



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, DETROIT DISTRICT
477 MICHIGAN AVENUE
DETROIT MI 48226-2550

SUBJECT: Coastal Zone Management Act Federal consistency Determination for Duluth Vessel Yard Repairs and Improvements, Duluth MN

Mr. Cliff Bentley
Federal Consistency Coordinator
Minnesota Lake Superior Coastal Program
Minnesota Department of Natural Resources
1568 Highway 2
Two Harbors, MN 55616

Dear Mr. Bentley:

The U.S. Army Corps of Engineers (USACE), Detroit District, will be conducting repair and improvement activities to the Duluth Vessel Yard facilities located at 901 Minnesota Ave., Duluth, Minnesota (Figure 1). Implementing the proposed activities will support current and future operational needs of the Duluth Area Office (DuAO) as well as help to preserve the Duluth Vessel Yard, which is listed on the National Register of Historic Places.

The Coastal Zone Management Act (CZMA; 16 U.S.C. § 1451 et seq.) requires Federal agency activities that have reasonably foreseeable effects on any coastal use or resource to be undertaken in a manner consistent to the maximum extent practicable with the enforceable policies of a coastal state's Federally approved Coastal Zone Management Program (CMP; 15 C.F.R. §903 et seq.). The following Federal Consistency Determination has been developed by the USACE for the Duluth Vessel Yard repair project on behalf of the USACE. The purpose of this letter is to provide the Federal Consistency Determination for Duluth Vessel Yard repairs.

The proposed Federal agency activity (project) will be contained within the approximately 4.25 acre USACE Duluth Vessel Yard facilities in the Duluth-Superior Harbor, along the eastern edge of the Superior Basin in the outer harbor. The proposed activities consist of:

- a. Building new mooring bit foundations and seawalls using steel sheet piling (SSP) for piers that will extend as much as three feet beyond the existing structure (where property boundaries, constructability, and operational activities allow);
- b. Installing new utility conduits (electrical and water lines) between the shore and mooring sites for vessels along the south pier;
- c. Backfilling areas within the newly constructed seawalls;

- d. Grading and placing an aggregate base for new parking areas and work yards (on site of the planned demolition of the Vessel Yard Master Residence) with the potential for also paving these areas;
- e. Capping the repaired piers: concrete will be removed and replaced to the limits currently in place on the north and south piers as well as the east headwall, and;
- f. Ancillary repairs such as light poles, fencing, and concrete curbing.

A survey of the Vessel Yard by a USACE geostructural engineer was conducted in August, 2019 and found both piers to be in poor condition and several areas where voids are present, or likely present, under the concrete apron capping the structures. Storm events have caused lateral movement of the North Pier and voids and sinkholes behind the face of the South Pier. Several of these sinkholes have required more than 10 yards of material to fill. These observations and conditions are cause for concern given the industrial nature of the site and the use of large vehicles both on the piers and in the water. In their current state the Vessel Yard piers do not meet the operational requirements of the USACE.

Enforceable Policies Evaluation

The Duluth Vessel Yard is within Minnesota's Coastal Zone as defined in Minnesota's Lake Superior Coastal Program. The project has a reasonably foreseeable effects on coastal use and/or resources, therefore a Federal Consistency Determination is required. The enforceable policies applicable to this project, as contained in the relevant sections of Minnesota's Coastal Zone Management Program, are the criteria listed in Subpart 5 of Minnesota Administrative Rule 6115.0215, Restoration of Public Waters. USACE concludes that the proposed project would be undertaken in a manner that is consistent to the maximum extent practicable with the relevant State of Minnesota enforceable policies.

a. The proposed project represents the minimal impact solution to a specific need with respect to all other reasonable alternatives;

The proposed project was determined to meet the "minimal impact solution" criteria because it:

- Will stabilize the existing piers in-place with minimal increase in their footprint;
- Reduces the risk of compromising the stability of adjacent dock walls or structures by leaving existing structures in place;
- Restores and stabilizes the substrate under the piers through backfilling of newly constructed seawalls, and;
- Will not adversely affect the current or planned futures uses of the Vessel Yard.

