

**Department of Natural Resources  
Ecological and Water Resources**

**OFFICE MEMORANDUM  
STATE OF MINNESOTA**

Date: December 20, 2013  
To: Parties on the EAW Distribution List  
Other Interested Parties

From: Ronald Wieland Phone: 651-259-5157  
Environmental Planner

Subject: Blazing Star State Trail, Myre-Big Island State Park to Hayward  
Environmental Assessment Worksheet  
EQB Monitor Notice

The Minnesota Department of Natural Resources (DNR) has prepared the attached Environmental Assessment Worksheet (EAW) to describe the environmental effects associated with the Blazing Star State Trail, Myre-Big Island State Park to Hayward project, located in Freeborn County Minnesota. This document has been prepared as a Mandatory EAW pursuant to Minnesota Rules Minnesota Rules, part 4410.4300, subpart 27 (Wetlands and Public Waters). The DNR is the Responsible Governmental Unit for the environmental review of this project.

A 30-day public review and comment period will begin on December 23, 2013, with the publication of the notice of availability of this EAW in the EQB Monitor. The DNR invites public comments on the EAW during the public review period from December 23, 2013 to January 22, 2014 at 4:30 pm. A copy of the EAW is available for public review at:

- DNR Library, 500 Lafayette Road, St. Paul, MN 55155
- DNR South Region, 261 Highway 15 South, New Ulm, MN 56073
- Hennepin Co.- Minneapolis Central Library, Government Documents, 2nd Floor, 300 Nicollet Mall, Minneapolis, MN 55401-1992
- Albert Lea Public Library, 211 E. Clark Street, Albert Lea, MN 56007
- Rochester Public Library, Reference Dept., 101 Second St. SE, Rochester, MN 55904

The EAW is also posted on the DNR's website at : <http://www.dnr.state.mn.us/index.html> → Public Input → Environmental Review → See Blazing Star EAW in the drop down list.

Written comments must be received by Wednesday, January 22, 2014, at 4:30 pm and sent to:

Ronald Wieland, EAW Project Manager  
Department of Natural Resources  
Division of Ecological and Water Resources  
500 Lafayette Road, St. Paul, Minnesota, 55155-4025

Electronic or e-mail comments may be sent to [Environmentalrev.dnr@state.mn.us](mailto:Environmentalrev.dnr@state.mn.us) with "Blazing Star EAW" in the subject line. If submitting comments electronically, please include your name and U.S. mailing address. Signed written comments may be sent via facsimile to (651) 296-1811. For additional information, or copies of the EAW, please call (651) 259-5157

8

**Attachment:** Blazing Star State Trail, Myre-Big Island State Park to Hayward project EAW



# ENVIRONMENTAL ASSESSMENT WORKSHEET

**Note to preparers:** This form and EAW Guidelines are available at the Environmental Quality Board’s website at: <http://www.eqb.state.mn.us/EnvRevGuidanceDocuments.htm>. The Environmental Assessment Worksheet provides information about a project that may have the potential for significant environmental effects. The EAW is prepared by the Responsible Governmental Unit or its agents to determine whether an Environmental Impact Statement should be prepared. The project proposer must supply any reasonably accessible data for — but should not complete — the final worksheet. The complete question as well as the answer must be included if the EAW is prepared electronically.

**Note to reviewers:** Comments must be submitted to the RGU during the 30-day comment period following notice of the EAW in the *EQB Monitor*. Comments should address the accuracy and completeness of information, potential impacts that warrant further investigation and the need for an EIS.

1. **Project title:** Blazing Star State Trail, Myre-Big Island State Park to Hayward

2. **Proposer:** Minnesota Department of Natural Resources

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3. **RGU:** Minnesota Department of Natural Resources

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4. **Reason for EAW preparation (check one)**

EIS Scoping     Mandatory EAW     Citizen petition     RGU discretion     Proposer volunteered

**Minnesota Rules, part 4410.4300, subp. 27, item A. Wetlands and public waters**

5. **Project location** County: Freeborn

City/Township: Albert Lea/Hayward

Section	Township	Range
7, 8, 9	102N	20W
12, 13	102N	21W

GIS COORDINATES (UTM 15, NAD 83)		
TRAIL POINT	EASTING	NORTHING
Western End	475495	4832370
Myre-Big Island SP	477224	4832654
Hayward (East End)	480104	4832600
TAX PARCEL NUMBERS		
Multiple parcels		

**Attach each of the following to the EAW:**

**County map showing the general location of the project**

- Figure 1: Blazing Star State Trail – Myre-Big Island State Park to Hayward, County Location

**U.S. Geological Survey 7.5 minute, 1:24,000 scale map indicating project boundaries (photocopy acceptable)**

- Figure 2: Blazing Star State Trail – Myre-Big Island State Park to Hayward, Freeborn County, USGS Map, 1:24,000

**Site plan showing all significant project and natural features.**

- Figure 3: Blazing Star State Trail (Developed)
- Figure 4: Blazing Star State Trail – Myre-Big Island State Park to Hayward Project Area, Including Land and Surface Water Features
- Figure 5: Blazing Star State Trail - Myre-Big Island State Park to Hayward - USDA, NRCS Soil Survey Map Units
- Figure 6: Blazing Star State Trail - Typical Trail Section Profiles
- Figure 7: Blazing Star State Trail - Draft Plan and Profile for Lake Crossing
- Table 1: Blazing Star State Trail - Myre-Big Island State Park to Hayward Project Area - List of Soil Map Units (USDA, NRCS)

**Attachments to the EAW:**

- Attachment A: MDNR NHIS Rare Features Database report letter
- Attachment B: Minnesota State Historic Preservation Office correspondence.

**6. Description**

**a. Provide a project summary of 50 words or less to be published in the *EQB Monitor*.**

Minnesota Department of Natural Resources proposes to extend the Blazing Star State Trail 2.4 miles from Myre-Big Island State Park to Hayward in Freeborn County. The trail will consist of a 10-foot wide bituminous surface for pedestrian, bicycle and other non-motorized uses, and requires a new bridge crossing Albert Lea Lake. The 100-foot single span pedestrian bridge will be adjacent and parallel to the existing railroad bridge.

**b. Give a complete description of the proposed project and related new construction.** Attach additional sheets as necessary. Emphasize construction, operation methods and features that will cause physical manipulation of the environment or will produce wastes. Include modifications to existing equipment or industrial processes and significant demolition, removal or remodeling of existing structures. Indicate the timing and duration of construction activities.

The Blazing Star State Trail is a non-motorized, year-round multi-use recreational trail, located in Freeborn County with approximately six miles currently developed from Albert Lea to Myre-Big Island State Park (Figures 1, 2, and 3). Current uses include bicycling and pedestrian uses--hiking, in-line skating and cross country skiing.

The Minnesota Department of Natural Resources (MDNR) proposes to extend the Blazing Star State Trail eastward for 2.4 miles, from Myre-Big Island State Park to Hayward (Figure 4). During the trail's design phase, the landscape and natural resource features of the project area were evaluated, including soil interpretation using the Natural Resource Conservation Service, Freeborn County Soil Survey map (Figure 5). The 14-foot wide trail development will be constructed with a 10-foot bituminous (asphalt) surface and two-foot aggregate shoulders (Figure 6). The bituminous surface will be 2.5 inches thick. The segment includes construction of a crossing Albert Lea Lake, requiring 1.2 acres of lake fill and a new 100-foot single span pedestrian bridge (Figures 4 and 7). Additional temporary fill to construct the bridge and dewatering to establish the bridge abutments are proposed. The trail will be developed primarily on state land acquired for trail purposes, with short segments located in state and city parks. In addition to the new trail segment, an existing 0.7 mile state trail segment located within the park would be upgraded from aggregate to bituminous pavement. Approximately 40-acres of land, proposed for purchase from willing sellers, would allow opportunities for routing the trail around multiple wetlands. Intentions are to use portions of that land for wetland and prairie restoration in conjunction with trail development.

The majority of the proposed trail corridor has gently rolling topography well suited for a bituminous non-motorized, multi-use trail. Grades will not exceed five percent at any point on the proposed route and will meet Americans with Disabilities Act (ADA) accessibility guidelines. Construction will include cutting and filling to achieve the desired trail grade and trail cross-slope. Trail segments proposed through woodlands will follow natural contours as much as possible to avoid slope cuts. The trail bed will be stabilized with a 14-foot wide base of Class 5 aggregate material, which consists of durable particles or fragments of gravel and sand.

The trail is proposed to cross Albert Lea Lake adjacent and parallel to the existing railroad grade, originally constructed in the 1890's at a narrow point of the lake. The railroad bridge has a span of approximately 90-feet that allows water flow and boat passage between the northeastern lobe and the central main lobe of the lake. The railroad is requiring a 50-foot separation between the proposed trail and rail bed. A power line parallels the railroad crossing. The proposed crossing area will have a length of approximately 1100-feet and an average fill width of 52 feet, to allow for the required separation from the railroad and power lines. The proposed trail would have a 100-foot span bridge separate from the railroad bridge. A 5-foot high chain-link fence will separate the trail from the railroad to deter trespass and improve safety. Equipment and materials will be brought in using a minimum maintenance road and township road, as well as a short segment of the existing trail. The source for the proposed fill material has not been determined. Signage and fences will be put in place to alert visitors of temporary trail closures. Trail construction will not affect the usage of other trails within the park.

Construction of the trail and the bridge crossing may take two construction seasons. Construction is scheduled to begin later in the summer of 2014, possibly in June, to avoid the peak breeding and nesting season for most species, and may extend to November 2015, as weather permits. Most of the construction would occur during the summer and fall but some limited activities would occur during the winter. Some of the work is weather dependent and restricted to periods

with temperatures above freezing. Bridge construction is proposed to be completed in one season, likely in 2014, with the remainder of the trail construction to Hayward to be completed in 2015. Construction could start earlier in the spring of 2015, weather permitting, since the embankment in the lake would have already been constructed.

