

United States Department of the Interior



FISH AND WILDLIFE SERVICE
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North and South Dakota Field Offices
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South Dakota Determination Key Standing Analysis

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1 INTRODUCTION

1.1 PURPOSE OF STANDING ANALYSIS

This Standing Analysis provides an optional, streamlined alternative consultation process for federal action agencies to address potential effects of future actions, pursuant to section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act or ESA), to the species and critical habitats listed or proposed in Table 1. The U.S. Fish and Wildlife Service (Service) developed this Standing Analysis to streamline the process of reviewing actions that would result in a “may affect, not likely to adversely affect” (NLAA) determination for the subject species or designated critical habitat(s). This Standing Analysis also provides proactive technical assistance to federal action agencies in making “no effect” (NE) determinations.

Table 1. Federally listed species and designated critical habitat covered within this Standing Analysis.

Common Name	Scientific Name	Critical Habitat
Pallid Sturgeon	<i>Scaphirhynchus albus</i>	
Topeka Shiner	<i>Notropis topeka</i>	
Higgins Eye (pearlymussel)	<i>Lampsilis higginsii</i>	
Scaleshell Mussel	<i>Leptodea leptodon</i>	
Black-footed Ferret	<i>Mustela nigripes</i>	
Leedy’s Roseroot	<i>Rhodiola integrifolia</i> ssp. <i>leedyi</i>	
Western Prairie Fringed Orchid	<i>Platanthera praeclara</i>	
Dakota Skipper	<i>Hesperia dacotae</i>	X
Poweshiek skipperling	<i>Oarisma poweshiek</i>	X
Whooping Crane	<i>Grus americana</i>	
Piping Plover	<i>Charadrius melodus</i>	X
Rufa Red Knot	<i>Calidris canutus rufa</i>	

This Standing Analysis provides an optional consultation process that is available to federal action agencies for federal actions that meet the criteria described below as delivered through a Determination Key (DKey) in the Service’s Information for Planning and Consultation (IPaC) application. To obtain consultation documents, including technical assistance for NE or concurrence with NLAA determinations, federal action agencies must use the associated DKey in IPaC to answer questions about the proposed action. By screening the project through the DKey, all or part of the Standing Analysis is adopted by the federal action agency and used to submit a concurrence request to support their NLAA determination. It also provides technical information to help federal action agencies determine whether

a proposed action will have no effect on the species or designated critical habitat. Formal consultation under ESA section 7(a)(2) is required for actions that "may affect, likely to adversely affect" a listed species or critical habitat, unless the Service concurs in writing that actions are "not likely to adversely affect" listed species or designated critical habitat. Actions which a federal action agency determines will have NE on species or designated critical habitat do not require submittal to the Service.

With the IPaC DKey established for this Standing Analysis, the federal action agency may receive a letter of concurrence for eligible projects by providing specific information requested by the DKey. Throughout the remainder of this document, statements regarding this Standing Analysis refer to both the Standing Analysis and the associated DKey.

1.2 BENEFITS OF THE STANDING ANALYSIS

For those federal actions that the Service has accumulated significant knowledge in analyzing previously, the Service is able to develop a standing analysis to streamline the consultation process for eligible federal actions. The streamlined process facilitated by this Standing Analysis will reduce the amount of Service staff time necessary to review proposed actions and provide the requesting federal action agencies, consultants, or other project proponents a predictable, consistent, and timely response for qualified federal actions. In addition, development of a standing analysis to assess the impacts of individual projects allows the Service to more efficiently track multiple independent actions on listed species and critical habitat.

1.3 ELIGIBILITY FOR USE OF THE STANDING ANALYSIS

A standing analysis, itself, does not provide concurrence on federal action agency determinations of NLAA, instead it serves as and documents the rationale behind the associated DKey. The DKey is a logically structured set of questions to assist in determining whether a proposed project qualifies for a predetermined consultation outcome based on the standing analysis. This Standing Analysis also allows the Service to quickly evaluate an action agency's analysis of effects to listed species or designated critical habitat. If the action agency's proposed action is consistent with the covered area and covered activities, including any required conservation measures in the Standing Analysis, the concurrence that the proposed action will have either insignificant, discountable, or completely beneficial effects on the relevant listed species or designated critical habitat (i.e., NLAA) can be obtained through the DKey.

This Standing Analysis may also provide technical information to help action agencies identify actions that will have no effect on listed species or designated critical habitat. For projects that do not qualify to use this Standing Analysis, action agencies and project proponents should coordinate directly with the South Dakota Ecological Services Field Office (SDESFO) to address any consultation requirements, as appropriate.

1.4 ENSURING ACCURATE DETERMINATIONS

As is true in all consultation procedures, the Service relies on complete and accurate information provided by federal action agencies during consultation. To apply this Standing Analysis to a project, it is the responsibility of the action agency or project proponent to provide information that is truthful and accurate which fully represents the entire scope of the project in order to comply with the Act.

Where appropriate in the Standing Analysis, we make note of which activities are expected to have no effect on a species or designated critical habitat. This information is provided as technical assistance to action agencies making no effect or may affect determinations.

1.5 UPDATES TO THE STANDING ANALYSIS

This Standing Analysis will be reviewed annually and updated as needed to ensure it contains the best scientific and commercial data available. The update process will include regular reviews to ensure that the analysis is accurate and valid, and that it still meets the Act's requirements. All updates will also ensure that the logic is sound, and determinations are appropriate for covered activities. Updates will be dated, signed, and versioned.

Projects reviewed under this Standing Analysis must rely on the version that is current on the date consultation is completed. For reference, both current and previous versions of the Standing Analysis will be maintained by the SDESFO.

The Service will post the last date of revisions to the Dkey and standing analysis on the IPaC website to inform action agencies of updates. Prior to implementing an action that has received a "no effect" or "not likely to adversely affect" determination through the DKey, the action agency (or designated non-federal representative) should check if revisions to the Dkey have been made. If a new version of the Dkey is available, the project should be re-evaluated to verify that the previous determinations still apply, or if consultation should be reinitiated.

Additionally, activities not described in this Standing Analysis may be rare or include new methods or technology. For these activities, individual project review and consultation to complete section 7(a)(2) activities is required. Should these activities become routine or standardized with known effects, this Standing Analysis can be revised to include any such activities.

1.6 COVERED AREA

This Standing Analysis applies within the State of South Dakota (Figure 1). In delineating the geographic scope of this Standing Analysis (coverage area), we determined the appropriate extent based on the species and critical habitat(s) included and the activities covered herein. To qualify to use this Standing Analysis, a project's action area must fall completely within the State of South Dakota. Projects that extend into other states are not able to use the associated DKey.

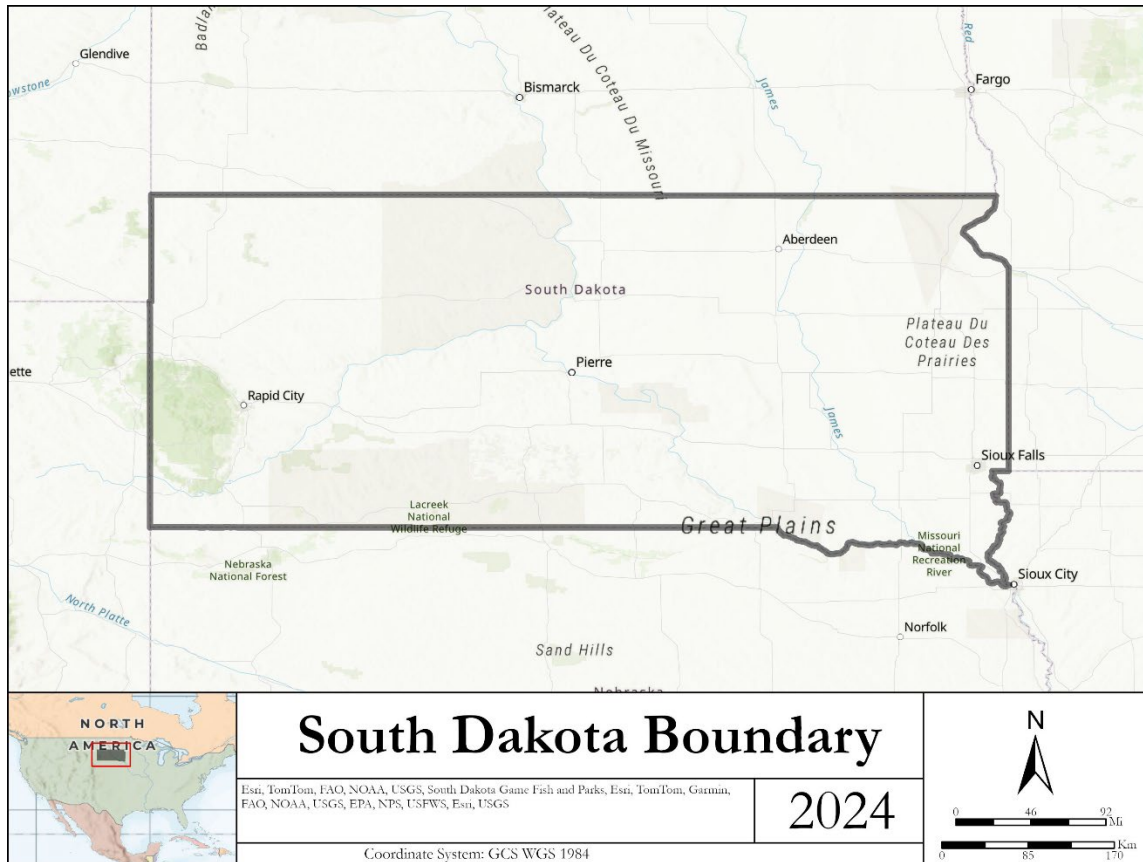


Figure 1: The South Dakota State boundary where projects covered by this Standing Analysis must fall within.

2 COVERED ACTIVITY DESCRIPTION

The activities described herein include all activities addressed in this Standing Analysis. The activity description, conservation measures, and covered area inform the Standing Analysis and describe which specific activities are appropriate for NE or NLAA outcomes. The description of activities and their inclusion in the Standing Analysis should not be construed to indicate that these activities will always result the same effects to the species or its designated critical habitat, nor is it meant to cover activities that fall outside of the scope of the Standing Analysis as described below. Action agencies are not required to use this Standing Analysis; they continue to have the option to request individual consultation on a project-by-project basis; however, in most cases, we anticipate use of the Standing Analysis will substantially decrease the associated consultation timeframes.

The standing analysis includes a wide variety of different activities that could cause effects to the covered species and to which agencies and others may apply the DKey. The structure of the DKey, including conservation measures, will determine which specific actions in these broad groupings will be eligible for predetermined NE or NLAA outcomes. This standing analysis covers stressors associated with activities that the SDESFO see on a routine basis. These routine activities include, but are not limited to:

- Foot traffic

- Work within existing rights-of-ways and previously disturbed areas, including:
 - Vehicle traffic such as use of automobiles, tracked equipment, bulldozers, or excavators
 - Earth-disturbing activities, such as disking, grading, and placement of fill
 - Construction, maintenance, operation, or removal of infrastructure projects including:
 - Roads and trails
 - Communication towers
 - Transmission and utility lines
 - Broadband cable installation)
 - Bridges and culverts
- Vegetation management – for example, prescribed burning, clearing of trees or brush, mowing, or grazing.
- Commercial, residential, and recreational developments.
- Agricultural activities.
- Habitat restoration and enhancement.

2.1 LIMITS/SIDEBORDS

To assist action agencies and project proponents in determining whether their project meets the requirements of this Standing Analysis, the Service will provide a series of questions (**Appendix A**) to assess whether the proposed action is not likely to adversely affect listed species or critical habitat because the impacts are either unable to be meaningfully measured, detected, or evaluated and, therefore, insignificant; or extremely unlikely to occur and, therefore, discountable. Any actions that are likely to adversely affect a listed species or critical habitat do not qualify under this standing analysis and require separate individual project review and consultation with the SDESO.

Actions that include certain activities, occur in certain geographic areas, or meet one or more context-dependent conditions will not be eligible to use the standing analysis. For projects requiring consultation (i.e., those projects that “may affect” listed species or critical habitats) that do not qualify due to one or more of these exclusions, action agencies/project proponents must contact the SDESO directly to complete their consultation requirements.

2.1.1 Activity Based Limits/Sideboards

To receive the Service’s technical assistance acknowledgement of an action agency’s NE determination or the Service’s concurrence for a NLAA determination, based on this standing analysis, actions and activities may NOT include the following:

1. Any action that causes adverse effects to a listed species and/or critical habitat.
2. Research or other actions that include the collection, capture, handling, or harassment of any federally listed or proposed species.
3. Actions that result in the approval of a long-term (i.e., in effect greater than 10 years) permits, plans, or other actions.
4. Actions that Involve wind or solar energy.
5. New builds of a wastewater treatment facility or activities that result in a new, increase, or relocation of an existing discharge from surface or ground waters are not covered.
6. New transmission power lines in any habitat type. New distribution lines that occur outside of an existing right-of-way, previously developed land, or actively managed agricultural area.
7. Aerial or other large-scale broadcast applications of any chemical (e.g., insecticide, herbicide, fungicide).

8. Construction of new, or modification of existing oil or gas, (including carbon dioxide) pipelines that may result in grading, trenching, or other ground disturbance.
9. Any project that results in a point source discharge into a water body.
10. Dams, hydropower plants, or other activities that could result in any stream channel obstruction.
11. Projects which include additions or modification to water intake structures.
12. Projects which do not incorporate applicable erosion control measures to avoid or minimize excess sedimentation where practicable for any upland, outlet, bank, or soil disturbances.
13. Project that result in changes in water chemistry, temperature, nutrients, pollutants, or other water quality parameters outside of sedimentation.

2.2 CONSERVATION MEASURES

This standing analysis applies conservation measures as design features to avoid adverse effects on an individual, population, or species. The Service has previously found that incorporation of certain conservation measures, while voluntarily adopted by action agencies, has reduced effects to the extent that the actions do not require formal consultation and the Service and the action agency have found that actions are not likely to adversely affect species and critical habitat. Projects using this standing analysis to support a determination of NE or NLAA must meet all the requirements of the standing analysis. The inability to voluntarily adopt certain conservation measures may result in a project not qualifying to use this standing analysis. Additional conservation recommendations are also included that may be voluntarily implemented as part of a federal agency's program under a standing analysis section 7(a)(1).

It is assumed that all projects comply with federal, state, and local requirements that apply to the specific type of project at the proposed location. Example requirements include all construction requirements on or near public roads, such as traffic speed, utility one-call procedures, restoring or repaving disturbed areas, use of soil erosion and sedimentation control, and following appropriate construction codes for site-specific geology and geography.

2.2.1 Avoidance of Federally Listed Species and Designated Critical Habitat

Projects that can completely avoid federally listed species and their critical habitat are able to reduce potential effects such that they are insignificant and/or discountable.

- Insignificant effects relate to the size of the impact and should never reach the scale where "take" of a listed species occurs.
- Discountable effects are those extremely unlikely to occur. Based on best judgment, a person would not be able to meaningfully measure, detect, or evaluate insignificant effects, or expect discountable effects to occur.

2.2.2 Avoidance of Habitat Modification

Even though existing utility rights-of-way have had previous disturbance, some native habitats may still exist within the project footprint. To the greatest extent practicable, avoid construction and staging activities within wetlands, diversion of surface water and groundwater sources, and above and below ground wetland crossings. Ground disturbance of native prairie habitat, defined as untilled or undisturbed grassland habitat, should be avoided to the greatest extent possible. If unavoidable, use already disturbed areas such as easements, roads, roadway shoulders, bridges, or old railroad beds. Boring may be used to go under native prairie habitat to avoid adverse modifications. To the greatest

extent practicable, avoid clearing mature trees. Create and maintain buffer zones around wetlands to protect their functions and values. Refer to effects of covered activities for specific species measures incorporated into questions in **Appendix A** for required buffer zones, if spatial requirements are available.

