

Construction Projects Affecting Waters Inhabited by Topeka Shiners (*Notropis topeka*) in Minnesota

Project Recommendations and Guidelines for Meeting Endangered Species Act Section 7 Requirements

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Background

The U.S. Fish and Wildlife Service (Service) listed the Topeka shiner (*Notropis topeka*) as an endangered species in 1998 and designated critical habitat for the species in 2004. The Endangered Species Act of 1973, as amended, prohibits the taking¹ of this species. In Minnesota, Topeka shiner is distributed extensively throughout the Big Sioux and Rock River Watersheds in five counties in southwestern Minnesota (see Fig. 1).

ESA Requirements for Actions in Topeka Shiner Habitat

Federal Actions

Federal agencies² must consult with the U.S. Fish and Wildlife Service on any action that they fund, authorize, or carry out that may affect federally listed endangered and threatened species or their critical habitat. If an agency determines that an action may affect, but is not likely to adversely affect listed species or critical habitat, it may avoid formal consultation by receiving written concurrence on this determination from the Service. Projects that incorporate the recommendations shown below may still affect Topeka shiners. In addition, these recommendations may not address every way in which proposed actions may affect this species. Contact the U.S. Fish and Wildlife Service at (612) 725-3548 for further information.

¹ The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.

² Minnesota Department of Transportation serves as the non-federal representative for the Federal Highway Administration for some of the activities required under section 7 (Interagency Cooperation) of the Endangered Species Act of 1973, as amended.

Private or Local (Non-Federal) Actions

For private or local government actions that do not involve federal funding (e.g., Federal Highway Administration, FEMA, etc.) or authorization (e.g., Corps of Engineers permits), project proponents should ensure that their actions are not likely to result in the take (see definition in footnote) of Topeka shiners. Project plans may need to be modified and an Endangered Species Incidental Take permit may be necessary if take is expected. Contact the U.S. Fish and Wildlife Service at (612) 725-3548 for further information or see the following website for information regarding Endangered Species permits -- <http://endangered.fws.gov/permits/index.html?#forms>.

If federal funding or authorization (e.g., a permit) is received, we recommend that you contact the responsible federal agency to ensure that it has concluded consultation with the U.S. Fish and Wildlife Service before implementing any action that you think may affect Topeka shiners.

Recommendations

Any action planned in or adjacent to streams, or in side channels, cut-off channels, or oxbows that are at least periodically connected to streams in the Rock River and Big Sioux watersheds in Minnesota should incorporate the following recommendations to avoid or minimize impacts to Topeka shiners. If these recommendations cannot be followed, contact U.S. Fish and Wildlife Service and/or the funding agency as soon as possible.

1. Identify the stream or off-channel areas that may be affected by the proposed action; conduct a survey in the area to determine whether Topeka shiners are present and to assess the presence and condition of important habitat features for this species, such as instream pools. Conduct surveys as early in the planning stages as possible to avoid last-minute delays necessary to modify project design. Contact U.S. Fish and Wildlife Service or Minnesota DNR for guidance on conducting effective surveys for this species.
2. Do not dewater stream reaches and/or temporarily divert streams for construction. Due to the significant likelihood of adverse effects to Topeka shiners as a result of these activities, contact U.S. Fish and Wildlife Service and/or any federal agency that is funding or authorizing proposed actions that are likely to include temporary stream diversion and/or dewatering.
3. Do not permit or conduct in-stream work between ice-out and August 15 to ensure free passage of Topeka shiners and to protect spawning habitat. When feasible, also avoid work below the ordinary high-water level during this period. (See note above regarding projects requiring intensive instream work, such as temporary stream diversions or

dewatering.)

4. Topeka shiners frequently inhabit headwaters of small prairie streams and stream reaches that are periodically dry. If feasible, conduct instream construction work when the stream is dry to minimize sedimentation.
5. Minimize or eliminate removal of vegetation and exposure of bare soil below the ordinary high water level and in riparian (i.e., stream side) or wetland areas adjacent to waters inhabited by Topeka shiner.
6. Keep removal of riparian vegetation to a minimum; such removal shall occur sequentially as needed over the length of the project. Mulch areas of disturbed soils and reseed promptly, preferably with native grasses and forbs (flowering herbaceous plants). Inspect the site after spring green up to ensure that vegetation is recovering as expected. Replant as necessary to prevent bank erosion.
7. Implement erosion and sediment prevention measures to the maximum extent practicable. Install silt fences adjacent to the stream. Install additional devices, such as silt fences or check bales, further upslope. Inspect devices frequently to ensure that they are effective and in good repair, especially after precipitation.
8. Existing features such as bridge abutments, retaining walls and riprap should remain in place as much as possible.
9. Do not leave site exposed to potential erosion; ensure that erosion prevention measures are in place and in adequate condition when leaving work site.
10. Do not begin construction until the entire project can be completed without anticipated delay. If precipitation is imminent, cease work with erosion prevention measures in place until weather conditions are conducive to resume work.
11. Do not conduct instream work that would impair passage of Topeka shiners after construction is completed. Improperly designed and installed culverts, for example, may impede or prevent upstream or downstream passage of Topeka shiners and other fish species.
12. Do not operate motorized vehicles instream. Excavation, culvert placement, etc. shall be conducted from above streambanks.
13. Backfill placed in the stream shall consist of rock or granular material free of fines, silts, and mud. Machinery parts (i.e., backhoe buckets, etc.) shall be cleaned of all such

material and free of grease, oil, etc. before their instream use.

