FINAL

ENVIRONMENTAL ASSESSMENT

Wild Rice Dam Removal Mitigation Project
Cass County, North Dakota

U.S. Army Corps of Engineers
St. Paul District

October, 2014

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1. SUMMARY

The St. Paul District, Corps of Engineers, has prepared this assessment of the environmental effects that may result from the proposed dam removal at the Wild Rice Dam on the Wild Rice River, Cass County, North Dakota. This assessment of the Corps of Engineers proposal is required by the National Environmental Policy Act of 1969 (NEPA), the Council on Environmental Quality Regulations (40 CFR 1500-1508), and the Corps of Engineers Procedures for Implementing NEPA (33 CFR Part 230).

This Environmental Assessment provides information to the St. Paul District Commander on the potential environmental effects of the proposed action and various alternatives for determining whether to prepare an Environmental Impact Statement or a Finding of No Significant Impact (FONSI) for the proposed action. This assessment includes the following:

a. A discussion of the need for the proposed action.

b. Identification of alternatives, including the proposed action.

c. An assessment of the environmental impacts of the proposed action and alternatives.

d. Coordination activities.

The project involves the placement of fill in waters of the United States; therefore, a Clean Water Act Section 404(b)(1) evaluation has been prepared.

2. RELATIONSHIP TO ENVIRONMENTAL LAWS AND REGULATIONS

The proposed action would comply with Federal environmental laws, executive orders, and policies, including the Clean Air Act, as amended; the Clean Water Act of 1977, as amended; the Endangered Species Act of 1973, as amended; the National Environmental Policy Act of 1969, as amended; the Land and Water Conservation Fund Act of 1965, as amended; the National Historic Preservation Act of 1966, as amended; the Fish and Wildlife Coordination Act of 1958, as amended; Executive Order 11988, Floodplain Management; and Executive Order 11990, Protection of Wetlands. The project would not result in the conversion of agricultural lands to nonagricultural purposes. Therefore, the provisions of the Farmland Protection Policy Act of 1981 do not apply.

3. AUTHORITY

The proposed action would be a mitigation feature of the Fargo-Moorhead Metro Flood Risk Management (FRM) Project that was authorized by Section 7002 of the Water Resources Reform and Development Act of 2014 (WRRDA).

4. LOCATION, PURPOSE AND NEED

The proposed action would be at the Wild Rice Dam, located on the Wild Rice River approximately 8 miles south of Fargo, North Dakota. Wild Rice Dam is located in Cass County, North Dakota (Figure 1). It was constructed in 1934 for water supply associated with livestock and agricultural interests. The structure is not currently used for water supply. It is a rock-filled timber crib dam capped with concrete with a spillway length of 140 feet (Figure 2). Wild Rice Dam operates solely as a run-of-the-river structure, offering no flood control capabilities or low-flow augmentation releases. The dam is owned by Southeast Cass Water Resource District.

The Final Feasibility Report and Environmental Impact Statement (FEIS) published in July 2011 (USACE 2011) identified potentially significant impacts to biotic connectivity, or the ability for fish and other biota to swim freely through the Wild Rice and Red rivers in the Fargo-Moorhead area. Mitigation is needed to offset those impacts. Wild Rice Dam is one of at least two dams on the Wild Rice River and remains a barrier to fish during periods when the dam is not "washed out" by high water. It is also very close to key structures that would potentially limit fish movement on the Wild Rice River under the broader flood risk management project for the Fargo-Moorhead area. As such, this dam is an excellent candidate for mitigation actions for the potential effects to connectivity on the Wild Rice River, and the proposed action would offset potentially significant environmental impacts.

This environmental assessment discloses environmental conditions and potential effects specific to this proposed mitigation project. Impacts due to the broader flood risk management project have been discussed in the FEIS, July 2011 (USACE 2011).

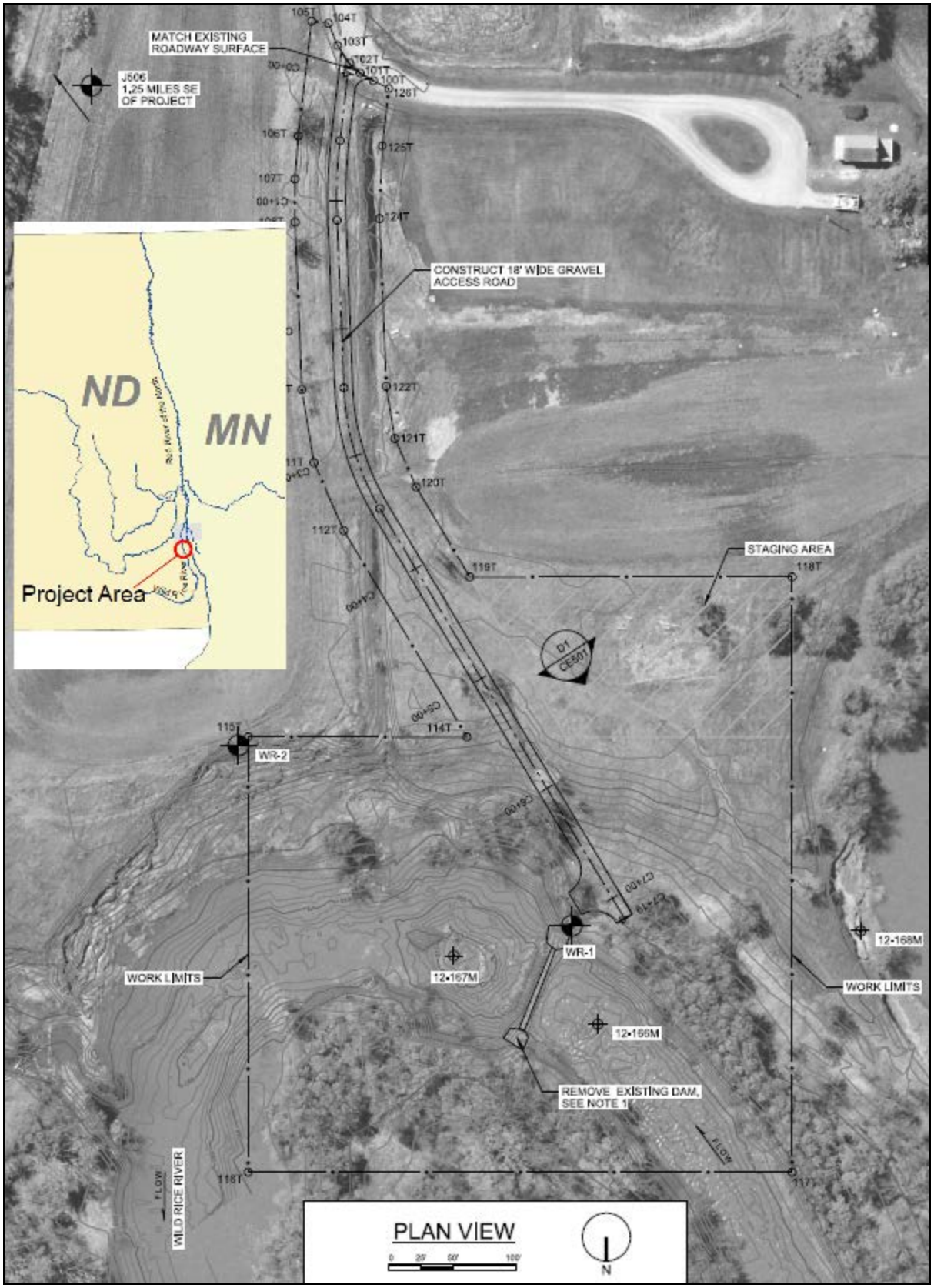

Figure 1. Location of the Wild Rice Dam mitigation project near Fargo, ND.

Figure 2. Wild Rice Dam on the Wild Rice River, just south of Fargo, ND. Photo from May 4, 2012.

The FEIS (USACE 2011) discussed that two dams on the Wild Rice River would be modified to offset impacts to biological connectivity. This could include dam removal, implementing a rock rapids fishway, or other measures. However, since completion of the FEIS it has been determined by the Corps and the Fargo-Moorhead project sponsors (the city of Fargo, North Dakota, the city of Moorhead, Minnesota, and the Flood Diversion Board of Authority) that one fish passage project (this project at Wild Rice Dam) would be adequate to address mitigation needs related to biological connectivity on the Wild Rice River. There are multiple reasons for this. First, the broader FRM project design has been modified since the FEIS so that it operates less frequently. Impacts to biological connectivity only occur when the FRM project operates, and now that would generally occur when Red River discharge at Fargo is forecast to exceed 17,000 cfs (as opposed to 9,600 cfs in the FEIS).

Second, detailed monitoring on the Wild Rice River has been completed since 2011, including observations on geomorphology, physical habitat, and fish and macroinvertbrate presence and relative abundance. These observations confirm relatively poor habitat throughout at least the lower Wild Rice River, and therefore the likely impact from reduced biological connectivity is lower. Combined with the reduced frequency of project operation, this supports the conclusion that the proposed action at the Wild Rice Dam would be adequate mitigation for impacts to biological connectivity on the Wild Rice River, resulting from the

broader flood risk management project for the Fargo-Moorhead area. It should be noted that the fish passage project at Drayton Dam remains a part of the overall mitigation plan, and will address connectivity-related impacts on the Red River.

5. ALTERNATIVES

5.1 No Action Alternative

The no-action alternative, or future without-project condition, depicts existing conditions in the area, and assumes the continuation of existing trends (Figure 3). For Wild Rice Dam, this continuation would be expected to include little to no fish passage when the dam is not inundated by high flows. Reduced connectivity could be limiting fish populations, and other biota, from reaching their maximum potential for diversity and abundance.

Given that the dam no longer has a useful purpose it is possible the dam could be removed in the future independent of this action. However, the dam owner has not given any indication that dam removal is being considered. As such the preferred action is being pursued as mitigation. The majority of the discussion for the No Action Alternative assumes the dam remains in the future. However, it is possible that dam removal or failure could occur in the future.

5.2 Proposed Alternative

The proposed alternative includes a basic dam removal with placement of rock to reduce risk for bank and river bed erosion. Dam removal would likely be completed during periods of low flow to facilitate ease of demolition and construction. The minimum flow conditions at the Wild Rice Dam site typically occur during the winter months. One likely method for removal involves the following:

1. Excavators equipped with a hydraulic hammer would be used to demolish and remove the existing concrete crib and rock in stages. The removal could be done in a graduated schedule, allowing for a gradual release of the upstream water pool. A small amount of sediment excavation would occur immediately behind the existing dam. This is estimated to be less than 100 cubic yards
2. When the dam has been removed to the general level of the existing adjacent river bed, rock fill would be placed to minimize river bed and bank erosion. This includes placing rock within the downstream scour hole of the dam, along with a layer of rock on the existing dam footprint and adjacent banks. A general profile of this rock placement is provided at Figure 3. A total of about 900 cubic yards of rock would be used for the project.
3. Concrete, wood, sediment and other materials would be removed. Rock from within the dam would be used within the project site for filling the existing scour hole at the downstream toe of the dam. Rock from within the dam would be reasonably free of concrete and rebar. Remaining waste material will be transported to a designated location for disposal or reuse.

