



DEPARTMENT OF THE ARMY
DETROIT DISTRICT, CORPS OF ENGINEERS
477 MICHIGAN AVE.
DETROIT, MICHIGAN 48226

IN REPLY REFER TO:

FEB 04 2013

Planning Office
Environmental Analysis Branch

TO ALL INTERESTED AGENCIES, PUBLIC GROUPS, AND CITIZENS:

The enclosed Environmental Assessment (EA)—*Dam Maintenance and Construction of Bottom Draw Outflow, Town of Iron River, Bayfield County, Wisconsin*—is provided for your review. The EA addresses the potential environmental impacts associated with the Detroit District, U.S. Army Corps of Engineers (USACE), providing funding assistance under Section 154 of the Consolidated Appropriations Act of 2001 (Public Law 106-554) as amended by Section 119 of the Consolidated Appropriations Act of 2005 (Public Law 108-447), to the Town of Iron River, Wisconsin, for dam maintenance and outflow construction.

The Section 154 project includes repairs to the existing concrete spillway and appurtenant structures, installation of weep weirs on the downstream side of the earthen embankment and installation of a bottom draw outflow pipe. Alternatives for the Section 154 project include: 1) No Action, 2) Maintain the dam with required upgrades, and 3) Dam removal. The recommended alternative is Alternative 2 as it would meet the project objectives of maintaining the impoundment through the construction of a bottom draw outflow, reduce the long term maintenance costs associated with the failing infrastructure system, and comply with state dam safety maintenance requirements.

The EA includes a Section 404(b)(1) Evaluation, pursuant to the Clean Water Act for placement of fill material into the waters of the United States and a Preliminary Finding of No Significant Impact (FONSI). Any person who has an interest that may be affected by the proposed in water placement of fill material may request a public hearing. The request must be submitted in writing within the comment period of this notice (as described below) and must clearly set forth the interest that may be affected and the manner in which the interest may be affected by this activity.

The EA is available for public review on the internet at the USACE Detroit District website: <http://www.lre.usace.army.mil/who/environmentalservices/> and available Monday - Thursday during normal business hours (9:00 am - through 2:00 pm) at:

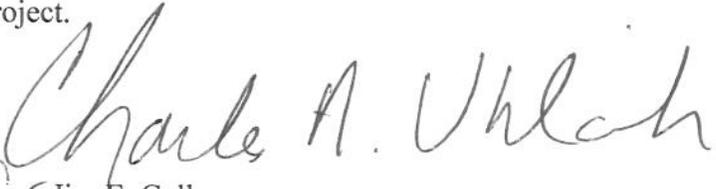
Town of Iron River
8275 East Mill Street
Iron River, Wisconsin 54847

Any comments you may have concerning the proposed environmental assistance should be made within thirty (30) days from the date of this letter. If no comments are received by the end of the

thirty (30) day review period, it will be assumed that you have no comment. Please direct your comments to:

U.S. Army Engineer District, Detroit
CELRE-PL-E (Charles A. Uhlarik)
477 Michigan Ave.
Detroit, Michigan 48226-2550

Based on the conclusions of the EA, it appears that the proposed project does not constitute a major federal action that significantly affects the environment. Following the public review period, the USACE District Engineer will make a final decision regarding the necessity of preparing an Environmental Impact Statement (EIS) for the proposed environmental assistance project. If, the potential project impacts are found to be insignificant, a FONSI would be executed, and the proposed assistance provided. If the project's environmental impacts are found to be significant, mitigation measures would be proposed to reduce the impact below a level of significance, or the USACE would prepare a Notice of Intent to prepare an EIS, or choose not to proceed with the proposed project.


for Jim E. Galloway
Chief, Planning Office

Enclosure

ENVIRONMENTAL ASSESSMENT

Dam Maintenance and Construction of Bottom Draw Outflow,
Town of Iron River, Bayfield County, Wisconsin
Section 154



February 2013

U.S. Army Engineer District, Detroit
Corps of Engineers, CELRE-PL-E
477 Michigan Avenue
Detroit, Michigan 48226-2550
313-226-2476

SECTION 1

Introduction

Introduction: The U.S. Army Corps of Engineers (USACE), Detroit District, proposes providing funding assistance under Section 154 of the Consolidated Appropriations Act of 2001, as amended, to the Town of Iron River, Wisconsin, for dam maintenance and outflow construction. The Town of Iron River is located approximately 15 miles inland from Lake Superior, 21 miles west of Ashland, Wisconsin and 50 miles east of Superior, Wisconsin (Figure 1).

Project Authority: The funding assistance is authorized under the Northern Wisconsin Environmental Infrastructure and Resource Protection and Development Program as authorized by Section 154 of Division B of Appendix D, Consolidated Appropriations Act, 2001, Public Law 106-554, as amended (hereinafter "Section 154"). This program authorizes the Secretary of the Army to provide assistance in the form of design, construction, and reconstruction assistance for water-related environmental infrastructure and resource protection and development projects in northern Wisconsin, including projects for navigation and inland harbor improvement and expansion, wastewater treatment and related facilities, water supply and related facilities, environmental restoration, and surface water resource protection and development.

USACE Participation: Under Section 154, the USACE would provide up to 75 percent cost reimbursement for the dam maintenance and upgrades. The Town of Iron River has had one prior work contract for a waste water pump station rehabilitation which was funded partially by the USACE. The former project costs were \$300,459.64 with the total federal share of \$225,344.73. The proposed project costs for dam repairs are \$145,333. The USACE will reimburse up to 75 percent (\$109,000) of the total project cost. The Sponsor will pay the remaining 25 percent (\$36,333) of the total project cost. Total project costs for both grants: \$445,792.64; federal share \$334,334.73.

