MINNESOTA DEPARTMENT OF NATURAL RESOURCES

RECORD OF DECISION

In the Matter of the Determination of the Need for an Environmental Impact Statement for the Lock and Dam 2 Protective Island, Dakota County, Minnesota

FINDINGS OF FACT, CONCLUSIONS, AND ORDER

FINDINGS OF FACT

1. The U.S. Army Corps of Engineers (USACE), St. Paul District is proposing to protect the Lock and Dam 2 embankment from erosion through construction of an offshore protective island. The major stressors acting on the embankment are long wind fetch and moderate ice action, resulting in recurring degradation and erosion. Lessening or eliminating these stressors on the earthen embankment would ensure the longevity of the structure. A secondary purpose of the project is to enhance wildlife and natural ecosystem functions by creating varied natural habitats in the river. The island would result in a variety of unique habitat types that are not currently present above the Lock and Dam 2 embankment. Some of these habitat types include: wooded/forest; brush/grassland; beach; a fish overwintering area; and emergent wetlands.

2. The proposed Project Area is located entirely within Pool 2 of the Mississippi River, outside of the main navigational channel and in front of the embankment for the lock and dam. This part of the Mississippi is in the City of Hastings in Dakota County, Minnesota. The island and associated deepwater fish refuge would be approximately 38.8 acres in size, and an additional 5.4 acres of open water in the river would be deepened if access channels need to be dredged to the Project Area. These parts of the river are currently open water and unvegetated. Dredged sediments used for island construction would come primarily from those currently stored at the USACE's temporary dredged sediment storage sites at Pine Bend and Upper and Lower Boulanger, near Grey Cloud Island in the Mississippi River approximately 7 to 12 miles upstream of the Project Area. Sediments would be excavated from the temporary storage sites and conveyed by barge to the Project Area, where they would be deposited by mechanical and/or hydraulic means. If any access channels need to be dredged to the Project Area, these sediments would be incorporated into the island if feasible or, if not feasible, then stored at the temporary storage sites. Structural integrity of the island would be reinforced with an outer riprap retaining wall and bullnose.

3. Pursuant to *Minnesota Rules* 4410.4300, subpart 1, an environmental assessment worksheet (EAW) must be prepared for projects that meet or exceed the threshold defined in any of the subparts 2-37. The proposed project exceeds the threshold defined under *Minnesota Rules* 4410.4300, Subp. 27. A, regarding wetlands and public waters. The project would change

or diminish the course, current or cross-section of one acre or more of a public water and therefore required the completion of an EAW.

4. Pursuant to *Minnesota Rules*, part 4410.4300, subpart 27a, the Responsible Governmental Unit (RGU) is either the local governmental unit (LGU) or the Minnesota Department of Natural Resources (DNR). In this case, the LGU would be Dakota County. However, this project also meets the definition of a 'phased action', as defined by Minnesota Rules 4410.0200 Subpart 60, in connection with the USACE's Lower Pool 2 Boulanger Bend Project (for which the EAW was completed in 2017), and the Dredge Material Management Plan Project (for which the EAW process is currently ongoing). The DNR has been acting as the RGU for both of these phased actions. Therefore, in 2018, Environmental Quality Board (EQB) staff determined that the DNR should continue as RGU for the currently proposed action, and Dakota County concurred. The DNR is delegated the duties of the RGU for conducting the environmental review.

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

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

7. The EAW was filed with the EQB and a notice of its availability was published in the *EQB Monitor* on October 12, 2020. A copy of the EAW was sent to all persons on the EQB Distribution List, to those persons known by DNR to be interested in the proposed project, and to those persons requesting a copy. A statewide press release announcing the availability of the EAW was sent to newspapers and radio and television stations. Copies of the EAW were distributed to the DNR Central Region Headquarters, the DNR Library located at DNR's Central Office, the Hennepin County-Minneapolis Central Public Library, and the Pleasant Hill Library in Hastings. Due to COVID-19, many DNR offices and public libraries imposed building use or entry restrictions. Many of these restrictions were in place during the publication timeframe. As a result, only the Hastings library was open and allowed in-person inspection of the EAW. The EAW was also made available to the public via posting on DNR's website. *See Minn. R. 4410.1500.*

8. The 30-day EAW public review and comment period began October 12 and ended November 12, 2020 pursuant to *Minnesota Rules*, chapter 4410.1600. The opportunity was provided to submit written comments on the EAW to the DNR by U.S. mail or electronically.

9. During the 30-day EAW public review and comment period, the DNR received written comments from the agencies and individuals listed below. In addition, comments from an individual were received after the official close of the comment period. The DNR is forwarding these last comments to the project proposer for consideration.

10. Minnesota Rules 4410.1700, subp. 4 indicates that the Record of Decision must include specific responses to all substantive and timely comments on the EAW. All comments and

issues raised in comment submittals were reviewed to determine if they addressed the accuracy or completeness of the material contained in the EAW or environmental impacts that may warrant further investigation prior to the final ROD. A copy of comments received is included in this Record of Decision as Attachment A.

11. Responses to all substantive comments are summarized below in Item 12. Each submittal was arranged alphabetically by commenter last name and given an identification letter. Many submittals contained more than one comment. In those cases, each comment was assigned a unique comment identification letter and number.