As such, the proposed project is consistent with this criteria of Minnesota Rule 6115.0215.

b. The proposed project is intended to achieve one or more of the following purposes:

- (1) improve navigational or recreational uses;**
- (2) improve or restore fish or wildlife habitat;**
- (3) expose sediment to remove or eliminate nutrients or contaminants;**
- (4) restore shorelines or watercourse channels to more natural conditions;**
- (5) improve or restore natural hydrologic conditions; or**
- (6) improve or restore water quality;**

The selected proposed project will achieve purposes (1) of the above list. New mooring foundations and seawalls will be taller than current structures, reducing wave action within the Vessel Yard and preventing over-topping of the piers during strong wave events. This will allow for safer navigation and mooring of vessels under a variety of conditions. The installation of new light poles will increase illumination around the piers, which will also increase the safety of navigation within and around the Vessel Yard. The seawalls and backfilling will stabilize the substrate that is currently experiencing significant amounts of scour and undermining. These stabilization efforts will potentially contribute to purpose (6) of the above list through earth retention and the reduction of suspended particles during strong wave events. The proposed project is consistent with this criteria of Rule 6115.0215 as it is intended to achieve one of the listed purposes and may contribute to a second listed purpose.

c. The project does not exceed more than a minimum encroachment, change, or damage to the environment, particularly the ecology of the waters;

In all project areas, minor excavation is anticipated to occur at the low water datum (LWD 601.1 feet; International Great Lakes Datum, 1955). This excavation is to remove surficial deleterious materials and any existing structures disturbed during removal of the concrete cap blocks. These excavations could extend up to 2 feet below the LWD, but are expected to occur primarily at the LWD. Excavations would occur beneath existing pier structures and around the perimeter of the existing pier faces. The alignments of new SSP was designed to allow for a 2-3 foot space between the outside face of existing structures and the rear face of the new structure (where possible or within property lines). This approach is to allow the existing structures to remain in place, reducing the

amount of demolition and excavation necessary in addition to providing an unobstructed site for driving the new SSP.

The limited excavation and expansion of the proposed Federal action represents the minimum encroachment necessary to achieve the project objectives. Given that this is currently, and will remain, an industrial Vessel Yard and pier, and that the proposed Federal action is similar in design to the existing structures, these changes will also have a minimal impact on the environment and the ecology of the waters. As such, the proposed project is consistent with this criteria of Minnesota Rule 6115.0215.

d. Adverse effects of the proposed project on the physical or biological character of the waters are avoided when possible and are subject to feasible and practical measures to mitigate the effects;

The proposed Federal action is being designed such that their implementation will avoid adverse effects to the physical and biological character of the waters. To this end, the installation of new SSP and expansion of the pier footprint will occur first, followed by backfilling between the new and old structures up to the LWD. This would be followed by the removal of existing concrete curbs, cap, slabs, and deteriorated or disturbed structures. Any increases in turbidity due to project actions are not expected to adversely impact the physical or biological character of the waters; the increased turbidity will be temporary or confined between inside the SSP structures and the completed project will have a similar or lesser impact as the current structures. The proposed project therefore is consistent with this criteria of Minnesota Rule 6115.0215.

e. The proposed project is consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved;

The proposed project is located within the federally defined floodplain and no other reasonable alternatives would meet the project objectives. Repair and improvement of the Vessel Yard will not encourage floodplain development nor induce flooding (in accordance with the Federal Executive Order on Flood Plain Management – E.O. 11988). Actions will take place in open water contained within an industrial slip and will therefore not directly impact shorelands. The St. Louis River Estuary is not a designated wild and scenic river and project actions would not impact any designated rivers. The proposed actions will support current and future operational needs of the Vessel Yard for the DuAO without any impacts to floodplain, shorelands, or wild and scenic rivers. As such, the proposed project is consistent with this criteria of Minnesota Rule 6115.0215.