2.2.3 Recommended Best Practices for Communication Tower Design, Siting, Construction, Operation, Maintenance, and Decommissioning

Broadband installation recommendations are intended to work alongside previous recommendations for communication tower construction and operation. These recommendations have been modified and updated from previous versions to incorporate the state of the science and the 2024 Federal Aviation Administration Obstruction Marking and Lighting Advisory Circular AC 70/7460-1M CHG 1.

2.2.4 Utility Industry Best Practices

Utility installation activities are intended to incorporate standard industry best practices into the project description. These include:

- Following all applicable federal, state, and local laws, regulations, ordinances, and codes.
- Conducting manufacturer's recommended maintenance on all equipment.
- Adhere to Avian Power Line Interaction Committee Guidelines for minimizing avian electrocutions, collisions, and use of electrical structures (APLIC, 2012, 2024).

In addition to the general conservation measures above, this section details species- or guild-specific exclusions and/or conservation measures that must be met to use this standing analysis and receive a conclusion from IPaC through the DKey. To ensure compliance with the Act, project-specific consultation (or other programmatic consultation, if applicable) with the Service may be necessary for projects that cannot make a "no effect" determination for any listed species that may occur in the project area and cannot apply the following conservation measures. Such projects would not necessarily result in significant adverse effects to Federally listed species or their habitats.

2.3 SPECIES SPECIFIC CONSERVATION MEASURES

In addition to the general conservation measures above, this section details species- or guild-specific exclusions and/or conservation measures that must be met to use this standing analysis and receive a conclusion from IPaC through the DKey. To ensure compliance with the Act, project-specific consultation (or other programmatic consultation, if applicable) with the Service may be necessary for projects that cannot make a "no effect" determination for any listed species that may occur in the project area and cannot apply the following conservation measures. Such projects would not necessarily result in significant adverse effects to Federally listed species or their habitats.

If appropriate, species- or guild-specific conservation measures are included as approval conditions in the exit letter generated by IPaC. Note that not all species and species guilds have conservation measures that would effectively lower the effect determination.

2.3.1 *General Aquatic Measures for all aquatic species*

- Construction activities within and upstream of designated segments should be designed to prevent streambank erosion and should not impact the stream channel/bank.
- Avoid disturbance to ground cover and vegetation within riparian areas by utilizing existing disturbed areas such as roads, trails, etc.

- A spill kit of appropriate capacity should be immediately available at all times when operating equipment near water.
- Implement and maintain comprehensive and effective sediment/erosion controls to the greatest extent possible during and after actions. Silt fences, silt curtains, geotextile fabrics, and immediate post-construction vegetation seedings are examples of methods to address the risk of further degradation. Monitoring and maintenance of these measures is necessary to ensure continued effectiveness, with the goal of keeping sediments from entering the stream system.

2.3.1 Species Guild: Fish

2.3.1.1 *Pallid Sturgeon*

- Avoid in-stream and riparian work from **March 1st-June 30th** during the migration and spawning season.
- Have intake velocities less than 0.50 feet per second (fps) and must use intake screens sized to have a maximum mesh opening of ¼ inch for general pumping activities (USFWS Intake Recommendations, USFWS, 1976 and 40 CFR 125.94(c)).

3.3.1.2 *Topeka Shiner*

- Avoid riparian work in from May 15-July 31st during the spawning season. Avoid activities that directly damage instream habitat. Practices such as driving machinery through streams, excavating streambeds, channelizing channels, or placing fill can harm Topeka shiners and should be avoided. Excavation to install culverts below grade for fish passage is an exception, but sediment and erosion controls should be used to prevent downstream impacts.

2.3.2 Species Guild: Freshwater Mussels

2.3.2.1 *Higgins Eye and Scaleshell Mussels*

- Projects must not affect local hydrology.
- If activities will occur within the riparian zone of a stream or river, a presence/absence survey must be completed by a qualified biologist in the wetted channel after coordinating with the South Dakota Field Office.
- Any barges or equipment that will be used in the water should be inspected and decontaminated of all invasive species prior to use.
- Avoid direct discharge or any materials (i.e., water, chemical, or spoil) that can negatively impact water quality.

2.3.3 Species Guild: Mammals

2.3.3.1 *Black-footed Ferret*

- Projects that intersect the Black-footed Ferret species list area must not include any actions that would harm the species or their prey, prairie dogs, directly (e.g., mammal trapping, poison bait, etc.).

- Avoid all activities which could destroy prairie dog mounds, disturb burrows, or reduce prairie dog populations.
- Projects within the species list area that contain black-tailed prairie dog towns must conduct presence/absence surveys to determine if project activities would occur within a prairie dog town.
- Projects that intersect the Black-footed Ferret species list area must not conduct any work that involves driving a vehicle or other heavy machinery equipment which could destroy prairie dog mounds, disturb burrows, or reduce prairie dog populations through a prairie dog town.
- Projects within the species list area that contain black-tailed prairie dog towns and include ground disturbance or nighttime lighting must consult with the SDESFO for further assistance.

2.3.4 Species Guild: Plants

2.3.4.1 *General measures for each species*

- Projects should not conduct ground disturbance that would directly or indirectly alter the habitat or resources of the listed plant(s)
 1. Potential habitat for Western Prairie Fringed Orchid: Mesic upland prairies, wet prairies, sedge meadows, sub irrigated prairies and swales in sand dune complexes.
 2. Potential habitat for Leedy's Roseroot: North facing, seepy cliffside in the Black Hills.
- Projects should not Directly or indirectly harm the listed plant(s)
 1. Avoid broadcast spraying of herbicides or pesticides in areas known to support suitable habitat, occupied habitat or in the species list area.
 2. Avoid ground disturbance and/or vegetation removal activities in suitable or occupied habitats.

2.3.4.2 *Leedy's Roseroot*

- Any projects which intersect the Species List Area for Leedy's roseroot must work with the SDESFO to complete consultation.

2.3.4.3 *Western Prairie Fringed Orchid*

- Projects should not conduct broadcast or spot spraying of pesticides within suitable habitat.
- Project must not directly or indirectly alter western prairie fringed orchid habitat or resources.
- Avoid staging project related equipment and activities in suitable, native prairie habitats.

Mowing, haying, brush cutting etc. will not occur if it overlaps with the orchid's growing season (late spring through the end of July) and in the spring it should not be cut too close to the ground.

2.3.5 Species Guild: Invertebrates

2.3.5.1 *Dakota Skipper*

- Projects that intersect the Dakota Skipper species list area and overlap with the Service's Habitat and Population Evaluation Team (HAPET) ([Barnes et al, 2024](#)) model with a 50% probability or greater should avoid ground disturbance and removing any existing vegetation. For projects which can not avoid those activities, the following conservation measures apply:
 - Limit all ground disturbance and vegetation removal to within existing right-of-ways, or to actively managed agricultural fields.

- If ground disturbance and vegetation cannot be limited to these areas, either conduct a habitat assessment survey to confirm presence of suitable habitat or conduct a presence/absence surveys following the current Dakota Skipper Survey Protocol and areas where activities will occur must be determined to be unoccupied or absent of Dakota skipper.

2.3.5.2 *Dakota Skipper Critical Habitat*

- Projects that intersect the Dakota Skipper Critical Habitat must not:
 - Disturb the ground or existing vegetation. This includes any off-road vehicle access, soil compaction, digging, seismic survey, directional drilling, heavy equipment, grading, trenching, placement of fill, pesticide application (herbicide, fungicide), vegetation management (including removal or maintenance using equipment or prescribed fire), cultivation, development, etc.
 - Result in changes to Dakota skipper habitat quality, quantity, or availability. Dakota Skipper suitable habitat contains forbs (purple coneflower, violet, asters, purple prairie clover, etc.) along with prairie grasses (little and big blue stem, prairie dropseed, and needlegrasses). Actions that may result in changes to habitat include land management activities including mowing, haying, grazing, and prescribed fire; governmental, commercial, or private development; agricultural conversion; allowing habitat to convert to brush or trees; application of pesticides, including herbicide, insecticide, or fungicide, etc.

2.3.5.3 *Poweshiek Skipperling Critical Habitat*

- Projects must avoid disturbing the ground or existing vegetation within suitable habitat, which includes any off-road vehicle access, soil compaction, digging, seismic survey, directional drilling, heavy equipment, grading, trenching, placement of fill, pesticide/herbicide/fungicide application, vegetation management (including removal or maintenance using equipment or chemicals), cultivation, development, etc.
- Avoid activities that will affect local hydrology including any actions likely to change elevations of surface water upstream or downstream, or in local groundwater levels.

2.3.6 Species Guild: Birds

2.3.6.1 *Piping Plover*

- Must not disturb aquatic or terrestrial habitats which support foraging, roosting, or nesting piping plovers.
- If the project is within 0.5 mile of suitable piping plover habitat, prior to project implementation, surveys of the project area (i.e., operational site, access points, travel corridors, staging areas, etc.) for the presence of piping plovers and optimal habitat features (i.e., vegetated interchannel sandbars, islands, shorelines sand mud flats) must be conducted by a qualified biologist.
- Project personnel must be educated by a qualified biologist on avoiding those areas being utilized by the birds.
- When piping plovers are identified, keep vehicle and foot traffic 0.5 miles from the birds during the nesting season from April 15 to August 15 or 10 feet and from optimal habitat features

(even when birds are not present). Maintain the recommended buffers for the duration of the work activities even if the birds depart or relocate.

- Designate access points, staging areas, waste collections areas, and travel corridors away from known foraging, roosting, or nesting areas and keep all personnel, vehicles, and equipment within those designated corridors to minimize disturbance to birds and shoreline topographic alterations.
- Limit driving up and down the shoreline to the minimum number of passes needed to accomplish the work in order to minimize disturbance to birds and topographic alterations. Keep all personnel, vehicles, and equipment within the designated work area/project footprint and access corridors.
- Do not block major egress points in channels and rivers to avoid disturbance to natural riverine processes.
- Staging areas and waste collection areas should be located in upland areas to avoid shoreline habitat.
- Maintain a clean worksite. Remove all trash and work-related debris on a daily basis.
- Avoid disturbing mud flats or wetlands.
- Restore shoreline topography to its natural pre-project conditions.

2.3.6.2 Piping Plover Critical Habitat

Avoid any long-term impacts (effects lasting up to 6 months or more) to piping plover critical habitat quality, quantity, or availability via habitat degradation.

2.3.6.3 Rufa red Knot

- Avoid long term impacts (greater than 6 months) to foraging habitats (shorelines, islands, sandbars, wetlands, and/or mudflats) or roosting habitats (unvegetated or sparsely vegetated sandbars, islands, shorelines, wetlands or mudflats) via habitat degradation.
- Avoid project activities between May 9 and May 28 or July 25 to September 15, if possible. Activities which occur during this timeframe must incorporate the following conservation measures:
 - Designate access points, staging areas, waste collections areas, and travel corridors away from known foraging or roosting areas and keep all personnel, vehicles, and equipment within those designated corridors to minimize disturbance to birds and shoreline topographic alterations.
 - Limit driving up and down the shoreline to the minimum number of passes needed to accomplish the work to minimize disturbance to birds and topographic alterations. Keep all personnel, vehicles, and equipment within the designated work area/project footprint and access corridors.
 - Staging areas and waste collection areas should be located in upland areas to avoid shoreline habitat.
 - Maintain a clean worksite. Remove all trash and work-related debris on a daily basis.
 - Avoid disturbing mud flats or wetlands.
 - Restore shoreline topography to its natural pre-project conditions.

2.3.6.4 Whooping Crane

- Bird flight diverters must be installed on guy wires for communication towers over 450 feet to reduce avian collisions (USFWS, 2021d).

- Work must not occur in medium or high threshold whooping crane habitat, as identified by the Barnes 2026 [model](#).
- In all other wetland habitats outside of the medium or high suitability, avoid construction during spring (March 22-May 15) and fall (September 15-November 10) migration.
- In low suitability areas, avoid habitat degradation that will render onsite or adjacent habitat unsuitable for whooping crane stopover.
- Workers must be educated on whooping crane appearance, and all sightings must be reported to an SDFO biologist or other person with authority to postpone actions if a crane is present and is detected within 0.5 miles of the work site.
- Cease work activities if a whooping crane is detected within 0.5 miles of the work site.
- Report any whooping crane sightings in the project area to the SDESO as soon as possible and stop all work until the cranes have left the 0.5 mile buffer zone around the project area. Follow existing/established travel and access corridors and maintain slow speeds to avoid disturbing birds.
- Designate access points, staging areas, waste collections areas, and travel corridors away from known foraging or roosting areas and keep all personnel, vehicles, and equipment within those designated corridors to minimize disturbance to birds and habitat alterations.
- Keep all personnel, vehicles, and equipment within the designated work area/project footprint and access corridors.
- Do not block major egress points in channels and rivers to avoid disturbance to natural riverine and wetland processes.
- Staging areas and waste collection areas should be located to avoid whooping crane habitat (cropland and pastures; wet meadows; shallow marshes; shallow portions of rivers, lakes, reservoirs, and stock ponds; and both freshwater and alkaline basins).
- Maintain a clean worksite. Remove all trash and work-related debris on a daily basis.
- Restore habitat to their natural pre-project conditions.

3 COVERED SPECIES AND CRITICAL HABITAT

The following section includes a summary of relevant background information on the species and critical habitat(s) used to develop this standing analysis. A complete description of the species can be found on the USFWS species [website](#). This overview is included to inform the reader of the species prior to the analysis of the effects of the action presented below. Species and critical habitats within a project's action area that may be affected by the proposed action, but are not covered by this standing analysis, will require individual consultation with the SDESO. The DKey does not currently cover species proposed for listing, critical habitat proposed for designation, or nonessential experimental populations (NEPs).

3.1 FISH

3.1.1 Pallid sturgeon (*Scaphirhynchus albus*)

The pallid sturgeon was listed as endangered under the ESA on September 6, 1990 ([55 FR 36641-36647](#)). No federally designated Critical Habitat is recognized for the species.

The pallid sturgeon is a bony potamodromous fish with a dorsoventrally flattened snout which can weigh up to 80 pounds and up to 6 feet long. The body is grayish-white, paler than the body of the

shovelnose sturgeon. The mouth is protractible, free of teeth, and located under the snout. The pallid sturgeon's body supports bony plates and ends in a long slender heterocercal caudal fin. Four barbels are located ventrally and above the mouth (Aron, 2006).

[Habitat requirements](#) for the pallid Sturgeon include large rivers with a high degree of structural and fluvial diversity. This diversity of flows, and associated habitats provides for the ecological requirements of the species, including seasonal or reproductive migrations, egg and larval dispersal, nursery areas for developing young and dispersal corridors and habitats.

The pallid sturgeon is believed to occur in the southeastern portion of South Dakota, although there has been no confirmed breeding of wild pallid sturgeon in the Missouri River and associated tributaries upstream of Gavin's Point Dam for more than a decade. As a result, stocking of hatchery raised sturgeon is deemed necessary to maintain populations in Lake Lewis and Clarke, Lake Randall, Lake Sharpe and Lake Oahe. The section of the Missouri river below Gavin's Point Dam maintains a naturally reproducing population of Pallid Sturgeon, and the sturgeon may enter Missouri River Tributaries like the James and Vermilion rivers ([Recovery Plan 2014](#)).

There are many factors that negatively impact pallid sturgeon populations in South Dakota. Habitat alterations to the Missouri River and associated drainages including impoundments, bank stabilization, increased channelization, and changes in flow regimes have changed water temperatures and turbidity, prevented movement to spawning and feeding areas, reduced emigration and immigration, affected food sources, and reduced available habitat to drifting larvae (USFWS, [2014a](#)). More information about the pallid sturgeon ecology can be found [here](#).

3.1.2 Topeka shiner (*Miniellus topeka*)

The [Topeka shiner](#) was listed as an endangered species under the ESA on December 15, 1998 ([63 FR 69008-69021](#)).

