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1 Introduction

1.1 Background

The Big Sandy Lake Dam is located on the Sandy River in Aitkin County, MN, 1.25 miles upstream of the junction between the Sandy River and Mississippi River. The dam’s original purpose was to provide supplemental flow to the Mississippi River during periods of low river stages for navigation. Construction of the locks and dams downstream of Minneapolis in the 1930’s reduced the need for upstream storage for navigation and since then the Big Sandy Lake Dam’s purpose has shifted to flood control, recreation, fish and wildlife conservation, water supply, and water quality improvement. The dam is owned and operated by the U.S. Army Corps of Engineers, St. Paul District (Corps) in accordance with the 2003 Water Control Manual and the 2010 Mississippi River Headwaters Reservoir Operating Plan Evaluation Study. The Big Sandy Lake Dam structure is comprised of a concrete control dam with a log sluice bay, six mechanical slide gates, and an inoperable lock bay. There are two short earthen embankments with timber diaphragm cutoff walls that tie the concrete structure into higher ground and then a series of four earthen perimeter dikes to prevent uncontrolled overflow from lower areas surrounding the reservoir.

Over its history, the Big Sandy Lake Dam has undergone a series of modifications, repairs, and periodic inspections. From 2011 to 2016, a series of above and below water inspections identified several features that had deteriorated to a point that repair or replacement were necessary to maintain the long-term stability of the structure. These deficiencies were highlighted in Corps' 2016 inspection report and include:

- Upstream Timber Apron and Cutoff – poor or unknown condition, needs replacement.
- Lock Curtain Wall – poor condition, needs replacement or repair.
- Concrete – areas of poor condition, needs repair.
- Log Sluice Bay – stoplogs in poor condition and difficult to operate, needs replacement.
- Slide Gates – operable but nearing end of typical service life, need replacement.

The 2016 inspection report also recommended that a preliminary engineering report (aka design analysis report) be completed for the listed repairs/replacements. The objective of that report was to summarize the evaluation and development of the recommended rehabilitation plan and present preliminary design and cost estimates for proposed repairs/replacements.

Accordingly, the Corps has prepared this Environmental Assessment (EA) to disclose the environmental effects that may result from the rehabilitation of the Big Sandy Dam. This EA follows the procedures outlined in the National Environmental Policy Act of 1969 (NEPA), the Council on Environmental Quality Regulations (40 CFR 1500-1508), the USACE regulation Engineer Regulation 200-2-2 and includes the following information:
• Need for the proposed project
• Alternatives considered
• Evaluation of environmental effects
• Agency coordination and public involvement.

At the Federal level, this Environmental Assessment (EA) will be used to provide sufficient environmental documentation to determine whether an Environmental Impact Statement (EIS) is needed or a Finding of No Significant Impact (FONSI) is appropriate.

1.2 Project Area

The Big Sandy Lake Dam is located at the northwest corner of Big Sandy Lake. Figures 1 and 2 show a general location map and site layout map, respectively, and Figure 3 shows overall project footprint including staging areas on either side of the dam structure.

Figure 1. Project Area.
Figure 2. Big Sandy Lake Dam Area Overview.

Figure 3. Big Sandy Lake Dam Area Project Footprint.
1.3 Purpose and Need

The purpose and need for the proposed rehabilitation work is to address a series of deficiencies identified during the last inspection and prolong the life of the structure for the next 50+ years. The proposed activities would include repairing the features outlined above in Section 1.1.

1.4 Authority

The River and Harbor Acts of June 14th, 1880 and August 2nd, 1882 authorized the construction of dams at each of the six Mississippi River Headwaters lakes for the purpose of forming reservoirs. The lakes affected by these acts include Winnibigoshish, Leech, Pokegama, Sandy, Cross (Pine River), and Gull. Following authorization of the reservoirs, Congress directed the Secretary of War to establish regulations governing their operation through the River and Harbor Act of August 11, 1888 (25 Stat. 400).

1.5 Related Studies, Previous Evaluations, and Related Documents

- Big Sandy Lake Dam Rehabilitation Project Plans.
- Big Sandy Lake Dam Preliminary Engineering Report (PER), Stantec, September, 2018.
- Sandy Dam Safety Inspection Report, USACE, 2016.
2 Alternatives

2.1 No-Action – Continued Use of the Existing Structure

The no-action alternative in this case would be the continued use of the dam structure under current deteriorated conditions. No repairs or rehabilitation would occur.

2.2 Proposed Action – Rehabilitation

The proposed action is the repair and rehabilitation of the existing structure in accordance with the proposed project plans. Project plans were developed through identification of existing deficiencies in the 2016 Dam Safety Inspection Report, engineering assessments through the Preliminary Engineering Report, and as refined through the subsequent Value Engineering Study and additional discussions between the Corps’ Project Development Team. Table 1 below includes a list of activities with the proposed action including a general description of the work needed to repair or rehabilitate each.

Table 1: Preferred Alternatives for the Big Sandy Lake Dam Rehabilitation

<table>
<thead>
<tr>
<th>Design Features</th>
<th>Work Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lock Bulkhead Wall</td>
<td>Rehabilitate deteriorating concrete lock bulkhead (lock curtain wall).</td>
</tr>
<tr>
<td>Log Sluice</td>
<td>Replace wooden stoplogs with a more operable system.</td>
</tr>
<tr>
<td>Slide Gates</td>
<td>Refurbish the existing slide gates with mechanized equipment with push button controls operated from the bridge.</td>
</tr>
<tr>
<td>Upstream Apron and Cutoff</td>
<td>Remove existing timber apron and replace with concrete. Include new sheet pile cutoff.</td>
</tr>
<tr>
<td>Concrete Repairs</td>
<td>Repair the deteriorated concrete, including cracks, delamination, exposed aggregate, spalling, erosion, abrasion, and concrete loss above, at and below the normal pool water line.</td>
</tr>
<tr>
<td>Construction Phasing</td>
<td>Establish a construction phasing plan for construction tasks and bypass of water during construction.</td>
</tr>
<tr>
<td>Dam Dewatering During Construction</td>
<td>Provide a dam dewatering system to facilitate the rehabilitation work (some or all) in the dry. Include cofferdam(s) and dewatering (possibly including groundwater dewatering).</td>
</tr>
<tr>
<td>Electrical</td>
<td>New onsite electrical system for gate operators, lighting, and other powered facilities on the dam, including manual local/remote controls for the gates.</td>
</tr>
</tbody>
</table>
2.2.1 Project Phasing and Duration of Planned Activities

The proposed work would occur in two phases. Rehabilitation work on the lock chamber would occur first, followed by rehabilitation work on the sluice gates and log sluice chamber. Planned activities are expected to begin in the fall of 2020 or the spring or summer of 2021 and are expected to be completed by the end of the 2022 construction season.

2.2.2 Use of Cofferdams, Dewatering and Project Footprint

Upstream and downstream cofferdams would be used for each phase. Under Phase 1 (lock chamber), a sheet pile cofferdam would be installed immediately upstream of the lock chamber and span from the central concrete pier to the shoreline. Downstream, a portable cofferdam (port-a-dam) would be installed across the end of the lock chamber from chamber wall to chamber wall. The Phase 1 project footprint would encompass 750 square feet upstream and 5500 square feet downstream, including dewatering areas. Under Phase 2 (Sluice Gates and Log Sluice Bay), a sheet pile cofferdam would be installed immediately upstream of the lock chamber and span from the central concrete pier to the shoreline. Downstream, a portable cofferdam (port-a-dam) would be installed across the sluice gate bay from the lock chamber wall to the shoreline abutment. The Phase 2 project footprint would encompass 1400 square feet upstream and 6700 square feet downstream, including dewatering areas. Once cofferdams are in place, work areas would be dewatered to allow for construction activities.

