DEPARTMENT OF NATURAL RESOURCES

RECORD OF DECISION

In the Matter of the Determination of the Need for an Environmental Impact Statement for the Upper Lightning Lake Water Level Management Project in Grant and Otter Tail Counties, Minnesota

FINDINGS OF FACT, CONCLUSIONS, AND ORDER

FINDINGS OF FACT

1. The Minnesota Department of Natural Resources (MDNR) proposes to install a pump and lift station at the outlet of Upper Lightning Lake to manage water levels for wildlife habitat and water quality improvement. As part of the project, the downstream public watercourse between Upper Lightning Lake and Denton Slough will be excavated to restore flow between the water basins during pumping operations. The project is located in Grant and Otter Tail Counties, Minnesota.

2. The project area includes Upper Lightning Lake and the downstream public watercourse that serves as the outlet of the lake to an unnamed wetland basin on the Kube-Swift Wildlife Management Area (WMA). The excavation/clean-out continues downstream from the unnamed wetland basin to open water on Denton Slough. The project area includes both private land under permanent easements and public land.

3. Pursuant to *Minnesota Rules*, chapter 4410.4300, subpart 1, an environmental assessment worksheet (EAW) must be prepared for projects that meet or exceed the threshold defined in any of the subparts 2-37. The proposed project exceeds the threshold defined under *Minnesota Rules,* chapter 4410.4300, Subp. 27, item A, regarding wetlands and public waters. The project would change or diminish the course, current or cross-section of one acre or more of a public water and public water wetland and therefore required the completion of an EAW.

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

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

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

7. The EAW was filed with the EQB and a notice of its availability was published in the *EQB Monitor* on July 7, 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 Thorson Memorial Public Library. The EAW was also made available to the public via posting on MDNR's website.

8. The 30-day EAW public review and comment period began July 7, 2014 and ended August 6, 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.

9. During the 30-day EAW public review and comment period, the MDNR received five written comments on the EAW from agencies and individuals. A copy of comments received is included in this Record of Decision as Attachment A. The findings numbered 10 through 13 include further discussion on comments received and responses from the MDNR.

    1. Callie Funkhouser on behalf of Van R. Ellig (July 24, 2014)
    2. Mark Pederson (July 25, 2014)
    3. Chris Melberg (July 31, 2014)
    4. Sarah J. Beimers on behalf of the Minnesota Historical Society, State Historic Preservation Office (August 1, 2014)
    5. Kevin Kain on behalf of the Minnesota Pollution Control Agency (August 5, 2014)

10. Three commenters expressed support or approval of the project. One supporter added a comment on another area that is need of improvement in the vicinity.

    RESPONSE: The MDNR appreciates the review and comments made by these individuals. As RGU for the EAW, MDNR is mandated to evaluate the environmental effects of the proposed project; therefore, comments regarding the merits of the proposed project will generally not be addressed in this Record of Decision. These comments will be provided to the proposer and to permitting and/or approval entities for their consideration about whether to permit, approve and/or implement the project.

11. The Minnesota Pollution Control Agency (MPCA) provided a comment pertaining to Item 14 of the EAW regarding excavated and fill materials stating that these materials should be inspected and free of solid waste and contamination.

    RESPONSE: It is not anticipated that the excavated spoil material would be contaminated or consist of solid waste. The footprint of the proposed project lies in a rural landscape within the bed of public watercourse and the bed of a public water basin. The public waters have historically been known to support an abundant and diverse aquatic

community and waterfowl refuge. The adjacent lands to the public waters within the project footprint currently and historically have been wetlands and agricultural fields since at least the turn of the century. The excavated spoil material would be spread and disked into existing, nearby agricultural fields. If solid waste material and/or contaminated sediments were encountered during project activities, the suspect material would be sorted, removed, and hauled away to an approved landfill.

The source for the fill material that would be used for the embankment area has not been identified at this juncture. Material from nearby agricultural fields may be used or it may be from another local source. Any potential borrow site would be inspected and approved by the construction manager for suitable clay material, be free of contaminants and solid waste and be free of any invasive plant species. All gravel and rock rip rap used for the project would come from a quarry and would be inspected for contaminants, solid waste and invasive plant species prior to entering the project area.