- f. **The proposed project is consistent with water and related land management plans and programs of local and regional governments, provided the plans and programs are consistent with state plans and programs;**

This section does not apply to the proposed Federal actions because the project objectives are the repair and improvement of the DuAO Vessel Yard to support the Federal Missions of the USACE in Duluth-Superior Harbor and surrounding areas. Local and regional entities, and their programs, that benefit from normal commercial operations in Duluth-Superior Harbor and partnerships with the USACE will indirectly benefit from the proposed Federal actions and operational capacity of the Vessel Yard. The proposed Federal actions will not impact water management and will be implemented in a manner to avoid adverse impacts to the physical and biological character of the water. The Vessel Yard is the property of the USACE and therefore not a component of land management plans. As such, the proposed project is consistent with this criteria of Minnesota Rule 6115.0215.

- g. **Projects that involve the placement of fill to recover shoreland lost by erosion or other natural forces are subject to part 6115.0191, subpart 4, except that part 6115.0191, subpart 4, does not preclude the issuance of a permit to place riprap materials or use other structural and vegetative means for protection of the shoreline zone to prevent continuing erosion.**

This section does not apply to the proposed Federal actions because the project objectives are the repair and improvement of the Vessel Yard. This project is not intended for the recovery or protection of shoreline lost to, or undergoing, erosion and will not address erosion or other natural forces' impact on shorelands. On account of being not applicable, the proposed federal actions are consistent with this criteria of Minnesota Rule 6115.0215.

CZMA Federal Consistency Determination

The proposed Federal agency activity to repair and improve the USACE Duluth Vessel Yard was determined to be located within Minnesota's Coastal Zone as defined in the Minnesota Lake Superior Coastal Program. The enforceable policies of the Minnesota Lake Superior Coastal Program were evaluated with respect to the Federal agency activity. Specifically, criteria listed in Subpart 5 of Minnesota Rule 6115.0215, Restoration of Public Waters, were individually addressed (outlined above) and the Federal agency activities were found to be consistent with said criteria. Based on this evaluation, it has been determined that the proposed project would be undertaken in a manner consistent to the maximum extent practicable with the enforceable policies of

the Minnesota Lake Superior Coastal Program. This is in accordance with 15 C.F.R § 930.

USACE requests concurrence with this Federal Consistency Determination for the proposed Federal actions within 60 days from the date of receipt in accordance with the Coastal Zone Management Act. In accordance with 15 C.F.R. §930.41, the State of Minnesota's concurrence will be presumed if a response is not received by USACE, Detroit District within 60 days from the State's receipt of this determination..

The State of Minnesota's response for the USACE CZMA determination should be addressed to:

U.S. Army Corps of Engineers, Detroit District
ATTN: CELRE-PLE
Mr. Charles A. Uhlarik
477 Michigan Avenue
Detroit, MI 48226-2550

Any questions may be directed to Kevin Meyer, Ph.D. at (313) 226-6478 and Kevin.A.Meyer@usace.army.mil, or me at (313) 226-2476 and Charles.A.Uhlarik@usace.army.mil.

Sincerely,

Charles A. Uhlarik
Chief, Environmental Analysis Branch

Enclosures

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(see next page)

DISTRIBUTION:

Minnesota Pollution Control Agency

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**CC
USACE**

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Figure 1: The Duluth Vessel Yard is located just south of the Duluth entrance to Duluth-Superior Harbor. Yellow line: Federally maintained navigation channel boundary (channel is to the left of the boundary line in this image). Green box: Area of Vessel Yard footprint, including approximate boundary lines to the North, East, and South of the facility. North is up in the images. Insert: Location of the USACE Duluth Vessel Yard in Duluth-Superior Harbor.