



## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
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Pierre, South Dakota 57501-5408



In Reply Refer to:  
FWS/R6/South Dakota Flooding Emergency  
Minimization Measures

July 15, 2024

Dear Federal Action Agencies,

In an effort to provide clear guidance to federal action agencies dealing with recent flood events in southeast South Dakota, the U.S. Fish and Wildlife Service (Service) would like to review the procedures for emergency consultation under section 7 of the Endangered Species Act (ESA), as amended, and the requirements for consultation conducted during emergency situations (50 CFR 402.05). The Service's *Section 7 Consultation Handbook* (March 1998, Chapter 8) outlines procedures for handling emergency consultations. Emergency consultation usually begins informally with phone or email contact from the action agency to the appropriate Service office relaying the nature of the emergency. The Service's role at this early stage is to provide recommendations that would minimize the effects of the emergency response action on listed species and/or their critical habitat.

South Dakota flood events can put human lives and property at risk and damage infrastructure. State, local, and private entities are challenged after these events to quickly address situations caused by flooding and must often use their own resources to do so. When an official "State of Emergency" or "Disaster" is declared, the cost of remedial actions may be reimbursed by federal agencies. Although other agencies may also play a role, the primary federal agency involved in assisting in the aftermath of such disasters is the Federal Emergency Management Agency (FEMA).

All federal agencies, including FEMA, must ensure their actions comply with federal laws, including the ESA. Emergency post-disaster actions require expedited measures so that necessary emergency response actions on the ground are not delayed by this federal process. The Service's policy is to provide recommendations to be applied, whenever possible and appropriate under the emergency circumstances, to reduce the risk of adverse affects to species protected by the ESA.

These remedial actions may be separated into two categories. The first is the emergency-phase which typically occurs immediately following the disaster and encompasses actions that must be taken to address risks to human life and/or property. Under no circumstances should a Service representative obstruct an emergency response decision made by the action agency where human life is at stake. Emergency consultation will be handled after the fact for projects in the emergency-phase category. The second is the non-emergency phase, which is generally after the

initial urgency and imminent risk to human life/property has passed, and more time is available to plan and design repair projects.

To determine what may be required during non-emergency actions after a disaster, we recommend contacting FEMA prior to doing any work, in addition to our office. In 2019, flood-related disaster declarations prompted FEMA to coordinate with the Service to develop a programmatic consultation that addresses impacts to the Topeka shiner. That consultation is specifically for non-emergency repair projects incurred during the 2019 disasters and applies to future disasters that may occur through 2024. Adherence to requirements in that consultation, and documentation of completion of those requirements, can help facilitate eligibility for federal assistance.

The minimization measures are recommendations only. Implementation of them by your agency is not a requirement for meeting the intent of the Act. **These measures should be implemented if, and only if, your emergency response team experts determine that the health and safety of people and property would in no way be compromised during the emergency.**

The Service encourages you to use these measures when planning and preparing for the flood events as well as during flood response activities. We also encourage you to continue to have your staff contact the appropriate Service office at the earliest convenience once a flood event starts. Your consideration of the minimization measures during flood mitigation activities, along with the information provided to us post-flood, will be invaluable to completing the emergency informal or formal consultation process in the most efficient manner.

Please distribute this letter and the attached minimization measures to all resource staff and other appropriate personnel that could potentially be involved with the emergency response to flood events in eastern South Dakota. We appreciate your efforts to ensure the conservation of listed, proposed, and candidate species as part of our joint responsibilities under the Act. If you have questions or comments related to this issue, please do not hesitate to contact our staff in the South Dakota Ecological Services Office.

Date: July 25, 2024

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The guidance provided below is intended to address emergency-phase projects only. The intention of these guidelines is to provide minimization measures to reduce short- and long-term impacts to listed species that may occur as a result of life and property saving actions required immediately after an event. Note that any take of federally listed species that occurs during emergency actions will not necessarily be authorized or exempted via an after-the-fact ESA consultation with Service.

**Recommended Conservation Measures for Listed Species Impacted Emergency-Phase Activities:**

**RECOMMENDED CONSERVATION MEASURES FOR EMERGENCY-PHASE ACTIONS IN TOPEKA SHINER STREAMS**



The Topeka shiner (*Notropis topeka*) is a small minnow found in prairie streams within the James, Vermillion, and Big Sioux River watersheds of eastern South Dakota (Figure 1). It is currently listed as endangered under the ESA. When flooding occurs in eastern prairie streams, Topeka shiners may be affected not only by the floodwaters, but also by the remedial actions taken after the flood event.