2.2.3 Water Management during Construction

During Phase 1 (lock chamber), water flows would continue to be directed and managed through the existing sluice gate bays as they are currently. During Phase 2 (Sluice Gates and Log Sluice Bay), water flows would be directed and managed through the lock chamber by using variable height stoplogs in a manner that would mimic normal water management through the sluice gates. Phasing the project in this manner will allow outlet flows to be managed as they are currently in accordance with the approved water control plan. No significant changes or modifications to the existing water control plan are expected to occur during construction activities.
3 Existing Conditions and Environmental Effects

The following sections present the existing environmental conditions surrounding the proposed project area. The affected environment ranges from a small area around the actual project work to a larger socioeconomically affected area depending on the condition.

The effects of the no-action alternative are those expected to occur short-term and into the future under continued use of the existing dam without rehabilitation. The no-action alternative serves as the base condition against which the proposed action is compared for evaluating effects. Although the no-action alternative is not expected to have any adverse socioeconomic or environmental impacts in the immediate future, if the structure continues to deteriorate and one or more parts of the structure fails and water management capabilities are lost, substantial adverse impacts on recreational opportunities, public health and safety, property values, public facilities and services, flooding effects, aquatic habitat, and biological productivity could result.

A description of potential environmental effects follows for the proposed action, including a summary of effects provided in Table 3 at the end of this chapter. If not specifically listed, no effect is expected.

3.1 Social Conditions and Effects

3.1.1 Noise

Noise levels in and around the vicinity of the project area are commensurate with that of other semi-remote northern Minnesota locale. Ambient noise levels typically increase during the summer months when the nearby recreation area and campground is frequented by visitors and campers.

Under the preferred alternative, an increase in noise levels around Sandy Dam would occur during construction activities, which are expected to begin in the spring or summer of 2021 and extend through the 2022 construction season. Noise levels would return to normal after the rehabilitation project is completed. Therefore, overall impacts on noise under the preferred alternative are expected to be minor and temporary.

3.1.2 Recreational Opportunities

Big Sandy Lake is well-known for recreational opportunities such as fishing, boating, and camping.
Under the proposed action, the areas immediately upstream and downstream of the dam structure and areas directly adjacent to the structure are expected to be blocked off during construction activities for the safety of the public and construction workers. In addition, the “North Loop” of the recreation area will be temporarily closed to the public during the 2 year construction period due to concerns with public safety. This includes the temporary closure of 34 of 60 campsites, 1 boat launch, and the main playground area. Consequently, recreational opportunities in these areas, such as fishing, boating, and camping are expected to be temporarily interrupted during rehabilitation work. The use of parking areas adjacent to the dam structure may also be limited or temporarily closed during construction activities to accommodate construction vehicles and ensure public safety. However, the proposed work is not expected to limit the public’s use of the remainder of the Big Sandy Lake Recreation Area and other nearby public recreational facilities. Consequently, overall impacts to recreational opportunities are expected to be minor and temporary. No changes are anticipated to Big Sandy Lake water levels during construction, compared to what would otherwise occur under the No Action.

Conversely, if the rehabilitation work is not completed and the dam structure continues to deteriorate and fails, the stable pool that is currently maintained by the dam would revert to the natural run-out elevation which is 8-9 feet lower than the currently maintained pool-level. Under these conditions, the surface area of the lake would be smaller and the overall depths would be shallower substantially reducing the quality of recreational opportunities such as fishing and boating.

3.1.3 Public Health and Safety
Currently, the dam structure does not pose a threat to public health and safety. However, its deteriorating condition may result in a structural failure that could pose a substantial threat to public health and safety. Rehabilitating the dam now would maintain its current structural integrity for the next 50+ years avoiding the potential for unsafe conditions to occur. As a result, the preferred alternative would have a substantial beneficial effect on public health and safety by maintaining structure with good integrity and optimum functionality for the foreseeable future.

3.1.4 Controversy
Maintaining water levels at Big Sandy Lake as they have been for the last several decades is very important to the local residents, cabin owners and those that routinely enjoy the use of Big Sandy Lake. This was one of the key issues raised at the public meeting held by the Corps on November 2nd, 2019 at the Big Sandy Lodge in McGregor, MN. Rehabilitating the dam structure would allow the Corps to continue to manage water levels in Big Sandy Lake as they have been for the last several decades, supporting the public interest and preserving the use of the lake for the next 50+ years. No changes are anticipated to Big Sandy lake water levels during construction, compared to what would otherwise occur under the No Action. Conversely, allowing the dam structure to continue to deteriorate as it is currently and potentially fail would not support the public interest and would not preserve the use of the lake for next several decades.
3.1.5 Environmental Justice

Environmental Justice is a national goal and is defined as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Project goals and objectives were established to ensure the continued and safe use of the dam structure for all people. The proposed project would occur on public lands, therefore no private lands would need to be acquired. The distribution of information through public notifications will continue to be an integral part of planning for this project to ensure that concerns of all people will be fully considered in the decision-making process. In summary, the proposed action would not have a disproportionate adverse impact on any population, racial or economic group.

3.2 Economic Conditions and Effects

3.2.1 Property Values

The shoreline of Big Sandy Lake is predominantly developed and many landowners enjoy the benefits the lake has to offer. Big Sandy Lake is a desirable location with many permanent residences and cabins along its shoreline. These landowners typically enjoy high property values due to the strong desire to own lakeshore property around Big Sandy Lake. The Corps manages lake levels in accordance with an approved water management plan that takes into account the potential need for source water to manage the navigation channel in the Mississippi River, but also considers the management and maintenance of lake levels for recreational opportunities and the preservation of local fish and wildlife, which benefits local property owners and the property values of residences around the lake. Rehabilitating the dam structure would allow the Corps to continue to manage lake levels as it has in the past which would substantially benefit these property owners by maintaining the lake’s desirability, which would preserve local property values. Allowing the dam structure to deteriorate and fail could have an adverse impact on local property values.

3.2.2 Public Facilities and Services

The Corps currently manages a recreation area, campground and public water access in conjunction with its operation of the Big Sandy Lake Dam. These public facilities are largely dependent upon the recreational activities afforded by Big Sandy Lake which predominantly exist through continued maintenance of existing lake levels. If the dam structure continues to deteriorate and fails, the quality of these public facilities may be substantially reduced. Conversely, rehabilitation of the existing dam would preserve the Corps’ ability to maintain the water levels in Big Sandy Lake, thereby preserving the quality of these public facilities for the next several decades.

