



SCOPING DOCUMENT WABASHA BARGE FACILITY

Wabasha County

Barge facility on the Mississippi River to facilitate dredged material storage and transportation of agricultural products and shipping containers.

DRAFT June 2022

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Prepared for: Wabasha Port Authority

WABASHA BARGE FACILITY SCOPING DOCUMENT

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List of Acronyms and Abbreviations

AADT	Average Annual Daily Traffic
BMP	Best Management Practices
BWSR	Minnesota Board of Water and Soil Resources
CWA	Clean Water Act
DWSMA	Drinking Water Supply Management Area
EAW	Environmental Assessment Worksheet
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
EQB	Environmental Quality Board
FEMA	Federal Emergency Management Agency
LGU	Local Government Unit
MARAD	Maritime Administration
MDH	Minnesota Department of Health
MGS	Minnesota Geologic Survey
MnDNR	Minnesota Department of Natural Resources
MN	State of Minnesota
MnDOT	Minnesota Department of Transportation
MPCA	Minnesota Pollution Control Agency
MPCA WIMN	Minnesota Pollution Control Agencies What's in My Neighborhood website
NHIS	Natural Heritage Information System
NLCD	National Land Cover Database
NPDES	National Pollutant Discharge Elimination System
NRCS	National Resource Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetland Inventory
PWI	Public Waters Inventory
RGU	Responsible Governmental Unit
SHPO	State Historic Preservation Office
SSURGO	Soil Survey Geographic Database
SWPPP	Storm Water Pollution Prevention Plan
TH	Trunk Highway
TMDL	Total Maximum Daily Load
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
WCA	Wetland Conservation Act
WIDNR	Wisconsin Department of Natural Resources

Scoping EAW Document

This EAW form is being used to identify issues or potential concerns for the Wabasha Barge Facility Environmental Impact Statement (EIS). Comments submitted to the Responsible Government Unit (RGU) during the 30-day public comment period will be reviewed and addressed in the Draft and Final EIS.

1 Project Title

Wabasha Barge Facility

2 Proposer

Organization: Wabasha Port Authority
Contact person: Caroline Gregerson
Title: City Administrator
Address: 900 Hiawatha Drive E
City, State, ZIP: Wabasha, MN 55981
Phone: 651-565-4568
Email: cityadmin@wabasha.org

3 RGU

Organization: Same as Proposer
Contact person:
Title:
Address:
City, State, ZIP:
Phone:
Email:

4 Reason for EAW Preparation

Required:	Discretionary:
<input checked="" type="checkbox"/> EIS Scoping	<input type="checkbox"/> Citizen petition
4410.4400 Subp. 17, Barge Fleeting Facility	<input type="checkbox"/> RGU discretion
<input type="checkbox"/> Mandatory EAW	<input type="checkbox"/> Proposer initiated

5 Project Location

County Wabasha County
City/Township Wabasha

County	Wabasha County		
PLS Location (¼, ¼, Section, Township, Range):	Section	Township	Range
Sect-30 Twp-111 Range-010 13.60 AC EX HWY ESMT, OUT LOTS 4 & 5	30	111N	010W
Sect-30 Twp-111 Range-010 13.15 AC EX SWLY 12.85 AC, OUT LOT 6	30	111N	010W
Watershed (82 major watershed scale):			
GPS Coordinates (UTM): 44.3913760, -92.0536705			
Tax Parcel Number: R27.00004.00 and R27.00005.03			

See [Appendix A](#) for a series of figures depicting the project location and existing/proposed site conditions.

6 Project Description

a. EQB Monitor Description

Provide the brief project summary to be published in the EQB Monitor, (approximately 50 words).

This Scoping Document addresses a proposed barge facility in Wabasha, MN that will serve to transport sand from Mississippi River navigation channel dredging operations from the river to offsite locations for beneficial re-use. The project area encompasses 54.0 acres and will include infrastructure construction, including access channel dredging, a sheet pile dock wall, barge mooring and maneuvering facilities, conveyors and hoppers for material management, temporary storage area for transported dredge material, sewer and water utilities, internal access road, a weighing station, and a small operations structure (see [Appendix A](#) for a series of location maps and existing/proposed site condition maps). Facility operations will involve the transfer of sand from river barges to trucks for transport to off-site facilities for use as reclamation material for existing sand and gravel mines or other potential beneficial reuse.

b. Complete Description

Give a complete description of the proposed project and related new construction, including infrastructure needs. If the project is an expansion include a description of the existing facility. Emphasize: 1) construction, operation methods and features that will cause physical manipulation of the environment or will produce wastes, 2) modifications to existing equipment or industrial processes, 3) significant demolition, removal or remodeling of existing structures, and 4) timing and duration of construction activities.

Project Description (Including Context/Need)

The City of Wabasha, in cooperation with the Wabasha Port Authority, is proposing to construct a barge terminal on the Mississippi River in Wabasha, MN (UMR Mile 760). The site will be used to facilitate the transfer of approximately 270,000 CY of sand that is annually dredged from the Mississippi River within a roughly 6-mile reach of the river centered on Wabasha. This material is dredged by the US Army Corps of Engineers (USACE) to maintain a 9-foot navigable channel along this stretch of the

Mississippi River. The Wabasha barge terminal site will facilitate the transfer of sand from river barges to trucks for transport to off-site facilities for use as reclamation material for existing sand and gravel mines or other potential beneficial reuse.

Upon environmental clearance and acquisition of all required permits, the work elements to be completed as part of the project include:

- Dredging the existing access channel on the Mississippi River to the proposed dock area
- Dredging an area to accommodate barge maneuvering and docking
- The dredged material will be used as fill material on the barge terminal site to raise the storage area above the 100-year flood elevation
- Construct the barge terminal pad and access road
- Construct a sheet pile dock face and upstream/downstream steel pipe pile clusters for barge mooring and maneuvering system
- Construct footings for conveyors and hoppers for material handling and loadout
- Install a loading truck scale and construct a scale house/field office building
- Install sewer and water utilities for field office building
- Install electrical utilities for the site

Timing and Duration of Construction Activities

Detailed construction plans have not been completed. Site design documents are anticipated to be completed in Fall/Winter 2022. The proposed letting date for construction is Summer 2023. Construction is proposed to be complete with site operations commencing in Spring 2024.

Proposed Treatment of Topic in EIS

The EIS will include a complete project description.

c. Project Magnitude

Table 1: Project Magnitude

Total Project Acreage	54.0 acres
Linear project length	NA
Aggregate mining acreage	NA
Number and type of residential units	NA
Commercial building area (square feet)	NA
Industrial building area (square feet)	<1,000 sq/ft (scale house)
Institutional building area (square feet)	NA
Other uses – specify (acres)	3,200 sq/ft dock area 3.35 ac. aggregate surface (storage pad and access roads)
Structure height(s)	<20'

d. Project Purpose

Explain the project purpose; if the project will be carried out by a governmental unit, explain the need for the project and identify its beneficiaries.

The proposed barge terminal site is planned to facilitate the transfer of dredged material from the river to land as an alternative to previously proposed transfer facility locations that would have been in close proximity to and would have routed relatively high volumes of truck traffic through, residential neighborhoods in the City of Wabasha. The proposed Wabasha barge terminal is a cost-effective strategy to allow dredged material to be moved from the river to land while minimizing impacts to residential neighborhoods in the community.

Proposed Treatment of Topic in EIS

The EIS will include a complete project purpose and need statement.

e. Future Development

Are future phases of this development including development on any other property planned or likely to happen?

☐ Yes ☒ No

If yes, briefly describe future phases, relationship to present project, timeline and plans for environmental review.

f. Previous Development

Is this project a subsequent stage of an earlier project? ☐ Yes ☒ No

If yes, briefly describe the past development, timeline and any past environmental review. N/A

7 Cover Types

Estimate the acreage of the site with each of the following cover types before and after development:

The conceptual site plan, including project construction and disturbance limits, was used to define the area footprint in **Table 2** below.

Table 2: Cover Types

	Before*	After*		Before*	After*
Wetlands	16.1	15.7	Lawn/landscaping	0	0
Deep water/streams	12.5	12.5	Impervious surface	4.5**	7.8**
Wooded/forest	9.0	6.3	Stormwater Pond/Ditch	0	0.6
Brush/Grassland	7.5	6.6	Other (barge docking area)		0.1
Cropland	4.4	4.4			
			TOTAL	54.0	54.0

*Existing and proposed cover type acreage estimates are based on the National Land Cover Database (NLCD), aerial photo interpretation, wetland delineations, and the conceptual site layout. Acreages are estimates and subject to change based on further site planning and project development.