12. 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 will provide this comment to the Proposer.

13. The Minnesota State Historic Preservation Office commented that it concurred with the conclusion outlined under Item 25 of the EAW that there are no historic properties in the area that will be affected by the proposed project. The letter also acknowledged that MDNR has determined the proposed project falls under a Categorical Exclusion pursuant to 36 CFR 800.2(c)(4). for Section 106 of the National Historic Preservation Act of 1966 and 36CFR800, Procedures of the Advisory Council on Historic Preservation for the protection of historic properties.

    RESPONSE: The MDNR appreciates the review and letter response completed by the Minnesota Historical Society for the proposed project.

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

    a. Fish, Wildlife and Ecologically Sensitive Resources
    b. Invasive Species
    c. Physical Impacts to Water Resources
    d. Erosion and Sedimentation
    e. Water Quality
    f. Water Use
    g. Odors, Noise, Dust and Air Emissions
    h. Cumulative Potential Effects

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

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

The channel cleanout and reshaping portion of the project is planned for late fall/early winter over a time frame of two to three weeks. The construction of the pump, lift station and excavation of an inlet channel for the lift station would occur during the summer and will take approximately three to four weeks. Following completion of summer construction activities, a temporary drawdown of Upper Lightning Lake would begin, and further excavation into the lake bed would occur to the desired elevation of 1079.00 feet. The drawdown excavation would likely occur in winter and over ice cover as lower lake levels allow. Maintenance of the site post-construction and during operation would include monitoring sediment erosion controls until all disturbed areas within the project site are stabilized, invasive species management, and pump and lift station maintenance.

Resident fish and wildlife and, to a lesser extent, migratory wildlife would be affected by the construction and operation of the proposed project. The environmental effects on fish and wildlife would include habitat loss, temporary displacement during project construction, and the risk of mortalities caused by the excavation, filling and reshaping channel activities, and other construction-related activities such as heavy equipment mobility. Environmental effects to fish and wildlife would be considered to be limited to within the project footprint and in sites where spoil materials may be deposited.

Timing the cleanout and reshaping of the channel during late fall/early winter, when water levels would be low and the ground likely frozen, would reduce impacts on wetland-dependent amphibians, reptiles and birds as peak breeding season would be avoided, nonresident species would likely have migrated, and resident amphibians and reptiles would likely have sought out overwinter sites. Vegetation/habitat disturbance caused by heavy equipment would be also minimized in areas outside of the project disturbance footprint if the ground is frozen. The temporary drawdown and excavation activities would be scheduled to be completed prior to ice cover to minimize impacts to hibernating turtles and amphibians.

The public watercourse and nearby adjacent land is currently considered poor habitat for waterfowl and other wetland wildlife that prefer semi-open marshes. The MDNR Natural Heritage Information System Rare Features Database did not identify state-listed endangered, threatened or special concern species that would likely be affected by construction activities within the project area. The database did identify records of prairie chicken, loggerhead shrike, American bittern, and a Colonial Waterbird Nesting Site within one mile of the project area. Rare bird species documented within the vicinity of the site are expected to benefit from habitat and water quality improvements from the proposed project.

Environmental effects of the proposed project would be minimal and temporary. Any short-term negative environmental effects would be minor when considering the long-term positive environmental effects that would be expected as a result of the proposed project. After project completion, overall habitat and water quality would be

improved. Upper Lightning Lake would be restored to pre-1980 run-out elevation levels, reducing erosion and flooding. Water conveyance from Upper Lightning Lake downstream to Denton Slough would be stabilized, reducing erosion and flood impacts on adjacent uplands.

b. Invasive Species. This topic was addressed under Item 6b of the EAW.

Construction activities involve the disturbance and/or removal of vegetation and soil by equipment that will be brought in from offsite. The removal of vegetated cover enables weeds, including invasive species and noxious weeds, to establish if these areas are not properly managed. Fill, construction materials brought into the site, and workers are all potential vectors for the spread or introduction of invasive species within the project site.