    A. Amy Anderson (November 3, 2020)
    B. Randy Birk (October 16, 2020)
    C. Christine Costello, on behalf of the City of Cottage Grove (November 10, 2020)
    D. Jonathan Deyo (October 16, 2020)
    E. Mark Frazer (November 10, 2020)
    F. Tate Gahnz (October 17, 2020)
    G. Anna Hotz, on behalf of the Minnesota Pollution Control Agency (October 26, 2020)
    H. Brian Huberty (October 17, 2020)
    I. Karen Kromar, on behalf of the Minnesota Pollution Control Agency (November 12, 2020)
    J. Terrance Lowrie (October 12, 2020)
    K. Steven C. Mielke, on behalf of Dakota County (November 5, 2020)
    L. Scott Norling (November 10, 2020)
    M. Daniel S. Pfannenstein (October 14, 2020)
    N. Patrick Regan (November 3, 2020)
    O. Carla Sain (October 18, 2020)
    P. Christopher Smith (October 12, 2020)
    Q. Robert Wellemeyer (October 14, 2020)
    R. Andrew Wester (October 12, 2020)
    S. Friends of Pool 2 (November 12, 2020)
    T. Metropolitan Council (November 6, 2020)

12. Comments received, as well as the DNR's response to the comment, are provided below.

    A. Commenter- Amy Anderson:

        A.1 We would support this as avid river boaters.

        RESPONSE: Noted. The comment has been passed on to the project proposer.

    B. Commenter- Randy Birk:

        B.1 So where exactly do they want to put this island on pool 2?

        RESPONSE: The proposed island would be constructed in front of and just upstream of the embankment for Lock and Dam 2. The distance between the island and the

embankment at their closest is approximately 400 feet. A close-up of the proposed island is shown on Exhibit 5 of the EAW.

B.2 Also will this affect hunting on pool 2 for waterfowl?

RESPONSE: One of the anticipated benefits of the proposed island is to provide additional habitat for wildlife, including waterfowl. It is anticipated that hunting opportunities for waterfowl on Pool 2 would be enhanced.

B.3 How will this affect the fishing on pool 2?

RESPONSE: Among the proposed habitat enhancements is a deep pool on the leeward side of the island, to provide a location deep enough for fish to overwinter. The addition of rock riprap and the variety of habitats proposed for the island would also improve the quality and variety of fish and fish prey habitat in Pool 2. It is anticipated that fishing opportunities in Pool 2 would be enhanced.

B.4 Will this Island be public hunting grounds for deer or waterfowl?

RESPONSE: The federal government would likely determine the extent to which the public could engage in hunting activities on the island. This comment has been passed on to the project proposer for consideration.

B.5 If this is going to affect waterfowl hunting on pool 2 I think that needs to be let known to the public, since there are many people who enjoy pool 2 for waterfowl hunting.

RESPONSE: Noted. The addition of an island providing a variety of natural habitats is expected to have an overall positive impact on wildlife, including game species. This is expected to increase the overall hunting experience in the general area. The extent to which the island itself would be open to the public for hunting purposes has not yet been determined by the project proposer. Creation of the island would replace current open water habitat with more heterogeneous habitat and would therefore not result in the destruction of existing hunting grounds.

C. Commenter- Christine Costello, on behalf of the City of Cottage Grove:

C.1 The City of Cottage Grove has reviewed the EAW for Lock and Dam 2 Protective Island Project. The City has no specific comments overall it appears that effects to environmental constraints will either be temporary, or in some cases, beneficial. Only a few temporary minor adverse effects were noted but we do not see any concerns with the biological effects identified in the EA. Additionally, in terms of impacting water and groundwater quality, the project doesn't propose to appropriate any groundwater, nor does there appear to be any potential threats to nearby wells. The most significant concerns deal with surface water quality, with a temporary potential for suspension of fine particles during project construction but it appears there are proposed measures to reduce that impact.

RESPONSE: Noted.

D. Commenter- Jonathan Deyo:

D.1 As a resident of Hastings I think this is a great idea for the river. I would like to see this in my city.

RESPONSE: Noted. The comment has been passed on to the project proposer.

E. Commenter- Mark Frazer:

E.1 Where is the fill coming from?

RESPONSE: Most of the fill comes from the temporary dredged material storage sites that the USACE operates at Pine Bend and Upper and Lower Boulanger, as well as any additional dredged channels needed to provide access to the island construction site for large equipment. Fill for the emergent wetland area would come from sediments removed to create the fish overwintering area and sediments from the access dredging cuts, if applicable. The temporary storage sites are shown on Exhibit 4 of the EAW, and further details concerning dredged sediments and their deposition can be found in Item 6(b) of the EAW.

F. Commenter- Tate Gahnz:

F.1 Sounds cool.

RESPONSE: Noted.

G. Commenter- Anna Hotz, on behalf of the Minnesota Pollution Control Agency (MPCA):

G.1 The MPCA waives its Section 401 authority to certify the referenced project application. This action does not eliminate, waive, or vary the applicant's responsibility of complying with all applicable MPCA statutes and rules, including those regarding water quality standards.

RESPONSE: Noted.

H. Commenter- Brian Huberty:

H.1 You should add the current MN DNR NWI map of the area to your list of figures.

RESPONSE: Noted. An additional figure showing National Wetland Inventory (NWI) wetlands in the area is included in this Record of Decision as Attachment B.