Project Purpose and Need: The purpose and need of the project is to conduct dam maintenance to comply with state dam safety requirements; to reduce long term maintenance costs associated with the failing infrastructure system; and to construct a bottom draw outflow to maintain the impoundment.

Public Involvement: The NEPA process is designed to inform the public of the potential environmental consequences of the Proposed Action and involve them in the federal decision-making process. The USACE recognizes that public involvement and intergovernmental coordination and consultation are essential elements in developing an Environmental Assessment (EA). Formal notification and opportunities for public participation, as well as informal coordination with government agencies and planners are incorporated into the EA process.

Agencies, organizations, and members of the public having a potential interest in the Proposed Action are invited to participate in the decision-making process. Coordination was conducted with the Wisconsin State Historic Preservation Office (SHPO), the U.S. Environmental Protection Agency (EPA), the U.S. Fish and Wildlife Service (FWS), and the state of Wisconsin Department of Natural Resources (WDNR). In addition, coordination letters requesting

information about traditional cultural properties or sites of particular interest near the project site were sent to various Native American tribal governments that have expressed interest in actions located in Bayfield County.

This EA includes a Section 404(b)(1) Evaluation (Attachment A), pursuant to the Clean Water Act for placement of fill material into the waters of the United States and a Preliminary Finding of No Significant Impact (FONSI) (Attachment B). Any person who has an interest that may be affected by the proposed in water placement of fill material may request a public hearing. The request must be submitted in writing and must clearly set forth the interest that may be affected and the manner in which the interest may be affected by this activity.

This EA will be available to the public for comment for a period of 30 days. At the end of the 30-day period, the USACE will consider all comments submitted by individuals, agencies, and organizations. As appropriate, the USACE may then finalize and sign the FONSI and proceed with implementing the project's recommended alternative. If it is determined that implementing the recommended alternative would result in potentially significant impacts to the quality of the human environment, mitigation measures will be proposed to reduce the impact below a level of significance, or the USACE will either publish in the Federal Register a Notice of Intent to prepare an Environmental Impact Statement (EIS) or choose not proceed with the proposed project.

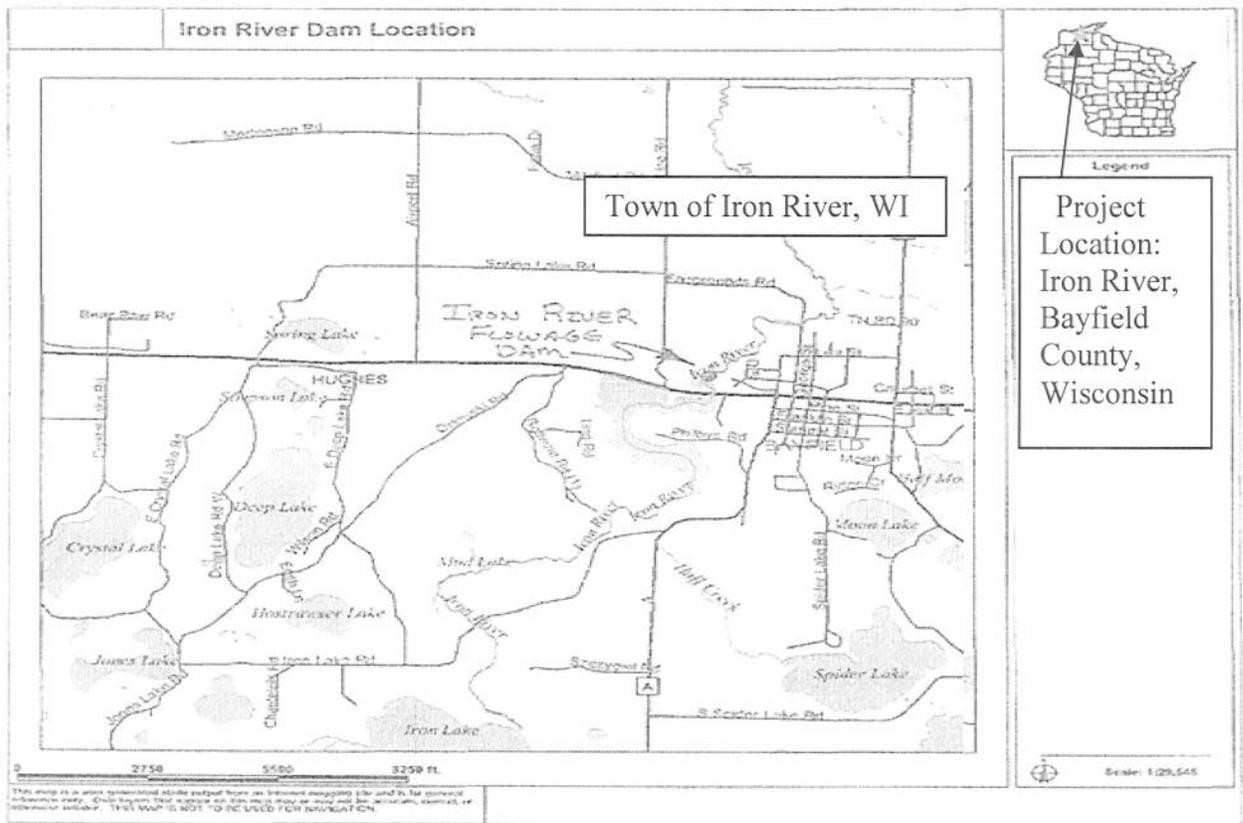


Figure 1. Town of Iron River, Bayfield County, Wisconsin

SECTION 2

Description of Proposed Action & Alternatives

Proposed Action and Alternatives: The Section 154 project includes repairs to the existing concrete spillway and appurtenant structures, installation of weep weirs on the downstream side of the earthen embankment and installation of a bottom draw outflow pipe. Alternatives for the Section 154 project include: 1) No Action, 2) Maintain the dam with required upgrades, and 3) Dam removal. The recommended alternative is Alternative 2 as it would meet the project objectives of maintaining the impoundment through the construction of a bottom draw outflow, reduce the long term maintenance costs associated with the failing infrastructure system, and comply with state dam safety maintenance requirements. Alternative 1, No Action, was not a viable alternative as it does not meet the project's objectives. Alternative 3, Dam removal, was not a viable alternative since dam removal was too costly and it does not meet the project's objectives.