The proposed alternative was identified collaboratively by the Corps, natural resource agencies, project sponsors, and the local dam owner. This option best meets the project

mitigation objectives of improving fish passage on the Wild Rice River to help offset potential biotic connectivity (fish passage) impacts of the Fargo-Moorhead Metropolitan Area Flood Risk Management project. This alternative is likely the most effective at removing a direct barrier to fish movement. A cursory cost comparison suggests that dam removal costs would generally be substantially less than other alternatives (e.g., approximately four times less costly). Environmental effects appear generally similar to other alternatives.

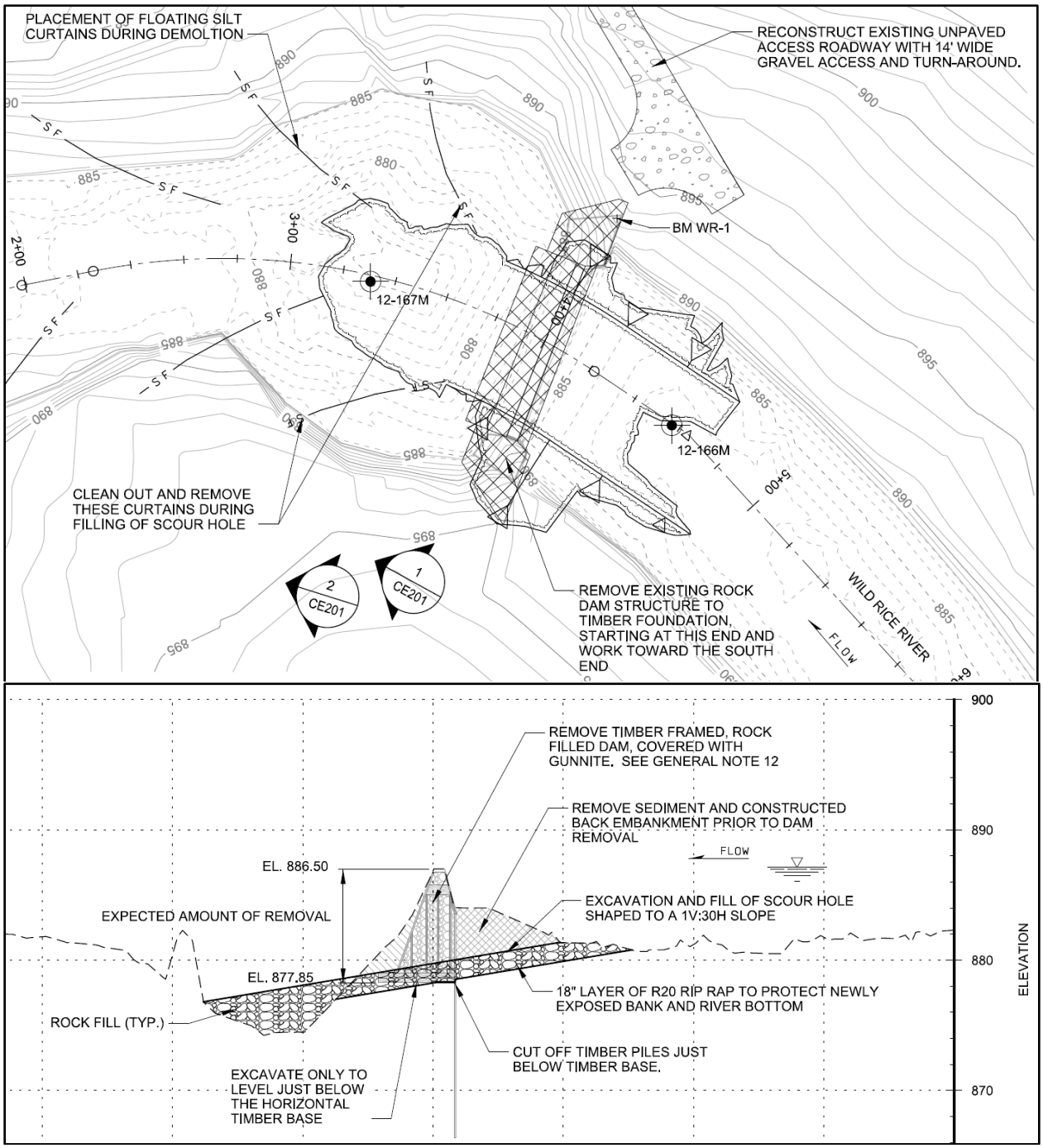

Figure 3. Proposed Wild Rice Dam removal alternative on the Wild Rice River.

Detailed design of the structure is described in Appendix E, Civil Site of the Wild Rice Dam Fish Passage Mitigation Project Design Documentation Report. The design is shown in Figure 3. Access for construction activity would occur via an improved temporary access road, (Figure 1). This 18 foot-wide access road would be temporarily created on an existing access easement. Project staging would be accomplished adjacent to the structure and access road immediately southwest of the dam. It is estimated that construction could be completed in a few months, although additional time may be needed given site conditions and construction logistics (e.g., river conditions).

5.3 Other Alternatives Considered

The other primary alternative considered was constructing a rock rapids fishway near the existing dam, similar to that done on other Red River dams (example at Figure 4). This alternative is similar to the proposed alternative at the Drayton Dam fish mitigation project, and would be the second choice of the natural resource agencies, the project sponsors, and the local dam owner. Under this alternative, a rock rapids would be constructed either over the existing dam, or adjacent to the existing dam (the dam would then be removed and the rock rapids would function as a new dam). This rock rapids alternative is believed to be very effective at passing fish, but likely is not as effective as direct dam removal. This alternative could be considerably more costly (perhaps four times more costly) than the proposed alternative. It would also require more attention for maintenance, compared to dam removal which is generally considered maintenance free. There also would be minor differences with project effects that would occur with the larger project footprint from a rock ramp. The rock rapids fishway would maintain upstream water elevations and potentially provide greater stabilizing forces to river banks that currently are experiencing failure. However, the rock rapids alternative was eliminated from consideration because it would not be as effective in terms improving biological connectivity, is significantly more expensive, and is not the preferred option of the natural resource agencies, the project sponsors, and the local dam owner.

Figure 4. Example of a rock rapids fish passage project at Riverside Dam, Grand Forks, ND on the Red River of the North.

6. AFFECTED ENVIRONMENT

A description of the Red River Basin and certain characteristics of the Wild Rice River is included in the FEIS (USACE 2011). The discussion below will emphasize site-specific conditions.

6.1 Aquatic Habitats and Biota

A physical habitat assessment was conducted in 2012 along four reaches of the Wild Rice River using a modified version of the Qualitative Habitat Evaluation Index, QHEI (OEPA 2006). Habitat observations for areas approximately a mile downstream of the dam suggest poor physical habitat conditions (USACE 2013). Habitat improved slightly upstream, but still would be characterized as poor quality. Most physical structure is provided by woody debris and some scattered rock from erosion protection. Aquatic vegetation is extremely limited in the Wild Rice River due to high turbidity levels.

Fish observations for the Wild Rice River were made in 2012 via electrofishing (USACE 2013). The fishery of the Wild Rice River consists of warmwater species. The total number of species collected ranged from 10 to 16 species per reach surveyed. Catch per unit effort ranged from about 174 to 443 fish collected per electrofishing hour. Fish typically collected in the Wild Rice River included orangespotted sunfish (*Lepomis humilis*), spotfin shiner (*Cyprinella*

spiloptera) fathead minnow (*Pimephales promelas*), sand shiner (*Notropis tramineus*), channel catfish (*Ictalurus punctatus*) and common carp (*Cyprinus carpio*).

Benthic invertebrate observations from 2012 included relative abundance (catch per unit effort) that were highest for the reach closest to the Wild Rice dam. This was dominated by a single taxon (Ostracoda).

The Wild Rice River has at least two dams that disrupt biological connectivity. Extensive work has been done to improve connectivity and fish passage on the Red River mainstem and select tributaries on the Minnesota side of the basin. Few such projects have been considered for tributaries on the North Dakota side of the basin.

North Dakota Department of Health (NDDOH) has identified the Wild Rice River as impaired for the reach from its confluence with the Colfax Watershed, downstream to its confluence with the Red River of the North (NDDOH 2014). Impairments were identified for the designated use of Fish and other Biota. Impairments included: Benthic and Fish Bioassessments; Dissolved Oxygen; Physical Substrate Habitat Alteration; and Sediment/Siltation. A Total Maximum Daily Load Study (TMDL) is needed for all these impairments. A TMDL has been completed for an impairment for Fecal Coliform impairing recreational use of this same stretch of the Wild Rice.

6.2 Terrestrial Habitats and Biota

Riparian and nearby forest composition consists of mixed floodplain trees, grasses and exposed mud. Areas immediately adjacent to Wild Rice Dam are often disturbed by flooding. Terrestrial wildlife in the area includes white-tailed deer, foxes, raccoons, squirrels, rabbits, and a variety of songbirds.

6.3 Threatened or Endangered Species

The U.S. Fish and Wildlife Service's (USFWS) Threatened and Endangered Species Database System was reviewed to identify the potential presence of listed species in the project area. The species identified for Cass County (ND) was the Whooping crane (*Grus Americana*; Endangered). The Poweshiek skipperling (*Oarisma poweshiek*) also was identified as a proposed endangered species in Cass County.

Whooping cranes inhabit shallow wetlands that are characterized by cattails, bulrushes and sedges. They can also be found in upland areas, especially during migration. The historical breeding range of the whooping crane extended from Illinois, northwest through North Dakota, and up to the Northwest Territories. The last nesting record for North Dakota was in McHenry County in 1915. The birds historically wintered along the Gulf of Mexico (USGS 2009). In the 1940s, there were an estimated 21 whooping cranes left in the world. Most were from a flock that wintered at the Aransas National Wildlife Refuge on the coast of Texas. These birds are known to breed in the Wood Buffalo National Park (Alberta, Canada). Today, there are approximately 145 whooping cranes in the wild. About 132 birds are in the Aransas-Wood Buffalo flock. The Aransas-Wood Buffalo population migrates through North Dakota. The fall migration occurs from late September to mid-October and the spring migration occurs from late April to mid-June. Although the bird can show up in all parts of North Dakota, most sightings

occur in the western 2/3 of the state (USGS 2009). No sightings have been listed for the study area in the North Dakota Natural Heritage database.

The Poweshiek skipperling is a small butterfly most often found in native prairie remnants of Iowa, Minnesota, North Dakota, South Dakota and Wisconsin; and fens (wet prairies) in Michigan. The USFWS states that the Poweshiek may have been extirpated from the Dakotas, Minnesota and Iowa in the last 10 years. It is now known only in Wisconsin, Michigan and Manitoba (USFWS: www.fws.gov/midwest/endangered/insects/posk/).

The Minnesota and North Dakota Natural Heritage Databases were checked for the presence of other rare species. Only the lake sturgeon (*Acipenser fulvescens*) was identified within a couple miles of the project, and that was identified for the Red River. Another species observed near the project site is the bald eagle (*Haliaeetus leucocephalus,* active nest observed in 2007). The closest observations of these species occurred approximately one mile from the proposed action.

6.4 Wetland Resources

The project site includes the Wild Rice River and adjacent floodplain. Review of the National Wetlands Inventory (NWI) identified the riverine area as riverine wetland (NWI code R2UBG). However, this area likely would not be delineated as formal wetland due to lack of aquatic vegetation. Conversely, although not identified by NWI, it is possible that some of the adjacent floodplain, including forested areas and farmland, could be identified as different wetland types.

