



## DEPARTMENT OF NATURAL RESOURCES

### RECORD OF DECISION

**In the Matter of the Determination of  
the Need for an Environmental  
Impact Statement for the Redpath  
Project in Grant and Traverse  
Counties, Minnesota**

### **FINDINGS OF FACT, CONCLUSIONS, AND ORDER**

#### **FINDINGS OF FACT**

1. The Bois de Sioux Watershed District proposes to construct the Redpath Project in Grant and Traverse Counties, Minnesota. The Redpath Project is a multipurpose flood water storage impoundment along the Mustinka River/Judicial Ditch 14. The project includes three storage pools for flood control and a by-pass corridor. Water quality and wildlife habitat natural resource enhancements are also incorporated in the project design.
2. Judicial Ditch (JD) 14, the Mustinka River, will be routed around a three pool impoundment via a by-pass corridor. A portion of JD 14/Mustinka River flows will enter the impoundment for the purpose of flood control and natural resource enhancement. As stream flow increases and the river level rises, the impoundment water level will also rise and provide flood storage as described below.
3. Other features of the project include an excavated floodway along JD14 as it approaches the impoundment, and the relocation of Traverse County Ditch 35 (TCD 35) to increase flood storage capacity and maintain road alignment. A bypass channel is also designed to function as a feature for natural resource enhancement.
4. Pursuant to *Minnesota Rules*, chapter 4410.100, subpart 2 an Environmental Assessment Worksheet (EAW) must be prepared for projects that meet or exceed the thresholds of any of the EAW categories listed in part 4410.4300. The project proposes to create a new permanent impoundment of water, creating additional water surface of 160 or more acres and therefore required the completion of an EAW. This exceeds the threshold defined by *Minnesota Rules*, chapter 4410.4300, Subp. 24, water appropriations and impoundments.
5. Pursuant to *Minnesota Rules*, part 4410.0500, subpart 1, for any project listed in part 4410.4300, the government unit specified in those rules shall be the responsible government unit (RGU) unless the project will be carried out by a state agency, in which case that state agency shall be the RGU. Therefore, since the Redpath Project is proposed by and will be carried out by the Minnesota Department of Natural Resources

(MDNR), MDNR is delegated the duties of the RGU for conducting the environmental review.

6. The MDNR prepared an EAW for the proposed project, pursuant to *Minnesota Rules*, parts 4410.1400.
7. The EAW is incorporated by reference into this Record of Decision (ROD) on the Determination of Need for an Environmental Impact Statement (EIS).
8. As required by Minnesota Rules 4410.1500, the EAW was filed with the EQB and a notice of its availability was published in the *EQB Monitor* on September 15, 2014. A copy of the EAW was sent to all persons on the EQB Distribution List, to those persons known by MDNR to be interested in the proposed project, and to those persons requesting a copy. A press release announcing the availability of the EAW was sent to newspapers and radio and television stations statewide. Copies of the EAW were also available for public review and inspection at the MDNR Northwest Region Headquarters, the MDNR Library, the Minneapolis Central Public Library, Fergus Falls Public Library and the Wheaton Community Library. The EAW was also made available to the public via posting on MDNR's website.
9. The 30-day EAW public review and comment period began September 15, 2014 and ended October 15, 2014 pursuant to *Minnesota Rules*, chapter 4410.1600. The opportunity was provided to submit written comments on the EAW to the MDNR by U.S. Mail, by facsimile, or electronically.
10. During the 30-day EAW public review and comment period, the MDNR received two written comments on the EAW from state agencies. A copy of comments received is included in this Record of Decision as Attachment A. Findings 11 and 12 include further discussion on comments received and responses from the MDNR.
  1. Sarah J. Beimers on behalf of the Minnesota Historical Society, State Historic Preservation Office (October 9, 2014)
  2. Kevin Kain on behalf of the Minnesota Pollution Control Agency (October 15, 2014)
11. The Minnesota State Historic Preservation Office (SHPO) commented that due to the nature and location of the proposed project, a Phase 1 archeological survey is recommended to be completed. The survey must meet the requirements of the Secretary of the Interior's Standards for Identification and Evaluation, and should include an evaluation of National Register eligibility for any properties that are identified. The SHPO also stated that the need for a survey would be reconsidered if the project area can be documented as previously surveyed or disturbed, noting that previous survey work must meet contemporary standards and that plowed areas are not automatically considered disturbed. The SHPO also clarified that further assessment would be needed for federal licensing or permitting to address the requirements of Section 106 of the National Historic Preservation Act of 1966 and 36CFR800.