Proposed Project Details: The dam is on the Iron River, which drains north to Lake Superior. There have been dams at this location that have washed out at least four (4) times before the existing dam was re-constructed in 1923. The re-constructed dam has a structure height of 29 feet and a hydraulic height of 23 feet, creating a 76 acre impoundment. A spillway was incorporated into the design and the adjacent penstock provided water to the powerhouse turbines which were components of the dam. The power house and spillway were removed in the 1980's by the previous owner when hydropower generation ceased. The impoundment volume is approximately 1,890 acre-feet. The dam is classified as a high hazard dam because of the lack of local zoning in the downstream river valley yet no downstream residential structures are imperiled under a dam break scenario however, road crossings would be endangered in the event of dam failure.

A portion of the Section 154 project work was completed in late summer, 2012 and included maintenance to the concrete outfall structure including repairs to the spalled and cracked concrete spillway, removal of woody vegetation on the earthen embankment, installation of three (3) seepage weirs on the downstream side of the embankment, trash rack and stop log replacement. A three (3) foot drawdown of the impoundment was conducted to complete the above listed repairs as authorized and required by the Wisconsin Department of Natural Resources (WDNR) under state permit (1P-NO-2012-4-03366) issued on July 31, 2012 to refurbish the concrete outfall and install weep weirs. The project repairs were completed and the impoundment refilled by mid-September 2012, as directed by the WDNR.

The remaining Section 154 project work consists of excavation of 400 cubic yards (CYD) of earthen embankment (18 CYD of material being removed below the normal impoundment water level) to install 130 lineal feet (LF) of 24 inch high density polyethylene (HDPE) pipe and outflow control structure with discharge to the existing concrete spillway (Figure 2). The impoundment will be drawn down up to six (6) feet for 45 days to install the bottom draw outflow pipe at a drawdown rate not to exceed six (6) inches per day or the work may be completed using a cofferdam with no draw down.

Excess earthen material removed to install the outflow structure and pipe will be deposited on uplands and seeded for stabilization. The excavated upland trench will be backfilled with the excavated materials and seeded. Excavated material, where structurally suitable, would be incorporated in the new construction, supplemented with clean construction fill as necessary. Excess materials not used in the project construction would be disposed of in accordance with applicable disposal regulations. Special materials handling is not anticipated, as the potential for hazardous and toxic wastes is not expected or anticipated.

The proposed construction activities may require temporary access, staging areas, and/or construction of one or more temporary structures such as turnarounds, additional work and storage areas, access roads, and office facilities. Temporary structures/staging sites would be incidental to the work being performed, located at USACE approved, and Town-owned or Town- approved locations, would be located outside wetlands, within project boundaries or right-of-ways, and removed when no longer needed. Although the specific type and location of temporary structures or staging sites cannot be determined at this time, an appropriate amount of real estate would be provided by the non-federal project sponsor to accommodate access and storage activities during construction. Temporary access for construction and staging activities would be mainly from the existing access road that extends from town to the proposed work site on the dam. The top of the earthen embankment has a gravel cap with sufficient space to store materials and provide construction access. Therefore, no additional work or storage areas are anticipated.

Construction activities would include appropriate precautionary measures to prevent erosion and sedimentation or other undesirable environmental impacts. Refer to Section 3, Existing Environment, Environmental Consequences for further details related to Best Management Practices (BMPs) and potential impacts of implementing the recommended alternative. The project site would be restored upon completion of construction, including re-vegetation to prevent erosion and soil runoff until permanent drainage and erosion control is re-established, and to help prevent establishment of non-native and invasive plant species

All construction will be in accordance with federal and state regulations and local ordinances. The project work area does not contain any federally protected species or their critical habitat nor is the dam listed on the National Register of Historic Places (NRHP). Applicable permits would be obtained prior to construction. Some minor variation from the project as described may occur with respect to items such as the sequence of activities, method of construction, or design details as a result of unanticipated design improvements, site conditions, or cost-saving measures. Any variations that result in a significant change to the project design or significant environmental impacts, and that are to be included in the Section 154 project, would be further evaluated under the NEPA.

SECTION 3

Existing Environment, Environmental Consequences

This section describes the existing environment that could be affected by implementing the project alternatives. Information gathered from site visits, interviews, project sponsors, consultants and coexisting documentation, and correspondence with federal, state, and local agencies was used to characterize the existing environment.

This section identifies the potential direct and indirect environmental consequences of the action alternatives and the No Action alternative to water resources, air quality, natural and biological resources, cultural resources, noise, visual resources, transportation and traffic, hazardous materials, and environmental justice. Each alternative was evaluated for its potential to affect resources. Potentially relevant resource areas were initially considered in this EA. Some were eliminated from detailed examination because of their inapplicability to this proposed project. General descriptions of the eliminated resource categories and the basis for elimination are described in Section 3.1.

This section also describes the potential cumulative effects on the environment of the project alternatives when combined with recent, present, and reasonably foreseeable future projects. Key measures and Best Management Practices (BMPs) that would be implemented to avoid or minimize potential impacts to the environment also are presented as applicable.

