

## Memorandum

DATE: May 21, 2025  
FROM: Brandon Harland  
RE: Rationale for Section 401 Water Quality Certification for 2024-205\_Iron Fleur Dam Project

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**Project Description:** The project as planned would involve the construction of access improvements at two locations along the Raccoon River (North Site and South Site) as well as construction of an in-river structure that would back up the Raccoon River hydraulic elevation to mitigate the existing low head dam located upstream.

At the North Site, where the existing dam is located, an accessible egress, secondary egress, pedestrian sidewalk/mowed path, and accessible launch would be constructed above and below the existing dam. The South Site includes an access road from an unnamed planned roadway over an existing USACE levee project, and then connects to a river access located along the north shoreline of the Raccoon River - including vehicle access (20 stalls parking), a vehicle turn-around area, a boat ramp and watercraft launch (with ingress and egress to the river), pedestrian trails, and associated walkways. The in-river structure would include a fish bypass and habitat riffle channel, a boat passage channel, pneumatic flashboard gates, and associated in river boulders, grouting, and rip rap.

**Project Location:** 41.573856 / -93.639368 Polk County.

### Receiving Water Bodies

The Raccoon River is an A1, BWW1, HH, C 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 safe use of the river near the old low head dam by boaters by adjusting the hydraulic elevation to mitigate the existing low head dam as well as access to the site/river by walk of a pedestrian sidewalk/mowed path and parking.

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:**

The project as planned would involve the construction of access improvements at two locations along the Raccoon River (North Site and South Site) as well as construction of an in-river structure that would back up the Raccoon River hydraulic elevation to mitigate the existing low head dam located upstream.

At the North Site, where the existing dam is located, an accessible egress, secondary egress, pedestrian sidewalk/mowed path, and accessible launch would be constructed above and below the existing dam. The South Site includes an access road from an unnamed planned roadway over an existing USACE levee project, and then connects to a river access located along the north shoreline of the Raccoon River - including vehicle access (20 stalls parking), a vehicle turn-around area, a boat ramp and watercraft launch (with ingress and egress to the river), pedestrian trails, and associated walkways. The in-river structure would include a fish bypass and habitat riffle channel, a boat passage channel, pneumatic flashboard gates, and associated in river boulders, grouting, and rip rap.

**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: \_\_\_\_\_

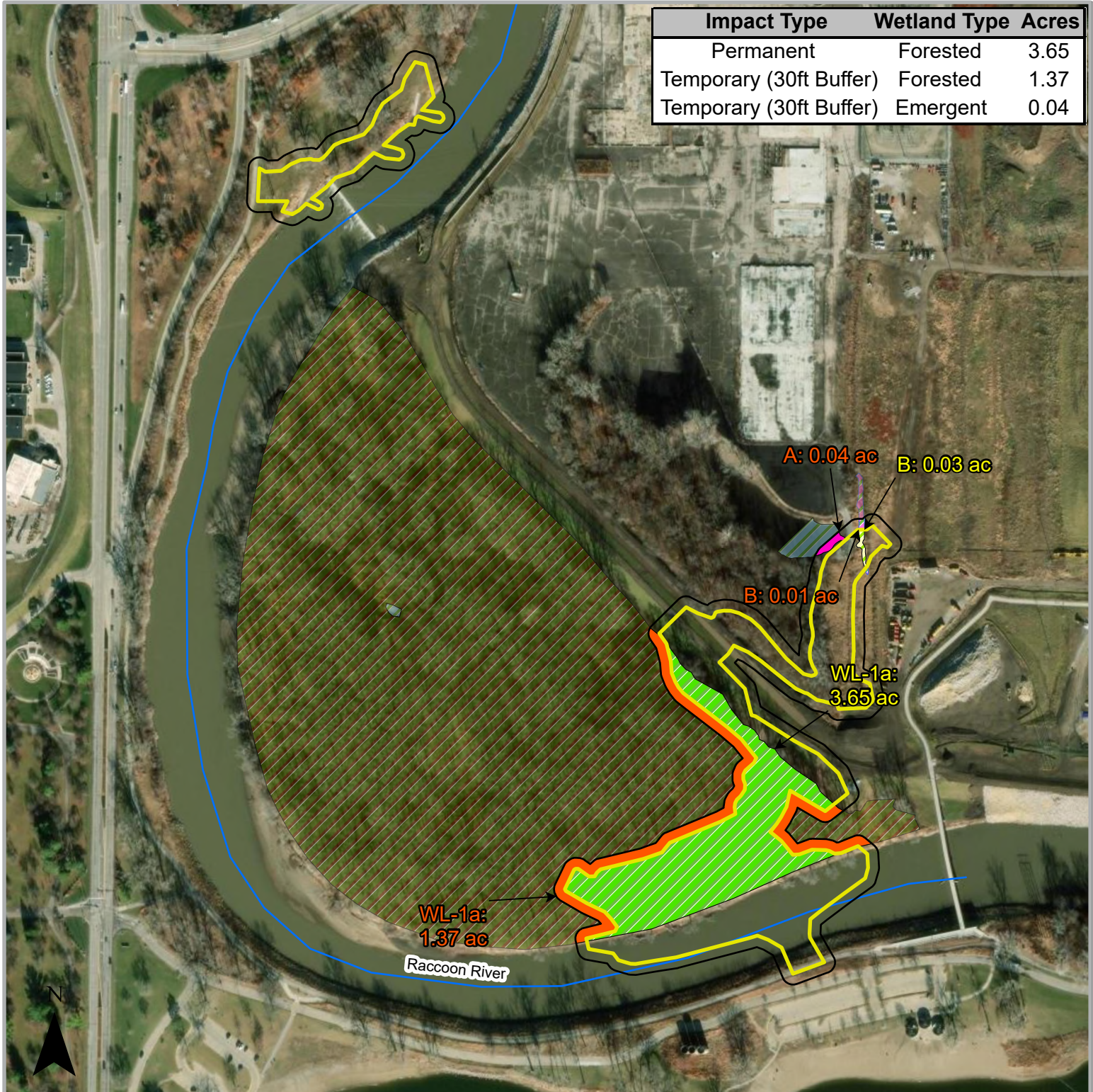
If applicable: Authorized Agent's Name (printed): \_\_\_\_\_