Preventative measures would be taken by the contractor to avoid the spread or introduction of invasive species within the project area prior to and during construction activities. This would include cleaning and inspecting equipment and clothing at an offsite staging area prior to arriving at the project site. If material or clothing arrives with soil, aggregate, mulch, vegetation or animals, it will be cleaned from equipment and/or clothing would be disposed of at a location determined by the site owner or legally disposed of at an approved location. Any equipment used within waterbodies would be cleaned and drained prior to leaving the site. Soil, gravel, rock rip rap and other needed project materials brought in from offsite would be inspected and approved by the contractor to be free of any invasive species prior to entering the project area.

Disturbed areas within the existing cattail cover area would be reseeded with an approved seed mix and mulch. Disturbed areas within existing Conservation Reserve Program grass buffers would be disked and reseeded according to U.S. Department of Agriculture standards. All seeded areas would be checked for bare spots, washouts, and vigorous plant growth and free of significant weed infestations until the project area soils have stabilized. Future maintenance would be the responsibility of the individual landowners.

The project site is currently dominated by reed canary grass (*Phalaris arundinacea*), a MDNR listed invasive species and narrowleaf/hybrid cattail (*Typha spp.*). No other aquatic or terrestrial invasive species have been documented in the project area.

The project would improve conditions for native species in newly seeded areas. The existing reed canary grass monoculture would be replaced by a native grass and forb mixture that is better forage for wildlife, and has a better root structure for stabilizing banks.

c. Physical Impacts to Water Resources. This topic was addressed under Item 6b, Item 12 and Item 29 of the EAW.

The proposed project involves the cleanout, reshaping, and placement of fill materials within and adjacent to public waters totaling approximately 10,680 feet in length. Wetland Conservation Act (WCA) administered wetlands would be affected by project activities. The project has been reviewed by the WCA Technical Evaluation Panels (TEP) from both Grant and Ottertail Counties. Both TEPs have concluded that the proposed activities relating to the cleanout of the watercourse would be considered maintenance and not result in a loss in WCA administered wetlands.

An embankment pad would be constructed in wetlands alongside the existing channel to accommodate the lift station and electrical control panel. This would result in fill into public waters, a net loss of 0.11 acres that would be replaced at the required ratio through wetland banking.

Proposed activities may result in a change in wetland type in the area adjacent to the channel from a Type 3 permanent wetland dominated by a monoculture of hybrid cattail back to a Type 1 or Type 2 seasonal wetland due to post-construction flow changes. The change in wetland type would not be considered a negative environmental effect as the current Type 3 wetland consists of undesirable vegetation species and was the result of higher than normal water levels and sedimentation. The change of wetland type would not be considered a loss of wetlands.

The physical impact of the proposed project on public water and wetlands was considered in the context of cumulative effects from other projects in the area. The MDNR is unaware of any projects in the vicinity that would result in disturbances to these waterbodies. It is likely that future drawdowns would be implemented for Upper Lightning Lake to maintain desirable aquatic habitat and water quality; however, at this time, these activities are not planned or proposed.

d. Erosion and Sedimentation. This topic was addressed under Item 6b and Item 16 of the EAW.

Construction activities would involve the disturbance and/or excavation of vegetation and soil within and adjacent to the public water basins. This would be the primary source for erosion and sedimentation issues during construction and post-construction until disturbed areas area stabilized. Another sediment source includes the movement of sediment to downstream receiving bodies during the drawdown event.

During and following construction, temporary erosion prevention and sediment control measures would be implemented on all exposed soil and temporary spoil piles, as required by the MPCA Storm Water Pollution Prevention Plan (SWPPP), MDNR public waters permit, and MDNR General Waters Permit. These measures would include floating silt fences in public water basins, standard silt fences, 12-inch bio-rolls/straw wattles, and erosion control blankets. In addition, three temporary rock check dams would be installed at the lower end of the reach during channel cleanout to slow water and catch downstream movement of silt. The rock check dams would be inspected regularly and sediment would be removed by the contractor

when sediment depths reached 75% of the height of the dam. The removed sediment would be spread on designated spoil areas. The rock check dams and erosion prevention and sediment control measures would remain in place until all disturbed areas within the project site are stabilized.