6.5 Cultural Resources

The *Programmatic Agreement Among the U.S. Army Corps of Engineers, St. Paul District, the North Dakota State Historic Preservation Officer, and the Minnesota State Historic Preservation Officer Regarding the Fargo-Moorhead Metro Flood Risk Management Project, Cass County, North Dakota and Clay County, Minnesota*, stipulates what the Corps must do to comply with Section 106 of the National Historic Preservation Act, as amended, in connection with the Fargo-Moorhead Metro Flood Risk Management Project (FMM Project). Amendment No. 1 to the Programmatic Agreement added "project-related environmental mitigation areas" to the overall FMM Project's area of potential effects. The Programmatic Agreement is included as part of the FEIS (USACE 2011), while Amendment No. 1 is included in the *Supplemental Environmental Assessment: Design Modifications to the Fargo-Moorhead Metro Flood Risk Management Project* (September 2013).

A Phase I cultural resources survey of the approximately 4-acre mitigation project area and Phase II evaluation of the eligibility of the Wild Rice Dam to the National Register of Historic Places was conducted in May 2014. Based on the draft report, two historic archeological sites (cultural material scatters), one possible prehistoric isolated find, and the Wild Rice Dam itself were recorded in the mitigation project area during the survey. The two archeological sites, the isolated find, and Wild Rice Dam are recommended as not eligible to the National Register as they do not meet any of the criteria for inclusion on the National Register and/or lack historical physical integrity. A traditional cultural property, the Black Duck Battlefield, is located within one mile of the dam, but is outside of the mitigation project's area of potential effects.

6.6 Social and Economic Resources

The Wild Rice Dam is located approximately eight miles south of Fargo, North Dakota. The project site is within Cass County, North Dakota. A detailed description of social-economic resources for the Cass County area has been provided in the FEIS (USACE 2011). The affected environment for population, employment and income will not be repeated here.

The project site is rural in nature and fairly isolated from public access and use. Land surrounding the site is river floodplain and agriculture land. A relatively small number of residencies and farmsteads are located within a mile of the Wild Rice Dam. Many of these are riparian, or within close proximity to the Wild Rice River.

6.7 Recreational Resources

The project site is surrounded by private property but is occasionally used for recreational fishing immediately downstream of the dam. The season of primary use is May through September. The Wild Rice River experiences minimal use by canoes or small boats. Overall the project area provides minimal recreational value.

7. ENVIRONMENTAL CONSEQUENCES

An environmental analysis has been conducted for the proposed action; a discussion of the impacts follows and is summarized in Table 6. No significant adverse impacts would result from construction of the proposed project, relative to the No Action Alternative. In accordance with the Clean Water Act, a Section 404(b)(1) evaluation is included with this report. The Corps has been coordinating with the North Dakota Department of Health regarding the Section 401 state water quality certification. Coordination will continue during the development of final plans and specifications for the project, which will address construction methods, sequencing and best management practices to avoid and minimize any water quality issues. Section 401 certification will be obtained prior to awarding the construction contract.

Table 1. Environmental Assessment Matrix.

	No Action Alternative							Proposed Alternative						
	BENEFICIAL				ADVERSE			BENEFICIAL				ADVERSE		
PARAMETER	SIGNIFICANT	SUBSTANTIAL	MINOR	NO EFFECT	MINOR	SUBSTANTIAL	SIGNIFICANT	SIGNIFICANT	SUBSTANTIAL	MINOR	NO EFFECT	MINOR	SUBSTANTIAL	SIGNIFICANT
A. SOCIAL EFFECTS														
1. Noise Levels				**X**								**T**		
2. Aesthetic Values				**X**								**X**		
3. Recreational Opportunities				**X**								**T**		
4. Transportation				**X**							**X**			
5. Public Health and Safety					**X**					**X**		**T**		
6. Community Cohesion (Sense of Unity)				**X**							**X**			
7. Community Growth and Development				**X**							**X**			
8. Business and Home Relocations				**X**							**X**			
9. Existing/Potential Land Use				**X**							**X**			
10. Controversy				**X**							**X**			
B. ECONOMIC EFFECTS														
1. Property Values				**X**							**X**			
2. Tax Revenue				**X**							**X**			
3. Public Facilities and Services				**X**								**T**		
4. Regional Growth				**X**							**X**			
5. Employment				**X**							**X**			
6. Business Activity				**X**							**X**			
7. Farmland/Food Supply				**X**							**X**			
8. Commercial Navigation				**X**							**X**			
9. Flooding Effects				**X**							**X**			
10. Energy Needs and Resources				**X**							**X**			
C. NATURAL RESOURCE EFFECTS														
1. Air Quality				**X**								**T**		
2. Terrestrial Habitat				**X**								**X**		
3. Wetlands				**X**								**T**		
4. Aquatic Habitat					**X**					**X**		**T**		
5. Habitat Diversity and Interspersion						**X**			**X**					
6. Biological Productivity					**X**					**X**				
7. Surface Water Quality				**X**								**T**		
8. Water Supply				**X**							**X**			
9. Groundwater				**X**							**X**			
10. Soils				**X**							**X**			
11. Threatened or Endangered Species				**X**							**X**			
D. CULTURAL RESOURCE EFFECTS														
1. Historic Architectural Values				**X**							**X**			
2. Prehistoric & Historic Archeological Values				**X**							**X**			

T: Temporary Effect

7.1 Natural Resource Effects

7.1.1 Air Quality

The operation of construction equipment may result in a short-tem localized reduction in air quality under the preferred alternative. Adverse effects would be limited and short-term because they are associated only with construction. It is estimated that construction could take from a few weeks to a few months, though additional time may be needed given site conditions and construction logistics.

No changes to air quality would occur under the No Action Alternative.

7.1.2 Surface Water Quality

The proposed action would have no effect on long-term water quality of the Wild Rice River. Water quality, especially water clarity, may be briefly reduced during construction. Any reduction in clarity would fade immediately following construction.

As outlined above the State of North Dakota has identified existing water quality impairments for the Wild Rice River in the project area. These impairments affect Fish and Other Biota; and Recreational Use. A TMDL has been completed for Fecal Coliform (Recreational Use Impairment). No other TMDLs have been completed or are in progress.

Short-term increases in turbidity would occur as the result of grading and placing rock and riprap, both of which would disturb river bottom sediments and bank soils. To minimize this impact, construction activities would include use of best management practices (BMPs) and potentially other measures to minimize short-term impacts. The specific construction methods, including specific BMPs, have not yet been identified. These will be further specified during the final phase of project design. Potential BMPs may include construction during low-flow periods, use of silt curtains, vegetation plans to minimize vegetation clearing, minimizing the time period of exposed soils, control of stormwater flow from any upland areas disturbed during construction, and other methods. Given the Corps' prior experience with both fish passage and bank stabilization projects, and its success in controlling short-term turbidity impacts from construction of those projects, it is reasonable to assume that no substantial impacts would occur to water quality. BMPs have traditionally been successfully used to minimize short-term impacts associated with projects that focus on grading and rock along streams and rivers. Further, the Section 401 water quality certification may be conditioned on implementation of measures designed to reduce water quality impacts and the Corps will ensure any such measures are implemented.

Erosion at riprap boundaries would be minimized with careful design and construction. The riprap boundaries will be designed to blend back into the bank, minimizing turbulence at the riprap/bank interface that could result in long-term erosion.

Dam removal could release a small amount of sediment that has accumulated upstream of the dam. However, the volume of stored sediment appears small as surveys both upstream and downstream of the dam confirm fairly consistent elevations of the river bottom (Figure 3). In addition, material immediately upstream of the dam would be excavated during dam removal. It is not anticipated that the proposed action would result in large-scale release of sediment or sudden changes in sediment transport regimes.

Construction activities would not contribute to low dissolved oxygen concentrations, or reduced fish and invertebrate conditions. Impacts to fish and invertebrates are discussed further below, but would not be expected to be significant. The intent of the project is to improve biological connectivity which should help improve fish and invertebrate bioassessment observations.

No changes to surface water quality would occur under the No Action Alternative.

7.1.3 Aquatic Habitat and Biota

The proposed action would result in the removal of the dam and placement of riprap within the Wild Rice River, with rock extending up onto the banks (Figure 3). The areal footprint extent of the proposed placement within the water is estimated at less than a half-acre. This acreage would be at typical summer low flows. At flood flows the entire rock placement would be inundated.

Invertebrates would be crushed by placement of the riprap and removal of the existing dam, but they would quickly recolonize the new rock substrate. Fish would avoid the area during construction but would return upon completion. The new rock may attract fish and provide habitat value. The project would fill the downstream scour hole which provides depth and some desirable habitat characteristics. However, this wouldn't be expected to substantially affect the fish community, and is more than offset by the benefits of improving fish passage. The project would improve the ability for fish to migrate through the project area and optimally select habitats that improve their ability for reproduction and survival, thus providing long-term benefits to the Wild Rice and Red rivers. No long-term adverse impacts would be anticipated to aquatic habitat or biota.

The proposed action would not significantly impact long-term stream erosion or stream stability at and downstream of the project site. While flow conditions would change slightly, they generally would not change in terms of velocity, stage, direction or discharge. Riprap placed along the banks and river bed would minimize the potential for stream bank erosion. In fact, the project would potentially be an improvement over existing conditions where bank erosion has and continues to occur at the tailwater of the existing dam.

The proposed action would lower water elevations by four to five feet immediately upstream of the dam under low flow conditions. The effect on water elevations decreases with the distance upstream, and historically was largely lost by the bridge at 25th Street South (5 miles upstream). The 25th Street South bridge was recently washed out, and the backwater effect of the existing dam could extend slightly upstream of this location. Under existing conditions, upstream water elevations provide stabilizing forces to the river bank. Under the proposed action, these stabilizing forces would be reduced, which would increase the risk of bank failure in this upstream reach. This could slightly reduce the quality of aquatic habitat and water quality due to loss of riparian tree cover and bank erosion. However, it should be noted that failures currently exist in some upstream river banks. While dam removal could trigger or accelerate the rate of failure, this failure is already occurring in some areas and will likely occur under the future without project. Though there may be an incremental increase in risk for bank failure under the proposed action it would not be expected to substantially impact habitat quality upstream of the dam.

The proposed action would provide strong, meaningful benefits to the aquatic environment through improved connectivity. The project would help different aquatic species meet seasonal habitat requirements by reconnecting a pathway between habitat types that are interspersed throughout the watershed. By providing access to a greater diversity of habitats, the proposed action would improve interspersion and biological productivity. This is compared to the no-action alternative which limits connectivity and limits the ability for biota to reach interspersed habitats. The no-action alternative would thus have adverse effects, compared to the proposed action.

7.1.4 Terrestrial Habitat and Biota

The proposed action would result in the clearing of trees and understory vegetation only to facilitate removal of the dam and placement of needed rock for erosion protection. The amount of tree clearing will be minimized as much as practical, and should be relatively minor. The aerial footprint extent of the proposed project is relatively small and mostly within water. Temporary access would primarily be sought through existing field edges and agricultural equipment access points. Tree clearing would be minimized to the extent possible, though may be needed immediately adjacent to the dam. Construction staging also would likely be focused to the southwest of the existing dam. The work limits area identified within project plans and specifications is approximately 4.8 acres (Figure 1, work limits identified by the dashed line). However much of this area is void of trees and has minimal understory vegetation.