** The existing gravel driveway, which is classified as “Developed” in the NLCD, was considered an impervious surface. The proposed condition assumed the aggregate surfaces associated shown on the proposed site plan along with the remaining portions of the existing gravel driveway are consider impervious for the “After” condition.

Proposed Treatment of Topic in EIS

The EIS will provide analysis of cover type impacts within respective sections of the EIS. For example, changes in the acres of cropland or forested areas on the site will be discussed in the Farmland section and Vegetation section, respectively. Cover types that do not exist within the study area, and will not result from the proposed project, will not be discussed in the EIS (e.g., urban/suburban land). The proposed barge terminal facility site plan will be utilized to determine areas for cover type conversions, areas that may remain unaltered, stormwater treatment sites, and potential impervious surfaces.

8 Permits & Approvals Required

List all known local, state and federal permits, approvals, certifications and financial assistance for the project. Include modifications of any existing permits, governmental review of plans and all direct and indirect forms of public financial assistance including bond guarantees, Tax Increment Financing and infrastructure. All these final decisions are prohibited until all appropriate environmental review has been completed. See Minnesota Rules, Chapter 4410.3100.

Permits and Approvals

All known permits at state, federal, and local levels necessitated by the project are listed in **Table 3**, below. Public financial assistance is anticipated from the State of Minnesota through its PDAP and from the federal Department of Transportation Maritime Administration (MARAD) PIDP grant.

Table 3. Required Permits & Approvals

Government Agency	Type of Application/Permit	Status
Federal Agencies		
U.S. Army Corps of Engineers	Clean Water Act (CWA) Notification	To be updated*
	Section 10 Rivers & Harbors Appropriation Act	To be updated*
State Agencies		
Minnesota Department of Natural Resources	Public Waters Work Permit	To be updated*
Minnesota Board of Water and Soil Resources (BWSR)	Minnesota Wetland Conservation Act (WCA) Notification	To be updated*
Minnesota Pollution Control Agency (MPCA)	National Pollutant Discharge Elimination System (NPDES) Construction General Storm Water Permit	To be updated
Local Agencies		
City of Wabasha	Stormwater Permit	To be updated*
	Conditional Use Permit	To be updated*

*To be updated: permit requirement is anticipated and will be applied for prior to project or specific phase commencing.

Proposed Treatment of Topic in EIS

The EIS will include a list of all potential agency approvals and permits potentially required for the project.

9 Land Use

a. Existing Land Use

Description

Existing land use of the site as well as areas adjacent to and near the site, including parks, trails, prime or unique farmlands.

Located on the northwestern outskirts of the City of Wabasha, the City's 2016-2035 Comprehensive Plan lists the 54.0-acre project site's existing land use as Vacant. The project site is primarily comprised of vacant woodland and appears to have been used for the dumping or storage of scrap metal, construction material, and various vehicle parts.

According to historic aerial imagery—which is available for limited years from 1939 to the present—gravel mining occurred on the project site, beginning in earnest in 1949 and continuing into the early 1970s. By 2010, gravel mining had ended, and trees have reclaimed the filled gravel pits.

As shown on **Appendix A, Figure 3, "Existing Conditions,"** the project site is bounded by the Mississippi River to the north and agricultural land to the east and west. 5th Grant Boulevard West (Wabasha County Road 59), which borders the project site to the south, provides connection to downtown Wabasha and Highway 61.

Additional agricultural land is located south of the project site, across 5th Grant Boulevard West. Some of the agricultural lots adjacent to the project site contain houses, however the nearest lots to the project site that are primarily of residential use are located approximately 0.25 miles southeast of the project site.

The Riverview Cemetery is located beyond the agricultural land west of the project site, approximately 250 feet from the proposed project. An active freight railroad line operated by Canadian Pacific Railway is approximately 300 feet southwest of the project site. A small rail yard is located approximately 400 feet southeast of the project site. The Gunderson St. Elizabeth's Hospital is located approximately 0.40 miles southeast of the project site.

As shown on **Appendix A, Figure 10, "Outdoor Recreation,"** there are no identified parks, trails, or recreational resources located within the project site. The closest outdoor recreational resources are the State of Wisconsin's Nelson-Trevino Bottoms State Natural Area, located across the Mississippi River approximately 0.25 miles northeast of the project site, and the City of Wabasha's Beach Park, located approximately 0.60 miles southeast of the project site.

In July 2020, Bolton & Menk, Inc., conducted a wetland delineation that identified 16.1 acres of Type 1 Seasonally Flooded Wetlands located within the northernmost portions of the project site.

A Phase I Environmental Site Assessment was completed in January 2020 and determined that there is no potential risk for contamination due to recognized environmental conditions, current land uses, and previous land uses on the project site.

Local Plans

Describe planned land use as identified in comprehensive plan (if available) and any other applicable plan for land use, water, or resources management by a local, regional, state, or federal agency.

The current Wabasha Comprehensive Plan (2016-2035), last amended July 6, 2021, lists the future land use of the project site as “Industrial.” Furthermore, Section 7.0 (Economic Development & Historic Preservation) discusses Wabasha’s unique location and opportunity for development of a commercial river port facility that would be used in the ongoing efforts by the Corps of Engineers in maintaining the 9-foot navigable river channel.

Zoning

Zoning, including special districts or overlays such as shoreland, floodplain, wild and scenic rivers, critical area, agricultural preserves, etc.

The two parcels that comprise the project site are both zoned R-1, “Low-Density Residential.” R-1 zoning districts are intended to allow for the use and development of residential structures, yards, and directly related complimentary uses at a lower density than traditionally developed in the originally platted cities. The parcels bordering the project site to the east and west are also zoned R-1. The parcels located across 5th Grant Boulevard West, south of the project site, are zoned I, “Industrial.”

The project site is also located in a S1 Shoreland Overlay Zone. Shoreland Overlay Zoning Ordinances typically contain a variety of provisions that guide land development and activity in shorelands with the goal of protecting surface water quality, near-shore habitat, and shoreland aesthetics. S1 Shoreland Overlay Zones are intended to provide standards for shoreland areas within the city that are primarily undeveloped.

The project site is located within FEMA 100-Year Floodplain. The project site is not located within a Drinking Water Management Supply Area (DWSMA)—however, the lots directly south of the project site, across 5th Grant Boulevard West, are located within a DWSMA.

b. Project Compatibility

Discuss the project’s compatibility with nearby land uses, zoning, and plans listed in Item 9a above, concentrating on implications for environmental effects.

As discussed in Item 9a, the proposed project is compatible with the nearby industrial land uses and zoning and is aligned with the industrial development goals outlined in the City of Wabasha’s 2016-2035 Comprehensive Plan.

c. Project Incompatibility

Identify measures incorporated into the proposed project to mitigate any potential incompatibility as discussed in Item 9b above.

No incompatibility issues exist for the project, as discussed in Item 9a.

Proposed Treatment of Topic in EIS

The EIS will verify and summarize the existing land uses identified within the Wabasha Barge Terminal study area. The EIS will also address existing land uses adjacent to the site within a half-mile buffer area of the site. This half-mile buffer will serve as a guideline to evaluate land use compatibility and identifying environmental impacts within an area of potential impact resulting from the proposed barge terminal operations. No additional analysis is planned for the EIS regarding the description of land uses within the project area. A series of mitigation strategies will be explored to avoid and minimize impacts from the proposed operations on land uses within the area of impact.

10 Geology, Soils, & Topography/Landforms

a. Geology

Describe the geology underlying the project area and identify and map any susceptible geologic features such as sinkholes, shallow limestone formations, unconfined/shallow aquifers, or karst conditions. Discuss any limitations of these features for the project and any effects the project could have on these features. Identify any project designs or mitigation measures to address effects to geologic features.