H.2 USACE should also be using the NWI wetland designations in their discussion. Ironically, you use the USDA NRCS soil map descriptions but not the federal standard which is NWI. This is a bit of an oversight. Additionally, since the state recently updated the NWI maps for the state, there are additional descriptions such as Eggers/Reed and the

functional assessments (HGM lite) that have been added to the MN NWI. Adding these maps would provide better clarity to the impact statement. After all, you are going from a mono deep water habitat to a multiple wetland and deep water system which provides many benefits.

RESPONSE: Noted. This comment has been passed on to the project proposer for inclusion in their final Environmental Assessment (EA) and final project decisions. The location where the island would be constructed is currently open river water. It would have several ecosystem types on it, including a Type 3 or 4 wetland, but the specific attributes and functions of this wetland would be determined during construction. No officially mapped wetlands exist at Upper or Lower Boulanger or at Pine Bend, where sediments to construct the island would be obtained. National Wetland Inventory (NWI) wetlands within one mile of the proposed island include forested, shallow water emergent, scrub-shrub and nonpersistent emergent wetlands. Please see the figure in Attachment B for further information.

H.3 Most importantly, visually, the upside down, angled 'V' will be viewed as manmade. It might be wise to use an upside down 'Y' design with bends in the legs of the 'Y' to visually match the landscape of the river better as seen from the aerial view. And it will provide better habitat. Keep in mind waterfowl may use this more if they feel protected with natural features vs manmade features. Keep in mind, this structure will be viewed by millions of people as they look out their airplane windows into the approach for MSP. It should be interpreted as a natural island vs an arrow pointing towards MSP.

RESPONSE: The V shape was chosen for the following reasons: 1) the shape and placement were chosen because local geological conditions favored it and it is more structurally stable: the west leg of the island is placed on the remnant edge of King Slough, which is a more stable design; 2) this shape allows maximal placement of material in the ineffective flow zone; 3) the east leg of the V breaks up the long wind fetch and reduces potential ice damming, thereby providing the most protection to the embankment; and 4) the V shape provides a sheltered habitat area between the island and the embankment.

H.4 You also need to add some figures/animations to show what it may look like in the future from both a bird's eye view and the water view.

RESPONSE: Noted. The island would be allowed to fill out naturally with vegetation. In a few years, the overhead and side views are expected to show a variety of grown out trees, shrubs, grasses, and herbaceous plants growing over the island margins and camouflaging the original constructed margins.

H.5 I did not see any discussion of potential ice damming on the structure give this area is prone to this kind of damage. Hence another reason why the levee is eroding.

RESPONSE: The project proposer is aware of the potential for ice damming and considered it preferable to have those effects impact the island rather than the

embankment. Riprap structures have been incorporated into the design to reduce erosion from wind fetch and ice damming on the island.

H.6 Since this area is in the approach paths to MSP, the discussion should also include potential bird habitat that may interfere with approaching jet liners. It should be relatively minor but the studies by the NPS with avian radar units recently just below the Hastings Lock and Dam could be included in your list of references.

RESPONSE: While the precise study referenced by the commenter was not provided or readily available to DNR, information contained in the FAA Advisory Circular 150/5200-33C recommends the following separation distances between bird habitat and airports:

PERIMETER A: For airports serving piston-powered aircraft, it is recommended hazardous wildlife attractants be 5,000 feet from the nearest aircraft operations area.

PERIMETER B: For airports serving turbine-powered aircraft, it is recommended hazardous wildlife attractants be 10,000 feet from the nearest aircraft operations area.

PERIMETER C: Recommended for all airports, 5-mile range to protect approach, departure and circling airspace.

The nearest airport to the Project Area is South St. Paul Airport, which is about 10 miles northwest. MSP is about 17 miles away. Both airports are well outside the zones recommended by the FAA. In response to these comments, MN DNR contacted staff at United States Fish and Wildlife Service (USFWS) on this question, and they concurred with this conclusion.

I. Commenter- Karen Kromar, on behalf of the Minnesota Pollution Control Agency:

I.1 Minnesota Pollution Control Agency (MPCA) staff has reviewed the EAW and have no comments at this time.

RESPONSE: Noted.

J. Commenter- Terrance Lowrie:

J.1 Will there be any hunting allowed on the island?

RESPONSE: Decisions regarding the extent to which hunting activities would be allowed on the island would be made by the federal government. These comments have been shared with the project proposers to consider when making final project decisions.

K. Commenter- Steven C. Mielke, on behalf of Dakota County:

K.1 The Mississippi River Greenway is a popular recreational trail that runs on top of the levy for the dam. We request that if trail closures will be needed due to construction,

that they be minimized to limit disruption to trail users. Any impacts or closures of public trails should be coordinated with Dakota County and City of Hastings.

RESPONSE: Noted. The request has been shared with the project proposers.

K.2 The embankment protective island project will be highly visible to trail users along the Mississippi River Greenway. Please consider using a design that will look more natural and aesthetically pleasing than the concept that was distributed, avoiding straight lines and unnatural structures to the extent possible.

RESPONSE: Noted. The request has been shared with the project proposers for consideration. The riprap for the rock groins and bullnose structure would be the only component of the island that might appear unnatural, and it is required for resisting erosion and maintaining structural integrity. Once the vegetation becomes established on the island, many of the straight lines would camouflage. Intended vegetation to be planted includes willows, which would overhang and obscure nearby structures.

K.3 Dakota County staff would like to provide input on the species that are being considered to plant on the island and adjacent wetland, and we request a list of the species that are under consideration. If possible, we would like to see wild rice considered for this site as wild rice is found further west in Spring Lake and may be desirable at this location as well.