The proposed action also will include some grading on the bank where concrete is removed. This will include minor shaping to smooth bank elevations and facilitate rock placement. Bank elevations will remain above the waterline for most lower flow conditions, and only be inundated as flows approach bankfull. This area for grading would be well under an acre. If needed, some graded area could then be replanted to stabilize soils and minimize potential erosion. Material removed during dam removal and grading would be placed in an approved placement site. If an approved placement site is not utilized, the potential placement site will be coordinated with appropriate State and federal agencies to ensure that material placement would not result in any significant, adverse impacts.

Otherwise, long-term effects of the project on terrestrial habitat and related biota would generally be minor. Wildlife may temporarily avoid the project area during construction, but would return following completion of the project. As noted above, dam removal could trigger or accelerate the rate of bank failure, which could result in some tree loss. However, this failure is already occurring in some areas under existing conditions, and will likely occur under the future without project. No substantial long-term adverse impacts would be anticipated to terrestrial habitat or biota due to the project.

No changes to terrestrial habitat or biota would be anticipated under the No Action Alternative.

7.1.5 Threatened or Endangered Species

As part of this analysis, it has been concluded that the proposed project would have no adverse effects on any federally listed endangered or threatened species. This is based on the habitat needs outlined above for the identified listed species, the fact that these habitats are

lacking at the project site and/or that the species has not been observed in the immediate area, and the fact that the project is minimally invasive for both short-term and long-term impacts.

No effects would occur to threatened or endangered species under the No Action Alternative.

7.1.6 Wetland Resources

The majority of project work would occur directly in the river. This habitat would not be considered wetland. The project area does include small areas of adjacent floodplain and some of these low lying floodplain areas may be considered wetlands. However, the access road and staging appear to avoid low depressions and would not occur in areas currently identified as wetland by the U.S. Fish and Wildlife Service National Wetlands Inventory. Any grading activities would be temporary and the area would be returned to similar topography following dam removal. A small amount of wetland area may be permanently impacted as a result of this effort. However, these losses would generally be small (e.g., well under a half acre) and are necessary to implement a project that would have substantial benefits to the aquatic environment. No substantial losses of aquatic vegetation would be anticipated. Overall, effects to wetlands, if any, would be minimal, temporary and further minimized to the extent practical.

No changes to wetland habitat would be anticipated under the No Action Alternative.

7.2 Cultural Resource Effects

As of July 7, 2014, there are no National Register of Historic Places-listed or eligible historic properties in the Wild Rice Dam Fish Passage Mitigation Project area. Two historic archeological sites and one possible prehistoric isolated find were recorded in the mitigation project area during its Phase I cultural resources survey in May 2014. Both sites and the isolated find are recommended as not eligible to the National Register because they do not contain the potential to provide information important to the history of the region. The Wild Rice Dam was also recorded during the May 2014 survey. While the dam is associated with the Civilian Conservation Corps and is in its original setting, its lack of integrity of workmanship, feeling, and materials precludes it from being eligible to the National Register under Criterion A (association with important events). The dam also does not meet the requirements of Criteria B (association with significant people), C (possesses distinctive architecture) or D (has potential to yield information important in prehistory or history) for inclusion on the National Register. The Black Duck Battlefield, a traditional cultural property located within one mile of the dam, is outside of the mitigation project's area of potential effects and would not be affected by dam removal or related mitigation activities. There are no historic buildings or structures within one-half mile of the dam which would be indirectly (visually) affected by removal of the dam. The draft Phase I cultural resources survey report was sent to the North Dakota State Historic Preservation Officer (SHPO) on July 9, 2014, with the SHPO being expected to concur with the not eligible recommendations for the two historic archeological sites, the prehistoric find, and for the Wild Rice Dam.

No changes to cultural resources would be anticipated under the No Action Alternative.

7.3 Social and Economic Effects

7.3.1 Noise

Heavy equipment used for dam removal and rock placement will generate noise. However, this impact will be short-term and relatively minor. The nearest structure to the dam is over 500 ft away, with a few other residences over 1,000 ft away. Truck and equipment access would pass some residences, but again be temporary. No significant noise impacts would be anticipated.

No changes to noise levels would occur under the No Action Alternative.

7.3.2 Aesthetics

Site conditions during dam removal and rock placement for the proposed alternative would result in a minor intrusion on the visual aesthetic environment. Construction activities would be short-term and relatively minor. The permanent removal of the existing dam would be a permanent change. However, the project area includes a relatively short stretch of river, and the overall impact would be minor. The project area is lightly used and few would notice any change. The project would reduce upstream water elevations for a distance of about 5 miles, possibly further. People living along the river would have their view affected by lower water elevations. However, the river would still maintain its current position and appear largely as it does downstream of the existing dam. The aesthetic appearance of the area would largely return to the appearance prior to the original construction of the dam in 1934. Overall this would influence a small number of people and be a relatively minor, permanent aesthetic change.

No changes to aesthetics would be anticipated under the No Action Alternative.

7.3.3 Recreation

Little recreation occurs at the project site. A small amount of fishing occurs in the tailwater, even though this is not a public area. Little canoeing occurs in the area. Dam removal activities would necessitate complete closure of the area during construction. This would temporarily eliminate any recreational use.

Once construction is completed, recreational effects from the project would cease. Fish blocked from upstream migration may not be as congregated immediately below the dam, making the area less desirable for fishing. However, fishing could still occur at the project site, and the project should overall be a benefit to fish of the Wild Rice River. The proposed project would have no permanent, substantial, long-term adverse impacts on the recreational environment. In fact, safety would be improved through dam removal, which would benefit recreation that occurs at the dam site.

No effects to recreation would be anticipated under the No Action Alternative.

7.3.4 Safety

During construction, there would be an increase in heavy equipment traffic at and leading to the project site. To minimize safety risks for areas around the project site, appropriate construction and safety signage, detours, or other safety measures may be implemented. These effects would be short lived and terminate when construction is complete.

The proposed action would not have long-term adverse effects on public safety at the site. In fact, the project will improve safety by eliminating the dangerous hydraulic roller that forms at the base of low-head dams. Dam removal also provides some small improvement in safety by removing any potential for future dam failure under the No Action Alternative.

No changes to safety would be anticipated under the No Action Alternative. Hydraulic conditions would be more hazardous below the dam under the No Action Alternative compared to the Preferred Alternative. As noted above, the presence of the dam and potential for dam failure may have some slight level of safety risk for the immediate vicinity over the dam being absent. However, no evidence has been provided that the dam is under any imminent risk of failure.

7.3.5 Economy and Employment

The proposed project would have negligible impacts on the socioeconomic environment of Cass County. It is possible the project could require some upstream riparian property owners to adjust land-use activities (e.g., cattle grazing) based on altered water levels. This could have some economic effect on individual property owners, but isn't anticipated to be a substantial effect to a large number of people. It is also possible that removal activities could result in a minor short-term infusion of income into the local economy due to purchase of materials from local vendors or employment of persons from the local area, particularly if the construction work is awarded to a local contractor.

No changes to economic or employment conditions would be anticipated under the No Action Alternative.

7.3.6 Environmental Justice

Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," provides that "each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." The Executive Order makes clear that its provisions apply fully to programs involving Native Americans.

The proposed project would not have a disproportionately high adverse effect on minority or low income populations and is in compliance with EO 12898. The project is located in a rural area with few residents nearby. The project would have negligible social and economic effects and would generally affect all persons equally.

No adverse economic or social effects would be anticipated under the No Action Alternative. The No Action Alternative would not disproportionately impact any one group over another.

7.3.7 Public Facilities, Services and Personal Property

Traffic flow leading to the project site could be temporarily disrupted during construction due to heavy equipment flow. This could include loads of material being both removed from (e.g., concrete debris) and brought into (e.g., riprap) the project site by truck. This additional traffic could be a temporary inconvenience to local residences. Effects to traffic corridors would be attenuated through the appropriate signage and detour routes, if appropriate. Any detour routes appear unlikely, but would be determined during more detailed construction planning and will be avoided to the extent practical. These effects would be short lived and terminate when construction is complete. It is estimated that construction could take from a few weeks to a few months, though additional time may be needed given site conditions and construction logistics.

The proposed action would have little, if any effect on river hydrologic regimes. It would be unlikely that removal of the dam would cause any appreciable change to the 1% annual chance flood stage elevation either upstream or downstream of the project site.

As described above, the proposed action would lower water elevations by four to five feet immediately upstream of the dam under low flow conditions; the lower water elevations would decrease until they became negligible further upstream. Within this upstream reach there are residences and buildings adjacent to the river, primarily along 21st and 25th streets (Figure 5). Field observations and review of aerial photography demonstrate that bank failures are already found both upstream and downstream of the dam. For example, bank stabilization measures have been implemented just north of the 100 Avenue bridge crossing to protect an existing access for seven residences along 21st Street South (Figure 5).

Figure 5. Location of upstream existing bank failure stabilization measures relative to the Wild Rice River dam.

Under existing conditions, upstream water elevations provide stabilizing forces to the river bank. Under the proposed action, these stabilizing forces will be reduced. Lowering upstream water elevations could increase the rate bank failure within the reach of backwater effect. The extent or rate of this increase is unknown and very difficult to predict. However, while dam removal could trigger or accelerate the rate of bank failure, such failures are already occurring in the upstream area and will likely occur in the future under the No Action alternative.

The proposed action will not have long-term substantial adverse effects on other public facilities or services. The project site is fairly remote and not in any proximity to other public facilities, structures or features not identified above.

No substantial adverse effects would be anticipated to public facilities, services or personal property under the No Action Alternative.

7.4 Cumulative Impacts

Cumulative impacts on the environment are the result of the incremental impacts of past actions, the proposed project and reasonably foreseeable future actions. Significant changes to the environment were made through construction of dams on the Wild Rice River, along with all the other changes to the river and landscape that has permanently altered the aquatic environment. The proposed project is intended to provide long-term improvement to the environment through improved biological connectivity. The proposed project also would improve long-term safety at the project site, and address concerns with longevity of the dam. The proposed action would reduce upstream water elevations which would reduce bank stabilization forces. This could trigger or accelerate upstream bank failures. However, these failures already occur to some extent under existing conditions, and will continue to occur under future without project conditions. It is also possible the dam, which no longer has a purpose, could be removed in the future. It also might fail. Either of these would be independent of the proposed action and would also influence bank stability.

Generally, the effects of the proposed project would be minimal and mostly positive in maintaining the quality of the human environment. The proposed action will help protect and improve the biological integrity of the Wild Rice River. Removal of this dam addresses the first of at least two impediments (dams) to fish passage on the Wild Rice River. It is anticipated that the proposed action will help reduce habitat fragmentation on the Wild Rice River and improve biodiversity in this reach of the river. It would also off-set the infrequent loss of connectivity that would occur during operation of the flood risk management project for the Fargo-Moorhead area. Overall, the project will help to cumulatively improve biological connectivity on the Wild Rice River.

The project would not contribute to the long term water quality impairments for the Wild Rice River.

The No Action alternative would continue to contribute to the lack of biological connectivity of the Wild Rice River. This would potentially result in lower species diversity and altered aquatic communities both upstream and downstream of the dam. If the flood risk management project was implemented without the proposed action, biological connectivity connections would be cumulatively worse.