The Blazing Star State Trail project is being designed in accordance with Minnesota Department of Transportation (MnDOT) State Aid Geometric Design Standards, Minnesota Manual of Uniform Traffic Control Devices (MnMUTCD), MnDOT Bikeway Facility Design Manual, American Association of State Highway and Transportation Officials (AASHTO) Guide for Planning, Design and Operation of Pedestrian Facilities, MDNR Trail Planning, Design and Development Guidelines, and Americans with Disabilities Act (ADA) Guidelines. The project will be constructed in accordance with the current edition of the Minnesota Department of Transportation's "Standard Specifications for Construction."

**c. Explain the project purpose; if the project will be carried out by a governmental unit, explain the need for the project and identify its beneficiaries.**

The purpose of this project is to extend the development of a legislatively authorized state trail from its current terminus in Myre-Big Island State Park to the city of Hayward. When fully developed, the Blazing Star State Trail will provide a high-quality, non-motorized recreational trail of statewide significance connecting the communities of Albert Lea, Hayward, and Austin. The proposed project is needed to provide non-motorized recreational opportunities to the general public in this region of the state. Eventually the link will enable alternative transportation between the major population centers of Albert Lea and Austin.

Beneficiaries of the proposed project include bicyclists and pedestrians living or visiting in the area, particularly the communities of Albert Lea and Hayward. Myre-Big Island State Park visitors are also provided improved and extended access to recreational experiences within and beyond the state park. Pedestrians or bicyclists will benefit from the development of the proposed trail by experiencing safer conditions for travel and reduced potential for conflicts with motor-vehicle traffic.

When the Blazing Star State Trail is complete from Albert Lea to Austin, it is anticipated that use patterns will reach similar levels as those identified for the Sakatah Singing Hills State Trail, which is located between Mankato and Faribault, Minnesota. The Sakatah Singing Hills State Trail receives approximately equal use by tourists and local users. In 1998, a trail user survey was conducted along 38 miles of the Sakatah Singing Hills State Trail, and it was found to have a total of 95,634 seasonal user hours (Memorial Day to Labor Day). A user hour is equivalent to a trail user spending one hour on the trail. A user survey has not been completed for any portion of the Blazing Star State Trail.

This project will be administered by the MDNR, which operates the Blazing Star State Trail. Funding has been provided by the Minnesota Legislature in the 2005 Capital Bonding Appropriation, which has been extended through June 30, 2014, as well as a 2011 Capital Bonding Appropriation which is available through 2014.

**d. Are future stages of this development including development on any other property planned or likely to happen?  Yes  No**

Future trail development may consist of multiple segments/projects in order to provide a connection to the city of Austin, as legislatively authorized in 1996 (*Minnesota Statutes*, part 85.015, subd. 19). Todd Park in Austin is identified in the master plan as a trail head location for the eastern terminus. The Blazing Star State Trail may eventually connect to the Shooting Star State Trail in Austin via a local trail segment, if not a direct state trail connection link. Much of the land available for future routing is in private ownership. With developments subject to funding and land availability, no specific planning, design, or construction timeline can be provided. The MDNR will continue to work with local communities and landowners to identify potential route locations between Hayward and Austin.

Additional development to improve a trail rest area is proposed within Myre-Big Island State Park (picnic table icon near railroad on Figure 3 shows the proposed location). The rest area is not designed or funded and does not have a construction time frame. The concept for the improvement includes providing the site with a solar-powered water faucet, a picnic area, and vault toilet, and building to ADA guidelines.<sup>1</sup> MDNR natural and cultural resource assessments will be conducted on future development areas prior to construction. As the projects are planned, additional environmental review requirements under the Minnesota Environmental Policy Act will be determined, pursuant to Environmental Quality Board rules, *Minnesota Rules*, parts 4410.1000 and 4410.1100.

**e. Is this project a subsequent stage of an earlier project?**  Yes  No

Existing development of the Blazing Star State Trail consists of about six miles of trail, 10-foot wide, with a bituminous (asphalt) surface. In 1997, the City of Albert Lea constructed the first 1.9 mile segment of the Blazing Star State Trail. Two trail access points are located within Frank Hall City Park. In 1998, the state legislature approved funding to extend the trail another 4.5 miles, which was completed in 2003. Another segment completed in 2005 in Myre-Big Island State Park, included a 10-foot wide bituminous pathway, with 2-foot shoulders, and a grade-separated (bridge) crossing of the railroad. This crossing to the north end of the park consists of a 135-foot single span bridge with concrete abutments and wing walls. Grading was added to meet Americans with Disabilities Act (ADA) standards (Figure 3).

During the planning and design phases of each of these projects, the MDNR conducted natural and cultural resource assessments prior to construction. The planning process included consultation and coordination with resource specialists and the State Historic Preservation Office (SHPO). Pursuant to Environmental Quality Board rules, the earlier projects did not require environmental review.

## **7. Project magnitude data**

The proposed project area encompasses approximately 53.5 acres, consisting of a construction zone of 9.8 acres and a vegetation management zone of approximately 43.7 acres, where the intention is to maintain, restore, or enhance native vegetation cover. The construction zone includes the area of ground disturbance, where the trail's side slopes are reshaped and the treadway is smoothed, hardened, and paved to meet standards for establishing a sustainable trail.

The construction zone (9.8 ac.) consists of two trail segments of varying width allocation: 1) an existing gravelled segment approximately 0.7 miles long that would be paved with a bituminous surface (1.7 ac.); and 2) about 2.4 miles of new trail construction (8.1 ac.), including a bridge across a narrow point of Albert Lea Lake. The width of the construction zone along the existing

trail segment would average 20 feet, and along the new trail segment, 28 feet. The resulting trail bed of both the existing and new segments will consist of a 10-foot wide paved treadway and 2-foot wide shoulders, resulting in a 14-foot wide trail approximately 5.2 acres in size.

Areas within the construction zone that are disturbed but not allocated to the treadway and shoulders (approximately 4.6 acres) would be planted with native vegetation similar to standards applied to the vegetation management area. After project completion, approximately 90 percent of the project area would have a cover type of wetland, woodland, or brush/grassland.

Number of residential units: unattached: 0                      attached: 0                      maximum units per building  
 Commercial, industrial or institutional building area (gross floor space): total square feet

Indicate areas of specific uses (in square feet):

Office 0	Manufacturing 0
Retail 0	Other industrial 0
Warehouse 0	Institutional 0
Light industrial 0	Agricultural 0

Other commercial (specify) 0

Building height NA                      If over 2 stories, compare to heights of nearby buildings

8. **Permits and approvals required.** List all known local, state and federal permits, approvals and financial assistance for the project. Include modifications of any existing permits, governmental review of plans and all direct and indirect forms of public financial assistance including bond guarantees, Tax Increment Financing and infrastructure. *All of these final decisions are prohibited until all appropriate environmental review has been completed. See Minnesota Rules, Chapter 4410.3100.*

<u>Unit of Government</u>	<u>Type of Application</u>	<u>Status</u>
<b>State of Minnesota</b>		
MDNR	Work in Public Waters Permit	To be obtained
	Wetland Conservation Act (WCA) Permit	To be obtained
MPCA	National Pollutant Discharge Elimination System (NPDES) Permit, Section 401 Water Quality Certification	To be obtained
MHS/SHPO	Archaeology Review (Section 106)	Ongoing
<b>Freeborn County</b>		
	Construction in Road Right-of-Way CUP or Land Use Permit	To be obtained as needed
<b>Hayward Township</b>		
	Road Authority	To be obtained as needed
<b>U.S. Government</b>		
U.S. Army Corps of Engineers (USACE)	Section 404 Permit, Clean Water Act Section 10, Rivers and Harbors Act	To be obtained for wetlands and/or Albert Lea Lake
U.S Department of Justice	Americans with Disabilities Act	To be in compliance with accessibility guidelines
<b>Other</b>		
Canadian Pacific Railroad	Notification requirement if trail is within 50-feet of active rail	To be obtained as needed
Shell Rock River Watershed District	Project Review	Approvals as necessary



**9. Land use.** Describe current and recent past land use and development on the site and on adjacent lands. Discuss project compatibility with adjacent and nearby land uses. Indicate whether any potential conflicts involve environmental matters. Identify any potential environmental hazards due to past site uses, such as soil contamination or abandoned storage tanks, or proximity to nearby hazardous liquid or gas pipelines.

Myre-Big Island State Park contains natural diversity in a prairie landscape surrounded by agricultural land uses. Unique features of this region’s geologic, botanic, and human history can be seen in this park. The original park vegetation was dominated by three types of communities: oak savanna, northern hardwood forest, and wetlands. As the trail exits the state park to the east, it travels through an agricultural landscape, with periodic short segments through wooded areas, before ending at the Hayward municipal park and ball fields. Portions of the trail right-of-way will provide opportunities for both wetland and prairie restoration.

An electric substation, a cellular tower, and several overhead transmission lines are in proximity to the project area. It would not be unusual for electrical substations and similar sites to have some level of historic PCB contamination. There are no known PCB spills or cleanups at the nearby electric substation site. No gas pipelines are known in the vicinity of the trail development. The rail company requires a 50-foot trail setback from the railroad. The non-motorized trail development would be compatible with adjacent land uses. No conflicts with adjacent residents and/or landowners are anticipated.

**10. Cover types.** Estimate the acreage of the site with each of the following cover types before and after development:

<u>Cover Type</u>	<u>Before (ac.)</u>	<u>After (ac.)</u>	<u>Cover Type</u>	<u>Before (ac.)</u>	<u>After (ac.)</u>
Types 1-8 wetlands	5.6	12.9	Lawn/landscaping	6.0	0.0
Wooded/forest	6.5	5.0	Impervious surfaces	1.7	5.2
Brush/Grassland	0.0	29.2	Stormwater Pond	0.0	0.0
Cropland	32.0	0.0	Other: Lake Surface	1.7	0.5
			Other: Bridge	0.0	0.1
<b>TOTAL</b>			<b>TOTAL (all cover types)</b>	<b>53.5</b>	<b>53.5</b>

If **Before** and **After** totals are not equal, explain why: N/A

**11. Fish, wildlife and ecologically sensitive resources –**

a. Identify fish and wildlife resources and habitats on or near the site and describe how they would be affected by the project. Describe any measures to be taken to minimize or avoid impacts.

