

Memorandum

DATE: September 16, 2025
FROM: Brandon Harland
RE: Rationale for Section 401 Water Quality Certification for Civil Work
Project_USACE Burlington Light and Power Wing Dam

Project Description: The proposed Project is located between river miles (RM) 397.1–398.0 in Pool 19 of the Mississippi River, near Burlington, Des Moines County, Iowa. At RM 397.3 there is an existing wing dam built in 1899. The original construction used “earthen” materials, assumed to be rock, and had a top elevation of 512.6 ft MSL 1912 (512.03 ft NAVD88). The structure has degraded over time. The proposed action would repair and raise the wing dam. The design would reduce maintenance dredging requirements in the 9-foot Navigation Channel Project. The wing dam would be raised to flat pool (517.63 NAVD88) & monitored. If necessary, the wing dam may later be raised to 3 feet above flat pool elevation. This request is only for the discharge or rip rap associated with the Project.

Project Location: 40.714939/-91.114617, Des Moines County

Receiving Water Bodies

The Mississippi River is an A1, BWW1, HH designated use waterbody. The designated uses have been adopted in Iowa’s state rule, described in the rule-referenced document of Surface Water Classification effective on July 24, 2019.

Antidegradation

Pollutants of Concern

This project proposes dredging to maintain the navigation channel. Chemicals will not be used. Thus, the pollutants present in the discharge from such construction are substances present in runoff, or are the result of a spill. The DNR has identified the following pollutant of concern in discharges from this project and the potential impacts on water quality:

Increased Turbidity/Total Suspended Solids

The turbidity of water is related to the amount of suspended solids contained in the water. Suspended solids decrease the clarity of water, reduce light penetration, and can impair the photosynthetic activity of aquatic plants. Suspended solids can be aesthetically displeasing and can reduce the recreational value of a water body. If suspended solids screen out light and impair growth of aquatic plants, dissolved oxygen levels can decrease. Suspended solids can be harmful to fish and other aquatic life by causing abrasive injuries and clogging gills and respiratory passages.

Increases in turbidity/total suspended solids from projects authorized by this project will generally be local and temporary. To address turbidity/total suspended solids, the permittee will control runoff to water bodies using a variety of best management practices (BMPs).

Best Management Practices in Permit and Certification Conditions

Permit-Based

The Corps has BMP-based conditions in the Section 404 permit.

Construction activity that disturb one or more acres require a storm water NPDES permit from the DNR. For projects that require storm water NPDES permits, Storm Water Pollution Prevention Plans (SWPPPs) are developed, which typically include BMP-based conditions.

Certification-Based

The DNR is adding BMP-based conditions to the certification. The combined listed BMPs, when adhered to by the permittee, protect Iowa's water quality by controlling erosion and sediment runoff to prevent pollution from reaching the nearby water bodies. Antidegradation requirements will be considered to be met if all appropriate and reasonable BMPs required by permit and certification are applied and maintained. See, 567 IAC 61.2(2); Iowa Antidegradation Implementation Procedure § 6.3.

Temporary and Limited Degradation

The State adopted Iowa Antidegradation Implementation Procedure (2010 and 2016) states that "A regulated activity shall not be considered to result in degradation, if the activity will result in only temporary and limited degradation of water quality as defined in the glossary and as further described in Sections 1.2 and 2.4." The effects can be regarded as temporary and limited following a review of all of the following factors, if applicable:

- a) Length of time during which water quality will be lowered
The length of time where there might be a lowering of water quality is relatively short for the proposed activity.
- b) Percent change in ambient conditions
The only significant change that is reasonably expected to occur would be for the presence of sediment in the stream if there is a heavy rainstorm or if the BMPs fail.
- c) Pollutants affected
Turbidity, total suspended solids.
- d) Likelihood for long-term water quality benefits to the water body
This activity provides water quality benefits by removing sediment from the stream bed.
- e) Degree to which achieving the applicable Water Quality Standards during the proposed activity will be at risk
The use of BMPs installed prior to construction, maintained during construction, and until the site has returned to pre-construction conditions should greatly increase the degree to which a project achieves the applicable water quality standards.
- f) Potential for any residual long-term effects on existing uses
The BMP-based conditions included in the Section 404 permit and certification include activities such as grain size analysis of sediment samples in accordance with the Inland Testing Manual and EM 1110-2-1906 prior to dredging. Placement sites are included in National Environmental Policy Act documents. Additionally, the District coordinates dredge placement activities with the inter-agency group called On-Site Inspection Team (OSIT), which the IA DNR participates. This project should not contribute to any ongoing impacts to water quality.

For the above discussed reasons, the DNR makes the following finding:

This review concludes that water quality degradation due to this activity is temporary and limited.