The Topeka shiner is a small minnow that lives and breeds in low-order prairie streams in the Great Plains States of South Dakota, Minnesota, Nebraska, Iowa, Kansas, and Missouri. Occupied habitats generally have relatively small channels which may flow perennially or intermittently into larger streams or rivers. The species typically occupies pools with varying substrates (e.g., cobble, silt and detritus). The Topeka shiner uses pools with little or no flow that occur either within the stream channel or off-channel. The species is generally tolerant of conditions that may exclude co-occurring fishes such as high-water temperatures and low dissolved oxygen. Topeka shiners are small, rapidly maturing, short-lived fishes. They employ a migratory and geographically protracted spawning strategy which supports rapid larval growth and population turnover rates.

Major threats to the Topeka Shiner in South Dakota include altered hydrology, stream fragmentation, land conversion, and sedimentation ([USFWS, 2018a](#)). Channelization, construction of impoundments, mining, and an introduction of predator fish have also reduced Topeka Shiner populations ([USFWS, 2021a, 2021b](#)).

3.1.3 Critical Habitat for Topeka Shiner

Federally recognized Critical Habitat was designated for the Topeka Shiner on August 26, 2004. No habitats in South Dakota were included in this designation due to an existing management plan for the species ([69 FR 44736](#)).

Additional information on the ecology and listing status of the Topeka shiner is available [here](#).

3.2 FRESHWATER MUSSELS

3.2.1 Higgins eye (*Lampsilis higginsii*)

Higgins Eye Pearly mussel is a freshwater mussel currently listed by the USFWS under the ESA as endangered across its range on June 14, 1976 ([41 FR 24062](#)). No federally recognized Critical Habitat is designated for the species.

Higgins eye shells are oval or elliptical, somewhat inflated, and solid and usually yellow, greenish, reddish or brown with green rays. Higgins eye is a long-term brooder, bradytictic, meaning that they spawn in the summer and larvae are retained in the marsupium to protect the eggs, through the winter until they are released the following spring or summer. After fertilization, females store developing larvae, or glochidia, in their gills until expelling them back into the current. The glochidia attach to a fish host, where they remain for approximately three weeks, as they transform into juveniles. The sauger (*Sander canadensis*), walleye (*Sander vitreus*), yellow perch (*Perca flavescens*), largemouth (*Micropterus salmoides*) and smallmouth bass (*Micropterus dolomieu*), and freshwater drum (*Aplodinotus grunniens*) are recognized as suitable hosts for Higgins eye glochidia. (USFWS, 2020).

Major threats include construction activities, environmental contaminants, and invasive species, such as the Zebra Mussel (*Dreissena polymorpha*; [USFWS, 2004](#)). A more complete description of the species' ecology can be found in the USFWS Higgins Eye Pearlymussel recovery plan ([USFWS, 2004](#)) and the most recent 5-year review ([USFWS, 2020](#)).

3.2.2 Scaleshell mussel (*Potamilus leptodon*)

The scaleshell mussel is listed as endangered across its range ([66 FR 54808-54832 2001](#)). The species persists in the state of Missouri, with small populations reported from South Dakota. No federally recognized critical habitat has been designated for this species.

The scaleshell occurs in medium-to large rivers with low-to-medium gradients. It primarily inhabits stable riffles and runs with gravel or mud substrate and moderate current velocities. The scaleshell requires good water quality and is usually found in areas of high mussel concentration and diversity ([USFWS, 2011](#)).

Threats to the conservation of the scaleshell mussel include water quality degradation, sedimentation, channel destabilization, and habitat destruction areas contributing to the decline of the species throughout its range ([USFWS, 2011](#)). The spread of the nonnative zebra mussel (*Dreissena polymorpha*) may threaten scaleshell populations in the future. During the larval stage (glochidia), scaleshell mussel complete an obligate symbiotic phase on freshwater drum (*Aplodinotus grunniens*). A full ecological summary of the scaleshell mussel can be found on the USFWS species [webpage](#) or in the USFWS scaleshell mussel recovery plan ([USFWS, 2010](#)) and the most recent 5-year review ([USFWS, 2020](#)).

3.3 MAMMALS

3.3.1 Black-footed ferret (*Mustela nigripes*)

The U.S. Fish and Wildlife Service listed the black-footed ferret as an endangered species under the early endangered species legislation on March 11, 1967, ([32 FR 4001](#)), and again on June 2, 1970, ([35 FR 8491](#)). The ferret was grandfathered into the ESA in 1973. The species is listed as a nonessential experimental population in specific portions of Arizona, Colorado, Montana, South Dakota, Utah, and Wyoming, with a population established in Dewey County, South Dakota in 2000 ([65 FR 60879](#)). No federally recognized critical habitat is designated for the species.

The black-footed ferret is 18 to 24 inches long ferret, including a 5-to-6-inch tail. It weighs only one-and-a-half to two-and-a-half pounds, with males slightly larger than females. The black-footed ferret is well adapted to its prairie environment. It is a slender, wiry animal with a black face mask, black feet, and a black-tipped tail. The rest of its short, sleek fur is a yellow-buff color, lighter on the belly and nearly white on the forehead, muzzle, and throat (USFWS, 2019a, 2022b).

Sustainable black-footed ferret populations are exclusively dependent on black-tailed prairie dog (*Cynomys ludovicianus*) colonies for food and habitat. Any black-tailed prairie dog towns >80 acres in size or any towns that are part of a ≥1,000-acre complex of prairie dog colonies may be considered black-footed ferret habitat, and surveys for ferrets may be recommended prior to any construction on colonies meeting the above requirements (USFWS, 2019a).

Threats to the species include but are not limited to disease (sylvatic plague [*Yersinia pestis*]), declining genetic fitness due to small population size drought, and the synergistic effects of sylvatic plague with recreational shooting and poisoning of prairie dogs. For more information on the ecology and protected status of the black-footed ferret, see the USFWS species [webpage](#).

3.4 PLANTS

3.4.1 Leedy's roseroot (*Rhodiola integrifolia*)

The Leedy's Roseroot was listed by the USFWS threatened throughout its range on April 22, 1992 ([57 FR 14649-14653](#)). No federally recognized Critical Habitat is designated for the species.

Leedy's Roseroot is a member of the stonecrop family (*Crassulaceae*) and are often characterized by succulent stems and leaves. They are habitat specialists, occupying north to northeast facing cliffs where there is seepage present. Populations are small and isolated due to the species preference for habitats that are relatively uncommon across the South Dakota landscape. The species is known from a single population on Black Elk Peak in the Black Hills, Pennington County, South Dakota ([USFWS 2015](#)).

The main threats to the Leedy's roseroot include small, isolated populations; development; cliff erosion related to logging, heavy rains, poor soil conservation practices above occupied sites; inherent cliff instability; and stochastic events. Other potential threats include alterations to and contamination of surface and groundwater ([USFWS, 2021e](#)). Additional information on the Leedy's roseroot can be found [here](#).

3.4.2 Western prairie fringed orchid (*Platanthera praeclara*)

The Western prairie fringed orchid was listed as threatened on September 28, 1989 ([54 FR 39857 39863](#)). No federally recognized critical habitat is designated for the species.

The Western prairie fringed orchid is a terrestrial herbaceous plant found mainly in fens and tallgrass prairies. It is a glabrous, erect, single stemmed perennial that grows up to 48 inches and flowers from May to August each year and seeds in September. Each flower will persist for around 10 days when they are pollinated by hawkmoths (Sphingidae). Potential habitats include mesic upland prairies, wet prairies, sedge meadows, sub irrigated prairies and swales in sand dune complexes. Although the species has not been documented in South Dakota as of the 2009 five-year status review ([USFWS, 2009](#)), the life cycle and growth patterns of the plant, coupled with the existence of potential non-surveyed habitat suggests that it may be present and not yet detected (Orchid, Recovery Plan, Orchid) .

Threats to the western prairie fringed orchid include but are not limited to habitat conversion to cropland and other manmade land uses; over collection for commercial, recreational, scientific, and educational purposes; inadequate government regulations focused on the protection of the species; and pesticides that increase mortality of pollinating hawkmoth species. Additionally, the presence of nonnative and invasive species and foraging by wild and domestic browsers also may impact the western prairie fringed orchid (Recovery Plan). Additional information on the Western prairie fringed orchid's ecology, threats and protected status can be found on the USFWS species [webpage](#).

3.5 INVERTEBRATES

3.5.1 Dakota skipper (*Hesperia dacotae*)

The Dakota Skipper was listed as threatened on November 24, 2014 (USFWS, 2014b, [79 FR 63672 63748](#)). Federally recognized critical habitat was designated on November 2, 2025 ([80 FR 59248](#)).

The Dakota skipper is a small butterfly with curved antennae, approximately 2.3-3.3 cm (0.9-1.3 inch) in length. The dorsal exterior of an adult male's wing is tawny-orange to brown, with a noticeable mark on the forewing. The eggs are round, white protuberances deposited on the undersides of leaves. Early instar larvae are green with dark collars and heads. Late instar larvae are light brown with black collars and darker brown heads. Pupae are reddish-brown in color ([USFWS, 2019b](#)). Larval host plants include little bluestem (*Schizachyrium scoparium*), big bluestem (*Adropogon gerardii*), porcupine grass (*Hesperostipa spartea*), side-oats grama (*Bouteloua curtipendula*), and prairie dropseed (*Sporobolus heterolepis*) ([USFWS, 2019b](#)). The species inhabits dry-mesic hill prairies with abundant purple coneflower (*Echinacea angustifolia*) but also use mesic to wet-mesic tallgrass prairie habitats characterized by wood lily (*Lilium philadelphicum*) and mountain death camas (smooth camas; *Zigadenus elegans*).

Many environmental and human caused factors threaten Dakota Skipper populations. These include grazing, wildfire, haying, pesticides, flooding, and habitat fragmentation ([USFWS 2018b, 2019b](#)). Impacts associated with these threats include reduction of nectar sources and changes in foraging behavior; the elimination of suitable host plants; general habitat degradation; reduction of populations and changes in habitat quality, composition, and availability. Additionally, the diversity of impacts related to climate change potentially poses a widespread threat to the species ([USFWS, 2021c](#)).

3.5.2 Critical Habitat for Dakota Skipper

Critical Habitat was designated for the Dakota Skipper in eastern South Dakota within tallgrass and mixed grass prairies of Brookings, Day, Deuel, Grant, Marshall, and Roberts Counties. These units comprise 3,465.4 ha (8,564 ac) of habitat essential to the conservation of the species ([80 FR 59248](#)).

The Physical and Biological Features essential for the conservation of the Dakota skipper include;

- Wet-mesic tallgrass or mixed-grass untilled prairie that occurs on near-shore glacial lake soil deposits or high-quality dry-mesic remnant untilled prairie on rolling terrain consisting of gravelly glacial moraine soil deposits;
- Multiple species of flowering forbs to provide nectar and water sources during the Dakota skipper flight period. These species can include but are not limited to purple coneflower (*Echinacea angustifolia*), bluebell bellflower (*Campanula rotundifolia*), and white prairie clover (*Dalea candida*) among other prairie species;
- Grassland habitats suitable for dispersal that is within 1 km (0.6 mi) of native high-quality remnant prairie, as defined above that connects high-quality wet-mesic to dry tallgrass prairies or moist meadow habitats.

For more information on the necessary Physical and Biological Features for Dakota skipper conservation see the linked [Federal register](#) notice.

More information about the Dakota skipper's ecology, threats, protected status and critical habitat can be found on the USFWS species [webpage](#).

3.5.3 Poweshiek skipperling (*Oarisma poweshiek*)

The Poweshiek skipperling was listed as endangered on November 24, 2014 (USFWS, 2014b, [79 FR 63672](#)). Federally recognized Critical Habitat was designated in 2015([80 FR 59248](#)) including prairie habitat in eastern South Dakota.

The Poweshiek skipperling is small and slender bodied butterfly, with a wingspan ranging from approximately 2.3 to 3.0 cm (0.9 to 1.2 in). The upper wing surface is dark brown with a band of orange along the leading edge of the forewing. Ground color of the lower surface is also dark brown, but the veins of all but the anal third of the hindwing are outlined in hoary white, giving an overall white appearance to the undersurface. Once found in native prairie habitat across the west and Midwest, the species has been extirpated from much of its historic range and surviving populations are only known to occur in Michigan, Manitoba, and Wisconsin (USFWS, 2022a).

The habitat of Poweshiek skipperlings includes prairie fens, grassy lake and stream margins, moist meadows, and wet-mesic to dry tallgrass prairie. Preferred nectar plants for adult Poweshieks include smooth ox-eye (*Heliopsis helianthoides*) and purple coneflower (*Echinacea angustifolia*), but they also use stiff tickseed (*Coreopsis palmate*), black-eyed Susan (*Rudbeckia hirta*), and palespike lobelia (*Lobelia spicata*). Larval food plants are assumed to include spike-rush, sedges, prairie dropseed (*Sporobolus heterolepis*) and little bluestem (*Schizachyrium scoparium*). Poweshiek skipperlings have one flight per year from about the middle of June through the end of July (depending upon weather). They have a low dispersal capability and may not cross areas that are not structurally similar to native prairies. Extirpation from fragmented and isolated prairie remnants may be permanent unless it occurs within about 0.6 miles of an inhabited site that generates a sufficient number of emigrants. They are

vulnerable to extreme weather conditions, dormant season fire, and other disturbances (e.g., intense cattle grazing). Additional information on the Poweshiek skipperling ecological needs, threats, protected status and critical habitat is available on the USFWS species [webpage](#).

3.5.3.1 Critical Habitat for Poweshiek skipperling

Critical Habitat was designated in Brookings, Day, Deuel, Grant, Marshall, and Roberts counties of South Dakota. The Physical and Biological Features essential for the conservation of the Poweshiek skipperling are:

- Wet-mesic to dry tallgrass remnant untilled prairies or remnant moist meadows containing with a predominance of native grasses and native flowering forbs; undisturbed (untilled) glacial soil types including, but not limited to, loam, sandy loam, loamy sand, gravel, organic soils (peat), or marl that provide the edaphic features conducive to supporting native prairie vegetation;
- If present, depressional wetlands or low wet areas, within or adjacent to prairies; low (<5%) tree or large shrub cover in dry prairies and less than 25% in mesic prairies and prairie fens and less than 5% invasive species.
- Prairie fens should provide a preponderance of native grasses and flowering forbs, undisturbed native soils and hydraulic features necessary to maintain groundwater flows supportive of prairie fen plant communities. Species composition of prairie habitats should support a minimum of at least one of the following species of grasses: Prairie dropseed (*Sporobolus heterolepis*), little bluestem (*Schizachyrium scoparium*), sideoats grama (*Bouteloua curtipendula*), or mat muhly (*Muhlenbergia richardsonis*). Forbs present in habitats should include at least one of the following species: purple coneflower (*Echinacea angustifolia*), black-eyed Susan (*Rudbeckia hirta*), smooth ox-eye (*Heliopsis helianthoides*), stiff tickseed (*Coreopsis palmata*), palespike lobelia (*Lobelia spicata*), sticky tofieldia (*Triantha glutinosa*), or shrubby cinquefoil (*Dasiphora fruticosa* ssp. *floribunda*).
- The physical and biological features associated with native prairie should include dispersal grassland habitat that is within 1 km (0.6 mi) of native remnant prairie connecting high quality wet-mesic habitats to dry tallgrass prairies, moist meadows, or prairie fen habitats. Dispersal grassland habitat should be dominated by perennial grassland with limited or no barriers to dispersal including tree or shrub cover less than 25% of the area and no row crops.

For more information on the critical habitat designation and physical and biological features essential for Poweshiek skipperling conservation can be found in the federal register ([80 FR 59248](#)).

3.6 BIRDS

3.6.1 Piping plover

The Piping Plover was listed as threatened in the Northern Great Plains on December 11, 1985 ([50 FR 50726-50734](#)), including the South Dakota. Federally recognized [Critical Habitat](#) for the Northern Plains population of the species was designated on September 2, 2002, and is present in South Dakota along the Missouri River from the North Dakota border to Oahe Dam and below Ft. Randall Dam to Ponca, Nebraska.

