The Fish and Wildlife Service (Service) recognizes the need to address problems related to bridge repair. For this reason the Service has compiled the following list of BMP’s (Best Management Practices) that may act as a guide to avoid impacts to the Topeka shiner. Best management practices include the placement of devices above and below the work area to trap, filter, and hold sediment during the construction process. Such measures include silt fences/curtains, hay bales, rock debris dams, and sheet-pile structures. These types of structures are the prevalent erosion control method. However, inappropriate design and use, as well as a lack of maintenance of these structures, limit their effectiveness.

The Service requests the following BMP’s be implemented as special conditions of this permit:

1. All temporary storage facilities for petroleum products, other fuels, and chemicals shall be located and protected to prevent accidental spills from entering the Creek or its tributaries within the project area. In the event of an accidental spill, please follow established reporting procedures, and, in addition, please contact our office immediately.

2. Temporary stream crossings, if constructed, should not contain fine sediment particles that may enter the stream channel and impair water quality. In addition, temporary stream crossings should be removed immediately after use, and the area of impact should be restored to pre-construction conditions.

3. There shall be no deposition of cement sweepings, washings, treatment chemicals, or grouting and bonding material into the Creek proper or into any location where such pollutants can be washed into the Creek by runoff water.

4. Culverts should be installed below grade to preserve the natural stream bed and prevent the formation of fish barriers.

5. Close attention is warranted for the placement and maintenance of temporary erosion and sediment control measures at this site to minimize unnecessary sediment loading into the Creek. Appropriate temporary erosion control measures and/or temporary grass seeding should be in place within one week of land disturbance at the project site. In addition to standard procedures, we recommend the applicant place two silt fences downstream of the bridge structure (one primary silt fence with an additional back-up fence to protect against any failures or blow-outs). We also recommend that, where applicable, hay bale ditch checks be placed. Other applicable erosion control measures are recommended to be implemented at this site, as sediment loading could result in considerable harm to both the Topeka shiner and its habitat.

6. To protect Topeka shiners during their peak spawning period, no project activity shall be conducted within the stream channel proper between the dates of May 15 and July 31, inclusive. Construction and removal of temporary crossings, causeways, and weirs are excluded between these dates as well.
7. All areas denuded of vegetation as a result of the permitted action, including all borrow areas that drain into the Creek, shall be reseeded within one month following completion of construction. USDA Natural Resources Conservation Service-approved native grasses, in addition to any other native ‘quick’ rooting grasses, are preferred for the permanent seeding mix.

8. Sand or gravel for use in mixing concrete and/or blacktop should not be taken from the project site.

9. Special attention should be taken to protect any off-channel wetland complexes, such as old oxbow meanders that are present near the project area. Topographic maps indicate that these habitats may be present just downstream of the proposed bridge replacement. Additional siltation prevention measures should be implemented, if necessary, to insure the protection of these habitats.

10. The permittee is responsible for informing all contractors of the conditions listed herein and assuring compliance therewith throughout the construction period.

If you have any questions regarding our comments, please contact the Illinois & Iowa Field Office at (309) 757-5800.