

Memorandum

DATE: December 1, 2025
FROM: Brandon Harland
RE: Rationale for Section 401 Water Quality Certification for 2023-0706 City of Waterloo

Project Description: Whitewater and Habitat Improvements Project, Cedar River, Waterloo, Iowa.

Project Location: 42.497279 / -92.337785 Black Hawk County.

Receiving Water Bodies

The Cedar 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 removing a dam and converting it to a series of whitewater rapids. 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 safe use of the river by removing a dam and decreasing the stream's elevation gradually to create a series of rapids.

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.

Water Quality Pre-Filing Meeting Request and Certification Request Form

This form should only be completed and submitted if your project requires one of the following:

- Corps of Engineers (Corps) standard/individual Section 404 permit;
- Corps Section 404 nationwide or regional permit where the Corps waives a limit;
- Corps Section 404 nationwide or regional permit on an [Outstanding Iowa Water](#);
- Federal Energy Regulatory Commission license; or
- Other federal permit or license requiring a Section 401 Water Quality Certification.

Federal regulation [40 CFR 121.4](#) requires the applicant to submit a pre-filing meeting request before filing a certification request. More information may be viewed on the [U.S. EPA Overview of §401 Certification](#) website.

IMPORTANT NOTE: Iowa Administrative Code 567—[Chapter 61](#) currently states that a certification request form **may not** be submitted until **at least 30 days** have passed since the “Pre-filing Meeting Request” was submitted to the DNR.

The following is a guide for completing the Department of Natural Resources’ (DNR) pre-filing meeting request and certification request form. The information is required, and if not filled out completely, the request may be determined to be incomplete, which may delay the 401 certification process. If additional space is needed for any item on the form, attach additional page(s) as necessary. Please note that DNR may request additional information if it is needed to prepare the §401 Water Quality Certification (certification).

Separately submit pre-filing meeting request and, when ready, the certification request and attachments by email to Section401WQC@dnr.iowa.gov

Contact Section 401 Water Quality Certification at the DNR with any questions:
Section401WQC@dnr.iowa.gov; 515-954-6450
Iowa DNR, Attn: Section 401 Water Quality Certification, 502 E 9th St, Des Moines IA 50319

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Water Quality Pre-Filing Meeting Request and Certification Request Form

Pre-Filing Meeting Request Instructions

1.
 - a. **Property Owner/Project Proponent (aka Applicant) Name.** Enter the name, primary residence mailing address, email address, and phone number(s) of the responsible party or parties. If the responsible party is an agency, company, corporation, or other organization, indicate the name of the organization and responsible officer. If there is more than one party, please attach a sheet with the necessary information. Please note that the Project Proponent means the applicant for a license or permit or the entity seeking certification.
 - b. **Authorized Agent's Name.** If applicable, indicate the name of the individual or agency, designated by you, to represent you in this process. An authorized agent (agent) can be an attorney, builder, contractor, engineer, or any other person or organization. Please provide the agent's complete mailing address, email, and telephone number where the agent can be reached during normal business hours. **Note: An agent is not required.**
2. **Proposed Project Description.** Please provide a name and description identifying the proposed project, (examples: Smith Lake shoreline stabilization, U.S. 66 Mississippi River Bridge replacement, utility line replacement, or Wallace Building rain garden). Proposed project means the activity or facility for which the project proponent has applied for a federal license or permit. Please include a map or diagram of the proposed project area, as well as photographs and any other relevant site data. If you have any other readily available water quality-related materials not specified in this form, please include a brief description here and include them as an attachment in the application. Existing water quality-related materials are those in the project proponent's possession or easily obtainable and inform the project proponent's development of the application or draft license or permit.
3. **Project Location:** The location should be provided as latitude and longitude and county that the project is located in. Provide latitude and longitude in decimal degrees with four decimal places, example: latitude: 41.5919, longitude: -93.6061. Use www.latlong.net if needed for finding latitude/longitude. Please provide the name of the water body (water bodies) receiving the discharge. For minor streams with no official name, you can use "unnamed tributary".

Receiving Water(s): This is the name of the water body (or water bodies) that will be affected by the project (e.g., rivers, streams, and/or wetlands).

Discharge: A discharge is any material entering the water (e.g., riprap, bridge piers, culvert, utility lines, fill material, dredged material, chemicals, etc.).
4. **Pre-filing Meeting Request Verification.** By signing the form, you must agree with everything stated in this section. The signature of the property owner/project proponent is required. If you are working with an authorized agent, their signature is also required.

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: City of Waterloo

Company Name (if applicable): _____

Mailing Address: 715 Mulberry Street

Email Address: mayor@waterloo-ia.org

Phone numbers (with area code): Home: 3192914301 Cell: _____ Business: 3192914301

1b. Authorized Agent's Name (if applicable): Shane Sigle, PE

Company Name: Riverwise Engineering, LLC

Mailing Address: PO Box 706, Durango, CO 81301

Email Address: shane@riverwise.org

Phone numbers (with area code): Business: 3038087734 Cell: 3038087734

2. Identify the Proposed Project:

Whitewater and Habitat Improvements Project, Cedar River, Waterloo, Iowa

3. Project Location:

County: Black Hawk County Latitude: 42 deg., 29 min., 51.382 sec Longitude: -92 Deg., 20 min., 15.59 sec.

