DEPARTMENT OF NATURAL RESOURCES

RECORD OF DECISION

In the Matter of the Determination of the Need for an Environmental Impact Statement for the Solid Bottom Creek Restoration in Becker County, Minnesota

FINDINGS OF FACT, CONCLUSIONS, AND ORDER

FINDINGS OF FACT

1. The Minnesota Department of Natural Resources (MNDNR), Division of Fish and Wildlife, proposes to move the Solid Bottom Creek trout stream away from a hillside, to reduce erosion and improve habitat conditions for brook trout and other species. The proposed Project is located between State Highway 113 and Elbow Lake in Round Lake North Township, Becker County, Minnesota.

2. The Project area is less than 0.4 acres, where a 200 foot stretch of Solid Bottom Creek would be realigned away from a steep eroding hillside. A 220 foot temporary access road utilizing an existing unimproved All-Terrain Vehicle (ATV) trail would be cleared. The immediate watershed is forested; the downstream receiving water is Elbow Lake. The proposed Project area is on a permanent easement that the MNDNR manages for fisheries in cooperation with the landowner.

3. Pursuant to *Minnesota Rules*, chapter 4410.4300, subpart 1, an Environmental Assessment Worksheet (EAW) must be prepared for projects that meet or exceed the threshold defined in any of the subparts 2-37. The proposed Project exceeds the threshold defined under *Minnesota Rules,* chapter 4410.4300, Subp. 26, regarding stream diversions. The proposed Project would realign a designated trout stream and therefore required the completion of an EAW.

4. Pursuant to *Minnesota Rules*, part 4410.0500, subpart 1, for any project listed in part 4410.4300, the government unit specified in those rules shall be the responsible government unit (RGU) unless the project will be carried out by a state agency, in which case that state agency shall be the RGU. Therefore, as the project Proposer, the MNDNR is delegated the duties of the RGU for conducting the environmental review.

5. The MNDNR prepared an EAW for the proposed Project, pursuant to *Minnesota Rules*, parts 4410.1400.

6. The EAW is incorporated by reference into this Record of Decision on the Determination of Need for an Environmental Impact Statement (EIS).

7. The EAW was filed with the EQB and a notice of its availability was published in the *EQB Monitor* on July 6, 2015. A copy of the EAW was sent to all persons on the EQB Distribution List, to those persons known by MNDNR to be interested in the proposed Project, and to those persons requesting a copy. A press release announcing the availability of the EAW was sent to newspapers and radio and television stations statewide. Copies of the EAW were also available for public review and inspection at the MNDNR Northwest Region Headquarters, the MNDNR Library, the Minneapolis Central Public Library, and the Fergus Falls Public Library. The EAW was also made available to the public via posting on MNDNR's website.

8. The 30-day EAW public review and comment period began July 6, 2015 and ended August 5, 2015 pursuant to *Minnesota Rules*, chapter 4410.1600. The opportunity was provided to submit written comments on the EAW to the MNDNR by U.S. Mail, by facsimile, or electronically by email.

9. During the 30-day EAW public review and comment period, the MNDNR did not receive any comments on the EAW from either agencies or individuals.

10. An email was received from Becker County staff before the comment period began indicating that the Project would require a permit from the Becker County Planning and Zoning Office. While the applicability of this permit would not change the Project's potential of significant environmental effects, the MNDNR will continue to coordinate with Becker County on permitting and approval needs for the proposed construction.

11. The MNDNR has determined that the following issues reviewed for potential environmental effects in the EAW have no or very limited potential for environmental effects.

    a. **Wastewater (EAW Item No. 11bi).** Due to the nature of project activities, the construction and operation of this project would not produce wastewater that would be produced or treated at the site.

    b. **Hazardous Waste Historical Presence (EAW Item No. 12a).** During investigations to complete the EAW, no potential environmental effects related to existing hazardous wastes on or near the project area were identified and no hazardous waste would be generated by the project.

    c. **Historic Properties (EAW Item No. 14).** A review of the site by MNDNR archeologist concluded that no historical properties would be affected and the State Historic Preservation Office (SHPO) reviewed the project and concluded the same.

12. Based upon the information contained in the EAW, the MNDNR has identified the following potential environmental effects associated with the project:

    a. Habitat impacts to fish and wildlife
    b. Physical impacts to plant communities
    c. Water resource impacts
    d. Air and noise emissions

e. Cumulative potential effects

Each of these environmental effects is discussed in more detail below.

a. Habitat impacts to fish and wildlife. This topic was addressed under Item 6b, and Item 13 of the EAW.