RESPONSE: The MDNR appreciates the review and letter response completed by the Minnesota Historical Society for the proposed project. EAW Item 25 includes a description of the SHPO historical database review and states that “a Phase I Cultural Resources Survey was completed for the entire project site. The report finding is No Properties Affected. A copy of the Phase I Cultural Resources Survey will be submitted to the SHPO. The MDNR will provide SHPO’s statements referring to permits to the project proposer.

12. The Minnesota Pollution Control Agency (MPCA) provided a letter stating that MPCA staff has reviewed the EAW and has no comments at this time. The letter also requested notice of the decision on the need for an EIS and stated that the MPCA letter does not constitute approval of any or all elements of the Project for the purpose of pending of future permit actions. The MPCA reminded the MDNR that it is the responsibility of the project proposer to secure any required permits and to comply with any requisite permit conditions.

RESPONSE: The MDNR appreciates the review and letter response completed by the MPCA for the proposed project. The MDNR will provide MPCA’s statements referring to permits to the Proposer.

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

- a. Land Use
- b. Fish, Wildlife and Ecologically Sensitive Resources
- c. Invasive Species
- d. Physical Impacts to Water Resources
- e. Erosion and Sedimentation
- f. Water Quality
- g. Odors, Noise, Dust and Air Emissions
- h. Infrastructure and Public Services

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

- a. Land Use.** This topic was addressed under Items 6b, 9, and 25 of the EAW.

The impoundment site is generally located in agricultural cropland and surrounded by agricultural cropland. Primary production is corn, wheat, sugar beets and soybeans. The Mustinka State Ditch is located along the northern portion of the proposed impoundment. The project area is prone to frequent flooding from overflow from the Mustinka River/JD 14 and Five Mile Creek causing widespread damage to roads and agricultural lands.

The impoundment will be divided into 3 pools with various uses. Pool 1 will be a permanent pool. Water level in Pool 1 will fluctuate along with the water level in the river. When Pool 1 is full, it will overflow a weir structure to Pool 2. When water

levels rise in Pool 2, it will flow over the spillway into Pool 3. As water levels rise and submerge the weir structures, the entire impoundment will continue to rise to the elevation of the top of the outflow structure, and then water will begin to overflow the spillway at the northwest corner of Pool 3 to JD14. The pool complex will provide about 24,000 acre-feet of storage during a 100-year spring flood, of which approximately 18,500 is gate controlled.

No archaeological sites were identified in the SHPO review of the Minnesota Archaeological Inventory and Historic Structures. There was a historic property identified, a school, within the search area. The location is outside of the project and it will not be disturbed. Also, a Phase I Cultural Resources Survey was completed for the entire project site. The report finding is No Properties Affected.

An inquiry of the project area using the MPCA online application “What’s in My Neighborhood” does not indicate any potentially contaminated sites within or near the project site. There is no knowledge of any soil contamination or abandoned storage tanks within the project site. There are no known hazardous liquid or gas pipelines on or near the project site.

Land use impacts will include an overall reduction in farm land acreage. But the productivity of remaining farmland around the project area is expected to improve by reducing the impacts from overland flooding. Therefore, the effect is expected to be a net increase in both agricultural efficiency and net production. Also, following the spring flood, when downstream conditions allow, excess water will be drained from Pool 3 to allow it to return to agricultural use. Pool 2 may also be managed for cropland or for moist soils. The Watershed District plans to own the project area and would lease land for crop production, when possible.

- b. Fish, Wildlife and Ecologically Sensitive Resources.** This topic was addressed under Items 6b, 11a, and 11b of the EAW.

#### Fisheries Resources

Resources which would be affected by the project include JD14/Mustinka River and Lake Traverse. Fisheries resources are currently affected in the Redpath Project area due to historic ditching of the Mustinka River/JD 14. The Mustinka River is also impaired for turbidity in the vicinity of the project (see Item 17). The Redpath project team identified the need for spawning habitat for northern pike in the Mustinka River due to previous loss of northern pike spawning habitat upstream of Lake Traverse.