3.2.3 Flooding Effects

Under current conditions, discharges through the Big Sandy Lake Dam are managed in accordance with the current water management plan which was developed in consideration of minimizing flooding effects both around the perimeter of Big Sandy Lake and downstream. If the current structure continues to deteriorate and is either non-
Existing Conditions

and Environmental Effects

10

If the dam is not functional or is unsafe to operate, the ability of the Corps to manage water levels for these purposes would be diminished or eliminated. In addition, if the dam structure deteriorates to the point of failure, large amounts of water could be released uncontrolled, which may result in increased flooding effects downstream. Rehabilitating the dam structure now would preserve the Corps’ ability to continue to manage water levels as it has in the past to minimize flooding effects both around the shoreline of Big Sandy Lake and downstream. Consequently, the no-action alternative could result in substantial adverse flooding effects, while the preferred alternative would avoid these effects.

3.3 Natural Resource Conditions and Effects

3.3.1 Air Quality

The U.S. Environmental Protection Agency (EPA) is required by the Clean Air Act to establish air quality standards that primarily protect human health. These National Ambient Air Quality Standards (NAAQS) regulate six major air contaminants across the United States. When an area meets criteria for each of the six contaminants, it is called an “attainment area” for that contaminant. Areas that do not meet the criteria are called “nonattainment areas”. Aitkin County, MN is classified as an attainment area for each of the six contaminants, and is therefore, not considered an area of impaired ambient air quality (U.S. EPA, 2020). This designation means that the project area has relatively few air pollution sources of concern.

The use of heavy equipment to conduct the rehabilitation work may reduce air quality in and around the project area during the construction activities, but these effects would be minor and temporary and air quality is expected to return to normal shortly after construction activities cease.

3.3.2 Aquatic Habitat

Aquatic habitat immediately above Big Sandy Lake Dam is similar to the surrounding lake habitat, but is likely lower in quality due to presence of the dam and its accompanying man-made features. Aquatic habitat below Big Sandy Lake Dam is similar to the riverine aquatic habitat in the Sandy River, but is likely lower in quality for the same reasons. Aquatic habitats above and below the dam are not expected to change markedly under the no-action alternative, even if the dam structure fails and the historic outlet is returned. However, large amounts of aquatic habitat may be lost along the shoreline of Big Sandy Lake if lake levels decrease substantially under a catastrophic failure scenario. Rehabilitating the dam would preserve existing aquatic habitat for the foreseeable future, but minor temporary impacts to the aquatic environment would be realized during construction activities due to the use of temporary cofferdams to perform the work. Overall effects would be minor and temporary and the aquatic environment would return to existing conditions after construction activities cease.
3.3.3 **Biological Productivity**

Similar to the aquatic habitat discussion above, biological productivity immediately above and below Big Sandy Lake Dam is lower in quality due to presence of the dam and accompanying man-made features, and biological productivity above and below the dam is not expected to change markedly under the no-action alternative. However, biological productivity could be substantially affected if large amounts of aquatic habitat are lost along the shoreline of Big Sandy Lake under a catastrophic failure scenario. Conversely, rehabilitating the dam would preserve existing aquatic habitat for the foreseeable future resulting in substantial long-term benefits on biological productivity, though minor temporary impacts to the aquatic environment would be realized during construction activities due to the use of temporary cofferdams to perform the work.

3.3.4 **Surface Water Quality**

Big Sandy Lake above the dam and the Sandy River below support a diverse assemblage of aquatic flora and fauna including numerous fishes and aquatic plant species indicating the presence of good water quality in both water bodies. The continued use of the existing dam structure is not expected to have any adverse effect on surface water quality in the immediate future and likely would not have more than negligible effects on surface water quality even if the dam structure fails. Conversely, rehabilitating the dam will likely result in localized degradation of surface water quality during construction activities, but adverse effects associated with the rehabilitation work are expected to be minor overall and surface water quality would return to normal after construction activities are concluded.

3.3.5 **Fish and Wildlife**

The project area above and below Big Sandy Lake Dam is predominantly aquatic. Therefore, the flora and fauna that could be affected by the proposed rehabilitation project are those species that are adapted to live in aquatic habitats such as fish, frogs, turtles, mussels and aquatic plants. Fish, frogs and turtles are highly mobile, so it is likely that those occupying the area in and around the vicinity of Big Sandy Lake Dam would move out of the area if they are bothered by construction activities associated with the proposed rehabilitation project and would return after construction activities cease. However, it is possible that a few individuals may be stranded or unintentionally killed from the installation of cofferdams and subsequent dewatering activities necessary to perform the work; especially in the case of mussels and other bottom-dwelling invertebrates that are much less mobile and aquatic plants are sedentary. However, the footprint of the proposed work area within the aquatic environment is small and limited to areas directly adjacent to and immediately upstream and downstream of the dam. At most, only a few individuals are likely to be adversely affected by the proposed work. It is expected that these areas would recolonize with biota and return to normal after the completion of the rehabilitation project. Therefore, no substantial long-term adverse effects to resident fish and wildlife are expected to occur under the preferred rehabilitation project.
3.4 Federally-listed Threatened and Endangered Species

According to the USFWS IPaC Trust Resources Report obtained through the ECOS website on March 26, 2020, there are three federally threatened species that have the potential to occur within or near the proposed project area. Their common name, scientific name, status and preferred habitat type are further described in Table 2 below. No critical habitats are present within the proposed project area.

Table 2: Federally-listed species

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Status</th>
<th>Habitat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada Lynx</td>
<td><em>Lynx Canadensis</em></td>
<td>Threatened</td>
<td>Northern Boreal Forest habitat</td>
</tr>
<tr>
<td>Northern long-eared bat</td>
<td><em>Myotis septentrionalis</em></td>
<td>Threatened</td>
<td>Hibernates in caves and mines - swarms in wooded areas in autumn. Roosts and forages in upland forests during late spring and summer.</td>
</tr>
<tr>
<td>Gray Wolf</td>
<td><em>Canis lupis</em></td>
<td>Threatened</td>
<td>Wide range of habitats, typically forested areas in northern Minnesota</td>
</tr>
</tbody>
</table>

3.4.1 Canada Lynx

Canada Lynx are solitary animals predominantly found in the subalpine classic northern boreal forest areas called taiga in Canada and Alaska, but have been found in northern boreal forested areas of Minnesota. They prefer area with deep snow where they have an advantage against their favorite food source, snowshoe hares. The proposed project is located at the southern edge of their preferred habit range, therefore they are not likely to occupy or frequent the project area. In addition, the location of Sandy Dam and the nearby frequently used recreation area and campground has a high level of human activity and further reduces the likelihood that Lynx would be present in, or nearby the project area. As a result, the proposed work is not expected to have any adverse effects to Canada lynx.

3.4.2 Gray Wolf

Gray wolves in the region typically occupy forested habitats in the northern parts of Minnesota and southern Canada. Although the proposed project is within the gray wolf known range, their preferred habitat area is several miles further to the northeast of the project area. Still, gray wolves may occasionally pass through or temporarily occupy forested areas in the region. However, the location of Big Sandy Lake Dam directly adjacent to a public water access, recreation area and campground makes it far less likely that gray wolves would reside nearby or in the project area. Further, the proposed work is limited to the areas adjacent to and directly upstream and downstream of Big...
Sandy Lake Dam where no suitable habitat exists for this species. Therefore, the proposed work is not expected to have any adverse effect on gray wolves.