Authorized Agent's Signature: Will Downey Date: \_\_\_\_\_



# FIGURE A

## Proposed Project - Aquatic Resource Impacts



### DESCRIPTION

Fleur Dam River Access  
Iowa Confluence Water Trails  
Physical Location  
41.576325°, -93.640442°  
Map Creator: WDowney

Service Layer Credits: Maxar, ISU GIS Facility  
Coordinate System: NAD 1983 UTM Zone 15N  
Date Exported: 12/17/2024

### LEGEND

- Grading Extent (90% Plans)
- 30 ft Activity Buffer
- Aquatic Resources**
  - Emergent
  - Forested
  - Wet Ditch

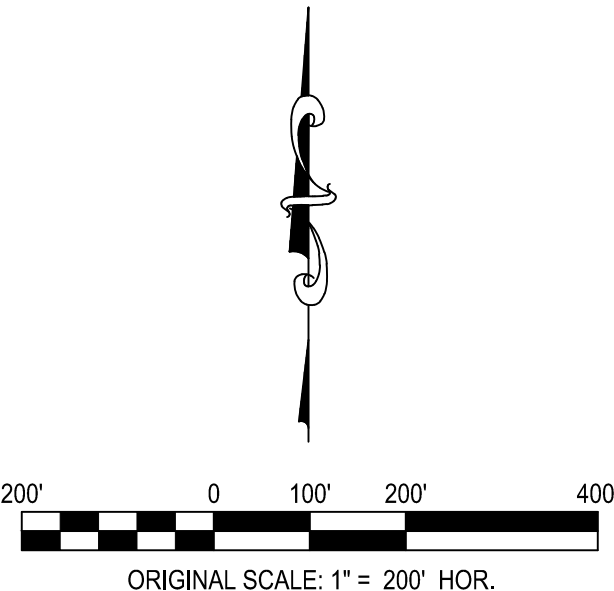
- Perennial Stream
- Impacts (Temporary)**
  - Emergent
  - Forested
  - Wet Ditch

- Impacts (Loss)**
  - Forested
  - Wet Ditch

0 250 500  
Feet



File Location: Q:\Denver\_North\Projects\1225-00 ICON Fleur Dam\CAD\CDs\1225\_Site-Plan-Prpsd-Cond.dwg Plot Date: 12/3/2024 11:39 AM Last Saved By: TIM.MCMULLEN

[illegible]