8.0 COORDINATION

As required by the Fish and Wildlife Coordination Act, this project was coordinated with the U.S. Fish and Wildlife Service (Appendix B). The effort was also coordinated extensively with other agencies, including the Minnesota Department of Natural Resources, Minnesota Pollution Control Agency, North Dakota Game and Fish, North Dakota Department of Health, and North Dakota State Water Commission. General coordination has been on-going since the planning stage for the broader Fargo-Moorhead Flood Risk Management project, and has been more focused as the proposed project has been identified as a mitigation component. This process has included the refinement of the proposed plan during the planning process to minimize any adverse effects and maximize benefits. Coordination will continue in the future through project construction and any project monitoring and adaptive management, if needed. No substantial concerns with the proposed plan were identified by the U.S. Fish and Wildlife Service or the State resource agencies. This project has received strong support for the potential environmental benefits that it would provide.

Initial coordination with the North Dakota State Historic Preservation Officer and eight Indian tribes involved a letter sent by the U.S. Army Corps of Engineers, Rock Island District, on July 11, 2012, which gave a brief description of the alternatives being considered to improve fish passage at the Wild Rice Dam. The U.S. Army Corps of Engineers, St. Paul District, sent a follow-up letter to the Tribal Historic Preservation Officers and Cultural Resources points-of-contact for ten tribes on April 14, 2014. This letter conveyed additional information on the proposed fish passage mitigation project at the Wild Rice Dam, including that construction of a rock rapids fishway and/or removal of the dam would have no effect on the nearby traditional cultural property, the Black Duck Battlefield. The draft Phase I cultural resources survey report is being coordinated with the North Dakota SHPO. The North Dakota SHPO is expected to concur with the “no effects to historic properties” recommendation for the Wild Rice Dam Fish Passage Mitigation Project.

Copies of this assessment were distributed to the public and other State and Federal agencies for review and comment. A distribution list is included at Appendix C.

State 401 Water Quality Certification will be pursued from the North Dakota Department of Health once final project designs are completed.

The public review period for this EA and attached Clean Water Act Section 404(b)(1) evaluation extended from August 18th through September 18th, 2014. During the public review period, five comments were received. Copies of the comments are provided at Exhibit D, with summaries included below.

Minnesota PCA provided a letter confirming it had no comments on the project.

The North Dakota State Historic Preservation Office provided a letter of concurrence that the four historic archeological sites, including the Wild Rice Dam itself, are not eligible to the National Register of Historic Places.

The Flandreau Santee Sioux Tribe indicated they have no objections to the project. However, if human skeletal remains and/or any objects falling under NAGPRA are uncovered during construction, please stop immediately and notify the appropriate persons.

An individual submitted a comment online regarding decreases in upstream water elevations and possible economic ramifications to that individual property owner and aesthetic changes from reduced water elevations. The EA has been revised, as appropriate, to account for additional concerns. The Corps investigated the likely location of the property owner to better estimate impacts to water elevations at his property. These results will be communicated directly to the commenter to help him understand the effect at his property. The commenter also expressed concern for changes to the aesthetic beauty of the property that his family settled in 1871. With the proposed project, water elevations would be returned to those present pre-dam. Since the dam was constructed in 1934, the project would return water elevations to those experienced during the settlement.

A law firm submitted a comment letter on behalf of the Board of Township Supervisors for Stanley Township and an individual. The concerns included changes to aesthetics, permanent effects to recreational use of the area, bank stability issues, financial loss, and real estate interests associated with the project. Several of these items have already been addressed within the EA. Some concerns expressed in the letter are unsubstantiated and cannot be addressed. For example, the letter states the project “will have financial repercussions that are being ignored.” However, the financial issues are not specified and thus could not be investigated further. Ultimately, the final EA has been edited, as appropriate, to account for additional relevant concerns.

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DEPARTMENT OF THE ARMY
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REPLY TO
ATTENTION OF

Regional Planning and Environment Division North

FINDING OF NO SIGNIFICANT IMPACT

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

Wild Rice Dam Removal Mitigation Project
Cass County, North Dakota

The purpose of this project is to improve fish passage and biological connectivity at Wild Rice Dam on the Wild Rice River, Cass County, North Dakota. The proposed project involves removing the existing dam, followed by placement of rip rap to minimize bank or river bed erosion.

This finding of no significant impact is based on the following factors: The project would have temporary minor adverse impacts on noise levels, recreational opportunities, public health and safety, air quality, and surface water quality and long term minor adverse impacts on aesthetic values, terrestrial habitat, and wetlands. Impacts to upstream bank stability, and related effects, would likely not be substantial given that stability issues already exist and would continue in the future even without the project. The project would have a minor beneficial impact on public health and safety, aquatic habitat, and biological productivity, and a substantial beneficial impact on habitat diversity via improved connectivity. The project would have no impact on the cultural environment.

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

9 OCT 14
Date

Dan Koprowski
Colonel, Corps of Engineers
District Engineer

EXHIBIT A - Section 404(b)(1) Evaluation

PRELIMINARY SECTION 404(b)(1) EVALUATION
Wild Rice Dam Removal Mitigation Project
Cass County, North Dakota

October, 2014

1. PROJECT DESCRIPTION

a. Location

The proposed fill activity would take place in the Wild Rice River in Cass County, North Dakota, near the City of Fargo, ND, (Environmental Assessment (EA) Figures 1 and 2).

b. Authority and Purpose

Federal authority for the proposed project is provided through the Red River Reconnaissance Study which was authorized by a September 30, 1974 Resolution of the Senate Committee on Public Works. The purpose of the project is environmental mitigation for the broader Fargo-Moorhead Metropolitan Area Flood Risk Management Project. The project would allow for greater fish passage and connectivity at Wild Rice Dam.

c. General Project Description

This evaluation addresses the impacts resulting from the placement of fill material in waters of the United States in compliance with Section 404 of the Clean Water Act, as amended. The proposed fill activities would consist of the placement of rip rap to minimize river bank and bed erosion associated with dam removal. Dam removal is being performed to improve biological connectivity on the Wild Rice River. The general design is presented in Figure 3 of the Environmental Assessment. The project would excavate a small amount of sediment immediately upstream of the dam.

d. General Description of Dredged and Fill Material

(1) General Characteristics of Material

(a) Riprap - Rock for erosion protection or filling of the scour hole would be obtained from within the existing dam (concrete covered rock crib structure), provided the rock is of adequate size to meet the requirement. Additional riprap would be obtained from a regional commercial quarry or similar outlet. Riprap would be field stone or quarry rock with gradations of R20. Riprap would be clean and reasonably free from soil and fines and contain no refuse. This would be placed on fine material surfaces exposed to the river current within the placement footprint.

Additional rock fill for the scour hole at the toe of the existing dam would come from the dam removal. The dam is a concrete covered rock crib. Rock from inside the dam would be used for rock fill of the scour hole. R20 riprap may be

placed on top of this rock to help anchor the rock beneath. Rock from the dam would be reasonably free of concrete and rebar.

(2) Quantity of Material – Current plans use approximately 900 cubic yards of R20 riprap, or similar. It is estimated that less than 100 cubic yards of sediment would be excavated from immediately behind the dam.

(3) Sources of Material - Rock for erosion protection or filling of the scour hole would be obtained from within the existing dam (concrete covered rock crib structure), provided the rock is of adequate size to meet design requirements. Additional riprap would be obtained from a regional commercial quarry or similar outlet.

e. Description of Proposed Fill Placement Sites

Material placement would extend across the river channel and onto the bank. The majority of material placement would occur below the water. Disposal of any concrete, wood, and excavated sediment would occur at an already approved placement site. Specifics on rock placement the placement include:

(1) Location - The proposed fill activities would take place in the Wild Rice River, south of Fargo, ND (EA Figures 1).

(2) Size - The areal footprint extent of the proposed placement within the water is estimated at less than a half-acre (for typical low summer flows) (EA Figure 3). Total rock placement would likely be about an acre or less.

(3) Type of Site - The fill activities would take place following removal of the Wild Rice Dam, overlapping with the footprint of the old dam. Riprap would extend from the river bed onto the river bank on both sides of the former dam.

(4) Types of Habitat - The habitat is river, riverbank, riparian areas and river floodplain. Much of the footprint is the existing concrete lowhead dam that will be removed. It also includes the scour hole at the downstream toe of the dam. Floodplain areas adjacent to the project include floodplain forest with low areas that may be considered wetland habitat.

(5) Timing and Duration - Subject to approval, construction could begin in calendar year 2014 or 2015, though this is not specifically known. It is estimated that construction could take from a few weeks to a few months, although additional time may be needed given site conditions and construction logistics. The seasonal timing and duration of construction will be further identified during the final project design.

f. Description of Fill Placement Method

Minor clearing of trees and understory vegetation may be necessary within the footprint area and to support equipment access. Grading would be performed to accommodate proper slopes for equipment access and placement of rock both above and below the water surface. First, the dam would be removed. Rock would then be placed on and around the dam footprint to a thickness of 18". Additional riprap (resulting in greater thickness) would be added to the scour hole downstream of the dam to help ensure river bed stability. Thickness of the riprap within the scour hole is provided at EA Figure 3.

Riprap placed under water would be positioned in a systematic manner to ensure a continuous uniform stone layer. Equipment would be capable of reaching the placed material to monitor the water depth and surface coverage.

Construction actions will include use of best management practices (BMPs) to minimize short-term impacts. The specific construction methods, including identification of specific BMPs, have not yet been identified. These will be further specified during preparation of the final plans and specifications. Potential BMPs include construction during low-flow periods, use of silt curtains, vegetation plans to minimize the effects of vegetation clearing, minimizing the time period for exposed soils, and control of stormwater flow from any upland areas disturbed during construction.

2. FACTUAL DETERMINATIONS

a. Physical Substrate Determinations

(1) Substrate Elevation and Slope - Following dam removal, the river bed elevation in the footprint would be approximately 878 ft. The riprap placement would be to a thickness of 18" on top the exposed river bottom. (EA Figure 3). Rock would be used to partially fill the existing scour hole downstream of the dam to help ensure stability. The scour hole bottom elevation is approximately 874 and would be filled to a depth and slope as outlined in EA Figure 3.

(2) Sediment Type – Much of the fill will be in an area is currently a concrete dam. Fill would also occur in areas where river sediment is primarily finer silt. Bank soil at the site also is generally silt material.

(3) Dredged/Fill Material Movement - Rock would be placed directly in the river with grading to achieve desired slopes. Material is being placed to minimize bed and bank erosion. No significant movement of riprap would be expected.

Sediment immediately upstream of the dam would be excavated (Figure 3; estimated at less than 100 cubic yards). Beyond this, dam removal could release a small amount of sediment that has accumulated upstream of the dam. However, the volume of stored sediment appears small as surveys both upstream and downstream of the dam confirm fairly consistent elevations of the river bottom (Figure 3). It is not anticipated that the proposed action would result in large-scale release of sediment or sudden changes in sediment transport regimes.

b. Water Circulation, Fluctuation, and Salinity Determinations

(1) Water

(a) Salinity - The fill activities would not affect salinity. The project would not contribute to the long-term water quality impairments for chloride.

(b) Water Chemistry - The use of clean fill material and mechanical placement procedures would preclude any significant impacts on water chemistry.