Solid Bottom Creek is a designated trout stream, currently stocked and managed for brook trout. Several other fish species including bluegill, pumpkinseed sunfish, spotfin shiner, creek chub and blacknose dace also inhabit the stream. Deer, furbearers, reptiles and amphibians are also common along the stream corridor.

Fish and other aquatic species would experience increased stream turbidity for short periods while the project is being constructed. To reduce sedimentation, portions of the channel work would be constructed in the absence of flowing water by constructing channel blocks as necessary to maintain flows in the original channel. Channel blocks would be removed and flow would be connected to the new stream channel as the project progresses. Any visible mussels or stranded fish would be manually relocated before the original channel is filled.

While presence of the least darter (*Etheostoma microperca*) has not been documented within Solid Bottom Creek, it was found downstream in Elbow Lake in 2012. There is the potential that temporarily decreased water quality would affect the least darter and its habitat during construction. Long term effects of the project would improve habitat for the least darter. To minimize impacts to the least darter, all fish in the original channel would be collected using electrofishing equipment and relocated prior to draining and filling the original channel. The newly constructed channel would not be connected to flowing water until it is completed to minimize erosion and sedimentation impacts downstream. Construction is scheduled to take place in early fall, which is outside of the spawning season for the least darter and during low water levels to minimize turbidity.

The project is within the range of the northern long-eared bat habitat, but the northern long-eared bat has not been identified in the project area. Tree removal associated with the project would total less than 1 acre and would meet the "minimal tree removal" threshold in US Fish and Wildlife Service (USFWS) guidelines. Potential effects include loss of habitat for wildlife during excavation and construction.

Impacts to the northern long-eared bat would be minimized by removing less than 50 trees and attempting to save or work around larger trees that may serve as roosting habitat. The project is scheduled to take place in early fall, which follows U.S. Fish and Wildlife Service interim habitat guidance to avoid tree removal from April 1 to September 30th.

Wildlife impacts would be local, minor, temporary, and limited to construction and establishment phases of project. Long-term beneficial effects for wildlife are anticipated.

b. Physical impacts to plant communities. This topic was addressed under Item 6 b, and 13 of the EAW.

The proposed Project would require temporarily widening an ATV access road for construction equipment to access the site, which would impact surrounding plant communities. The plant community would be affected through heavy equipment traffic, vegetation clearing and excavation. The existing access road would need to be widened to permit access for a front-end loader and excavator. Some trees and vegetation would be removed. In addition, construction of a new channel requires excavation and tree removal. Uprooting plants and removing trees would also affect wildlife habitat in the immediate area during construction of the project.

Impacts to plant communities should be limited due to the small footprint of the project area (0.4 acres). An existing trail to the project area would be used to access the project site, minimizing disturbance to the upland forest. The project is scheduled to be constructed in the fall, when soils are dry. This would reduce rutting, compaction and soil disturbance. Soft soils or sensitive areas would be flagged to avoid disturbance. Erosion control blankets, straw mulch and replanting with a native wet sedge meadow seed mix would be used to minimize soil erosion on exposed stream banks and upland areas. These practices closely follow the six recommendations in the Natural Heritage Review, which focuses on reducing disturbance to the plant community.

c. Water resource impacts. This topic was addressed under Item 6b and Item 11 of the EAW.

It is expected that the area of excavation and disturbance would affect approximately 0.2 acres of open water in the original stream channel and 0.2 acres of adjacent riparian wetland. The project would involve excavation in a wetland on the west side of the channel, but would also create an equal amount of wetland on the east side of the channel with the same elevation and hydraulic connection to ground and surface water as the excavated wetland.

A short-term increase in turbidity would likely occur when the newly constructed channel is reconnected to the natural stream. However, many of the solids contributing to the turbidity would be expected to settle in the downstream reaches of Solid Bottom Creek, limiting environmental effects in downstream Elbow Lake. The proposed project would affect surface water by placing channel blocks in the stream and re-directing the water into the new channel once it is built. These actions may contribute to higher sedimentation and turbidity following construction of the project. Stormwater runoff is expected to be higher than normal until revegetation

surrounding the site occurs. While Solid Bottom Creek would be directly impacted during construction, impacts would be expected to lessen downstream. Elbow Lake, the downstream receiving water, is not expected to receive more than a negligible increase in sediment during construction, and no increased effects following construction. Additional turbidity due to construction activities is expected to be less than natural turbidity generated during spring runoff. To reduce impacts on water resources, the project would be constructed in the fall, when stream flows are lower and riparian soils are drier.

d. **Air and noise emissions.** This topic was addressed under Items 16 and 17 of the EAW.

