Appendix H

Public and Agency Comments with Responses

Pool 5 Dredged Material Management Plan

Upper Mississippi River
Wabasha and Winona Counties, Minnesota
Buffalo County, Wisconsin
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Summary Statement for Comments and Responses

The DRAFT Pool 5 Dredged Material Management Plan (DMMP) was released on September 16, 2019 and closed on October 18, 2018. The review period generated a few concerns, questions, suggestions, and some general comments about the initial draft feasibility report. All of the original comments that were received during the public comment period are provided at the end of this appendix.

All comments have been reviewed by the St. Paul District of the Army Corps of Engineers. Many of the comments were unique and many have been reiterated in comments by multiple individuals or groups. Comments that were submitted during the public comment period were carefully evaluated and considered in the final version of the Pool 5 DMMP. Submitted comments/alternatives have been consolidated and responded to accordingly.
Public Comments
1. County Road 84 Repairs
2. Taking Farmland out of Tax Roll
3. Wetland Concerns
4. Use Material to Create More Islands
5. Fix the Chippewa River
6. Minnesota vs. Wisconsin
7. Water Level and Contaminant Testing
8. Compression of the Existing Soil and Localized Flooding Concerns
9. Original Public Comment Letters

Agency Comments
10. MNDNR Comments
11. Corps Response to MNDNR Comments
12. WIDNR Comments
13. Corps Response to WIDNR Comments
14. EPA Comments
15. Corps Response to EPA Comments
Public Comments

1. County Road 84 Repair
The report states that the material would be mostly transferred from West Newton Chute to the Rolling Prairie Site via County Road 84. Who will be responsible for the repairs and maintenance of this road?

Response: County Road 84 is public roadway which means that as long as the trucks that move dredged material from West Newton Chute to the Rolling Prairie Site abide by any restrictions (weight, axel limits, etc.) that are placed upon the road, then they are not to be held liable for any repairs needed to the road after movement of material.

2. Taking Farmland out of Tax Roll
Approximately 962 acres of farmland will be purchased as part of the Pool 5 DMMP. Will the 962 acres be taken out of the tax roll then? Is there any federal reimbursement for such a lose?

Response: Yes, the ~962 acres will be taken out of the county tax rolls; however, payments in lieu of taxes (PILT) are made to local governments on an annual basis to help offset their inability to tax federal property. PILT compensates counties for some of this lost revenue and allow local governments to provide critical health, education, road maintenance, and emergency services to their residents and federal lands visitors. These payments are one example of the United States striving to be a good neighbor to local communities.

Using a statutory formula, the annual PILT payments to local governments are computed based on the number of acres of federal land within each county or jurisdiction and on the population of that county or jurisdiction. The lands include the national forest and national park systems; lands in the FWS Refuge System; areas managed by the BLM; areas managed by the U.S. Army Corps of Engineers; U.S. Bureau of Reclamation water resource development projects; and others.

The Department of Interior collects more than $11.9 billion in revenue annually from commercial activities on public lands, such as oil and gas leasing, livestock grazing, and timber harvesting. A portion of these revenues is shared with States and counties. The balance is deposited in the U.S. Treasury, which in turn pays for a broad array of federal activities, including PILT funding.

Wabasha County received $14,384 for 5,202 acres in 2019. A full list of funding by state and county is available at www.doi.gov/pilt.

Source: https://www.doi.gov/pressreleases/interior-disperses-5147-million-funding-local-communities
3. **Wetland Concerns**
There are several wetland areas throughout the Rolling Prairie site, how will those be avoided and managed going forward? Will the placement of sand impact the neighboring water table and will excess water be managed within the property?

**Response:** A wetland delineation will be conducted on the entire Rolling Prairie property which will inform the Corps as to where the wetlands are located. The Corps will avoid all wetland acres to the greatest extent possible. If avoiding wetlands becomes impracticable due to capacity needs, the District would follow all wetland sequencing procedures (avoid, minimize, and compensate) that comply with Section 401(b)(1) requirements. During the implementation of the project, the site will be designed so that flooding will not impact the neighboring landowners.

4. **Use Material to Create More Islands**
Previous projects within the Pool 5 project area involved the creation of islands (i.e. Weaver Bottoms), why isn’t the Corps looking into expanding those islands and/or creating new ones to use the dredged material?

**Response:** Dredged material has periodically been used for habitat improvement on the Upper Mississippi River. Locally, dredged material has been used to create islands (e.g., Spring Lake Island, Swan Island and Mallard Island in Pool 5), as well as raise floodplain elevations to create topographic diversity and conditions favorable for floodplain forest (L/D 4 Embankment). Indirect benefits also occur as other construction materials, such as fine material used to cap dredged sand, can be obtained from the river. This benefits aquatic backwater habitats via increased water depth. Beneficial use of dredged material for habitat purposes can be performed if the project costs are generally similar to other methods for permanent placement of dredged material. This presents a unique opportunity to benefit river habitat without use of traditional funds for river restoration.

The potential to improve habitat in Pool 5 by the use of dredged material is always being considered; however, this is a only a partial solution to managing dredged material within the project area and a more comprehensive long term solution is needed. Currently, dredged material is available at numerous beneficial use facilities up and down the river if there is an immediate need to use material to build and improve habitat. In cooperation with agency partners, Wisconsin and Minnesota Departments of Natural Resources as well as the USFWS Refuge offices, the use of dredged material to rebuild and improve habitat within the Pool 5 project area could be a possibility in the future. Funding from the Upper Mississippi River Habitat Rehabilitation and Enhancement Program (HREP) or via a cost share agreement through the Corps’ Continuing Authorities Program (CAP) for feasibility planning and construction are funding options to use material for habitat restoration if cooperating agencies agree to such a project.
5. Fix the Chippewa River
The Chippewa River is the main source of all of the sediment that is getting transported within the Pool 5. Why can’t the Corps solve the problem and fix the Chippewa River?

Response: In the early 1980s, the Corps and research experts in sediment transport, investigated both the geomorphic response time and stabilization measures for reducing sediment loads originating from the Chippewa River. The results of the study indicated that there were no low-cost bank stabilization measures and the cost for stabilization would be high (e.g. nearly 9.5 million dollars in present day cost) based on only armoring the nearly 5-mile length of identified and prioritized eroding stream banks. More telling than overcoming the initial investment cost is how the extensive sediment transport modeling and field assessment indicated that the geomorphic response time after improvements are placed would be realized well into the future. It was estimated that if only the prioritized 5-miles of stream banks were armored, a 10% reduction in the sediment supply would be seen 50-years from the construction date. If all of the eroding banks assessed at the time of the study were armored and cost was not a factor, it was estimated that dredging in Lower Pool 4 would be gradually decreased but only by about 30% by year 50. This reduction is significant but again it only occurs at year 50. The energy of the river system (i.e. transport capacity) under a bank armoring system might be increased, resulting in sediment sourcing to switch from erosion of the stream banks to degradation of the stream bed. At some point in time, equilibrium may be achieved but most likely on a different time scale than agencies and the public will desire related to downstream dredging operations.

Following the sediment transport study for the Chippewa River, the Corps held a conference with international experts in this field to specifically examine means to reduce sediment loads originating from the Chippewa River. The attendees concluded that bank protection would not substantially reduce the river’s material load and a less expensive alternative was not reached.

Alternative options for reducing sediment loads may be viable but need to account for the innate lag in the geomorphic timeframe and overcome the associated impacts to items such as but not limited to the substantial capital investment, terrestrial and aquatic ecology, water quality, tourism and recreational industry, infrastructure, real estate, etc.

6. Minnesota vs. Wisconsin
The plan looked at sites within Pool 5 that were in both Minnesota and Wisconsin but ultimately the recommended plan only considers sites in Minnesota. How come Wisconsin doesn’t get any of this material, especially considering it is coming down the Chippewa River from Wisconsin?

Response: Corps policy requires that we manage dredged material in the least cost environmentally acceptable manner. The original source of the material does not affect available management options. Wisconsin was not included as an option due to a significant cost increase that would be incurred from dredging, transporting, and placing the material in Wisconsin versus the identified properties on the Minnesota side. Additionally, the Corps chose a plan that was operationally feasible, socially acceptable, and cost effective.
7. **Water Level and Contaminant Testing**
Will there be test wells monitoring the water levels and contamination within the property? Would this testing also extend to neighboring properties as well?