**General Landscape Characteristics and Plant Communities:** The proposed project area is located within the Eastern Broadleaf Forest (EBF) Province, a large area extending through Minnesota and southward to parts of Arkansas and Tennessee and eastward into New York. In Minnesota, the EBF Province covers nearly 12 million acres (4.9 million hectares) of the central and southeastern parts of the state and serves as a transition, or ecotone, between semiarid portions of the state that were historically prairie and semi-humid mixed conifer-deciduous forests to the northeast. The western boundary demarcating the transition between prairie and forest/woodland habitats is sharply defined along much of its length in Minnesota. The EBF Province coincides roughly with the part of Minnesota where precipitation approximately equals

evapotranspiration; the climate's water balance influences numerous plants as many forest and several prairie species reach their range limits within the province.

Within the EBF Province is the Minnesota and Northeast Iowa Morainal Section (MIM), a long band of deciduous forest, woodland, and prairie stretching nearly 350 miles from Polk County in northwestern Minnesota to the Iowa border. The project location is within the Oak Savanna Subsection, an area of gently rolling hills found near the southern and western borders of the MIM section. Historically, bur oak savanna dominated this section but areas of tallgrass prairie and maple-basswood forest were also common. Fire was the most important disturbance force that maintained oak openings and prevented forested communities from establishing. The oak savanna and a mosaic of wetlands, shallow lakes, and creeks provided a diversity of habitat for wildlife to flourish. Although most of the landscape is farmed today, numerous state parks, wildlife management areas, and scientific and natural areas have been established within the subsection. The high intensity of agricultural practices employed in the region has led to wetland deterioration and loss, water quality concerns, and increased sediment loading in streams.

Natural communities in Myre-Big Island State Park include oak savanna, wetland, northern hardwood forest, grassland, and some restored prairie. Oak savanna is a prairie interspersed with widely spaced bur oak trees. Typical prairie grasses include big and little bluestem, side-oats grama, porcupine, Indian, and switch grasses. Broad-leaved flowering plants include lead plant, rattlesnake master, prairie clover, prairie smoke, bottle gentian, blazing star, black-eyed susan, and numerous milkweeds and coneflowers.

An isolated patch of northern hardwood forest is found on the park's Big Island. The configuration of Albert Lea Lake, which almost completely encircles the Big Island, protected it from fires that swept over the surrounding landscape during presettlement times. Typical trees of this forest include maple, basswood, ash, elm, ironwood, and red oak. Flowering plants include spring beauty, bloodroot, hepatica, Dutchman's breeches, wild ginger and trout lily.

The oak savanna habitats located near the park's entrance are in the process of being restored. The park's native vegetation will aptly serve as a seed source for the restoration proposed in the project area. Wetland and prairie plant communities once found throughout the park are also being restored. Wetlands provide habitat for migratory waterfowl. Park staff and the local community are striving to preserve the original park habitats by using controlled burning and seeding programs. Wetland rehabilitation is being done by removing old farm tiles, diking low areas, and installing water control structures.

**Fisheries:** Shell Rock River Watershed District (SRRWD) encompasses 246-square miles in Freeborn County. Albert Lea Lake (2,669 acres) is among the district's eleven lakes and is central to area's identity and tourism industry. Albert Lea Lake is shallow, averaging 3.5 feet in depth, and has poor transparency, limited to about one-foot on average over the past ten years. The poor transparency relates to the very high nutrient level, classified as hypereutrophic. All of the shoreline adjoining the park and some outside the park is protected with a wide buffer of perennial vegetation. Stable shoreline habitat is essential to fisheries production within the lake and is beneficial to other resident wildlife. Aquatic plants in nearshore areas and at the water's edge provide habitat, prevent erosion, and absorb nutrients.

The most abundant fish in the last surveys included yellow perch, walleye, northern pike, bluegills, black crappie and channel catfish. Other species included black bullhead, common carp, bigmouth buffalo, brook stickleback, central mudminnow, common shiner, fathead minnow,

highfin carpsucker, golden shiner, green sunfish, hybrid sunfish, Johnny darter, orangespotted sunfish, tadpole madtom, yellow bullhead, and white sucker. The lake has been stocked with walleye fry on nearly an annual basis. A fisheries status report for Albert Lea Lake is available for viewing on MDNR website or will be provided upon request.

Rough fishes tend to dominate the fish community but gamefish have increased over the last sixteen years, with an increasing occurrence of walleye, channel catfish, and black and white crappie. In recent years, the abundance of most rough fish, except bigmouth buffalo and white sucker, has declined. Selective fish kills have disproportionately impacted common carp within Fountain Lake and the Pickerel Lake tributary watershed. Gamefish have fared well because of the improved habitat stability resulting from aeration, incremental water quality improvements, and restocking efforts. Emergency aeration involved increasing water flow over the upstream Fountain Lake dam. The flowage allows increased opportunities for fish to migrate from Fountain Lake to Albert Lea Lake.

The environmental effects on the fisheries resources in Albert Lea Lake are expected to be minor and relative to size of habitat loss due to the proposed fill. Proposals to stabilize the shoreline with rip rap and additional conservation plantings above the water level are to be described in the engineering designs and the shoreline vegetation plan. The construction of the fill strip and temporary bypass will be of short duration to minimize environmental effects on spawning.

**Wildlife:** The prairie, hardwoods, and wetlands provide habitat for many animals, with the following known to inhabit the park environs. Numerous mammals, including white-tailed deer, raccoon, red and gray fox, muskrat, opossum, squirrels, and several bat species, reside in the park. A few snakes, namely the eastern and red-sided garter snakes, northern red-bellied snakes, and northern brown snakes, are also present. A variety of other reptiles and amphibians, including the leopard, western chorus, Cope's gray tree, and green frogs, western painted and snapping turtles, and eastern tiger salamanders reside in the park.

The park is a recognized birding spot of southern Minnesota, especially during the spring and fall migration periods. Birds of prey including the American kestrel, northern harrier, red-tailed hawk, rough-legged hawk, great horned owl, and bald eagle are regular visitors. Reports of wading birds include the common egret, great blue heron, American bittern, sora, and Virginia rail. Wood duck, mallard, blue-winged teal, and Canada goose are commonly seen birds. Songbirds include the indigo bunting, eastern bluebird, rose-breasted grosbeak, northern oriole, and eastern pewee.

A portion of the proposed trail segment and the proposed lake crossing is within the Albert Lea State Game Refuge (Figure 4). The refuge's principal function is to provide security for waterfowl during fall migration. Peak waterfowl use of the lake occurs in October and November prior to winter freeze-up. As a shallow lake, Albert Lea Lake has potential for significant wildlife use throughout the open water period. Its natural lake shores provide relatively undisturbed riparian habitats important to wildlife.

Avoiding all wildlife impacts is not possible due to the nature of the habitats, wide variety of species that utilize the area, and the possibility that construction would span all seasons. Wildlife effects would include loss of habitat and potential mortalities during construction. Slow moving species such as small mammals, turtles, amphibians, and fresh water mussels are most likely to suffer direct mortalities. Some indirect impacts including wildlife avoidance of otherwise suitable habitat along the trail corridor are anticipated, especially during construction. Some

aquatic species (e.g., green frogs, painted turtles) would be more able to move away from impacted areas during the warm water months than during their winter dormancy.

Most of the construction is timed for the summer and fall. Activities timed for the late summer season will avoid the peak breeding and nesting season for most species; early migrants generally have less restricted habitat availability than fall migrants. If limited construction occurs during the winter, impacts to most migratory wildlife and resident species would be minimal due to their absence from shallow nearshore areas during cold periods. Pre-construction mitigation techniques, such as fencing, to exclude or limit turtle nesting, and mowing, to limit the attractiveness of habitats along haul roads, staging areas, and construction areas, will be implemented to help avoid some of the direct wildlife effects. Additional avoidance and mitigation techniques will be considered in consultation with resource specialists. Erosion control measures such as silt fences and other measures will be implemented to prevent sedimentation from entering the lake.

**Species in Greatest Conservation Need (SGCN):** Species in Greatest Conservation Need are species identified as rare, declining, or vulnerable in Minnesota and their available habitats are declining in quality or extent. The Oak Savanna subsection contains at least 93 SGCN. Oak Savanna is one of the state's rarest wildlife habitats. The scattered trees in a grassy landscape are home to numerous wildlife, including: Swainson's hawks, red-headed woodpeckers, regal fritillaries, boblinks, northern harriers, and dickcissels. Sandhill cranes, wood turtles, Blanding's turtles, trumpeter swans, Ozark minnows and redbfin shiners are found in associated wetland and aquatic habitats. Important areas for SGCN include Sakatah, Myre-Big Island, Rice Lake and Nerstrand Big Woods state parks, and multiple Scientific and Natural Areas and state Wildlife Management Area designated throughout the subsection.

Species of greatest conservation need that are most likely to be impacted by the project include snapping turtles, bull snakes, greater yellow-legs, least bitterns, Virginia rails, northern harriers, marsh and sedge wrens, least flycatchers, brown thrashers, eastern meadowlarks, and dickscissels. Snakes, including bull snakes, may be especially vulnerable to adverse impacts due to their propensity to use blacktopped surfaces for basking, which increases the likelihood of potential encounters with people. Turtles in general are vulnerable to disturbance and collecting, especially during the nesting season. Trail grades that bisect wetlands are known to increase nest losses for marsh nesting wildlife. The proposed project will increase the amount of grassland, brushland and wetland habitat available to SGCN. After project completion, perennial vegetation will cover nearly 90 percent of the 53.5 acre project area.

