

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): June 24, 2022

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: CEMVR-RD-2021-0208: Dan Cornelison

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Iowa County/parish/borough: Madison City:
Center coordinates of site (lat/long in degree decimal format): Lat. 41.2966° **N**, Long. -94.1924° **W**.
Universal Transverse Mercator: 15
Name of nearest waterbody: unnamed tributary to Middle River

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Des Moines River

Name of watershed or Hydrologic Unit Code (HUC): 07100008

☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☒ Office (Desk) Determination. Date: May 26, 2021 (Pre-2015 regulations AJD)

☒ Field Determination. Date(s): May 7, 2021 (NWPR AJD)

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

☐ Waters subject to the ebb and flow of the tide.

☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- ☐ TNWs, including territorial seas
- ☐ Wetlands adjacent to TNWs
- ☒ Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
- ☒ Non-RPWs that flow directly or indirectly into TNWs
- ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
- ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
- ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
- ☐ Impoundments of jurisdictional waters
- ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: 720 LF (intermittent) and 110 (ephemeral) linear feet: 1-5 width (ft) and/or acres.

Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Established by OHWM.

Elevation of established OHWM (if known): .

2. Non-regulated waters/wetlands (check if applicable):³

☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.

Explain: .

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW: .

Summarize rationale supporting determination: .

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is “adjacent”: .

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are “relatively permanent waters” (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 147 acres

Drainage area: 115 acres

Average annual rainfall: 31 inches

Average annual snowfall: 36 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☒ Tributary flows through 2 tributaries before entering TNW.

Project waters are 30 (or more) river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

Project waters are 30 (or more) aerial (straight) miles from TNW.

Project waters are 1 (or less) aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW⁵: .

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

Tributary stream order, if known: unnamed tributary to Middle River (intermittent and AJD review area) --> Middle River (perennial) --> Lake Red Rock (a Corps impoundment of the Des Moines River, a TNW).

(b) General Tributary Characteristics (check all that apply):

Tributary is:

☒ Natural

☐ Artificial (man-made). Explain: .

☒ Manipulated (man-altered). Explain: A man-made dam has created an impoundment upstream of

the natural portion of the tributary and may be a reason the hydrologic regime is not the same as it was historically as a direct result of the dam.

Tributary properties with respect to top of bank (estimate):

Average width: 1-5 feet

Average depth: <1 foot

Average side slopes: **2:1**.

Primary tributary substrate composition (check all that apply):

☒ Silts

☐ Sands

☐ Concrete

☒ Cobbles

☐ Gravel

☐ Muck

☐ Bedrock

☒ Vegetation. Type/% cover:

☐ Other. Explain: .

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Intermittent tributary - The upper reaches of the tributary near the impoundment exhibited signs of severe erosion with near vertical banks. The lower end of the tributary has minimal erosion, sloped banks, and is connected to its floodplain. The majority of the banks are stable and highly vegetated.

Ephemeral tributary - weak indicators of a bed and bank, no flowing water, and vegetation in the channel were observed.

Presence of run/riffle/pool complexes. Explain: Intermittent tributary - Several small riffles were observed through larger cobbles along the bottom of the streambed but flow was very minimal. In the site visit photos taken May 7, 2021 (20210507_102227.jpg) a pool is observed .

Tributary geometry: **Meandering**

Tributary gradient (approximate average slope): 25-40 %

(c) Flow:

Tributary provides for: **Seasonal flow**

Estimate average number of flow events in review area/year: **Pick List**

Describe flow regime: Flow regime is intermittent (770LF) and ephemeral (110LF).

Other information on duration and volume: Flow regime is intermittent based on the observation of flowing water during the May 7, 2021 site visit which occurred during normal conditions and not following a precipitation event. Portions of the channel were dry, however the presence of standing water during normal conditions and not following a rain event, and the presences of riffles and pools are characteristics most closely related to seasonal flow. As there was flow in the intermittent tributary not in response to a rain event, the flow is likely groundwater fed through springs, seeping from around/under the dam, etc. Portions of the intermittent tributary did not have flowing or standing water and so those locations may not be receiving groundwater at these locations. Ephemeral channel did not have water in its channel.

Surface flow is: **Discrete and confined**. Characteristics: .

Subsurface flow: **Unknown**. Explain findings: .

☐ Dye (or other) test performed: .