3.4.3 Northern Long-eared Bat (NLEB)

The proposed project area is located within the northern long-eared bat's known range and within the designated white-nose syndrome (WNS) zone, but there are no known hibernacula or roost trees within several miles of the project area. However, there are partially forested areas nearby the project area that could provide suitable habitat for roosting and/or pupping. However, those areas are adjacent to a frequented public recreation area and campground, so it is not likely that NLEB would occupy or use the areas near Big Sandy Lake Dam. Additionally, the proposed work would not involve the removal of any trees. Therefore, the Corps has determined that the proposed project will have no effect on the NLEB.

3.5 Bald Eagles

There are no known eagle nests or winter roosting areas located in close proximity (660 feet) to the project area and eagles residing or nesting in the vicinity of the project area would likely be accustomed to regular recreation and boat traffic. A search of the USFWS Eagle Database did not reveal the presence of any nests within one mile of the project area. Therefore, no adverse impacts to bald eagles are expected to occur under either alternative.

3.6 Migratory Birds

There is a small potential that the proposed project may have an effect on migratory birds if the site preparation and/or removal activities are conducted during the breeding, nesting or fledging season. However, the planned work will not require the removal of trees and will not require the modification or destruction of any prime migratory bird habitat. Therefore, the Corps does not believe that the proposed action would have any significant effect on migratory birds.

3.7 Cultural Resources

The proposed project includes the rehabilitation of the Big Sandy Lake Dam which is eligible for inclusion in the National Register of Historic Places (NRHP) (Harrison 1987). The dam is significant for its role in the development of navigation, commerce, tourism and Indian policy. The proposed features of the rehabilitation plan would not involve any substantive change to the structure itself.

The Area of Potential Effects (APE) includes the areas where both direct and indirect effects would occur. In this case, the APE would be limited to the proposed work on the dam and the proposed electrical system upgrades (Figure 2). Construction access would be through existing boat ramps, and the staging areas would be located on the north side of the dam in the existing parking lot and basketball court directly adjacent to the dam. Construction would be performed in two phases; phase I would consist of work
within the lock bay area and phase II would consist of work within the slide gate and log sluice area. Both phases of construction would use a dam dewatering system such as a cofferdam to allow work from within the channel.

The proposed work is also within the boundaries of Big Sandy Lake archaeological site, 21AK11, a multi-component site eligible to the NRHP. All proposed work would avoid or minimize effects to this site. The new electrical service and control equipment for the dam gates would be located in the existing well pumphouse which was constructed in the 1970s. The electrical connection would be directionally bored from this well house to the dam, limiting the level of ground disturbance.

### 3.8 Cumulative Effects

The proposed rehabilitation project is a stand-alone project and there are no other known projects related to the proposal either on-going or planned in the foreseeable future. The only known project that is partially related to the rehabilitation work is fish and aquatic environment study planned to begin in the spring or summer of 2021. One of the components of this project is to study fish habits and movements in the vicinity of and around Big Sandy Lake Dam. Results from that study may ultimately develop into the potential feasibility of adding a fish passage structure to Sandy Dam. However, neither the fish passage study, nor the development of a fish passage structure at Big Sandy Lake Dam (if deemed appropriate and feasible) are dependent upon the proposed rehabilitation project. Therefore, no cumulative effects are expected to occur because of the proposed rehabilitation project.
Table 3: Environmental Assessment Matrix

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>No-Action Alternative</th>
<th>Proposed Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Social Effects</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Noise Levels</td>
<td>X</td>
<td>T</td>
</tr>
<tr>
<td>2. Aesthetic Values</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>3. Recreational Opportunities</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>4. Transportation</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>5. Public Health and Safety</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>6. Community Cohesion (Sense of Unity)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>7. Community Growth and Development</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>8. Business and Home Relocations</td>
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<td>X</td>
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<tr>
<td>9. Existing/Potential Land Use</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>10. Controversy</td>
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<td>X</td>
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<tr>
<td><strong>B. Economic Effects</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Property Values</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2. Tax Revenue</td>
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<td></td>
</tr>
<tr>
<td>3. Public Facilities and Services</td>
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<td>X</td>
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<td>4. Regional Growth</td>
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<td>X</td>
</tr>
<tr>
<td>5. Employment</td>
<td>X</td>
<td></td>
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<td>6. Business Activity</td>
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<td>7. Farmland/Food Supply</td>
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<td>X</td>
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<td>8. Commercial Navigation</td>
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<td>9. Flooding Effects</td>
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<td>X</td>
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<td>10. Energy Needs and Resources</td>
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<td>X</td>
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<td><strong>C. Natural Resource Effects</strong></td>
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<td>1. Air Quality</td>
<td>X</td>
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<td>2. Terrestrial Habitat</td>
<td>X</td>
<td>X</td>
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<td>3. Wetlands</td>
<td>X</td>
<td>X</td>
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<td>4. Aquatic Habitat</td>
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<td>5. Habitat Diversity and Interspersion</td>
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<td>X</td>
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<td>6. Biological Productivity</td>
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<td>X</td>
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<td>7. Surface Water Quality</td>
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<td>8. Water Supply</td>
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<td>9. Groundwater</td>
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<td>10. Soils</td>
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<td>11. Threatened or Endangered Species</td>
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<td>X</td>
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<td><strong>D. Cultural Resource Effects</strong></td>
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<td>1. Historic Architectural Values</td>
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<td>2. Prehistoric &amp; Historic Archeological Values</td>
<td>X</td>
<td>X</td>
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</tbody>
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T = Temporary Effect
4 Environmental Compliance Review

4.1 Applicable Environmental Laws and Executive Orders

The proposed action would comply with federal environmental laws, Executive Orders and policies, and applicable state and local laws including but not limited to the Clean Air Act, as amended; the Clean Water Act, as amended; the Endangered Species Act of 1973, as amended; the Fish and Wildlife Coordination Act of 1958, as amended; the National Historic Preservation Act of 1966, as amended; the National Environmental Policy Act of 1969, as amended; and Executive Order 12898 - Environmental Justice.

4.2 Coordination

Planning for the overall project has been and will continue to be coordinated with the public, state, and federal agencies, and other interested parties. The Corps held a public meeting on November 2nd, 2019 at the Big Sandy Lodge in McGregor, MN to inform the public about the Big Sandy Lake Dam Rehabilitation Project. The meeting was well attended and because of the high level of public interest, the Corps decided to prepare this EA to give the public an additional opportunity to submit comments on the proposed project. The following list of entities, including the Corps, have had involvement with the planning and/or permitting of this project:

| U.S. Army Corps of Engineers | Clean Water Act review (Section 404) |
| U.S. Army Corps of Engineers | Rivers and Harbors Act (Section 10) |
| U.S. Fish and Wildlife Service | FWCA |
| MN Department of Natural Resources | DNR Public Waters Permit |
| U.S. Environmental Protection Agency | Interagency Coordination |

Detailed descriptions of compliance efforts for certain regulations are described below and related coordination correspondence is included in Appendix B.

4.2.1 Rivers and Harbors Act (RHA) and Clean Water Act (CWA)

The Corps regulates work in navigable waters under Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. Section 403) and discharges of dredged and fill material under Section 404 of the Clean Water Act (CWA; 33 U.S.C. §1251 et seq.). Big Sandy Lake and the Sandy River are both classified as navigable waters under the RHA and waters of the U.S. under the CWA. Since the proposed work includes work in and discharges of dredged or fill in both water bodies, authorization under Section 10 (RHA) and Section 404 (CWA) is required. The Nationwide Permit program provides authorization under Section 10/404 for activities deemed to be individually and cumulatively minor. In terms of the proposed Big Sandy Lake Dam rehabilitation project, the proposed work is commensurate with that described under Nationwide Permit 3 (Maintenance) and Nationwide Permit 33 (Temporary Construction, Access, and
Dewatering). Therefore, the Corps concludes that the proposed work is authorized under these Nationwide Permits.