**Invasive Species:** Recreational trail development and use can contribute to the spread of terrestrial invasive species, such as spotted knapweed (*Centaurea maculosa*). Freeborn County Environmental Services Office has identified a list of prohibited, restricted or specially regulated plants or noxious weeds that must be destroyed, eradicated or otherwise controlled to prevent them from spreading. This list includes: Wild Parsnip; Spotted Knapweed; Canada Thistle; Plumeless Thistle; Common or European Buckthorn; Poison Ivy; Narrowleaf Bittercress; Common Tansy; Leafy Spurge; Musk Thistle; Purple Loosetrife; Glossy Buckthorn; and Garlic Mustard.

The MDNR Operational Orders 113 provides guidance and directives applicable to agency staff and contractors for implementing site-level management to prevent or limit the introduction, establishment, spread, and treatment of invasive species. The MDNR Division of Parks and Trails

staff have guidelines prepared specifically for administering their lands and programs. Operational Order 59 provides guidance and governance for applying herbicides to all MDNR staff and contractors. All herbicide applications would need to comply with labeling, safety protocols, and precautions as prescribed. Pesticide applications must be preceded by a natural heritage information system (NHIS) database review to prevent endangered or threatened species or significant native plant communities from being harmed.

The MDNR guidelines to prevent or limit the introduction, establishment and spread of invasive species contain procedures applicable to the proposed project. Prevention measures would include such activities as: assessing the project area for the presence of invasive species prior to initiating work; treatment of invasive species before work begins; locating sources of weed-free materials; cleaning equipment before it arrives and departs; and re-vegetating disturbed areas as soon as possible. Prior to arrival at project sites, all equipment and clothing will be cleaned of exiting soil, aggregate material, mulch vegetation (including seeds), and animals. For equipment entering and leaving a water body, water must be drained from equipment, tanks, or water retaining components of boats, motors, live wells and bilge. After leaving the water body, transom wells need to be drained on dry land away from surface waters.

After construction, the trail right-of-way will be monitored for invasive species. Suitable control measures will be employed when invasive plants are encountered. Intrusive species, i.e., those growing through bituminous trail surfaces, will be controlled to prevent pavement breakup and maintain safe trail conditions. The MDNR guidance documents indicate a low to moderate risk level for the spread of invasive species along a paved trail. To minimize the potential of spreading invasive species, the newly constructed trail segments will be monitored during the first year after construction, and periodically thereafter, consistent with the management of other trail segments. A prescribed fescue mix, also known as a “no mow mix,” will be used on the gravel shoulders to reduce the opportunity for invasive species becoming established. Fescue grass can grow in the gravel without adding topsoil and does not require mowing. A reduction in mowing helps to reduce the risk of spreading seeds and viable plant fragments.

**b. Are any state-listed (endangered, threatened or special concern) species, rare plant communities or other sensitive ecological resources on or near the site?  Yes  No.** If yes, describe the resource and how it would be affected by the project. Describe any measures that will be taken to minimize or avoid adverse impacts. Provide the license agreement number (LA-\_\_\_\_) and/or Division of Ecological Resources contact number (**ERDB #20130293**) from which the data were obtained and attach the response letter from the DNR Division of Ecological Resources. Indicate if any additional survey work has been conducted within the site and describe the results.

The Minnesota Natural Heritage Information System (NHIS) database was reviewed to determine whether any rare, threatened, or endangered plant or animal species or other significant natural features are known to occur within or near the project area. This query identified one state-listed threatened species, a colonial waterbird nesting area and several rare plants within the state park. The Minnesota Biological Survey (MBS) identified a native plant community within the state park in the vicinity of the proposed project (Attachment A).

- Blanding’s turtles (*Emydoidea blandingii*), a state-listed threatened species, have been reported from the vicinity of the proposed project and may be encountered on site. State laws prohibit the destruction of threatened or endangered species, except under certain prescribed conditions. The MDNR fact sheet for Blanding’s turtles and recommendations for

construction sites and the wildlife-friendly erosion control brochures will be provided to all contractors working in the area. The project's BMPs for erosion control include use of wildlife friendly erosion control mesh. Silt fencing would be set up to keep turtles out of construction areas and removed promptly after areas are revegetated. The fences would be searched regularly at reasonable intervals to remove turtles and other vulnerable wildlife that may be caught by the fencing. If turtles are in imminent danger, they would be moved by hand out of harm's way. Vegetation management should use mechanical (mowing) rather than chemical treatments. Revegetation with native species provides better habitat for the turtles as non-native grasses form unfavorable dense growth. If riprap is used for stabilizing the new shore, a vegetation management plan would be developed for the shoreline.

- Rare plants and a colonial waterbird nesting area have been documented within Myre-Big Island State Park. However, given the nature and location of the proposed project, it will not negatively affect any known occurrences of these rare species.
- In 1980 the Minnesota Biological Survey (MBS) identified a Dry Sand – Gravel Oak Savanna within Myre-Big Island State Park, adjacent to the proposed project in T102N R20W Section 7. This type of native plant community has a conservation status rank of S1S2, indicating that it is imperiled to critically imperiled within Minnesota. The MBS considered this area for biodiversity significance, but it was determined to be below the minimum biodiversity threshold in part because the open areas of the site were dominated by non-native vegetation. Areas ranked 'Below' by MBS may have conservation value of local significance, as habitat for native plants and animals, corridors for animal movements, buffers surrounding higher quality natural areas, or as areas with high potential for restoration of native habitat.

12. **Physical impacts on water resources.** Will the project involve the physical or hydrologic alteration — dredging, filling, stream diversion, outfall structure, diking, and impoundment — of any surface waters such as a lake, pond, wetland, stream or drainage ditch?  Yes  No  
If yes, identify water resource affected and give the DNR Public Waters Inventory number(s) if the water resources affected are on the **PWI: 24001400**. Describe alternatives considered and proposed mitigation measures to minimize impacts.

Environmental effects on public waters and wetlands is categorized under three actions: the construction and filling (temporary and permanent) required to complete a crossing of Albert Lea Lake; the installation of a culvert to cross County Ditch Number 32 near Hayward, and the placement of the corridor affects several wetlands.

#### **The Albert Lee Lake Crossing:**

Description, Environmental Effects, and Mitigation: Albert Lea Lake is a large, shallow lake of 2,669 acres, with a maximum depth of 5.5 feet. The preliminary design for the trail segment crossing Albert Lea Lake is to place a combination of fill (52 x 1000 feet, 1.2 ac) and bridging (100 x 44 feet, 0.1 ac) along the southern side of the railroad line that runs eastward towards Austin. About three-fourths (835-feet) of the affected shoreline consists of rip rap structure supporting the railroad grade (Figures 4 and 7). If rip rap is used, the shoreline receiving the fill would shift an average of less than 52 feet. The average fill depth below the ordinary high water level (OHWL) would be about 2.5 feet. The fill strip will reach an elevation of four feet above the OHWL and support a 20-foot wide trail corridor. The preferred shoreline formation would have 3:1 side slopes, resulting in approximately 6,600 cubic yards of fill. When anchoring the shore with riprap, geotextile, granular borrow, etc., would be placed below the OHWL.

Two construction techniques to reduce the amount of permanent lake fill are under consideration at this time and will be fully vetted in preparation for the project's permitting phase. The first technique is to consider increasing the number and/or length of bridge structures for the crossing. Each additional foot of bridge span would reduce the permanent fill area by approximately 52 square feet (or 0.001 acres) in Albert Lea Lake.

The second technique being considered is the installation of a retaining wall along the length of the proposed fill strip. This option could reduce permanent fill by as much as 0.35 acres and a similar proportion of shoreline shift. Sheet pile would be driven into the lake bed and back filled, resulting in a vertical-walled shoreline. If sheet pile is used, a safety fence between the trail surface and the sheet pile would be necessary. Although sheet pile would reduce fill requirements, it creates an unfavorable shoreline for turtles of other species, is less attractive, and requires additional long term maintenance when compared to a sloped-shoreline structure. One of the drawbacks to sheet pile is lack of energy absorbing capacity. Waves hitting the pile bounce back with greater energy, when dispersed to nearby lake bottom and shorelines, causes increased resuspension of sediments and erosive action within the wave zone. During windy days, the crossing will be exposed to high energy waves due to a wide southern exposure to wind fetch.

About 0.3 acres of temporary fill would be placed in the lake bed to provide a support platform for equipment during the pedestrian bridge construction. Placed to the south of the proposed pedestrian bridge, the temporary fill platform would consist of earthen fill across three parallel metal culverts, sized to allow fish passage and sufficient water flow. Barge equipment was considered for use during construction but the lake is too shallow to support the equipment. The temporary bypass will be removed and the waterway opened for boat traffic after trail construction and pavement surfacing are completed. End section(s) of the temporary bypass, if left in place, could serve as rest areas for trail users and platforms for fishing or wildlife viewing.

Additional BMPs will be applied during construction of the proposed crossing. Two rings of floating silt curtain will be used to isolate and hold sediment during fill placement and trail construction. The floating silt curtain would be weighed along its bottom edge to secure the curtain to the lake bottom and anchored to uplands at each end. The installation would be timed to limit the potential of animal entrapment and mortalities. Public water work permits do not allow construction within the stream or lake bed from March 15th to June 15th.

Sheet pile would eliminate the opportunity to naturalize the constructed shoreline. The riprap would provide a better opportunity to incorporate native vegetation along the shoreline to improve aesthetics, wildlife habitat, and erosion control. Rip-rap would anchor the new shoreline and prevent shore erosion, but its usage also produces a shoreline environment generally unfavorable to turtles and other species. If rip rap is used, a vegetation plan would be developed to help naturalize and improve the shoreline. Logs, other woody debris, live stakes, and long-lived emergent aquatic plants, i.e., *Phragmites* and water lilies, could be incorporated into the shoreline. Establishing seasonally exposed sandbar areas for loafing and basking animals would also be considered, as long as the integrity of the trail is not compromised.