Tributary has (check all that apply):

☒ Bed and banks

☒ OHWM⁶ (check all indicators that apply):

☒ clear, natural line impressed on the bank

☒ changes in the character of soil

☐ shelving

☐ vegetation matted down, bent, or absent

☐ leaf litter disturbed or washed away

☐ sediment deposition

☐ water staining

☒ other (list): Flowing water in channel not in direct response to precipitation

☐ Discontinuous OHWM.⁷ Explain: .

☒ the presence of litter and debris

☐ destruction of terrestrial vegetation

☐ the presence of wrack line

☒ sediment sorting

☒ scour

☐ multiple observed or predicted flow events

☒ abrupt change in plant community

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- | | |
|--|--|
| <input type="checkbox"/> High Tide Line indicated by: | <input type="checkbox"/> Mean High Water Mark indicated by: |
| <input type="checkbox"/> oil or scum line along shore objects | <input type="checkbox"/> survey to available datum; |
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings; |
| <input type="checkbox"/> physical markings/characteristics | <input type="checkbox"/> vegetation lines/changes in vegetation types. |
| <input type="checkbox"/> tidal gauges | |
| <input type="checkbox"/> other (list): | |

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: The water is clear, flowing, with algae growth in portions of the intermittent channel. Weak indicators of a bed and bank with no flowing water were observed in the vegetated streambed of the ephemeral channel.

Identify specific pollutants, if known: Unknown .

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- ☒ Riparian corridor. Characteristics (type, average width): There is a forested riparian corridor along the entire reach of the tributary and on both sides ranging from a width of 300' to 1,500'.
- ☐ Wetland fringe. Characteristics: .
- ☒ Habitat for:
- ☒ Federally Listed species. Explain findings: Suitable habitat for foraging and roosting maternity bats of the federally listed Indiana bat and Northern long-eared bat.
- ☐ Fish/spawn areas. Explain findings: .
- ☐ Other environmentally-sensitive species. Explain findings: .
- ☐ Aquatic/wildlife diversity. Explain findings: .

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: . acres

Wetland type. Explain: .

Wetland quality. Explain: .

Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: .

Surface flow is: **Pick List**

Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .

☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

☐ Directly abutting

☐ Not directly abutting

☐ Discrete wetland hydrologic connection. Explain: .

☐ Ecological connection. Explain: .

☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List**.

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: .

Identify specific pollutants, if known: .

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

☐ Riparian buffer. Characteristics (type, average width): .

☐ Vegetation type/percent cover. Explain: .

☐ Habitat for:

☐ Federally Listed species. Explain findings: .

☐ Fish/spawn areas. Explain findings: .

☐ Other environmentally-sensitive species. Explain findings: .

☐ Aquatic/wildlife diversity. Explain findings: .

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: **Pick List**

Approximately () acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed: .

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: Biological and physical processes that the tributary supports includes nutrient cycling, sediment retention and transport, pollutant trapping and filtration, improvement of water quality, provides refugia, habitat, foraging and breeding opportunities for wildlife and aquatic organisms, has the capacity to transfer nutrients and organic carbon vital to support food webs, contribute to the maintenance of water quality and aquatic life, provide for flood storage capacity of the Middle River and runoff from the nearby erosional features, which are all functions that may affect the integrity of a TNW.
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:

☐ TNWs: linear feet width (ft), Or, acres.

☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**

☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .

- ☒ Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: The erosion, undercutting of the banks, clear distinct line impressed on the bank, and the strong indicators of a defined bed and bank support the findings of an intermittent stream rather than an ephemeral stream. Standing water, flowing water, riffles and pools complexes are more closely related to seasonal flow. Flow regime is intermittent based on the observation of flowing water during the May 7, 2021 site visit which occurred during normal conditions according to the APT, it was the wet season, but it was not following a precipitation event, and based on the U.S. drought monitor is was abnormally dry. Portions of the channel were dry which support the findings of an intermittent stream rather than a perennial. See discussion in Section IV.B.

Ephemeral tributary - weak indicators of a bed and bank, no flowing water, and vegetation in the channel were observed.

Provide estimates for jurisdictional waters in the review area (check all that apply):

- ☒ Tributary waters: **720** linear feet **1-5** width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

3. Non-RPWs⁸ that flow directly or indirectly into TNWs.

- ☒ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

- ☒ Tributary waters: **110** linear feet **1** width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

- ☐ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .
☐ Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

- ☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.

- ☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. Impoundments of jurisdictional waters.⁹

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- ☐ Demonstrate that impoundment was created from “waters of the U.S.,” or
☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

⁸See Footnote # 3.

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰

- ☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
- ☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- ☐ which are or could be used for industrial purposes by industries in interstate commerce.
- ☐ Interstate isolated waters. Explain: .
- ☐ Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

Provide estimates for jurisdictional waters in the review area (check all that apply):

- ☐ Tributary waters: linear feet width (ft).
- ☐ Other non-wetland waters: acres.
Identify type(s) of waters: .
- ☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- ☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- ☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - ☐ Prior to the Jan 2001 Supreme Court decision in “*SWANCC*,” the review area would have been regulated based solely on the “Migratory Bird Rule” (MBR).
- ☐ Waters do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction. Explain: .
- ☐ Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- ☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- ☐ Lakes/ponds: acres.
- ☐ Other non-wetland waters: acres. List type of aquatic resource: .
- ☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction (check all that apply):

- ☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- ☐ Lakes/ponds: acres.
- ☐ Other non-wetland waters: acres. List type of aquatic resource: .
- ☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- ☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Joint Application February 2021. A wetland delineation was not submitted in the application and online data conflicted with what was submitted so the Corps conducted a site visit on May 7, 2021.
- ☐ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - ☐ Office concurs with data sheets/delineation report.
 - ☐ Office does not concur with data sheets/delineation report.
- ☐ Data sheets prepared by the Corps: .
- ☐ Corps navigable waters’ study: .
- ☐ U.S. Geological Survey Hydrologic Atlas: .
 - ☐ USGS NHD data.
 - ☐ USGS 8 and 12 digit HUC maps.

¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

- ☒ U.S. Geological Survey map(s). Cite scale & quad name: Web Soil Survey viewed in March 2021 and May 2022; USGS topographic maps 2022 (1:24000) and 1952 (1:62500).
- ☒ USDA Natural Resources Conservation Service Soil Survey. Citation: Web Soil Survey viewed in March 2021 and May 2022.
- ☒ National wetlands inventory map(s). Cite name: Regulatory Viewer with NWI Layer viewed in March 2021 and May 2022.
- ☐ State/Local wetland inventory map(s): .
- ☐ FEMA/FIRM maps: .
- ☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- ☒ Photographs: ☒ Aerial (Name & Date): 1930, 1980, 2018, 2020, and 2021.
or ☒ Other (Name & Date): Site photos dated May 7, 2021, June 6, 2021, and June 30, 2021.
- ☒ Previous determination(s). File no. and date of response letter: A Navigable Waters Protection Rule AJD was issued May 17, 2021 with a determination that the 720' tributary was intermittent and jurisdictional under Section 404 and that the 110' tributary was ephemeral and not jurisdictional under Section 404 under the NWPR. On July 14, 2021 Mr. Cornelison appealed the NWPR AJD. See the appeal file in the project folder for rationale. On November 16, 2021, an appeal meeting was held. On May 3, 2022, the review officer determined that the appeal had merit and the Rock Island District was to provide clarification on several items including data to support flow regime findings based on a typical year, the flow path between the subject water and the nearest downstream TNW and how it contributes surface flow to that TNW in a typical year, and to use a revised AJD utilizing the current applicable regulation, guidance, and policy; the pre-2015 regulations which include the Rapanos and SWANCC guidance.
- ☐ Applicable/supporting case law: .
- ☐ Applicable/supporting scientific literature: .
- ☒ Other information (please specify): Digital Globe, APT, Google Earth, LiDAR, StreamStats, NOAA, Iowa State University - Iowa Environmental Mesonet, U.S Drought Monitor.