Bedrock Geology

According to the Geologic Atlas of Wabasha County, C-14, Plate 2, bedrock geology beneath the project site consists of the Eau Claire Formation which consists of sandstone, siltstone, and shale interbedded in thin to medium beds. The sandstone is very fine grained to fine grained. The sandstone and siltstone are light to yellowish gray, variably glauconitic, and commonly contain gray to black brachiopod shell fragments. The shale is greenish gray. Unit coarsens upward, with siltstone and shale replaced in abundance by sandstone. Uppermost 10–20 feet is mostly very fine grained sandstone and minor amounts of siltstone. The unit is 125–150 feet thick. A tongue in the uppermost part of the Eau Claire Formation crops out near Wabasha.¹

Surficial Geology

The Geologic Atlas of Wabasha County, C-14, Plate 3, shows the surficial geology consists of floodplain alluvium, West Campus Formation, and Grey Cloud terrace. Floodplain alluvium is mainly fine sand and silt on floodplains; includes sand and gravel that infills modern river channels. Some depressions have been filled with thick silty to clayey sediment. Includes minor lakeshore sediment along Lake Pepin. Contacts with other map units are commonly scarps. The West Campus formation is comprised of Sand

¹ Mossler, John H. 2001. C-14 Geologic Atlas of Wabasha County, Minnesota. Plate 2-Bedrock Geology. Retrieved from University of Minnesota Digital Conservancy. Available at: <https://conservancy.umn.edu/handle/11299/58557>.

and gravelly sand; coarsens to cobbly gravel in places. The sediment is largely reworked from the Mississippi valley train; deposited during early, high stages of the Mississippi River and preserved in terraces above the modern floodplain. The West Campus formation is mapped at three major terrace levels in Wabasha County. The Grey Cloud terrace is 40–50 feet (12–15 m) above Lake Pepin and the present floodplain level. The terrace elevation is 700–710 feet (214–216 m) in Lake City and Wabasha. Most contacts with other map units are scarps.²

The pollution sensitivity of near surface materials has a high rating across the majority of the project site. The sensitivity to pollution of near-surface materials is an estimate of the time it takes for water to infiltrate the land surface to a depth of 10 feet. Generally, areas of course-grained material have a higher sensitivity to pollution compared to areas of fine-grained material, except where special conditions (karst, bedrock at or near the surface, mining, and peatlands) occur. No special conditions are mapped within the project site.³

While Wabasha County is located in a karst region, the project area consists of non-karsted bedrock, with Cambrian sandstones and shales as the uppermost bedrock layers. Karsted bedrock can be found in close proximity to the project area, both south and west.⁴

Aquifers

Minnesota is divided into six groundwater provinces based on bedrock and glacial geology. The aquifers within these provinces occur in two general geologic settings: bedrock, and unconsolidated sediments deposited by glaciers, streams, and lakes. The project site is located in the East-Central Province. The East-Central Province has surficial and buried sand and gravel aquifers that are common. The East-Central Province's aquifers are underlain by thick and extensive sandstone and carbonate (Paleozoic) and (Precambrian) sandstone aquifers.⁵

Geologic conditions and groundwater information can be seen in **Appendix A, Figure 6, “Geologic Conditions/Groundwater.”**

Proposed Treatment of Topic in EIS

The EIS will include an evaluation of the geologic conditions at the Wabasha Barge study area, including an assessment of potential impacts to bedrock geology, surficial geology and underlying aquifers. The EIS will also include a detailed floodplain assessment.

² Hobbs, Howard C. 2001. C-14 Geologic Atlas of Wabasha County, Minnesota. Plate 3-Surficial Geology. Retrieved from University of Minnesota Digital Conservancy. <https://conservancy.umn.edu/handle/11299/58557>.

³ Adams, Roberta. 2016. Pollution sensitivity of near-surface materials: St. Paul, Minnesota Department of Natural Resources, Minnesota Hydrogeology Atlas Series HG-02, report and plate. Available at: https://www.dnr.state.mn.us/waters/programs/gw_section/mapping/platesum/mha_ps-ns.html.

⁴ Tipping, R., Green, J., & Alexander, E. 2001. C-14 Geological Atlas of Wabasha County, Minnesota. Plate 5 – Karst Features. <https://conservancy.umn.edu/bitstream/handle/11299/58557/plate5%5b1%5d.pdf?sequence=5&isAllowed=y>

⁵ MNDNR. 2021. Groundwater Provinces of Minnesota. Available at: https://files.dnr.state.mn.us/waters/groundwater_section/provinces/2021-provinces.pdf

b. Soils & Topography

Describe the soils on the site, giving NRCS (SCS) classifications and descriptions, including limitations of soils. Describe topography, any special site conditions relating to erosion potential, soil stability or other soils limitations, such as steep slopes, highly permeable soils. Provide estimated volume and acreage of soil excavation and/or grading. Discuss impacts from project activities (distinguish between construction and operational activities) related to soils and topography. Identify measures during and after project construction to address soil limitations including stabilization, soil corrections or other measures. Erosion/sedimentation control related to stormwater runoff should be addressed in response to Item 11.b.ii.

United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Soil Maps were reviewed within and around the proposed project footprint. A soils map of the proposed site can be seen in **Appendix A, Figure 5, “Soils.”**

The predominant soil types and soil component names within the proposed development area are listed in the table below. Additional information regarding the soil hydrologic classification provides insights regarding potential runoff and erosion control measures that may be needed during construction.

Table 4: Soil Types within the Project Area⁶

Map Unit Symbol	Map Unit Key	Component Name	Soils Label	Hydric Rating	Estimated Percentage of Study Area
N646A	1946882	Ceresco	N646A, Ceresco	No	18.8
N648A	1946885	Kalmarville	N648A, Kalmarville	Yes	13.9
MdA	2216395	Meridian	MdA, Meridian	No	2.4
DmA	2216322	Mt. Carroll	DmA, Mt. Carroll	No	3.8
ThA	2216437	Tell	ThA, Tell	No	1.9
Ts	2216441	Terrace escarpments, sandy	Terrace escarpments, sandy	No	3.9
GP	2216134	Udipsamments	GP, Udipsamments	No	49.7
W	2216215	Water	W, Water		5.6

Soils in Wabasha County are generally characterized in the soil survey as silty loam developed on alluvium and sedimentary bedrock. The river terrace and floodplain alluvium is composed of sand and gravel and is about 180 feet thick. This body of sand and gravel is underlain by lower permeability sedimentary bedrock.⁷

The Soil Survey Geographic Database (SSURGO) lists almost half of the project area soil as gravel pit and udipsamments. The udipsamments complex has a 0-25 percent slope, is excessively drained, and has sandy and gravelly outwash parent material. The next largest soil types within the project area are Ceresco and Kalmarville, respectively, which are somewhat poorly drained and poorly drained. The majority of the project area has minimal slopes, except for the portion listed as Ts – terrace escarpments, sandy. This soil type is listed as having steep slopes, with a slope range of 15-60 percent.

⁶ Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Soil Survey Geographic (SSURGO) Database. Available online at <https://sdmdataaccess.sc.egov.usda.gov>.

⁷ City of Wabasha. 2018. Hydrogeologic Assessment of the Drinking Water Source and Wells for the City of Wabasha, Part I.

The NRCS classifies soils into hydrologic soil groups, A – D:

- Group A – Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands.
- Group B – Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture.
- Group C – Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture.
- Group D – Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays with high swelling potential, soils with a permanent high-water table, soils with a claypan or clay layer at or near the surface, and shallow soils over nearly impervious material.
- Group “/D” – Soils with a high-water table, but if drained conform to the first letter listed before “/D” (for example, A/D, B/D).

See *Item 11.b.ii.* for a discussion of erosion/sedimentation control measures related to stormwater runoff.

Project activities during the construction phase that will impact soils include the dredging of river bottom sediment to create a navigable passage and construction of roads, weighing station, small operations structure, and barge fleeting area. Dredged sediment will be brought to an upland area of the site.

Operational activities of the proposed project will not further impact the soils and topography of the site beyond the temporary placement of transported goods on the site prior to being hauled off-site.

Topography/Land Forms

Elevations on the site range between 668 to 708 feet above mean sea level.⁸ Two-foot contour mapping shows the lowest elevations along the Mississippi River, with a steep bluff along the edge of the floodplain. A USGS topographic map of the proposed site can be seen in **Appendix A, Figure 2.**

Proposed Treatment of Topic in EIS

The EIS will include a discussion of site geology, soils, and topography, as well as a more complete assessment of potential impacts of the site layout and operations of the barge terminal facilities.

⁸ Elevations taken from MnTOPO. <http://arcgis.dnr.state.mn.us/maps/mntopo/>.

11 Water Resources

a. Surface Water & Groundwater Features

Describe surface water and groundwater features on or near the site.

Surface Water

Describe lakes, streams, wetlands, intermittent channels, and county/judicial ditches. Include any special designations such as public waters, trout stream/lake, wildlife lakes, migratory waterfowl feeding/resting lake, and outstanding resource value water. Include water quality impairments or special designations listed on the current MPCA 303d Impaired Waters List that are within 1 mile of the project. Include DNR Public Waters Inventory number(s), if any.