**Response:** Material from Pool 5 DMMP will be mechanically placed at the Rolling Prairie site. There will be no impact to ground water levels or contamination of ground water. Because mechanical placement will be performed, there will not be any testing wells on the placement site or testing of adjacent property. If hydraulic placement will be done in the future, then appropriate monitoring testing wells and the testing of adjacent properties will be performed. The testing of sediment quality occurs on a periodic basis and the testing procedure is highlighted in section 2.5.1 of the main report.

8. **Compression of the Existing Soil and Localized Flooding Concerns.**
Has the Corps studied the effects that the compression of existing soils will have on the groundwater to surface water flow in the area? Will the placement of the dredged material have an impact on the localized flood elevations and the surface water flow routes?

**Response:** The Corps does not anticipate that the placement of dredged material will have an impact on groundwater to surface water flow within the area. Material will be placed mechanically (as opposed to hydraulic pumping a slurry of river water and sand) at the Rolling Prairie site such that groundwater will not be impacted and in such a manner that it will avoid impeding natural drainage patterns as much as possible. Compression of existing soils and impacts to groundwater levels at other placement sites such as the West Newton Chute placement site has not been observed. Infrastructure, such as additional culverts, may be added if needed to facilitate drainage once material is placed. Upon the completion of this report, a land management plan for the site will be developed by the Corps, for the long-term management of the site. Coordination with the natural resource agencies and the community will be taken into consideration when determining the restoration actions that are to be considered.
CLASSIFICATION: UNCLASSIFIED

Pool 5 DMMP NEPA Comments - See below.

-----Original Message-----
From: Bruce [mailto:bruce@bakerswelding.com]
Sent: Thursday, October 17, 2019 2:26 PM
To: Edstrom, Robert K CIV USARMY USACE (USA) <Robert.K.Edstrom@usace.army.mil>
Subject: [Non-DoD Source] POOL 5 DREDGED MATERIAL Comment Card

Hello - this is Bruce & Beverly Baker - we own land on the East side of the Dredging project - 62739  145th Ave, Kellogg, MN 55945. Our concerns would be the following.

Will there be test wells monitoring the water levels and contamination and would that also include our residence testing annual as to contaminants since we live adjacent?

We were told sand would be trucked not pumped in, within the 100 year plan is that correct?

We already live in wet lands - will this placement of sand affect our water table - in other words -we will be lower than the piles of sand where will the excess rain water be channeled?

We have lived here for over 40 years and plan to sale as we retire - do not want to see our property valve decrease - has there been similar projects that we can look into as to the valuation?

Bruce & Beverly Baker

62739 145th Ave

Kellogg, MN 55945

Bruce Cell 651-564-0371
Bev's Cell 651-764-1325
Work 651-565-3517
Home 507-767-2263
Please do not publish the following comment:

Sorry we did not send earlier - Bruce had medical issue which delayed our comments.

CLASSIFICATION: UNCLASSIFIED
CLASSIFICATION: UNCLASSIFIED

See below from Wabasha County for the report.

-----Original Message-----
From: Flesch, Dietrich [mailto:dflesch@co.wabasha.mn.us]
Sent: Wednesday, October 2, 2019 10:47 AM
To: Machajewski, Paul R CIV USARMY CEMVP (US) <Paul.R.Machajewski@usace.army.mil>; Edstrom, Robert K CIV USARMY USACE (USA) <Robert.K.Edstrom@usace.army.mil>
Subject: [Non-DoD Source] RE: Pool 5 Dredged Material Management Plan (DMMP) (UNCLASSIFIED)

Gentlemen
Regarding the proposed Management Plan, Wabasha County Highway Department has the following comments/questions:
- at sometime in the future when CR 84 pavement is near the end of its service life (estimated 10+ years); the County may consider reconstructing CR 84 in locations adjacent to and on the proposed Corps property acquisition areas. Conceptually, CR 84 would remain straight except at horizontal road curve in Section 26. Road reconstruction would require additional width of right of way for potential widening, slope, and vertical and/or horizontal alignment changes. Design could be accomplished in consideration of (potential ample) use of dredged materials and design that meets the needs of the public and as the Corps may find beneficial. On the recent County Hwy 59 project in Wabasha, the Corps was great to work with in granting the necessary easement for road purposes; I look forward to the same working relationship on CR 84.
- the County is the sponsoring agency for the previous Corps levee system project along the Zumbro River. As the sponsor, the County is required to maintain not only the levee(s) but also the channel which was also constructed under the project. The County holds flood control easements for the levee system, and the County Highway Department has been responsible for maintenance and compliance with Corps levee program and inspections. The purpose of the levee was for agricultural production protection. Maintenance of the levee system has proved difficult with sedimentation and the Zumbro naturally attempting to meander. The County encourages further discussions on a different management approach to the levee system including channel that may have benefits to the Corps dredge operations mission, sustainable flood protection and environmental stewardship.

Please contact me if you have any questions or would like to discuss further.

Thanks,

Dietrich Flesch
Wabasha County Engineer
821 Hiawatha Drive West
Wabasha, MN 55981
Phone 651.565.3366 ext.113
Fax 651.565.4696

-----Original Message-----
From: Machajewski, Paul R CIV USARMY CEMVP (US) [mailto:Paul.R.Machajewski@usace.army.mil]
Sent: Friday, September 13, 2019 1:21 PM
To: Baumgard, Kevin L CIV USARMY CEMVP (USA); Baylor, Sharonne; Beckham, Amy (UMWA); Benjamin, Gretchen (TNC); Berg, Kevin F CIV (US); Bernhardt, Jacob T CIV USARMY CEMVP (US); Birkenstock, Terry J CIV USARMY CEMVP (US); Brennan Dispatch; Cameron, Tamara E CIV USARMY CEMVP (USA); Carstens,
Jess (WDNR); Clark, Steven J CIV USARMY CEMVP (US); Cook, Travis (USCG Wyaconda); Cottrell, Daniel J CIV USARMY CEMVP (USA); Denzer, Judith M CIV USARMY CEMVP (USA); Dieterman, Dan (MDNR); DLL-CEMVP PA; Doneen, Randall (MDNR); Fasbender, Pete (FWS); Fischer, Jim (WDNR); Gray, Brian P CIV USARMY CEMVP (USA); Havlik, Marian; Heath, David (WI DNR); Heffner, Joseph P CIV USARMY CEMVP (USA); Hendrickson, Jon S CIV USARMY CEMVP (US); Heyer, Rojean E CIV USARMY CEMVP (US); Horton, Becky (MDNR); Johnson, Thomas R CIV USARMY CEMVP (USA); Kelner, Daniel E CIV USARMY CEMVP (US); Kimmel, Zachary R CIV USARMY CEMVP (USA); Kowal, Kathleen (EPA); Krause, Brian M CIV USARMY CEMVP (USA); Kwok, Angel M LT (USCG - St. Paul); Loewenhagen, Adrian J CIV USARMY CEMVP (US); Machajewski, Paul R CIV USARMY CEMVP (US); River Port Captains; Mathison, Jane Marie (USA); McCracken, Chandi (MPCA); McFarlane, Aaron M CIV USARMY CEMVP (USA); McMurl, Curt (FWS); Miller, Tim (FWS); Moe, Kristin M CIV USARMY CEMVP (USA); Moore, Megan (MDNR); Moser, Delene J CIV USARMY CEMVP (USA); Nelson, Lee MVS External Stakeholder; Noren, James B CIV USARMY CEMVP (USA); Olson, Brandon L CIV USARMY CEMVP (USA); Perkl, Bradley E CIV (US); Peterson, Bryan D CIV USARMY CEMVP (USA); Patrick Phenow; Potter, David F CIV USARMY CEMVP (US); Rand, Jimmy T CIV USARMY CEMVP (USA); Rasmussen, Kurt (WDNR); Robbins-Fenger, Alan (NPS); Rude, Neil (MDNR); Schnick, Emily (MPCA); Sipos, Brian A CIV USARMY CEMVP (USA); Sorenson, Jennifer (MDNR); Stai, Christopher J CIV USARMY CEMVP (USA); Stefanik, Elliott L CIV USARMY CEMVP (USA); Stefanaki, Mary (FWS); Strassman, Sara L (WDNR); Studenski, David A CIV USARMY CEMVP (USA); Sutton, John (Pilot); Tabery, Timothy D CIV USARMY CEMVP (USA); Tapp, Steven D CIV USARMY CEMVP (US); UMWA (umwamail@gmail.com); Urich, Randall R CIV USARMY CEMVP (US); Utrup, Nick (FWS); Vanguilder, Alan Scott CIV USARMY (USA); Weeks, Jordan (WDNR); Yager, Tim (FWS); Zeller, Kriss R CIV USARMY CEMVP (USA); taylor.huinker@state.mn.us; Althoff, Jess (DNR); Greg Genz; Flesch, Dietrich; Buhmann, Brian
Cc: Edstrom, Robert K CIV USARMY USACE (USA); Dunham, Nicholas R CIV USARMY CEMVP (USA); Moes, Patrick N CIV USARMY CEMVP (USA); Dupey, Stephanie T CIV USARMY CEMVP (US); Caldwell, Stephen (Penny) CIV USARMY CEMVR (USA); Robinson, Benjamin C CIV USARMY CEMVD (USA); Emery, Benjamin E CIV USARMY CEMVD (USA)