B. ADDITIONAL COMMENTS TO SUPPORT JD: The Corps utilized several tools to determine flow regime including on-site observation and photos, historic and recent aerial photos via Google Earth, RegViewer (a regulatory tool with access to different data layers, e.g. LiDAR), and Digital Globe, Antecedent Precipitation Tool (APT) calculations, the US Geological Survey (USGS) national hydrography dataset, precipitation data from Iowa State University Mesonet and the National Oceanic Atmospheric Administration (NOAA), the United States Department of Agricultural (USDA)- Natural Resource Conservation Services' web soil survey, the U.S. Drought Monitor (a partnership between the National Drought Mitigation Center at the University of Nebraska-Lincoln, USDA, and NOAA), USGS topographic maps, appellant provided site photos, RGL 05-05, USGS StreamStats data, LiDAR, and the United States Fish and Wildlife Services National Wetland Inventory. The USGS 1952 and 2022 topomap considered I-1 to be intermittent as indicated by a dashed blue line and E-2 was not marked but did have contours that led towards an area where water collected from higher elevations to flow downhill. LiDAR supports these findings of a well-defined channel at the I-1 and a steeper contour at E-2. The U.S. Drought Monitor and APT calculations verify the May 7, 2021, site visit was conducted in normal conditions and the NOAA and ISU Mesonet precipitation data support that any water present was not a result of recent precipitation. Historical and recent aeriels verify the presence of a meandering stream and the construction of the upstream impoundment sometime between 1970 and 1980. The Corps' RGL 05-05 was utilized to determine ordinary high water mark characteristics (OHWM) and on-site observations verified; I-1 had many indicators of an OHWM including, but not limited to: very strong bed and banks, sediment sorting, presence of debris and litter, a natural line impressed on the bank, and flowing water. In addition, there was standing, ponding, and flowing water within I-1 which supports the findings of intermittent. E-2 had weak bed and banks, vegetation in its channel, and no water in its channel which support findings of ephemeral. There was no indication of wetlands on site, no NWI mapped wetlands, and no hydric soils, and steep contours and site topography made wetlands on-site highly unlikely.




The Corps' APT calculation uses the average of a 30-year rolling calendar of nearby weather stations to determine normal conditions for a particulate date. On the Corps' May 7, 2021, site visit, the APT calculated it to be the wet season and normal conditions; while the U.S Drought Monitor considered it an abnormally dry; therefore, the date of this site visit accurately represents normal conditions and typical flow regime. A series of photos taken the date of the site visit are provided below representing flowing water as can be viewed through darker, wet areas, and water reflection, as well as the statements from the PM conducting the site visit (Alex Meincke) in the letter dated May 17, 2021, stating that "The stream also had weakly flowing water." There was no rain on the date of the site visit, the previous day, or the proceeding 3 days. A total of 0.16" of rain fell within the week preceding the Corps site visit. The Corps definition of ephemeral stream is that it has flowing water only during, and for a short duration after, precipitation events in a typical year. As there was no precipitation preceding the Corps site visit the I-1 does not meet the definition of ephemeral. An intermittent stream has flowing water during certain times of the year and is considered a seasonal relatively permanent water or non-relatively permanent water. A perennial stream has flowing water year-round during a typical year. I-1 does not have flowing water year-round during a typical year, and it did not have flowing water throughout the entire length of the tributary therefore it does not meet the definition of a perennial stream. I-1 is non-relatively permanent stream that also had segments with standing water, no water, and flow, therefore, it meets the definition of an intermittent stream. E-2 channel did not have flowing water during the site visit in response to precipitation, but it did exhibit weak characteristics of an OHWM and therefore meets the definition of an ephemeral stream.

The flow path is E-2 (110LF ephemeral stream) to I-1 (720LF intermittent stream) connecting downstream to the Middle River (a perennial river) and connecting to the Des Moines River (a TNW). The intermittent and ephemeral streams, though not continuous throughout the tributary/project area, provides a direct downstream surface flow connection to a TNW in a typical year. The water collected and flowing through E-2 and I-2 contributes surface water flow in a typical year under normal conditions.

MVR-2020-1774

AJD Map
Dated: May 12, 2021

Legend

-  AJD Area
-  E-2 (Ephemeral Stream) - 110 LF
-  I-1 (Intermittent Strea) - 720 LF