3.1 Preliminary Impact Scoping

In compliance with NEPA, the CEQ guidelines, and Engineer Regulation ER 200-2-2, Policy and Procedures for Implementing NEPA, the following evaluation of environmental impacts focuses on those resources and conditions potentially subject to effects and on potentially significant environmental issues deserving of study, and deemphasizes insignificant issues. Some environmental resources and conditions that are often analyzed in an EA have been omitted from detailed analysis. The following provides the basis for such exclusions.

Sustainability and Greening, Farmlands, Hazardous, Toxic, Radiological Waste, Recreation, Social Setting/Environmental Justice. The proposed project does not require significant resources for construction or operation, nor produce significant emissions once constructed. Methods to implement green building technologies (i.e., utilizing recycled material or recycling waste such as concrete or steel) will be implemented where feasible and are not discussed in detail within this EA. No farmland is present at the site for the proposed bottom draw outflow pipe, access road and work and storage areas.

The purpose of a HTRW investigation is to ascertain the environmental history and current conditions of a site as it relates to HTRW, within practical measures and using reasonably available resources. By conducting such an investigation, the uncertainty regarding the potential

for HTRW in connection with the project is reduced, though not eliminated. There is always some risk of encountering unknown HTRW elements during a project, thus contract clauses incorporate wording on how to address such conditions should they be discovered. A review of the EPA's Envirofacts, EnviroMapper and MyEnvironment (which includes Superfund / National Priorities List sites, toxic releases, water dischargers, air emissions, and hazardous wastes) and DNR Bureau for Remediation and Redevelopment Tracking System (BRRTS) was conducted for the proposed project site. The USACE review of databases and resources indicates that no HTRW sites are known to be at the project site or would be impacted by the proposed construction.

Recreation is not known to occur at the site other than viewing of the impoundment and shore fishing, on occasion. The impoundment will be drawn down up to six (6) feet and refilled, thus the impacts will be minimal.

The presence and operation of equipment necessary for construction and operation of the dam would not significantly affect the social setting/environmental justice of the town. The Town of Iron River owns the dam and has been involved in the planning for this project. The proposed project would not have a significant impact on community cohesion, desirable community growth, tax revenues, property values, public facilities, public services, regional growth, employment or the labor force, business and industrial activity, or human-made resources; nor would the project cause displacement of people. The action would not cause disproportionately high and adverse effects on low-income, minority, tribal or child populations.

3.2 Effects Summary of No Action

The effects of taking no action are similar for most resources. By taking no action, there would be minimal changes to current conditions, except for the continued deterioration of the dam and supporting infrastructure. The dam would not be maintained and the bottom draw outflow for the release of cooler waters in the summer would not occur. The potential exists for increased dam maintenance costs in the future or the increased potential for dam failure. A dam failure would result in the release of flood waters and sediments to the downstream area, potentially affecting road crossings and natural resources in the river and river valley. The No Action alternative would not contribute to cumulative impacts of resources at the site in the short term. By taking no action, the Town of Iron River would continue to be in non-compliance with the WDNR maintenance requirements for the dam. The downstream river floodplain would be subject to potential flood impacts if the dam were to fail.

3.3 Physical Setting and Land Use

Existing Environment: The Town of Iron River is located east of the proposed project area. The Town of Iron River is located in northwestern Wisconsin. Average seasonal temperatures range between 50 and 80 degrees Fahrenheit in the summer and between -10 and 20 degrees Fahrenheit in the winter. Average rainfall is approximately 4 inches per month during the summer months. Snowfall mainly occurs between the end of October and the end of April. Topography of the general area varies from rolling hills to flat. The dam on the Iron River consists of the concrete spillway and earthen embankment spanning the floodplain. Highway 2

crosses the impoundment upstream of the dam. Surface waters from the Iron River drains north to Lake Superior. The powerhouse and penstock at the dam were removed by previous owners.

Environmental Consequences: The proposed project would cause negligible effects to the physical setting or land uses of the site. Site use from human activity would be similar to what currently exists and what has existed in the past. The installation of the bottom draw outflow pipe results in no change in the surface area of the impoundment.

3.4 Vegetation, Wildlife Habitat, Wildlife and Aquatic Resources

Existing Environment: Within the project site, the earthen embankment is mostly grass with exception of the existing gravel access road and concrete spillway. Woody vegetation is removed during routine maintenance operations as the root systems of the trees provides a pathway for water seepage that could ultimately lead to the failure of the earthen embankment. The wooded area downstream of the project site and in the project vicinity harbor wildlife.

Environmental Consequences: No unique, special or significant vegetation, fish or wildlife species have been identified at the site that would be significantly affected by the proposed project. The project would have minor effects on vegetation and wildlife resources as the majority of the project would occur in areas previously developed or currently. There would be negligible effects on fish and aquatic resources. Woodlands in the Iron River floodplain harbor wildlife, but such wildlife are accustomed to noise and traffic from Highway 2 and the town and would not be unduly disturbed by construction or operation activities.

Construction would occur in the later summer months, consistent with generally lower flows, after fish spawning and consistent with WDNR requirements. The project would allow for the discharge of cooler waters from the impoundment downstream in the summer months to the Iron River, which is a designated trout stream and provide a mechanism to draw down the impoundment for future maintenance or inspection requirements.

Site drainage is toward the Iron River, but drainage from the site during construction and post-construction would be minor and protected with appropriate soil erosion control methods. To minimize impacts, disturbed areas would be seeded, grassed, or re-vegetated upon completion of the project to prevent erosion and to help prevent establishment of non-native and invasive plant species. Required soil erosion and sediment control Best Management Practice (BMPs) would protect aquatic resources.