PRELIMINARY DESIGN  
NOT FOR CONSTRUCTION

# RACCOON RIVER IMPROVEMENTS AT FLEUR DRIVE POLK COUNTY, IA

## PROPOSED CONDITIONS SITE PLAN

JOB NUMBER  
121225

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DATE  
12/03/2024

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DRAWING NO.  
G-103

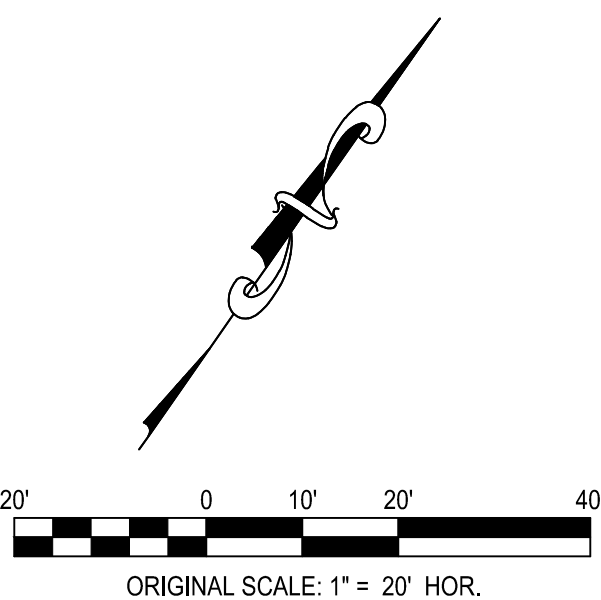
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SHEET NO.  
11



This topographic map shows a section of a river with several engineering annotations. Key features include:
 

- Stream Barbs:** Three stream barbs are identified: SB-1, SB-2, and SB-3, all pointing towards the river. They are labeled 'SEE DWG. R-507'.
- River Access Ramps:** Two ramps are shown, one on the left and one on the right, both labeled 'SEE L-SERIES FOR DETAILS'.
- Water Main:** A '30" WATER MAIN' is indicated by a dashed line running across the upper portion of the map.
- Dam:** An 'EX DMWW DAM' is located on the left side, with a fixed crest elevation of 780.3' and a top of flashboard elevation of 783.3'.
- Property Line:** A dashed line labeled 'PROPERTY LINE, TYP' runs horizontally across the middle of the map.
- Overhead Safety Cable:** A line labeled 'EX OVERHEAD SAFETY CABLE TO BE REMOVED' runs diagonally from the bottom left towards the center.
- Levee Easement:** A dashed line labeled 'EX LEVEE EASEMENT' runs diagonally from the bottom left towards the center.
- Uplands:** An area labeled 'UPLANDS - SEE L-SERIES FOR DETAILS' is located in the upper right.
- Limit of River Work:** A dashed line labeled 'LIMIT OF RIVER WORK - SEE L-SERIES FOR UPLAND DESIGN' runs horizontally across the middle of the map.
- Raccoon River:** An arrow points to the 'RACCOON RIVER' on the right side of the map.
- Topography:** The map shows contour lines with elevations ranging from 770 to 795 feet.



1. SEE L-SERIES FOR RIVER VEGETATION PLANS.
2. BATHYMETRY UPSTREAM OF THE EXISTING DAM IS DATED 2010.

# RIVER SITE PLAN

SCALE: 1" = 20'

REV	REVISION DESCRIPTION	DATE	CHND	CHKD	APPR



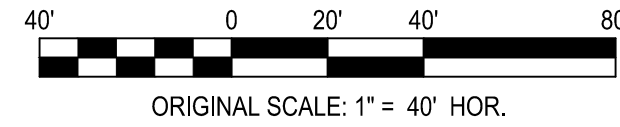
PRELIMINARY DESIGN  
NOT FOR CONSTRUCTION

# RACCOON RIVER IMPROVEMENTS AT FLEUR DRIVE POLK COUNTY, IA NORTH SITE RIVER PLAN

JOB NUMBER	121225
DATE	12/03/2024
DRAWING NO.	R-100
SHEET NO.	18



File Location: Q:\Denver\_North\Projects\1225-00 ICON Fleur Dam\CAD\CDs\1225-Overall\SitePlanRiver.dwg Plot Date: 12/3/2024 2:29 PM Last Saved By: CORA.MOORE