Public Waters – One Mile Search Area

The project site is within the Buffalo-Whitewater watershed (HUC8: 07040003).

Table 5. Impaired and Public Waters Within One Mile of Wabasha Barge Facility

AUID	Name	Impaired Use**	Additional Impairments	Distance to Project Area
07-0400-03-627	Mississippi River - U.S. Lock & Dam #4 Pool	-	Mercury in fish tissue PCB in fish tissue	adjacent
NA	Brewery Creek	NA	NA	~0.25 mile

Appendix A, Figure 7 “Surface Waters” illustrates the surface waters within close proximity of the study area.

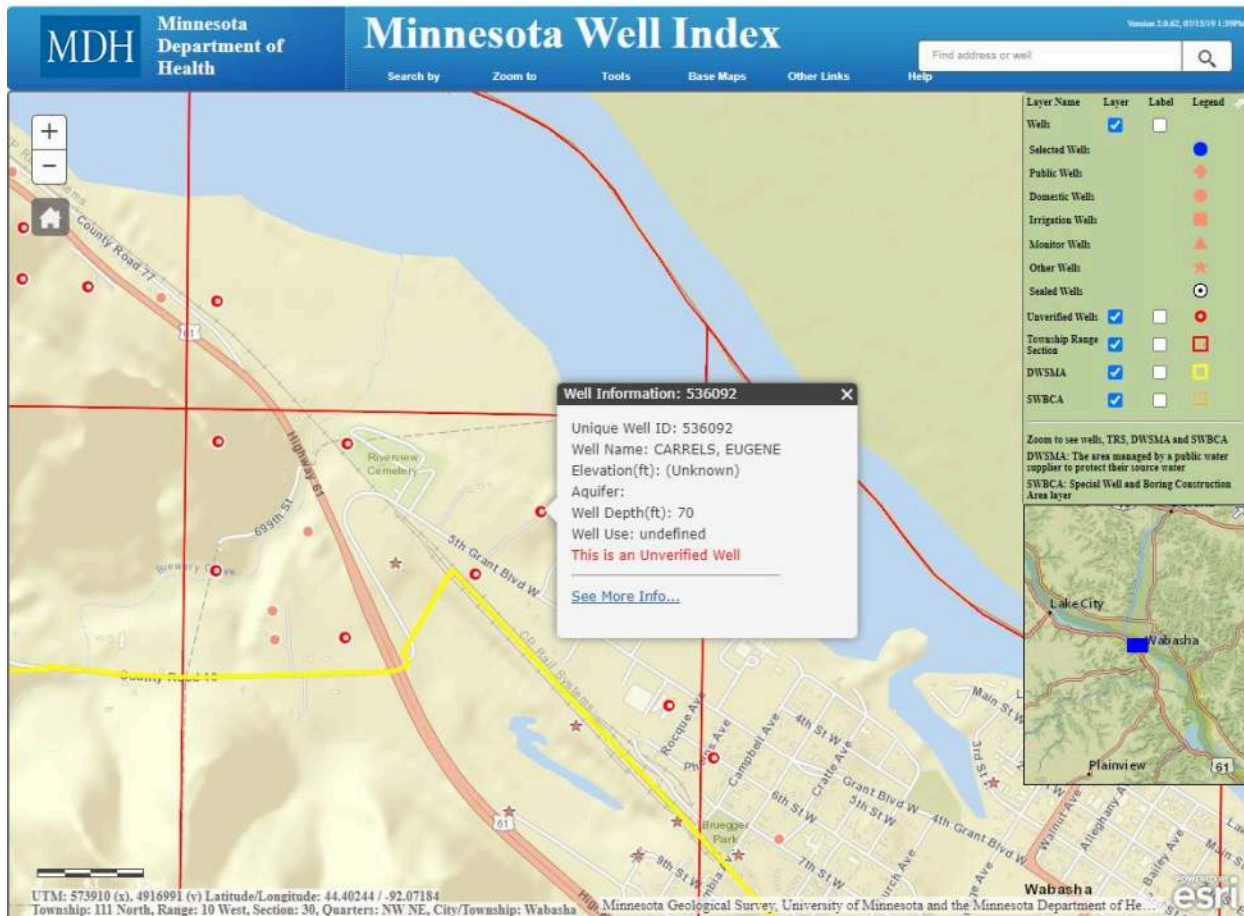
Wetlands

Wetland delineations were completed in June 2020. The field investigation was performed to evaluate and verify the existence and boundary of any aquatic resources located within the project area. The field investigation found four wetland basins within the study area. In addition to the field investigation, an off-site hydrology assessment was performed to identify locations within agricultural field that may possess wetland signatures. Eight years of aerial imagery was reviewed, only one site was identified and reviewed. According to the off-site hydrology decision matrix, the site was not considered wetland.

Ground Water

Describe aquifers, springs, seeps. Include: 1) depth to groundwater; 2) if project is within a MDH wellhead protection area; 3) identification of any onsite and/or nearby wells, including unique numbers and well logs if available. If there are no wells known on site or nearby, explain the methodology used to determine this.

Groundwater data for the project area was obtained from the MNDNR. The site is located within the East-Central (1) Minnesota Groundwater Province and within the Quaternary water-table and buried unconfined aquifer. No springs are currently identified onsite by the MNDNR Spring Inventory. Depth to groundwater within the site is generally 0-20 ft⁹. The project site is not within an existing DWSMA or a wellhead protection area (see [Appendix A, Figure 6, “Geologic Conditions/Groundwater”](#)) but there are DWSMA and Wellhead protection areas located nearby. There is an existing unverified well onsite, Well ID: 536092 (see *Minnesota Well Index* image below).



b. Project Effects & Mitigations

Describe effects from project activities on water resources and measures to minimize or mitigate the effects in Item b.i. through Item b.iv. below.

Any wells encountered on site will be sealed in accordance with Minnesota Department of Health’s (MDH) requirements.

⁹ Peterson, Todd A. 2005. C-14 Geologic Atlas of Wabasha County, Minnesota. Part B, Plate 8 – Hydrogeology of the Unconsolidated and Bedrock Aquifers. Retrieved from MNDNR.
https://www.dnr.state.mn.us/waters/programs/gw_section/mapping/platesum/wabacga.html.

i. Wastewater

For each of the following, describe the sources, quantities and composition of all sanitary, municipal/domestic and industrial wastewater produced or treated at the site.

If the wastewater discharge is to a publicly owned treatment facility, identify any pretreatment measures and the ability of the facility to handle the added water and waste loadings, including any effects on, or required expansion of, municipal wastewater infrastructure.

Sanitary (domestic) wastewater generated by employees at the barge terminal facility will be collected and conveyed to the City of Wabasha wastewater treatment facility (WWTF) where it will be treated. No pretreatment measures are necessary for domestic wastewater and the City's WWTF has adequate capacity to handle the minor amount of additional flow from the proposed facility.

If the wastewater discharge is to a subsurface sewage treatment system (SSTS), describe the system used, the design flow, and suitability of site conditions for such a system.

N/A

If the wastewater discharge is to surface water, identify the wastewater treatment methods and identify discharge points and proposed effluent limitations to mitigate impacts. Discuss any effects to surface or groundwater from wastewater discharges.

N/A

ii. Stormwater

Describe the quantity and quality of stormwater runoff at the site prior to and post construction. Include the routes and receiving water bodies for runoff from the site (major downstream water bodies as well as the immediate receiving waters). Discuss any environmental effects from stormwater discharges. Describe stormwater pollution prevention plans including temporary and permanent runoff controls and potential BMP site locations to manage or treat stormwater runoff. Identify specific erosion control, sedimentation control or stabilization measures to address soil limitations during and after project construction.

Stormwater Quantity

The project site and surrounding surface waters are not located within a defined watershed district or watershed management organization area. The project is located within the Buffalo-Whitewater watershed (HUC 07040003), which is part of the larger Mississippi River Watershed.

Stormwater runoff flows within the project limits north towards the Mississippi River. Ditches will be constructed around the perimeter of the active operations area to collect, store, and treat runoff prior to discharging to the Mississippi River. Areas not part of the facility operations will remain in natural habitat. Runoff from these areas should have no change from current water quantity and quality conditions, thereby causing negligible impact to receiving waters.

Stormwater Quality

During construction, the contractor will follow stormwater and erosion control best management practices as dictated by the MPCA NPDES Permit. The EPA-approved impairments for the Mississippi

River are considered non-construction related and do not require any additional best management practices or plan review for compliance with the NPDES construction stormwater permit.