Google Earth

© 2021 Google

500 ft

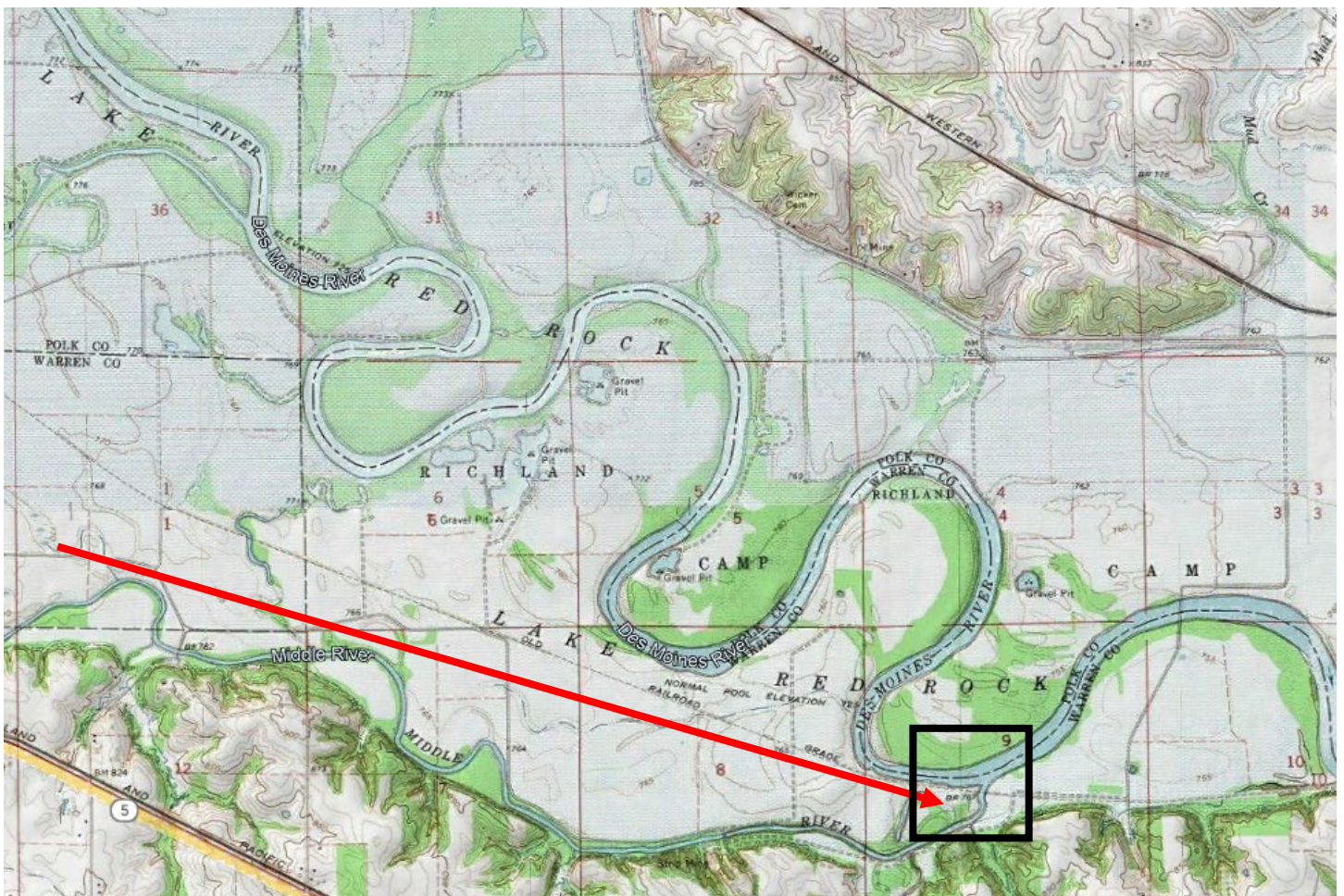


008

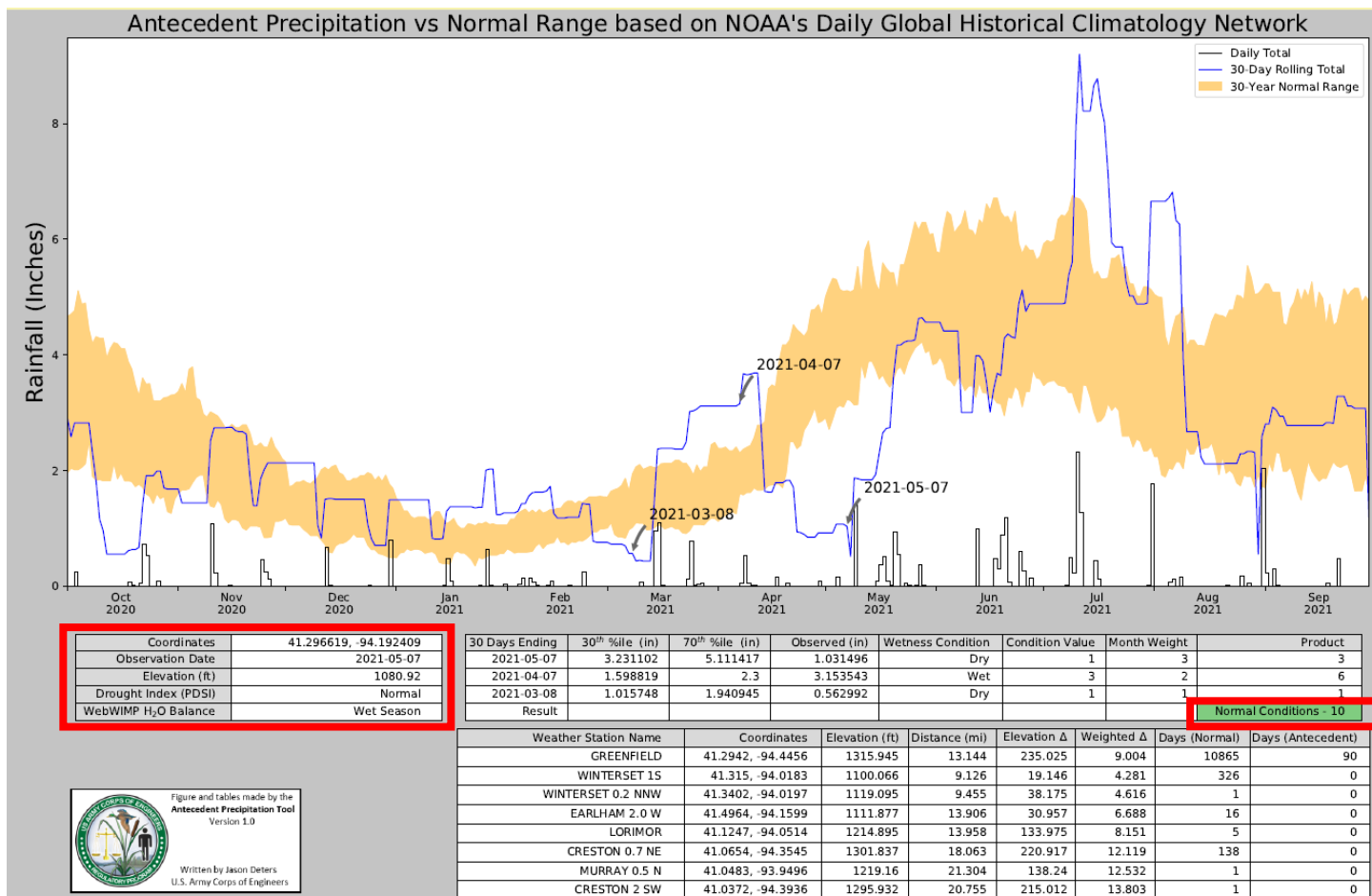
Flow path and surface water flow in a typical year: Unnamed tributary to the Middle River (includes E-2 and I-2) → Middle River → Des Moines River, a TNW (this segment of the Des Moines River is Lake Red Rock – a Corps reservoir)



The black box and yellow pin is the area of review. The red arrows show the flow direction downstream to a TNW (the Des Moines River).



Connection of the Middle River, black box, with Lake Red Rock (a Corps reservoir) within the Des Moines River – a TNW



The Corps' Antecedent Precipitation Tool (APT) calculation uses the average of a 30-year rolling calendar of nearby weather stations to determine normal conditions for a particular date. On the Corps' May 7, 2021, site visit the APT calculated it to be the wet season and normal conditions; while the U.S Drought Monitor considered it an abnormally dry; therefore, the date of this site visit accurately represents normal conditions and typical flow regime. A series of photos taken the date of the site visit are provided below representing flowing water as can be viewed through darker, wet areas, and water reflection, as well as the statements from the PM conducting the site visit (Alex Meincke) in the letter dated May 17, 2021, stating that "The stream also had weakly flowing water."

U.S. Drought Monitor Iowa

May 4, 2021
(Released Thursday, May 6, 2021)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	21.56	78.44	36.85	7.62	0.00	0.00
Last Week 04-27-2021	25.51	74.49	19.57	7.62	0.00	0.00
3 Months Ago 02-02-2021	47.81	52.19	34.17	15.77	3.55	0.00
Start of Calendar Year 01-01-2021	37.84	62.16	36.35	17.59	4.03	0.00
Start of Water Year 09-28-2020	30.56	69.44	46.89	22.57	0.00	0.00
One Year Ago 05-05-2020	100.00	0.00	0.00	0.00	0.00	0.00

Intensity:

None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

David Simeral
Western Regional Climate Center





This upstream segment of stream (near the dam outlet) was wet as observed by the darker soil in the surface of the creek bed but did not have flowing water.