The DNR is scoping out options that could be applied as additional mitigation for the proposed lake fill. In collaboration with the City of Albert Lea, a plan is being considered to reconnect an area of Albert Lea Lake, which has been isolated from the lake for many years. Dikes were constructed many years ago to create settling basins for a processing plant that has since closed. The dikes support a pedestrian trail owned by the City of Albert Lea. By removing

approximately 500 feet of dike, one of the settling basins would be reconnected to the lake. Bridging would be installed to support the trail and establish a longer trail loop around the wetland basins. Under this scenario, approximately 0.3 acres of previous fill could be removed to reconnect approximately 23 acres of wetlands to the lake. Reconnecting the wetland is seen as a substantial benefit to help improve the lake's water quality. Other mitigation options may become evident during the process of environmental review and permitting.

All construction work proposed beneath the Ordinary High Water (OHW) level will be subject to regulation under the Work in Public Waters Permit, issued by the MDNR (Minnesota Statutes, section 103G.245 and Minnesota Rules, part 6115.0150); the Clean Water Act (CWA) Section 404 permit, issued by the U.S. Army Corps of Engineers (ACE), and the National Pollution Discharge Elimination System (NPDES) permit (CWA Section 401 Water Quality Certification) issued by the Minnesota Pollution Control Agency (MPCA). A MDNR report, "Best Practices for Meeting DNR General Public Waters Work Permit GP 2004-0001" provides substantial guidance to engineers for designing and implementing projects that affect public waters. A draft Storm Water Pollution Prevention Plan (SWPPP) has been prepared.

Other Alternatives Considered for Extending Trail Eastward past Albert Lea Lake: Several alternatives were explored prior to choosing a preferred Albert Lea Lake crossing located on the south side of the railroad. The purpose of the alternative analysis was to help position the trail to minimize environmental effects on wetlands and public waters and to reduce construction costs.

One of the alternatives had the trail route go north through Myre-Big Island State Park and around the north end of Albert Lea Lake, parallel County Highway (CH) 46, then southward. This route added at least 1.5 trail mile, resulted in impacts to high quality natural and cultural resources, incurred substantial wetland impacts, and required extensive (~660 feet) of permanent lake fill along CH 46. The corridor along CH 46 has detrimental features, including a narrow passageway, steep slopes, poor sight lines, and multiple private driveway crossings. Additional factors contributing to the decision not to pursue this route included: the inability to secure lands, a lack of support from highway engineers, reduced trail user safety, and overall cost concerns.

A second alternative had the trail go around the south end of the lake. It was quickly apparent that safety concerns and costs relating to crossing Interstate 35 rendered this option impractical.

A third alternative strongly considered was similar to the preferred route, but crossed Albert Lea Lake on the north side of the existing railroad grade. This route required a shorter crossing of public waters but would result in greater wetland impacts on the east side of the lake. It became clear that this corridor did not minimize environmental effects and proved unworkable, when land to the east of the lake was not available for trail construction.

A fourth alternative that was explored would construct a pier supported bridge on the same alignment as the preferred alternative for the entire length of the crossing (1,100 feet). This alternative proved cost prohibitive due to the locally unstable bottom sediments and the need for a temporary fill corridor to install the bridge piers. Although the fill strip would be temporary, the impacts due to filling during construction appeared similar to those of the preferred alternative.

Other minor variations to these alternatives were also explored, but eliminated from consideration due to multiple issues, such as land ownership, natural resource impacts, safety issues, or prohibitive costs. The proposed option will include further engineering and design improvements, including consideration of specific site conditions and refinements in development



and safety, while avoiding and minimizing impacts.

**County Ditch Number 32:** The proposed trail would cross a Freeborn County ditch (Ditch Number 32), within the city limits of Hayward. The crossing will require the installation of an aluminum box culvert, with 16 ft-10 in span by 8 ft-3 in rise dimensions and an open invert configuration, i.e., bottom-less culvert. This culvert is appropriately sized to ensure a natural stream bottom with some shoulder area for wildlife travel under low flow periods. This will help prevent the culvert from becoming a barrier to travel for aquatic and semi-aquatic life. The structure is being designed according to best management practices available to reduce stream disturbances and enable wildlife passage. Prior to installation, the DNR will coordinate with the Freeborn County drainage authority. Minor effects on the ditch channel are anticipated.

**Wetland Effects:** Up to 0.9 acres of wetlands would be filled or disturbed at three locations during construction of the trail (Figure 4). Where soils are prone to rutting, a portion of the unsuitable subgrade soils would be removed (subcut) and replaced with granular fill, such as Class 5 aggregate base material to harden the trail base layer.

Where wetland impacts are unavoidable, impacts would be minimized through careful siting and improved trail design. Bridging structures that reduce wetland fill requirements and provide some benefit to wildlife are being considered. The feasibility of bridging the wetlands located next to Albert Lea Lake will be evaluated during the design and permitting phases of the project. Using geo-grid to provide grade support and increasing the trail's side-slope ratio to 2:1 instead of 3:1 to reduce grade width are additional measures employed to reduce wetland impacts.

Impacts will be minimized and losses mitigated as required by the Wetlands Conservation Act (WCA). With the purchase of approximately 40 acres of land within the project area, wetland creation on old fields is being considered as potential mitigation, but scheduling could be problematic. If on-site mitigation and replacement is not possible, wetland credits will be purchased from the Board of Water and Soil Resources (BWSR) and U.S. Army Corps of Engineers (ACE) approved wetland bank. A Technical Evaluation Panel (TEP) will begin meeting in the fall of 2013 to coordinate sequencing for meeting requirements of the Wetland Conservation Act and Public Waters rules. The TEP will include representatives from MDNR, the Freeborn Soil and Water Conservation District (SWCD), and the Board of Water and Soil Resources (BWSR). The meetings will also include representatives from ACE, and Shell Rock Watershed District. The TEP will assist with determining wetland and public waters mitigation opportunities and requirements. MDNR will also continue to coordinate with ACE regarding the Clean Water Act Section 404 permitting process.

13. **Water use.** Will the project involve installation or abandonment of any water wells, connection to or changes in any public water supply or appropriation of any ground or surface water (including dewatering)?  X  Yes   No

No temporary dewatering wells are anticipated for constructing the trail or the crossing. Temporary cofferdams and dewatering may be needed for constructing submerged footings of the concrete bridge abutments. Typically in order to pour the concrete, vertical steel cylinders are placed where the abutments need to be constructed and the water within the cylinders is emptied. Sometimes the cylinders are later removed and sometimes they become part of the structure. It may be advantageous for the concrete footings to be submerged or flooded once the concrete is hardened.

If construction dewatering is employed, the dewatering volume would be small and fall under the general permit guidelines. To be included under General Permit 1997-0005 the project must meet the following criteria: have a minimal potential for causing adverse environmental impacts; water appropriations cannot exceed 50 million gallons per year; water appropriations must be completed within one year from the start of pumping; the area hydrologist must be notified at least five days prior to the start of pumping; and water volumes must be measured and reported upon project completion, with charges levied if volume exceeds 15 million gallons, among others.

Discharge points must be adequately protected from erosion and scour with approved energy dissipation and sedimentation control measures employed. The temporary dewatering will be discharged to an approved location for settling treatment prior to discharging into the receiving waters in accordance with best management practices. Prior to dewatering, the contractor will be required to submit a site specific plan to the MDNR project engineer to describe the proposed process and equipment used.

14. **Water-related land use management district.** Does any part of the project involve a shoreland zoning district, a delineated 100-year flood plain, or a state or federally designated wild or scenic river land use district?  Yes  No

Since part of the project is located in a Special Protection Zone of Albert Lea Lake, a Conditional Use Permit (CUP) is likely required. MDNR will coordinate with Freeborn County, the local governmental unit that administers the CUP. The MDNR will continue to coordinate with the City of Albert Lea, Freeborn County, ACE, and Shell Rock River Watershed District during project review and would apply for any other approvals, if necessary.

The project is not located within a delineated 100-year flood plain, or a state or federally wild or scenic river land use district.

15. **Water surface use.** Will the project change the number or type of watercraft on any water body?  Yes  No

If yes, indicate the current and projected watercraft usage and discuss any potential overcrowding or conflicts with other uses.

Several lakeshore residents are located along the shores of the northeast bay. During bridge construction, these residents will not have watercraft access through the channel to the rest of the lake south of the railroad bridge. The channel will be closed for a period of up to two construction seasons, from June 16, 2014 through November 2015.

The existing timber supported railroad bridge has relatively low vertical and narrow width clearances. The trail bridge structure will not further restrict or cause other changes in watercraft usage on Albert Lea Lake. Public water accesses on Albert Lea Lake will not be affected.

Three public water accesses are located on the lake. Two are owned and operated by the MDNR – one at Myre-Big Island State Park and one at Albert Lea, on the south side of the lake near St. Nicholas County Park. The city owned public access is located in Albert Lea's Frank Hall Park, near the lake's inlet on the northwest side of the lake, and managed under a MDNR agreement.

16. **Erosion and sedimentation.** Give the acreage to be graded or excavated and the cubic yards of soil to be moved: **acres: 9.8; cubic yards: 28,000.** Describe any steep slopes or highly erodible soils and identify them on the site map. Describe any erosion and sedimentation control measures to be used

during and after project construction.

Occasionally steeper slopes affect the corridor, including hills along the eastern edge of lake. The trail grades will not exceed five percent, to fulfill a requirement for achieving ADA guidelines.

The contractor will install the temporary erosion prevention and sediment control BMP's prior to construction to minimize erosion from disturbed surfaces and capture sediment on site. The contractor will install sediment controls for construction entrances to prevent tracking soils and organic materials from the project site onto paved surfaces. Prior to clearing and grading, perimeter control measures (silt fence) will be installed and maintained until vegetation is re-established. All exposed soils will be stabilized by temporary seeding, blanketing, or mulching as soon as possible to limit soil erosion. Soil stock piles will be temporarily stabilized in a similar fashion. The shoulder slopes of upland trail segments would be configured with a slope ratio of 3 (horizontal):1 (vertical). In the event that slopes greater than a 3:1 are created, the disturbance zone will be stabilized by installing erosion control blankets. Additional BMPs for erosion control include use of wildlife friendly erosion control mesh; stabilizing pipes and ditches within 24 hours of installation; and riprapping culvert inlets and outlets. Typically sloped ditch bottoms will be lined with erosion control blankets.