The contractor would have a designated person at the project site who is trained and certified as either an Erosion/Sediment Control Inspector/Installer or as an Erosion/Sediment Control Site Manager to oversee project activities. Sediment impacts would be considered to be temporary and would be localized to the immediate area downstream from the pump discharge. Once the disturbed areas are stabilized, maintenance of the site will be the responsibility of the landowners.

Pumping operations during the drawdown event would likely result in temporary increased flows and sediment loads within the outlet channel. Pumping would ideally occur during late summer and fall, when base flows are relatively low, and be managed so that it does not cause downstream flooding or erosion from the increased flows. The temporary sediment impacts would be generally localized to the immediate area downstream from the pump discharge. Any buildup of sediment during pumping operations would be removed from the watercourse and disposed of properly.

Any temporary water quality impacts to Upper Lighting Lake and the downstream watercourse due to project construction or operation are expected to be mitigated by the overall improvements to water quality and aquatic habitat as a result of the project.

e. **Water Quality.** This topic was addressed under Item 6b, Item 17 and Item 29 in the EAW.

Upper Lightning Lake was added to the 303(d) Impaired Waters List in 2014 for nutrients and turbidity. Water quality data from within the watershed showed that fish Index of Biological Integrity (IBI) and macroinvertebrate scores were poor. These low scores are attributed to low dissolved oxygen and high turbidity. Physical stream habitat indexes were also rated poor at monitoring stations. The main objective of the proposed project would be to improve waterfowl habitat and water quality on Upper Lightning Lake.

Hazardous materials that could affect water quality would be used during project construction activities. These include fuel, oil and hydraulic fluid necessary for construction equipment. Refueling would occur outside, away from the project site, and equipment would be inspected and maintained to prevent spills. The National Pollutant Discharge Elimination System (NPDES) Construction Stormwater permit requires a site specific SWPPP to be completed for construction. This SWPPP is required to include pollution prevention management measures for solid waste and hazardous material spills that occur during construction.

Construction and/or operation of the proposed project would result in temporary increases in nutrients and sediments. Water quality protection measures would be implemented to limit the downstream movement of silt and sediment as required by the MPCA National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS), MDNR public waters permit, and MDNR General Waters Permit and any other provisional requirements of permits and approvals necessary. Measures to reduce erosion and sedimentation and prevent turbidity from affecting water quality have been described further under Finding No. 14d.

The incremental increase of turbidity and sedimentation originating from the proposed project would likely be minor. Any temporary water quality impacts in the downstream waterbodies due to project construction or operation are expected to be mitigated by the overall improvements to water quality and aquatic habitat as a result of the project.

When necessary, future drawdown events may be planned in accordance with the Upper Lightning Lake Management Plan (Attachment E of the EAW). Drawdown events may also be an implementation strategy included in the Bois de Sioux Watershed Restoration and Protection Strategy currently under development to improve water quality in this basin and the watershed.

f. Water Use. This topic was addressed under Item 13 in the EAW.

A temporary drawdown of Upper Lightning Lake would begin after excavation of the inlet channel, lowering the lake from the normal outlet elevation of 1084.19 to a final elevation of 1079.00. The drawdown would only occur if downstream conditions could handle the additional water without causing flooding or damage. The drawdown would also be coordinated with water level management on Denton Slough to provide additional downstream storage capacity. Discharge would not exceed 25 cubic feet per second through Denton Slough.

There are two surface water appropriation permits for crop irrigation located on the north side of Upper Lightning Lake. During full drawdown, this area of the lake would still be approximately 2-3 feet deep and hold approximately 158 acre-feet of water. The total maximum allowance for both permits is 143 acre-feet per calendar year. The MDNR would coordinate with permit holders in the unlikely case that the landowners decide to appropriate water during the drawdown period.

The proposed project would not have long-term, negative impacts on downstream reaches. Sediment and erosion control measures that would be implemented (described further under Finding No. 14d) and natural wetland basins would limit downstream movement of silt and sediment associated with excavation or pumping discharges. Temporary water quality impacts in the downstream water course due to project construction or operation are expected to be mitigated by improvements to water quality.