Water is visible in this picture. The growth of algae (which is not dried out) as shown by the vivid green within the channel at the bottom left of the photo above is indicative of a relatively permanent pool of slow moving or stagnant water.

The erosion and undercutting of the banks is more indicative of an intermittent tributary than an ephemeral tributary. Ephemeral channels have flow during, and for a short duration after, precipitation events and therefore, do not typically exhibit such strong ordinary high-water mark (OHWM) indicators or cause erosion with undercutting of the banks and sheer-face sides.



Further downstream deeper and wider pools of water were visible.

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Iowa Environmental Mesonet



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```
# IEM Rainfall https://mesonet.agron.iastate.edu/rainfall
# Date Generated: Tue, 31 May 2022 11:34:51 -0500
# Request Method: Geocoded , winterest, iowa, IA
# Latitude: 41.3308237 Longitude: -94.0138393 HRAP_I: 7507
Date,Estimate
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2021-04-08, 0.08

2021-04-09, 0.01

2021-04-10, 0.05

2021-04-11, 0.00

2021-04-12, 0.00

2021-04-13, 0.00

2021-04-14, 0.00

2021-04-15, 0.00

2021-04-16, 0.05

2021-04-17, 0.10

2021-04-18, 0.00

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2021-04-22, 0.00

2021-04-23, 0.00

2021-04-24, 0.00

2021-04-25, 0.00

2021-04-26, 0.00

2021-04-27, 0.00

2021-04-28, 0.16

2021-04-29, 0.00

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2021-05-01, 0.00

2021-05-02, 0.00

2021-05-03, 0.16

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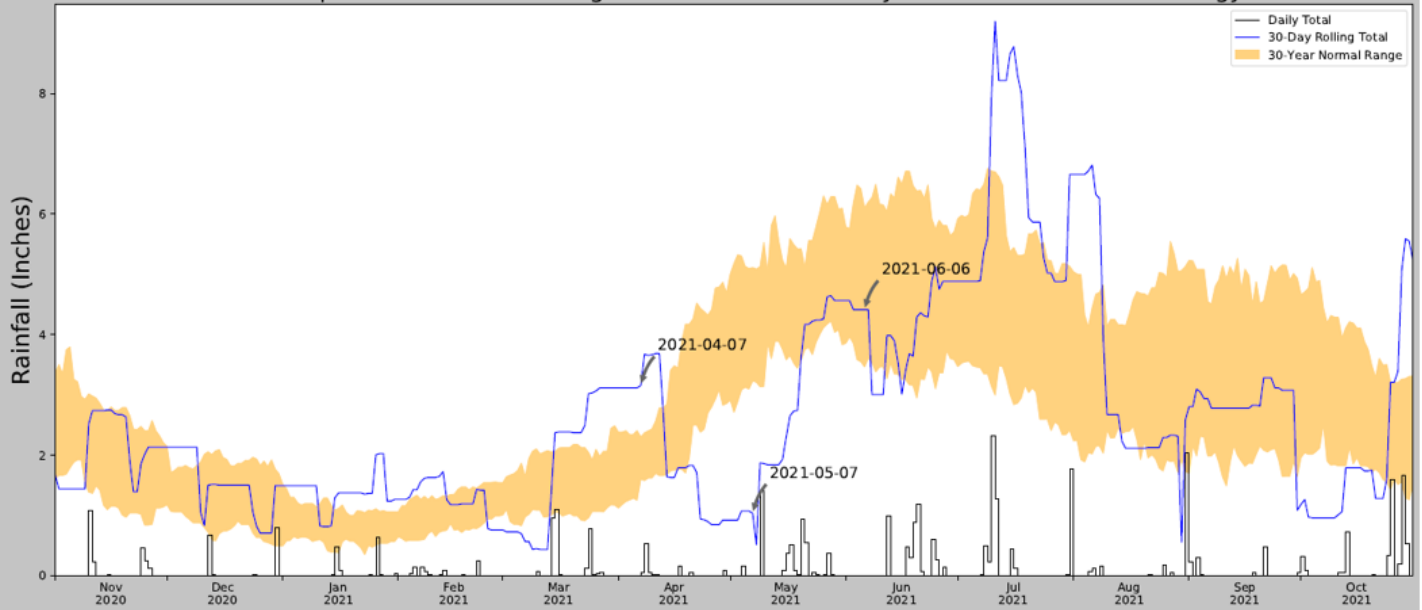
2021-05-05, 0.00