Subject: Pool 5 Dredged Material Management Plan (DMMP) (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

* Please disregard if this does not pertain to you *

Pool 5 On Site Inspection Team members -

See attached Public Notice regarding the release and public review of the DRAFT Pool 5 Dredged Material Management Plan (DMMP). As noted in the notice this is a DRAFT management plan for the material generated by our dredging operations in Pool 5 for the next 40 years. Questions or comments during this comment period can be addressed to robert.k.edstrom@usace.army.mil, 651-290-5026 or the undersigned.

The DRAFT report will be posted on our St. Paul District website on Monday, September 16th, 2019.

A Public Meeting regarding this DRAFT Pool 5 DMMP is scheduled for Thursday, September 26th from 6 - 8 pm at St. Agnes Church in Kellogg, MN. A separate News Release will be published regarding the Public Meeting as well.

Please note that this is a separate planning effort from the Pool 4 Dredged Material Management Plan in the Wabasha, MN area.

Paul Machajewski
Dredged Material Manager
St. Paul District, US Army Corps of Engineers
431 North Shore Drive
CLASSIFICATION: UNCLASSIFIED

Paul,

See below. Please respond directly. I copied Nick Dunham so this can be recorded as a comment.

Thanks,

Bob

-----Original Message-----
From: Bill Deming [mailto:bdeming36@gmail.com]
Sent: Tuesday, October 8, 2019 6:05 PM
To: Edstrom, Robert K CIV USARMY USACE (USA) <Robert.K.Edstrom@usace.army.mil>
Subject: [Non-DoD Source] Pool 5 dredging plans

Robert, was unable to attend the recent meeting in Kellogg on plans for the sand disposal from pool 5 dredging. I have voiced this idea before but could you tell me why more islands could not be constructed in the Weaver Bottoms area as were done a few years ago?? These islands cut down on wind erosion in the lake plus create a wildlife bonanza as I can attest to having lived in the area all my life. I see no negative wildlife impact in doing this plus it would provide a great area to dispose of some of this river sand...the more islands the better to curb wind issues in the Fall and Spring. It would certainly be easier than piping and trucking...This may not be the answer for all the sand but would disposition a good deal of it. Would appreciate a response..thank you

Bill Deming
bdeming36@gmail.com <mailto:bdeming36@gmail.com>

CLASSIFICATION: UNCLASSIFIED
Please check ONE category below that best describes you and your interest in the Pool 5 DMMP:

☐ General Public  ☐ Media  ☐ City/County Government
☐ Business/Industry  ☐ Federal Government  ☐ Other (please specify)
☐ Environmental Group  ☐ State Government

Please provide your comments in the sections below:

What happens to the irrigation system?

Concern about road use.

Test wells

Noxious weed on farmer’s side of fence. Why that be kept up?

All the questions we had were kind of answered at the meeting. Thank you for informing us of what may happen.

All comments received will be made available to the public, to include the possibility of being posted on a publicly accessible website. Individuals are requested not to include personal privacy information in their comments unless they do not object to such information being made available to the public.

If you would like to leave your contact information, please complete the following:

Name ________________________________

Address 63252 Co Rd 84 P.O. Box 25

City Kelloggs State MN ZIP 55945

Phone 507-737-4920 Email gsreese@gmail.com

You can email your comments to robert.k.edstrom@usace.army.mil or mail them to U.S. Army Corps of Engineers Attn: PD-F, 180 East 5th Street, Suite 700, Saint Paul MN 55101

Comments are requested by October 18, 2019
TO:
U.S. Army Corps of Engineers
Attn: PD-F
180 East 5th Street
Suite 700
Saint Paul MN 55101
Mr. Edstrom,

I am e-mailing you on behalf of Watopa Township in Wabasha County in my role as one of the three supervisors. We discussed the dredging material plan for pool 5. Watopa township owns and maintains an existing gravel road, 618th st, about 1 mile south of the Rolling Prairie Site as shown on the attached map. There is an existing roadway culvert which is maintained by the township and acts as a water leveler between two areas of the wetlands. It is sensitive to high groundwater within the area and surface water flows during spring runoff.

Although the Rolling Prairie site is not within the one-percent floodplain, it does flood on a regular basis (portions every year) either from local run-off or seasonally high groundwater. The placement of significant fill will compress the existing soils and introduce a different soil type into elevations where groundwater is present during portions of the year.

I have the following questions regarding the Dredged Material Management Plan:

* Has the Corps studied the effects that the compression of existing soils will have on the groundwater to surface water flow in the area?

* Has the Corps studied the effects that the placement of fill will have on the localized flood elevations and whether this will result in any changes to surface water flow routing or rates?

* Will any of these impacts cause any change to the expected flow rates through the township roadway culvert crossing shown in the attached map?

* If so this is likely to impact the upstream surface elevation which would be concerning to the township considering the current susceptibility of the roadway and culvert.

* If there are impacts to the township road, would the Corps be proposing to mitigate these impacts as part of their dredged material management operations?

Thank you in advance for reviewing and responding to our comments and concerns. I would welcome the opportunity to discuss these with you directly or at one of our monthly township meetings. My contact information is listed below. If you would wish to join one of our township meetings Jerry can get you the schedule of our upcoming meetings.
Thank You

Jeff Fosmo
email – jeff.fosmo@gmail.com <mailto:jeff.fosmo@gmail.com>
Cell – 507-421-0572

Jerry Grabowski
Email - Watopa_township_clerk@yahoo.com <mailto:watopa_township_clerk@yahoo.com>

CLASSIFICATION: UNCLASSIFIED
October 17, 2019

Mr. Bob Edstrom
Regional Planning and Environment Division North
180 Fifth Street East
Suite 700
St. Paul, Minnesota 55101-1638.

RE: Mississippi River Pool 5 Dredged Material Management Plan

Dear Mr. Bob Edstrom,

The Minnesota Department of Natural Resources (DNR) has reviewed the Mississippi River Pool 5 Dredged Material Management Plan. Regarding matters for which the DNR has regulatory responsibility or other interests, we offer the following comments for your consideration.

Section 4.1.2 – This section states that a qualitative climate change analysis was conducted by the Corps in accordance with Engineering and Construction Bulletin, 2018-214 Guidance for Incorporating Climate Change Impacts to Inland Hydrology in Civil Work Studies, Designs, and Projects (USACE 2018) and that the full analysis is presented in Appendix C: Climate Change. However, Appendix C does not contain this Climate Change analysis, rather it contains a Draft FONSI for the Mississippi River Pool 5 Dredged Material Management Plan Feasibility Report and Integrated Environmental Assessment.