**Recommended Minimization measures:**

- **Implement and maintain comprehensive and effective sediment/erosion controls to the greatest extent possible during and after the emergency action(s).** Heavy and prolonged instream sedimentation can be detrimental to the Topeka shiner, and emergency repair activities have the potential to worsen already degraded conditions. Sediment/erosion control measures reduce the risk of additional sediment input to Topeka shiner streams during construction, and similar post-construction measures ensure vulnerable work sites are protected from erosion. 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 the stream.
- **Avoid practices that may further and directly damage instream habitat.** In addition to sedimentation and erosion concerns, some instream activities such as driving machinery through streams, excavating streambed materials, channelizing streams, adding fill to streams, and similar direct habitat impacts can negatively affect Topeka shiners. These practices should be avoided. One caveat to excavating streambed materials

involves the installation of culverts below grade to facilitate fish passage (see recommendation below); this countersinking measure can be beneficial to the species long-term. In those situations, sediment and erosion control measures mentioned above are needed to prevent further downstream sedimentation.

- **Whenever possible, install adequately sized stream-crossing structures and repair existing damaged structures in a manner that will not result in long-term fish passage problems.** Topeka shiners have a small body size (usually under 3”) and are not strong swimmers. Corrugated metal pipes have the potential to become perched above the stream, blocking Topeka shiner passage and excluding the fish from miles of otherwise suitable habitat. Other factors such as riprap installed in the streambed or high-water velocity through undersized pipes can have the same barrier effect. Installing structures greater than the bank full width, and countersinking culverts below the streambed are recommended measures. Analysis of instream morphology may be needed on a case-by-case basis to determine the appropriate countersink depth to preclude structure perching. For many culverts/watersheds, 12” or more countersunk depth may be necessary. If emergency restrictions require that undersized structures be installed above-grade or at-grade level, we recommend revisiting these structures once the emergency has passed and replacing inadequate structures with appropriately designed/placed structures to facilitate fish passage. This will also reduce the risk of future flood damages to structures and subsequent repair/replacement costs.

Additional species information can be found here: <https://ecos.fws.gov/ecp/species/4122>

## RECOMMENDED CONSERVATION MEASURES FOR EMERGENCY-PHASE ACTIONS AFFECTING NORTHERN LONG EARED BAT



The northern long-eared bat (NLEB) (*Myotis septentrionalis*) range is large, and its western portion includes the states of South Dakota, North Dakota, and the eastern portions of Montana and Wyoming. This is a tree roosting bat in the active season that feeds on insects. Males generally roost alone, and females can develop large colonies for maternity roosts. They can use any type and size of tree. Larger trees with an opening or break in the structure or loose bark are the type of tree they prefer for roosting. Known winter habitat (hibernacula) in South Dakota include caves and mines in the Black Hills National Forest and cracks in cliff faces along the Missouri River. They may also be present in larger numbers within a five-mile radius of hibernacula during spring staging and fall swarming. Males and non-reproductive females may

be closer to hibernacula year-round. The active period for NLEB in SD is approximately April 15 to November 1 in the South Dakota Plains; this can vary depending on weather.

**Recommended Minimization measures:**

- Avoid construction activities within 0.25 mile of known NLEB hibernacula (there are currently no known hibernacula in South Dakota east of the Missouri River).
- Avoid entering NLEB hibernacula during the hibernation season approximately November 1 to April 14, varying slightly depending on weather.
- Avoid clearing of NLEB summer habitat (forested habitats with snags and large trees with cracks and crevices) during the time of year when females are pregnant, or the pups are nonvolant (June 1 and Aug 15). Maintain a 600-foot buffer around known roost trees.
- Retain snags, dead/dying trees, and trees with exfoliating (loose) bark >3-inch diameter at breast height (dbh) in areas one mile from water.
- Avoid woody vegetation or spoil (e.g., soil, rock, etc.) disposal within 500 feet of known or assumed NLEB hibernacula entrances and associated sinkholes, fissures, or other karst features.
- Avoid/minimize alterations of clean drinking water and foraging areas within a 0.25-mile radius of a known hibernacula or 600 feet of a known maternity roost tree.
- Implement sediment and erosion control measures, ensures restoration of pre-existing topographic contours after any ground disturbance, and restore native vegetation (where possible)
- Avoid filling, channelizing, or degrading streams, wetlands, and other watering areas.
- Contaminants should be strictly controlled so the quality, quantity, and timing of prey resources are not affected.
- Activities involving continued noise disturbance greater than 75 decibels measured within a 0.25-mile radius of known or assumed NLEB hibernacula should be avoided during the spring staging and fall swarming seasons.

Additional species information can be found here: <https://ecos.fws.gov/ecp/species/9045>

## RECOMMENDED CONSERVATION MEASURES FOR EMERGENCY-PHASE ACTIONS AFFECTING PALLID STURGEON



In the South Dakota, the pallid sturgeon (*Scaphirhynchus albus*) is found in the Missouri River and some of the larger tributaries in the Southeastern portion of the state. These fish are well adapted to life on the bottom in swift waters of large, turbid, free-flowing rivers. Habitat loss is a reason for decline, mainly from the construction of dams. Large woody debris is an important component of pallid sturgeon habitat.