Regulated activities under Section 404 of the CWA require water quality certification under Section 401 of the CWA. In Minnesota, the Minnesota Pollution Control Agency (MPCA) is the regulatory authority for 401 water quality certification. The MPCA previously issued 401 water quality certification for work that requires authorization under Section 404 and qualifies for one or more Nationwide Permits. That certification includes both Nationwide Permit 3 and 33 and is applicable for the proposed work. Therefore, no additional 401 water quality certification is required for the proposed rehabilitation project.

4.2.2 Fish and Wildlife Coordination Act (FWCA)

In compliance with the FWCA, project plans were coordinated with the U.S. Fish and Wildlife Service (USFWS), the Minnesota DNR, and the EPA. Furthermore, appropriate state and federal agencies as well as the public will have the opportunity to review and comment on the draft environmental assessment. Coordination efforts with the Minnesota DNR to date determined that the preparation of a state Environmental assessment worksheet (EAW), a water appropriation permit, and dam safety permit are not needed for the proposed project. However, the project will require a DNR Protected Waters Permit for this effort and the Corps will continue to work with the Minnesota DNR to obtain a permit prior to the start of work.

4.2.3 Endangered Species Act

The Corps determined that the proposed project would have no effect on Canada lynx, gray wolves and the NLEB due to the nature, location and scope of the proposed work. This determination also included consideration for the habitat needs of each species and likelihood that they would be present within the action area during planned construction activities.

4.2.4 Bald and Golden Eagle Act

The Bald and Golden Eagle Act prohibits anyone from taking, possessing, or transporting an eagle, or the parts, nests, or eggs of such birds without prior authorization. Disturbing an eagle to a degree that causes, or is likely to cause injury to an eagle, decrease productivity, or cause nest abandonment are considered forms of take. Activities that directly or indirectly lead to take are prohibited without a permit. The USFWS recommends maintaining a buffer of at least 660 feet between project activities and active eagle nests. There are no known eagle nests or winter roosting areas located in close proximity (660 feet) to the project area and eagles residing or nesting in the vicinity of the project area would likely be accustomed to regular recreation and boat traffic. A search of the USFWS Eagle Database did not reveal the presence of any nests within one mile of the project area. Therefore, the Corps determined that the proposed project would have no effect on bald eagles.
4.2.5 National Historic Preservation Act

The National Historic Preservation Act (NHPA) is the primary law establishing the historic preservation structure in the United States. It assigns preservation responsibilities to federal agencies and establishes the Advisory Council on Historic Preservation, the State Historic Preservation Offices and Historic Tribal Preservation Offices. Section 106 of the Act specifies that federal agencies shall, prior to the approval of the expenditure of any funds on an undertaking, take into account the effect of an undertaking on any property included in or determined eligible for the National Register. The Corps has determined the proposed work would have no adverse effect to historic properties.

Big Sandy Lake Dam, AK-LBY-005 was determined eligible to the NRHP in 1989 for its significant role in the development of navigation, commerce, tourism, and Indian policy. The proposed project features associated with rehabilitation would not alter or remove character defining features or the qualities that support its' NRHP eligibility. The proposed work is also within the designated site boundary for 21AK11; however, it is within an area that has been heavily disturbed from dam operations since the 1880s and more recently in 2018 for waterline work. Since proposed work would be confined to areas that have been previously disturbed; i.e. within dam operation areas, along existing water line and utility line corridors, within previous building construction areas, and along the existing road ways, the proposed action would have no adverse effect to archaeological site 21AK11. The Corps has notified the State Historic Preservation Office (SHPO) of the proposed project and our determination of no adverse effect. In addition, the Corps has notified Tribal Historic Preservation Officers (THPO).

4.3 Review of the Draft Environmental Assessment

This draft environmental assessment is being made available for a 30-day public review and comment period. Comments and Corps responses will be included in the final draft of this document.
References


Stantec Corporation Incorporated. 2018. Big Sandy Lake Dam Preliminary Engineering Study.


Appendices
Appendix A – Draft FONSI
FINDING OF NO SIGNIFICANT IMPACT

In accordance with the National Environmental Policy Act of 1969, the U.S. Army Corps of Engineers, St. Paul District assessed the environmental impacts of the following project:

BIG SANDY LAKE DAM REHABILITATION PROJECT
HEADWATERS, BIG SANDY LAKE
AITKIN COUNTY, MINNESOTA

The U.S. Army Corps of Engineers (Corps), St. Paul District, is proposing to rehabilitate the Big Sandy Lake Dam located between Big Sandy Lake and the Sandy River. According to recent inspections several features of the dam are deteriorating and are in need of repair or rehabilitation to preserve the long-term structural integrity of the dam.

The proposed rehabilitation when compared with the No Action alternative would have similar effects, with the exception that the rehabilitation work would have minor temporary adverse effects on ambient noise, recreation, public facilities, air quality, aquatic habitat, biological productivity and surface water quality. Conversely, not conducting the rehabilitation work could result in substantial adverse effects on recreation, public health and safety, property values, public facilities, flooding, aquatic habitat and biological productivity if one or more components of the structure fail. Therefore, the minor temporary adverse effects of rehabilitating the dam in the short-term are better for the environment than the substantial long-term effects of the No Action.

For the reasons above, the proposed action does not constitute a major federal action significantly affecting the quality of the human environment. Therefore, an environmental impact statement will not be prepared.

________________________________________  ____________________
Jonathan J. Sobiech                     Date
Deputy Chief, Regional Planning and Environment Division North
Appendix B – Coordination
We have conducted an initial review of your DNR permit application 2020-0401 and determined that an Individual Public Waters Work Permit is required for the proposed activity. No application fees are due so review of your application will proceed.

For a permit of this type, the process typically involves:
* 30 day review by local government
* Technical and resource review by DNR staff
* Determination of any additional fees required
* Possible request for additional information from applicant

The process may also involve:
* Site visit by DNR or local government staff
* Site-specific technical study

It is expected that the permit review process generally takes 45 to 150 days. Please be advised that no activity proposed in the application may take place until a permit decision is reached and a permit is issued. You may not proceed with the work in anticipation of receiving a permit.

You may sign-in to the MNDNR Permitting and Reporting System (MPARS) using the link below anytime you would like to check the status of your application or send a message to your hydrologist. If you are using MPARS for the first time, you will need to create an account.

Blockedhttps://webapps11.dnr.state.mn.us/mpars/public/permits

If you have any questions, please contact Rian Reed at rian.reed@state.mn.us, 218-328-8815.

*** DO NOT REPLY TO THIS EMAIL ***
You may sign-in to the MNDNR Permitting and Reporting System (MPARS) using the link below anytime you would like to check the status of your application or send a message to your hydrologist. If you are using MPARS for the first time, you will need to create an account.

Blockedhttps://webapps11.dnr.state.mn.us/mpars/public/permits

If you have any questions, please contact Rian Reed at rian.reed@state.mn.us, 218-328-8815.