(c) Clarity - Some minor, short-term decreases in clarity are expected from the proposed fill activities during construction. As noted above, dam removal could trigger or accelerate the rate of bank failure, which could result in some bank erosion which may increase turbidity. However, this failure is already occurring in some areas under existing conditions, and will likely occur under the future without project. Ultimately, no substantial long-term impacts to water clarity would be expected.

(d) Color - The proposed fill activities should have no impact on water color.

(e) Odor - The proposed fill activities should have no impact on water odor.

(f) Taste - The proposed fill activities should have no impact on water taste.

(g) Dissolved Gas Levels - The proposed fill activities should have no impact on dissolved gas levels in the water.

(h) Nutrients - The proposed fill activities should have no impact on nutrient levels in the water.

(i) Eutrophication - The proposed fill activities should have no impact on the level or rate of eutrophication of the water.

(j) Temperature - The proposed fill activities would have little impact on water temperature.

(2) Current Patterns and Circulation

(a) Current Patterns and Flow - Flow patterns in the project area would change as a result of the proposed project. Dam removal will change the slope immediately at the dam. Bank erosion with the project would likely be less than that observed under existing conditions.

(b) Velocity - Flow velocities in the project area would change as a result of the proposed project. Dam removal will change the slope immediately at the dam, reducing velocities at the site. In addition to reduced velocities, the proposed fill activities would help to minimize river bed and bank erosion at the dam site.

(c) Stratification - The proposed fill activities would have no effect on the development of stratified conditions in the river.

(d) Hydrologic Regime - The proposed fill activities would not have substantial impacts on river hydrologic regimes. The broader project involves removal of a low-head dam. Overall the project would not be anticipated to increase flood heights.

(3) Normal Water Level Fluctuations – As outlined above under Hydrologic Regime, the proposed fill activities would have no substantial effect on normal water level fluctuations. Effects of the broader project (dam removal) on water elevations is discussed above within the EA.

(4) Salinity Gradient - The fill activities would have no effect on the salinity gradient.

c. Suspended Particulate/Turbidity Determination

(1) Expected Changes in Suspended Particulates and Turbidity Levels in the Vicinity of the Placement Site - Although minor temporary increases in suspended particulates and turbidity would occur during project construction, the project would have no long-term adverse effects to suspended solids or turbidity. Construction activities would follow water quality requirements stipulated in the Section 401 Water Quality Certifications from North Dakota and any additional permits obtained for this project. The project would not contribute to the long-term water quality impairments (Clean Water Act section 303d listings) for the Wild Rice River.

To address short-term water quality impairments, project construction will include use of BMPs and potentially other measures to minimize short-term impacts. The specific construction methods, including identification of specific BMPs, have not yet been identified. Potential BMPs include construction during low-flow periods, use of silt curtains, vegetation plans to minimize vegetation clearing, and other methods. However, it is reasonable to assume that no substantial impacts would occur to water quality. BMPs have traditionally been used to minimize short-term impacts associated with projects that focus on grading and rock along streams and rivers. BMPs can be implemented to facilitate construction of a project that will not result in undesirable sediment loading to the Wild Rice River.

(2) Effects on Chemical and Physical Properties of the Water Column

(a) Light Penetration - Light penetration in adjacent waters would be reduced temporarily during construction but would quickly return to background levels.

(b) Dissolved Oxygen - This project is not expected to substantially affect dissolved oxygen concentrations. Short-term oxygen levels would not be expected to change substantially during construction.

(c) Toxic Metals and Organics - This project is not expected to release any toxic metals or organics.

(d) Pathogens - This project is not expected to release pathogens to the water column. Only clean fill materials would be placed during construction.

(e) Aesthetics - This project would change the aesthetics as a result of dam removal. This would not be considered a substantial impact given minimal use of the area.

(3) Effects on Biota - Invertebrates would be crushed by placement of the riprap and removal of the existing dam, but they would quickly recolonize the new rock substrate. Fish would avoid the area during construction but would return upon completion. The new rock may attract fish and provide habitat value. The project would fill the downstream scour hole which provides depth and some desirable habitat characteristics. However, this wouldn't be expected to substantially affect the fish community, and is more than offset by the benefits of improving fish passage. The project would improve the ability for fish to migrate through the project area and optimally select habitats that improve their ability for reproduction and survival, thus providing long-term benefits to the Wild Rice and Red rivers. Effects on primary production and photosynthesis in the water column would be temporary and minor because of the small amount of material resuspended during construction. The structure should have a long-term benefit to fish and mussel species as a result of improved connectivity. No long-term adverse impacts would be anticipated to aquatic habitat or biota.

d. Contaminant Determinations

Clean riprap and rock would be used. No contaminant issues would be expected. The project would not contribute toward any long-term impairments.

e. Aquatic Ecosystem and Organism Determinations

(1) Effects on Plankton - Effects on plankton would be minor and temporary. Construction operations that increase turbidity levels would reduce light penetration.

(2) Effects on Benthos - Effects on benthic organisms would be minor and temporary. While the initial construction would cover benthic organisms, they would quickly recolonize. Additionally, riprap would provide substrate for such organisms as well as cover and refugia.

(3) Effects on Nekton - This project would have no effects on nekton.

(4) Effects on Aquatic Food Web - This project would have no substantial effects on the aquatic food web.

(5) Effects on Special Aquatic Sites

(a) Sanctuaries and Refuges - No sanctuaries or refuges would be affected by this project.

(b) Wetlands and Vegetated Shallows – The project site likely includes wetlands in adjacent floodplain areas. A small amount of wetland area may be permanently impacted as a result of this effort. However, these losses would generally be small (e.g., well under a half acre) and are necessary to implement a project that would have substantial benefits to the aquatic environment. No substantial losses of aquatic vegetation would be anticipated.

(c) Mud Flats and Coral Reefs - Mud flats and coral reefs would not be affected by this project.

(d) Riffle and Pool Complexes – The project would remove an existing dam and place rock over the remaining river bottom and bank. No true riffle habitat would be lost. The scour hole below the dam would be partially filled to help with river bed stability. This loss of an existing pool would be necessary to facilitate the project, which would provide greater benefits for fish of the Wild Rice River.

(6) Threatened or Endangered Species - The proposed project would not adversely affect any federally listed species.

f. Proposed Placement Site Determinations

(1) Proposed Mixing Zone Determination - The proposed fill activity would have a small mixing zone. The mixing zone would be less than 50 feet from the upstream to downstream extent of the riprap. Existing conditions include a more substantial mixing zone due to turbulence created at the dam. However, this change is not considered to be a substantial impact to water quality or aquatic biota. No liquid material would be discharged during construction. For these reasons, the mixing zone was not analyzed further.

(2) Determination of Compliance with Applicable Water Quality Standards - The nature of the fill material and the type of construction should avoid violation of State water

quality standards by project-related activities. Construction activities would follow water quality requirements stipulated in the Section 401 Water Quality Certifications obtained from North Dakota for this project. The Corps has already begun coordination with the State of North Dakota on additional requirements that may be necessary as a condition of State Water Quality Certification given this construction will occur in an identified impaired waterbody (303d listing). The long-term adverse environmental or water quality effects of the placement of fill material would be minimal to non-existent.

(3) Potential Effects on Human Use Characteristics

(a) Municipal and Private Water Supply - No municipal supplies would be affected by this project. The dam previously supported private or agricultural water supply but no longer has a purpose.

(b) Recreational and Commercial Fisheries – Recreational fishing occasionally occurs below the existing dam and may be briefly interrupted during construction, but would not be impacted long-term. No long-term adverse effects on recreational activities would be expected. No commercial fishing is known to occur in the project area.

(c) Water-Related Recreation - This project could have a temporary impairment to recreational use of the area during construction. However, no long-term impacts to recreation would occur. Overall the project area experiences minimal recreational water use.

(d) Aesthetics - The project area will have different aesthetic properties than the existing dam and would be a permanent change. However, this would not be a substantial adverse effect.

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(e) Parks, National and Historical Monuments, National Seashores, Wilderness Areas, Research Sites and Similar Preserves - No parks, monuments, wilderness areas or similar areas would be affected by the project.

g. Determination of Cumulative Effects on the Aquatic Ecosystem

Cumulative impacts on the environment are the result of the incremental impacts of past actions, the proposed project and reasonable foreseeable future actions. Significant changes to the environment were made through construction of dams on the Wild Rice River, along with all the other changes to the river and landscape that has permanently altered the aquatic environment. This project is intended to provide long-term improvement to biological connectivity at this location. Effects of the construction would be minimal and mostly positive in maintaining the quality of the human environment. The proposed action would help meet the mitigation needs of the Fargo-Moorhead Flood Risk Management project, which could potentially affect connectivity. The proposed action would involve removing a low head dam that serves as an impediment to fish passage on the Wild Rice River. It is anticipated that the proposed action will help reduce habitat fragmentation on the Wild Rice River and improve biodiversity in this reach of the river. It would also off-set the infrequent loss of connectivity that would occur during operation of the flood risk management project for the Fargo-Moorhead area. Overall, the project will help to cumulatively improve biological connectivity on the Wild

Rice River. If the flood risk management project was implemented without the proposed action, biological connectivity connections would be cumulatively worse.

The project would not contribute to the long term water quality impairments (303d listing) for the Wild Rice River.

h. Determination of Secondary Effects

No significant secondary effects on the aquatic ecosystem would be expected from the proposed action.

i. Actions Taken to Minimize Impacts

To the extent possible, the proposed project was designed to minimize footprint impacts on the aquatic environment while maximizing the potential to improve fish passage and connectivity. For the proposed project, BMPs would be implemented during all constructions phases, including water quality management practices to control, prevent, and minimize surface water degradation.

The specific construction methods, including identification of specific BMPs, have not yet been identified. These will be further specified during the development of final plans and specifications. Potential BMPs include construction during low-flow periods, minimizing the period of time exposed for soils, use of silt curtains, vegetation plans to minimize vegetation clearing, and other methods. However, it is reasonable to assume that no substantial impacts would occur to water quality. BMPs have traditionally been used to minimize short-term impacts associated with projects that focus on grading and rock placement in and along streams and rivers. Although the project site presents some unique challenges, BMPs can be implemented to facilitate construction of a project that will improve the long-term environment of the Wild Rice River.

3. FINDING OF COMPLIANCE FOR WILD RICE DAM REMOVAL

The proposed project complies with the Section 404(b)(1) guidelines of the Clean Water Act.

Alternatives considered were the no action alternative, the proposed alternative, and a rock rapids alternative. Rock rapids fishways were not considered practicable for the reasons outlined in paragraph 5.3 of the EA. No significant adaptations of the guidelines were made for this evaluation. The placement of fill is required to provide the desired benefits. Moreover, the overall placement of fill is relatively minor. Thus, this action is the least environmentally damaging practicable alternative.

The proposed construction is not expected to exceed water quality standards for turbidity set by the State of North Dakota. The Corps expects water quality standards for other contaminants to be met as well. The Corps has determined the project would not have significant water quality impacts and will obtain 401 water quality certification prior to awarding the construction contract. The project complies with Section 307 of the Clean Water Act and with the Endangered Species Act of 1973, as amended. The proposed activity would have no substantial adverse impacts on human health or welfare, including municipal and private water supplies, recreation, and commercial fishing.