RESPONSE: Noted. The request has been shared with the project proposers for consideration. The current plan calls for self-vegetation of the wetlands, but the upland areas would be planted with a variety of habitat-appropriate native grasses, willows, and trees. The exact composition and planting plan of these trees would be decided upon by the USACE's Environment Section located in La Crescent, MN.

K.4 In addition, to address problems with turtle predation we suggest that turtle nesting habitat be considered for the island restoration.

RESPONSE: Noted. The request has been shared with the project proposers for consideration. Please note that the island is proposed to include a variety of habitat types, including 4.7 acres of beach habitat. It is expected that turtles in the area would take advantage of this new habitat.

L. Commenter- Scott Norling:

L.1 It would be nice if some of the island beach areas were accessible via recreational boats for beaching.

RESPONSE: Noted. The comment has been shared with the project proposers for consideration. The extent to which the island itself, including the beach, would be open to the public has not yet been determined by the project proposer. Any public riparian access would follow the statutes and rules of the State of Minnesota. Please note that creation of the island would permanently increase the quality of a variety of recreational

river experiences, including boating, wildlife watching, fishing, and hunting, due to the creation of a variety of habitats. Recreational activity would be temporarily negatively impacted during construction.

M. Commenter- Daniel S. Pfannenstein:

M.1 The commenter provided information regarding island building materials and expressed an interest in providing material or services to the project.

RESPONSE: Noted. The comment has been passed along to the project proposer for consideration.

N. Commenter- Patrick Regan:

N.1 I would consider the construction of this island to be a positive amenity from a sightseeing attraction as it is being constructed over three seasons. We also have a direct interest in seeing the present levee protected long term by this River Island project.

RESPONSE: Noted.

O. Commenter- Carla Sain:

O.1 It would be a great enhancement for the community, while also using natural resources to accomplish the project. I hope it would be open to the public once it is established.

RESPONSE: Noted.

P. Commenter- Christopher Smith:

P.1 The EAW fails to acknowledge / address the discovery of Blanchard's Cricket Frogs (*Acris blanchardi*) within the Project Area. This state endangered species has been identified in various locations within the Project Area. These data have been submitted to MnDNR. Please contact Erica Hoaglund, MNDNR Nongame.

RESPONSE: Blanchard's cricket frogs occur within 1 mile of the project site and some of the project area is likely to be suitable habitat for this species. Due to its location in a large, open water riverway, Blanchard's cricket frogs are not known to occur where the island would be constructed. However, nearby similar habitat assessments, reports of on-the-ground conditions and aerial imagery review indicate that suitable habitat for Blanchard's cricket frogs is found at or near the three temporary sediment deposition sites (Pine Bend and Upper and Lower Boulanger) from which the project proposer plans to remove sediment for the island construction. Currently no instances of Blanchard's cricket frogs are documented within the project area. The three temporary sediment deposition sites have so far not been surveyed for presence of the frogs or for suitable habitat; however, a very similar site nearby at Grey Cloud Island was surveyed for

suitable breeding and overwintering habitat, and was determined to have habitat suitable for both life activities. This suggests that these temporary storage sites could also serve as breeding or overwintering habitat for the species. In addition, the project proposer's planned procedures for removing sediment from the storage sites could create new habitat suitable for spawning and for growth during the frogs' tadpole phase: the project proposer intends to excavate channels from the river into the interior of these sites, and then continue to excavate below the Ordinary High Water Level (OHWL), creating a pond that would persist until filled in with future dredged sediments.

The potential for and degree of effect on the Cricket Frog cannot be determined without additional information on species presence. DNR determined that a survey of the storage sites would be a requirement of the PWW permit and the applicant agreed to conduct the surveys prior to submitting the application. The project proposer has agreed to conduct a survey to determine presence or absence of Cricket Frogs at the three temporary sediment storage sites, and is currently working with the DNR to establish survey protocols and procedures. The survey protocols would be approved by the DNR Endangered Species Review Coordinator and Nongame staff.

The public water works permit would also ensure that the protective island includes habitat suitable to the Cricket Frog. Potential habitat features could include, but are not limited to:

- south, east or west facing streambanks with a slope of 0-45 degrees, little to no emergent vegetation, and soil cracks for overwintering;
- construction of sandbars to limit watercraft access to potential Cricket Frog habitat on the island; and
- ponds, wetlands, or backwaters with moderate levels of continuous or annual disturbance, continuous fish presence, a substrate of muck/mud/sand or gravel, and limited emergent vegetation for breeding and the tadpole life stage.

If the survey discovers that Cricket Frogs are present on any or all of the sediment storage sites, this habitat on the protective island would serve to mitigate any potential taking.

Additional mitigation for and evaluation of take of the Cricket Frogs would be accomplished through permit conditions that would be activated should the survey detect their presence: if it is necessary to assure that a project meets the requirements of state law and that impacts are addressed, a proposer may be subject to certain conditions through a regulatory permitting process to ensure proper mitigation is undertaken. To complete the project, the proposer would need to acquire a Public Waters Work Permit from the DNR to construct the island, and this permit could be conditioned to enable identification of possible impacts to the species and require necessary mitigation. The ability to condition a permit provides a regulatory control to ensure potential impacts are addressed. Potential conditions may include:

- Development and implementation of a plan to monitor presence of the Blanchard's Cricket Frog on the sediment storage sites, in order to identify and evaluate possible impacts to the frogs from the project proposer's activities there;
- Development and implementation of a plan to monitor the protective island for presence of the frogs; and
- Development of a management plan for the island to limit human recreation and other activities during times when any frogs present would be susceptible to harm from such activities (e.g., spawning or hibernation), and to maintain suitable habitat for the frogs.