Section 4.1.3 – The future effects of climate change on hydrologic conditions described in this report do not accurately reflect observed changes in hydrology and the potential for sediment transport. Calculation of average annual dredging and use of those quantities for projecting future volumes of dredge material from Pool 5 are likely under estimated due to use of inappropriate metrics for determining changes in hydrologic conditions, sediment transport, and sources. The statement “annual dredging volumes in Pool 5 and average annual discharge (AAD) on the Mississippi River at L/D 4 and the Chippewa River at the USGS gage at Durand, WI for the period 1981 to the present do not indicate upward trends” does not accurately reflect the data and narrative presented in Appendix D. Data presented in Appendix D only includes data from 1981-2015, not to the present and the narrative in Appendix D actually states: “there appears to have been an increase in the AAD and the number of days that the bankfull flood event was exceeded annually starting with this decade. Future projected dredging volumes should be based on data from this more recent time period, with adjustments made to the beginning year as needed based on dredging records”. Additionally, there is no reference to climate change effects on hydrologic conditions and potential internal sediment mobilization from within lower Pool 4 and Pool 5 and from the Zumbro River, a significant tributary and source of sediment to Pool 5.

Section 4.2.1 – The Chippewa River is identified as the primary source of sediment to Pool 5, but there is no reference or citation to relevant information supporting this statement. Other potentially significant sources of sediment not mentioned in this section include existing sediment from within
Lower Pool 4 and Pool 5, and three tributary rivers, the Buffalo River (lower Pool 4), Zumbro River (Pool 5) and the Whitewater River (Pool 5).

**Section 5.1** - The definition of Emergency Dredging was discussed at the River Resources Forum in August. The Corps would like to change the official definition of Emergency Dredging in their CMMP to include “natural shoals in the channel that arise from weather-related events that prevent safe vessel passage.” The discussion at the Forum was tabled until a later date so that the partnership agencies can have time to discuss and agree to common language. It would be inappropriate to use the new Emergency dredging language in this document until the partnership has come to an agreement.

*Section 5.3* – The characterization of agency partner’s lack of support for use of dredge material for habitat restoration purposes is inaccurate. Agency partners (MN DNR, WI DNR, and USFWS) have consistently and repeatedly asked the USACE to explore options and Channel Maintenance economic justification for use of dredge material for habitat restoration purposes. USACE policy and inflexibility in cost accounting are much more responsible for the decision and statement in this report. Furthermore, this section contains contradictory statements related to cost effectiveness of using dredge material for habitat restoration as stated: “dredge material placement….not being a cost effective solution” vs “Cost difference for these options were not well understood, and would take further planning to potentially reach a point where the cost-effectiveness of habitat restoration with dredge material could be determined.”

**Section 6.1** – Use of the tentatively selected plan’s (TSP) Rolling Prairie Site for permanent dredge material placement may have much more flood stage and wetland impacts than described in the report. The geomorphic low lying “floodplain” area of the Rolling Prairie Site historically conveyed flood flows from both the Mississippi River and Zumbro River, and if not for the lower Zumbro River flood control dikes, probably still would. Permanently filling this area with dredge material without consideration of the future flood conveyance role this area might function as or provide for in a wetter climate is missing from the report. This report should include channel restoration and flow conveyance opportunities as part of the detailed description of the TSP. Potential wetland impacts from placement of dredge material at the Rolling Prairie Site described in this section contradict the description and information provided in Appendix E (see comments below for Section 7.2.2). An analysis of wildlife value and potential recreational use of the Rolling Prairie Site over the next 40 years, if it were managed as such, versus agricultural use, would be very useful in identifying the most appropriate short and long-term use of the site. A wetland delineation will be needed in the location identified for initial placement of dredge material at the Rolling Prairie site within the northern portions of the parcel immediately south of and abutting Co. Rd. 84

**Section 7.2.2** – The statement that Appendix E contains results of a wetland delineation is incorrect, since it was only a wetland assessment, not a delineation. In conducting the wetland assessment, the parcel was divided into 8 separate units and the percentage of each unit containing wetlands was presented in Appendix E. The total wetland acreage (approx. 273 acres) within the entire 990-acre parcel, as determined by the wetland assessment, differs from the amount of wetlands (160 acres) referenced throughout the main report.

A potential action to reduce future dredging in Pool 5 that the TSP of this DMMP provides, is the ability to intercept a significant proportion of bedload (sand) material from the Zumbro River before it enters
Pool 5. An assessment or evaluation of this option added to this Report would be very useful in determining cost/benefit analyses of dredge material management in Pool 5.

**Section 7.2.4** – This section discusses that a Natural Heritage Information System review was conducted to identify state-protected species that may be found within the vicinity of the project site, however it does not discuss potential impacts to these species, or how these impacts may be mitigated. As noted in Table 7, Blanding’s turtle and Wood turtle (both state-listed as threatened) have been found within 1 mile of the project area. Before the Rolling Prairie site is utilized as a placement site for sediment, the DNR recommends that the Corps consult with DNR staff regarding project plans and details. Blanding’s turtles and wood turtles utilize sandy soils for nesting, and there is a concern that this placement site could be attempted to be used for nesting, which could result in burial of adults, nests, and hatchlings. Due to the presence of these state-protected species, and the potential for impact by the project, avoidance measures, such as installing fencing along the perimeter of the project area to exclude turtles, will likely be required by the DNR. As the plan to utilize this site proceeds, DNR Environmental Review Coordinator Lisa Joyal should be contacted to discuss avoidance measures and implementation.

On behalf of the DNR, thank you for consideration of these comments.

Sincerely,

/s/ Rebecca Horton
Planner Principal

CC:
Dan Dieterman
Lisa Joyal
Megan Moore
Dan Lais
5 November 2019

Ms. Rebecca Horton
Minnesota Department of Natural Resources
Ecological and Water Resources
1200 Warner Road
St. Paul, MN 55106

RE: Mississippi River Pool 5 Dredged Material Management Plan

Dear Ms. Rebecca Horton,

Thank you for your review comments provided in a letter dated 17 October, 2019 regarding the Mississippi River Pool 5 Dredged Material Management Plan. Below are our responses to your comments. Your letter along with the Corps’ responses will be added to the Appendix H: Agency and Public Comments with Responses for the record. Suggested updates, where applicable, will be added to the final report.

Section 4.1.2.
Concur with comment. The correct appendix for the Climate Change Assessment is Appendix D. Updates to the main report were made.

Section 4.1.3.
Concur with comment. An updated Climate Change Assessment has been prepared (Appendix D) and includes data from 1981-2018. Section 4.1.3. in the main body of the report has also been updated to reflect more recent data and conclusions from the updated Climate Change Assessment. Climate change effects on specific hydrologic conditions and internal mobilization from within Pool 4 and Pool 5 and from the Zumbro River are included in the larger context of the Upper Mississippi-Black-Root River Basin (Hydrologic Unit Code “HUC” 0704) which contains the project area at Mississippi River Pool 5.

Section 4.2.1
Concur with the comment. There is no recent reference as to the sediment contribution of sediment into Pool 5 from the Chippewa River except for annual dredged quantities, an indicator of sediment input. However, from estimates of the Upper Mississippi River and Illinois Waterway Cumulative Effects Study in 1999 (USACE – Nakato, 1999), the Chippewa River contributes approximately 600,000 yd³ per year into Lower Pool 4 and Pool 5. Annual average dredge quantities since 1981 from Lower Pool 4 and Pool 5 are approximately 270,000 and 117,000 yd³, respectively. The Zumbro contributes approximately 113,000 yd³ to Pool 5 and it’s estimated that the Buffalo River contributes unmeasurable amounts and the Whitewater River sediments are deposited in Weaver Bottoms. Given that this section of the report is identifying
the Problems and Opportunities in managing dredged material in Pool 5, we propose to keep the language in Section 4.2.1 as is with the Chippewa River identified as the primary source of sediment into UMR Pool 5.

**Section 5.1.**
Concur with the definition of Emergency Dredging in the report as not a finalized agreed upon statement. The report was changed to reflect the existing definition of Emergency Dredging as defined in the CMMP.

**Section 5.3.**
Concur with the comment. The section in the report has been updated to reflect the agencies interest in using dredged material for habitat restoration.

**Section 6.1.**
The scope of this study is for the acquisition of the Rolling Prairie site and placement of dredged material placement and not necessarily channel restoration of tributaries or modification of the Zumbro River flood control levee to improve flood conveyance. The Rolling Prairie site was referred to the Corps by the MNDR for acquisition under federal ownership and used as a dredged material placement site and will be managed long term for natural resources and public use. A land management plan for the site will be conducted by the Corps for the long term management of the site and will be coordinated with our partner resource agencies of which restoration actions can be considered.

We do concur a detailed wetland delineation is required for the entire Rolling Prairie site. Wetland delineations are scheduled for and will be conducted prior to first placement of any dredged material.