The piping plover is a compact shorebird approximately 18.4 cm (7.25 in) in length. During breeding season, its dorsal parts are gray and ventral parts are white. It has a black stripe on the forehead that extends from eye to eye. The bill is short and stout. The base of the bill is orange while the tip is black. It has a black band extending from side to side on the upper breast that is broken most of the time. It has yellowish to legs.

In South Dakota, this species primarily breeds along the Missouri River but will also use alkali lakes and other shorelines. They nest from early May to mid-August. Piping Plovers breed and forage in unvegetated or sparsely vegetated areas such as river sandbars and islands, wetland edges and open sand flats.

For the purpose of this Standing Analysis, long term impacts to piping plover and piping plover critical habitat will be defined as greater than 6 months. Although the U.S. Fish and Wildlife Service does not explicitly define “long-term impacts” using a fixed month-based threshold, a six-month duration aligns with USFWS seasonal management frameworks. Impacts persisting for six months or longer overlap substantially with at least one ecologically significant period (breeding or nonbreeding), both of which are foundational to USFWS demographic monitoring. Therefore, classifying effects exceeding six months as long-term is biologically justified and consistent with how USFWS evaluates seasonal vulnerability and annual population trends.

Threats to the conservation of piping plover populations in South Dakota include but are not limited to alteration of water levels in reservoirs and rivers due to increased flooding; physical strikes with man-made features such as powerline, wind turbines, and automobiles; agricultural runoff; invasive species, and increased disturbance from high levels of human traffic associated with recreational activities. Avian diseases such as botulism, West Nile Virus, and avian influenza also may pose a threat to the species (USFWS, 2016). Stochastic events resulting from climate change are a developing threat to the species. For more information on the ecology, threats and protected status of the piping plover, visit the USFWS species [webpage](#).

3.6.1.1 Critical Habitat for the piping plover

Critical habitat for the piping plover was designated along the Missouri River from the North Dakota border to Oahe Dam and below Ft. Randall Dam to Ponca, Nebraska. Critical habitat units encompass approximately 287.5 miles of habitat along the Missouri River.

The primary physical and biological feature required for piping plover conservation is the dynamic ecological processes that create and maintain piping plover habitat. The essential habitat characteristics differ among habitat types within South Dakota. On prairie alkali lakes and wetlands, these characteristics include shallow, seasonally to permanently flooded, mixosaline to hypersaline wetlands with sandy to gravelly, sparsely vegetated beaches, salt-encrusted mud flats, and/or gravelly salt flats; springs and fens along edges of alkali lakes and wetlands; and adjacent uplands 61 m (200 ft) above the high water mark of adjacent bodies of water. Essential habitats along rivers include sparsely vegetated channel sandbars, sand and gravel beaches on islands, temporary pools on sandbars and islands, and a direct interface with the river. Critical habitat features associated with reservoirs include sparsely vegetated shoreline beaches, peninsulas, islands composed of sand, gravel, or shale, and their interface with the water bodies. Additional information on the critical habitat designation for the piping plover,

and the physical and biological features for the species' conservation can be found in the [federal register](#).

3.6.2 Rufa red knot

The red knot was listed as threatened under the ESA on January 12, 2015 ([79 FR 73705 73748](#)). No federally recognized critical habitat is designated for the species.

The red knot is a medium-sized shorebird about 23 to 28 cm (9 to 11 inches) in length with a proportionately small head, small eyes, short neck, and short legs. The black bill tapers steadily from a relatively thick base to a relatively fine tip; bill length is not much longer than head length. The species is an uncommon migrant in South Dakota while traveling between its arctic breeding grounds and wintering regions, from the southeastern United States gulf states to the southern tip of South America. The species passes through South Dakota between mid-May and September.

Major threats to this species include the loss of breeding and nonbreeding habitat, likely effects related to disruption of natural predator cycles on breeding grounds, reduced prey availability throughout nonbreeding range, and increasing frequency and severity of asynchronies (mismatches) in the timing of the annual migratory cycle relative to favorable food and weather conditions (USFWS, 2023).

On April 13, 2023, the Service designated proposed critical habitat for wintering red knot (Federal Register / Vol. 88, No. 71), but this habitat does not occur within the state of South Dakota. Additional information on the ecology and protected status of the rufa red knot is available on the USFWS species [webpage](#).

3.6.3 Whooping crane

The whooping crane was listed as endangered under the ESA on March 11, 1967 ([32 FR 4001](#)). There is no designated critical habitat for whooping cranes in South Dakota.

The whooping crane is the largest bird in North America, reaching 5 feet in height. Adult male and females have mostly white feathers. Black feathers are located on the wing tips. A crimson-colored crown extends toward the base of the bill. Breeding and nesting occur in the Wood-Buffalo National Park in Canada ([ECOS](#)).

The whooping crane is currently known to occur as a migratory species in Kansas, Montana, Nebraska, North Dakota, Oklahoma, South Dakota, and Wisconsin. The endangered population is believed to occur in suitable habitats throughout all of South Dakota. During migration north, whooping cranes use the Wood Buffalo-Aransas flyway and move into central South Dakota, twice annually on their way to northern breeding grounds (March 22 – May 15) and southern wintering areas (September 15 – November 10). They occupy numerous habitats such as cropland and pastures; wet meadows; shallow marshes; shallow portions of rivers, lakes, reservoirs, and stock ponds; and both freshwater and alkaline basins for feeding and loafing. Overnight roosting sites frequently provide shallow water in which to stand and rest (USFWS, 2007).

Threats to the whooping crane population in South Dakota are variable. The most predominant threat is the risk of strike mortality associated with manmade structures within the migratory flyway. Alterations of prairie pothole habitats such as conversion to cropland; wetland draining; decreased river flows and water diversions forest succession into roosting habitats; expansion of sandhill crane hunting season;

and increased human disturbance. Whooping cranes may also be susceptible to diseases such as avian tuberculosis (USFWS, 2007).

A small population size, stochastic events and impacts related to climate change are also expected to pose a threat to the species ([5-Year Review](#)). Should projects require construction to occur during spring or fall migration, and within the Service's Habitat and Population Evaluation Team Habitat Model per Barnes et al. 2026, then the potential for whooping crane disturbances (flushing the birds) exists. Additional information on the ecology and protected status of the whooping crane is available on the USFWS species [webpage](#).

4 EFFECTS OF COVERED ACTIVITIES

This section covers the effects of the anticipated activities covered in this standing analysis to the covered species and critical habitat (Section 2, Covered Activity Description; Section 3 Covered Species and Critical Habitat). Where appropriate in this analysis, we make note of activities that are expected to have no effect on covered species and critical habitat. This information is provided as technical assistance to those agencies and project proponents who may be unfamiliar with the species and activities and can be incorporated by reference by action agencies when they make a NE determination.

Some projects that are eligible to use the key may result in no effects to species covered by the key, such as when the project occurs entirely within an already-developed area (e.g., within an existing structure, graveled or paved lot, industrial site) that does not provide habitat for listed species. For this DKey, an "already-developed area" is defined as highly disturbed habitat that does not provide potential feeding, breeding, or sheltering resources for any federally listed species such as paved surfaces, buildings, sidewalks, regularly tilled agriculture, or urban lawns. Examples of developed or disturbed areas that may still provide resources to listed species include road or transmission line rights-of-way, other roadside habitat, bridges, culverts, etc. Projects also reach a NE outcome for some species when the user indicates that there is no land disturbance or other alterations to habitation conditions of previously undeveloped habitat. For the purposes of this DKey, this includes any activity that changes the physical, biological, or hydrologic characteristics of an area that provides habitat features. This may include changes to water flow regime, channel form or connectivity, or drainage patterns resulting from culvert or bridge installation, replacement, or modification. It also includes land-based actions such as clearing or removing vegetation; managing vegetation using equipment; prescribed fire; offroad vehicle use; soil compaction; excavation, digging, trenching, grading, or placement of fill; seismic survey; directional drilling; heavy equipment operation; cultivation or development; and the application of pesticides (including insecticides, herbicides, and fungicides).

Effects of the action refers to the direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action, that will be added to the environmental baseline. The environmental baseline includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process. Indirect effects are those that are caused by the

proposed action and are later in time but still are reasonably certain to occur. Interrelated actions are those that are part of a larger action and depend on the larger action for their justification. Interdependent actions are those that have no independent utility apart from the action under consideration. 50 CFR 402.02 (2018).

A project's action area must include all areas affected (i.e., modifications to land, air, or water) by the proposed action, and not merely the immediate area involved in the action. If the activities satisfy the two-part test for causation ("but for" and "reasonably certain to occur"), they should be considered as part of the action. To qualify for use of this standing analysis, a project's action area must be wholly encompassed by the coverage area for this standing analysis as described above and all activities within the proposed action must fit within the scope of the standing analysis.

Qualifying actions typically involve one or more of the stressors addressed below.

To develop pathways for evaluating effects to listed species covered by the South Dakota DKey, we considered the most relevant information South Dakota ESFO biologists use when evaluating effects of individual projects. In general, the most relevant information includes:

- Likelihood of unknown occurrences of listed species or habitat within a project's action area;
- Severity of potential impacts should a listed species be present; and
- Conservation measures that will be implemented
- The DKey references embedded Geographic Information Systems (GIS) data to automatically answer questions about sensitive resources located within or near the action area delineated in IPaC for a project. Questions automatically answered, either by GIS data embedded in the key or based on the response to previous questions, are referred to as "Hidden Semantic" questions.

To account for unknown occurrences of listed species, many pathways include questions about the presence of suitable habitat within or near the action area, whether surveys were completed, and/or if the species was documented.

As noted the South Dakota DKey does not currently cover proposed species, proposed critical habitat, or NEPs (non-essential experimental populations). Therefore, we did not develop a pathway for evaluating effects on these resources.

Activities involving purposeful take, such as capture of individuals, are not eligible to use the key and thus, are not discussed further.

A note on applicability of conservation measures below: Not every conservation measure identified in the Not Likely to Adversely Affect determinations that follow will be relevant to every project. Each measure addresses a specific activity or exposure pathway (e.g., water intake construction, in-stream work, prescribed burning); a project that does not include that activity does not need to satisfy that measure to qualify for an NLAA determination. A project qualifies for NLAA by committing to all conservation measures that are applicable to the activities it actually includes not by satisfying every measure listed for the species or guild regardless of relevance.

4.1 EFFECTS OF STRESSORS ON FISH

4.1.1 Primary Stressors

The primary stressors affecting the Topeka shiner and pallid sturgeon in South Dakota are:

- **Habitat Alterations:** Impoundments, bank stabilization, channelization, and fragmentation that lead to habitat loss and degradation.
- **Water Quality and Quantity Degradation:** Changes in flow regimes, temperature, turbidity, and contamination from runoff or spills.
- **Loss of Connectivity:** Barriers such as improperly installed culverts that block movement and fragment habitat.
- **Sedimentation:** Ground disturbance in riparian or lacustrine habitats that releases sediment into streams, impacting spawning and feeding areas.
- **Disruption of Life Cycles:** Riparian work during critical spawning and migration seasons.
- **Hydrology:** Changes of flows in the Missouri River during pallid sturgeon spawning season.

Projects that result in in-stream habitat alteration, water quality or quantity degradation, loss of connectivity, or hydrology specific to pallid sturgeon are excluded from DKey eligibility under Section 2 of this Standing Analysis. This exclusion removes the exposure pathway to pallid sturgeon and Topeka shiner at the outset, rather than relying on conservation measures to reduce an otherwise qualifying effect. Therefore, sedimentation and disruption of life cycles are carried forward as potential exposure pathways.

4.1.2 Exposure Pathway

Covered activities that involve ground disturbance within or adjacent to occupied stream channels (Section 2, Appendix A: trenching, boring pit excavation, bridge/culvert work, vegetation clearing in riparian corridors) can create a pathway for sediment mobilization into the water column and subsequent potential life cycle alterations. Pallid sturgeon and Topeka shiner both depend on specific instream conditions: pallid sturgeon on flow and turbidity regimes that support larval drift and dispersal and Topeka shiner on low-flow pools with stable cobble/silt substrate for spawning. Activities that alters bank stability, channel form, or flow within an occupied reach has the potential to disrupt the life cycle for each species regardless of distance from the actual disturbance footprint, since sediment and hydrologic effects propagate downstream. Exposure is time-limited by life history: pallid sturgeon are most vulnerable during the March 1–June 30 migration/spawning window, and Topeka shiner during the May 15–July 31 spawning window, when eggs, larvae, and spawning adults are concentrated in specific reaches and are least able to avoid or recover from disturbance.

4.1.3 Anticipated Response if Exposed

Absent mitigation, sediment introduced to occupied streams settles into interstitial spaces of spawning substrate, reducing dissolved oxygen available to eggs and smothering larvae. Altered flow or channel form from bank stabilization or fill placement can eliminate the low-velocity pool habitat Topeka shiner requires or disrupt the drift corridors pallid sturgeon larvae rely on for dispersal to nursery habitat. Undersized, perched, or misaligned culverts create velocity barriers. Topeka shiner are small, weak-

swimming species cannot pass through these barriers, which can result in fragmenting populations and isolating genetic subpopulations. Direct instream work (machinery in the streambed, excavation, channelization) causes immediate physical destruction of occupied habitat and can directly injure or kill individuals present at the time of work.

4.1.4 Determination Logic

No Effect: The action area is located entirely outside occupied streams, riparian corridors, and their associated watersheds. Since no ground disturbance, discharge, or hydrologic modification can reach occupied habitat, no exposure pathway exists and no effect determination analysis beyond this screening step is required.

Not Likely to Adversely Affect: The action area is within or adjacent to occupied habitat. An NLAA determination is supported where the project commits to the conservation measures in Section 2.2 that are applicable to its proposed activities:

- *If the project includes riparian work, and that work avoids the March 1–June 30 window (pallid sturgeon) and the May 15–July 31 window (Topeka shiner), then the exposure window is removed entirely during the life stages most sensitive to disturbance, and the resulting effect is discountable because the sensitive life stage is not present or concentrated in the work area during construction.*
- *If the project includes ground disturbance in riparian or lacustrine areas, and sediment and erosion controls (silt fencing, silt curtains, geotextile fabric, immediate post-construction revegetation) are implemented, then mobilized sediment is physically intercepted before it reaches the stream channel, reducing delivery below the threshold at which it could be measured or detected in occupied habitat.*
- *If the project includes a water intake structure, and it meets the intake velocity (less than 0.50 fps) and screen mesh (¼-inch maximum) specifications, then entrainment and impingement of larvae and juvenile pallid sturgeon is prevented due to the ability of the larvae and juveniles to escape the intake structure from the low velocity and small mesh size, minimizing effects to discountable.*
- *If the project occurs near aquatic habitat, and herbicide/pesticide application is prohibited and spill kits/equipment maintenance protocols are followed, then the water quality contamination pathway is closed, and the probability of an accidental contamination event is reduced to a level that is unlikely to occur.*

Where the project commits to each applicable measure above, every exposure pathway created by its proposed activities is either removed or reduced below a detectable threshold, and the resulting effects are insignificant or discountable, supporting an NLAA determination.

May Affect: The project involves direct work in the streambed or wetland, directly damages instream habitat (driving machinery through streams, excavating streambeds, channelizing, placing fill), causes permanent or temporary changes to water quality or quantity, occurs during the seasonal windows identified above without avoidance, or includes herbicide/pesticide application near aquatic habitat, and does not commit to the applicable conservation measure(s) above. These activities create a direct,

unmitigated exposure pathway to sensitive life stages or habitat function, and coordination with the SDESFO is required.

4.2 EFFECTS OF STRESSORS ON FRESHWATER MUSSELS

4.2.1 Primary Stressors

The primary stressors to South Dakota mussel species are habitat degradation and direct physical effects from ground disturbance or in-stream activity, producing:

- Water quality degradation.
- Increased sedimentation from land-use activities.
- Channel destabilization and habitat destruction.
- Crushing, burying or displacement.
- The spread of invasive species, such as the Zebra Mussel.
- Altered hydrology that reduces cleansing flows and allows fine sediments to accumulate.