The project is not located within a defined Watershed District or watershed management area, therefore NPDES guidelines for permanent stormwater treatment will be followed. The project will generate more than one acre of new impervious surfaces. Per the NPDES construction stormwater permit, a water quality volume equal to one-inch time the net increase of impervious surfaces needs to be treated by permanent stormwater treatment systems constructed as a part of the project.

iii. Water Appropriation

Describe if the project proposes to appropriate surface or groundwater (including dewatering). Describe the source, quantity, duration, use and purpose of the water use and if a DNR water appropriation permit is required. Describe any well abandonment. If connecting to an existing municipal water supply, identify the wells to be used as a water source and any effects on, or required expansion of, municipal water infrastructure. Discuss environmental effects from water appropriation, including an assessment of the water resources available for appropriation. Identify any measures to avoid, minimize, or mitigate environmental effects from the water appropriation.

A DNR water appropriations permit is not anticipated for operations of the proposed barge terminal facility. An extension of City watermain to serve the facility and a water service connection to the watermain system will be constructed as a part of the project.

iv. Surface Waters

Describe any anticipated physical effects or alterations to wetland features such as draining, filling, permanent inundation, dredging and vegetative removal. Discuss direct and indirect environmental effects from physical modification of wetlands, including the anticipated effects that any proposed wetland alterations may have to the host watershed. Identify measures to avoid (e.g., available alternatives that were considered), minimize, or mitigate environmental effects to wetlands. Discuss whether any required compensatory wetland mitigation for unavoidable wetland impacts will occur in the same minor or major watershed and identify those probable locations.

Wetlands

Figure 8, located in Appendix A, “Wetlands”, illustrates the NWI areas and approved delineated wetland boundaries within and surrounding the project area. On June 18 and 25, of 2020, a field investigation was performed to evaluate and verify the existence and boundary of any aquatic resources located within the Wabasha Barge Terminal project area. The field investigation found a total of four wetlands within the study area. In addition to the field investigation, an off-site hydrology assessment was performed to identify locations within agricultural field that may possess wetland signatures. Eight years of aerial imagery was reviewed, only one site was identified and reviewed. According to the off-site hydrology decision matrix, the site was not considered wetland.

Permitting and Sequencing Information

Impacts to the delineated wetlands are proposed as part of the proposed barge facility. Approximately 0.4 acres of impacts will occur and are considered to be permanent. These impacts result from fill being placed in the area adjacent to the barge/dock and off-loading area, which contains the material hauler, hopper, scale, and conveyor system. These impacts will be permitted.

Impact Avoidance

Early in the planning process, several scenarios to avoid wetland impacts were identified. A no-build alternative would not impact wetlands but would not address the need for this facility.

Other site plans alternatives included additional impacts as a result of the access road and placement of other ancillary uses (e.g., scale house and kiosk system). Due to these additional impacts, the preferred site plan was redesigned to avoid wetland impacts to the extent practicable.

Minimization

Minimization will be achieved by limiting disturbance limits within wetlands to the greatest extent allowable and ensuring appropriate erosion control measures are in place to prevent sedimentation of non-impacted wetlands and any receiving waters. Impacts were further minimized by avoiding impacts to the approximately 14 acre wetland found on the western portion of the project area.

Mitigation

The proposed project will impact a total of up to 0.4 acres of wetland within Bank Service Area (BSA) 7 and the Mississippi River Watershed. It is anticipated mitigation for these impacts at a minimum of a 2:1 ratio (i.e., 0.8 acres of wetland replacement for every acre of wetland impact) through a purchase of wetland credits within BSA 7. All mitigation efforts will be completed in accordance with local, state and federal regulations. The proposer will work closely with agency staff to identify requirements and ensure all potential concerns are addressed. Permits and all required plans will be submitted for review to appropriate state and federal agencies prior to proposed wetland impacts.

Other Surface Waters

Describe any anticipated physical effects or alterations to surface water features (lakes, streams, ponds, intermittent channels, county/judicial ditches) such as draining, filling, permanent inundation, dredging, diking, stream diversion, impoundment, aquatic plant removal and riparian alteration. Discuss direct and indirect environmental effects from physical modification of water features. Identify measures to avoid, minimize, or mitigate environmental effects to surface water features, including in-water Best Management Practices that are proposed to avoid or minimize turbidity/sedimentation while physically altering the water features. Discuss how the project will change the number or type of watercraft on any water body, including current and projected watercraft usage.

Proposed Treatment of Topic in EIS

The EIS will include a discussion and further assessment of both surface and groundwater resources. An impact analysis of the proposed site layout will include an assessment of floodplain impacts and a discussion of existing jurisdictional wetlands on the site, avoidance alternatives, minimization measures considered, wetland impacts and proposed mitigation. Impacts of the barge terminal facility on the water table, and impacts associated with other surface waters (e.g., dredging in Mississippi River) will also be conducted and discussed in the EIS.

12 Contamination/Hazardous Materials/Wastes

a. Pre-project Site Conditions

Describe existing contamination or potential environmental hazards on or in close proximity to the project site such as soil or ground water contamination, abandoned dumps, closed landfills, existing or abandoned storage tanks, and hazardous liquid or gas pipelines. Discuss any potential environmental effects from pre-project site conditions that would be caused or exacerbated by project construction and operation. Identify measures to avoid, minimize or mitigate adverse effects from existing contamination or potential environmental hazards. Include development of a Contingency Plan or Response Action Plan.

According to the MPCA’s “What’s in My Neighborhood” interactive mapping database, there are six existing potential environmental hazards within ½-mile of the project area. Table 6 and **Figure 11, located in Appendix A, “Potentially Contaminated Sites”** identifies those uses within a half-mile radius from the proposed site.

Table 6: MPCA “What’s In My Neighborhood” Sites within 1/2-mile

Site Number	Site Name	Distance of Proposed Site
No Number Available	J & S Storage	0.4 miles
SP 079-070-010	No Information Available	0.3 miles
No Number Available	Wabasha 2019 New Storage Building	0.3 miles
No Number Available	KP RUS Cardinal Health	0.35 miles
No Number Available	Timm Lawn Care	0.45 miles
No Number Available	Gunderson St. Elizabeth Medical Center	0.35 miles

A Phase I Environmental Site Assessment was completed in January 2020 and determined that there is no potential risk for contamination due to recognized environmental conditions and previous land uses on the project site. The potential for impacts to the proposed site are considered as a low potential for encountering contaminated materials during project operations. Any potentially contaminated materials encountered during construction and operations will be handled and treated in accordance with applicable federal, state and local regulations. A Phase II Environmental Site Assessment was not recommended for the project site.

b. Project Related Generation/Storage of Solid Wastes

Describe solid wastes generated/stored during construction and/or operation of the project. Indicate method of disposal. Discuss potential environmental effects from solid waste handling, storage and disposal. Identify measures to avoid, minimize or mitigate adverse effects from the generation/storage of solid waste including source reduction and recycling.

Debris from clearing land prior to operating the Wabasha Barge Facility will be disposed of in compliance with local and state regulations.

No solid wastes will be generated or stored at the site during construction and/or operations of the facility.

c. Project Related Use/Storage of Hazardous Materials

Describe chemicals/hazardous materials used/stored during construction and/or operation of the project including method of storage. Indicate the number, location and size of any above or below ground tanks to store petroleum or other materials. Discuss potential environmental effects from accidental spill or release of hazardous materials. Identify measures to avoid, minimize or mitigate adverse effects from the use/storage of chemicals/hazardous materials including source reduction and recycling. Include development of a spill prevention plan.

The site operator's equipment will require fuel (diesel and/or gasoline) and oils (lubricating and hydraulic). If it is determined that these products will be stored onsite, a Spill Prevention and Response Plan will be prepared to address accidental spills or the release of any hazardous material or petroleum products. The plan would be required to include the following measures to avoid and/or minimize spills:

- Fueling and equipment maintenance would not be allowed within 100 feet of the river's edge without deploying spill capture methods.
- The site operator shall maintain fuel spill containment kits and trained spill response personnel on the site at all times.
- Any spill or release of a hazardous material or petroleum products would be reported to the site supervisor who would take immediate action to minimize the potential for groundwater or surface water pollution.
- In the event of a spill or release of a hazardous material or a petroleum product, the project site supervisor would immediately deploy on-site supplies and equipment to contain the spill and contact the DNR, MPCA and the Minnesota Duty Officer, according to emergency procedures identified in Minnesota Rules, 7045.0574.
- Temporary, above ground, on-site fuel storage would not be allowed within the 100-year floodplain.
- Below ground storage tanks would not be allowed.

d. Project Related Generation/Storage of Hazardous Wastes

Describe hazardous wastes generated/stored during construction and/or operation of the project. Indicate method of disposal. Discuss potential environmental effects from hazardous waste handling, storage, and

disposal. Identify measures to avoid, minimize or mitigate adverse effects from the generation/storage of hazardous waste including source reduction and recycling.