P.2 The project should be required to use wildlife-friendly erosion control materials (i.e., natural-fiber blanket, etc.). In the past the USACE has used plastic-netted blankets, which poses a significant wildlife entanglement risk and adds microplastics to the environment.

RESPONSE: The DNR agrees. It will be shared with the project proposer for inclusion in the final EA and work plans. This would also be considered as a permit condition.

P.3 EAW fails to acknowledge / consult on the rusty-patched bumble bee (*Bombus affinis*). An effect determination should be made. This species frequently forages in sandy areas where spotted knapweed and other flowering weeds occur.

RESPONSE: The rusty patched bumblebee is not a state-listed species, and therefore DNR defers to the USFWS on this issue. On a March 9th, 2020 telephone conference, the USFWS concurred with the USACE's determination that the proposed project would have no effect on Federally-listed threatened and endangered species within the Project Area. Due to the commenter's observation, the DNR consulted with USFWS personnel to verify this conclusion with respect to the rusty-patched bumblebee. USFWS confirmed that the Project Area as well as the areas surrounding the temporary storage sites fall within the Low Potential Zone for the rusty-patched bumble bee, and therefore no avoidance action is warranted.

Q. Commenter- Robert Wellemeyer

Q.1 Will exposing dredged, potentially toxic materials, buried under the constantly moving river silt be environmentally sound? Will dredge loads from various depths be tested, evaluated and mitigated?

RESPONSE: The bulk of the dredged sediments to be used to construct the island would be removed from the three temporary sediment storage sites at Pine Bend and Upper and Lower Boulanger; additional fine sediments for construction of the emergent wetland would come from the river deepening to create a fish overwintering area. The sediments stored at the temporary sites are the result of the project proposer's ongoing channel maintenance activities on the Mississippi River, and are routinely sampled for a variety of environmental contaminants as a part of the channel maintenance and dredged material storage activities management plans. Over the last ten years, sediment samples collected

by the USACE in Pool 2 suggest that the Per- and Polyfluoroalkyl Substances (PFAS) associated with the river's sediment in Pool 2 are limited to a few PFAS chemicals, such as, Perfluorooctanesulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA), but are fairly ubiquitous (i.e., backwater, channel, above 3M plant or below). Furthermore, all detected concentrations were below 5 ppb, which are at least 100 times lower than the applicable MPCA Residential/Recreational SRVs (2016; Page 4, Appendix G of the EAW). In addition, the project proposer collected sediment samples from the proposed Project Area for analysis in 2017; no analytes were detected in concentrations higher than the MPCA's sediment quality targets or soil reference value guidelines. Further discussion of sediment sampling results can be found in Appendix G of the EAW and in the federal EA.

Q.2 Given the location of two petroleum refineries, and the Rosemount metal smelter, has consideration been given to creation of an area based on large deposits of volatile organic compounds (VOCs) and heavy metals?

RESPONSE: Sediments dredged from the river are tested for a wide variety of contaminants suspected or known to be of potential concern in this location; these include heavy metals, pesticides, and semivolatile organic compounds. VOCs are not considered to be a likely significant environmental problem in these sediments. A round of testing in 2017 identified no compounds in concentrations higher than the MPCA's Sediment Quality Targets (SQT) or Soil Reference Value (SRV) guidelines. In addition, the dredged sediments that would be used for island construction are primarily sandy, which typically do not have the contaminant levels associated with the siltier material in the river. Further discussion of sediment testing can be found in Appendix C and Appendix G of the EAW, and the EA. The USACE has additional sediment data on their channel maintenance website: https://www.mvp.usace.army.mil/Missions/Navigation/Channel-Maintenance/Channel-Maint-Mgmt/

R. Commenter- Andrew Wester:

R.1 I would love to see more waterfowl hunting opportunities on a protective island upstream from the lock and dam #2. I think this a great idea in which all users of the river will benefit.... Assuming it will be an add on of the spring lake WMA!

RESPONSE: Noted. The comment has been passed on to the project proposer for consideration. It is expected that the island would provide additional habitat for waterfowl and increase the quality of hunting opportunities in and around the island. The extent to which public hunting opportunities can be pursued on the island itself is up to the federal government.

S. Commenter- Friends of Pool 2:

S.1. What are the short- and long-term effects of this project?

RESPONSE: The construction of the proposed island would result in temporary minor adverse effects to noise, aesthetic values, air quality and surface water quality within the Project Area, which may occur over multiple construction seasons, and cease once construction is complete.

The completed island project would result in a permanent loss of unvegetated aquatic habitat within the Project Area; however, it would add permanent wetland and upland habitat and increase underwater habitat structural features such as fish overwintering areas, bottom surface variation, and submerged sand and rock substrate. Overall, this would result in a permanent improvement in aquatic, wetland, and terrestrial habitats.

The construction of the island and other associated projects within Pool 2 would provide benefits to commercial navigation by providing a beneficial use for sediments dredged from the navigation channel, thus prolonging the life of the dredged sediment storage areas and improving navigational channel maintenance.