This EA contains a Section 404(b)(1) Evaluation, pursuant to the Clean Water Act for placement of fill material into the waters of the United States (Attachment A). Any person who has an interest that may be affected by the proposed in water placement of fill material may request a public hearing. The request must be submitted in writing and must clearly set forth the interest that may be affected and the manner in which the interest may be affected by this activity.

3.5 Threatened and Endangered Species

Existing Environment: Federal listings under the Endangered Species Act (ESA) for Bayfield County, Wisconsin, as of March 2012, include: Canada lynx (threatened); Kirtland's warbler (endangered); and Fassett's locoweed (threatened). While no resident populations of the Canada lynx are known from Wisconsin, the species occasionally occurs in northern forested areas, and Bayfield County is one county with the highest likelihood of occurrence. Habitat for the Kirtland's warbler included young jack pine stands (5 to 25 years old) and habitat for the Fassett's locoweed is open sandy lakeshores.

Environmental Consequences: Individual Canada lynx could be present in the vicinity, but are not likely to be present near the downtown project work site area, which does not include suitable Canada lynx habitat. Habitat for the Kirtland's warbler and Fassett's locoweed is not present at the work site. Therefore, the USACE has determined, under the ESA, that the proposed Section 154 project would have no effect on federally listed species. The US Fish and Wildlife Service (USFWS) concurred with this USACE determination in an email response dated September 28, 2012.

3.6 Exotic and Invasive Species

Existing Environment: Project areas that would be disturbed are currently grass or the fringe area of an established wooded area.

Environmental Consequences: The proposed project would have negligible effects on exotic and invasive species. BMPs and special equipment handling would be implemented to reduce the transport of invasive plants by seed. BMPs may include off-site power-washing of equipment prior to being transported to the site and re-vegetating disturbed areas to help prevent establishment of non-native invasive plant species.

3.7 Wetlands

Existing Environment: A review of the USFWS National Wetlands Inventory indicated that wetlands are present both upstream and downstream of the proposed project work areas.

Environmental Consequences: The proposed project would not cause unacceptable impacts to wetlands nor result in the loss of surface acreage of wetlands as work is not proposed in wetlands. If applicable, permits would be obtained by the non-federal project sponsor prior to construction.

3.8 Water Quality

Existing Environment: The Iron River, a designated trout stream, is located along the westernmost edge of the town.

Environmental Consequences: There would be negligible to no effect on water quality from the proposed project. Potential threats to the water quality of the Iron River in the vicinity of the

project site include sediment from runoff. Appropriate erosion control measures would be implemented to prevent sediment runoff from leaving the construction site. Soil erosion control methods would be put in place prior to beginning construction activities and maintained during construction to minimize sediments from potentially entering the river system. The contractor shall prepare and obtain any required erosion and sediment control plans and permits. Other erosion control measures such as the use of silt fencing, straw bales, geo-fabrics, hydroseeding, or various other immediate re-vegetation tactics would be developed and implemented prior to, during and after construction, as needed. Disturbed surface areas or temporary construction sites would be re-vegetated (grass only) to similar conditions for long-term erosion control, or restored as applicable, upon project completion. Prior to construction, a State of Wisconsin Water Quality Certification or waiver thereof will be obtained by the non-federal project sponsor from the WDNR.

3.9 Floodplains and Coastal Zone Management

Existing Environment: The proposed work area is within the floodplain of the Iron River. However, there is no Federal Emergency Management Agency (FEMA) map information regarding floodplains for the Town of Iron River. Bayfield County is located within a Wisconsin Coastal Zone County and is thus subject to the Wisconsin Coastal Management Program.

Environmental Consequences: The proposed project complies with the Federal Executive Order on Flood Plain Management (E.O. 11988) since the project would not encourage floodplain development. The proposed project would be “consistent to the maximum extent practicable” (as defined in 16 USC 1456, Coastal Zone Management Act, approved 1978) with the Wisconsin Coastal Management Program and not significantly impact the coastal zone. The proposed work is consistent with the dam safety requirements of the WDNR. Upon completion of the project, the existing grades on the embankment will be restored, thus no harmful effect on floodplains. The installation of the seepage weirs on the downstream side of the embankment will provide monitoring data to assist in protecting the downstream floodplain areas from potential dam failure.

3.10 Hydrology

Existing Environment: Based on topography and surface water locations, the local groundwater flow direction is likely toward the west, to the Iron River. Regional groundwater flow is towards Lake Superior, located approximate 15 miles to the north of the project site. Well logs from the area indicate that the glacial deposits contained intermingled layers of clay, silty sands, fine and coarse sands and gravel.

Environmental Consequences: The proposed project would not affect the hydrology of the river but could provide cooler water downstream during the summer months.

3.11 Cultural Resources

Existing Environment: In compliance with Section 106 of the National Historic Preservation Act of 1996 and Executive Order 11593 (Protection and Enhancement of the Cultural

Environment, May 1971), the NRHP and the SHPO was consulted in October 2012 for their review of the proposed project. The project site has been reviewed for historic and cultural resources. Though the dam is older than 50 years, the site was significantly altered by the removal of the power house and the spillway in the 1980's. The National Park Service does not list any historic properties within the project area.

Environmental Consequences: The USACE has reviewed the project site for historic and cultural resources and determined that no historic properties will be affected. The SHPO concurred with the USACE's determination in a response dated November 2, 2012 that "no historic properties will be affected" by the proposed project. Construction contracts would include clauses protective of any discovered cultural resources. If any unusual sites / items that may have historical value are encountered during the course of proposed construction, work would stop and the sites / items would be protected while the appropriate authorities, including the District archeologist, are contacted. It is not anticipated that the proposed dam maintenance would affect cultural resources.