4.2.2 Exposure Pathway

Higgins eye and scaleshell mussels are sessile as adults and entirely dependent on ambient water quality and substrate stability within occupied reaches; unlike mobile species, they cannot avoid a sediment/contamination event once it reaches their location or move away from physical effects. Covered activities involving bank disturbance, outfall construction, or equipment operation in or near occupied streams creates a direct pathway for sediment and contaminants to reach mussel beds via the same mechanism described for fish. Ground disturbance mobilizes fine sediment that travels downstream to areas of established mussel concentration. Because both species also depend on a host fish species (sauger, walleye, yellow perch, bass, or freshwater drum) to complete their larval (glochidial) life stage, any activity that also affects host fish populations or movement compounds the exposure pathway indirectly. Activities involving bank disturbance, outfall construction, or equipment operation in or near occupied streams also create a direct pathway to direct physical effects on individuals such as crushing, burying, and displacement.

4.2.3 Anticipated Response if Exposed

Sedimentation fills the interstitial spaces between substrate particles that mussels use for feeding, respiration, and can directly bury and smother sessile individuals. Water quality degradation (contaminant discharge, altered dissolved oxygen from disturbed sediment) is particularly harmful to mussels, which have limited ability to metabolize or excrete many contaminants. Activities that have a direct physical effect on individuals have the potential to directly harm or kill each impacted species. Introduction of invasive species such as zebra mussel via uninspected equipment can result in competitive displacement or biofouling of native mussels. Altered hydrology that reduces flow variability degrades the natural cleansing action that prevents fine sediment accumulation, producing chronic rather than acute habitat degradation.

4.2.4 Determination Logic

No Effect: The action area is located entirely outside occupied streams and their associated watersheds; no sediment, hydrologic, or water quality pathway exists to reach these habitats.

Not Likely to Adversely Affect: The action area intersects occupied streams. An NLAA determination is supported where the project commits to the conservation measures in Section 2.3.2 that are applicable to its proposed activities:

- *If the project includes bank work or outlet construction, and that work is designed to avoid or minimize sedimentation and stream bank erosion, then the sediment-delivery pathway is intercepted before it reaches occupied stream reaches, this minimizes the exposure to insignificant.*
- *If the project has the potential to discharge water, chemical, or spoil material, and direct discharge of such material is prohibited, then the contamination pathway is closed at the source rather than relying on dilution or downstream treatment.*
- *If the project involves instream work and a mussel survey was conducted where neither species was found, then the direct physical effects (i.e. crushing, burying, dislodging) pathway has been avoided.*
- *If the project uses barges or equipment in the water, and that equipment is inspected and decontaminated before use, then the invasive species introduction pathway is minimized to insignificant.*

Where the project commits to each applicable measure above, and because these measures act at the point of generation rather than after release, full implementation of the applicable source-control measures is the basis for concluding that resulting effects are insignificant, thus supporting an NLAA determination.

May Affect: The project involves bank disturbance within occupied streams, any direct discharge of water, chemical, or spoil material, hydrologic alteration that reduces flow within occupied segments, or failure to decontaminate equipment before use in water, and does not commit to the applicable conservation measure(s) above. Because mussels cannot avoid a released stressor, any of these activities without full **avoidance** is treated as a direct exposure pathway requiring SDESFO coordination.

4.3 EFFECTS OF STRESSORS ON MAMMALS

4.3.1 Black-footed Ferret

Primary Stressors: The primary stressors affecting Black-footed ferrets in South Dakota are (USFWS, 2013, 2020):

- Disease (sylvatic plague)
- Drought
- Habitat destruction, disturbance, or modification
- Prairie dog poisoning/shooting

Exposure Pathway: Black-footed ferret populations are entirely dependent on black-tailed prairie dog colonies for food (prey) and shelter (burrow use). Covered activities do not introduce disease vectors, poison, or direct take mechanisms. One exposure pathway is physical disturbance to prairie dog towns themselves. The physical disturbance can be through vehicle or heavy equipment operation that collapses burrows or displaces prairie dog colonies within a project's action area, which secondarily reduces ferret habitat and prey availability. Another exposure pathway would be habitat modification such as nighttime lighting, which may impact the response of this species during nocturnal hunting events.

Anticipated Response if Exposed: Direct destruction of prairie dog burrows or reduction of colony reduces the prey base and shelter available to any ferret present. This destruction compounds an existing stressor, which for a species already limited by small, isolated populations, rather than introducing a novel one at meaningful scale.

Determination Logic:

No Effect: The project does not fall within black-footed ferret range or if a survey is conducted and no prairie dog towns were detected in the project area. Because ferrets require this specific habitat feature to be present, its absence removes any exposure pathway.

Not Likely to Adversely Affect:

If a presence/absence survey identifies a prairie dog town within a project's action area, and if the project avoids driving vehicles or heavy machinery through the town, ground disturbance, nighttime lighting, and poisoning, then exposure pathway associated with that specific activity would be avoided

May Affect: Any work occurring inside an active prairie dog town within ferret range requires coordination with the SDESFO, because the town itself constitutes the exposure pathway regardless of the specific activity conducted within it.

4.4 EFFECTS OF STRESSORS ON PLANTS

4.4.1 Leedy's Roseroot

Primary Stressors: : The primary stressors affecting Leedy's roseroot in South Dakota are (USFWS, 1998):

- Physical disturbance (i.e. cliff erosion due to human disturbance, trampling, cutting, crushing, etc.).
- Hydrologic dependence

Exposure Pathway: Leedy's roseroot occupies a single known population on Black Elk Peak, on north-to-northeast-facing seepage cliffs, a habitat type that is both extremely limited in extent and hydrologically dependent on groundwater seepage from above the cliff face. Since the population is a single, small, isolated occurrence, even localized disturbance could constitute a meaningful proportion of the total known population. Therefore, projects which intersect the Leedy's roseroot species list area must work with the SDESFO to complete consultation.

4.4.2 Western Prairie Fringed Orchid

Primary Stressors: The primary stressors affecting Western prairie fringed orchid are (USFWS 1996):

- Habitat destruction
- Habitat modification/overutilization
- Disease or Predation
- Competition from invasive species

Exposure Pathway: Although the species has not been documented in South Dakota as of the most recent five-year review, the potential presence of unsurveyed suitable habitat (mesic upland prairies, wet prairies, sedge meadows, sub-irrigated prairies, and dune-complex swales) means covered activities involving ground disturbance or vegetation management within these habitat types create a potential exposure pathway even in the absence of a confirmed detection. Because the species flowers and seeds within a defined window (late spring through July), the timing of vegetation management activities (mowing, haying, brush cutting) relative to this window determines whether exposure occurs during a life stage where disturbance would eliminate a reproductive season entirely versus occurring outside it. Since the species has not been documented in South Dakota; Projects are unlikely to involve disease, predation, and competition from invasive species. The exposure to these stressors is minimized to insignificant.

Anticipated Response if Exposed: Ground disturbance (grading, disking, fill placement) in suitable habitat directly destroys plants or the specific soil/hydrologic conditions (mesic to wet-mesic moisture regime) the species requires. Pesticide application, broadcast or spot, poses a dual threat: direct toxicity to the plant and elimination of the hawkmoth pollinators (Sphingidae) on which the species' reproduction depends. This means pesticide exposure can suppress reproduction even without directly contacting the plant. Mowing or haying during the growing season removes flowering structures before seed set, eliminating that year's reproductive output.

Determination Logic:

No Effect: The action area is located entirely outside potential habitat.

Not Likely to Adversely Affect: The action area occurs within potential habitat. An NLAA determination is supported where surveys confirm no orchids present, or where the project commits to the conservation measures in Section 3.3.4 that are applicable to its proposed activities:

- *If* pre-project surveys are conducted during the blooming period and confirm the species is absent, *then* the exposure pathway is closed entirely, since no individual or seed bank is present to be affected.
- *If* surveys cannot confirm absence, but the project avoids ground disturbance and vegetation removal within suitable habitat, *then* direct destruction of plants and the moisture regime they require is avoided.
- *If* the project involves pesticide application of any kind, and that application is avoided entirely within suitable habitat, *then* both the direct-toxicity pathway to the plant and the indirect pollinator-loss pathway (affecting the hawkmoth species the plant depends on for reproduction) are addressed simultaneously.

- *If the project includes mowing, haying, or brush cutting, and that activity is restricted to outside the late-spring-through-July flowering and seed-set window, then disturbance does not coincide with the reproductive period, allowing the plant to complete its annual cycle even where covered activity occurs nearby.*

Where the project commits to each applicable measure above, the survey/avoidance/timing combination addresses every independent exposure pathway relevant to its activity's direct destruction, pollinator loss, and reproductive-window disturbance and the resulting effect is insignificant, supporting an NLAA determination.

May Affect: The project is within potential habitat and involves broadcast or spot pesticide spraying, direct or indirect habitat alteration (including ground disturbance), equipment staging in suitable native prairie habitat, mowing/haying/brush cutting during the growing season, or failure to conduct required pre-project surveys, and does not commit to the applicable conservation measure(s) above.

4.5 EFFECTS OF STRESSORS ON INVERTEBRATES

4.5.1 Primary Stressors

The primary stressors affecting Dakota skipper and Poweshiek skipperling in South Dakota include:

- Habitat loss/degradation from conversion of native prairie.
- Ground disturbance and earth movement, including dust generation.
- Landscape modification (vegetation removal, water extraction).
- Mowing and haying outside acceptable parameters.
- Spread of invasive cool-season grasses (smooth brome, Kentucky bluegrass).
- Chemical use, particularly non-target pesticides such as neonicotinoids.

4.5.2 Exposure Pathway

Dakota skippers depend on intact native prairie containing specific larval host grasses (little bluestem, big bluestem, prairie dropseed, among others) and adult nectar forbs (purple coneflower, black-eyed Susan, and others identified in Section 3). Since Dakota skippers have low dispersal capability and cannot cross landscape gaps that are not structurally similar to native prairie, any covered activity that removes, fragments, or chemically alters native prairie within occupied or designated critical habitat directly reduces the finite habitat available to a population that cannot recolonize from elsewhere. The HAPET model (Barnes et al. 2024) identifies areas with 50% or greater probability of Dakota skipper presence, providing a spatial basis for determining where this exposure pathway is potentially located.

4.5.3 Anticipated Response if Exposed

Ground disturbance (grading, trenching, off-road vehicle access, digging, seismic survey, directional drilling, cultivation) within suitable or critical habitat directly destroys the native prairie soil structure and vegetation community that cannot be readily reestablished. Pesticide application, particularly neonicotinoids, are directly toxic to larvae and adults and can also eliminate the specific nectar plants adults require. Altered hydrology affects the soil moisture regime that determines whether a site

supports wet-mesic versus dry-mesic prairie vegetation, changing which host and nectar species can persist.

4.5.4 Determination Logic

No Effect: The action area is located entirely outside suitable habitat (including native prairie and areas supporting key host/nectar plants) and designated critical habitat, or falls within an area the HAPET model identifies as low probability of suitable habitat features present (Barnes et al 2024). Based on field evaluations by independent surveyors, and a meta-analysis of previous survey efforts, the model provides an accurate landscape level evaluation of potential habitat. Therefore, using the model as a surrogate for field evaluated habitat overrepresents potential effects to the species, and is a more conservative approach that is more sensitive towards Dakota skippers.

Not Likely to Adversely Affect: The action area intersects suitable or critical habitat. An NLAA determination is supported where the project commits to the conservation measures in Section 3.5.1 and Appendix A that are applicable to its proposed activities:

- *If the project is located entirely within a previously disturbed right of way that is already paved or supports structures, and vegetation is limited to frequently mowed grass or conventional landscaping, then the exposure pathway is minimized to insignificant due to lack of suitable habitat.*
- *If the project is located in an area that has a less than 50% probability of occurrence obtained from the HAPET model, then the exposure pathway is minimized to insignificant due to lack of suitable habitat.*
- *If the project involves ground disturbance within suitable habitat, and pre-project surveys following the Dakota Skipper Survey Protocol demonstrate no habitat loss will occur, then the project has established that the specific activity does not intersect occupied or high-quality habitat.*
- *If the project, in its entirety, is planned to occur in an actively managed agricultural field, then the exposure pathway is minimized to insignificant due to lack of suitable habitat.*

Where the project commits to each applicable measure above, these thresholds convert routine land management from a chronic degrading stressor into a neutral or beneficial habitat maintenance action, and full implementation of the applicable measures reduces effects to a level that is insignificant or discountable, supporting an NLAA determination.

May Affect: The project is within suitable habitat, designated critical habitat, or an area with greater than 50% HAPET-modeled probability of occurrence, and involves ground or vegetation disturbance (off-road access, soil compaction, digging, grading, trenching, fill placement, pesticide application, or vegetation management), will change habitat quality/quantity/availability, will affect local hydrology, or proceeds without required pre-project surveys where avoidance is not otherwise demonstrated, and does not commit to the applicable conservation measure(s) above.

4.6 EFFECTS OF STRESSORS ON CRITICAL HABITAT FOR DAKOTA SKIPPER AND POWESHIEK SKIPPERLING

4.6.1 Physical and Biological Features:

Designated critical habitat for the Dakota skipper and Poweshiek skipperling is defined by three physical and biological features (PBFs): (1) the untilled native prairie substrate and larval host grass community, (2) the native forb community providing nectar and water resources during the adult flight period, and (3) the grassland dispersal habitat connecting high-quality prairie patches across the landscape.

4.6.2 Exposure Pathway

Covered activities expose Dakota skipper critical habitat through three PBF-specific pathways. Land management (haying (excluding fall haying), grazing, and prescribed fire; governmental, commercial, or private development; agricultural conversion; allowing habitat to convert to brush or trees; application of pesticides, including herbicide, insecticide, or fungicide, etc.) can alter the untilled soil profile and host grass cover defining PBF 1. Vegetation management and chemical applications expose PBF 2 by removing or suppressing flowering forbs; because this PBF's function depends on forb availability during the flight period specifically, disturbance timed to that window eliminates the resource for the season regardless of long-term forb survival. PBF 3 is exposed differently: because it is defined by connectivity rather than point-scale conditions, exposure extends beyond critical habitat boundaries to any activity grassland conversion, new infrastructure, fencing within the broader dispersal corridor. Across all three PBFs, the species' low dispersal capability limits its ability to offset a loss to one PBF by relocating to unaffected habitat.

4.6.3 Anticipated Response if Exposed

Loss of untilled soil structure or host grass cover within PBF 1 directly reduces the extent of usable larval food and shelter, an effect that persists because tilled or compacted soil does not readily revert to the specific structure this PBF requires. Removal of flowering forbs within PBF 2 eliminates nectar and water resources necessary for adult foraging, mating, and egg-laying during the flight period; the effect is most acute where disturbance directly overlaps that window but can compound across seasons if herbicide use or repeated disturbance prevents forb populations from reestablishing. Fragmentation or barrier introduction within PBF 3 isolates prairie patches from one another, because Dakota skipper has limited dispersal capability, reduced landscape permeability can prevent recolonization following a local disturbance or extirpation event, with effects compounding over time as isolated patches lose genetic exchange with the broader population. Because all three PBFs support distinct but interdependent life-history functions, an effect concentrated in one PBF can constrain the species' ability to complete its life cycle even where the other two PBFs remain intact.

4.6.4 Determination Logic for Dakota Skipper Critical Habitat

No Effect: The action area consists solely of developed or regularly maintained areas with no undeveloped or natural vegetation present (e.g., paved surfaces, buildings, sidewalks, regularly tilled agricultural fields, or urban lawns), and the project will not require land disturbance or land clearing of previously undeveloped habitat, *and* the project will not temporarily or permanently affect local

hydrology. Because none of the three PBFs described above can be present or functionally affected under these conditions, no exposure pathway exists to any PBF.