Once completed, the island would decrease wind-driven turbidity in the pool by providing a wind break and reducing the wind fetch in the Project Area. This would result in a permanent improvement in water quality.

Please see Questions 19 and 20 in the EAW for further information.

S.2 We know channel dredge material is tested for contaminants, but we wonder if the fine material excavated for access and cover material has gone through a testing regimen?

RESPONSE: Yes. The USACE adheres to a standard sampling and testing regimen for dredged sediments. The project proposer collected sediment samples from the proposed Project Area for analysis in 2017; no analytes were detected in concentrations higher than the MPCA's sediment quality targets or soil reference value guidelines. Further discussion of sediment sampling results can be found in Appendix G of the EAW and in the federal EA, and dredge cut sampling locations are listed in Section 3.2.6 of the EA.

S.3 Who will benefit from the proposed structure?

RESPONSE: The project is expected to benefit fish, wildlife, recreational users of the Mississippi River, and the overall lock and dam operations on the river.

S.4 Could this project be expanded to benefit multiple river user groups, including fish, wildlife, and recreational users (humans)?

RESPONSE: It is expected that all of these river user groups would benefit from the project.

S.5 How would this project affect the immediate area above Lock and Dam #2?

RESPONSE: If the question refers to the immediate area of the river between the island and the embankment, or the area just above Lock and Dam 2, its presence would break up the wind fetch on the pool, decreasing wind and wave erosion of the embankment and reducing wind-generated turbidity. It would also increase variation in water depth in this area by creation of a deepwater fish refuge. Because it is out of the main channel, it would not impede commercial navigation on the river.

S.6 What impact would this project have on the recreational river user in Pool 2?

RESPONSE: Creation of the island would permanently increase the quality of a variety of recreational river experiences, including boating, wildlife watching, fishing, and hunting, due to the creation of a variety of habitats. Recreational activity would be temporarily negatively impacted during construction.

S.7 Are there other areas in Lower Pool 2 that could benefit even more from this type of structure?

RESPONSE: The primary purpose for this project was to mitigate erosion of the embankment on Lock and Dam 2. This purpose could not be achieved if the island were constructed elsewhere in the pool.

S.8 Every river is also a watershed system, and actions taken in one section of a river will impact the entire region. Repercussions from this project may be felt throughout the region, not only in Pool 2.

RESPONSE: Noted.

S.9 Pool 2 is a unique urban recreational resource that deserves to be used to its full potential.

RESPONSE: Noted. The DNR anticipates that the presence of the island would enhance recreational opportunities in Pool 2.

S.10 There has been deterioration of historic islands above the lock that deserve attention, but this project won't really address that ongoing issue.

RESPONSE: That is correct. This project is intended primarily to reduce erosion on Lock and Dam 2's embankment. Deterioration elsewhere would need to be addressed by other projects.

S.11 Three commenters expressed interest in the possibility of the USACE engaging in other projects in Pool 2. These projects include re-establishing the island chain that started at historic Buck Island and ran to the long wall at L&D #2, and constructing additional habitat islands in Spring Lake.

RESPONSE: Noted. These comments have been passed along to the project proposer for future consideration.

S.12 We understand that this is a fully funded federal project, and that the DNR merely has review authority. However, we feel that there are some issues and suggestions here that should be shared with the USACE, and we plan to copy them on this correspondence.

RESPONSE: Noted.

S.13 We don't believe the Corps [USACE] has done any flow studies on flow into Spring Lake since the new barrier islands were created.

RESPONSE: Noted. The comment has been passed on to the project proposer for future consideration.

S.14 We would like to see Friends of Pool 2 possibly join forces with the DNR, the National Park Service and various local environmental groups to make an effort to incorporate new recreational and habitat facilities into this project, or into future projects of a similar nature.

RESPONSE: Noted. The creation of the island might present new opportunities for environmental and recreational activities in Pool 2, including opportunities for partnerships among different organizations and agencies.

T. Commenter- Metropolitan Council:

T.1 While Item 9.a.i. references some state, regional, and local parks and trails that are in or adjacent to the Mississippi River in the vicinity, the EAW should also acknowledge Grey Cloud Island Regional Park, a planned component of the Regional Park System with a Metropolitan Council-adopted regional park master plan.

> Grey Cloud Island Regional Park is managed by Washington County, the regional park implementing agency for Cottage Grove and all of Washington County. Though the regional park is not yet open to the public, portions of the planned regional park have been acquired by Washington County. The planned regional park is located just south of Grey Cloud Dunes Scientific and Natural Area and just north of Spring Lake Islands Wildlife Management Area.

RESPONSE: Noted. The EAW will not be updated, but this comment is included in this Record of Decision for completeness.

T.2 The construction staging area has the potential to temporarily impact the Mississippi River Greenway Regional Trail managed by Dakota County. Item 15 notes that "the construction process could take multiple construction seasons..." The contractor awarded the project should coordinate its work with Dakota County so that any needed trail detours or other temporary measures can be clearly communicated and signed to the public before and during construction activities.

RESPONSE: Noted. This comment has been passed on to the project proposer for inclusion when coordinating construction activities.

13. Based upon the information contained in the EAW and received as public comments, the DNR has identified the following potential environmental effects associated with the project:

a) **Surface Water Quality.** This topic was addressed under EAW Items 6b and 11.