3.12 Noise and Traffic

Existing Environment: The Town of Iron River is located east of the dam site. Noise in the vicinity of the project site is typical of that found in a mixed use industrial and relatively undeveloped area near a small sized downtown. The general area of the Iron River at the dam is undeveloped and wooded. Highway 2 crosses the impoundment immediately south of the dam. Individual residences and river crossings are located downstream of the dam.

Access to the dam site will be from either the east or west along old US Highway 2 which is part of the embankment and crosses the dam. Access to Old US Highway 2 will be off US Highway 2 from either County Highway A extended (Lea Street) or Range Line Road. Access routes are not densely developed and located west of the downtown area. However, moderate traffic would be expected at peak workday commute times on US Highway 2 because it is the main east-west route through the Town of Iron River.

Environmental Consequences: Temporary and minor noise and traffic disturbances would occur from the presence and operation of heavy machinery during the proposed construction activities; however, disturbances would not be significant or long-term. Effects beyond the site are not expected to exceed levels necessary for the protection of public health and welfare, which is typically identified as 70 db for NEPA assessments based on EPA publications.

Predicted noise levels would continue to decrease at distances further from the noise source. Levels would fluctuate throughout the day during construction and could be impacted by intervening buildings, vegetation, wind direction, and atmospheric conditions. The proposed project is relatively small scale in the sense that it would involve the use of only a few pieces of heavy equipment at a time (i.e., excavator, front end loader, trucks delivering supplies, etc.). Based on this analysis, excessive noise above what might be considered typical in the project vicinity is not anticipated. Potential effects from noise would be minimized by ensuring that construction activities would only occur during times of the day designated by the Town.

Construction activities such as initial mobilization for the project and transport of materials to the construction site would cause general traffic in the area to be slightly heavier than normal, but impacts would be short-term, minimal and not have significant effects. All equipment and / or materials hauled to and from the project site would use approved hauling routes and abide by local, state, and federal hauling requirements. The contractor would be required to coordinate with the local authorities regarding use of access routes and obtain the appropriate permit(s), if necessary.

3.13 Air Quality

Existing Environment: The EPA and DNR monitor air quality across the State of Wisconsin. Data for Bayfield County was not available through the EPA's AirCompare; however, data was available and reviewed for the neighboring counties of Ashland and Douglas, which indicated no unhealthy days in recent years (2002-2011) for the general population. Bayfield County is currently in attainment for National Air Quality Standards and has good air quality.

Environmental Consequences: Impacts to air quality would arise from emissions of motorized construction equipment and minor fugitive dust associated with the proposed construction activities. Emissions and exposed soil conditions associated with the proposed construction would be short-term and temporary. The proposed project is relatively small scale and would likely involve the use of only a few pieces of heavy construction equipment at a time (i.e., an excavator, grader, front end loader and trucks delivering supplies). Fugitive dust control methods such as spraying down dust with water and re-vegetating exposed soils as soon as possible would be implemented throughout the project. Equipment would be required to meet emission standards. Emissions from the proposed construction activity are exempted as *de minimis* (Latin for 'of minimal importance'), and therefore meet the General Conformity Criteria pursuant to Section 107 of the Clean Air Act of 1970, as amended and 40 CFR 93.153. Air emission impacts during operations of the bottom draw outflow structure would be negligible.

3.14 Cumulative Effects

This section presents the recent and foreseeable future projects that were considered during the assessment of cumulative effects of each alternative. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time. Principles of cumulative effects analysis are outlined in the CEQ guide "Considering Cumulative Effects under the National Environmental Policy Act" (CEQ, 1997) which states: "for cumulative effects analysis to help the decision maker and inform interested parties, it must be limited through scoping to effects that can be evaluated meaningfully."

The potential for cumulative effects on the environment from the project alternatives were evaluated by reviewing available data such as historical aerial photographs and reports to identify recent projects, and by reviewing ongoing and planned projects within the vicinity of the proposed project areas that could affect the same environmental resources as each alternative. Actions that were considered include construction and environmental restoration projects that were recently completed, are currently underway, or are programmed to occur within the near future. The proposed project's cumulative effects are described in the following sections.

3.14.1 Recent, Present, and Reasonably Foreseeable Future Projects

The Town of Iron River maintains the dam and spillway. No major utility or infrastructure improvements are planned near the proposed project area. Activities that are expected to occur may include vegetation clearing, minor maintenance. No impact from these activities is expected to affect the proposed project, nor is the proposed project expected to impact any town projects. The Town of Iron River has been involved in planning this project. In addition, no developments or improvements in the dam vicinity of are planned due to classification of this river valley area as a flood zone.

3.14.2 Evaluation of Cumulative Effects

Alternative 1 – No Action

The No Action alternative would have no significant impacts on cumulative effects from recent, present, or reasonably foreseeable future projects. Fish passage upstream in the Iron River has been impeded by the dam since before the 1920's. If no action was taken at this time, the dam could conceivably deteriorate to a point where the dam could fail, resulting in downstream flooding. The WDNR dam safety inspection report indicates that the proposed repairs are necessary and should be completed. Without the necessary maintenance of the spillway and installation of the seepage weirs and bottom draw outflow structure, additional cost would be incurred in the future. The dam would not comply with required WDNR maintenance and would pose a flood threat to downstream infrastructure.

