding it is compatible with the purposes of the Refuge. 16 U.S.C. § 668dd(d)(3)(A)(i); 50 CFR 26.41; *see also* 50 CFR Part 29 (FWS Refuge right of way regulations). A compatible use is defined as “[] a proposed or existing wildlife-dependent recreational use or any other use of a national wildlife refuge that, based on sound professional judgment, will not materially interfere with or detract from the fulfillment of the National Wildlife Refuge System mission or the purpose(s) of the national wildlife refuge.” 50 CFR 25.12(a).

Through the compatibility determination process, the Refuge has determined the construction and operation of underground bundled utilities within the TXDOT SH4 ROW would not materially interfere with or detract from the fulfillment of the Refuge System mission or the purposes for which the Refuge was established. The Service has assessed the impacts and the potential for the use (i.e., bundle of utilities) to be conducted off of refuge lands and has determined that the use cannot be implemented without traversing Refuge lands as described herein. As discussed above, this activity will not conflict with any other priority public uses of the refuge, and no or minimal impacts to Service trust resources are anticipated. Through this compatibility determination, the refuge manager has determined that this construction, implemented with the stipulations provided above, is a compatible use that will not materially interfere with or detract from the fulfillment of the Refuge System mission or purpose of the refuge.

Signature of Determination

Refuge Manager Signature and Date

Signature of Concurrence

Assistant Regional Director Signature and Date

Mandatory Reevaluation Date

2040

Literature Cited/References

U.S. Fish and Wildlife Service. 2021. Final Environmental Assessment: Magic Valley Electric Cooperative Power Line Right of Way Permit and Special Use Permit Along State Highway 4, Cameron County Texas.

U.S. Fish and Wildlife Service. 2025. Draft Categorical Exclusion: State Highway 4 Utility Bundle Right of Way Permit and Special Use Permit, Cameron County, Texas.

Figure(s)