Project construction activities would temporarily produce exhaust emissions, dust and noise typical of earth moving equipment. Air quality may be affected temporarily by exhaust emissions and dust from this equipment. During operation, fugitive dust could arise from soil disturbances that could affect nearby neighbors. Project construction noise would consist of motor noise, rock on metal, and safety backup alarms on construction vehicles.

The stream reach is heavily forested and the creek runs along a steep valley wall in a rural area. Noise levels would be similar to heavy truck traffic, which measures approximately 80 dba while construction is taking place. The nearest neighbor is approximately 500 ft. from the project site and the next closest neighbor is 800 ft. away. Approximately eight truck deliveries would be needed to the site and steps would be taken to minimize unnecessary idling. The project is expected to take approximately three weeks for construction and effects on air quality and noise would be limited to this short period.

e. **Cumulative Potential Effects.** This topic was addressed under Item 19 of the EAW.

The potential environmental effects related to this proposed Project could combine with environmental effects from other past, present, or reasonably foreseeable future projects for which a basis of expectation has been laid. No other active projects are known in the nearby or surrounding areas. No future projects for which a reasonable basis has been laid are known that would contribute to cumulative potential effects.

Cumulative potential effects are limited to those created by this project. Environmental effects resulting from the project are expected to be minor and temporary in nature. Following project completion, the affected environment is expected to benefit from improved water quality and stream stability.

Mitigation measures and best management practices have been identified in the EAW and would be utilized to minimize impacts. To reduce impacts to fish, all fish in the original channel would be collected using electrofishing equipment and relocated prior to draining and filling the original channel. Any visible mussels or stranded fish would be manually relocated before the original channel is filled. Construction

would take place outside of the spawning season for the least darter and other aquatic species. To reduce impacts to wildlife, efforts would be made to save or work around sensitive vegetation and larger trees, which may serve as roosting habitat for potentially affected bat species.

To reduce impacts on water resources, the project is proposed to be constructed in the fall, when stream flows are lower and riparian soils are drier. The project construction timeframe would also help to reduce impacts to soil from rutting, compaction, and soil disturbance. Dry conditions would also help reduce potential runoff and erosion. Soft soils or sensitive areas would be flagged to avoid disturbance. Erosion control blankets, straw mulch and replanting the area with a native wet sedge meadow seed mix would be used to minimize soil erosion on exposed stream banks and upland areas to reduce disturbance to the plant community. Erosion control blankets would also be used to stabilize steeper slopes. Additionally, portions of channel work would be constructed in the absence of flowing water by constructing channel blocks to decrease sedimentation as necessary to maintain flows in the original channel. The newly constructed channel would not be connected to stream flow until it is completed and stabilized.

Air and noise impacts would be mitigated by taking steps to reduce unnecessary idling and minimizing the number of trips heavy equipment would take to and from the project site. Overall potential environmental effects are expected to be minimal and temporary and no reasonably foreseeable projects are expected to occur within the same geographic scale or timeframe to result in cumulative effects.

13. The MNDNR requested and was granted a 15-day extension for making a decision on the needs for an EIS as provided under the provision of *Minnesota Rules*, chapter 4410.1700 Subp. 2.b.

14. The following permits and approvals are needed for the project:

Unit of Government	Type of Application	Status
MNDNR	Public Waters Work Permit	Pending approval
USACE	Clean Water Act, Section 404 Permit	Pending determination*
MPCA	Clean Water Act (CWA), Section 401 Certification	Pending approval
MNDNR	Wetlands Conservation Act (WCA)	Pending approval
Becker County Planning and Zoning	Planning and Zoning	Application to be submitted

*The USACE will determine (with MPCA concurrence) how the Project will be authorized to comply with CWA Section 404, either via a Regional General Permit (RGP), a Letter of Permission, or the Individual 404 Permit obligations.

CONCLUSIONS

1. The Minnesota Environmental Review Program Rules, *Minnesota Rules*, chapter 4410.1700, subparts 6 and 7 set forth the following standards and criteria, to which the effects of a project are to be compared, to determine whether it has the potential for significant environmental effects.