Please see Items 12b and 12c.

Proposed Treatment of Topic in EIS

The EIS will verify and summarize known contaminated/hazardous sites in the study area. The EIS will evaluate the extent of hazardous materials being used and/or stored onsite and will include a discussion of mitigation measures that may be employed to address potential impacts should remedial action be necessary.

13 Fish, Wildlife, Plant Communities, & Sensitive Ecological Resources (Rare Features)

a. Resources/Habitats/Vegetation

Describe fish and wildlife resources as well as habitats and vegetation on or near the site.

The proposed project area is located at (URM Mile 760) within the Lower Pool 4 of the Mississippi River. This stretch of the river, which is 44 miles long, extends from Lock and Dam 3 at Red Wing, MN to Lock and Dam 4 at Alma, WI, and includes Lake Pepin. Pool 4 features a wide variety of aquatic habitats including fast flowing main channels, variable width and depth side channels, and backwater areas. In 2007, the Upper Mississippi River Restoration Program conducted a long-term fish collection effort from Pool 4. Over 15,342 fish were sampled, representing 59 species and two hybrids. Commonly sampled sport fish included walleye, sauger, yellow perch, white bass, bluegill, black crappie, smallmouth bass, largemouth bass, northern pike, channel catfish, and freshwater drum.¹⁰

Lower Pool 4 of the Mississippi River also hosts large assemblages of aquatic invertebrates and mussels. Invertebrate diversity can be attributed to the variety of habitats found in the area. Specialized invertebrates that rely on running water can be found in a range of water velocities near the project area. Several mussel surveys have been completed within Lower Pool 4, many of which were associated with channel maintenance and dredging activities. In 2002, 2015, and 2021, the Corps of Engineers completed mussel skimmer dredge transects along the stretch of the river located immediately adjacent to the Barge Terminal Facility. According to the Corps mussel survey data, only two live mussels of two common species (Threehorn Wartyback and Threeridge) were found in 2002. No live mussels were found in this stretch of the Mississippi River during the 2015 or 2021 surveys.

The Wisconsin Department of Natural Resources (WDNR) conducted a survey of unionid mussels throughout the Upper Mississippi River. Findings concluded that 115 specimens were collected in the

¹⁰ https://www.umesc.usgs.gov/reports_publications/ltrmp/fish/2007/pool_4/summary_p4.html

Lower Pool 4, of which 15 species were documented, the most abundant being Threeridge, Pigtoe, and Pimpleback¹¹.

In addition to the construction of dock and barge facilities within and along the river, access roads, stock piling facilities, and a terminal pad are proposed at the site. Much of the terrestrial portion of the project area has been substantially disturbed by historic mining activities. Site observations indicate that reclamation of the site never took place and remains largely disturbed, to this day large stockpiles, abandoned equipment, and debris litter the upland portion of the site. A large portion of the site, northwest area, is a seasonally flooded wetland, and is dominated by silver maple, black willow, and green ash. These seasonally flooded backwaters provide habitat for a variety of species including racoon, muskrat, beaver, mink, river otter, white -tailed deer, reptile species, amphibian species, and numerous waterfowl/migratory bird species.

b. Rare Features

Describe rare features such as state-listed (endangered, threatened or special concern) species, native plant communities, Minnesota County Biological Survey Sites of Biodiversity Significance, and other sensitive ecological resources on or within proximity to the site. Provide the license agreement number (LA-1069) and/or correspondence number (ERDB XXXX) from which the data were obtained and attach the Natural Heritage letter from the DNR. Indicate if any additional habitat or species survey work has been conducted within the site and describe the results.

A query of the Natural Heritage Information System (NHIS) database was completed to assess the potential presence of state-listed threatened, endangered, and species of special concern within a one-mile radius of the project area. The review identified several occurrences of invertebrate animals, vascular plants, and vertebrate animals, including the following:

State Listed Species

- Black Sandshell Mussel (*Ligumia recta*) – Special Concern
- Butterfly Mussel (*Ellipsaria lineolate*) – Threatened
- Monkeyface Mussel (*Theliderma metanevra*) – Threatened
- Mucket Mussel (*Actinonaias ligamentina*) – Threatened
- Purple Wartyback Mussel (*Cyclonaias tuberculata*) – Endangered
- Round Pigtoe Mussel (*Pleurobema sintoxia*) – Special Concern
- Sheepnose Mussel (*Plethobasus cyphus*) – Endangered
- Spectaclecase Mussel (*Cumberlandia mondonta*) – Endangered
- Spike Mussel (*Euryna dilatata*) – Threatened
- Wartyback Mussel (*Quadrula nodulata*) – Threatened
- Cattail Sedge (*Carex typhina*) – Special Concern
- Gray's Sedge (*Carex grayi*) – Special Concern
- Green Dragon (*Arisaema dracontium*) – Special Concern
- Muskingum Sedge (*Carex muskingumensis*) – Special Concern

¹¹ Thiel, P. A. (1981). *A Survey of Unionid Mussels in the Upper Mississippi River (Pools 3 through 11)*. Madison: Wisconsin Department of Natural Resources .

- American Eel (*Anguilla rostrata*) – Special Concern
- Blue Sucker (*Cycleptus elongatus*) – Special Concern
- Mississippi Silvery Minnow (*Hybognathus nuchalis*) – Special Concern
- Paddlefish (*Polyodon spathula*) – Threatened
- Peregrine Falcon (*Falco peregrinus*) – Special Concern
- Pirate Perch (*Aphredoderus sayanus*) – Special Concern
- Timber Rattlesnake (*Crotalus horridus*) - Threatened

In addition to the NHIS query, a regulatory review for federally-listed species surrounding the project area was conducted using the U.S. Fish and Wildlife Service’s (USFWS) Information for Planning and Consultation (IPaC) tool. The following species and migratory birds were identified during the review:

USFWS - Federally Listed Species

- Northern Long-eared Bat (*Myotis septentrionalis*) – Threatened
- Higgins Eye Mussel (*Lampsilis higginsii*) - Endangered
- Spectaclecase Mussel (*Cumberlandia monodonta*) - Endangered

Migratory Birds

- Bald Eagle (*Haliaeetus leucocephalus*) - Protected
- Black-billed Cuckoo (*Coccyzus erythrophthalmus*)
- Golden Eagle (*Aquila chrysaetos*) - Protected
- Lesser Yellowlegs (*Tringa flaviper*)
- Red-headed Woodpecker (*Melanerpes erythrocephalus*)
- Rusty Blackbird (*Euphagus carolinus*)
- Short-billed Dowitcher (*Limnodromus griseus*)

c. Project Effects

Discuss how the identified fish, wildlife, plant communities, rare features and ecosystems may be affected by the project. Include a discussion on introduction and spread of invasive species from the project construction and operation. Separately discuss effects to known threatened and endangered species.

The project is expected to impact existing habitat areas on site and within the Mississippi River. Based on the information provided by the Corps of Engineers, live mussel species in the area appear to be limited based on the 2015 and 2021 surveys.

Any existing mussel species may experience direct mortality and short-term impacts because of the proposed project (dredging activities). Ongoing coordination with Corps of Engineers and MnDNR staff will determine if further mussel surveys are needed as part of the EIS. Other rare feature impact assessments will further describe details of potential direct impacts (e.g., vegetation loss and direct mortality) and indirect impacts (e.g., noise, dust) on rare species. As needed, mitigation measures will be proposed in the Draft EIS.

Transportation of construction equipment and materials associated with the project site carries the risk of spreading invasive plant species. Preventing the spread of invasive species during construction and

operation of the barge terminal facility will occur as part of BMPs measures that will be put in place to control and appropriately manage vegetation and any invasive species. Disturbed areas on the site will primarily be replaced with gravel surfaces (access road, loading and stockpile areas). Reseeding and landscaping materials will predominantly be native seed mixes and free of invasive plants or plant parts.

d. Control Measures

Identify measures that will be taken to avoid, minimize, or mitigate adverse effects to fish, wildlife, plant communities, and sensitive ecological resources.