Not Likely to Adversely Affect: The project does not meet the criteria for an automatic No Effect determination above (i.e., the action area contains undeveloped land, or the project will disturb the ground or remove existing vegetation), but the project's action area does not intersect designated Dakota skipper critical habitat, *or* the project does intersect critical habitat and satisfies both of the following:

- *If* the project will not disturb the ground and will not remove existing vegetation within designated critical habitat, *then* PBF 1 (untilled prairie substrate/host grasses) and PBF 2 (forb community) are not exposed to a stressor, because the activities that would alter soil structure, host grass cover, or forb cover do not occur.

Where a project intersects critical habitat but satisfies condition above, none of the three PBFs are exposed to a stressor from the proposed activity, and the resulting effect is discountable, supporting an NLAA determination for Dakota skipper critical habitat.

May Affect: The project intersects designated Dakota skipper critical habitat, and *either* the project will disturb the ground or remove existing vegetation within critical habitat. Ground disturbance or vegetation removal directly exposes PBF 1 and PBF 2 to the stressors described above (loss of untilled soil structure, host grass cover, or forb cover). Because the DKey does not provide a conservation-measure-based avoidance pathway for ground disturbance or vegetation removal within designated Dakota skipper critical habitat, any project meeting this condition requires coordination with the SDESFO to evaluate effects to critical habitat.

4.7 EFFECTS OF STRESSORS ON BIRDS

4.6.1 Primary Stressors

The primary stressors affecting the Piping Plover, Rufa Red Knot, and Whooping Crane include (USFWS, 2007, 2016, 2023):

- Habitat loss, degradation, and fragmentation of nesting, roosting, and foraging areas.
- Collision risk with above-ground structures such as new utility lines and communication towers.
- Increased human disturbance from noise and activity, disrupting essential behaviors.
- Changes in hydrology that alter river flows, water levels, and the formation of sandbars or wetlands.

Changes in hydrology are outside of the scope of this standing analysis and DKey, and are not further addressed herein.

4.7.1 Exposure Pathway

Piping plover and rufa red knot depend on sparsely vegetated shoreline, sandbar, and mudflat habitat along the Missouri River and associated water bodies for nesting, foraging, and roosting. This habitat type is dynamically maintained by natural hydrologic processes (flooding, sediment deposition), meaning covered activities that alter hydrology have an indirect but functionally equivalent effect to direct habitat destruction.

Whooping crane exposure differs by pathway, because whooping crane migrate through South Dakota using traditional flyway corridors and stopover habitat rather than being restricted to a fixed site. The relevant exposure pathway is temporal and spatial, overlap between covered activity and the defined migration windows (spring March 22–May 15; fall September 15–November 10) combined with the physical collision risk posed by new vertical structures (towers, transmission lines) within the flight corridor identified by the Barnes et al. 2026 habitat selection model.

All three species are exposed to human disturbance (noise, vehicle/foot traffic). This disturbance can cause flushing from roosting/foraging sites regardless of whether physical habitat is altered. It can also cause nest abandonment for piping plovers. To account for this distance-dependent exposure, whooping crane and piping plover are each assigned a 0.5-mile buffer around suitable habitat, based on the maximum line-of-sight in most suitable habitat and long-standing practice developed by federal and state agencies that these distances sufficiently reduce the potential for disturbance.

4.7.2 Anticipated Response if Exposed

Physical habitat loss or degradation eliminates nesting substrate (piping plover) or forage/roost sites (all three species) that cannot be readily replaced given the specificity of the required conditions (sparse vegetation, particular substrate, shallow water depth). Collision with new above-ground structures is a direct mortality/injury pathway, particularly significant for whooping crane given the species' small population size, where each mortality event represents a meaningful proportion of the total population. Human disturbance during nesting (piping plover, April 15–August 15) or during migration (red knot, whooping crane) can cause nest abandonment, flushing that expends critical energy reserves needed for migration, or displacement from limited high-quality stopover sites.

4.7.3 Determination Logic

No Effect: The action area is located entirely outside suitable habitat for all three species and outside designated critical habitat for piping plover, outside of 0.5 miles of piping plover suitable habitat, including upland areas sufficiently distant from rivers, reservoirs, and alkali lakes that no habitat feature or hydrologic connection is present

Not Likely to Adversely Affect: An NLAA determination is supported where the project involves only short-term disturbance (less than six months in duration, or approximately 1 nesting season) and commits to the species-specific conservation measures below that are applicable to its proposed activities:

- *If the project will occur within suitable piping plover habitat during the nesting season (April 15–August 15), and the project maintains a 0.5-mile buffer from nesting birds then spatial separation sufficient to prevent flushing and nest abandonment is achieved without requiring cessation of all nearby activity.*
- *If the project will occur within suitable habitat for rufa red knot during its migration windows (May 9–28; July 25–September 15), and work during those windows is avoided, then the species is not present during construction and no exposure occurs.*
- *If the project will occur outside of whooping crane habitat identified by the HAPET habitat selection model(Barnes 2026), but would contain wetland habitats suitable for the whooping*

crane, and construction would be avoided during the spring (March 22–May 15) or fall (September 15–November 10) migration windows, *then* the temporal overlap between construction and the period the species is present and most sensitive is removed, converting what would otherwise be direct exposure into no exposure at all.

- *If* time-of-year avoidance is not feasible for any of the above and a whooping crane is detected, and the project maintains a 0.5 mile work-stoppage buffer, with mandatory reporting to the SDESFO, *then* the exposure pathway is closed for the duration the individual remains within the buffer.
- *If* the project requires access, staging, or travel through suitable habitat, and access points, travel corridors, and staging areas are designated away from foraging/roosting/nesting habitat with the number of shoreline passes minimized, *then* the disturbance footprint is reduced to the minimum necessary, limiting both spatial extent and duration of the human-disturbance pathway.

Where the project commits to each applicable measure above, these measures either remove the temporal overlap with sensitive periods or bound the disturbance to a duration and footprint from which the habitat and species can recover without lasting effect, and the resulting impact is insignificant, supporting an NLAA determination.

May Affect: The project involves permanent habitat alteration (removal, modification, or degradation of critical habitat or breeding/foraging habitat); hydrologic changes likely to alter surface water elevation affecting sandbars or wetlands; work during the identified sensitive periods without the required buffers or work stoppages; or installation of new communication towers lacking avian-friendly configuration or new above-ground lines lacking flight diverters, and does not commit to the applicable conservation measure(s) above.

4.8 EFFECTS OF STRESSORS ON CRITICAL HABITAT FOR PIPING PLOVER

4.8.1 Physical and Biological Features:

The primary physical and biological feature required for piping plover conservation is the dynamic ecological processes that create and maintain piping plover habitat. The essential habitat characteristics differ among habitat types within South Dakota. On prairie alkali lakes and wetlands, these characteristics include shallow, seasonally to permanently flooded, mixosaline to hypersaline wetlands with sandy to gravelly, sparsely vegetated beaches, salt-encrusted mud flats, and/or gravelly salt flats; springs and fens along edges of alkali lakes and wetlands; and adjacent uplands 61 m (200 ft) above the high water mark of adjacent bodies of water. Essential habitats along rivers include sparsely vegetated channel sandbars, sand and gravel beaches on islands, temporary pools on sandbars and islands, and a direct interface with the river. Critical habitat features associated with reservoirs include sparsely vegetated shoreline beaches, peninsulas, islands composed of sand, gravel, or shale, and their interface with the water bodies. Additional information on the critical habitat designation for the piping plover, and the physical and biological features for the species' conservation can be found in the [federal register](#).

4.8.2 Exposure Pathway

Piping plover critical habitat is defined by the dynamic hydrologic and sediment processes (i.e. flooding, water level fluctuation, sediment deposition) that create and maintain sparsely vegetated beaches, sandbars, mudflats, and salt flats across alkali lakes/wetlands, rivers, and reservoirs in South Dakota. Because the PBF is the process rather than a fixed footprint, covered activities expose it either by directly disturbing these substrates or by altering the hydrology that sustains them, and this exposure can extend beyond the mapped critical habitat boundary to anywhere within the same hydrologic system that supplies the flows or sediment the feature depends on. Alterations in hydrology are not covered under this standing analysis.

4.8.3 Anticipated Response if Exposed

Ground disturbance, bank stabilization, or shoreline hardening within these substrates can prevent the natural erosion and deposition cycles that maintain sparse vegetation and open substrate, allowing encroaching vegetation or altered sediment supply to degrade habitat suitability over time. Altered water levels or flow can inundate or permanently expose sandbars, mudflats, and beaches outside their natural regime, eliminating the open-water interface the PBF requires. Since the feature is process-dependent, effects that persist long enough to disrupt a seasonal or annual cycle are more consequential than a single short-term disturbance.

4.8.4 Determination Logic for Dakota Skipper Critical Habitat

No Effect:

The action area consists solely of developed or regularly maintained areas with no undeveloped or natural vegetation present, the project will not require land disturbance or land clearing of previously undeveloped habitat, and the project will not affect local hydrology, *or* none of the PBFs described above are present in the project area. Because no PBF is present or exposed under these conditions, no exposure pathway exists.

Not Likely to Adversely Affect:

- *If* the project intersects any of the PBFs and will not result in long term impacts (<6 months) *then*, due to the dynamic habitat, the resulting effect is insignificant.

May Affect: The PBFs are present in the project area, and the project will result disturbance to critical habitat quality, quantity, or availability via habitat degradation. Because the disruption to the underlying hydrologic or sediment process persists beyond a single seasonal cycle, the resulting effect is more than insignificant, and coordination with the SDESFO is required.

5 SUMMARY AND CONCLUSION

After considering the relevant information pertaining to the species and critical habitat, reviewing the covered activities and associated required conservation measures, and evaluating their anticipated effects, we conclude that the actions subject to this standing analysis will support a federal action agency determination of “No Effect” or support a section 7(a)(2) determination pursuant to the Act of “May Affect, Not Likely to Adversely Affect,”) as appropriate, for the subject species and critical habitat as described above. This standing analysis is based on the consultation provisions of section 7(a)(2) of the Act and the information cited and will undergo review and revision, as needed, if any of the

following conditions have been met: 1) If new information reveals the effects of the covered action(s) to the covered species or critical habitat are occurring in a manner or to an extent not considered in this standing analysis based on applied use; or 2) If the species or critical habitat covered by the standing analysis has a change in status.

5.1 FIELD OFFICE AUDITING USE OF THE KEY

Ecological Services Field Offices within the covered area will have the opportunity to audit Dkey submissions to ensure that users are answering Dkey questions accurately and that errors in the Dkey are not causing the wrong determinations to be delivered to users. FWS will notify the user within 30 calendar days if the field office determines that the proposed action does not meet the criteria for a NLAA determination. If the FWS does not notify the user within that timeframe, the user may proceed with the Action under the terms of the NLAA determination provided in the concurrence letter. Each field office will establish their own process for auditing Dkey submissions, but across all field offices, a sufficient number of Dkey submissions will be audited to ensure accurate use.

This standing analysis is available to IPaC users if their project falls within the covered area.

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APPENDIX A: SOUTH DAKOTA DETERMINATION KEY OVERVIEW

Structured Questions for screening a project via a DKey to determine whether it is applicable for use under this Standing Analysis

[Automatically generated when DKey is completed]

South Dakota Multi-Species Determination Key

Determination Key overview

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This determination key is intended to streamline review of projects for potential effects to Federally listed threatened and endangered (TE) species and designated critical habitat (CH). This key is designed as a tool to help Federal agencies and other project proponents decide if their proposed action has the potential to adversely affect TE species and CH and covers certain routine and predictable utility projects for most species in South Dakota. The American burying beetle, tricolored bat, and northern long-eared bat are all addressed by separate species-specific determination keys. Projects that result in a species list with any of those species will need to utilize those species-specific keys, potentially in addition to this key, to reach their determination for those species. To qualify to use this standing analysis, a project's action area must fall completely within the state of South Dakota.

This key covers projects that include utility infrastructure activities occurring in South for the expansion or improvement of utility services. This key was primarily developed for use by the Rural Utilities Service and the National Telecommunications and Information Administration, but it is not restricted in use and may be used for projects being funded, permitted, or authorized by other federal entities when all project activities fall within the scope of this key and associated standing analysis. Activities addressed in this key includes new utility (power, water, gas, fiberoptic, sewer, etc.) builds or improvements within existing rights-of-way, new communication tower builds within municipal city limits, updates and modifications to existing infrastructure facilities when all work occurs within previously disturbed areas.

Some projects may be outside the scope of this key. The key does not cover projects covered by active consultation or emergency consultations; projects that are long-term (greater than 10 years); new build communication towers occurring outside municipal city limits; new power or wastewater facility builds outside of municipal city limits or developed areas; new transmission power lines or oil/gas pipelines; or broadcast or other large-scale application of any chemical (such as insecticide or herbicide). Activities that fall outside the scope of this key will require additional evaluation and/or consultation outside of the IPaC application; please contact the South Dakota Ecological Service Field Office if you have questions.

If your project qualifies for use of this Dkey, you will be prompted to answer questions about your project to help you evaluate the effects of your action on Federally listed species and designated CH. If your completed TE review indicates a "No Effect" (NE) determination for all listed species, print your IPaC output letter for your files to document your compliance with the Endangered Species Act. For Federal projects with a "Not Likely to Adversely Affect" determination, our concurrence becomes valid if you do not hear otherwise after a 30-day review period, as indicated in your letter. If your output letter indicates additional coordination with the South Dakota Ecological Services Field Office is necessary (i.e., you get a May Affect technical assistance letter), you will be provided additional guidance on contacting the Service to continue ESA coordination outside of this key; ESA compliance cannot be concluded using the key for

“May Affect” determinations unless otherwise indicated in your output letter. Please note that only one assisted determination key may be completed per species for each project. Please carefully review the descriptions of all available determination keys to select the most appropriate key for your project. For instance, federal transportation projects with potential effects to listed bats may be advised to complete the determination key entitled, [FHWA, FRA, FTA Programmatic Consultation for Transportation Projects affecting NLEB or Indiana Bat](#). Finally, be advised that this determination key is intended to assist the user in the evaluating the effects of their actions on Federally listed species in South Dakota. It does not authorize any activities that are otherwise prohibited by the Endangered Species Act (e.g., for wildlife: import/export, Interstate or foreign commerce, possession of illegally taken wildlife, etc.; for plants: import/export, reduce to possession, malicious destruction on Federal lands, commercial sale, etc.) or other Federal or state statutes.

Species covered by this key

This key covers the following species expected to occur in this project area:

None

The following species, also covered by this key, are not expected to occur in this project area:

Black-footed ferret *Mustela nigripes*
 Dakota Skipper *Hesperia dacotae*
 Higgins eye (pearlymussel) *Lampsilis higginsii*
 Leedy's roseroot *Rhodiola integrifolia* ssp. *leedyi*
 Pallid sturgeon *Scaphirhynchus albus*
 Piping Plover *Charadrius melodus*
 Scaleshell mussel *Leptodea leptodon*
 Topeka shiner *Notropis topeka* (=tristis)
 Western prairie fringed Orchid *Platanthera praeclara*
 Whooping crane *Grus americana*
 rufa red knot *Calidris canutus rufa*

Geographic extent where this key is valid

This key is valid for qualifying projects anywhere within the following geographic extent:



Potential questions in this key

The following is a comprehensive list of all questions that are part of this determination key.

Based on the answers you provide, only appropriate follow-up questions will be asked.

1. This determination key is intended to assist the user in evaluating the effects of their actions on federally listed species in South Dakota. It does not cover other prohibited activities under the Endangered Species Act (e.g., for wildlife: import/export, possession of illegally taken wildlife, etc.; for plants: import/export, reduce to possession, malicious destruction on federal lands, commercial sale, etc.) or other statutes.

Click "yes" to acknowledge that you must consider other prohibitions of the ESA or other statutes outside of this determination key.

2. Is the proposed **action** (project) authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?
3. Are you an employee of the lead Federal Agency?
4. Are you a designated non-federal representative?
5. Does the project involve research or other actions that include the collection, capture, handling, or harassment of any federally listed or proposed species?