**Section 7.2.2.**
Concur with the comment that Appendix E contains results of a wetland delineation as only a wetland assessment was conducted. Also we concur that there are inconsistencies in wetland acreages identified on the Rolling Prairie site. Currently the 160 acre wetland estimate is accurate as the site is actively farmed with pumping and drain tiling in operation. Once farming stops and pumping ceases, areas are likely to return to wetlands. Once wetland delineations are completed, a more accurate wetland acreage of the parcels will be known. As identified in the report, wetlands will be avoided if upland placement areas are available. If no upland acreages are available, wetland mitigation sequencing will take place prior to placement and mitigated for per Corps policy.

The scope of this project is not to identify potential actions to reduce dredging in Pool 5 but to prepare a long term plan for managing dredged material for the next 40 years. Even so, if the bedload from the Zumbro River could be eliminated from entering the Mississippi River, doing so would have a minimal impact on dredging quantities due to the bedload from the Chippewa River.

**Section 7.2.4.**
Concur with comment on the recommendation that the Corps should consult with MNDNR staff for implementing avoidance measures to state listed species, such as the Blanding’s turtle and wood turtle. This coordination has been updated in the report. Prior to placement of dredged material at the Rolling Prairie site, when specific areas identified for material are known, avoidance measures will be coordinated with MNDNR Environmental Review Coordinator Lisa Joyal.

Again, thank you for reviewing and providing comments to the Mississippi River Pool 5 Dredged Material Management Plan. For additional clarification or questions please feel free to contact Dan Kelner at Daniel.e.kelner@usace.army.mil or via phone at 651-290-5277.

Robert Edstrom
Robert K. Edstrom
Project Manager
PM-B, St. Paul District
October 18, 2019

Mr. Bob Edstrom  
Regional Planning and Environmental Division North  
United States Army Corps of Engineers - St. Paul District  
180 Fifth Street East  
Suite 700  
St. Paul MN 55101-1638

Subject: Mississippi River Pool 5 DMMP

Dear Mr. Bob Edstrom:

Thank you for the opportunity to review the draft Feasibility and Integrated Environmental Assessment for the Pool 5 Dredged Material Management Plan (DMMP). The plan identifies a tentative long-term solution for managing dredged material in Pool for the Upper Mississippi River (UMR) for the purposes of continued operations and maintenance of the 9-foot Navigation Channel Project. The Wisconsin Department of Natural Resources (Department) has reviewed the plan and provided comments in a sequential order that follows the DMMP outline. Those comments are attached to this letter.

The Department recognizes that the UMR is an important resource to our state and our nation. In 1986, Congress declared the Upper Mississippi River system as a nationally significant ecosystem and a nationally significant commercial navigation system and stated that the system shall be administered and regulated in recognition of its several purposes. As a partner in the management of this system, the Wisconsin Department of Natural Resources recognizes the role the U.S. Army Corps of Engineers (Corps) has in managing the river as multipurpose system and would like to commend the Corps’ efforts in developing a long-term dredge material management plan that efficiently removes the dredge material from the floodplain, is to be acquired through a willing seller, and accounts for environmental and social concerns.

The detailed comments are provided as an attachment, but there are a few items that can improve the final DMMP and its outcomes:

- The Rolling Prairie site has both floodplain reconnection and wetland mitigation opportunities. While the priority for the site must be dredge material placement, it would behoove the Corps to develop site setbacks and layouts that allow for floodplain reconnection for the Zumbro River and wetland reestablishment as a bank for the Corps’ future mitigation needs.
- It is inaccurate to state that the agencies are not interested in pursuing habitat restoration opportunities. While it is agreed that the majority of the material within this plan must be removed from the floodplain, the Department has been a strong proponent for habitat restoration measures that can provide constructive use of the excess sand from navigation dredging. This is something that the public advocates for as a win-win. If planning aspects of these types of projects are not undertaken as part of a DMMP, the partner agencies lack the necessary comparative economic and operational costs that are needed to take action when opportunities arise. For example, in 2014 and 2018, the Corps sought expedited, habitat-oriented placement sites to be utilized to address emergency channel closures and overfull temporary placement sites. While this plan is a positive step toward retaining a broader suite of options for placement by adding
a large capacity upland site, it fails to deliver any of those short-term, immediate use habitat placement options that were recently sought.

• The failure to consider utilization of the DPC facility just below Lock/Dam 4 seems inconsistent with the Corps’ assertion that “land availability near the river is seldom available so when there is an opportunity to pursue land that is for sale it is necessary for the Corps to explore the acquisition of the property.” A site with such optimal proximity to the peak dredging needs of the Corps and with facilities in place for offloading barges should not be excluded from evaluation, particularly in light of the possibility of future scenarios that include barging material dredged from Pool 4 into the TSP site in Pool 5.

Again, thank you again the opportunity to comment on the Pool 5 DMMP. If you have any questions or need any clarification on the items included in this letter, please contact Kurt Rasmussen, Mississippi River Planner, at (608) 785-9003 or by email at Kurt.Rasmussen@Wisconsin.gov.

Sincerely,

Kurt A. Rasmussen
Wisconsin Department of Natural Resources - Mississippi River Planner
3550 Mormon Coulee Road
La Crosse, WI 54601
Phone: (608) 785-9003
Kurt.Rasmussen@Wisconsin.gov

cc: Steve Galarneau (WDNR), James Fischer (WDNR)

Encl: WDNR Comments on the Pool 5 Dredged Material Management Plan
WDNR Comments on the Pool 5 Dredged Material Management Plan

Section 2.5.1 – Water Quality. “This section of the river has relatively high water quality because Lake Pepin is a sink for sediment and contaminants from the Minnesota River and the Twin Cities Metropolitan Area. This section of the river does not appear on the State’s impaired waters list, which identifies pollutants, stressors or indicators (such as turbidity, polychlorinated biphenyls (PCBs), fecal coliform) that would affect aquatic life and/or recreation. Except for isolated sloughs and backwater lakes, the dissolved oxygen content of the water remains above levels required to sustain a quality fishery.”

Comment: Pool 5 of the Mississippi River is listed as an 303d impaired water in Wisconsin due to Total Phosphorus and Mercury. Pool 5 also has a contaminated fish tissue impairment for Mercury and PCBs.

Section 2.5.1 – Hydrology

Comment: The Zumbro and Whitewater Rivers deliver sediment to the mainstem and Weaver Bottoms, respectively. In both places, sedimentation occurs, forming deltas and shoals. The contributions should not be minimized, even though they are localized to this pool.

Section 2.5.2 – Mussels. “The zebra mussel is present in Pool 5 and its numbers have steadily been increasing since its first reported occurrence in 1991.”

Comment: This statement appears to be dated. Data now suggests populations have stabilized.

Section 4.1.2 – Climate Change. “The Corps performed a qualitative climate change analysis in accordance with Engineering and Construction Bulletin, 2018-214 Guidance for Incorporating Climate Change Impacts to Inland Hydrology in Civil Work Studies, Designs, and Projects (USACE 2018). The full analysis is presented in Appendix C: Climate Change. Relevant components of river discharge that affect sediment transport and engineering resilience include its magnitude, frequency, and duration. Average annual discharge and the number of days that discharge exceeds a bank full flood event was evaluated to explain the potential for increased sediment loading in Pool 5. This data is available for the Mississippi River at Winona, Minnesota and the Chippewa River at Durand, Wisconsin. The gage located at Durand represents hydrologic conditions on the primary source of sediment to Pool 5. The gage at Winona is located near River Mile 726 at the upstream end of Pool 6, 13 miles downstream of Pool 5, and only separated by Pool 5A. It adequately represents flow conditions in Pool 5.”

The evaluation found no statistically significant trends in either average annual discharge or the number of days the flow exceeded a bank full flow event at these two gages for the 1981 to 2015 time period (see Appendix C). From a longer term perspective when analyzing data from overall time period 1938 to 2015 at Winona, there is a statistically significant increasing trend for annual discharge and number of days flow exceeded a bank full event (see Appendix C). However, at the project scale level it’s most important to consider more recent flow data to evaluate discharges on sediment transport and lessons learned from projects constructed during the 1981 to 2015 time period.”

Comment: This section references Appendix C (Finding of No Significant Impacts). Please change to reference Appendix D (Climate Change).