While no substantial impacts are anticipated, the project site plan may be modified to reduce potential impacts identified during the EIS process. Minimizing areas of disturbance, including natural vegetation and tree removals, will be limited to the extent possible.

Erosion control BMPs will be used on newly exposed soils. These may include the use of wildlife friendly natural fiber, erosion control blankets, silt fencing, synthetic fiber-free hydro-mulch, and rock checks; specifications for BMPs and allowed materials would be included in construction contracts and specifications. Exposed areas of sediment would be stabilized as soon as possible and seeded with an approved seed mix to establish vegetative cover. Invasive plant species would be monitored and managed to ensure success of native species establishment.

Additional coordination with MnDNR will occur in order to determine the potential for impacts and/or takings of state-protected mussel species in the Mississippi River dredge areas. If impacts are identified, a qualified surveyor would conduct a mussel survey and or/relocation in any potential mussel habitat prior to disturbance within these habitats. No work in the riverbed would occur until potential impacts to mussels have been resolved. In addition, if mussels are found, they would be relocated to an area of the river that is not impacted by the construction and activities associated with the barge terminal facility.

Proposed Treatment of Topic in EIS

The EIS will address impacts of the project on state and/or federal threatened and endangered species, rare plant communities and other sensitive ecological resources. The EIS will use species range and distribution maps, scientific literature, and site survey information to determine whether these resources are present in the Wabasha Barge Terminal Facility study area, and if present, the extent of and potential impact to the resource.

14 Historic Properties

Describe any historic structures, archeological sites, and/or traditional cultural properties on or in close proximity to the site. Include: 1) historic designations, 2) known artifact areas, and 3) architectural features. Attach letter received from the State Historic Preservation Office (SHPO). Discuss any anticipated effects to historic properties during project construction and operation. Identify measures that will be taken to avoid, minimize, or mitigate adverse effects to historic properties.

A Phase 1A Archaeological Literature Review has been completed for the study area. The Phase 1A reviewed existing literature, historic imagery, and historic maps available through July 2021. The findings of the report include a recommendation for a Phase I archaeological reconnaissance survey for areas of the site with the potential to contain intact Holocene spoils, namely in areas not previously disturbed from the mining operation that previously occupied the site.

Early notification information was submitted to the State Historic Preservation Office (SHPO) in July 2021 and a response was received on September 20, 2021, recommending a Phase 1 archaeological survey be completed (SHPO No. 2021-2509) for areas identified in the Phase 1A literature review.

Proposed Treatment of Topic in EIS

A review of the site layout and recommended limits of the Phase 1 survey will be conducted during the development of the Draft EIS. If the site plan encroaches on previously undisturbed areas, the EIS will include the results of the Phase 1 survey and any additional findings and recommendations.

15 Visual

Describe any scenic views or vistas on or near the project site. Describe any project related visual effects such as vapor plumes or glare from intense lights. Discuss the potential visual effects from the project. Identify any measures to avoid, minimize, or mitigate visual effects.

The existing visual aesthetic of the project site is primarily woodlands with an assortment of left behind construction equipment and materials (scrap metal and various vehicle parts) that were abandoned following the mining operation that previously occupied this site.

The northern and northwestern portions of the project site contain wetlands and provide views of the Mississippi River. The eastern, western, and southern borders of the project site provide views of the surrounding agricultural land and the forested hillside located west of US Highway 61.

The proposed project would alter the existing visual aesthetic of the project site with the introduction of trucks, barges, other industrial equipment, storage facilities, and the temporary introduction of construction vehicles and equipment. This altered visual aesthetic would be visible from neighboring parcels, roadways, the Mississippi River, and from the surrounding hillside.

Proposed Treatment of Topic in EIS

The EIS will evaluate and summarize the extent of visual impacts associated with the proposed project on adjacent land uses and lines of sight. Mitigation measures will address site design and landscaping measures to reduce visual impacts over the course of the project's lifespan.

16 Air

a. Stationary Source Emissions

Describe the type, sources, quantities and compositions of any emissions from stationary sources such as boilers or exhaust stacks. Include any hazardous air pollutants, criteria pollutants, and any greenhouse gases. Discuss effects to air quality including any sensitive receptors, human health or applicable regulatory criteria. Include a discussion of any methods used assess the project's effect on air quality and the results of that assessment. Identify pollution control equipment and other measures that will be taken to avoid, minimize, or mitigate adverse effects from stationary source emissions.

Construction and facility operations have the potential to create air emissions, particularly fugitive dust sources, as described in Item 16c below. Stationary processing equipment and associated activities will be primarily located along the northern boundary of the site and will be in conjunction with the barge/dock unloading area. The initiation of site activities will result in a slight increase of emissions from dredge material transport equipment/operations (dredge material haulers/hoppers, and conveyors and vehicle hauling, but is not anticipated to be excessive or at level of concern.

Site owners will assess the air emissions relative to proposed operations and apply for an MPCA Air Emissions Permit, if needed and as required by state regulations. Pending current or future requirements, this permit would regulate operating parameters and require routine performance tests, record keeping, and monitoring to ensure compliance with State and Federal ambient air standards.

b. Vehicle Emissions

Describe the effect of the project's traffic generation on air emissions. Discuss the project's vehicle-related emissions effect on air quality. Identify measures (e.g., traffic operational improvements, diesel idling minimization plan) that will be taken to minimize or mitigate vehicle-related emissions.

There are no vehicle-related emissions generated on the existing project site. The proposed project would include no more than ten parking spaces for employee and operator parking. The site would generate less than 500 daily trips, and the construction and operation of the site is not anticipated to adversely impact traffic conditions at intersections within or near the study area.

Construction-related vehicle emissions from the proposed project would be minor and temporary in nature, generated by the use of construction vehicles and equipment, as well as barges, during the construction of the barge terminal dock, storage pad, access road, dock/mooring piles, truck loading area, and scale house/field office building.

Vehicle-related emissions during the operation of the proposed project would be generated from trucks and barges used to transport dredged material to and from the project site, as well as from the personal vehicles of employees traveling to and from the project site.

All construction vehicles and equipment, trucks, and barges would meet MPCA and EPA emission standards. Construction-related emissions would meet the conformity requirements under Section 176 (c) of the Clean Air Act and 40 CFR 93.153.

c. Dust & Odors

Describe sources, characteristics, duration, quantities, and intensity of dust and odors generated during project construction and operation. (Fugitive dust may be discussed under item 16a). Discuss the effect of dust and odors in the vicinity of the project including nearby sensitive receptors and quality of life. Identify measures that will be taken to minimize or mitigate the effects of dust and odors.

As described in *Item 9* above, the project site is currently of vacant land use. There are no activities currently occurring on the project site that contribute existing dust- or odor-related effects.

The proposed project may generate minor dust-related impacts during construction and operation because of vehicles operating within the site along internal roads. Dust may also be generated from the offloading of materials, transportation, and processing operations. All dust-related impacts are anticipated to be minor and typical of an industrial facility located in a rural setting.

The proposed project is not anticipated to generate any nauseous odors during construction or operation.

Proposed Treatment of Topic in EIS

The EIS will review the proposed project's detailed construction plans to confirm the project's effect on air quality and anticipated vehicle-related emissions. As appropriate, mitigation measures will be utilized during the construction and operation of the proposed project.

The EIS will include an assessment and discussion of dust-related impacts based on the detailed construction plans and introduce mitigation measures, including a potential Wet Dust Suppression Plan, to be utilized during the construction or operation of the project. Odors will not be further addressed in the EIS.

17 Noise

Describe sources, characteristics, duration, quantities, and intensity of noise generated during project construction and operation. Discuss the effect of noise in the vicinity of the project including 1) existing noise levels/sources in the area, 2) nearby sensitive receptors, 3) conformance to state noise standards, and 4) quality of life. Identify measures that will be taken to minimize or mitigate the effects of noise.

a. Existing Noise

Existing sources of noise in the vicinity of the proposed project include vehicle traffic on 5th Grant Boulevard West (County Road 59), noise from farming located on parcels adjacent to the project site, and an active freight railroad line located approximately 300 feet south of the project site.

The project site is bounded by the Mississippi River to the north and active agricultural land to the south, east, and west. Some of the agricultural lots adjacent to the project site contain houses, however the nearest lots to the project site that are primarily of residential use are located approximately 0.25 miles southeast of the project site. Additional noise receptors in the vicinity of the proposed project include: the Riverview Cemetery, approximately 250 feet west of the project site; the Gunderson St.