14. Construction, demolition and/or removal operations conducted over, or in the vicinity of, the stream, will be so controlled as to prevent materials from falling into the water. Any materials that do fall into the water or into areas below the ordinary high-water line shall be retrieved promptly, by hand or by equipment working from the banks. This material shall be disposed of in a manner consistent with state and local ordinances.
15. The applicant shall meet with any hired contractors before the commencement of the project to ensure that all permit provisions are clearly understood. If the project is modified, or if field conditions change, the applicant shall contact the Minnesota DNR Area Hydrologist and/or U.S. Fish and Wildlife Service before proceeding.
16. For ditch clean-outs, only accumulated sediment should be removed from the channel. No changes in geometry, width, or depth should occur. It is preferred that the ditch be dry before sediment removal begins. The local SWCD and/or NRCS office should be consulted regarding implementation of Best Management Practices to minimize soil erosion.

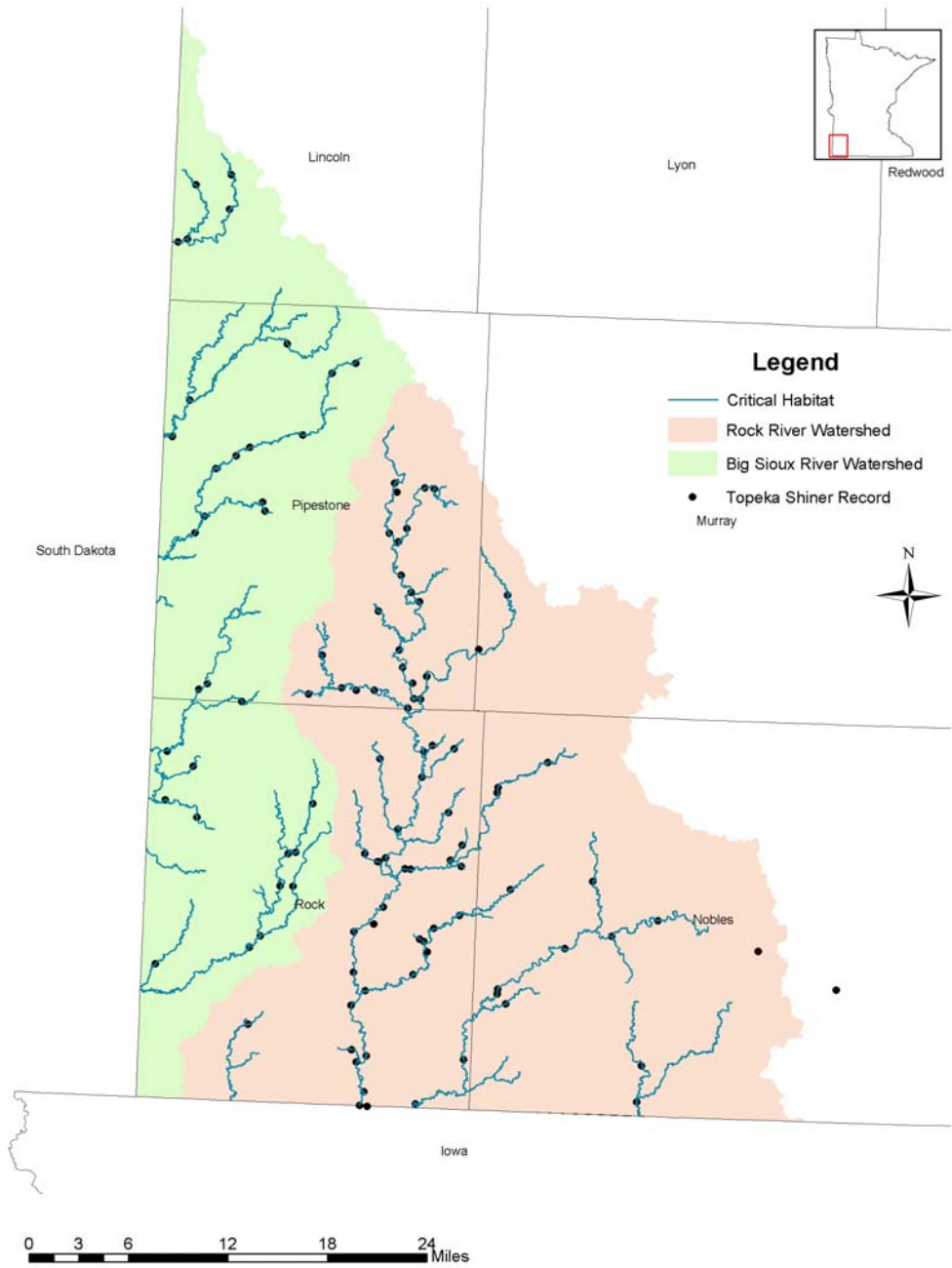


Figure 1. Critical habitat and recorded occurrences of Topeka shiner in Minnesota. Surveys for Topeka shiner are incomplete and ongoing. Therefore, Topeka shiners may also occur within these two watersheds at locations and in streams not shown on the map. Contact U.S. Fish and Wildlife Service at (612)725-3548 to determine whether Topeka shiners may be present in specific areas within these watersheds.