6. Is this project the approval, permitting, plan, or other action that will be in effect long-term?

Note: Examples of these types of actions/projects include but is not limited to a new or re-issued hydropower license, a land management plan, or other kinds of documents that provide direction for projects or actions that may be conducted over a long term (>10 years) without the need for additional section 7 consultation.

7. Does the proposed action involve wind or solar energy?
8. Does the proposed action include the construction of new, or modification of existing oil or gas, (including carbon dioxide) pipelines that may result in grading, trenching, or other ground disturbance?
9. Will the proposed action result in a point source discharge into a body of water?
10. Does the project involve sand and/or gravel mining within a stream?
11. Is the project a dam, hydropower plant, or other activity that could result in any stream channel obstruction?
12. Will the project include the addition of or modification to water intake structures?
13. Does the activity involve aerial or other large-scale broadcast applications of any chemical (e.g., insecticide, herbicide, fungicide)?
14. Does the action area consist solely of developed or regularly maintained areas with no undeveloped or natural vegetation present? (e.g., paved surfaces, buildings, sidewalks, regularly tilled agricultural fields, or urban lawns)
15. Will completion of this project require **land disturbance or land clearing** of previously undeveloped habitat (e.g., native habitat, agricultural areas, pasture, etc.)?
- Note: This includes any vegetation management (including removal or maintenance using equipment), use of prescribed fire, off-road vehicle access, soil compaction, digging, seismic survey, directional drilling, heavy equipment, grading, trenching, placement of fill, pesticide application (e.g., insecticide, herbicide, fungicide), cultivation, development, etc.
16. Will vegetation impacts occur during the primary nesting season (May 1 - July 15) for migratory birds in South Dakota?

17. Does the action involve a new communications tower or modification to an existing tower?
18. Will the new communications tower or modification of an existing tower require lighting?
19. Will the project utilize flashing LED lights at the minimum configuration allowed by the FAA (i.e. non pulsing and non steady-burning lights)?
20. Will the project utilize motion- or heat-sensitive, down-shielded, and minimum intensity security lighting on all on-ground facilities, equipment, and infrastructure to reduce nighttime bird attraction?
21. Does the communication tower have guy wires?
22. Will bird flight diverters be installed on the guy wires?
23. Is the communication tower over 450 feet?
24. Does the the action involve upgrades or modifications to existing power lines?

Note: This includes but is not limited to replacing poles, replacing existing structural/electrical components associated with power lines in existing right-of-ways and existing substations.

25. Will all applicable risk reduction strategies including line placement design, orientation, configuration, marking, and/or burying lines be implemented where practicable? More detail on these practices are outlined in Figure 5.1 on page 54 of the APLIC State of the Art 2012 (https://www.aplic.org/uploads/files/15518/Reducing_Avian_Collisions_2012watermarkLR.pdf)
 26. Will all applicable erosion control measures to avoid or minimize excess sedimentation be applied where practicable for any upland, outlet, bank, soil disturbances?
- Note: The Service recommends following best management practices such as those outlined in The National Menu of Best Management Practices for Stormwater-Construction which can be found here: <https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater-construction>.
27. Will the project result in changes in water chemistry, temperature, nutrients, pollutants, or other water quality parameters outside of sedimentation?
 28. Does the project include alteration or addition of night-time lighting?

29. Will all lighting be limited to correlated color temperature be limited to 3000 K, downshielded, and follow the principles of the Illuminating Engineering Society's Responsible Outdoor Practice guidelines (<https://www.ies.org/advocacy/light-at-night/>)?

30. Does the project include the construction of new power lines?

Note: If the project involves upgrades to existing lines/poles with new lines or poles answer 'No' to this question. This is for entirely new builds.

31. Does the project include the construction of new transmission power lines?

Note: Transmission lines transport high voltage electricity, 69 kV-765 kV, over vast distances and move power between power plants or grids.

32. Does the project include the construction of new distribution power lines within an existing [managed right-of-way, actively managed agricultural field, or previously developed landscape](#)?

Note: Distribution lines transport electricity, 69 kV or less, from substations to homes or businesses and typically require the use of insulated wires.

Note: If the project is a new distribution line build occurring outside of the listed habitat types select 'No'.

33. Does the project include building a new wastewater treatment facility?

34. Will the project include alterations to surface or groundwater discharges?

Note: Example alternations may include new infrastructure that alters surface or groundwater flows, increasing existing hydrological discharges, or relocating surface or groundwater facilities.

35. Will your project disturb the ground?

Note: This might include but is not limited to any off-road vehicle access, soil compaction, digging, seismic survey, directional drilling, heavy equipment, grading, trenching, placement of fill, pesticide application (herbicide, fungicide), vegetation management (including removal or maintenance using equipment or prescribed fire), cultivation, development, etc.

36. Will your project impact, damage, or remove existing vegetation?

Note: This includes any vegetation management (including removal or maintenance using equipment), use of prescribed fire, off-road vehicle access, soil compaction, digging, seismic survey, directional drilling, heavy

equipment, grading, trenching, placement of fill, pesticide application (herbicide, fungicide), cultivation, development, etc.

37. Will your project have any direct impacts to a stream or river including: Hydrostatic testing, stream/road crossings, new stormwater outfall discharge, dams, other in-stream work, etc.?

38. Will your project temporarily or permanently [affect local hydrology](#)?

Note: "Temporarily" in this context includes non-permanent impacts lasting 2 weeks or more. We consider "affecting hydrology" to include actions that are likely to change the elevations of surface water upstream or downstream, or in the local groundwater as estimated pre-action vs. post-action.

39. Will any project activities or impacts occur within the riparian zone of a stream/river?

Note: A riparian zone is a transition area between land and water that borders rivers, streams, lakes, and other bodies of water. Riparian areas are defined by changes in vegetation communities, specifically the transition zone from terrestrial vegetation to vegetation adapted to saturated soils.

40. Does the project take place in a wetland as defined by the Army Corps of Engineers (ACOE) OR a prairie pothole?

Note: The ACOE defines a wetland as: Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

A prairie pothole is a depressional wetland (primarily freshwater marshes) that may be temporary or permanently present on the landscape. Submerged and floating aquatic plants take over the deeper water in the middle of the pothole while bulrushes and cattails grow closer to shore. Wet, sedgy marshes lie next to the upland.

41. Does the project intersect the Pallid Sturgeon species list area?

This question will be answered automatically based on previous questions.

42. Does the project include application of herbicide or pesticide within the riparian zone of a stream or river (including below the ordinary high water mark)?

43. Will the proposed project avoid all riparian zone work between March 1st and June 30th?

44. Will construction activities within and upstream of designated segments should be designed to prevent streambank erosion and should not impact the stream channel/bank?
45. Will the proposed project implement and maintain comprehensive and effective sediment/erosion controls to the greatest extent possible during and after actions?

Note: Silt fences, silt curtains, geotextile fabrics, and immediate post-construction vegetation seedings are examples of methods address the risk of further degradation. Monitoring and maintenance of these measures may be needed to ensure continued effectiveness, with the goal of keeping sediments from entering the stream system.

46. Will adequate fuel spill kits be on site at all times and be within easy reach?
47. Will the proposed project involve pumping activities?
48. Will the proposed project design facilities to have intake velocities less than 0.5 feet per second (fps)?
49. Will the proposed project use intake screens sized to have a maximum mesh opening of 1/4 inch?
50. Based on the responses you have provided, we believe that the proposed project is consistent with a **"may affect - not likely to adversely affect"** determination for the **Pallid Sturgeon** under the standing analyses that supports this determination key. However, it is also up to the action agency to make their own determination for the **Pallid Sturgeon**.

What is your effect determination for the Pallid Sturgeon?

1. "No effect"
2. "May affect – not likely to adversely affect"
3. "May affect"

Note: If you choose "May affect" additional coordination with the Service is recommended.

- "No effect"
- "May affect - not likely to adversely affect"
- "May affect"

51. Does the project intersect the Higgins eye pearly mussel species list area?

This question will be answered automatically based on previous questions.

52. Has a presence/absence survey been completed by a qualified biologist in the wetted channel after early coordination with the South Dakota Field Office?

Note: Qualification of the surveyor, methods of the survey, and results should be provided to the South Dakota Field Office during Coordination

53. Does the project include application of herbicide or pesticide within the riparian zone of a stream or river (including below the ordinary high water mark)?

54. Will construction activities within and upstream of designated segments should be designed to prevent streambank erosion and should not impact the stream channel/bank?

55. Will the proposed project implement and maintain comprehensive and effective sediment/erosion controls to the greatest extent possible during and after actions?

Note: Silt fences, silt curtains, geotextile fabrics, and immediate post-construction vegetation seedings are examples of methods address the risk of further degradation. Monitoring and maintenance of these measures may be needed to ensure continued effectiveness, with the goal of keeping sediments from entering the stream system.

56. Will adequate fuel spill kits be on site at all times and be within easy reach?

57. Will all equipment used in the water (including barges) be inspected and decontaminated all all invasive species prior to use?

58. Will the proposed project avoid direct discharge or any materials (i.e., water, chemicals, etc) that could impact water quality?

59. Based on the responses you have provided, we believe that the proposed project is consistent with a "**may affect - not likely to adversely affect**" determination for the **Higgins eye pearly mussel** under the standing analyses that supports this determination key. However, it is also up to the action agency to make their own determination for the **Higgins eye pearly mussel**.

What is your effect determination for the Higgins eye pearly mussel?

1. "No effect"

2. “May affect – not likely to adversely affect”

3. “May affect”

Note: If you choose “May affect” additional coordination with the Service is recommended.

- "No effect"
- "May affect"
- "May affect - not likely to adversely affect"

60. Does the project intersect the Scaleshell Mussel species list area?

This question will be answered automatically based on previous questions.

61. Has a presence/absence survey been completed by a qualified biologist in the wetted channel after early coordination with the South Dakota Field Office?

Note: Qualification of the surveyor, methods of the survey, and results should be provided to the South Dakota Field Office during Coordination

62. Does the project include application of herbicide or pesticide within the riparian zone of a stream or river (including below the ordinary high water mark)?

63. Will construction activities within and upstream of designated segments should be designed to prevent streambank erosion and should not impact the stream channel/bank?

64. Will the proposed project implement and maintain comprehensive and effective sediment/erosion controls to the greatest extent possible during and after actions?

Note: Silt fences, silt curtains, geotextile fabrics, and immediate post-construction vegetation seedings are examples of methods address the risk of further degradation. Monitoring and maintenance of these measures may be needed to ensure continued effectiveness, with the goal of keeping sediments from entering the stream system.

65. Will adequate fuel spill kits be on site at all times and be within easy reach?

66. Will all equipment used in the water (including barges) be inspected and decontaminated all all invasive species prior to use?

67. Will the proposed project avoid direct discharge or any materials (i.e., water, chemicals, etc) that could impact water quality?
68. Based on the responses you have provided, we believe that the proposed project is consistent with a "**may affect - not likely to adversely affect**" determination for the **Scaleshell Mussel** under the standing analyses that supports this determination key. However, it is also up to the action agency to make their own determination for the **Scaleshell Mussel**.

What is your effect determination for the Scaleshell Mussel?

1. "No effect"
2. "May affect – not likely to adversely affect"
3. "May affect"

Note: If you choose "May affect" additional coordination with the Service is recommended.

- "No effect"
- "May affect – not likely to adversely affect"
- "May affect"

69. Does the project intersect the Topeka Shiner species list area?

This question will be answered automatically based on previous questions.

70. Does the project include application of herbicide or pesticide within the riparian zone of a stream or river (including below the ordinary high water mark)?
71. Will the proposed project avoid all riparian zone work between May 15 and July 31st?
72. Will the proposed project avoid activities that directly damage instream habitat?

Note: Practices such as driving machinery through streams, excavating streambeds, channelizing channels, or placing fill can harm Topeka shiners and should be avoided. Excavation to install culverts below grade for fish passage is an exception, but sediment and erosion controls should be used to prevent downstream impacts.

73. Will construction activities within and upstream of designated segments should be designed to prevent streambank erosion and should not impact the stream channel/bank?

74. Will the proposed project implement and maintain comprehensive and effective sediment/erosion controls to the greatest extent possible during and after actions?

Note: Silt fences, silt curtains, geotextile fabrics, and immediate post-construction vegetation seedings are examples of methods address the risk of further degradation. Monitoring and maintenance of these measures may be needed to ensure continued effectiveness, with the goal of keeping sediments from entering the stream system.

75. Will adequate fuel spill kits be on site at all times and be within easy reach?
76. Based on the responses you have provided, we believe that the proposed project is consistent with a "**may affect - not likely to adversely affect**" determination for the **Topeka shiner** under the standing analyses that supports this determination key. However, it is also up to the action agency to make their own determination for the **Topeka shiner**.

What is your effect determination for the Topeka shiner?

1. "No effect"
2. "May affect – not likely to adversely affect"
3. "May affect"

Note: If you choose "May affect" additional coordination with the Service is recommended.

- "May affect"
- "No effect"
- "May affect – not likely to adversely affect"

77. The Project intersects a black-footed ferret 10(j) experimental population. Federal action agencies are required to confer with FWS if a proposed action is likely to jeopardize the continued existence of the species. The Federal action agency is responsible for making that determination. Is the proposed project likely to jeopardize the continued existence of the black-footed ferret?
78. Does the project intersect with a black-footed ferret 10(j) nonessential experimental population area?

This question will be answered automatically based on your project location.

79. Does the project intersect the Black-footed Ferret species list area?

This question will be answered automatically based on previous questions.

80. Does the project include any activities that would harm the black footed ferret or prairie dog directly (e.g. mammal trapping, poison bait, etc.)?
81. Does the project include any activities that could destroy prairie dog mounds, disturb burrows, or reduce prairie dog populations?
82. Has a presence/absence survey been conducted to determine if project activities would occur within a prairie dog town?

Note: A prairie dog town is made up of a series of connected underground burrows.

83. Do the survey results indicate a prairie dog town is present within the project area?
84. Will the proposed project avoid conducting any work the involves driving a vehicle or other heavy equipment through a prairie dog town?
85. Will your project include ground disturbance, nighttime lighting, or poisoning of prairie dogs?
86. Based on the responses you have provided, we believe that the proposed project is consistent with a "**may affect - not likely to adversely affect**" determination for the **Black-footed ferret** under the standing analyses that supports this determination key. However, it is also up to the action agency to make their own determination for the **Black-footed ferret**.

What is your effect determination for the Topeka shiner?

1. "No effect"
2. "May affect – not likely to adversely affect"
3. "May affect"

Note: If you choose "May affect" additional coordination with the Service is recommended.

- "May affect"
- "No effect"
- "May affect – not likely to adversely affect"

87. Does the project intersect the Leedy's roseroot species list area?

This question will be answered automatically based on previous questions.

88. Does the project intersect the Western Prairie fringed orchid species list area?

This question will be answered automatically based on previous questions.

89. Will any project activities occur in suitable western prairie fringed orchid habitat?

Note: Potential habitats generally include mesic upland prairies, wet prairies, sedge meadows, sub irrigated prairies and swales in sand dune complexes. If these habitats exist within the proposed project area, surveys for the orchid should be considered prior to construction.

90. Does your project area occur entirely within an already developed area?

Note: Already developed areas are already paved, covered by existing structures, manicured lawns, industrial sites, or cultivated cropland. Be aware that listed species may occur in areas with natural, or semi-natural, vegetation immediately adjacent to existing utilities (e.g. roadways, railways) or within utility rights-of-way such as overhead transmission line corridors.

If unsure, select NO.

91. Did you conduct a survey to determine if western prairie fringed orchid (WPFO) occurs in the project area? If yes, please upload survey results.

92. Does western prairie fringed orchid occur in the project area?

93. Will the project indirectly alter the habitat or resources of western prairie fringed orchid? (I.e., could your action result in a change in canopy cover, microclimate, humidity; increase in invasive species; hydrologic alterations, etc.?)

Note: If unsure, select yes.