Receiving Water(s): Cedar River

Discharge: rocks, boulders, concrete, grout

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): City of Waterloo, Jamie Knutson

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

If applicable: Authorized Agent's Name (printed): Shane Sigle, PE

Authorized Agent's Signature: _____ Date: 11/25/2025

Water Quality Pre-Filing Meeting Request and Certification Request Form

Certification Request Instructions

5. **Corps Project Manager.** Enter the name, email address, and phone number(s) of the Corps project manager associated with the proposed project.
6. **Federal Permit / License Requiring Section 401 Water Quality Certificate and its Project Number.** Certification is required for any federal license or permit that authorizes an activity that may result in a discharge to a water of the United States. The federal agency can tell you what their identification number is for your project. Please check the appropriate box to indicate the federal agency. **Important:** A copy of the federal permit or license application is **required** to be submitted with this certification request. For the Corps of Engineers Section 404 permits, DNR Flood Plain, and Sovereign Lands permits, the application form can be found on the [DNR's Flood Plain webpage](#).
- Examples: Corps of Engineers NWP 27 #2020-0830
Corps of Engineers RP 33 #2020-1609
Corps of Engineers IP #2020-0361
FERC Hydropower #11530
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 (e.g., silt fences will be installed to prevent sediment entering the water body, all equipment will be cleaned prior to construction, equipment will be checked regularly to ensure oil, gas, or other material do not enter the water body).
8. **Dates.** Exact start and end dates for the proposed project are required, while date(s) of proposed discharges can be approximate. While the DNR has a default reasonable period of time of 6 months to respond to a certification request, the DNR intends to respond to requests as quickly as possible within that time period.
9. **List all other federal, interstate, tribal, state, territorial, or local agency authorizations required for the proposed project, including all approvals or denials already received.** Typical authorizations include DNR Flood Plain, DNR Sovereign Lands, DNR NPDES Storm Water, and zoning permits.

Examples:

Agency	Type of Authorization	Agency Number	Date Applied	Date Approved	Date Denied
DNR	Flood Plain	2020-0517	6/15/2021	10/8/2021	
DNR	Sovereign Lands	2020-0517	6/15/2021		7/2/2021
DNR	NPDES	3500901	2/14/2021	5/20/2021	

10. **Date Pre-filing Meeting Request was submitted.** List the date that a pre-filing meeting request was submitted to the DNR.
11. **Certification Request Verification.** By signing the form, you must agree with everything stated in this section. The signature of the property owner/project proponent is required. If you are working with an authorized agent, their signature is also required.

Note: Certification requests must also be sent to the Federal Agency (i.e., Corps, FERC, etc.) at the same time. All projects in Iowa are in the Rock Island Corps District except for those below the ordinary high water mark of the Missouri River or west of the Missouri River, which are in the Omaha Corps District. For the Rock Island District Corps, send to the Corps project manager or to iowaregulatory@usace.army.mil. For the Omaha District Corps, send to the Corps project manager or to NE404Reg@usace.army.mil.

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: kirsten.l.brown@usace.army.mil

Phone numbers (with area code): Business: 309-215-5831 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: CEMVR-RD-2023-0706 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.)

See attached drawings and report. Access and Staging are discussed on Page 34 and Appendix 1 includes the drawings that have additional information on where the fill will go, the cofferdam locations and sequences, and access locations.

8. Dates*

Planned Start Date of Proposed Project: 3-2026

Planned End Date of Proposed Project: 3-2027

Approximate date(s) of discharge(s) (if known): 3-2026 to 3-2027

*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
Iowa DNR	Floodplains		n/a		
Iowa DNR	Sovereign Lands		n/a		
Iowa DNR	NPDES		n/a		

10. Date Pre-filing Meeting Request was submitted 11/25/2025

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 to 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): City of Waterloo

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

If applicable: Authorized Agent's Name (printed): Shane Sigle, PE

Authorized Agent's Signature: _____ Date: 11/25/2025



December 1, 2025 (DRAFT)

City of Waterloo
715 Mulberry St.
Waterloo, IA 50703

Dear City of Waterloo:

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: Kirsten Brown, Department of the Army Corps of Engineers, Rock Island District
(Kirsten.L.Brown@usace.army.mil)

IOWA DEPARTMENT OF NATURAL RESOURCES

SECTION 401 WATER QUALITY CERTIFICATION

Certification issued to:

City of Waterloo
715 Mulberry St.
Waterloo, IA 50703

Project certified: City of Waterloo Project, No. 2023-0706

Project Description: Whitewater and Habitat Improvements Project, Cedar River, Waterloo, Iowa.

Project Location: 42.497279 / -92.337785 Black Hawk 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).