The Project will recreate 5.5 miles of meandered river channel with pools and riffles as typically found in naturally occurring streams. The floodway and meander channel will create a grassland/wetland complex within the floodway corridor. The meander channel will also include wide culverts at road crossings to provide better fish passage up the by-pass corridor. A need identified for the Lake Traverse and

Mustinka River fishery is northern pike spawning habitat. Pool 1 will be managed to provide the flooded grassy habitat area for eggs to hatch and fry to feed. The fry can return to the river and Lake Traverse.

Erosion and sedimentation due to construction of the project may impact habitat temporarily. Construction will not start within fisheries waterways until after the northern pike spawning is over.

Construction of the Redpath Project may temporarily affect fisheries resources due to work in public waters and potential for erosion and sedimentation. The phased nature of construction and restoration, along with best management practices to avoid erosion and sedimentation, are expected to minimize effects. Overall the project is designed to benefit fisheries resources as described above.

### Wildlife Resources

The existing project site is almost entirely agricultural land with portions of this land enrolled in the Conservation Reserve Program (CRP). Project construction will convert some of the agricultural land and the CRP land to various habitat types and project features. A portion will be converted to shallow water habitat in the primary flood pool (Pool 1) with some seasonally flooded wetland and a moist soil management area in Pool 2. Pool 3 is anticipated to remain in crop production. The dikes constructed to create the impoundment and interior pools will be seeded to permanent cover. Perimeter ditches will include a minimum one rod grassed buffer strip, which will provide additional habitat for wildlife.

The project will also create a riparian habitat corridor by the creation of the 5.5-mile-long by 240-foot-wide meander channel and wide grassed floodway (by-pass corridor). The meander channel area is approximately 20 acres and the grassed floodway is approximately 160 acres.

A competitive vegetative cover, including native species, will be established in the project area. The primary purpose of the vegetative cover will be minimizing site erosion. However, seed mixes are expected to also provide wildlife habitat.

During construction, there will be temporary disturbance to wildlife from construction noise and activity. Removal of CRP habitat, wetland habitat, relocation or maintenance of ditches, and construction of the floodway along the Mustinka River/JD 14 will also disturb wildlife using these habitat areas. The temporary and phased nature of disturbance is notable. Phased construction impacts would also be accompanied by phased restoration activities, which would provide some mitigation for habitat disruption. During operation, habitat areas within the project area would be inundated with water during flooding, affecting species using those areas. However, it is notable that habitat outside of the impoundment and floodway areas would experience less inundation due to the flood control benefits of the project.

Also, sediment accumulation may become an issue over time and require maintenance work for removal. Sediment removal might be necessary from the TCD35 sediment pond as well as the inlet channel and possibly Pool 1. Sediment might contain small amounts of contaminants and nutrients. To avoid impacting wildlife attracted to habitat in the project area, removed sediment will be thinly spread either on the outer sides of dikes or other appropriate areas to allow contaminants to break down and nutrients to be used by plants.

A search of MDNR Rare Features Data showed a sighting and presumed nesting of upland sandpipers (*Bartramia longicauda*) in Section 19 of Gorton Township. This species is not state-listed but it is a Species in Greatest Conservation Need as identified in Minnesota's State Wildlife Action Plan (MN State Wildlife Action Plan - <http://www.dnr.state.mn.us/cwcs/index.html>). Habitat for this species includes prairies and other grasslands. This project will create a large complex of varying habitat types including large grassland tracts. As the upland sandpiper is a ground nesting species, there is a risk that if a nest were to be located in grassland tracts within the pools or floodways, the nest could be inundated. However, the project will likely reduce inundation of areas outside of the impoundment/floodways due the impoundment of flood waters. Construction of the project would also impact grassland habitat located on CRP farmlands, in roadside ditches, and in spoil piles along the Mustinka River/JD 14. These construction impacts would be temporary and phased, and would also be accompanied by phased restoration activities.