The contractor will be required to record rainfall amounts and inspection/maintenance activity. The contractor will inspect all erosion control facilities weekly or within 24 hours following a storm event greater than 0.5 inches. All installations will be maintained to ensure their satisfactory performance. Sediment from bale barriers, silt fences, ditch checks, and storm water filter logs will be removed when sediment reaches 1/3 of the height of the device and the area will be reshaped. During construction, the lake and drainage ditches will be inspected for erosion and deposition. The removal of sediment and stabilization of eroded areas shall take place within seven days of discovery, unless precluded by legal, regulatory, or physical access constraints, or as otherwise stated in the requirements of the National Pollution Discharge Elimination System (NPDES) general construction storm water permit. Adjacent paved streets will be scraped clean daily and swept clean weekly. Additional details are included in the draft Storm Water Pollution Prevention Plan (SWPPP). Once the MDNR project engineer has determine the site to be stabilized and vegetation is established, the contractor will be allowed to remove the temporary erosion control measures. The MDNR Division of Parks and Trails will be responsible for the long term operation and maintenance of the permanent erosion control installations.

#### **17. Water quality: surface water runoff**

- a. Compare the quantity and quality of site runoff before and after the project. Describe permanent controls to manage or treat runoff. Describe any stormwater pollution prevention plans.

The amount of runoff from the newly created treadway will increase slightly from current conditions. The impervious surface area will be dispersed over long distances, anticipated to increase an average of 1.5 acres per mile of new trail. Perennial vegetation, in the form of wetland, woodland, or brush/grassland, will cover nearly 90 percent of the 53.5 acre project area after project completion. Perennial vegetation has outstanding soil protection and erosion control capabilities. A near-continuous border of vegetation adjacent the trail will slow runoff and improve infiltration of runoff originating from the paved treadway surface.

Silt fences will be in place during construction and for an additional year after construction to limit erosion and runoff from the newly graded surfaces that drain directly to the lake, streams, or

ditches. Silt fences would remain in place until vegetation has been established along the shoulders and all disturbed areas. Bio-logs may also be used for additional silt control and mulch will likely be used along sloping areas. Slight alterations in trail side slopes and ditches will help to drain runoff away from the trail towards infiltration areas. Erosion control and sediment control BMPs shall be installed as necessary to minimize erosion from disturbed surfaces and capture sediment on site, and shall meet MPCA's NPDES General Construction Storm Water Permit requirements. Invasive species prevention and concrete washout and fuel or chemical tank protocols are also included in the SWPPP.

b. Identify routes and receiving water bodies for runoff from the site; include major downstream water bodies as well as the immediate receiving waters. Estimate impact runoff on the quality of receiving waters.

Proposed project is located within the Shell Rock River Major Watershed, which includes Albert Lea Lake and Minor Watersheds. The project also crosses a perennial Ditch No. 32 that flows into Peter Lund Creek, just west of Hayward. Across the Iowa – Minnesota border, the waters of the Shell Rock River and the Iowa River joins the Cedar River which then flows into the Mississippi River above Burlington, Iowa, several hundred miles distant from Albert Lea Lake. Albert Lea Lake is the primary immediate receiving water body.

The federal Clean Water Act requires states to adopt water quality standards to protect lakes, streams, and wetlands from pollution. The standards define how much of a pollutant (bacteria, nutrients, turbidity, mercury, etc.) can be in the water and still meet designated uses, such as drinking water, fishing, and swimming. A water body is “impaired” if it fails to meet one or more water quality standards. Federal and state regulations and programs require implementation of restoration measures to meet the total maximum daily loads (TMDLs) that have been identified for the impaired waters of the District.

The DNR's 2011 Shell Rock River watershed health assessment provides an overview of the watershed's ecological health. The ranking indicates that the surface water quality of the watershed is low principally due to stresses related to non-point source pollutants and the limited perennial vegetation cover found in the watershed. The segment of Shell Rock River extending from Albert Lea Lake to Goose Creek (~12.12 miles), is impaired for turbidity, pH, and fecal coliforms. These impairments affect aquatic life and aquatic recreation. According to the MPCA Shell Rock River Watershed Monitoring and Assessment Report of 2012, Albert Lea Lake, classified as a Recreational Development Lake, was added to the list of impaired waters in 2008 for impaired aquatic recreation due to excess nutrients and its current assessment data support the 2008 listing. Other lakes upstream of Albert Lea Lake were also listed due to excess nutrients in 2008 (Pickeral Lake and the North, East, and West Bays of Fountain Lake). White Lake was assessed as impaired for aquatic recreation during the 2012 assessment cycle. The Shell Rock River TMDL project adjoins the Cedar River Major Watershed TMDL project, which has an area that extends several hundred miles into Iowa. The total phosphorus and chlorophyll-a samples reviewed were well over the Western Corn Belt Plains region's shallow lake standards. External loading of phosphorus occurs when dissolved phosphorus enters the drainage network and moves to downstream lakes. In addition to these external watershed inputs of phosphorus, shallow lakes can also experience internal loading. The phosphorus is released from the sediment when lake bottom conditions become anoxic (devoid of oxygen). Rough fish can also stir up the bottom sediments and release phosphorus that fuel algal blooms. With these stressors present, the lake water quality of the area is modest to poor. Nutrient eutrophication is common across the

watershed. The 2012 MPCA assessment also reported that the stream habitat of Peter Lund Creek and County Ditch 32 was poor, based on adjacent land use, riparian zone, substrate, fish cover, and channel morphology.

With additional perennial vegetation acreage planned for the project area, erosion and sedimentation should be notably lower. A temporary increase in the level of nutrients and sediments entering surface waters could locally occur over the short term, but important long term reductions are possible as perennial vegetation is established over ninety percent of the project area. The proposed project will have minor impacts to Albert Lea Lake and is not likely to affect the Shell Rock River below the Albert Lea Lake dam.

#### **18. Water quality: wastewaters**

- a. Describe sources, composition and quantities of all sanitary, municipal and industrial wastewater produced or treated at the site. N/A
- b. Describe waste treatment methods or pollution prevention efforts and give estimates of composition after treatment. Identify receiving waters, including major downstream water bodies (identifying any impaired waters), and estimate the discharge impact on the quality of receiving waters. If the project involves on-site sewage systems, discuss the suitability of site conditions for such systems. N/A
- c. If wastes will be discharged into a publicly owned treatment facility, identify the facility, describe any pretreatment provisions and discuss the facility's ability to handle the volume and composition of wastes, identifying any improvements necessary. N/A

#### **19. Geologic hazards and soil conditions**

- a. Approximate depth (in feet) to ground water: 0 minimum, >6 average; to bedrock: >60 minimum; >60 average.

Describe any of the following geologic site hazards to ground water and also identify them on the site map: sinkholes, shallow limestone formations or karst conditions. Describe measures to avoid or minimize environmental problems due to any of these hazards.

The rolling hills, shallow lakes, and marshes of Myre-Big Island State Park were formed as the last major glacier retreated from Minnesota over 10,000 years ago. The glacial features found within the park include moraines, an ice block lake, and an esker. Moraines are made up of irregular deposits of unsorted sand, gravel, and other rock debris left by retreating glaciers. Big Island is located within the Bemis Moraine, a moraine complex that can be traced across the state. A huge block of ice was deposited behind the Bemis Moraine. As the glacier retreated the ice melted to form Albert Lea Lake. Today, the lake has a surface area of about 2,600 acres and over 20 miles of shoreline. An esker is located at the north end of Myre-Big Island State Park, where a natural-surfaced hiking trail is available to allow exploration of the esker.)

No sinkholes, shallow limestone formations, or karst conditions have been identified in the project area.

- b. Describe the soils on the site, giving NRCS (SCS) classifications, if known. Discuss soil texture and potential for groundwater contamination from wastes or chemicals spread or spilled onto the soils. Discuss any mitigation measures to prevent such contamination.

Soils of Freeborn County are mostly deep and loamy. They formed mostly in glacial till and less extensively in glacial outwash, lacustrine sediments, alluvium, and organic material. The different parent materials, topography, and native vegetation account for a large number of soils in the county. The soil survey of Freeborn County was used as a guide for trail design and planning. If low load bearing (strength) materials are encountered during construction, the materials are usually subcut and either breaker run (cobble and large gravel fragments), granular borrow, and/or geo textile can be added to stabilize and strengthen the subgrade (Table 1 and Figure 5).

**Table 1: Blazing Star State Trail - Myre-Big Island State Park to Hayward Project Area - List of Soil Map Units (USDA, NRCS).**

Map Unit Symbol	Soil Type	Slope	Recreational Development Limitations – Paths and Trails
62	Barrington silt loam	1-3%	Slight
102B	Clarion loam	2-6%	Slight
104D	Hayden loam	12-18%	Moderate – slope
106B	Lester loam	2-6%	Slight
106C2	Lester loam	6-12%, eroded	Slight
114	Glencoe clay loam		Severe, wetness
129	Cylinder loam		Slight
130	Nicollet clay loam	1-3%	Moderate – too clayey
136	Madelia silty clay loam		Moderate – wetness, too clayey
156B	Fairhaven loam	2-6%	Slight
253	Maxcreek silty clay loam		Moderate – wetness, too clayey
259B	Grays silt loam	1-6%	Slight
376B	Moland silt loam	2-6%	Slight
377	Merton silt loam	1-3%	Slight
1033	Udipsammments		-
1055	Aquents and Histosols, ponded		-
Source: Soil Survey of Freeborn County, Minnesota. USDA, Soil Conservation Service in cooperation with the Minnesota Agricultural Experiment Station. 1980.			