Section 4.1.3 – “Projected Future Conditions. “The basis for projecting future dredging quantities in Pool 5 over the next 40 years is the dredging record from 1981-2018. Although qualitative climate change analysis suggests higher river discharge in the future, it is suggested that the annual dredging volumes in Pool 5 and average annual discharge on the Mississippi River at L/D 4 and the Chippewa River at the US Geological Survey (USGS) gage at Durand, Wisconsin for the period 1981 to the present do not indicate upward trends. Assuming
that dredging volumes remain consistent with recent history, it is estimated that 4.7 million CYs of dredged material will be generated over the 40-year period of analysis.”

Comment: This section inaccurately states that the “average annual discharge on the Mississippi River at L/D 4 and the Chippewa River at the US Geological Survey (USGS) gage at Durand, Wisconsin for the period 1981 to the present do not indicate upward trends”. First, the average annual discharge was calculated for the time period from 1981 to 2015, not from 1981 to present. Second, Appendix D goes on to state that “there appears to have been an increase in the AAD and the number of days that the bankfull flood event was exceeded annually starting with this decade. Future projected dredging volumes should be based on data from this more recent time period, with adjustments made to the beginning year as needed based on dredging records. These statements appear to contradict each other and warrant correction. It is recommended that the data be updated to include data from 2015 to 2018. It is possible that utilizing bankfull statistics is failing to account for short-duration, high intense events that recruit material from tributaries.

The regional scale section of Appendix D also quotes a NOAA report that states that the “Upper Midwest extreme heat, heavy downpours, and flooding will affect infrastructure, health, agriculture, forestry, transportation, air and water quality, and more. Climate change will tend to amplify existing risks climate poses to people, ecosystems, and infrastructure. Direct effects will include increased heat stress, flooding, drought, and late spring freezes”. The failure to account for this change in hydrology and the role it plays in sediment transport may result in under estimates of average annual dredging volumes and projected placement site capacities.

Section 4.3.3 – Constraints. “Environmental Acceptability. Plan must avoid and minimize to the extent practicable any impacts to the 1 Percent Annual Exceedance Probability (“100-Year”) Flood Stage. Avoid impacts to high value habitat and threatened and endangered species.”
Comment: Add statement on avoiding wetland impacts.

**Section 5.1 – No Action Alternative. Emergency Dredging.** “Emergency Dredging is defined as dredging required to free a grounded vessel or remove shoals (submerged bars) in the channel as a result of a vessel freeing itself, or to remove natural shoals in the channel that arise from weather-related events that prevents safe vessel passage.”

Comment: The definition of Emergency Dredging above differs from that listed in the Channel Maintenance Management Plan (CMMP). This subject was discussed at the August River Resources Forum and subsequently tabled until the partner agencies have time to discuss and agree to common language. Recommend the Corps continues to use the Emergency Dredging definition from the CMMP until this issue is resolved.

**Section 5.3 – Pool 5 Habitat Restoration through the Use of Dredged Material.** “Collectively, there was little interest expressed in these options by the natural resource agencies. Although there is potential to build more islands in the Weaver Bottoms area, the volume needed for islands is small relative to the volume of dredged material needing placement as well as it not being a cost effective solution.”

Comment: The statement above does not accurately reflect the partners position on the use of dredge material in Pool 5 for habitat restoration. Agency partners have collectively encouraged the Corps to explore habitat restoration options through the Corps’ Channel Maintenance program. The biggest deterrents for pursuing habitat restoration have been Corps policy (interpretation of the Federal Dredging Standard) and inability for a project to reach a point where it is cost-effective.

While it is agreed that the majority of the material within this plan must be removed from the floodplain, the Department has been a strong proponent for habitat restoration measures that can provide constructive use of the excess sand from navigation dredging. This is something that the public advocates for as a win-win. If planning aspects of these types of projects are not undertaken as part of a DMMP, the partner agencies lack the necessary comparative economic and operational costs that are needed to take action when opportunities arise. For example, in 2014 and 2018, the Corps sought expedited, habitat-oriented placement sites to be utilized to address emergency channel closures and overfull temporary placement sites. While this plan is a positive step toward retaining a broader suite of options for placement by adding a large capacity upland site, it fails to deliver any of those short-term, immediate use habitat placement options that were recently sought.

**Section 6.1 – Rolling Prairie Site: Site Preparation.** “Placement of material near the levee bordering the Zumbro River along the northeast portion of the site will be set back sufficiently so that the levee can be maintained and existing drainage patterns are not disturbed.”

Comment: The northern boundary of the Rolling Prairie Site borders a heavily channelized and leveed portion of the lower Zumbro River. The Corps should explore options to restore the flood plain and the channel of the Zumbro River. This may result in a net loss of dredge material capacity for the property but would provide flood flow capacity and the possibility of diverting sediment destined for the Mississippi River. Beyond that, this site would provide excellent opportunities for the Corps to do on-site wetland mitigation.

**Section 6.1 – Rolling Prairie Site: Natural Resources.** “Wetland areas would be avoided as part of the permanent placement of dredged material within the 815-acre area of proposed use.”

Comment: This statement accounts for 815 acres available for dredge material placement. The remainder of the document uses 830 acres. Please clarify.

**Table 6. Environmental Assessment Matrix.** Lists the TSP as “No Effect” on recreational opportunities.
Comment: Consider moving recreational opportunities associated with the TSP to minor adverse effects. The TSP will require the West Newton Chute boat landing to be closed more often.

Section 7.2.1 – Natural Resource Effects: Physical Setting – Hydrology. “Placement of material near the levee bordering the Zumbro River along the northeast portion of the site will be set back sufficiently so that the levee can be maintained and existing drainage patterns are not disturbed.”

Comment: The northern boundary of the Rolling Prairie Site borders a heavily channelized and leveed portion of the lower Zumbro River. The Corps should explore options to restore the flood plain and the channel of the Zumbro River. This may result in a net loss of dredge material capacity for the property but would provide flood flow capacity and additional wetland areas. Beyond that, this site would provide excellent opportunities for the Corps to do on-site wetland mitigation. Any increase in wetland would also aid in meeting goals set forth by the North American Waterfowl Management Plan.

Section 8.3 – Coordination. “Planning for the overall project has been coordinated with the public, state and Federal agencies, and other interested parties.”

Comment: It was disappointing that the partner agencies were not provided an opportunity to comment on the DMMP prior to the Public Review. In the future, it would be appreciated if that opportunity was arranged.

Appendix B – Sediment Containment

Comment: Please consider revising the title to read “Sediment Contaminant Datasheet”

Appendix E – Wetland Delineation 2018

Comment: Please consider revising the title to read “Wetland Assessment 2018”
5 November 2019

Mr. Kurt Rasmussen
Wisconsin Department of Natural Resources
Mississippi River Planner
3550 Mormon Coulee Road
La Crosse, WI 54601

RE: Mississippi River Pool 5 Dredged Material Management Plan

Dear Mr. Kurt Rasmussen,

Thank you for your review comments provided in a letter dated 18 October, 2019 regarding the Mississippi River Pool 5 Dredged Material Management Plan. Below are the our responses to your comments. Your letter along with the Corps’ responses will be added to the Agency and Public Comments with Responses - Appendix H for the record and updates when applicable added to the final report.

**General Comments.**
Concur with the comment concerning possible development of the Rolling Prairie site for wetland mitigation opportunities. We will consider mitigation opportunities within the site for future wetland banking. After we acquire the site, we will begin planning the site’s development in detail.

Also concur with the comment that the agencies are interested in pursuing habitat restoration opportunities using dredged material and the assertion to the contrary in the report in inaccurate. The report was updated to reflect the following;

The potential to improve habitat in Pool 5 by the use of dredged material is always being considered; however, this is a partial solution to managing dredged material within the project area and a more comprehensive long term solution is needed. Currently, dredged material is available at numerous beneficial use facilities up and down the river if there is an immediate need to use material to build and improve habitat. In cooperation with agency partners, Wisconsin and Minnesota Departments of Natural Resources as well as the USFWS Refuge offices, the use of dredged material to rebuild and improve habitat within the Pool 5 project area could be a possibility in the future. Funding from the Upper Mississippi River Habitat Rehabilitation and Enhancement Program (HREP) or via a cost share agreement through the Corps’ Continuing Authorities Program (CAP) for feasibility planning and construction are funding options to use material for habitat restoration if cooperating agencies agree to such a project.
The use of Dairyland Power Cooperative (DPC) property below LD 4 at Alma, WI was not an oversight but was considered for placement of dredged material. During discussions, DPC determined that the site would not be suitable for Mississippi River dredged material due to contaminant testing requirements.