The Minnesota Biological Survey has not identified any Sites of Biodiversity Significance or Native Plant Communities within Redpath Township. However, northwest of the community of Norcross, JD14 crosses the railroad and Trunk Highway 9 (Sections 20 and 21). The railroad right of way north of the ditch has been identified as native prairie. No construction is proposed on the railroad right of way, and the native prairie will not be disturbed. Seed mixes planned for use at the Redpath Project site will be sourced as locally as possible to address possible genetic impacts to nearby native prairie.

The following maintenance methods will be included in project planning to provide for nesting habitat in roadside ditches.

1. Delay roadside mowing until after August 1st.
2. Roadsides mowed after September 1st should be clipped high (10 to 12 inches).
3. Use spot treatment to manage site for noxious weed control
4. Avoid indiscriminate roadside burning.

Also, construction will be scheduled to comply with the Migratory Bird Treaty Act. Colonies of nesting cliff swallows have been observed under at least two of the bridges affected by the project. Work at these bridge sites will be restricted to between September 1st and May 1st which is outside of the swallow nesting season.

- c. **Invasive Species.** This topic was addressed under Item 11b of the EAW.

Noxious weed control will be addressed if needed. A project goal is to establish native prairie vegetation within the by-pass corridor. These natives are generally competitive once established. Mechanical control methods including prescribed burns, and mowing will be used during the establishment phase. Chemical applications will be used if necessary. The invasive species of most concern is reed canary grass as seen in many wetlands within the project site.

- d. **Physical Impacts to Water Resources.** This topic was addressed under Items 6b, 12, and 29 of the EAW.

Public Waters in the vicinity of the project site include Twelve Mile Creek, Five Mile Creek, and JD14 (Mustinka River). The project will involve the diversion of flood water from JD14. JD14 flows will by-pass the impoundment and flow down the new by-pass corridor. JD14 flows will automatically be split with a portion being directed into the impoundment and a portion being directed to the by-pass channel. By-pass corridor flows will re-enter the existing JD14 channel at the west end of the impoundment and continue to flow west. As flows in JD14/Mustinka River increase, a portion of the water will enter the impoundment and be stored until it is released or utilized for resource management. JD14 will be the outlet for all impoundment releases. During periods of low flow, all of the water will by-pass the impoundment. An additional gated inlet is provided to by-pass additional flows during construction, maintenance, or emergency situations.

TCD35 will also be relocated approximately 160 feet south of its current location to maintain road alignment and increase impoundment storage capacity. TCD35 will be reconnected at the west end of the project area with its current channel. There are no significant changes in flows to Five Mile Creek, Twelve Mile Creek or JD14/Mustinka River expected from the relocation of TCD35. However, when relocated, TCD35 will be designed to its original capacity. This is greater than TCD35's current capacity and may have a minor impact to the local hydrology.

During construction of the by-pass corridor, flows in JD14 will remain within the current channel. No flows will be altered or diverted other than the drainage areas that flow into the by-pass corridor. That drainage will be allowed to flow through the channel and associated storm water controls to the outlet into JD14 at the west end of the project site.

The outlet for the project is JD14. Modeling shows that design flood outflows were contained within the downstream channel. The capacity of the existing JD14 downstream channel exceeds the design flows of the by-pass corridor. A 10-year, 10 day spring runoff event (snowmelt including rainfall during the melt period) would fill Pools 1, 2, and 3 to the elevation of 1017.25 feet, which is lower than the

overflow. The un-gated flow volume would bypass the impoundment in the by-pass corridor.

Project impacts to public waters and wetlands were reduced during development of this EAW. The project design has been revised at the southwest corner of Section 21, Redpath Township, to avoid impacts to Five Mile Creek, Twelve Mile Creek and JD14/Mustinka River. The project team met and reviewed design changes that eliminated any loss of public water in Five Mile Creek; eliminated about two acres of wetland impacts; and eliminated some anticipated hydrologic changes to Twelve Mile Creek, Five Mile Creek, and JD14/Mustinka River. The revised design moved the impoundment out of the southwest corner area, and moved the west dike slightly farther west, so that the impoundment volume did not change. The project team, including Soil and Water Conservation Districts and the United States Army Corps of Engineers has also been involved during the various development stages of the proposed project.