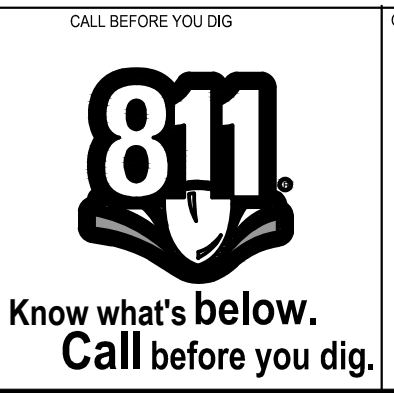


- NOTES:
1. IOWA DNR REQUIRES A TUNING PHASE TO ADJUST GAPS AND CREATE A DROUGHT FLOW FISH PASSAGE TRENCH BETWEEN BOULDER WEIRS WITH A WIDTH OF 1.5' TO 2'. CONTRACTOR TO ACCOMMODATE DNR IN PLACEMENT OF RANDOM BOULDERS NEAR SOME RIFFLE BOULDER GAPS. MODIFICATIONS TO THE CONTROL AREAS AND/OR LOOSE RIFFLE BOULDER SPACING SHALL NOT BE MADE UNLESS APPROVED BY ENGINEER TO ENSURE SAFETY REQUIREMENTS ARE BEING MET. TUNING PHASE WILL LAST TWO (2) DAYS, AND WILL REQUIRE COORDINATION WITH DNR STAFF.
  2. SEE L-SERIES FOR RIVER VEGETATION PLANS

# RIVER SITE PLAN

SCALE: 1" = 40'

REV	REVISION DESCRIPTION	DATE	CHND	CHKD	APPR



PRELIMINARY DESIGN  
NOT FOR CONSTRUCTION

RACCOON RIVER IMPROVEMENTS  
AT FLEUR DRIVE  
POLK COUNTY, IA  
SOUTH SITE RIVER PLAN - OVERALL

JOB NUMBER	121225
DATE	12/03/2024
DRAWING NO.	R-101
SHEET NO.	19



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

**5. Corps Project Manager\*:** Kirsten Brown

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-2024-205 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.)

-Installation of silt fences surrounding areas of ground disturbance.

-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.

-Preserve vegetation in areas not needed for construction

-Initialize stabilization of disturbed areas immediately after clearing, grading, excavating, or other earth disturbing activities have: A) permanently ceased on any portion of the site, or B) temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days.

-Measures shall be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. This may include velocity dissipation devices at discharge locations and along length of outfall channel as necessary to provide a non-erosion velocity flow from structure to water course.

See pollution prevention plan for entire list of controls and measures

**8. Dates\***

Planned Start Date of Proposed Project: 6/1/2025

Planned End Date of Proposed Project: 12/31/2026

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](mailto: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	Floodplain	2024-1753	10/4/2024		
IDNR	Sovereign Lands	2024-1753	10/4/2024		
IDNR	NDPES				
USACE	Section 408	CEMVR-RD-2024-205	12/11/2024		

**10. Date Pre-filing Meeting Request was submitted** 3/6/2025




### 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): Monica Converse, Iowa Confluence Water Trails

Property Owner/Applicant's Signature:  Date: 5/8/2025

Property Owner/Applicant's Name (printed): Rich Leopold, Polk County Conservation

Property Owner/Applicant's Signature:  Date: 5/8/2025

If applicable: Authorized Agent's Name (printed): Will Downey, Eocene Environmental Group

Authorized Agent's Signature:  Date: 5/8/2025





May 21, 2025 (DRAFT)

Iowa Confluence Water Trails (ICON)  
501 SW 7th St, Ste G  
Des Moines, IA 50309

Dear Iowa Confluence Water Trails (ICON):

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:**

Iowa Confluence Water Trails (ICON)  
501 SW 7th St, Ste G  
Des Moines, IA 50309

**Project certified:** Icon Fleur Dam Project, No. 2024-205

**Project Description:** The project as planned would involve the construction of access improvements at two locations along the Raccoon River (North Site and South Site) as well as construction of an in-river structure that would back up the Raccoon River hydraulic elevation to mitigate the existing low head dam located upstream.

At the North Site, where the existing dam is located, an accessible egress, secondary egress, pedestrian sidewalk/mowed path, and accessible launch would be constructed above and below the existing dam. The South Site includes an access road from an unnamed planned roadway over an existing USACE levee project, and then connects to a river access located along the north shoreline of the Raccoon River - including vehicle access (20 stalls parking), a vehicle turn-around area, a boat ramp and watercraft launch (with ingress and egress to the river), pedestrian trails, and associated walkways. The in-river structure would include a fish bypass and habitat riffle channel, a boat passage channel, pneumatic flashboard gates, and associated in river boulders, grouting, and rip rap.

**Project Location:** 41.573856 / -93.639368 Polk 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).