*** DO NOT REPLY TO THIS EMAIL ***

From: Boyle, Jason (DNR)
To: Hanson, Eric R CIV USARMY CEMVP (USA); Lindgren, Heidi (DNR)
Cc: Dostert, Dana M (DNR); Zwilling, Dan R (DNR)
Subject: [Non-DoD Source] RE: Big Sandy Lake Reservoir Dam Rehabilitation Project (UNCLASSIFIED)
Date: Wednesday, January 22, 2020 9:34:13 AM

Thanks, Eric. A dam safety permit is not required. Thanks for including me, we often learn something both as a dam owner and as a regulator by looking at these bigger rehab projects.

Jason

-----Original Message-----
From: Hanson, Eric R CIV USARMY CEMVP (USA) [mailto:Eric.R.Hanson@usace.army.mil]
Sent: Tuesday, January 21, 2020 5:45 PM
To: Lindgren, Heidi (DNR) <heidi.lindgren@state.mn.us>; Root, Greg (DNR) <greg.root@state.mn.us>; Reed, Rian (DNR) <rian.reed@state.mn.us>
Cc: Smude, Janet <swcd@mlecmn.net>; aitkinpz@co.aitkin.mn.us; Tillma, Jeff S (DNR) <jeff.tillma@state.mn.us>; Boyle, Jason (DNR) <jason.boyle@state.mn.us>
Subject: Big Sandy Lake Reservoir Dam Rehabilitation Project (UNCLASSIFIED)

Fellow Agency Partners,
The US Army Corps of Engineers is planning to do some rehabilitation work on the Dam Structure at the Big Sandy Lake Reservoir and I just wanted to do a little pre-coordination to let you know a little about the project for your awareness and solicit any general comments or concerns you might have with a proposed dam rehabilitation project. The bulk of the work includes repairing or replacing deteriorating structures or components of the dam and concrete repair. The proposed work would be divided into 2 phases whereby approximately 50% of the structure would be enclosed in a cofferdam (upstream and downstream) for each phase. Cofferdams would be sheet pile (in lieu of earthen or hybrid) to minimize environmental impacts to the aquatic environment and be capable of overtopping in case of really high water event. Phase 1 would transform the existing (decommissioned) lock chamber into a stoplog structure so that USACE staff and/or the contractor can manage water levels in the same manner as is occurring today while the gates are being replaced. New gates would be double-leaf and be capable of passing water either over or under depending upon needs/desires. A copy of our Preliminary Engineering Report outlining the work that needs to be done will be sent to each of you via email through our DOD SAFE file transfer platform. Please keep in mind that this is a preliminary study and final plans will likely vary from those included in here as more information becomes available and design details are finalized.

Also, separate from but related to this work is the initiation of a pilot study led by MN DNR and USACE staff to determine the feasibility of adding a fish passage structure to Sandy Dam. While the principal purpose of converting the existing (decommissioned) lock chamber into a stop log structure is to ensure water levels can be managed during Phase 2 of the rehab project, this conversion may provide flexibility for the addition of a future fish passage structure (depending upon the outcome of the feasibility study).
For the time being, I'd just like to put together a list of what permit types would be needed and who the Point of Contact(s) would be for the rehab project. I'm assuming a Public Waters Work Permit would be necessary, but not sure if Dam Safety would like to see the plans, or if Water Appropriations would need to authorize any pumping of water around the dam if needed at any stage/phase of the project. I would also assume that the MNDNR would be the RGU for EAW purposes, but don't know if an EAW is needed/warranted in this case. Total area for cofferdams would be less than the typical 1 acre threshold, but I'll defer to the EAW expert on this one. USACE will be preparing an EA to address Socioeconomic and Environmental impacts for the work, but I expect it to be relatively short because much of the work being performed is categorically excluded from NEPA and either exempt from Section 404 of the Clean Water Act or will qualify for a nationwide permit. The bulk of our review will be centered around the cultural resources component and public interest component.

Please let me know if you have a permit component for the proposed work; if you want to be on the email list for situational awareness; or if you'd rather not receive future emails about the proposed project.

Sincerely,

Eric R. Hanson
Sr. Ecologist/Environmental Planner
US Army Corps of Engineers
St. Paul District Work:
651-290-5386

From:  Reed, Rian (DNR)
To:  Hanson, Eric R CIV USARMY CEMVP (USA); Lindgren, Heidi (DNR); Root, Greg (DNR)
Cc:  Smude, Janet; aitkinpz@co.aitkin.mn.us; Tillma, Jeff S (DNR); Boyle, Jason (DNR)
Subject:  [Non-DoD Source] RE: Big Sandy Lake Reservoir Dam Rehabilitation Project (UNCLASSIFIED)
Date:  Tuesday, January 28, 2020 1:32:08 PM

Eric,
Thanks for the initial heads up. Yes, from what I understand a public waters permit will be required for your project. I will be your contact for the Public Waters Permit.
Thanks,

Rian Reed, Area Hydrologist
Ecological and Water Resources
DNR Northeast Region
1201 East Hwy 2
Grand Rapids, MN 55744
218-328-8815

-----Original Message-----
From: Hanson, Eric R CIV USARMY CEMVP (USA) <Eric.R.Hanson@usace.army.mil>
Sent: Tuesday, January 21, 2020 5:45 PM
To: Lindgren, Heidi (DNR) <heidi.lindgren@state.mn.us>; Root, Greg (DNR) <greg.root@state.mn.us>; Reed, Rian (DNR) <rian.reed@state.mn.us>
Cc: Smude, Janet <swcd@mlec.mn.net>; aitkinpz@co.aitkin.mn.us; Tillma, Jeff S (DNR) <jeff.tillma@state.mn.us>; Boyle, Jason (DNR) <jason.boyle@state.mn.us>
Subject: Big Sandy Lake Reservoir Dam Rehabilitation Project (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED
Fellow Agency Partners,
The US Army Corps of Engineers is planning to do some rehabilitation work on the Dam Structure at the Big Sandy Lake Reservoir and I just wanted to do a little pre-coordination to let you know a little about the project for your awareness and solicit any general comments or concerns you might have with a proposed dam rehabilitation project. The bulk of the work includes repairing or replacing deteriorating structures or components of the dam and concrete repair. The proposed work would be divided into 2 phases whereby approximately 50% of the structure would be enclosed in a cofferdam (upstream and downstream) for each phase. Cofferdams would be sheet pile (in lieu of earthen or hybrid) to minimize environmental impacts to the aquatic environment and be capable of overtopping in case of really high water event. Phase 1 would transform the existing (decommissioned) lock chamber into a stoplog structure so that USACE staff and/or the contractor can manage water levels in the same manner as is occurring today while the gates are being replaced. New gates would be double-leaf and be capable of passing water either over or under depending upon needs/desires. A copy of our Preliminary Engineering Report outlining the work that needs to be done will be sent to each of you via email through our DOD SAFE file transfer platform.

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Please let me know if you have a permit component for the proposed work; if you want to be on the email list for situational awareness; or if you'd rather not receive future emails about the proposed project.