### Wetlands

The project footprint is anticipated to permanently impact about 32 acres of wetlands. A review of the wetland delineation data sheets and the Minnesota Routine Assessment Method (MNRAM) for the project indicates that many of the sample points were within wetlands that contained drowned-out crops, or bare ground in agricultural fields. Other wetlands are monoculture stands of reed canary grass. Many of the wetlands are within agricultural fields or temporarily out of production CRP fields. The wetlands in agricultural production lack wetland vegetation. Approximately 19 acres of wetlands are within road ditches that will be realigned by the project. There will be an impact to existing ditch bottom wetlands due to the realignment of TCD 35 that is similar to the impact of ditch maintenance.

Pool 1 is expected to develop into an approximately 270 acre wetland including a permanent pool of about 45 acres. The by-pass corridor contains a floodway that is expected to develop into about 170 acres of wetlands. Ditches and channels are expected to account for 66 acres of wetlands. An additional 190 acres includes existing wetlands that will not be filled by construction and other areas anticipated to develop into wetlands, such as borrow areas. Pool 2 may be managed as a moist soils management area or cropland. If it is managed as a moist soils unit, considerable wetland acreage may be added.

Due to the ratio of proposed wetland creation to wetland impacts, and the expected increase in wetland vegetation quality and diversity, the Bois de Sioux Watershed District is proposing that wetland impacts are self-mitigating. The Bois de Sioux Watershed District is working with the United States Army Corps of Engineers and local government unit administering the Minnesota Wetland Conservation Act to consider practical alternatives to further avoid or minimize wetland impacts and to develop a mitigation plan for the remaining impacted wetlands.



Public waters and wetlands will be permanently affected as a result of the Redpath Project. Changes to water resources are intended to result in an overall reduction of flooding and to create additional habitat, including wetlands. Possible negative impacts have been minimized during project planning and development and wetland impacts will continue to be mitigated through the permitting phase of project development.

- e. **Erosion and Sedimentation.** This topic was addressed under Items 6b, 11a, and 16 of the EAW.

Primary sources of potential erosion and sedimentation for the Redpath Project include construction disturbance and channel erosion during operation. On-site erosion and sedimentation during construction will be controlled by phasing, detention ponds, silt fence, erosion control blanket, and grade checks (e.g., rocks). Side slopes of dikes on the pool side will be broken with a wave protection berm. Fill for dike construction will be taken from floodway excavation, water management channels, and borrow areas. Around the perimeter of the project permanent grass buffer strips will be established. All disturbed areas will be seeded and maintained in a permanent cover if not surfaced with riprap or gravel. Also, a temporary sediment pond will be located along the western portion of the impoundment during relocation of TCD35.

The project requires an MPCA Construction Stormwater Permit for each construction phase. The permit and associated stormwater pollution prevention plans (SWPPP) will identify all required best management practices (BMPs).

- f. **Water Quality.** This topic was addressed under Items 6b, 17 and 29 in the EAW.

Reduction of downstream flooding will generally improve water quality during high runoff events by reducing downstream channel and overland erosion. The constructed floodway will contain the majority of flood flows within the grassed floodway, reducing the amount of overland flows across agricultural fields. In addition, detention of runoff from agricultural areas during flood events when the impoundment is operated will remove suspended sediment, contaminants, and nutrients from the water, the amount depending on the duration of storage. The major downstream water body is Lake Traverse and the project will improve runoff from the area of the project to the lake by reducing sediment and nutrient amounts being transported to Lake Traverse.

During non-flood times, the meandered stream channel formed by the restored river corridor will slow flow and reduce turbidity. The grass buffer areas of the floodway will also reduce sediment and erosion resulting in improved water quality.

Very long detention times during the growing season can cause increased biological activity within the impoundment pool. While some plants and microorganism growth can provide a nutrient uptake function, increased bioactivity can also result in adverse

water quality effects of depleted dissolved oxygen levels and increased BOD (biochemical oxygen demand) levels in the discharge water. Generally, an operational goal is to avoid long detention times to maximize flood storage capacity. Operational adjustments can be made to address water quality. Also, outflows from the impoundment will be aerated, if necessary, to reduce the impacts downstream.

