Memorandum

DATE: September 15, 2025
FROM: Brandon Harland
RE: Rationale for Section 401 Water Quality Certification for 2024-0194 Melcher Streambank Restoration Project

---

Project Description: Project will implement 3,411 feet of stream bank stabilization along 15 segments of highly unstable bank. The site is pastureland. 3 bank stabilization techniques will be used; stone toe protection with vegetation, stone toe protection with a constructed floodplain bench, and longitudinal peak stone toe. 4 crossing points will be installed to facilitate cattle across the stream. Eleven locations will have root wads installed to provide overhead cover for trout and other fish species. Five areas of boulder clusters will be placed in stream to create habitat for trout populations, and one location of bank hides will be installed to provide in stream trout habitat. One vortex weir will be installed in channel to stabilize the streambed at the upper reaches of the project. 2.5 acre wetland restoration.

During construction excavation care will be taken to minimize the amount of sediment delivered to the stream. Activities will be completed on a timely schedule. All work during grading of stream bank slopes and placement of rock rip rap, sediment will be discharged in stream. The discharge will be temporary and allow for adequate placement of rock rip rap being conducted as part of the project will follow IA-1 Site Preparation and IA-5 Pollution Control. Care will be taken to limit the amount of sediment deposited in channel and work will be completed in a time that would allow for less potential of further erosion before the stone rip rap protection can be put in place. All discharge will be temporary in nature, and appropriate erosion control measures and seeding will be implemented concurrently with project installation.

Project Location: 43.1389 / -91.6301 Winneshiek County.

Receiving Water Bodies
The Yellow 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 bank stabilization. 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 erosion control. The project will follow IA-1 Site Preparation and IA-5

Pollution Control. 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 the trout fishery and stabilizing the stream banks.

This project is economically important for commerce, for the communities along the stream, 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: Tom Melcher

Company Name (if applicable):

Mailing Address: 1411 11th Ave Castalia IA 52133

Email Address: matthew.welsh@usda.gov

Phone numbers (with area code): Home: Cell: Business: (563) 567- 8135

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

Company Name: USDA-NRCS

Mailing Address: 2296 Oil Well Rd Decorah IA 52101

Email Address: matthew.welsh@usda.gov

Phone numbers (with area code): Business: (712) 363-2977 Cell:

2. Identify the Proposed Project:

Project will implement 3,411 feet of stream bank stabilization along 15 segments of highly unstable bank. The site is pastureland. 3 bank stabilization techniques will be used; stone toe protection with vegetation, stone toe protection with a constructed floodplain bench, and longitudinal peak stone toe. 4 crossing points will be installed to facilitate cattle across the stream. Eleven locations will have root wads installed to provide overhead cover for trout and other fish species. Five areas of boulder clusters will be placed in stream to create habitat for trout populations, and one location of bank hides will be installed to provide in stream trout habitat. One vortex weir will be installed in channel to stabilize the streambed at the upper reaches of the project. 2.5 acre wetland restoration

3. Project Location:

County: Winneshiek Latitude: N 43.1389 Longitude: W -91.6301

Receiving Water(s): Yellow River

Discharge: Sediment, rock aggregate, wood structures, boulders, root wads,

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): Tom Melcher

Property Owner/Applicant's Signature: Tom Melch Date: 7-9-2025

If applicable: Authorized Agent's Name (printed): Matthew Welsh

Authorized Agent's Signature: MattWelsh USDA-NRCS Date: 7/10/2025

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: albert.j.frohlich@usace.army.mil

Phone numbers (with area code): Business: _____ Cell: 309-215-5570

*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: MVR-2024-01094 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.)

During construction excavation care will be taken to minimize the amount of sediment delivered to the stream. Activities will be completed on a timely schedule. All work during grading of stream bank slopes and placement of rock rip rap, sediment will be discharged in stream. The discharge will be temporary and allow for adequate placement of rock rip rap being conducted as part of the project will follow IA-1 Site Preparation and IA-5 Pollution Control. Care will be taken to limit the amount of sediment deposited in channel and work will be completed in a time that would allow for less potential of further erosion before the stone rip rap protection can be put in place. All discharge will be temporary in nature, and appropriate erosion control measures and seeding will be implemented concurrently with project installation.

8. Dates*

Planned Start Date of Proposed Project: July 2026

Planned End Date of Proposed Project: August 2026

Approximate date(s) of discharge(s) (if known): All days

*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
IDNR	State Floodplain Permit		10/5/2022	12/9/2022	
Winneshiek County	Local County Floodplain				

10. Date Pre-filing Meeting Request was submitted 7/10/2025

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): Tom Melcher

Property Owner/Applicant's Signature: Tom Melcher Date: 8-20-25

If applicable: Authorized Agent's Name (printed): Matthew Welsh

Authorized Agent's Signature: MATTHEW WELSH Digitally signed by MATTHEW WELSH Date: 2025.08.19 09:36:32 -05'00' Date:

September 15, 2025 (DRAFT)

Tom Melcher
1411 11th Ave.
Castalia, IA 52133

Dear Mr. Melcher:

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: Al Frohlich, Department of the Army Corps of Engineers, Rock Island District (albert.j.frohlich@usace.army.mil)

IOWA DEPARTMENT OF NATURAL RESOURCES
SECTION 401 WATER QUALITY CERTIFICATION

Certification issued to:

Tom Melcher
1411 11th Ave.
Castalia, IA 52133

Project certified: Melcher Streambank Restoration Project, No. 2024-0194

Project Description: Project will implement 3,411 feet of stream bank stabilization along 15 segments of highly unstable bank. The site is pastureland. 3 bank stabilization techniques will be used; stone toe protection with vegetation, stone toe protection with a constructed floodplain bench, and longitudinal peak stone toe. 4 crossing points will be installed to facilitate cattle across the stream. Eleven locations will have root wads installed to provide overhead cover for trout and other fish species. Five areas of boulder clusters will be placed in stream to create habitat for trout populations, and one location of bank hides will be installed to provide in stream trout habitat. One vortex weir will be installed in channel to stabilize the streambed at the upper reaches of the project. 2.5 acre wetland restoration.

During construction excavation care will be taken to minimize the amount of sediment delivered to the stream. Activities will be completed on a timely schedule. All work during grading of stream bank slopes and placement of rock rip rap, sediment will be discharged in stream. The discharge will be temporary and allow for adequate placement of rock rip rap being conducted as part of the project will follow IA-1 Site Preparation and IA-5 Pollution Control. Care will be taken to limit the amount of sediment deposited in channel and work will be completed in a time that would allow for less potential of further erosion before the stone rip rap protection can be put in place. All discharge will be temporary in nature, and appropriate erosion control measures and seeding will be implemented concurrently with project installation.

Project Location: 43.1389 / -91.6301 Winneshiek 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).