94. Could the project directly harm western prairie fringed orchid?

(I.e., does your project include trampling, grazing, cutting/clearing, cultivation, crushing by vehicle, pesticide application (herbicide, fungicide), reduce to possession, etc.?)

95. Will all equipment associated with the proposed project avoid being staged in native prairie habitat?
96. Will mowing, haying, brush cutting, etc. be avoided during the western prairie fringed orchid growing season (late spring through the end of July) and in the spring?

Note: Vegetation should not be cut too close to the ground.

97. Based on the responses you have provided, we believe that the proposed project is consistent with a "**may affect - not likely to adversely affect**" determination for the **Western prairie fringed orchid** under the standing analyses that supports this determination key. However, it is also up to the action agency to make their own determination for the Western prairie fringed orchid.

What is your effect determination for the Western prairie fringed orchid?

1. "No effect"
2. "May affect – not likely to adversely affect"
3. "May affect"

Note: If you choose "May affect" additional coordination with the Service is recommended.

- "May affect"
- "May affect – not likely to adversely affect"
- "No effect"

98. Does the project intersect the Dakota Skipper species list area?

This question will be answered automatically based on previous questions.

99. Is your project located entirely within an existing right-of-way?

Note: A right-of-way corridor may include road ditches that are actively managed with routine maintenance including spraying and/or mowing. Road ditches that are not routinely managed via spraying or mowing do not qualify in this definition of a ROW.

100. Will all planned work occur entirely within this developed and previously disturbed right-of-way?

Note: A developed area is an area that is already paved or supports structures and the only vegetation is limited to frequently mowed grass or conventional landscaping. Already disturbed habitat includes the presence of underground pipelines/water/fiberoptic, road ditches, etc. indicate prior habitat disturbance. **If your project requires work to occur outside of the ROW select 'No' to this question.**

101. Will all planned work occur in an actively managed agricultural field?

Note: An actively managed agricultural field contains planted cultivar crops in monoculture and is routinely disturbed (plowed, planted, sprayed, mowed, and/or harvested).

102. Have vegetation surveys been conducted to evaluate habitat suitability for the Dakota skipper?

Note: Suitable habitat includes native bunchgrasses and flower species, including but not limited to: little bluestem, porcupine grass, green needlegrass, needle-and-thread, and purple coneflower.

103. Have vegetation surveys determined that suitable habitat is present?

104. Have presence/absence surveys been conducted following the current [Dakota Skipper Survey Protocol](#)?

105. Has the survey area been determined to be **unoccupied** or **absent** of Dakota Skippers?

106. Based on the responses you have provided, we believe that the proposed project is consistent with a "**may affect - not likely to adversely affect**" determination for the **Dakota skipper** under the standing analyses that supports this determination key. However, it is also up to the action agency to make their own determination for the Dakota skipper.

What is your effect determination for the Dakota skipper?

1. "No effect"
2. "May affect – not likely to adversely affect"
3. "May affect"

Note: If you choose "May affect" additional coordination with the Service is recommended.

- "No effect"

- “May affect – not likely to adversely affect”
- “May affect”

107. Does the project intersect Dakota Skipper Critical Habitat?

This question will be answered automatically based on previous questions.

108. Will the project be within Dakota skipper habitat and require mowing or broad land management changes described below?

Dakota Skipper suitable habitat contains forbs (purple coneflower, violet, asters, purple prairie clover, etc.) along with prairie grasses (little and big blue stem, prairie dropseed, and needlegrasses). Projects that may result in changes to habitat include land management activities including haying (excluding fall haying), grazing, and prescribed fire; governmental, commercial, or private development; agricultural conversion; allowing habitat to convert to brush or trees; application of pesticides, including herbicide, insecticide, or fungicide, etc.

109. Will the project be within Dakota skipper habitat and result in direct removal or conversion of habitat?

Dakota Skipper suitable habitat contains forbs (purple coneflower, violet, asters, purple prairie clover, etc.) along with prairie grasses (little and big blue stem, prairie dropseed, and needlegrasses). Projects that may result in changes to habitat include land management activities including haying (excluding fall haying), grazing, and prescribed fire; governmental, commercial, or private development; agricultural conversion; allowing habitat to convert to brush or trees; application of pesticides, including herbicide, insecticide, or fungicide, etc.

110. Based on the responses you have provided, we believe that the proposed project is consistent with a "**may affect - not likely to adversely affect**" determination for **Dakota skipper critical habitat** under the standing analyses that supports this determination key. However, it is also up to the action agency to make their own determination for Dakota skipper critical habitat.

What is your effect determination for Dakota skipper critical habitat?

1. “No effect”
2. “May affect – not likely to adversely affect”

3. "May affect"

Note: If you choose "May affect" additional coordination with the Service is recommended.

- "May affect – not likely to adversely affect"
- "No effect"
- "May affect"

111. Does the project intersect Poweshiek Skipperling Critical Habitat?

This question will be answered automatically based on previous questions.

112. Does any portion of the project occur in suitable Poweshiek skipperling prairie habitat?

Suitable habitat is considered to be a prairie fen, fen, sedge meadow, or tall grass prairie habitat. This habitat often includes preferred nectar plants for adult Poweshieks include smooth ox-eye (*Heliopsis helianthoides*) and purple coneflower (*Echinacea angustifolia*), stiff tickseed (*Coreopsis palmate*), black-eyed susan (*Rudbeckia hirta*), and palespike lobelia (*Lobelia spicata*). Larval food plants are assumed to include spike-rush, sedges, prairie dropseed (*Sporobolus heterolepis*) and little bluestem (*Schizachyrium scoparium*). For more information on suitable poweshiek skipperling habitat view their species profile: <https://www.fws.gov/species/poweshiek-skipperling-oarisma-poweshiek>

113. Based on the responses you have provided, we believe that the proposed project is consistent with a "**may affect - not likely to adversely affect**" determination for **Poweshiek skipperling critical habitat** under the standing analyses that supports this determination key. However, it is also up to the action agency to make their own determination for the Poweshiek skipperling critical habitat.

What is your effect determination for the Poweshiek skipperling critical habitat?

1. "No effect"
2. "May affect – not likely to adversely affect"
3. "May affect"

Note: If you choose “May affect” additional coordination with the Service is recommended.

- “May affect – not likely to adversely affect”
- “No effect”
- “May affect”

114. Does the project intersect with the Whooping Crane species list area?

This question will be answered automatically based on previous questions.

115. Is the communication tower in your project 450 feet or taller in height?

116. Will visual bird flight diverters be installed on guy wires to maximize effectiveness for reducing avian collisions?

117. Does the project area have habitat that may be used by whooping cranes during migration?

Note: Whooping crane habitat includes cropland and pastures; wet meadows; shallow marshes; shallow portions of rivers, lakes, reservoirs, and stock ponds; and both freshwater and alkaline basins. The portion of water bodies used by whooping cranes tend to be shallow (up to 20 inches in depth). More information on stopover habitat can be found here: <https://pubs.usgs.gov/publication/70202378>.

118. Will the proposed project render onsite or adjacent habitat unsuitable for whooping crane stopovers by habitat degradation (including permanent placement of human made structures within or adjacent to habitat)?

Note: Whooping crane habitat includes cropland and pastures; wet meadows; shallow marshes; shallow portions of rivers, lakes, reservoirs, and stock ponds; and both freshwater and alkaline basins. The portion of water bodies used by whooping cranes tend to be shallow (up to 20 inches in depth). More information on stopover habitat can be found here: <https://pubs.usgs.gov/publication/70202378>.

119. Will any work or disturbance activities occur between March 22 to May 15 OR from September 15 to November 10?

Note: Whooping crane habitat includes cropland and pastures; wet meadows; shallow marshes; shallow portions of rivers, lakes, reservoirs, and stock ponds; and both freshwater

and alkaline basins. The portion of water bodies used by whooping cranes tend to be shallow (up to 20 inches in depth). More information on stopover habitat can be found here: <https://pubs.usgs.gov/publication/70202378>.

120. Will workers be educated on the appearance and status of the whooping crane in order to identify individual cranes?
121. Will a person familiar with the whooping crane be present as a monitor with the authority to postpone actions if a crane is present?
122. If a whooping crane is detected within 0.5 mile of a work site will all work cease until the crane has moved outside of the 0.5 mile buffer zone?

Note: If project activities were to occur during the migration period and whooping cranes were to occupy the area within 0.5 mile of construction or other activity, then the activity could cause whooping cranes to be disturbed and leave the area. If this were to occur, it would most likely be first thing in the morning, as whooping cranes overnight in one area before continuing the next morning. Disturbance, such as flushing the cranes, stresses them at critical times of the year, including migration.

123. If a whooping crane is spotted or stops in the project area will the South Dakota ESFO be notified as soon as possible?
124. During Construction activities, will the project applicant follow existing/established travel and access corridors and maintain slow speeds to avoid disturbing birds?
125. Will the project applicant designate access points, staging areas, waste collections areas, and travel corridors away from known foraging or roosting areas and keep all personnel, vehicles, and equipment within those designated corridors to minimize disturbance to birds and habitat alterations?
126. Will staging areas and waste collection areas be located to avoid whooping crane habitat (cropland and pastures; wet meadows; shallow marshes; shallow portions of rivers, lakes, reservoirs, and stock ponds; and both freshwater and alkaline basins)?
127. Will the proposed project keep all personnel, vehicles, and equipment within the designated work area/project footprint and access corridors?

128. Will the proposed project ensure not to block major egress points in channels and rivers to avoid disturbances to natural riverine and wetland processes?
129. Will the proposed project ensure to maintain a clean worksite and remove all trash and work-related debris on a daily basis?
130. Will the proposed project restore habitat to their natural pre-project conditions?
131. Based on the responses you have provided, we believe that the proposed project is consistent with a **"may affect - not likely to adversely affect"** determination for **whooping crane** under the standing analyses that supports this determination key. However, it is also up to the action agency to make their own determination for the whooping crane.

What is your effect determination for the whooping crane?

1. "No effect"
2. "May affect – not likely to adversely affect"
3. "May affect"

Note: If you choose "May affect" additional coordination with the Service is recommended.

- "No effect"
- "May affect – not likely to adversely affect"
- "May affect"

132. Does the project intersect the Piping Plover species list area?

This question will be answered automatically based on previous questions.

133. Will the project result in impacts within 0.5 mile of suitable piping plover nesting habitat?

Note: Direct impacts include any off road vehicle access including use of mat roads, soil compaction, digging, seismic survey, directional drilling, heavy equipment, grading, trenching, placement of fill, vegetation management (including removal or maintenance using equipment or chemicals), cultivation, development, etc.)"

134. For activities that take place during the piping plover breeding season (April 15 - August 15), will trained personnel, or a qualified biologist, conduct surveys within a 0.5 mile radius of suitable habitat for Piping Plover according to the most up to date Piping Plover survey protocol?
135. If piping plovers are identified, will vehicle and foot traffic be kept 0.5 miles from the birds during the nesting season from April 15 to August 15 AND 10 feet from optimal habitat features (even when birds are not present)?
136. Will the proposed project designate access points, staging areas, waste collections areas, and travel corridors away from known foraging, roosting, or nesting areas and keep all personnel, vehicles, and equipment within those designated corridors to minimize disturbance to birds and shoreline topographic alterations?
137. Will the proposed project limit driving up and down the shoreline to the minimum number of passes needed to accomplish the work in order to minimize disturbance to birds and topographic alterations and will you keep all personnel, vehicles, and equipment within the designated work area/project footprint and access corridors?
138. Will the proposed project avoid blocking major egress points in channels and rivers to avoid disturbance to natural riverine processes?
139. Will the proposed project maintain a clean work site by removing all trash and work-related debris on a daily basis?
140. Will the proposed project avoid disturbing existing mudflats and wetland habitat?
141. Will the proposed project restore habitat to their natural pre-project conditions?
142. Will the proposed project result in long-term impacts (temporary effects lasting up to 6 months or more) to piping plover nesting habitat via habitat degradation?
143. Based on the responses you have provided, we believe that the proposed project is consistent with a "**may affect - not likely to adversely affect**" determination for **piping plover** under the standing analyses that supports this determination key. However, it is also up to the action agency to make their own determination for the piping plover.

What is your effect determination for the piping plover?

1. "No effect"

2. “May affect – not likely to adversely affect”

3. “May affect”

Note: If you choose “May affect” additional coordination with the Service is recommended.

- “May affect – not likely to adversely affect”

- “No effect”

- “May affect”

144. Does the project intersect Piping Plover Critical Habitat?

This question will be answered automatically based on previous questions.

145. Are any of the physical and biological features (PBFs) essential to the conservation of the piping plover present in the project area?

Note: PBFs for piping plovers varies based on habitat:

1. On prairie alkali lakes and wetlands, the PBFs include—(1) shallow, seasonally to permanently flooded, mix of saline to hypersaline wetlands with sandy to gravelly, sparsely vegetated beaches, salt-encrusted mud flats, and/or gravelly salt flats; (2) springs and fens along edges of alkali lakes and wetlands; and (3) adjacent uplands 200 feet (61 meters) above the high water mark of the alkali lake or wetland.
2. On rivers the PBFs include—sparsely vegetated channel sandbars, sand and gravel beaches on islands, temporary pools on sandbars and islands, and the interface with the river.
3. On reservoirs the PBFs include—sparsely vegetated shoreline beaches, peninsulas, islands composed of sand, gravel, or shale, and their interface with the water bodies.

For more information https://www.fws.gov/sites/default/files/federal_register_document/01-14169.pdf

146. Will the project result in long-term impacts (effects lasting up to 6 months or more) to piping plover critical habitat quality, quantity, or availability via habitat degradation?

147. Based on the responses you have provided, we believe that the proposed project is consistent with a **"may affect - not likely to adversely affect"** determination for **piping plover critical habitat** under the standing analyses that supports this determination key.

However, it is also up to the action agency to make their own determination for piping plover critical habitat.

What is your effect determination for piping plover critical habitat?

1. “No effect”
2. “May affect – not likely to adversely affect”
3. “May affect”

Note: If you choose “May affect” additional coordination with the Service is recommended.

- “May affect – not likely to adversely affect”
- “No effect”
- “May affect”

148. Does the project intersect the Rufa red knot species list area?

This question will be answered automatically based on previous questions.

149. Will the proposed project result in long-term impacts (effects lasting more than 6 months) to Rufa red knot foraging habitat (shorelines, islands, sandbars, wetlands, or mud flats) or roosting habitat (unvegetated or sparsely vegetated sandbars , islands, shorelines, wetlands, or mud flats) via habitat degradation?
150. Will any project activities or disturbances occur during the Rufa red knot migration season May 9 to May 28 **or** July 25 to September 15?
151. Will the proposed project designate access points, staging areas, waste collections areas, and travel corridors away from known foraging, roosting, or nesting areas and keep all personnel, vehicles, and equipment within those designated corridors to minimize disturbance to birds and shoreline topographic alterations?
152. Will the proposed project limit driving up and down the shoreline to the minimum number of passes needed to accomplish the work in order to minimize disturbance to birds and topographic alterations and will you keep all personnel, vehicles, and equipment within the designated work area/project footprint and access corridors?

153. Will the proposed project avoid blocking major egress points in channels and rivers to avoid disturbance to natural riverine processes?
154. Will the proposed project maintain a clean work site by removing all trash and work-related debris on a daily basis?
155. Will the proposed project avoid disturbing existing mudflats and wetland habitat?
156. Will the proposed project restore habitat to their natural pre-project conditions?
157. Based on the responses you have provided, we believe that the proposed project is consistent with a "**may affect - not likely to adversely affect**" determination for the **Rufa red knot** under the standing analyses that supports this determination key. However, it is also up to the action agency to make their own determination for the Rufa red knot.

What is your effect determination for the Rufa red knot?

1. "No effect"
2. "May affect – not likely to adversely affect"
3. "May affect"

Note: If you choose "May affect" additional coordination with the Service is recommended.

- "May affect"
- "No effect"
- "May affect – not likely to adversely affect"