When necessary, future drawdown events may be planned in accordance with the Upper Lightning Lake Management Plan (Attachment E of the EAW). Drawdown events may also be an implementation strategy included in the Bois de Sioux Watershed Restoration and Protection Strategy currently under development to improve water quality in this basin and the watershed. In any scenario, the drawdown event would only proceed under the same stipulations as described above.

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

Construction of the pump and lift station and the excavation required to clean out the downstream watercourse to restore flow to between the water basins would involve the use of earth moving equipment. This would include front loading excavators, off-road hauling trucks, a truck-mounted crane, a bulldozer, skid steers, and other diesel or gasoline powered equipment that would be used in the loading and hauling of materials.

The higher than normal levels of exhaust emissions, odors, and noise produced during project construction from the use of this equipment would be considered temporary and minor. The total duration of construction activities is anticipated to be between five and seven weeks. Heavy equipment would only be operated Monday through Friday during daylight hours. The nearest home site is approximately 800 feet from the watercourse; however, the channel cleanout through this area is anticipated to be completed within one day. The site is located in a rural landscape.

Excavation would be conducted in moist soil and is not expected to contribute to airborne dust. Truck traffic would increase along a gravel township road during the Downstream Channel Clean-Out stage of the project. The road is rural and consists primarily of local traffic. Fugitive dust levels would be likely to increase in this area for an approximately two-week period and would be considered minor. If dust would become an issue, the MDNR would work with Lawrence Township (which is the road authority) to water down the road to minimize airborne dust associated with the temporary increase in traffic.

h. **Cumulative Potential Effects.** This topic was address under Item 29 of the EAW.

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. As discussed in Item 29 of the EAW, a similar project was completed by the MDNR Division of Wildlife approximately 2 miles downstream of the project area in 2011. The 2011 project involved the construction of a variable crest water control structure and cleanout of the downstream public watercourse on Denton Slough. The goals for the project were similar to the current proposal, and included improving waterfowl habitat, water quality and reducing flood damage to public roadways and private property. Waterfowl habitat and water clarity were greatly improved as a result of this 2011

project, and no long-term negative environmental effects were observed from construction and operation activities. A high velocity fish barrier was also installed in the watercourse approximately 1.5 miles downstream of this project site to prevent fish from migrating into upstream shallow lakes and wetlands following drawdowns and habitat restorations.

The proposed project would occur upstream of the Denton Slough project. Any negative environmental effects that would have occurred as a result of the Denton Slough project would have primarily affected downstream waterbodies from the Denton Slough project area and not the proposed project area. The construction of the high velocity fish barrier serves as a benefit to the proposed project area. Denton Slough could potentially be impacted by temporary increases in sediment load during construction; however check dams will be installed to capture silt and sediment.

Consultation with the MDNR Division of Wildlife and with U.S. Fish and Wildlife representatives indicated that there are no known projects within Bois de Sioux Watershed District that occurred in the past or that are currently underway or planned in the foreseeable future that would have environmental effects on the project area. When necessary, future drawdown events may be planned in accordance with the Upper Lightning Lake Management Plan (Attachment E of the EAW). Drawdown events may also be an implementation strategy included in the Bois de Sioux Watershed Restoration and Protection Strategy currently under development to improve water quality in this basin and the watershed. Future drawdown events would follow the same criteria as described in Finding No. 14f. The environmental effect of a drawdown event would be considered beneficial in the long-term and outweigh the short-term negative environmental effects.

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

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

Unit of Government	**Type of Application**	**Status**
MDNR	Work in Public Waters Permit	To be obtained
MDNR	General Waters Permit 2011-0616	Valid upon Wildlife Lake designation
MDNR	Wetland Conservation Act (WCA) Permit	Pending "No Loss"
MPCA	NPDES/SDS General Construction Stormwater Permit, Clean Water Act (CWA) Section 401Water	To be obtained

Unit of Government	Type of Application	Status
	Quality Certification	
U.S. Army Corps of Engineers (USACE)	Section 404 Permit	To be obtained
Bois de Sioux Watershed District	Project review	Approvals as necessary