Alternative 2 - Maintain the Dam with Required Upgrades (Recommended Alternative)

The recommended alternative would have negligible to minor impacts to the majority of resources, no measurable impacts to wetlands, vegetation and floodplains hydrology. Maintenance of the dam saves long term costs and reduces the risk of dam failure and the subsequent downstream impacts. Based on evaluation of these potential impacts, and consideration of recent, present, and reasonably foreseeable future projects, the proposed action would not cause significant, long-term cumulative effects on the majority of resources.

Alternative 3 – Dam Removal

The dam removal alternative was considered and rejected as dam removal resulted in the loss of the 76 acres of open water impoundment, did not meet the needs of the Town of Iron River and was more costly than routine maintenance of the dam with required upgrades at the existing structure.

Summary - Table 1 summarizes potential impacts of the No Action and Recommended Alternative, as well as Cumulative Effects of the Recommended Alternative. No mitigation is proposed.

Table 1: Summary of Potential Effects and Cumulative Effects.

<u>RESOURCE</u>	<u>POTENTIAL EFFECTS</u>		
	<i>No Action – (Alternative 1)</i>	<i>Recommended Alternative - Maintain the Dam, Install Bottom Draw Outflow (Alternative 2)</i>	<i>Cumulative Effects of Recommended Alternative</i>
Physical Setting and Land Use	No effects	Negligible effects	Negligible cumulative effects
Vegetation, Wildlife Habitat, Wildlife and Aquatic Resources	No effects	Short-term, minor negative effects	No cumulative effects
Threatened and Endangered Species	No effects	No effects	No cumulative effects
Exotic and Invasive Species	No effects	Negligible effects	No cumulative effects
Prime Farmland and Wetlands	No effects	No effects	No cumulative effects
Water Quality	No effects	Negligible to no effects (related to soil erosion control)	No cumulative effects
Hazardous, Toxic and Radioactive Waste (HTRW)	No effects	No effects	No cumulative effects
Floodplains and Coastal Zone Management	No effects	No effects	No cumulative effects
Hydrology	No effects	No effects (negligible on surface water)	Minor to negligible cumulative effects.
Cultural Resources	No effects	No effects	No cumulative effects
Noise and Traffic	No effects	Minor during construction; negligible during operation	No cumulative effects
Air Quality	No effects	Minor during construction; negligible during operation	No cumulative effects

<u>RESOURCE</u>	<u>POTENTIAL EFFECTS</u>		
	<i>No Action – (Alternative 1)</i>	<i>Recommended Alternative - Maintain the Dam, Install Bottom Draw Outflow (Alternative 2)</i>	<i>Cumulative Effects of Recommended Alternative</i>
Social Setting/ Environmental Justice	No effects	No effects	No cumulative effects
Recreation	No effects	Negligible effects	No cumulative effects

SECTION 4

Agency Coordination

Project information coordinated via written correspondence for the proposed project was coordinated in September 2012 for review and early comment to the US Fish and Wildlife Service, US Environmental Protection Agency, Wisconsin Department of Natural Resources, the Wisconsin State Historic Preservation Office and Native American Tribes. No significant concerns were noted in their responses. These entities will receive a copy of the EA for review and comment during the 30-day public review period.

4.1 Early Coordination Comments

The State Historic Preservation Office asked for additional documentation that no historic properties would be affected and after USACE response, concurred with the USACE determination that no historic properties would be affected by the proposed dam maintenance and upgrades at the project site. The US Fish and Wildlife Service concurred the proposed project would have “no effect” on threatened or endangered species or designated critical habitat. The US Environmental Protection Agency had no comments. The Wisconsin Department of Natural Resources had comments of potential environmental concerns regarding sediment movement and soil erosion control, maintaining the cold water discharge and permits. These items have been addressed in the EA.

SECTION 5

Conclusions

This EA for funding assistance to the Town of Iron River, Bayfield County, Wisconsin, has been prepared in accordance with the National Environmental Policy Act (NEPA); the Council on Environmental Quality, *Regulations for Implementing the Procedural Provisions of the National*

Environmental Policy Act (40 CFR Parts 1500-1508); and the Corps of Engineers, *Policy and Procedure for Implementing NEPA* (33 CFR Part 230).

The proposed Section 154 project has been reviewed pursuant to the following Acts and Executive Orders, as amended: National Environmental Policy Act of 1969; Fish and Wildlife Act of 1956; Fish and Wildlife Coordination Act of 1958; National Historic Preservation Act of 1966; Clean Air Act of 1970; Executive Order 11593, Protection and Enhancement of the Cultural Environment, May 1971; Coastal Zone Management Act of 1972; Endangered Species Act of 1973; Water Resources Development Act of 1976; Clean Water Act of 1977; Executive Order 11990, Wetland Protection, May 1977; Executive Order 11988, Floodplain Management; and the Farmland Protection Policy Act (Subtitle I of Title XV of the Agriculture and Food Act of 1981).

This EA concludes that implementing the project's recommended alternative (Alternative 2):

- would be in compliance with the above Acts and Executive Orders;
- would result in no significant cumulative, long-term, or short-term adverse environmental impacts;
- would provide project benefits that outweigh minor, temporary impacts;
- would provide a long-term, environmentally sound solution consistent with the state dam maintenance requirements; and
- does constitute a major Federal action significantly affecting the quality of the human environment.

The No Action alternative (Alternative 1) and Alternative 3 (Dam removal) were evaluated in this EA but they do not meet the project's purpose and need.

SECTION 6

Public Review and Preliminary Determination

This Environmental Assessment will be made available for a 30-day public review to the Wisconsin Department of Natural Resources; the U.S. Fish and Wildlife Service; the State Historic Preservation Office; various Indian tribes, groups, and interests; and other Federal, state, and local agencies, interested groups, and individuals.