Sincerely,

Eric R. Hanson
Sr. Ecologist/Environmental Planner
US Army Corps of Engineers
St. Paul District Work:
651-290-5386

CLASSIFICATION: UNCLASSIFIED

From: Hanson, Eric R CIV USARMY CEMVP (USA)
To: Coyle, Margi (Anne) (DNR)
Subject: RE: Big Sandy Lake Reservoir Dam Rehabilitation Project (UNCLASSIFIED)
CLASSIFICATION: UNCLASSIFIED

Margi,

File uploaded. You should receive an email soon with instructions on how to download it. These plans are preliminary, but they are pretty solid. I only expect minor changes. Of note is that we have already decided to use sheet pile for the cofferdams to reduce the environmental impact. The PER investigated several cofferdam options, but we've since decide to use sheep pile. That's pretty much it. The rest is pretty straightforward. Please let me know your thought once you've had a chance to review the plans.

Thanks again!

Eric R. Hanson
Sr. Ecologist/Environmental Planner
US Army Corps of Engineers
St. Paul District Work:
651-290-5386

-----Original Message-----
From: Coyle, Margi (Anne) (DNR) [mailto:margi.coyle@state.mn.us]
Sent: Tuesday, January 28, 2020 2:38 PM
To: Hanson, Eric R CIV USARMY CEMVP (USA) <Eric.R.Hanson@usace.army.mil>
Subject: [Non-DoD Source] RE: Big Sandy Lake Reservoir Dam Rehabilitation Project (UNCLASSIFIED)

Great thank you so very much!

Anne Marguerite Coyle (Margi) PhD 218-328-8826; Margi.coyle@state.mn.us

Culture of Respect:
"Expresses, demonstrates, and reinforces positive and professional workplace conduct. You deserve to work where you are valued, regardless of individual differences."

MN DNR Mission: "Our mission is to work with citizens to conserve and manage the state's natural resources, to provide outdoor recreation opportunities, and to provide for commercial uses of natural resources in a way that creates a sustainable quality of life." DNR’s Conservation Agenda contains four goals.

-----Original Message-----
From: Hanson, Eric R CIV USARMY CEMVP (USA) <Eric.R.Hanson@usace.army.mil>
Sent: Tuesday, January 28, 2020 2:36 PM
To: Coyle, Margi (Anne) (DNR) <margi.coyle@state.mn.us>
Subject: RE: Big Sandy Lake Reservoir Dam Rehabilitation Project (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

I do. Now that I have your email, I'll send you a link to download the preliminary plans. Also, I included a basic description of the project in my earlier email below.
Eric, thanks for your message. Please forward your EA to us for review when it is released for public comment. We review most of the EAs we receive from lead federal agencies.

Ken

Kenneth A. Westlake
Deputy Director, Tribal and Multimedia Programs Office Office of the Regional Administrator
U.S. Environmental Protection Agency
77 W. Jackson Boulevard
Chicago, Illinois 60604
westlake.kenneth@epa.gov
312-886-2910

-----Original Message-----
From: Hanson, Eric R CIV USARMY CEMVP (USA) <Eric.R.Hanson@usace.army.mil>
Sent: Monday, March 02, 2020 3:18 PM
To: Westlake, Kenneth <westlake.kenneth@epa.gov>
Subject: Sandy Lake Dam Rehabilitation Project (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Ken,
USACE, St. Paul District is proposing to rehabilitate the Corps-owned Dam at the Sandy Lake Recreational Facility near Libby, MN. Reaching out to you in case EPA has any comments or would like to be included in future correspondence and/or decisions.

FYSA, here is a quick overview - We are planning to publish an EA for this project around the beginning of April due to the public interest surrounding Sandy Dam, but the work associated with the rehabilitation of the existing structure we believe is exempt from 404/401 requirements. However, we do intend to obtain a MN DNR Public Waters Permit for the proposed work and have already submitted a permit application.

I will forward copies of the pertinent docs to you shortly. You should receive an email from our SAFE file transfer site.

Sincerely,

Eric R. Hanson
Sr. Ecologist/Environmental Planner
US Army Corps of Engineers
St. Paul District Desk:
651-290-5386
Cell: 651-279-1121

-----Original Message-----
From: Hanson, Eric R CIV USARMY CEMVP (USA) <Eric.R.Hanson@usace.army.mil>
Sent: Tuesday, January 21, 2020 5:45 PM
To: Lindgren, Heidi (DNR) <heidi.lindgren@state.mn.us>; Root, Greg (DNR) <greg.root@state.mn.us>; Reed,
Fellow Agency Partners,
The US Army Corps of Engineers is planning to do some rehabilitation work on the Dam Structure at the Big Sandy Lake Reservoir and I just wanted to do a little pre-coordination to let you know a little about the project for your awareness and solicit any general comments or concerns you might have with a proposed dam rehabilitation project. The bulk of the work includes repairing or replacing deteriorating structures or components of the dam and concrete repair. The proposed work would be divided into 2 phases whereby approximately 50% of the structure would be enclosed in a cofferdam (upstream and downstream) for each phase. Cofferdams would be sheet pile (in lieu of earthen or hybrid) to minimize environmental impacts to the aquatic environment and be capable of overtopping in case of really high water event. Phase 1 would transform the existing (decommissioned) lock chamber into a stoplog structure so that USACE staff and/or the contractor can manage water levels in the same manner as is occurring today while the gates are being replaced. New gates would be double-leaf and be capable of passing water either over or under depending upon needs/desires. A copy of our Preliminary Engineering Report outlining the work that needs to be done will be sent to each of you via email through our DOD SAFE file transfer platform. Please keep in mind that this is a preliminary study and final plans will likely vary from those included in here as more information becomes available and design details are finalized.

Also, separate from but related to this work is the initiation of a pilot study led by MN DNR and USACE staff to determine the feasibility of adding a fish passage structure to Sandy Dam. While the principal purpose of converting the existing (decommissioned) lock chamber into a stoplog structure is to ensure water levels can be managed during Phase 2 of the rehab project, this conversion may provide flexibility for the addition of a future fish passage structure (depending upon the outcome of the feasibility study).

For the time being, I'd just like to put together a list of what permit types would be needed and who the Point of Contact(s) would be for the rehab project. I'm assuming a Public Waters Work Permit would be necessary, but not sure if Dam Safety would like to see the plans, or if Water Appropriations would need to authorize any pumping of water around the dam if needed at any stage/phase of the project. I would also assume that the MNDNR would be the RGU for EAW purposes, but don't know if an EAW is needed/warranted in this case. Total area for cofferdams would be less than the typical 1 acre threshold, but I'll defer to the EAW expert on this one. USACE will be preparing an EA to address Socioeconomic and Environmental impacts for the work, but I expect it to be relatively short because much of the work being performed is categorically excluded from NEPA and either exempt from Section 404 of the Clean Water Act or will qualify for a nationwide permit. The bulk of our review will be centered around the cultural resources component and public interest component.

Please let me know if you have a permit component for the proposed work; if you want to be on the email list for situational awareness; or if you'd rather not receive future emails about the proposed project.

Sincerely,

Eric R. Hanson
Sr. Ecologist/Environmental Planner
US Army Corps of Engineers
Date: Monday, April 6, 2020 9:04:52 AM

Thank you for the confirmations, Eric. Based on your confirmations of my understanding of the project. It is my assessment that the proposed project as it currently stands does not appear to meet or exceed any environmental review thresholds under the Minnesota Environmental Policy Act for which the Minnesota Department of Natural Resources is responsible. Please let me know if the project scope changes as that could have implications for Minnesota environmental review requirements.