   In deciding whether a project has the potential for significant environmental effects, the following factors shall be considered:

   a. *type, extent, and reversibility of environmental effects;*
   b. *cumulative potential effects of related or anticipated future projects;*
   c. *extent to which the environmental effects are subject to mitigation by on-going regulatory authority; and*
   d. *the extent to which environmental effects can be anticipated and controlled as a result of other environmental studies undertaken by agencies or the project proposer, including other EISs.*

2. *Type, extent, and reversibility of environmental effects*

   Based on the Findings of Fact above, the MNDNR concludes that the following potential environmental impacts, as described in Finding No. 10, would be either limited in extent, temporary, or reversible:

   a. Habitat impacts to fish and wildlife
   b. Physical impacts to plant communities
   c. Water resource impacts
   d. Air and noise emissions
   e. Cumulative potential effects

   Based on the Findings of Fact above, the MNDNR concludes the following potential environmental effects of the project, as described in Finding No. 10e, would be beneficial:

   The proposed Project activities would result in reduced erosion, improved habitat for aquatic invertebrate species, and lessen downstream impacts to Elbow Lake.

3. *Cumulative potential effects of related or anticipated future projects.*

   As described in Finding No. 10, overall cumulative potential effects would be minimal and temporary. Habitat impacts to fish and wildlife as well as physical impacts to plant communities would be limited to the construction timeframe and are not expected to contribute to cumulative potential effects of future projects. Mitigation measures and best management practices have been identified and would be utilized to minimize these impacts. No reasonably foreseeable projects are expected to occur within the same geographic scale or timeframe to result in cumulative effects.

4. *Extent to which environmental effects are subject to mitigation by on-going public regulatory authority.*

   Based on the information in the EAW and Findings of Fact above, the MNDNR has determined that the following environmental effects, as described in Finding No. 10, are subject to mitigation by ongoing public regulatory authority:

   Prior to initiation of this project, the following permits and approvals would be required: the MNDNR Public Waters Work permit, USACE CWA Section 404 permit (or alternately general permit coverage), CWA Section 401 Water Quality Certification and WCA. When applying standards and criteria used in the determination of the need for an environmental impact statement, the MNDNR finds that the project is subject to these regulatory authorities to sufficiently mitigate potential environmental effects on water resources through measures identified in the EAW.

   Air and noise emissions are subject to the regulatory authority by *Minnesota Rules,* part 7030.0030 Noise Control Requirement administered through MPCA, and Occupational Safety and Health Administration (OSHA). The local governmental unit may also have other regulatory authorities for construction including requirements for noise emissions.

5. *Extent to which environmental effects can be anticipated and controlled as a result of other environmental studies undertaken by public agencies or the project proposer, or other EISs.*

   The MNDNR has completed, or developed in collaboration with others, numerous habitat improvement projects within public waters that have included EAW preparations. The effects and benefits of prior projects are used in planning and developing other similar projects such as the proposed Solid Bottom Creek Restoration Project. The information gained on the effects and results of past projects provides part of the basis for predicting the effects of similar future projects, such as the proposed Project.

   The MNDNR has prepared EAWs for other habitat improvement projects that have similar environmental effects. These include the Gilmore Creek, Knowlton Creek, Upper Lightning Lake Water Level Management project and Roseau River Wildlife Management Area.

6. The MNDNR has fulfilled all the procedural requirements of law and rule applicable to determining the need for an environmental impact statement on the proposed Solid Bottom Creek Restoration Project.

7. Based on consideration of the criteria and factors specified in the Minnesota Environmental Review Program Rules (*Minnesota Rules*, chapter 4410.1700, subpart 6 and 7) to determine whether a project has the potential for significant environmental effects, and on the Findings and Record in this matter, the MNDNR determines that the proposed Solid Bottom Creek Restoration Project does not have the potential for significant environmental effects.

ORDER

Based on the above Findings of Fact and Conclusions:

The Minnesota Department of Natural Resources determines that an Environmental Impact Statement is not required for the Solid Bottom Creek Restoration Project in Becker County, Minnesota.

Any Findings that might properly be termed Conclusions and any Conclusions that might properly be termed Findings are hereby adopted as such.

Dated this 15th day of September, 2015.

STATE OF MINNESOTA
DEPARTMENT OF NATURAL RESOURCES

Barb Naramore

Barb Naramore
Assistant Commissioner