**20. Solid wastes, hazardous wastes, storage tanks**

a. Describe types, amounts and compositions of solid or hazardous wastes, including solid animal manure, sludge and ash, produced during construction and operation. Identify method and location of disposal. For projects generating municipal solid waste, indicate if there is a source separation plan; describe how the project will be modified for recycling. If hazardous waste is generated, indicate if there is a hazardous waste minimization plan and routine hazardous waste reduction assessments.

N/A - No hazardous will be generated by the proposed trail project.

b. Identify any toxic or hazardous materials to be used or present at the site and identify measures to be used to prevent them from contaminating groundwater. If the use of toxic or hazardous materials will lead to a regulated waste, discharge or emission, discuss any alternatives considered to minimize or eliminate the waste, discharge or emission. N/A

c. Indicate the number, location, size and use of any above or below ground tanks to store petroleum products or other materials, except water. Describe any emergency response containment plans. N/A

21. **Traffic.** Parking spaces added: 0

Existing spaces (if project involves expansion):

Estimated total average daily traffic generated: 0

Estimated maximum peak hour traffic generated and time of occurrence: 0

Indicate source of trip generation rates used in the estimates.

Traffic within the project area is expected to be similar to pre-existing levels.

Existing parking for about 36 or more vehicles, located at the Frank Hall Park entrance on the northwest side of Albert Lea Lake, may be used by pedestrian and trail riders for accessing the trail. "The Landing," located near Frank Hall Park, also has a graveled parking area for about a dozen vehicles. Informal parking is available at the city park in Hayward, which serves as the trailhead at the eastern terminus of proposed trail segment. Discussions are ongoing between the MDNR and the city of Hayward to consider improving the existing area to establish a designated parking area for the park and trail.

*If the peak hour traffic generated exceeds 250 vehicles or the total daily trips exceeds 2,500, a traffic impact study must be prepared as part of the EAW. Using the format and procedures described in the Minnesota Department of Transportation's Traffic Impact Study Guidance (available at: <http://www.oim.dot.state.mn.us/access/pdfs/Chapter%205.pdf>) or a similar local guidance, provide an estimate of the impact on traffic congestion on affected roads and describe any traffic improvements necessary. The analysis must discuss the project's impact on the regional transportation system.*

22. **Vehicle-related air emissions.** Estimate the effect of the project's traffic generation on air quality, including carbon monoxide levels. Discuss the effect of traffic improvements or other mitigation measures on air quality impacts.

Construction-related vehicle emissions will be minor and temporary in nature, arising from the use of equipment for trail and bridge construction and installation of culverts. Diesel fuel exhaust emissions contain pollutants including carbon monoxide, nitrogen oxides, reactive organic gases, sulfur dioxide, and suspended particulate matter, all of which carry some associated health risks.

23. **Stationary source air emissions.** Describe the type, sources, quantities and compositions of any emissions from stationary sources of air emissions such as boilers, exhaust stacks or fugitive dust sources. Include any hazardous air pollutants (consult *EAW Guidelines* for a listing) and any greenhouse gases (such as carbon dioxide, methane, nitrous oxide) and ozone-depleting chemicals (chloro-fluorocarbons, hydrofluorocarbons, perfluorocarbons or sulfur hexafluoride). Also describe any proposed pollution prevention techniques and proposed air pollution control devices. Describe the impacts on air quality. N/A

24. **Odors, noise and dust.** Will the project generate odors, noise or dust during construction or during operation?  Yes  No

If yes, describe sources, characteristics, duration, quantities or intensity and any proposed measures to mitigate adverse impacts. Also identify locations of nearby sensitive receptors and estimate impacts on them. Discuss potential impacts on human health or quality of life. (Note: fugitive dust generated by operations may be discussed at item 23 instead of here.)

The proposed project will create some temporary odors, dust, and noise during construction activities.

A few of the nearest residences that range in distance from about 150-feet to 500-feet may experience increased noise levels. Some lakeshore owners on Albert Lea Lake, particularly along the northeastern bay, may experience increased noise levels, such as during the construction of the bridge crossing. Noise from construction activities will occur during grade/treadway preparations, fill placement, bridge construction, culvert installation (ditch near Hayward), subgrade preparation along entire new corridor, paving operations, and associated trucking of materials and equipment. Construction activities will occur during normal daylight hours. Operation of diesel tractors and medium sized trucks would be the main source of construction noise. Noise would be controlled by ensuring standard noise arrestors (mufflers) are properly installed on construction vehicles. Minor odors will be generated during trail construction. Some fugitive dust will be generated during construction when top soils are dry. Measures, such as watering, will be implemented during grade preparations to limit the generation of fugitive dust.

25. **Nearby resources.** Are any of the following resources on or in proximity to the site?

Archaeological, historical or architectural resources?  Yes  No

Prime or unique farmlands or land within an agricultural preserve?  Yes  No

Designated parks, recreation areas or trails?  Yes  No

Scenic views and vistas?  Yes  No

Other unique resources?  Yes  No

If yes, describe the resource and identify any project-related impacts on the resource. Describe any measures to minimize or avoid adverse impacts.

#### **Archaeological, historical or architectural resources (Attachment B)**

- Long before European settlers arrived, seasonal – and possibly year-round – villages were numerous around area lakes, including Albert Lea Lake. Evidence of human occupation of the area dates back over 9,000 years, and encompasses all four identified cultural periods – Paleo, Archaic, Woodland, and Mississippian. Most of this evidence comes in the form of artifacts, including projectile points, axes, other hand-worked stone tools and pieces of pottery. The level of human occupation covers thousands of years and leads archaeologists to believe that this area was rich in natural resources such as wild game and harvestable wild food plants.
  - Over 30 archaeological sites have been identified within the Myre-Big Island State Park boundary.
  - Artifacts uncovered near Albert Lea Lake included projectile points, chipped stone scrapers, and flakes discarded during stone tool manufacture. Evidence of habitation included fire-cracked rock and pottery. The site was occupied many times between 4,000 and 1,500 years ago.
  - An archaeological investigation has been completed for the trail segment from Albert Lea through Myre-Big Island State Park.
  - Known archaeological sites within the park and along Albert Lea Lake shoreline that cannot be avoided will be mitigated. Mitigation may include constructing the trail on fill placed over the archaeological site. Mitigation will be coordinated with the State Historic Preservation Office (SHPO).
  - Another archaeological site has been identified within the trail corridor on the east shore of Albert Lea Lake. If there is no alternative to avoid this site, a mitigation plan will be developed in coordination with SHPO.
- **Chicago Milwaukee St. Paul and Pacific Depot** – Listed on the National Register of Historic Places for Albert Lea.
- The Southern Minnesota Railroad / Chicago, Milwaukee & St. Paul Railway / Chicago,



Milwaukee, St. Paul & Pacific Railway / Soo Line railroad corridor has statewide significance in the areas of transportation, agriculture, industry, and commerce. It was one of the state's earliest railroads and had an immediate impact upon the growth and settlement of the towns it connected. The completion contributed to increased building and settlement along the corridor and enabled expanded commerce to larger markets eastward. The corridor is recommended eligible for listing in the National Register of Historic Places under Criterion A as a railroad corridor historic district.

- **Historic sites/buildings located in City of Albert Lea (multiple)** – none affected.

#### **Prime or unique farmlands**

The Natural Resource Conservation Service (NRCS) Farmland classification identifies soil units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. Several soils within the project area are classified as: prime farmland, prime farmland if drained, and farmland of statewide importance. The prime farmlands in the project area would be converted to native prairie or wetland vegetation and a small acreage to bituminous trail development.

#### **Designated parks, recreation areas or trails**

**Myre-Big Island State Park**– located three miles southeast of Albert Lea, on County Highway 38. Myre-Big Island State Park affords the opportunity to experience a diversity of natural environments including wetlands, oak savanna, big woods and prairie. The park is considered one of several good birding spots in southern Minnesota, especially during spring and fall migration. The proposed project begins within the boundary of the state park, at the current terminus of the developed Blazing Star State Trail. The trail provides a vantage point that overlooks a portion of Albert Lea Lake. Construction equipment will use a minimum maintenance road and existing park roads, and a portion of the existing Blazing Star State Trail to access the project area to avoid and minimize impacts to park resources. During construction, a few trails within the park will be closed to visitors for safety considerations.

**City of Albert Lea** operates 41 parks and recreational areas, offering a wide variety of recreational and leisure facilities, including neighborhood park playfields, playground equipment, basketball and tennis courts, fishing areas, natural open spaces, picnic areas and shelters, softball and baseball fields, swimming pool civic theatre, senior center and an ice arena. The trailhead of the Blazing Star State Trail is located at Frank Hall City Park, at the northwest end of Albert Lea Lake. (Frank Hall Park is green space overlooking the channel to Albert Lea Lake, and includes an aquatic center, tennis courts and basketball courts, parking, restrooms, picnic sites, water, a public boat access, boat dock, and fishing pier; its total area is 11.8 acres.) Local recreational trails intersect the Blazing Star State Trail within the city limits of Albert Lea.

City of Hayward operates the local park where the proposed trail route will terminate. This city park provides open space for the community and includes vault toilets, a picnic shelter, playground equipment and ball fields. Some of the more recent improvements at the park were made in anticipation of the state trail connection. MDNR is coordinating with the City of Hayward to consider a trail connection to the 'downtown' area, as well as the future route of the Blazing Star State Trail toward Austin.

26. **Visual impacts.** Will the project create adverse visual impacts during construction or operation? Such as glare from intense lights, lights visible in wilderness areas and large visible plumes from cooling

towers or exhaust stacks? Yes  No  
If yes, explain.

Trail and bridge construction activities will be visible from within Myre-Big Island State Park. The new bridge will be constructed parallel and adjacent to the existing railroad bridge. Operation of the trail will not create an adverse effect or new visual impact. No lights are proposed for the trail or the bridge.