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. 14, will be either limited in extent, temporary, or reversible:

   a. Fish, Wildlife and Ecologically Sensitive Resources
   b. Invasive Species
   c. Physical Impacts to Water Resources
   d. Erosion and Sedimentation
   e. Water Quality
   f. Water Use
   g. Odors, Noise, Dust and Air Emissions
   h. Cumulative Potential Effects

   Based on the Findings of Fact above, the MDNR concludes the following potential environmental effects of the project, as described in Finding No. 14, will be beneficial:

   Habitat and water quality improvements resulting from the proposed channel cleanout and reshaping and the construction of a water control structure. The proposed project

activities would result in more stable water levels within Upper Lightning Lake, reduce flooding and erosion to downstream waterbodies, and create a more desirable habitat and improve water quality.

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

   The effects of all past projects comprise the existing conditions of the project area. Cumulative environmental effects add to the existing condition the proposed project and future projects.

   As described in Finding No. 14h, a similar project was completed in 2011 by the MDNR Division of Wildlife approximately 2 miles downstream of the project area with the same goals in mind. The 2011 project resulted in improvement to habitat and water quality and no long-term negative environmental effects have been observed from construction and operation activities. In addition, a high velocity fish barrier was also installed in the watercourse approximately 1.5 miles downstream of this project site to prevent fish from migrating into upstream shallow lakes and wetlands following drawdowns and habitat restorations.

   The proposed project is a continuation of the downstream Denton Slough habitat improvements and reduction of flood damage in a number of shallow lakes and wetlands within this highly altered watershed and target area for restoration efforts. The cumulative impact of the projects is intended to complement and facilitate each other to improve waterfowl habitat and water quality. Overall, impacts are expected to be minimal and temporary; long term benefits are expected from these projects.

   Consultation with the MDNR Division of Wildlife and with U.S. Fish and Wildlife representatives indicated that there are no known projects within Bois de Sioux Watershed District that are currently underway or planned in the foreseeable future

   Contributions to potential cumulative effects from the project are not expected to be significant. The proposed project complies with mitigation measures for erosion control, invasive species, and work in water that are designed to address potential cumulative effects. The project proposer has taken measures to design the project and propose construction activities that would minimize the project's contribution to potential cumulative effects.

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

   Based on the information in the EAW and Findings of Fact above, the MDNR has determined that the following environmental effects, as described in Finding No. 14, are subject to mitigation by ongoing public regulatory authority:

   Physical impacts on water resources including channel cleanout and channel reshaping activities and construction of a pump and lift station with inlet channel are subject to regulatory authority by the MDNR Public Waters Work permit, the MDNR General Waters permit and the USACE Section 404 permit.

Wetland effects include excavation of sediment during channel cleanout and reshaping, wetland type changes that could occur as a result of the proposed flow regime, and wetland fill activities. WCA, CWA, and Section 404 approval will be required 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 from construction-related activity that includes channel cleanout and reshaping and installation of a pump station and water control structure are subject to regulatory authority by the MPCA NPDES/SDS General Construction Stormwater Permit and CWA 401 Water Quality Certification.

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 completed, or developed in collaboration with others, numerous habitat improvement projects within public waters that have included EAW preparations. The effects and benefits of prior projects are used in planning and developing other similar projects such as the proposed Upper Lightning Lake Water Level Management project. The information gained on the effects and results of past projects provides part of the basis for predicting the effects of similar future projects, such as the proposed project.

   The MDNR has prepared EAWs for other habitat improvement projects that have similar environmental effects. These include the Lake Ogechie Wild Rice Restoration project and the Pelican lake Restoration 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 proposed Upper Lightning Lake Water Level Management Project.

7. Based on consideration of the criteria and factors specified in the Minnesota Environmental Review Program Rules (*Minnesota Rules*, chapter 4410.1700, subpart 6 and 7) to determine whether a project has the potential for significant environmental effects, and on the Findings and Record in this matter, the MDNR determines that the proposed Upper Lightning Lake Water Level Management 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 Upper Lightning Lake Water Level Management Project in

Grant and Otter Tail 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 15th day of September, 2014.

STATE OF MINNESOTA
DEPARTMENT OF NATURAL RESOURCES

Barb Naramore

Barb Naramore
Assistant Commissioner