Elizabeth Hospital, approximately 2,000 feet east of the project site; and a couple rural residents south of 5th Grant Blvd (County Road 59), approximately 1,600 and 1,750 feet south.

b. Operational Noise

Construction-related noise effects from the proposed project would be minor and temporary in nature, generated by the use of construction vehicles and equipment, as well as barges, during the construction of the barge terminal pad, access road, dock/mooring piles, barge staging winch system, loading truck scale, and scale house/field office building. See **Table 7, “Typical Construction Equipment Noise Levels at 50 Feet,”** for typical noise levels of construction equipment measured at 50 feet.

Table 7: Typical Construction Equipment Noise Levels at 50 Feet

Equipment	Manufacturers Sampled	Total Number of Models in Sample	Peak Noise Level (dBA*)	
			Range	Average
Backhoes	5	6	74-92	83
Front Loaders	5	30	75-96	85
Dozers	8	41	65-95	85
Graders	3	15	72-92	84
Scrapers	2	27	76-98	87
Pile Drivers	N/A	N/A	95-105	101

* Units of “A-weighted decibels”

Source: United States Environmental Protection Agency and Federal Highway Administration

Noise resulting from the proposed project’s operational activities would be generated by the loading and unloading of barges and trucks, from trucks and barges used to transport dredged material to and from the project site, as well as from the personal vehicles of employees traveling to and from the project site, and internal site operations equipment (e.g., material haulers: hoppers, conveyors, etc.).

The State of Minnesota rules (MN Statute 7030.0020) define daytime hours as 7am to 10pm, and nighttime hours as 10pm to 7am. All construction and operational activities associated with the proposed project would conform with the State of Minnesota noise standards listed in **Table 8, “Noise Standards (MN Statute 7030.0040).”**

Table 8: Noise Standards (MN Statute 7030.0040)

Noise Area Classification	Daytime		Nighttime	
	L ₅₀	L ₁₀	L ₅₀	L ₁₀
1 (Residential)	60	65	50	55
2 (Commercial)	65	70	65	70
3 (Industrial)	75	80	75	80

*L₁₀ is the sound level, expressed in dBA, which is exceeded 10% of the time for one hour

*L₅₀ is the sound level, expressed in dBA, which is exceeded 50% of the time for one hour

c. Traffic Noise

The proposed project would generate traffic-related noise from trucks hauling construction materials during the construction of the proposed project, trucks hauling dredged materials during the operation of the proposed project, and from employees using personal vehicles to travel to and from the project site. However, because the proposed project would include no more than ten parking spaces for employee and operator parking and would generate less than 250 vehicle trips during peak hour operations and less than 2,500 daily trips, traffic congestion and traffic-related noise are not anticipated to adversely affect surrounding areas or sensitive receptors.

Proposed Treatment of Topic in EIS

A detailed noise analysis will not be completed as part of the Draft EIS. However, the EIS will assess potential noise-related impacts of the proposed project and discuss any associated mitigation measures that could be utilized during the construction or operation of the project.

18 Transportation

a. Project-Related Traffic

Describe traffic-related aspects of project construction and operation. Include: 1) existing and proposed additional parking spaces, 2) estimated total average daily traffic generated, 3) estimated maximum peak hour traffic generated and time of occurrence, 4) indicate source of trip generation rates used in the estimates, and 5) availability of transit and/or other alternative transportation modes.

Existing and Proposed Parking Spaces

The project site does not presently include any parking spaces. It is anticipated the proposed project location will incorporate no more than ten parking spaces for employee and operator parking.

Existing Traffic

Transport roads to and from the proposed project location include Wabasha County Road 59 (Grant Blvd), State Trunk Highway (TH) 61, and County Road 10. Existing (2018) annual average daily traffic (AADT) for these roadways are as follows:

- 5th Grant Blvd (County Road 59): AADT ranges from 870 trips near the site entrance to 2,050 trips to the south near the Gundersen St. Elizabeth Hospital
- TH 61: this segment of state highway has approximately 4,850 daily trips
- County Road 10: near the intersection with TH 61 has 550 trips

The facility operations will cause traffic to increase in each direction on these roads, including an increase in heavy commercial truck traffic. Traffic will be generated by employees; haul trucks, and miscellaneous supply trucks/vehicles. A traffic study will be completed as part of the Draft EIS that will further analyze the impact of the proposed project on the local and regional transportation network.

b. Potential Congestion

Discuss the effect on traffic congestion on affected roads and describe any traffic improvements necessary. The analysis must discuss the project's impact on the regional transportation system. If the peak hour traffic generated exceeds 250 vehicles or the total daily trips exceeds 2,500, a traffic impact study must be prepared as part of the EAW. Use the format and procedures described in the Minnesota Department of Transportation's Access Management Manual, Chapter 5 (available at: <http://www.dot.state.mn.us/accessmanagement/resources.html>) or a similar local guidance,

A detailed traffic impact study has not been prepared as the proposed operations are not anticipated to exceed 250 vehicles during peak hour operations or exceed 2,500 trips per day during peak hauling operations. The number of daily trips, during summer operating peaks, is anticipated to be less than 500 per day. Winter hauling to/from the site is anticipated to be minimal as river barge operations would halt during winter months. A traffic analysis is planned to be completed as part of the Draft EIS, however due to the rural nature of the study area and proximity to 5th Grant Blvd (County Road 59) and Highway 61, traffic congestion on the local and regional transportation system is not anticipated to be a concern for the project as proposed.

Proposed Treatment of Topic in EIS

The EIS will include a discussion of the traffic analysis and results of the traffic study. Intersection and roadway operations and safety conditions will be addressed in the Draft EIS along with any identified mitigation measures (e.g., geometric improvements, cautionary signage, etc.) that may be needed.

Ongoing coordination with the Wabasha County Highway Department and MnDOT will occur through the preparation of the Draft and Final EIS.

19 Cumulative Potential Effects

a. Geographic Scales & Timeframes

Describe the geographic scales and timeframes of the project related environmental effects that could combine with other environmental effects resulting in cumulative potential effects.

It is currently estimated that the barge facility operations will operate for at least 20 years and continue to facilitate the transfer of dredged material from USACE channel maintenance activities on the Mississippi River within a stretch of the river near the City of Wabasha. Throughout the life of the site, it is expected that dredged material will be transported offsite for use as reclamation material for existing sand and gravel mines and other beneficial reuse, outside the geographic boundary of this cumulative potential effects analysis.

b. Future Projects

Describe any reasonably foreseeable future projects (for which a basis of expectation has been laid) that may interact with environmental effects of the proposed project within the geographic scales and timeframes identified above.

Cumulative potential effects may include private land use developments in portions of the city planned for future development and redevelopment. Transportation projects are likely to be planned and programmed for construction may involve safety, capacity, pavement preservation, and active transportation modes (ped/bike). These projects will be carried out by MnDOT, Wabasha County, or the city.

c. Discussion/Summary of Cumulative Potential Effects

Discuss the nature of the cumulative potential effects and summarize any other available information relevant to determining whether there is potential for significant environmental effects due to these cumulative effects.

Impacts may include changes in land cover type (e.g., increased impervious and vegetation/habitat loss), impacts to wetlands and other water resources, increases in traffic volumes and changes in demand for non-motorized transportation options. While not anticipated to involve significant social, economic, or environmental effects, all future projects would be subject to applicable local, state, and federal environmental reviews and permitting.

Proposed Treatment of Topic in EIS

The EIS will include a discussion of cumulative potential effects. Additional research and coordination with local and state agencies will occur to identify specific projects, including timing, magnitude and estimated impacts.

20 Other Potential Environmental Effects

If the project may cause any additional environmental effects not addressed by items 1 to 19, describe the effects here, discuss the how the environment will be affected, and identify measures that will be taken to minimize and mitigate these effects.

None

RGU CERTIFICATION

*The Environmental Quality Board will only accept **SIGNED** Environmental Assessment Worksheets for public notice in the EQB Monitor.*

I hereby certify that:

- The information contained in this document is accurate and complete to the best of my knowledge.
- The EAW describes the complete project; there are no other projects, stages or components other than those described in this document, which are related to the project as connected actions or phased actions, as defined at Minnesota Rules, parts 4410.0200, subparts 9c and 60, respectively.
- Copies of this EAW are being sent to the entire EQB distribution list.

Signature Caroline Gregerson

Date 6/7/2022

Title Caroline Gregerson



Appendix A: Figures