On the basis of this evaluation, I find that the proposed discharge complies with the Clean Water Act Section 404(b)(1) requirements for the discharge of dredged or fill material.

9 OCT 14
Date

Dan Koprowski
Colonel, Corps of Engineers
District Engineer

EXHIBIT B - Coordination

From: Stefanik, Elliott L MVP
To: Andrew_horton@fws.gov
Cc: Sobiech, Jonathan J MVP; Stefanik, Elliott L MVP
Subject: USFWS Coordination - Proposed Wild Rice Dam Removal Mitigation Project (UNCLASSIFIED)
Date: Friday, June 27, 2014 1:08:00 PM
Attachments: Wild Rice Dam Mitigation Project Overview for FWS.pdf

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Classification: UNCLASSIFIED
Caveats: NONE

Andrew:

By way of this e-mail, I am coordinating our proposed Wild Rice Dam removal mitigation project by the St. Paul District, U.S. Army Corps of Engineers. Project is near Fargo, ND, and would serve as mitigation for the Fargo-Moorhead Flood Damage Reduction Project. I have attached a brief PowerPoint summary of the proposed action. Please forward to anyone in your office that needs to be advised. I can also forward more design information if you or others would like to see it. The following email will assist with coordination and documentation pursuant to the Fish and Wildlife Coordination Act, and the Endangered Species Act. This is in preparation for release of a draft EA later in July.

The proposed action would be located on the Wild Rice River in Cass County, ND. The Wild Rice Dam was constructed in 1934 for water supply associated with livestock and agricultural interests. The structure is not currently used for water supply. It is a rock-filled timber crib dam capped with concrete with a spillway length of 140 feet (Figure 2). Wild Rice Dam operates solely as a run-of-the-river structure, offering no flood control capabilities or low-flow augmentation releases.

The Wild Rice Dam is one of at least two dams on the Wild Rice River mainstem. The dam is toward the bottom of the watershed near the proposed water control structure on the Wild Rice River. Providing fish passage at this location will provide environmental benefits through improved connectivity and help to offset adverse effects to connectivity that could occur on the Wild Rice River through the Fargo Flood Damage Reduction project.

St. Paul District proposes a basic dam removal project. This would include basic removal of the dam down to approximately the existing river bed, with placement of rip rap on the river bed and adjacent banks to minimize risk for erosion at the project site. Timbers or pilings below the existing river bed would be left in place. To the extent practical, the District proposes to use the rock contained inside the dam for erosion control provided the rock is the appropriate size. Rock that is not appropriately sized would be disposed of. Additional R20 sized rip rap would be brought to the project site to fulfill any remaining rip rap needs. This plan has been coordinated extensively with all agencies and has received agency support.

The proposed project includes a footprint area of less than a half-acre of in-water placement (at typical summer flows). Approximately 350 cubic yards of riprap would be used for construction. Additional grading and filling at the project site would be required. The project may require some minor tree clearing to facilitate equipment access. The Work Area limits are identified at 4.8 acres, though the disturbed area would likely be smaller.

Site access would occur across a temporary access road. Similarly, staging would also occur adjacent to the project. Aerial photos of this area suggest an existing farm access and farmland along the access route and staging area. This area does include small areas of adjacent floodplain and some of these low lying floodplain areas could be considered wetlands. The access road and staging appear to avoid the lowest areas that would be most likely identified as wetland. Any grading activities would be temporary and the area would be returned to similar topography following dam removal. Overall, effects to wetlands, if any, would be minimal, and further minimized to the extent practical

A search of USFWS on-line records identified only the whooping crane (Endangered) within the project area. Given existing knowledge of the species and the project area, there doesn't appear to be potential for impacts to this listed species. The district has determined that the proposed action would

have no effect on federally threatened or endangered species.

Given this is a dam removal project we wouldn't anticipate an increase in flood heights due to the project.

Removal of the dam would drop upstream water elevations four to five feet based on adjacent river bed elevations and could impact upstream bank stability. This level of drop is reduced with distance upstream, and historically was largely lost by the bridge at 25th Street South (5 miles upstream). This bridge was recently washed out, and the backwater effect of the existing dam could extend slightly upstream of this location. Lowering water elevations through dam removal would reduce these stabilizing forces and could result in or accelerate bank failure within this upstream reach. The Environmental Assessment discusses potential risk for ecological or social effects from this increased risk for bank failure. Ultimately, similar risks of bank failure also exist under existing conditions, will continue in the future under the No Action alternative, and would increase in the future under the No Action alternative if or when the dam is either removed or fails. However, there are no immediate plans for dam removal, hence the reason it is included as a part of mitigation for the Fargo-Moorhead project.

The broader Fargo-Moorhead flood project has a long history that has included extensive coordination with our agency partners. We have coordinated this and other project features with USFWS; Minnesota DNR and PCA; North Dakota Game and Fish, Dept. of Health, and State Water Commission. All agencies are comfortable with our proposed action to date and support this as a mitigation project. We will obtain necessary permits from the States of ND.

We are writing an EA to address this action. This EA will be released for public review in the near future; likely in late-July.

Let me know if you have any comments or concerns on this proposed action as it relates to either the Endangered Species Act or the Fish and Wildlife Coordination Act. Please provide any comments back to me by Friday, July 11th. A response will help confirm coordination and compliance.

Please call me if you have any further questions, or would like to discuss further. Thanks.

Elliott L. Stefanik
Fishery Biologist/Regional Technical Specialist
St. Paul District, Corps of Engineers
Office Phone: (651) 290-5260
Cell Phone: (651) 707-4078
Fax: (651) 290-5805
Elliott.L.Stefanik@usace.army.mil

Classification: UNCLASSIFIED
Caveats: NONE

From:	Stefanik, Elliott L MVP
To:	Kreft, Bruce L.; "mell@nd.gov"; "rgjestvang@nd.gov"; "Kestner, Nathan (DNR)"; C. Gregg Thielman; "keith.weston@nd.usda.gov"; "sharon.lean@mn.usda.gov"; "mbittner@cityoffargo.com"; emily.siira@state.mn.us; acarranza@nd.gov; John Paczkowski (jpaczkowski@nd.gov); pwax@nd.gov; Mikulecky, Matthew J NWO; Andrew_horton@fws.gov; Berkley.Jim@epa.gov; james.solstad@state.mn.us; irina.Comardicea@state.mn.us; Suzanne.Jiwani@state.mn.us; Townley, Jill (DNR)
Cc:	Williams, Terry L MVP; "Bruce.Spiller@CH2M.com"; John.Glatzmaier@CH2M.com; Coleman, Brett R MVP; "April Walker"; Buesing, Aaron W MVP; Snyder, Aaron M MVP; Deen, Angela MVP
Subject:	Wild Rice River Mitigation for Connectivity Impacts (UNCLASSIFIED)
Date:	Friday, June 27, 2014 11:06:00 AM

Classification: UNCLASSIFIED
Caveats: NONE

Agency Partners:

I believe we have discussed this, but I wanted to pass along an idea we are heavily considering for the Fargo-Moorhead project mitigation plan. I wanted to give you one last opportunity for comment before we make an official recommendation/change.

As you probably remember, the Final EIS (July 2011) discussed that two dams on the Wild Rice River would be modified to offset impacts to biological connectivity associated with the flood project. This could include dam removal, implementing a rock rapids fishway, or other measures. This would be in addition to Drayton Dam fish passage on the Red River. However at this time, we are considering dropping one of two fish passage projects on the Wild Rice, leaving us one project on the Wild Rice (Wild Rice Dam), as well as the project at Drayton Dam.

Two primary reasons for this. First, the broader flood project design has been modified since the Final EIS so that the project operates much less frequently. Impacts to biological connectivity only occur when the project operates, and now that most likely would only occur when Red River stage at Fargo is forecast to exceed 35 ft (generally equates to the project operating when flows are forecast to exceed 17,000 cfs; as opposed to 9,600 cfs in the EIS).

Secondly, additional field data collected since 2011 suggest the risk for potential biological impacts due to lost connectivity will be lower. Detailed monitoring on the Wild Rice River has been completed for geomorphology, physical habitat, and fish and macroinvertbrate presence and relative abundance. These observations confirm relatively poor habitat throughout at least the lower Wild Rice River. Given this, the risk for impacts from reduced biological connectivity would be lower.

We believe this reasoning supports the conclusion that the proposed action at the Wild Rice Dam would be adequate mitigation for potential impacts to biological connectivity on the Wild Rice River, resulting from the broader flood project for the Fargo-Moorhead area. That's not to say the Wild Rice River would not be further benefitted by a second fish passage project. But given the measures we've done to reduce the frequency of project operation, and given the relatively poor habitat, it's difficult for me to justify a second project given the lower risk for potential impacts and the likely cost of a second project.

Again, please note that the fish passage project at Drayton Dam remains a part of the overall mitigation plan, and remains in place to address connectivity-related impacts on the Red River.

Unless we hear substantial opposition from you, we would likely recommend this change within our mitigation plan. This change in mitigation would be discussed briefly within the Environmental Assessment for the Wild Rice Dam removal project (EA for public release later in July). Please shoot us an email with concerns, or support for this approach.

And as always.... give Jon Sobiech or myself a call with questions. Thanks.

Elliott L. Stefanik
Fishery Biologist/Regional Technical Specialist
St. Paul District, Corps of Engineers

Exhibit C – Distribution

USEPA

Mr. Kenneth Westlake
NEPA Implementation Section
USEPA REGION 5
77 West Jackson Boulevard
Mail Code: E-19J
Chicago, IL 60604-3507

USFWS

Mr. Peter Fasbender
Field Supervisor
Fish and Wildlife Service
Twin Cities Field Office
4101 East 80th Street
Bloomington, MN 55425-1665

Mr. Andrew Horton
Fish and Wildlife Service
Twin Cities Field Office
4101 East 80th Street
Bloomington, MN 55425-1665

North Dakota Game and Fish

Bruce Kreft
North Dakota Game and Fish Department
100 N. Bismarck Expressway,
Bismarck, ND 58501-5095

North Dakota Dep of Health

Pete Wax
ND Department of Health
918 East Divide Avenue, 4th Floor
Bismarck, ND 58501-1947

Mike Ell
ND Department of Health
918 East Divide Avenue, 4th Floor
Bismarck, ND 58501-1947

ND State Water Commission

John Paczkowski
North Dakota State Water Commission
900 E Boulevard Ave, Dept 770
Bismarck, ND 58505-0850

Randy Gjestvang
North Dakota State Water Commission
623 E Main St. 103
West Fargo, ND 58078

North Dakota SHPO

Ms. Susan Quinnell
Review and Compliance Coordinator
Archaeology and Historic Preservation Division
State Historical Society of North Dakota
612 East Boulevard Avenue
Bismarck, ND 58505-0830

City of Fargo

Mark Bittner
City of Fargo,
200 3rd St. N.,
Fargo, ND, 58102

City of Moorhead

Robert Zimmerman
City of Moorhead
500 Center Ave
Moorhead, MN 56561

Native American POCs

Mr. Bruce Nadeau
THPO
Turtle Mountain Band of Chippewa
P.O. Box 900
Belcourt, ND 58316

Ms Dianne Desrosiers
THPO
Sisseton Wahpeton Oyate
P.O. Box 907
Sisseton, SD 57262

Ms. Cayla Olson
THPO
White Earth Band of Minnesota Chippewa
P.O. Box 418
White Earth, MN 56591