During construction, BMPs will be used to minimize erosion and control sediment. Construction plans will include a SWPPP. Also, temporary sediment pond will be included in the western portion of the impoundment during relocation of TCD35.

- g. Odors, Noise, Dust, and Air Emissions.** This topic was addressed under Items 6b, 22 and 24 of the EAW.

There will be temporary noise associated with the construction of the impoundment dikes and structures. This noise will be generated by earth-moving machinery. Equipment noises will be similar to that of agricultural equipment, which is predominant in the project area. Construction will generally be done in moist soils, reducing the amount of fugitive dust. However, haul of borrow material could cause dust problems but will be minimized by requiring the contractor to treat haul roads.

There are two occupied residences within one half mile of the construction area on the north side. There is one residence about three-fourths of a mile west of the impoundment. There are four residences about one mile south of the impoundment.

Work hours during construction are generally restricted to weekdays during daylight hours. Work on Saturdays may be permitted and work on Sundays is not generally allowed except in unusual circumstances. It is anticipated that the project will be completed in phases (see Item 6b above) over a period of 4 years. Impacts are expected to be temporary in nature.

- h. Infrastructure and Public Services.** This topic was addressed under Items 6b and 28 of the EAW.

The project will raise and improve some of the existing roads within the project that will form the impoundment dikes. These altered roads/dikes will be designed to meet current standards. The north dike will also become a new road serving the traveling public. Township Road 104, along the east side of Section 21 through the impoundment Pool 3, will be abandoned and closed to through traffic. However, it will be maintained enough to provide access for agricultural operations. It is notable that a bridge in this portion of Township Road 104 is currently closed with no replacement proposed. The interior dike/roadways will be open to traffic most of the time, however during times of high water they will need to be closed as the existing bridges will be under water. Overall, there will be changes to infrastructure, including improved and new roads, as well as temporary or permanent closing of roads.

14. The MDNR requested and was granted a 15-day extension for making a decision on the need for an EIS as provided under the provision of *Minnesota Rules*, chapter 4410.1700 subp. 2.b.

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

<b>Unit of Government</b>	<b>Type of Application</b>	<b>Status</b>
<b>MN Dept. of Natural Resources</b>	Joint Dam Safety/Public Waters Work Permit	Application Pending
<b>U.S. Army Corps of Engineers</b>	Section 404	Application Pending
<b>U.S. Army Corps of Engineers</b>	Section 408	Application Pending
<b>MN Pollution Control Agency</b>	NPDES Construction Stormwater Permit	To Be Applied For
<b>Redpath and Gordon Townships</b>	Township Road Alteration	To Be Applied For
<b>Traverse County</b>	Zoning and Conditional Use Permit	To Be Applied For
<b>Grant and Traverse Counties</b>	Road Alteration	To Be Applied For
<b>Grant and Traverse Counties</b>	Wetland Cons. Act Approval	Wetland Delineation Submitted
<b>Bois de Sioux Watershed District</b>	Project Approval and Funding	Preliminary Hearing Held
<b>MN Dept. of Natural Resources</b>	Flood Damage Reduction Grant	Partial Funding Approved
<b>Red River Watershed Mgmt. Board</b>	Flood Control Grant	Step 2 Approval

## CONCLUSIONS

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

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

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

*proposer, including other EISs.*

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

Based on the Findings of Fact above, the MDNR concludes that the following potential environmental impacts, as described in Finding No. 13, will be either limited in extent, temporary, or reversible:

- a. Land use
- b. Fish, Wildlife and Ecologically Sensitive Resources
- c. Invasive Species
- d. Physical Impacts to Water Resources
- e. Erosion and Sedimentation
- f. Water Quality
- g. Odors, Noise, Dust and Air Emissions
- h. Infrastructure and Public Services

Based on the Findings of Fact above, the MDNR concludes the following potential environmental effects of the project, as described in Finding No. 13, will be beneficial:

Flood control and water quality improvements, resulting from the impoundment of flood waters. The project is expected to reduce downstream flooding and to improve water quality during high runoff events by reducing downstream channel and overland erosion.

Fisheries and wildlife habitat improvements, resulting from proposed natural resource enhancements, including the construction of a meandered by-pass channel, restoration methods including native seed selection, and management of the impoundment water levels for wildlife habitat as well as flood control.