### Recommended Minimization Measures:

- Avoid entrainment and/or impingement of fish when repairing water control structures.
- Minimize disturbance to ground cover and vegetation within riparian areas. Use existing roads and trails where possible.
- A spill kit of appropriate capacity should be immediately available at all times when operating equipment near water.
- If riparian areas have been affected by flooding, restrict livestock grazing of vegetation, especially cottonwood stands, until successful regeneration of this vegetation occurs.

Additional species information can be found here: <https://ecos.fws.gov/ecp/species/7162>

## RECOMMENDED CONSERVATION MEASURES FOR EMERGENCY-PHASE ACTIONS AFFECTING WHOOPING CRANE



The whooping crane (*Grus americana*) migrates through South Dakota on their way to northern breeding grounds and southern wintering areas. 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 require shallow water in which to stand and rest. Should construction occur

during spring or fall migration, the potential for disturbances to whooping cranes exists; particularly because your project involves construction in counties close to the Missouri River migration corridor and adjacent to major river systems. Disturbance (flushing the birds) stresses them at critical times of the year. We recommend remaining vigilant for these birds. There is little that can be done to reduce disturbance besides ceasing construction at sites where the birds have been observed. The birds normally do not stay in any one area for long during migration. Any whooping crane sightings should be reported to this office.

**Recommended Minimization Measures:**

- Avoid and minimize direct and indirect wetland impacts where possible.
- Implement appropriate erosion, sediment, and toxicant control efforts and measures near wetlands.
- If whooping cranes are sighted within one mile of where activities are proposed, avoid, and minimize disturbance to cranes where possible until the birds have left the area. Whooping cranes are unlikely to spend more than a few days in any one spot during migration.

Additional species information can be found here: <https://ecos.fws.gov/ecp/species/758>

**RECOMMENDED CONSERVATION MEASURES FOR EMERGENCY-PHASE ACTIONS AFFECTING PIPING PLOVER**



The piping plover (*Charadrius melodus*) can be found on open beaches, alkali flats, and sandy areas along major rivers and wetlands in the northern Great Plains. Nesting habitat consists primarily of shorelines of alkali wetlands, shorelines of reservoirs, and unvegetated interior sandbars. Critical habitat has been designated for the piping plover along shorelines and islands of the Missouri River, including some reservoirs, along with some alkali lakes in the prairie pothole region. Piping plovers usually begin breeding in April or May, lay eggs in May, hatch in June and begin winter migration in July to September.

**Recommended Minimization Measures:**

- Avoid activities within a minimum of 0.25 mile or within sight of any active nests or nest colonies during the nesting season May 1 to August 15 until young have fledged and left the nesting area.

Additional species information can be found here: <https://ecos.fws.gov/ecp/species/6039>

## RECOMMENDED CONSERVATION MEASURES FOR EMERGENCY-PHASE ACTIONS AFFECTING BALD AND GOLDEN EAGLES



Bald eagles (*Haliaeetus leucocephalus*) are found in riparian or lacustrine areas almost exclusively during the breeding season. They occasionally exploit upland areas for food and roost sites especially during winter. Their nest sites are usually close to maximum foraging opportunities and are around the periphery of lakes or linearly along forested corridors of major rivers, usually within a mile of shore. The 2005 South Dakota Bald Eagle Management Plan developed by South Dakota Game Fish and Parks provides general guidance for avoiding and minimizing the risk for bald eagle take in South Dakota (<https://gfp.sd.gov/UserDocs/nav/bald-eagle-plan.pdf>)

Golden eagles (*Aquila chrysaetos*) typically build large stick nests on cliffs, rocky outcroppings, or trees and occasionally on human artifacts (e.g., power poles, pump jacks, and windmills). Territories and pair bonds can be maintained year-round by resident breeding birds with nest building and mating usually intensifying in January, although breeding birds will sometimes travel hundreds of miles during nonbreeding periods.

### Recommended Minimization Measures:

- Limit activities within 0.5 mile of an occupied nest site during nesting season and refer to nest site management plans where they are provided.
- If activity does occur within 0.5 mile of an occupied nest, the nest should be visited post disturbance to assess the impacts such as abandonment.
- Avoid destruction of occupied or unoccupied nests.
- Eagle permit regulations, as allowed under BGEPA, were revised most recently in 2024 (89 FR 9920; Feb. 12, 2024). The regulations authorize the limited take/disturbance of bald and golden eagles where the take/disturbance to be authorized is associated with otherwise lawful activities. These regulations also establish permit provisions for intentional take of eagle nests where necessary to ensure public health and safety, in addition to other limited circumstances. The revisions in 2024 included several changes to clarify, improve implementation and increase compliance while still protecting eagles

<https://www.federalregister.gov/documents/2024/02/12/2024-02182/permits-for-incidental-takeof-eagles-and-eagle-nests> and <https://www.fws.gov/program/eagle-management>

