APPENDIX G
Topeka Shiner (*Notropis topeka*) Habitat: Construction Recommendations

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

U.S. Fish and Wildlife Service
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Background

Topeka shiner (*Notropis topeka*) occurs throughout the Big Sioux and Rock River Watersheds in five counties in southwestern Minnesota (Figure 1). The U.S. Fish and Wildlife Service (Service) listed Topeka shiner as an endangered species in 1998 and designated critical habitat[1] for it in 2004. The Endangered Species Act (ESA) prohibits the taking[2] of this species.

Endangered Species Act Requirements for Actions in Topeka Shiner Habitat

Federal Agency Actions

Federal agencies or their designated non-federal representatives must consult with the Service on any action that they fund, authorize, or carry out that may affect Topeka shiner or its critical habitat. If an agency proposes to implement an action that is likely to result in adverse effects to Topeka shiner, it must undergo formal consultation with the Service. If the agency determines that an action may affect Topeka shiners, but that those effects are not likely to be adverse, it may avoid formal consultation by receiving written concurrence on this determination from the Service.

Private or Local (Non-federal) Actions

Private landowners, corporations, state or local governments, and other non-federal entities or individuals who wish to conduct activities that might incidentally harm (or "take") Topeka shiners must first obtain an incidental take permit from the U.S. Fish and Wildlife Service (Service). To determine whether an action may require an incidental take permit, coordinate with the Service when planning actions that may affect streams or off-channel habitats in the

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1 See 69 Federal Register 44,736 (July 27, 2004) or http://www.fws.gov/midwest/endangered/fishes/index.html#topeka for further information about Topeka shiner critical habitat.
2 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.

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Rock River or Big Sioux River watersheds in Minnesota. Contact the Service's Twin Cities Field Office (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.

Project Recommendations

The following recommendations are provided to help design actions that would avoid or minimize adverse effects to Topeka shiner. These recommendations may not address every way in which proposed actions may affect this species and may not preclude the need for formal consultation for federal actions or for an incidental take permit for non-federal actions. Therefore, we highly recommend that you coordinate early in the planning process with the Service's Twin Cities Field Office (612/725-3548) when contemplating any action that may affect streams or associated off-channel habitats (oxbows, abandoned channels, etc.) in the Big Sioux River or Rock River watersheds in Minnesota (Fig. 1).

1. Ensure that contractors and subcontractors understand all permit provisions that are necessary to avoid or minimize adverse effects to Topeka shiners.

2. Do not dewater stream reaches or temporarily divert streams for construction.

3. Do not conduct in-stream work before August 15 to avoid disrupting Topeka shiner spawning.

4. Follow all applicable requirements and best management practices for stormwater and erosion control – for example, requirements contained within stormwater permits from Minnesota Pollution Control Agency (MPCA). Useful resources for designing effective stormwater and erosion control include the MPCA Stormwater Best Management Practices Manual (see http://www.pca.state.mn.us/water/pubs/sw-bmpmanual.html) and the Minnesota Department of Transportation Erosion Control Handbook for Local Roads (see http://www.lrrb.gen.mn.us/PDF/200308.pdf). Other resources are available at http://www.pca.state.mn.us/water/stormwater/stormwater-c.html#factsheets. General suggestions for minimizing effects of erosion on Topeka shiners are shown below.

5. Minimize removal of riparian (streamside) vegetation; such removal should occur sequentially as needed over the length of the project.

6. Mulch areas of disturbed soils and reseed promptly.

7. Implement appropriate erosion and sediment prevention measures to the maximum extent practicable. Inspect devices frequently to ensure that they are effective and in good

repair, especially after precipitation.

8. Leave existing features, such as bridge abutments, retaining walls, and riprap, in place as much as is feasible.

9. Ensure that erosion prevention measures are in place and in adequate condition when leaving work site.

10. Design and install instream structures (e.g., box culverts) in a manner that will not impair passage of Topeka shiners and other fish species after construction is completed.

11. Do not operate motorized vehicles instream. Excavation, culvert placement, etc. should be conducted from streambanks outside of standing or flowing water.

12. 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.

13. Prevent materials and debris from falling into the water during construction. If materials or debris fall into the water or into riparian areas retrieve them promptly by hand or with equipment working from the banks.

14. If the project is modified, or if field conditions change, the applicant or agency representative should contact U.S. Fish and Wildlife Service before proceeding.

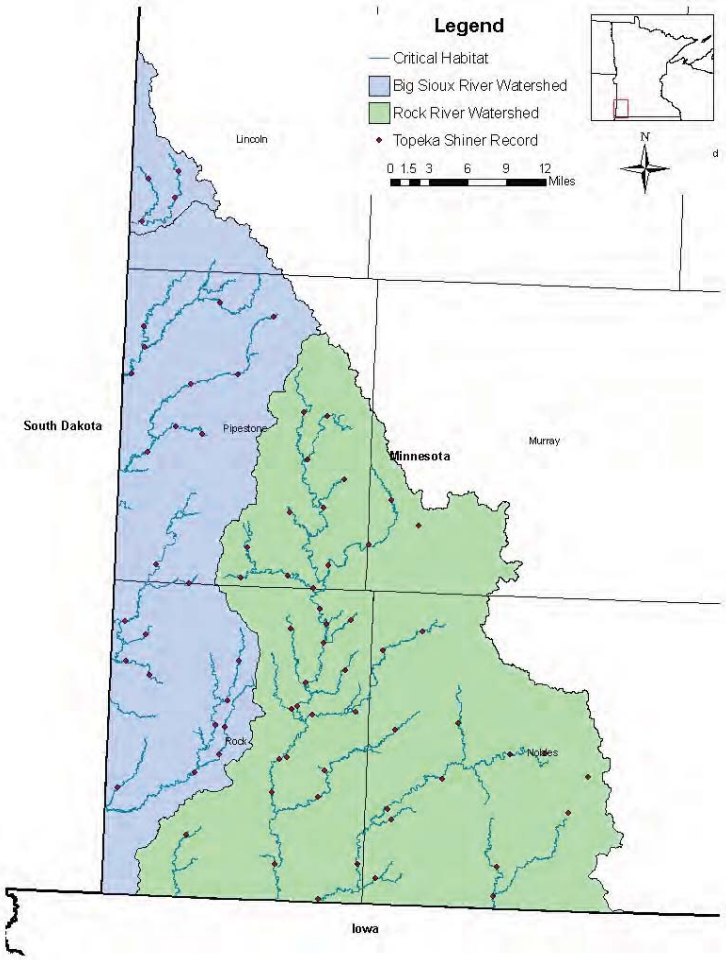

Figure 1. Recorded occurrences of Topeka shiner and officially designated critical habitat in Minnesota. [See 69 Fed. Reg. 44,736 (July 27, 2004) or http://www.fws.gov/midwest/endangered/fishes/index.html#topeka for further information about Topeka shiner critical habitat.] U.S. Fish and Wildlife Service (Service) designated critical habitat only in stream reaches where Topeka shiner had been recorded as of August 2002, when critical habitat was originally proposed. Surveys conducted after August 2002 have found Topeka shiners in additional locations, including some that the Service had not proposed as critical habitat. Therefore, some records shown above occur outside of officially designated critical habitat. Surveys for this species are limited and ongoing. Although Topeka shiners are likely to be found in additional sites not indicated on this map, it is unlikely that the species occurs outside of the Rock River or Big Sioux River watersheds. For information on potential Topeka shiner occurrence in a specific location, contact U.S. Fish and Wildlife Service (612/725-3548).