Based on the conclusions of the EA and the Section 404(b)(1) evaluation, it appears that the proposed project does not constitute a major federal action that significantly affects the environment. Therefore, a Preliminary Finding of No Significant Impact (FONSI) is included in this EA (Attachment B). Following the public review period, the USACE District Engineer will make a final decision regarding the necessity of preparing an Environmental Impact Statement (EIS) for the proposed environmental assistance project. If the potential project impacts are found to be insignificant, the FONSI would be executed, and the proposed assistance provided. If the project's environmental impacts are found to be significant, mitigation measures would be proposed to reduce the impact below a level of significance, or the USACE would prepare a Notice of Intent to prepare an EIS, or choose not to proceed with the proposed action.

ATTACHMENT A

**CLEAN WATER ACT
SECTION 404(b)(1) EVALUATION**

**CLEAN WATER ACT
SECTION 404(b)(1) EVALUATION**

**Of the Effects of Placing Fill Material into the Waters of the United States
Dam Maintenance and Construction of Bottom Draw Outflow
Town of Iron River
Bayfield County, Wisconsin**

I. PROJECT DESCRIPTION:

a. Project Location, Description, and Authority: The U.S. Army Corps of Engineers (USACE), Detroit District, proposes partial cost reimbursement funding assistance under Section 154 of the Consolidated Appropriations Act of 2001 (CAA 2001, Public Law 106-554), as amended by Section 119 of the CAA of 2005 (Public Law 108-447, as amended), to the Town of Iron River, Wisconsin for dam maintenance and outflow construction. The dam is located on the Iron River immediately west of the Town of Iron River.

b. Description of Disposal Methods: A portion of the Section 154 project work was completed in late summer, 2012 and included maintenance to the concrete outfall structure including repairs to the spalled and cracked concrete spillway, removal of woody vegetation on the earthen embankment, installation of three (3) seepage weirs on the downstream side of the embankment, trash rack and stop log replacement. A three (3) foot drawdown of the impoundment was conducted to complete the above listed repairs as authorized and required by the Wisconsin Department of Natural Resources (WDNR) under state permit (1P-NO-2012-4-03366) issued on July 31, 2012 to refurbish the concrete outfall and install weep weirs. The project repairs were completed and the impoundment refilled by mid-September 2012, as directed by the WDNR.

The remaining Section 154 project work consists of excavation of 400 cubic yards (CYD) of earthen embankment (18 CYD of material being removed below the normal impoundment water level) to install 130 lineal feet (LF) of 24 inch high density polyethylene (HDPE) pipe and outflow control structure with discharge to the existing concrete spillway. The impoundment will be drawn down up to six (6) feet for 45 days to install the bottom draw outflow pipe at a drawdown rate not to exceed six (6) inches per day or the work may be completed using a cofferdam with no draw down. The outflow pipe and structure will be bedded in 140 CYD flowable fill cement material (8 CYD in the impoundment) to provide suitable bedding for the pipe and control structure. The 80 LF of bottom draw outflow pipe located in the impoundment will be anchored by four (4) concrete collars.

c. Description of Habitat: The bottomlands of the impoundment contain very minimal submergent vegetation of low quality, suitable for some invertebrate production. The grassed embankment above the water line provides poor quality habitat for some small mammals and birds.

II. FACTUAL DETERMINATION

a. **Physical Substrate Determinations:** No significant adverse effects. Existing, consolidated bottomland substrate (< 0.01 acres) would be replaced with flowable fill and the 24" diameter bottom draw outflow pipe.

b. **Water Circulation, Fluctuation, and Salinity Determinations:** No adverse effects. The installation of the bottom draw outflow pipe will provide cooler water discharge downstream during the summer months. No adverse effects on water circulation and salinity.

c. **Suspended Particulate/Turbidity Determinations:** No significant adverse effect. Project construction would cause temporary turbidity if rains occurred prior to placement of the pipe and fill. Turbidity effects would dissipate over a short time period and distance from the work area and would not have significant, short term or long term effects. Soil erosion control measures are incorporated into the proposed project.

d. **Contaminant Determinations:** No significant adverse effect. No contaminants are known to exist in the earthen embankment. Only suitable flowable fill bedding would be placed into the waters of the US along with the four (4) concrete collars to anchor the 80 LF of pipe located below the normal water level in the impoundment. Backfill material, topsoil, seed or sod would be placed to restore the grade on the embankment where the pipeline was installed for the bottom draw outflow pipe.

e. **Aquatic Ecosystem and Organism Determinations:** No significant adverse effects. Construction would disrupt small mammal and bird use at the project site. Wildlife would temporarily avoid the area because of the noise and activity. Impacts to existing benthos would be minor and short lived within the 0.01 acre bottomland area. The flowable fill will create a hard substrate for other benthos to colonize within the impoundment.

f. **Federally Listed Species:** No Federally listed "threatened" or "endangered" species are known to be present in the drainage way or adjacent wetland, nor are any species proposed for listing that inhabit the project area. In the email correspondence dated September 28, 2012, the U.S. Fish and Wildlife Service (USFWS) concurred with the USACE determination that there will be "no effect" on federally listed species.

g. **Proposed Disposal Site Determinations:** The placement of fill material would have no significant adverse impacts on municipal or private water supplies, recreational or commercial fisheries, water related recreation, aesthetics, parks, monuments, wilderness areas, research sites, or similar preserves. The State Historic Preservation Office (SHPO) concurred that the project work area, as proposed, will not affect historic properties in a response dated November 2, 2012.

h. **Determination of Cumulative and Secondary Effects on the Aquatic Ecosystem:** No significant cumulative or secondary impacts are expected to occur from the proposed placement of the bottom draw outflow structure or site restoration to grade using backfill materials, topsoil, seed or sod for erosion control.