Section 2.5.1 – Water Quality.
Concur with the statement that Pool 5 is a 303d-listed impaired water in Wisconsin. The report has been updated.

Section 2.5.1 – Hydrology
Concur with the comment on the importance of delta formation in Pool 5 from tributaries but no action taken on the report.

Section 2.5.2 – Mussels.
Concur with the comment that zebra mussels have been increasing since 1991 is dated. Report has been updated to reflect more current conditions.

Section 4.1.2.
Concur with comment. The correct appendix for the Climate Change Assessment is Appendix D. Updates to the main report were made.

Section 4.1.3.
Concur with comment. An updated Climate Change Assessment has been prepared (Appendix D) and includes data from 1981-2018. Section 4.1.3. in the main body of the report has been updated to reflect more recent data and conclusions from the updated Climate Change Assessment and the assessment added as the new Appendix D. Climate change effects on specific hydrologic conditions and internal mobilization from within Pool 4 and Pool 5 and from the Zumbro River are included in the larger context of the Upper Mississippi-Black-Root River Basin (Hydrologic Unit Code “HUC” 0704) which contains the project area at Mississippi River Pool 5.

Section 4.3.3 – Constraints
Concur with the comment, report has been updated.

Section 5.1.
Concur with the definition of Emergency Dredging in the report as not a finalized agreed upon statement. The report was changed to reflect the existing definition of Emergency Dredging as defined in the CMMP.

Section 5.3.
Concur with the comment. The section in the report has been updated to reflect the agencies interest in using dredged material for habitat restoration.

Section 6.1.
The scope of this study is for the acquisition of the Rolling Prairie site and placement of dredged material placement and not necessarily channel restoration of tributaries or modification of the
Zumbro River flood control levee to improve flood conveyance. A land management plan for the site will be prepared and coordinated with the partner agencies.

We do concur with the inconsistency of 815 vs 830 acres available for placement of dredged material. The total available acreage available is 830. The report was updated.

**Table 6.**
Concur with comment that impacts to recreational use from the closing of the West Newton Chute boat landing will have minor adverse effects. Updates to the report were made.

**Section 7.2.1.**
The scope of this study is for the acquisition of the Rolling Prairie site and placement of dredged material placement and not necessarily channel restoration of tributaries or modification of the Zumbro River flood control levee to improve flood conveyance. The Rolling Prairie site was referred to the Corps by the MNDNR for acquisition under federal ownership and used as a dredged material placement site and managed long term for natural resources and public use. A land management plan for the site will be conducted by the Corps for the long term management of the site and will be coordinated with our partner resource agencies of which restoration actions can be considered.

**8.3 – Coordination**
Concur, will take into account more time allowed for agency partners to provide comments prior to public review.

**Appendix B – Sediment Containment**
Concur on changing title to “Sediment Contaminant Datasheet”. Updated accordingly.

**Appendix E - Wetland Delineation 2018**
Concur on changing title to “Wetland Assessment 2018”. Updated accordingly.

Again, thank you for reviewing and providing comments to the Mississippi River Pool 5 Dredged Material Management Plan. For additional clarification or questions please feel free to contact Dan Kelner at Daniel.e.kelner@usace.army.mil or via phone at 651-290-5277.

Robert Edstrom
Robert K. Edstrom
Project Manager
PM-B, St. Paul District
REPLY TO THE ATTENTION OF:

Dan Kelner
CEMVP-PD-C
U.S. Army Corps of Engineers, St. Paul District
180 Fifth Street East, Suite 700
St. Paul, Minnesota 55101

Re: Feasibility Report and Integrated Environmental Assessment for Pool 5 Dredged Material Management Plan, Upper Mississippi River, Wabasha and Winona Counties, Minnesota and Buffalo County, Wisconsin

Dear Mr. Kelner:

The U.S. Environmental Protection Agency has reviewed the Environmental Assessment (EA) for the project referenced above. Our comments are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality’s NEPA Implementing Regulations (40 CFR 1500-1508), and Section 309 of the Clean Air Act. The U.S Army Corps of Engineers (USACE) is the lead agency under NEPA.

The EA assesses the long-term management of material dredged from the Upper Mississippi River, between river miles 752.8 and 738.1, to facilitate operation and maintenance of a navigation channel. The proposed plan includes using the existing West Newton Chute Site as a transfer location prior to hauling material to the new Rolling Prairie Site. Three island sites used in the past for temporary placement would also be retained. The scope of this EA is limited to the selection of placement sites for dredged material and does not address dredging activities. The EA is tiered off the June 6, 1997 Final Environmental Impact Statement for the 9-Foot Navigation Channel Project. We appreciate information provided in the EA on sediment contamination as well as beneficial reuse of dredged material.

Please see EPA’s enclosed recommendations related to air quality, noise, transportation, wetlands, and species. We appreciate the opportunity to comment. If you would like to discuss our recommendations, please contact Jen Tyler, the lead reviewer for this project, at 312-886-6394 or tyler.jennifer@epa.gov.

Sincerely,

Kenneth A. Westlake
Deputy Director
Office of Tribal and Multi-Media Programs

Enclosures: (1) EPA’s Detailed Comments, (2) Construction Emission Control Checklist
Local Operational Impacts
The EA explains that use of the new Rolling Prairie Site would require trucking material 1.5 to 2.5 miles from the West Newton Chute Site via County Road 84. During trucking operations, 200 or more additional heavy truck round trips per day could occur on County Road 84. Such activities would likely occur once every 5 to 10 years. The EA states that hauling would likely not occur more than 180 days per year (page 56). Smaller scale hauling could occur annually (page 43). Trucks would travel past 3 rural residences along County Road 84 (page 54). While the number of people impacted would likely be small, EPA recommends fully assessing and seeking to minimize impacts.

Recommendations for the Final EA:
- Provide the number of daily truck trips associated with annual activities in order to clarify the magnitude of impacts.
- Assess impacts on the three residences along the proposed truck route from heavy truck operations and routine annual operations. Estimate changes in noise levels, air pollution, and traffic safety from the proposed project.
- Discuss outreach efforts to ensure nearby residents are aware of the proposed project and to gain local input to inform project decision-making.
- Identify measures to minimize air emissions during construction. Consider encouraging construction teams to use applicable practices in the enclosed Construction Emission Control Checklist.
- Consider best practices to minimize local operational impacts on residents during periods of heavy truck traffic. Examples could include: (1) noise curfews for truck hauling and machinery operations, (2) promoting use of trucks with the cleanest engine technologies and/or filters, and (3) notifying residents well in advance of the start to periods of heavy truck traffic. In addition, depending on the proximity of individual residences to the roadway and existing vegetation, new vegetation barriers may also be a way to help offset air and noise impacts.¹

Wetlands
The EA states that the proposed project would have no effect on wetlands (page 53). The Rolling Prairie Site is a multi-parcel mixed agriculture and upland placement site located on a sandy terrace of the Mississippi River valley. Of the available 990 acres, USACE proposes to use 830 acres for permanent placement of dredged material to avoid filling wetlands (page 41). The EA states that if, in the future, the USACE deems it necessary to fill wetlands, then USACE would follow all mitigation sequencing (i.e. avoid, minimize, and then mitigate) and prepare a Section 404(b)(1) evaluation before filling wetlands (page 43 and 51). The EA explains, "if over the course of the project it is determined that the impacts of placing dredged material differ from

¹ EPA's Recommendations for Constructing Roadside Vegetation Barriers to Improve Near-Road Air Quality is available at:
https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=NRMRL&dirEntryId=321772&simpleSearch=1&searchAll=Recommendations+for+constructing+roadside+vegetation+barriers+to+improve+near+road+air+quality
what is described here, those affects will be reevaluated and additional environmental
compliance documentation will be prepared and coordinated as required” (page 51).