Thank you, Kate Fairman

Kate Fairman
Planning Director | Environmental Review Unit Minnesota Department of Natural Resources 500 Lafayette Road North
Saint Paul, MN 55155 Phone: 651-259-5082
Email: kate.fairman@state.mn.us mndnr.gov

-----Original Message-----
From: Hanson, Eric R CIV USARCY CEMVP (USA) <Eric.R.Hanson@usace.army.mil> Sent: Friday, April 03, 2020 1:33 PM
To: Fairman, Kate (DNR) <kate.fairman@state.mn.us>
Cc: Coyle, Margi (Anne) (DNR) <margi.coyle@state.mn.us>
Subject: RE: Check in - thank you both! RE: [Non-DoD Source] RE: [DoD SAFE] HANSON.ERIC.ROBERT has dropped off a file for you (UNCLASSIFIED) CLASSIFICATION: UNCLASSIFIED
Kate,
Thanks for taking a look at this one for us. All of your assumptions are correct. See responses below.

- Correct. The proposed project involves repairs, restoration and rehabilitation of existing structures for the Sandy Lake Dam and does not include expansion or additional features that would alter public waters beyond what has already been built.

Correct. The proposed project requires a DNR work in public waters permit, but does not require other permits (Dam Safety, Water Appropriations, etc.).

Correct. The proposed project currently does not involve a fish passage project that would impact or alter public waters

- Correct. The electrical portion of the project will not exceed 70kV and will not exceed 20 miles in length.

Eric R. Hanson
Sr. Ecologist/Environmental Planner US Army Corps of Engineers
St. Paul District Desk: 651-290-5386
Cell: 651-279-1121

-----Original Message-----
From: Fairman, Kate (DNR) [mailto:kate.fairman@state.mn.us] Sent: Friday, April 3, 2020 12:04 AM
To: Hanson, Eric R CIV USARCY CEMVP (USA) <Eric.R.Hanson@usace.army.mil> Cc: Coyle, Margi (Anne) (DNR) <margi.coyle@state.mn.us>
Subject: RE: Check in - thank you both! RE: [Non-DoD Source] RE: [DoD SAFE] HANSON.ERIC.ROBERT has dropped off a file for you (UNCLASSIFIED)
Kate,
Thanks for taking a look at this one for us. All of your assumptions are correct. See responses below.

- Correct. The proposed project involves repairs, restoration and rehabilitation of existing structures for the Sandy Lake Dam and does not include expansion or additional features that would alter public waters beyond what has already been built.

Correct. The proposed project requires a DNR work in public waters permit, but does not require other permits (Dam Safety, Water Appropriations, etc.).

Correct. The proposed project currently does not involve a fish passage project that would impact or alter public waters

- Correct. The electrical portion of the project will not exceed 70kV and will not exceed 20 miles in length.

The proposed project involves repairs, restoration and rehabilitation of existing structures for the Sandy Lake Dam. The
The proposed project does not include expansion or additional features that would alter public waters beyond what has already been built.

The proposed project requires a DNR work in public waters permit, but does not require other permits (Dam Safety, Water Appropriations, etc.).

The proposed project currently does not involve a fish passage project that would impact or alter public waters. If this is not the case, please provide specific details on the acreage of public waters that would be impacted by the fish passage project.

The electrical portion of the project will not exceed 70kV and will not exceed 20 miles in length.

Please let me know if these assumptions are correct. If so, than it appears no state level environmental review is required. If the above assumptions are incorrect, please provide clarifying information and I will determine if that would have state level environmental review implications or not. Please note that the best way to communicate with me at the moment is email. Thank you,

Kate Fairman

Kate Fairman
Planning Director | Environmental Review Unit Minnesota Department of Natural Resources 500 Lafayette Road North Saint Paul, MN 55155 Phone: 651-259-5082 Email: kate.fairman@state.mn.us

-----Original Message-----
From: Hanson, Eric R CIV USARMY CEMVP (USA) <Eric.R.Hanson@usace.army.mil> Sent: Wednesday, April 01, 2020 8:52 AM
To: Fairman, Kate (DNR) <kate.fairman@state.mn.us>
Subject: FW: Check in - thank you both! RE: [Non-DoD Source] RE: [DoD SAFE] HANSON.ERIC.ROBERT has dropped off a file for you (UNCLASSIFIED) CLASSIFICATION: UNCLASSIFIED

Hi Kate,

Just checking in to see if you've had a chance to look at the information I submitted regarding the Sandy Lake Dam Rehabilitation Project. I took a look at state EAW requirements and don't believe that an EAW would be required for this project. If you agree, I could really use confirmation from you guys in the next day or two before I publish our environmental assessment for public review and comment.

This project does not have a lot of flexibility in the schedule and something like a last minute need to complete the state EAW process would be a significant burden, so it would be super helpful if you could let me know either way sooner than later. Thanks Kate! The help is very much appreciated.

Eric R. Hanson
Sr. Ecologist/Environmental Planner US Army Corps of Engineers
St. Paul District Desk: 651-290-5386
Cell: 651-279-1121

-----Original Message-----
From: Coyle, Margi (Anne) (DNR) [mailto:margi.coyle@state.mn.us] Sent: Wednesday, March 25, 2020 4:47 PM
To: Hanson, Eric R CIV USARMY CEMVP (USA) <Eric.R.Hanson@usace.army.mil>
Cc: Fairman, Kate (DNR) <kate.fairman@state.mn.us>; Reed, Rian (DNR) <rian.reed@state.mn.us>
Subject: Check in - thank you both! RE: [Non-DoD Source] RE: [DoD SAFE] HANSON.ERIC.ROBERT has dropped off a file for you (UNCLASSIFIED) Thank you Eric I have moved this along to Kate F. and Rian Reed.

It is on her list; and our apologies for the delays, with the COVID 19 and other obligations we are having to adjust our work environment and schedules. However we are still trying to keep up with our services.

I have cc'd Kate so you two can communicate directly, Thank you stay well! margi

Anne Marguerite Coyle (Margi) PhD 218-328-8826; Margi.coyle@state.mn.us

Culture of Respect:
"Expresses, demonstrates, and reinforces positive and professional workplace conduct. You deserve to work where you are valued, regardless of individual differences."

MN DNR Mission: "Our mission is to work with citizens to conserve and manage the state's natural resources, to provide outdoor recreation opportunities, and to provide for commercial uses of natural resources in a way that creates a sustainable quality of life." DNR's Conservation Agenda contains four goals.

-----Original Message-----
From: Hanson, Eric R CIV USARMY CEMVP (USA) <Eric.R.Hanson@usace.army.mil> Sent: Wednesday, March 25, 2020 4:07 PM
To: Coyle, Margi (Anne) (DNR) <margi.coyle@state.mn.us>
Subject: RE: [Non-DoD Source] RE: [DoD SAFE] HANSON.ERIC.ROBERT has dropped off a file for you (UNCLASSIFIED) CLASSIFICATION: UNCLASSIFIED
Margi,
Just wondering if you had a chance to review and determine whether or not we need an EAW for this project.

Eric R. Hanson
Sr. Ecologist/Environmental Planner US Army Corps of Engineers
St. Paul District Desk: 651-290-5386
Cell: 651-279-1121