Social and Economic Importance

This project is socially important for encouraging use of the Mississippi River by enabling use of the Mississippi River for recreational boating by supporting the Mississippi River 9-foot Navigation Channel Project.

This project is economically important for commerce, for the communities along the river, by creating jobs in the planning and construction of this project and likely using materials from local sources.

For the above discussed reasons, the DNR makes the following finding:

This review concludes that water quality degradation due to this activity is necessary to accommodate important economic and social development.

Iowa Department of Natural Resources
Section 401 Water Quality Pre-Filing Meeting and Certification Request Form
Pre-Filing Meeting Request Form

1a. Property Owner/Project Proponent (aka Applicant) Name: _____

Company Name (if applicable): _____

Mailing Address: _____

Email Address: _____

Phone numbers (with area code): Home: _____ Cell: _____ Business: _____

1b. Authorized Agent's Name (if applicable): _____

Company Name: _____

Mailing Address: _____

Email Address: _____

Phone numbers (with area code): Business: _____ Cell: _____

2. Identify the Proposed Project:

3. Project Location:

County: _____ Latitude: _____ Longitude: _____

Receiving Water(s): _____

Discharge: _____

4. Pre-filing Meeting Request Verification:

I certify that I have read and understand the following statements per the Clean Water Act Section 401 Certification Rule:

- Submission of this form completes the requirement of the pre-filing meeting request.
- I cannot submit my certification request until at least 30 calendar days after submitting this pre-filing meeting request. This request must be signed by the Property Owner/Applicant and the Authorized Agent, if applicable.
- I have included the following materials in the application:
 - ☐ Map/diagram of the proposed project area (required)
 - ☐ Photographs of the proposed project area (required)
 - ☐ Relevant site data (if applicable)

Property Owner/Applicant's Name (printed): _____

Property Owner/Applicant's Signature: _____ Date: _____

If applicable: Authorized Agent's Name (printed): _____

Authorized Agent's Signature: _____ Date: _____

Iowa Department of Natural Resources
Section 401 Water Quality Pre-Filing Meeting and Certification Request Form
Certification Request Form

5. Corps Project Manager*:

Email Address: _____

Phone numbers (with area code): Business: _____ Cell: _____

*The corps project manager must be cc'ed on the certification request email.

6. Federal Permit / License Requiring Section 401 Water Quality Certificate and its Project Number*

Permit/License Number: _____ Federal Agency: ☐ Corps of Engineers ☐ FERC
☐ Other: _____

*A copy of the federal permit or license application is **required** to be submitted with a certification request.

7. Include a description of any methods and means proposed to monitor the discharge and the equipment or measures planned to treat, control, or manage the discharge. (Please provide a description of the best management practices you will use to protect water quality as well as any methods and means proposed to monitor the discharge/equipment or measures planned to treat or control the discharge.)

8. Dates*

Planned Start Date of Proposed Project: _____

Planned End Date of Proposed Project: _____

Approximate date(s) of discharge(s) (if known): _____

*In normal situations, the DNR issues certifications within 90 days. This period of time accommodates internal review and the mandatory public comment period. If your project is scheduled to start sooner, please contact us at Section401WQC@dnr.iowa.gov. Be advised that the DNR is entitled up to six months by law to review certification requests.

9. List all other federal (not listed in #6), interstate, tribal, state, territorial, or local agency authorizations required for the proposed project, including all approvals or denials already received:

Agency	Type of Authorization	Agency Number	Date Applied	Date Approved	Date Denied

10. Date Pre-filing Meeting Request was submitted _____

11. Certification Request Verification

This request is hereby made for the activities described herein. I hereby certify that all information contained herein is true, accurate, and complete to the best of my knowledge and belief. I have completed the following tasks, as required for the certification request:

- ☐ Cc'ed the Corps contact associated with the proposed project
- ☐ Attached a copy of the federal permit or license application
- ☐ Submitted a complete pre-filing meeting request at least 30 days ago

I further certify that I possess the authority to undertake the proposed activities. I hereby request that the certifying authority review and take action on this CWA 401 certification request within the applicable reasonable period of time. This application must be signed by the Property Owner/Applicant and the Authorized Agent, if applicable.

Property Owner/Applicant's Name (printed): _____

Property Owner/Applicant's Signature: _____ Date: _____

If applicable: Authorized Agent's Name (printed): _____

Authorized Agent's Signature: _____ Date: _____



September 16, 2025 (DRAFT)

U.S. Army Corps of Engineers, Rock Island District
Clock Tower Building
PO Box 2004
Rock Island, IL 61204

Dear U.S. Army Corps of Engineers:

After reviewing your request for State 401 Water Quality Certification (Certification), the Iowa Department of Natural Resources (DNR) has issued the enclosed Certification. Please read the attached conditions carefully before beginning work on the project.