**Recommendations for the Final EA:**
- Describe anticipated indirect impacts to wetlands from the proposed project as well as
  measures to avoid and minimize such impacts. Consider requiring buffers around
  wetlands to avoid fill migrating via wind or rain into wetlands.
- Describe how the USACE would determine if impacts of placing dredged material
differ from what was described in the EA and need to be reevaluated, as described on
  page 51 of the EA. If a monitoring strategy would be employed, included details in
  the EA stating who would monitor wetlands and how often.

**Species**
The EA explains that the effects of channel dredging were evaluated in the 1997 Final
Environmental Impact Statement (EIS) for the 9-Foot Navigation Channel Project, and there are
no new circumstances or information related to the environmental effects of channel dredging
since the EIS (page 52).

**Recommendations for the Final EA:**
- Consider whether or not the analysis of state and federally-listed threatened and
  endangered species in 1997 EIS remains valid. Consider changes in species listed as
  threatened and endangered as well as the health and prevalence of listed species.
Mobile and Stationary Source Diesel Controls
Purchase or solicit bids that require the use of vehicles that are equipped with zero-emission technologies or the most advanced emission control systems available. Commit to the best available emissions control technologies for project equipment in order to meet the following standards.

- **On-Highway Vehicles**: On-highway vehicles should meet, or exceed, the EPA exhaust emissions standards for model year 2010 and newer heavy-duty, on-highway compression-ignition engines (e.g., long-haul trucks, refuse haulers, shuttle buses, etc.).
- **Non-road Vehicles and Equipment**: Non-road vehicles and equipment should meet, or exceed, the EPA Tier 4 exhaust emissions standards for heavy-duty, non-road compression-ignition engines (e.g., construction equipment, non-road trucks, etc.).
- **Locomotives**: Locomotives servicing infrastructure sites should meet, or exceed, the U.S. EPA Tier 4 exhaust emissions standards for line-haul and switch locomotive engines where possible.
- **Marine Vessels**: Marine vessels hauling materials for infrastructure projects should meet, or exceed, the latest U.S. EPA exhaust emissions standards for marine compression-ignition engines (e.g., Tier 4 for Category 1 & 2 vessels, and Tier 3 for Category 3 vessels).
- **Low Emission Equipment Exemptions**: The equipment specifications outlined above should be met unless: 1) a piece of specialized equipment is not available for purchase or lease within the United States; or 2) the relevant project contractor has been awarded funds to retrofit existing equipment, or purchase/lease new equipment, but the funds are not yet available.

Consider requiring the following best practices through the construction contracting or oversight process:

- Establish and enforce a clear anti-idling policy for the construction site.
- Use onsite renewable electricity generation and/or grid-based electricity rather than diesel-powered generators or other equipment.
- Use electric starting aids such as block heaters with older vehicles to warm the engine.
- Regularly maintain diesel engines to keep exhaust emissions low. Follow the manufacturer’s recommended maintenance schedule and procedures. Smoke color can signal the need for maintenance (e.g., blue/black smoke indicates that an engine requires servicing or tuning).
- Retrofit engines with an exhaust filtration device to capture diesel particulate matter before it enters the construction site.
- Repower older vehicles and/or equipment with diesel- or alternatively-fueled engines certified to meet newer, more stringent emissions standards (e.g., plug-in hybrid-electric

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2 http://www.epa.gov/otaq/standards/heavy-duty/hdci-exhaust.htm
3 http://www.epa.gov/otaq/standards/nonroad/nonroadci.htm
4 http://www.epa.gov/otaq/standards/nonroad/locomotives.htm
5 http://www.epa.gov/otaq/standards/nonroad/marineci.htm
vehicles, battery-electric vehicles, fuel cell electric vehicles, advanced technology locomotives, etc.).

- Retire older vehicles, given the significant contribution of vehicle emissions to the poor air quality conditions. Implement programs to encourage the voluntary removal from use and the marketplace of pre-2010 model year on-highway vehicles (e.g., scrappage rebates) and replace them with newer vehicles that meet or exceed the latest EPA exhaust emissions standards.

**Fugitive Dust Source Controls**

- Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative, where appropriate. This applies to both inactive and active sites, during workdays, weekends, holidays, and windy conditions.
- Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions.
- When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph.

**Occupational Health**

- Reduce exposure through work practices and training, such as maintaining filtration devices and training diesel-equipment operators to perform routine inspections.
- Position the exhaust pipe so that diesel fumes are directed away from the operator and nearby workers, reducing the fume concentration to which personnel are exposed.
- Use enclosed, climate-controlled cabs pressurized and equipped with high-efficiency particulate air (HEPA) filters to reduce the operators’ exposure to diesel fumes. Pressurization ensures that air moves from inside to outside. HEPA filters ensure that any incoming air is filtered first.
- Use respirators, which are only an interim measure to control exposure to diesel emissions. In most cases, an N95 respirator is adequate. Workers must be trained and fit-tested before they wear respirators. Depending on the type of work being conducted, and if oil is present, concentrations of particulates present will determine the efficiency and type of mask and respirator. Personnel familiar with the selection, care, and use of respirators must perform the fit testing. Respirators must bear a NIOSH approval number.
5 November 2019

Mr. Kenneth A. Westlake  
Deputy Director  
Environmental Protection Agency – Region 5  
Office of Tribal and Multi-Media Programs  
77 West Jackson Boulevard  
Chicago, IL 60604-3590

RE: Mississippi River Pool 5 Dredged Material Management Plan

Dear Mr. Kenneth A. Westlake,

Thank you for your review comments provided in a letter dated 17 October, 2019 regarding the Mississippi River Pool 5 Dredged Material Management Plan. Below are our responses to your comments. Your letter along with the Corps’ responses will be added to the Agency and Public Comments with Responses - Appendix H for the record and updates when applicable added to the final report.

**Local Operational Impacts.**

Concur with the comments pertaining to identifying operational impacts. However, the EA identifies trucking impacts as it relates to noise, air pollution, and traffic safety to the local area adequately as stated in Section 7.1 Socioeconomics Effects.

A public meeting was held 26 September 2019 in Kellogg, MN to describe the project and address questions from the local public. Press releases and the public notice announcing the availability of the Environmental Assessment and public meeting describing the project and seeking input have been made available.

Trucking of material and operation times will be dependent upon local traffic ordinances. Best management practices for emissions and noise are required in contracting specifications for the work to be conducted.

Best Management Practices include;

Air Resources
Equipment operation, activities, or processes performed by the Contractor shall be in accordance with all Federal and State air emission and performance laws and standards.
Sound Intrusions
The Contractor shall keep construction activities under surveillance and control to minimize environment damage by noise. The Contractor shall comply with State rules. The location of any booster pumps used shall not be within 500 feet of any residential areas. Noise levels shall not exceed the levels as specified in the Safety Manual ME 385-1-1. In addition, booster pumps shall be housed and soundproofed to limit noise to a maximum of 70 decibels at a distance of 50 feet from the pumps.

Wetlands.
Concur with comments pertaining to wetland impacts. However, indirect impacts to wetlands are not anticipated as dredged material will be placed on upland sites with best management construction practices in place to include appropriate buffers and silt fences. The Corps will determine if future impacts from placing dredge material at the Rolling Prairie site differs from what was identified in the existing EA. Wetlands will be delineated by the Corps prior to placement of dredged material and a long term land management plan will be developed for the site identifying wetland restoration and banking opportunities of which monitoring of wetlands will be integral.

Species.
Concur with ensuring current state and federally listed species are used in assessing environmental effects. Albeit the 1997 EIS was prepared 20+ years ago and there have been some species reclassifications, there have not been substantial changes to the Corps’ channel dredging operations since 1997 that are relevant to this assessment. In addition, there are no significant new circumstances or information related to the environmental effects of channel dredging. This study’s environmental assessment is tiered off of the 1997 EIS for the 9-Foot Navigation Project. Up to date species lists for the project area have been obtained from the Minnesota DNR’s Natural Heritage Database (2019) and from the 2019 USFWS (Information for Planning and Consultation (IPaC) database.

Again, thank you for reviewing and providing comments to the Mississippi River Pool 5 Dredged Material Management Plan. For additional clarification or questions please feel free to contact Dan Kelner at Daniel.e.kelner@usace.army.mil or via phone at 651-290-5277.

Robert Edstrom
Robert K. Edstrom
Project Manager
PM-B, St. Paul District