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

Past and present environmental effects in the area of the project represent the existing condition. Item 29 of the EAW compared environmental effects of the proposed project to the existing condition, thus addressing the cumulative impacts of the project with past and present projects.

In order to compare the project with future projects for which a basis of expectation has been laid, the MDNR determined that erosion, sedimentation, and hydrologic impacts are the likely potential cumulative effects. Therefore, the appropriate geographic area for cumulative impacts assessment is the Bois de Sioux Watershed. The MDNR discussed the possibility of potential future projects with county officials in each county for the area within the Bois de Sioux Watershed District. The MDNR also discussed possible impacts with Watershed District staff. Projects in each county are described below, followed by possible impacts that are applicable to various counties.

Grant County is currently working on replacing culverts along the Mustinka River upstream of the project site. The culverts are being replaced with sizes to facilitate flood damage

reduction. Some of these may be replaced during construction of the Redpath Project, however they are upstream of Pine Ridge Park Dam, where sediment will be removed before reaching the Redpath site. About one mile upstream of the Redpath Project at County State Aid Highway 1, the culverts may be replaced by Grant County during construction of the Redpath Project. It is anticipated that BMPs will be followed to minimize erosion and sediment upstream of the Redpath site. Phases of construction during the Redpath Project provide additional sediment and erosion protection as described above. Over the next two years, Grant County also anticipates replacing bridges and that ditch cleanouts will occur. If work occurred within a public water, a MDNR work in public waters permit would be required for a bridge replacement. Ditch cleanouts are described more below.

Culvert replacement with smaller culverts for the purpose of storing water temporarily during a flood upstream of a culvert/road would have a hydrologic impact intended to reduce damaging flooding. This approach would, however, affect the transport of sediment in the stream/ditch system by withholding some sediment and possibly causing erosion downstream. Naturally meandered rivers transport a sediment load in a more balanced manner. The counties are working with the MDNR for permitting these projects. It is notable that there was a focus during development of the Redpath Project on culvert sizing to ensure sediment transport through the by-pass channel would create a more stable meandered system. Therefore, this type of impact is not one the Redpath Project would be anticipated to increase in the watershed.

In Traverse County, a large fertilizer plant is being constructed. Construction is expected to be complete in approximately six months from the time of this EAW. Also, an erosion control project is in early planning stages for Traverse County Ditch 52. The timing of the fertilizer plant construction is not expected to coincide with construction of the Redpath Project. Though hydrologic alteration and erosion and sedimentation effects may be part of the Traverse County Ditch 52 project, the project is in such early planning stages that it does not meet the criteria for a “basis of expectation” having been laid.

Otter Tail County identified proposed size-for-size culvert replacements and road resurfacing, which would not be expected to have significant hydrologic or erosion impacts.

Big Stone County identified no upcoming projects within the watershed other than ditch cleanouts.

Wilken County discussed an upcoming bridge replacement project in Campbell, MN. The construction date is unknown and a MDNR Work in Public Waters permit would be required. This project is in such early planning stages that it does not meet the criteria for a “basis of expectation” having been laid.

Stevens County did not foresee any upcoming projects.

Generally, across the Bois de Sioux Watershed District, practices related to the predominantly agricultural land use of the area will be ongoing. These include installation of tiling, ditch cleanouts, erosion and sedimentation resulting from farming, and agricultural

impacts to wetlands and shorelands. Projects for on-farm agricultural drainage require permits from the Bois de Sioux Watershed District, limiting the extent of surface and subsurface drainage improvements. Counties are also planning to excavate sediment basins to reduce sedimentation. These ongoing practices will likely result in alterations to hydrology and sediment load. The Redpath Project includes natural resource enhancements in addition to flood control features intended to address some of the natural resource impacts of historic and ongoing changes the landscape designed to enhance agricultural productivity and protect homes and other structures from flooding.

The Watershed District is also aware of projects that are being pursued, but are not yet at the preliminary design level. Those include stabilization of an erosion problem near Lake Traverse known as Traverse County Ditch #52, the Brandrup 9 Impoundment for flood damage reduction, and the Western 32 Impoundment for flood damage reduction. These projects are in early planning stages, so they do not meet the criteria for a “basis of expectation having been laid.” Other potential projects that are anticipated in concept are included in the 20% Flow Reduction Strategy of the Watershed District.