Construction activities in the proposed Project Area would result in temporary increases in suspended sediments and turbidity from the deposition of sediments to create the island. The magnitude of these impacts would be minimized by using Best Management Practices (BMPs) to limit resuspension and spread of suspended sediments in the water column. BMPs for mechanical construction could include, but are not limited to: reducing the bucket height of excavators placing material, visual monitoring of sediment plumes or Total Suspended Solids (TSS) sampling if deemed necessary through the DNR's Public Waters Work General Permit, and implementing silt curtains during island construction. BMPs for hydraulic construction could include, but are not limited to: utilizing berms to contain pumped sediments when appropriate, visual monitoring of sediment plumes or TSS sampling if deemed necessary through the DNR's Public Waters Work General Permit, and implementing silt curtains during island construction. Construction activities would adhere to any permit requirements pertaining to turbidity and remain below any maximum permit-established thresholds during construction, with work suspended should turbidity exceed the established threshold.

It is expected that the island would result in permanent improvements in surface water quality in Pool 2 because its presence would break up the current long wind fetch, which stirs up sediments and increases turbidity.

b) **Habitat.** This topic was addressed under Item 13 of the EAW.

The completed island project would result in a permanent loss of unvegetated aquatic habitat within the Project Area; however, it would add permanent wetland and upland habitat and increase underwater habitat structural features such as fish overwintering areas, bottom surface variation, and submerged sand and rock substrate. Overall, this would result in a permanent improvement in aquatic, wetland, and terrestrial habitats.

It is possible that habitat for the Blanchard's Cricket Frog may be negatively impacted on the three temporary sediment storage sites when sediment is removed from these areas. This would be due to the removal of sediment, alteration of surface topography, and operation of heavy equipment. The extent of this impact, if any, is currently unknown because it is not known whether these frogs are present on these sites, or whether they would migrate to them during the course of the project if they are currently absent. Because of this uncertainty, surveys to detect presence of the frogs could be included as a permit condition, and additional conditions would be added to the permit to mitigate potential impacts to the frogs; these possible conditions are discussed further in 12.P.1

above. The extent of the impact would be temporary, lasting only while sediment is being excavated and the land surface is being disturbed.

It is expected that creation of the island would result in permanent improvement in habitat for the Blanchard's Cricket Frog in the Project Area.

c) **Visual Impacts.** This topic was addressed under Item 15 of the EAW.

The project would have temporary and limited negative impacts to the area's visual and scenic qualities. This impact is limited to the Project Area and the duration of construction activities. Once the island is constructed and vegetated, it would have a permanent positive impact on the area's visual and scenic qualities. The island would be naturally vegetated, with the vegetation extending over and camouflaging the original constructed outlines of the island and giving the island's perimeter a natural aesthetic.

Viewed from above, the island may look artificial until the vegetation grows out. This would be a temporary and limited negative impact to an aerial view of the Project Area.

d) **Air Quality impacts.** This topic was addressed under Item 16 of the EAW.

Dredging and island construction activities would involve the use of a variety of construction equipment. This may include excavators, barges, dredging equipment, hauling trucks, cranes, hydraulic pumping equipment, and other diesel- or gasoline-powered equipment that would be used in dredging and transporting river sediments, placing riprap, placing sediments, and shaping the island. Use of this equipment would also result in a small increase in greenhouse gas emissions. All of this equipment would be required to comply with emissions and maintenance requirements as part of standard conditions of the construction contract. Adherence to these requirements ensures that emissions would be considered de minimus.

The higher than normal levels of exhaust emissions and odors produced during project construction from the use of this equipment would be considered temporary and minor, although construction is expected to span several seasons. The nearest private residences are about 600-800 feet from the island, on the riverbank.

Excavation would be conducted underwater or in moist soil and is not expected to contribute to airborne dust.

e) **Noise impacts.** This topic was addressed under Items 6b and 17 of the EAW.

Construction equipment and activities would generate a higher than normal level of noise, but the effect is limited to periods of active construction activity and would be considered temporary and minor. Limiting the size of the work zone through construction phasing and duration of activity by limiting daily work hours would minimize disturbance to area residents. Noise generation is also regulated through MPCA regulations and city zoning.

f) **Cumulative Potential Effects.** This topic was addressed under Item 19 of the EAW.

The potential environmental effects related to this proposed project could combine with environmental effects from other past, present, or reasonably foreseeable future projects for which a basis of expectation has been laid. The proposed project has been identified to have temporary, limited and minor negative environmental effects to surface water quality, visual and aesthetic impacts, air impacts, the Blanchard's Cricket Frog, and noise impacts.

No planned projects were identified as part of the cumulative potential effects analysis that would result in cumulative potential effects on surface water quality, visual and aesthetic impacts, air impacts and noise impacts.

Any potential negative effects due to the proposed project are temporary and limited to the duration of active construction activities and until the establishment of stable vegetation on the created island.

g) **State-Listed Species**. This topic was addressed in response to comment 12.P.1] at Finding No. 12 of this Record of Decision.