Ms. Belinda L. Smith
Interim THPO
Leech Lake Historic Preservation Office
115 6th Street NW, Suite E
Cass Lake, MN 56633

Mr. Marlow LaBatte
THPO
Upper Sioux Community
P.O. Box 147
Granite Falls, MN 56241

Ms. Grace Goldtooth-Campos
THPO
Lower Sioux Indian Community
32469 County Highway 2
Morton, MN 56270

Mr. Erich Longe
THPO
Spirit Lake Tribe
P.O. Box 475
Fort Totten, ND 58335

Ms. Waste'Win Young
THPO
Standing Rock Sioux Tribe
P.O. Box D
Fort Yates, ND 58538

Ms. Lana Gravatt
THPO
Yankton Sioux Tribe
P.O. Box 1153
Wagner, SD 57380

Ms. Wanda Wells
THPO
Crow Creek Sioux Tribe
P.O. Box 50
Fort Thompson, SD 57339

Minnesota DNR

Melissa J Doperalski
Minnesota Department of Natural Resources
500 Lafayette Road-Box 10
St. Paul, Minnesota 55155-4010

Mr. Nathan Kestner
Natural Resources Dept
2115 Birchmont Beach Road NE
DNR NW Region Headquarters
Bemidji, MN 566018599

Minnesota PCA

Mr. Craig Affeldt
Municipal Division
Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, MN 55155

Mr. James Brist
Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, Minnesota 55155

Document also available at:
www.mvp.usace.army.mil

EXHIBIT D – Public Comments

Minnesota Pollution Control Agency
520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300
800-657-3864 | 651-282-5332 TTY | www.pca.state.mn.us | Equal Opportunity Employer

September 17, 2014

Mr. Brett Coleman
District Engineer, St. Paul District
Corps of Engineers
ATTN: Regional Planning and Environment Division North
180 Fifth Street East
St. Paul, MN 55101-1638

Re: Wild Rice Dam Removal Mitigation Project Environmental Assessment

Dear Mr. Coleman:

Thank you for the opportunity to review and comment on the Environmental Assessment (EA) for the Wild Rice Dam Removal Mitigation project (Project) located in Cass County, North Dakota. The Project consists of removal of the Wild Rice Dam as part of the broader Flood Risk Management Project for the Fargo-Moorhead area. Minnesota Pollution Control Agency (MPCA) staff has reviewed the EA and have no comments at this time.

We appreciate the opportunity to review this project. Please provide the notice of decision on the need for an Environmental Impact Statement. Please be aware that this letter does not constitute approval by the MPCA of any or all elements of the Project for the purpose of pending or future permit action(s) by the MPCA. Ultimately, it is the responsibility of the Project proposer to secure any required permits and to comply with any requisite permit conditions. If you have any questions concerning our review of this EA, please contact me at 651-757-2508.

Sincerely,

Karen Kromar
Planner Principal
Environmental Review Unit
Resource Management and Assistance Division

KK:bt

cc: Ken Westlake, EPA
Craig Affeldt, MPCA, St. Paul
Jim Courneya, MPCA, Detroit Lakes

STATE HISTORICAL SOCIETY OF NORTH DAKOTA

September 25, 2014

Mr. Terry J. Birkenstock, Deputy Chief
Regional Planning Environment Division North
Department of the Army
St. Paul District, Corps of Engineers
Army Corps of Engineers Center
180 Fifth Street East Suite 700
St. Paul, MN 55101-1678

NDSHPO REF.: 09-1166S: "Final Report: The Fargo-Moorhead Flood Risk Management Project, Cass County, North Dakota and Clay County, Minnesota: Results of 2014 Phase I Cultural Resources Investigations for the Wild Rice Dam Fish Passage Mitigation Project," in portions of [T138N R49W Section 24] Cass County, North Dakota

Dear Terry:

We reviewed NDSHPO REF.: 09-1166R: "NDSHPO REF.: 09-1166S: "Final Report: The Fargo-Moorhead Flood Risk Management Project, Cass County, North Dakota and Clay County, Minnesota: Results of 2014 Phase I Cultural Resources Investigations for the Wild Rice Dam Fish Passage Mitigation Project," and find it acceptable. We concur that 32CS5219, 32CS5220, 32Cd5221 and 32CSx398 are not eligible to the National Register of Historic Places.

Thank you for the opportunity to review the project, and we look forward to further consultation on the project. If you have questions please contact Susan Quinnell squinnell@nd.gov 701-226-5359 or Paul Picha at ppicha@nd.gov or (701) 328-3574.

Sincerely,

Merlan E. Paaverud, Jr.
State Historic Preservation Officer (North Dakota)

c: Virginia Gnabasik, St. Paul District

Flandreau Santee Sioux Tribe

P.O. Box 283 Flandreau, SD 57028

Ph. 605-997-3891
Fax 605-997-3878
www.santeesioux.com

Flandreau Santee Sioux Tribe
Office of Cultural Preservation/Tribal Historic Preservation Officer

Reference Number: Wild Rice Dam

Project Number: Planning

Date: August 28, 2014

____We have no interest in this geographical area

____We have no comment on the proposed undertaking

__✓__No objections. However, if human skeletal remains and/or any objects falling under NAGPRA are uncovered during construction, please stop immediately and notify the appropriate persons (state & tribal NAGPRA representatives)

____We have an objection or require additional project information. Please send the following to Samuel H. Allen, Flandreau Santee Sioux Tribe, P.O. Box 283, Flandreau, SD, 57028

Signature: Samuel H. Allen

Samuel H. Allen - THPO

RECEIVED
SEP 02 2014

From: Birkenstock, Terry MVP
To: Devendorf, Randall D MVP; Stefanik, Elliott L MVP; Sobiech, Jonathan J MVP
Subject: Fw: [EXTERNAL] St. Paul District Contact Form: Wild Rice Dam
Date: Wednesday, September 17, 2014 6:49:05 PM

Terry

Sent from my Mobile Device.
Original Message
From: noreply@dma.mil
Sent: Wednesday, September 17, 2014 6:13 PM
To: CEMVP-RPEDN MVP; solberg@cord.edu
Subject: [EXTERNAL] St. Paul District Contact Form: Wild Rice Dam

This message was sent from the St. Paul District website.

Message From: Warren Solberg

Email: solberg@cord.edu

Response requested: Yes

Message:

Dear Mr. Birkenstock, we live on the Wild Rice River less than two miles south of the Wild Rice dam. I would like to request a hearing on the Wild Rice Dam Removal Project. Removing the dam will make a significant impact on my land as there will be a remarkable decrease in the amount of water in the river--which I have used as a natural boundary for my livestock for over 20 years. This will cause us to build additional fencing along and even across the river which is a very high-maintenance proposition. In addition to keeping our livestock secure on the near side of the river, it also provides protection from the coyotes and other predators on the opposite side of the river as the depth of the water serves better than a mere fence. We also see the removal of the dam and the subsequent lowering of the water level as a drastic change to the aesthetic beauty of our land which my family chose to settle near in 1871. I would love to get a chance to talk in person at a hearing on this issue.

GARAAS LAW FIRM
ATTORNEYS AT LAW
DeMores Office Park
1314 23rd Street South
Fargo, North Dakota 58103-3796

Jonathan T. Garaas
David Garaas

Telephone
Area Code 701
293-7211

September 17, 2014

District Engineer, St. Paul District
Corps of Engineers
ATTN: Regional Planning and Environment Division North
180 Fifth Street East
St. Paul, Minnesota 55101-1638
simultaneously emailed to Brett R. Coleman at Brett.R.Coleman@usace.army.mil

RE: Public Notice
Project: Wild Rice Dam Removal Mitigation Project

Dear Sirs:

I am writing on behalf of the Board of Township Supervisors for Stanley Township, Cass County, North Dakota, and Fred Hector, as an individual, and/or as Trustee of the Hector Family Irrevocable Trust under agreement dated December 26, 2012.

Please be advised that Stanley Township Board of Supervisors, the local political subdivision where the Wild Rice Dam on the Wild Rice River is located, and Fred Hector, as owner and/or trustee of the current owner object vehemently to any attempt to remove the Wild Rice Dam down to approximately the adjacent river bed. The political subdivision and the owner/trustee also object to the placement of rock "on and near the footprint area to reduce risk for bank and river bed erosion."

The Wild Rice River Dam provides bank stability where water is ponded, decades of growth have occurred so as to make the area attractive to wildlife, recreation, and future development. No access should be attempted, or accomplished without landowner approvals. The political subdivision and owner/trustee take issue with the observation that the project would have only "temporary minor adverse impacts" – the loss of recreation opportunities are permanent, the adverse impact upon areas of prior impoundment with resulting reduced river levels will result in permanent sluffing or erosion of adjacent river banks [and there will be adverse impacts upon water quality], the adverse aesthetic values will be permanent, as will there be the permanent loss of terrestrial habitat and wetlands.

The Wild Rice River Dam has significant value to the adjoining landowner, and its loss will have financial repercussions that are being ignored.

As legal representative of the owner of the land surrounding the Wild Rice Dam and a large portion of its impounded waters, please be advised that the ownership of the streambed is also

claimed. While the Sheyenne River may be a navigable stream, the same may not be true as to the Wild Rice River, and the authority of any political subdivision of the State of North Dakota is at issue. Please be advised that the authoritative words of State v. Brace, 36 N.W.2d 330, 332 (N.D. 1949) still stand tall:

> When North Dakota became a state it acquired title to lands under all navigable waters within its borders, subject to the limitation of the commerce clause of the federal constitution. Article 1, § 8, cl. 3. *State v. Loy*, 74 N.D. 182, 20 N.W.2d 668. Admission to statehood vests no title in the state to lands underlying non-navigable bodies of water. Title to such lands remained in the federal government or in persons to whom it had transferred title. *United States v. State of Oregon*, 295 U.S. 1, 55 S.Ct. 610, 79 L.Ed. 1267. If before statehood the United States issued an unrestricted grant of land to riparian owners the patentee's title extended to the center of the adjacent non-navigable body of water. *Brewer-Elliott Oil & Gas Co. v. United States*, 260 U.S. 77, 43 S.Ct. 60, 67 L.Ed. 140; *United States v. Holt State Bank*, 270 U.S. 49, 46 S.Ct. 197, 70 L.Ed. 465; *State of Oklahoma v. State of Texas*, 258 U.S. 574, 42 S.Ct. 406, 66 L.Ed. 771. This rule is recognized by this court in *Brignall v. Hannah*, 34 N.D. 174, 157 N.W. 1042, and in *Roberts v. Taylor*, 47 N.D. 146, 181 N.W. 622.

Even if I am incorrect, no right exists to enter upon lands, or make public plans for the taking of any lands adjacent to the underlying land. North Dakota may not exercise eminent domain, even through the actions of the Army Corps of Engineers, without first adhering to every statutory step set forth in N.D.C.C. Chap. 32-15, and pursuant to our established constitutional authority – this time the Constitution of North Dakota which may protect even greater than the Constitution of the United States.

A hearing on the improper exercise of eminent domain is requested. Please do not act with disregard of the environment, property rights, recreational rights, wildlife benefits, and law.

If you have any questions concerning this matter, please feel free to contact me at any time.

Very truly yours,

Jonathan T. Garaas

JTG:j
cc: F. Hector
Stanley Township