The 20% Flow Reduction Strategy is part of a basin-wide flow reduction strategy in the Red River Basin. The Red River Basin Commission has developed a strategy to reduce peak flows in the Red River mainstem by 20%. In cooperation with the Commission, the Bois de Sioux Watershed District developed an implementation strategy to achieve its allocated flow reduction goal. To meet this goal, the Bois de Sioux Watershed is proposing to reduce flooding by approximately 20% within the Watershed District. A total of 26 storage locations were identified including one, the North Ottawa Project that has already been constructed and provides about 16% of the allocated storage goal. The Redpath Project will provide an additional 17%. The remaining 67% of the Bois de Sioux Watershed District’s flood reduction goal would be provided by the identified 24 additional storage sites. Those sites are considered to be representative of what will eventually be built, but will likely evolve in both location and design as planning proceeds. Other than flood control, the individual and cumulative environmental effects of these future projects cannot be determined at this time. Due to the early stage of project planning, a “basis of expectation” has not been laid. However, the Bois de Sioux Watershed District plans to implement the terms and philosophies of the Red River Mediation Agreement, which seeks to include “Natural Resource Enhancements” in flood control projects wherever practical and feasible.

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

Based on the information in the EAW and Findings of Fact above, the MDNR has determined that the following environmental effects, as described in Finding No. 13, are subject to mitigation by ongoing public regulatory authority:

Physical impacts on water resources, including construction of impoundments and a by-pass corridor at JD 14/Mustinka River, are subject to regulatory authority by the MDNR Joint Dam Safety/Public Waters Work Permit, the USACE Section 404 Permit and the USACE Section 408 Permit.

Wetland effects described in Finding No. 13 will require Wetland Conservation Act and Section 404 approval prior to initiation of this project.

When applying standards and criteria used in the determination of the need for an environmental impact statement, the MDNR finds that the project is subject to regulatory authority through the Minnesota public water and wetland conservation rules to sufficiently mitigate potential environmental effects on water resources through measures identified in the EAW that are specific and reasonably expected to occur.

Erosion, sedimentation, and water quality effects from construction-related activity are subject to regulatory authority by the MPCA NPDES Construction Stormwater Permit.

Construction activities described in Finding No. 13 will also require a Township Road Alteration Permit from both Redpath and Gordon Townships, a Traverse County Zoning and Conditional Use Permit, and Grant and Traverse County Road Alteration Permits.

The Redpath Project is also subject to funding approval by the Bois de Sioux Watershed District, MDNR, and Red River Watershed Management Board.

Also see Conclusion No. 3 for a description of public regulatory authority regarding cumulative effects.

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

The MDNR has prepared an EAW for a similar flood control project, the North Ottawa Flood Control Impoundment. The Bois de Sioux Watershed District developed the North Ottawa Flood Control Impoundment in collaboration with others and constructed the project. The impoundment is currently in operation. The effects and benefits of this prior project were incorporated in planning and developing the proposed Redpath Project. The information gained on the effects and results of this past project provides part of the basis for predicting the effects of similar future projects, such as the proposed project.

6. The MDNR has fulfilled all the procedural requirements of law and rule applicable to determining the need for an environmental impact statement on the Redpath Project.
7. Based on consideration of the criteria and factors specified in the Minnesota Environmental Review Program Rules (*Minnesota Rules*, chapter 4410.1700, subparts 6 and 7) to determine whether a project has the potential for significant environmental effects, and on the Findings and Record in this matter, the MDNR determines that the proposed Redpath Project does not have the potential for significant environmental effects.

**ORDER**


Based on the above Findings of Fact and Conclusions:

The Minnesota Department of Natural Resources determines that an Environmental Impact Statement is not required for the Redpath Project in Grant and Traverse Counties, Minnesota.

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

Dated this 1<sup>st</sup> day of December, 2014.

**STATE OF MINNESOTA  
DEPARTMENT OF NATURAL RESOURCES**

  
Barb Naramore  
Assistant Commissioner