The removal of sediments from the project proposer's temporary dredged sediment storage sites at Pine Bend and Upper and Lower Boulanger, a few miles north of the proposed Project Area on the Mississippi River, has the potential to negatively impact the Blanchard's Cricket Frog, a state-listed endangered species. It is not currently known whether the frog is present at any of the three temporary sediment storage sites, or whether frogs may migrate into these areas sometime in the future, but if frogs are present the project could negatively impact the species through sediment removal activities in three possible ways:

- during excavation of sediments at or just above the waterline while the frogs are hibernating there;

- During creation and continuing excavation of ponds on the three sediment storage sites during the frogs' breeding season, which would first entice the frogs to breed in the newly created ponds and then harm them by continuing excavation in these locations; and

- During continuing excavation of these ponds after breeding, when tadpoles might be present

Any effects that result in mortality to frogs would be permanent. Other negative effects would include disruption of breeding activity, which would be temporary. The extent of the effect would be limited to the duration and scope of sediment removal activities in these three areas. The public water works permit for the protective island would require these three sites to be surveyed for the presence of the Cricket Frogs to better assess the potential for negative impact to the frogs from sediment removal. In addition, habitat suitable to the

Cricket Frogs would be created on the protective island, enabling mitigation on this potential impact. Specific habitat requirements of the frogs, and appropriate survey protocols, are currently being evaluated by the project proposer in collaboration with the DNR's Endangered Species Review Coordinator and Nongame staff.

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

15. The DNR issued three extensions for issuing a Record of Decision due to Insufficient Information, as provided under the provision of *Minnesota Rules*, Chapter 4410.1700 Subp 2a: a 30-day extension on December 29, 2020; a 90-day extension on January 27, 2021; and a 60-day extension on April 28, 2021. Each of these extensions was issued due to insufficient information on the presence, status, and feasible approaches to mitigate possible impacts to the Blanchard's Cricket Frog at the temporary sediment storage sites. The project proposer agreed with the necessity for these extensions and entered into Memoranda of Agreement (MOA) with the DNR on this subject on January 27, 2021, and April 29, 2021.

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

Unit of Government	Type of Application	Status
MN DNR	Public Waters Work Permit	Not yet applied for
MPCA	401 Water Quality Certification	Waived per MPCA comment letter
MPCA	National Pollution Discharge Elimination System (NPDES) Permit	Will apply for if required

CONCLUSIONS

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

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

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

including other EISs.

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

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

   a. Surface water quality
   b. habitat
   c. visual impacts
   d. air quality impacts
   e. noise impacts
   f. state-listed species

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

   Habitat and water quality improvements resulting from creation of the proposed island. The proposed project would result in water quality improvement in Pool 2, and increased quality and variety of aquatic, wetland, and terrestrial habitat. The project would also include habitat specifically designed for the benefit of the Blanchard's Cricket Frog, which would be beneficial for this state-listed species.

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

   There are no known planned or anticipated future projects that would result in cumulative potential effects on habitat. Anticipated future projects that could have a cumulative effect on surface water quality, visual and aesthetic impacts, air impacts, and noise impacts with the proposed project are temporary, minor, and limited.

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

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

   a. Physical impacts on water resources are subject to regulatory authority by the DNR Public Waters Work permit.
   b. Potential impacts on the Blanchard's Cricket Frog would be subject to regulatory authority by the DNR Public Waters Work permit.
   c. The action of removing and placing any dredged material (granular or fine sand) on temporary placement sites during the Lock and Dam 2 Protective Island

Project is covered under a DNR Public Waters Work General Permit (General Permit Number: 1994-5082).

d. The USACE's existing SDS permit (MN0050580) for management and reuse of dredged material also applies to the management of dredged materials for this project.
e. When applying standards and criteria used in the determination of the need for an environmental impact statement, the DNR finds that the project is subject to regulatory authority through the Minnesota public water and wetland conservation rules to sufficiently mitigate potential environmental effects on water resources through measures identified in the EAW that are specific and reasonably expected to occur.
f. Project-related impacts to soil erosion, sedimentation, and overall water quality from construction-related activity are subject to regulatory authority by the MPCA NPDES/SDS General Construction Stormwater Permit. The MPCA has waived its requirement for a CWA 401 Water Quality Certification.

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

    a. The project proposer has completed, or developed in collaboration with the DNR and others, numerous habitat improvement and dredged sediment management projects within public waters that have included EAW preparations. Many of these are in the Upper Mississippi River within a few miles of the proposed project, and reflect different phases of the same general work proposed for this project. The effects and benefits of prior projects are used in planning and developing other similar projects such as the proposed Lock and Dam Pool 2 Embankment Protective Island Project. The information gained on the effects and results of past projects provides part of the basis for predicting the effects of similar future projects, such as the proposed project.

2. The DNR has prepared EAWs for other habitat creation and enhancement projects engaged in by the project proposer that have similar environmental effects. These include the Marsh Lake Ecosystem Restoration and ecological studies associated with Lock and Dam 1 Scour Repair. The DNR has fulfilled all the procedural requirements of law and rule applicable to determining the need for an environmental impact statement on the proposed Lock and Dam Pool 2 Embankment Protective Island Project.

3. Based on consideration of the criteria and factors specified in the Minnesota Environmental Review Program Rules (*Minnesota Rules*, chapter 4410.1700, subpart 6 and 7) to determine whether a project has the potential for significant environmental effects, and on the Findings and Record in this matter, the DNR determines that the proposed Lock and Dam Pool 2 Embankment Protective Island Project does not have the potential for significant environmental effects.

ORDER

Based on the above Findings of Fact and Conclusions:

The Minnesota Department of Natural Resources determines that an Environmental Impact Statement is not required for the Lock and Dam Pool 2 Embankment Protective Island Project in Dakota County, Minnesota.

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

Dated this __1st_____ day of July, 2021.

STATE OF MINNESOTA
DEPARTMENT OF NATURAL RESOURCES

Jess Richards
Assistant Commissioner