27. **Compatibility with plans and land use regulations.** Is the project subject to an adopted local comprehensive plan, land use plan or regulation, or other applicable land use, water, or resource management plan of a local, regional, state or federal agency?  Yes  No.  
If yes, describe the plan, discuss its compatibility with the project and explain how any conflicts will be resolved. If no, explain.

In June 2003, MDNR approved the "Blazing Star State Trail Master Plan." This plan provides a description of the proposed segment and includes the option of the trail crossing Albert Lea Lake and connecting to Hayward, with a trail head located at Hayward City Park. The proposed project is compatible with this plan and an amendment to the plan is not needed.

Approved in 1979, the Helmer Myre-Big Island State Park Management Plan includes recommendations for recreational trails within the park, particularly for hiking, biking, cross-country skiing, and snowmobiling. The plan also recommends providing bicycle access from the city of Albert Lea to the park. The Blazing Star State Trail accomplishes this opportunity, and will now expand upon this opportunity by extending the trail eastward. The proposed project is compatible with this plan and current park management goals and an amendment to the management plan is not needed for the proposed trail extension.

The surrounding land use is public recreational and agricultural. The proposed project is compatible with adjacent land uses and is supported by the local communities and land administrators. Lands within the project area are largely zoned as an Agricultural District, where park or recreational areas that are operated by a governmental agency, are permitted uses (Freeborn County Ordinance No 15, Article No. 6).

28. **Impact on infrastructure and public services.** Will new or expanded utilities, roads, other infrastructure or public services be required to serve the project? Yes  No.  
If yes, describe the new or additional infrastructure or services needed. (Note: any infrastructure that is a connected action with respect to the project must be assessed in the EAW; see *EAW Guidelines* for details.)

The proposed trail project intersects two public roads: Underland Road (T-290) and County State Aid Highway (CSAH) 26 (810<sup>th</sup> Avenue) in Hayward. A substation and overhead electric lines are in proximity to the proposed trail corridor. No new public services will be needed.

29. **Cumulative potential effects.** Minnesota Rule part 4410.1700, subpart 7, item B requires that the RGU consider the "cumulative potential effects of related or anticipated future projects" when determining the need for an environmental impact statement.

Identify any past, present or reasonably foreseeable future projects that may interact with the project described in this EAW in such a way as to cause cumulative potential effects. (Such future projects would be those that are actually planned or for which a basis of expectation has been laid.)

Describe the nature of the cumulative potential effects and summarize any other available information

relevant to determining whether there is potential for significant environmental effects due to these cumulative effects (*or discuss each cumulative potential effect under appropriate item(s) elsewhere on this form*).

The surrounding landscape of the proposed Blazing Star State Trail expansion project is zoned as an Agriculture District of Freeborn County. The rural setting is isolated from residential areas and has few nearby homesteads. The project is compatible with nearby land uses. Setbacks to the railroad and power company corridors will be honored to assure relevant safety standards are met. The project area provides solitude that enhances recreational opportunities along the trail. The area normally experiences minor instances of noise from agricultural implements or passing trains. Only minor traffic would be experienced at a few rural roadway crossings. The trail extension will provide additional recreational opportunities in a part of the state dominated by agricultural land uses.

The environmental effects of the proposed project would include about 0.9 acre of wetland disturbances and 1.2 acres of fill in Albert Lea Lake to enable a direct and feasible trail route between Albert Lea and Hayward, both legislatively authorized trail stops. A small acreage of prime farmlands will be converted to perennial vegetation. Benefits resultant from land conservation will occur, with about ninety percent of the project area proposed to be vegetated with perennial vegetation, including wetland, woodland, or brush/grassland cover types. Improved habitat and cover will be locally available to wildlife species. Although increased sedimentation may be a result during construction, the project could help improve water quality of Albert Lea Lake over the long term by locally increasing perennial vegetation acreage within watersheds that empty into the lake, i.e., Peter Lund Creek and County Ditch 32. The MPCA regarded the stream habitat of both drainages to be in poor quality, based on the conditions of the adjacent land use, riparian zone, stream channel substrate, amount of fish cover, and channel morphology.

The potential environmental effects related to this project could combine with environmental effects from other past, present, or reasonably foreseeable future projects for which a basis of expectation has been laid. The project's stormwater runoff, sedimentation, and loss of wetlands and public waters could locally contribute to cumulative potential environmental effects from other construction projects and surface water management activities proposed for the upper Shell Rock River watershed (above Albert Lea Lake dam). Nutrient eutrophication is common across the watershed. Water quality of the area lakes is modest to poor.

The Shell Rock River Watershed District (the District) has implemented and is proposing a variety of small and large scale projects to improve water quality across the upper watershed. Some of the earlier work focused on Mud and Pickeral Lakes, where the MDNR and others implemented a reclamation project to control common carp and raise game fish. The District also implemented improvements such as storm water retention systems to slow down and filter rainwater. Substantial improvements in the lakes' water quality were noted.

A variety of other projects include controlling aquatic invasive species (mostly common carp), wetland creation, vegetative cover management, ditch and creek bank stabilization, rock filter inlets, site specific stormwater management, sewer system upgrades, and non-point source erosion controls when opportunities arise. A Conservation Partners Legacy 2013 Grant has funded restoration of Goose Lake, just north of the City of Albert Lea. A fish barrier and rotenone treatment to remove rough fish is slated for completion in 2015. Also, hydraulic

dredging is proposed on Fountain and Albert Lea lakes to remove phosphorus laden sediments.

Several remediation projects would affect public waters and wetlands in the vicinity of the proposed project. Albert Lea Lake Management and Invasive Species Control Project, sponsored by the District would replace the fixed-crest dam with a rock-arch rapids water-level control feature. The existing outlet structure and access bridge for Albert Lea Lake was installed in 1922 and is now in need of repair. The project would construct a lake-level management structure and an electric fish barrier. The barrier would prevent carp and other bottom-feeding and bottom-rutting fish from entering the lake, including invasive species that are absent from the lake but occur in the lower reaches of the river system. This project is expected to result in improved aquatic habitat, improve waterfowl nesting, breeding and feeding habitat, increase desirable fish populations, and improve water quality and clarity. The project has received funding from the Lessard Sams Outdoor Heritage Council and its construction scheduling has moved forward, with anticipated project completion by August 2015. A similar project sponsored by the US Army Corps of Engineers, called the Freeborn County Restoration Project, has projections to: create 120 acres of wetlands within the Shell Rock River watershed; establish deepwater habitat within Albert Lea Lake for overwintering fish; enhance the entire lake through reduced water level fluctuations, sedimentation, and turbidity; and improve conditions in Fountain Lake and the Shell Rock River by reducing sediment inputs from the watershed.

The MPCA is in the process of launching Shell Rock River TMDL projects, which define additional strategies for improving water quality. Besides meeting the TMDL goals to reduce nutrient levels and improve aquatic recreation, other improvements would include improving water clarity, strength of bottom sediments, and presence of aquatic vegetation and native fish. Based on recent improvements in Pickeral Lake, the long term effects should enable the District lakes meet standards applied to shallow lakes of the Western Corn Belt Ecoregion.

Several local and state road improvement projects near Albert Lea Lake would potentially contribute minor sedimentation to local surface waters, such as the following. A 2014 project is proposed to place bituminous mill and overlay on US Highway 69 from IA/MN state line to Trunk 13 (12.5 miles). Two highway projects are slated for FY2015: one to place unbounded concrete overlay on I-35 north of I-90 (13.7 mi.) and the other to place bituminous overlay and mill and fill on US Highway 65 from 0.5 mi. south of I-35 to Trunk Highway 13 (7.1 miles). No other active or proposed projects are known to for the vicinity at this time.

It is anticipated that the relative increment of sedimentation and turbidity imposed on the lake by the proposed project is minor in comparison to other point and non-point sources of pollution in the local watershed. With the addition of perennial vegetation acreage after trail completion, erosion and sedimentation should be notably lower, especially along segments that pass through cultivated lands. The cumulative effects of construction and water management activities and the proposed Blazing Star State Trail expansion projects should be limited in extent and duration. A temporary increase in the level of nutrients and sediments entering surface waters could locally occur over the short term, but sizable long term reductions are possible as perennial vegetation is reestablished and other watershed management projects come to fruition. Permitting requirements are established to promote appropriate mitigation to limit the environmental effects of stormwater runoff, sedimentation, and loss of wetlands and public waters.

30. **Other potential environmental impacts.** If the project may cause any adverse environmental impacts not addressed by items 1 to 28, identify and discuss them here, along with any proposed mitigation.

No other potential environmental impacts have been identified; all known or anticipated environmental impacts have been addressed above, in Items 1 – 28.

31. **Summary of issues.** *Do not complete this section if the EAW is being done for EIS scoping; instead, address relevant issues in the draft Scoping Decision document, which must accompany the EAW.*

List any impacts and issues identified above that may require further investigation before the project is begun. Discuss any alternatives or mitigative measures that have been or may be considered for these impacts and issues, including those that have been or may be ordered as permit conditions.

No additional issues have been identified that require further investigation before this project can begin.

**RGU CERTIFICATION.** *(The Environmental Quality Board will only accept **SIGNED** Environmental Assessment Worksheets for public notice in the EQB Monitor.)*

**I hereby certify that:**

- The information contained in this document is accurate and complete to the best of my knowledge.
- The EAW describes the complete project; there are no other projects, stages or components other than those described in this document, which are related to the project as connected actions or phased actions, as defined at Minnesota Rules, parts 4410.0200, subparts 9b and 60, respectively.
- Copies of this EAW are being sent to the entire EQB distribution list.

Signature

Date: December 16, 2013



Ronald Wieland

Title: Environmental Review Planner

**Environmental Assessment Worksheet** was prepared by the staff of the Environmental Quality Board at the Minnesota Department of Administration, Office of Geographic and Demographic Analysis. For additional information, worksheets or for *EAW Guidelines*, contact: Environmental Quality Board, 658 Cedar St., St. Paul, MN 55155, 651-201-2492, or <http://www.eqb.state.mn.us>