A copy of this Certification has been forwarded to the office of the U.S. Army Corps of Engineers as indicated below.

Please note:

1. Prior to construction, the permittee is responsible for securing such other permits or approvals as may be required by the DNR, federal, state, or local governmental agencies for the project activities described. Issuance of this certification does not relieve you of the responsibility to comply with all local, state and federal laws, ordinances, regulations or other applicable legal requirements.
2. The permittee is responsible for ensuring that whoever performs, supervises, or oversees any portion of the physical work associated with the construction of this project complies with all the terms and conditions of this Certification as well as the associated Section 404 Permit.

If you have any questions about the certification or attached conditions contained therein, my contact information is provided in the certification.

Sincerely,

Brandon Harland
Natural Resources Biologist

cc: Matthew Afflerbaugh, Department of the Army Corps of Engineers, Rock Island District
(Matthew.J.Afflerbaugh@usace.army.mil)

IOWA DEPARTMENT OF NATURAL RESOURCES

SECTION 401 WATER QUALITY CERTIFICATION

Certification issued to:

U.S. Army Corps of Engineers, Rock Island District
Clock Tower Building
PO Box 2004
Rock Island, IL 61204

Project certified: U.S. Army Corps of Engineers, Civil Works Project

Project Description: The proposed Project is located between river miles (RM) 397.1–398.0 in Pool 19 of the Mississippi River, near Burlington, Des Moines County, Iowa. At RM 397.3 there is an existing wing dam built in 1899. The original construction used “earthen” materials, assumed to be rock, and had a top elevation of 512.6 ft MSL 1912 (512.03 ft NAVD88). The structure has degraded over time. The proposed action would repair and raise the wing dam. The design would reduce maintenance dredging requirements in the 9-foot Navigation Channel Project. The wing dam would be raised to flat pool (517.63 NAVD88) & monitored. If necessary, the wing dam may later be raised to 3 feet above flat pool elevation. This request is only for the discharge or rip rap associated with the Project.

Project Location: 40.714939/-91.114617, Des Moines County

The Iowa Department of Natural Resources (DNR) has issued this State 401 Water Quality Certification (Certification) pursuant to Section 401 {40 C.F.R. §121}. The U.S. Army Corps of Engineers requires state Certification before a Section 404 permit can be issued.

Subject to the attached conditions, incorporated by reference herein, the DNR has determined that a discharge from the proposed project will comply with water quality requirements of the state of Iowa {567 IAC 61}.

Prepared By/Date Executed: _____

Brandon Harland, brandon.harland@dnr.iowa.gov; 515-954-9559; Iowa DNR, 6200 Park Avenue, Des Moines, IA 50319

CONDITIONS

- (1) During construction and upon completion of the project, actions must be taken to prevent pollution affecting public health, fish, shellfish, wildlife, and recreation due to turbidity, pH, nutrients, suspended solids, floating debris, visible oil and grease, or other pollutants entering a water of the state. This condition will ensure permittees comply with Iowa's narrative water quality standards found at 567 IAC 61.3(2);
- (2) Equipment used in waters of the state shall be cleaned of all hazardous materials, pesticides, fuels, lubricants, oils, hydraulic fluids, or other construction-related, potentially hazardous substances before arriving on site. Wash water shall not be discharged into a water of the state. This condition will ensure permittees comply with Iowa's narrative water quality standards found at 567 IAC 61.3(2);
- (3) All cleared vegetative material shall be properly managed in such a manner that it cannot enter a water of the state and cause a violation of water quality requirements. This condition will ensure permittees comply with Iowa's narrative water quality standards found at 567 IAC 61.3(2);
- (4) All construction debris shall be properly managed in such a manner that it cannot enter a water of the state. This condition will ensure permittees comply with Iowa's narrative water quality standards found at 567 IAC 61.3(2);
- (5) Erosion shall be managed so that sediment is not discharged to a water of the state in a manner that causes a violation of water quality requirements. This condition will ensure permittees comply with Iowa's narrative water quality standards found at 567 IAC 61.3(2);
- (6) Riprap, treated lumber products, and temporary structures shall consist of clean material free of coatings of potentially hazardous substances. No asphalt or petroleum-based material shall be used as or included in material placed in any water of the state or within the high-water table. This condition will ensure permittees comply with Iowa's narrative water quality standards found at 567 IAC 61.3(2); and
- (7) Stockpiled dredged materials on the shore shall be managed so that sediment is not discharged to a water of the state in a manner that causes a violation of water quality requirements. This condition will ensure permittees comply with Iowa's narrative water quality standards found at 567 IAC 61.3(2).