2021-05-06, 0.00

2021-05-07, 0.00

5-7-2021 – no rain on the date of the site visit or the preceding day. No rain the proceeding 3 days of site visit. A total of 0.16” of rain fell within the week preceding the Corps site visit. The Corps definition of ephemeral stream is one that has flowing water only during, and for a short duration after, precipitation events in a typical year. As there was minimal precipitation the day immediately preceding the Corps site visit the tributary does not meet the definition of ephemeral. An intermittent stream has flowing water during certain times of the year and is considered a seasonal relatively permanent water or non-relatively permanent water. A perennial stream has flowing water year-round during a typical year. As the stream did not have flowing water throughout the tributary meets the definition of an intermittent tributary.

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	41.296619, -94.192409
Observation Date	2021-06-06
Elevation (ft)	1080.92
Drought Index (PDSI)	Normal
WebWIMP H ₂ O Balance	Dry Season

30 Days Ending	30 th Mile (in)	70 th Mile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2021-06-06	3.464173	6.103937	4.413386	Normal	2	3	6
2021-05-07	3.231102	5.111417	1.031496	Dry	1	2	2
2021-04-07	1.598819	2.3	3.153543	Wet	3	1	3
Result							Normal Conditions - 11



Figure and tables made by the
Antecedent Precipitation Tool
Version 1.0

Written by Jason Detert
U.S. Army Corps of Engineers

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days (Normal)	Days (Antecedent)
GREENFIELD	41.2942, -94.4456	1315.945	13.144	235.025	9.004	10865	90
WINTERSET 1S	41.315, -94.0183	1100.066	9.126	19.146	4.281	326	0
WINTERSET 0.2 NNW	41.3402, -94.0197	1119.095	9.455	38.175	4.616	1	0
EARLHAM 2.0 W	41.4964, -94.1599	1111.877	13.906	30.957	6.688	16	0
LORIMOR	41.1247, -94.0514	1214.895	13.958	133.975	8.151	5	0
CRESTON 0.7 NE	41.0654, -94.3545	1301.837	18.063	220.917	12.119	138	0
MURRAY 0.5 N	41.0483, -93.9496	1219.16	21.304	138.24	12.532	1	0
CRESTON 2 SW	41.0372, -94.3936	1295.932	20.755	215.012	13.803	1	0

The appellant provided a photo of the culvert inlet dated June 6, 2021, the APT calculated this to be taken during normal conditions and dry conditions. The drought index considered it to be moderate drought conditions.

U.S. Drought Monitor Iowa

June 8, 2021

(Released Thursday, Jun. 10, 2021)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	11.04	88.96	56.67	9.76	0.00	0.00
Last Week 06-01-2021	37.88	62.12	37.08	7.62	0.00	0.00
3 Months Ago 03-09-2021	45.12	54.88	26.95	10.08	2.93	0.00
Start of Calendar Year 12-29-2020	37.84	62.16	36.35	17.59	4.03	0.00
Start of Water Year 09-29-2020	30.56	69.44	46.89	22.57	0.00	0.00
One Year Ago 06-09-2020	89.00	11.00	0.00	0.00	0.00	0.00

Intensity:

None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drought

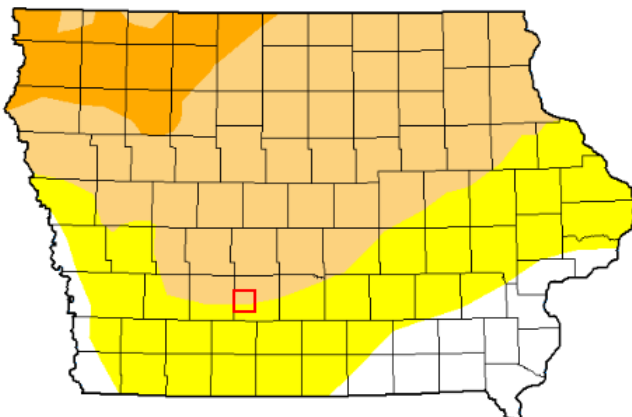
The Drought Monitor focuses on broad-scale conditions.
Local conditions may vary. For more information on the
Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

Brian Fuchs
National Drought Mitigation Center



droughtmonitor.unl.edu



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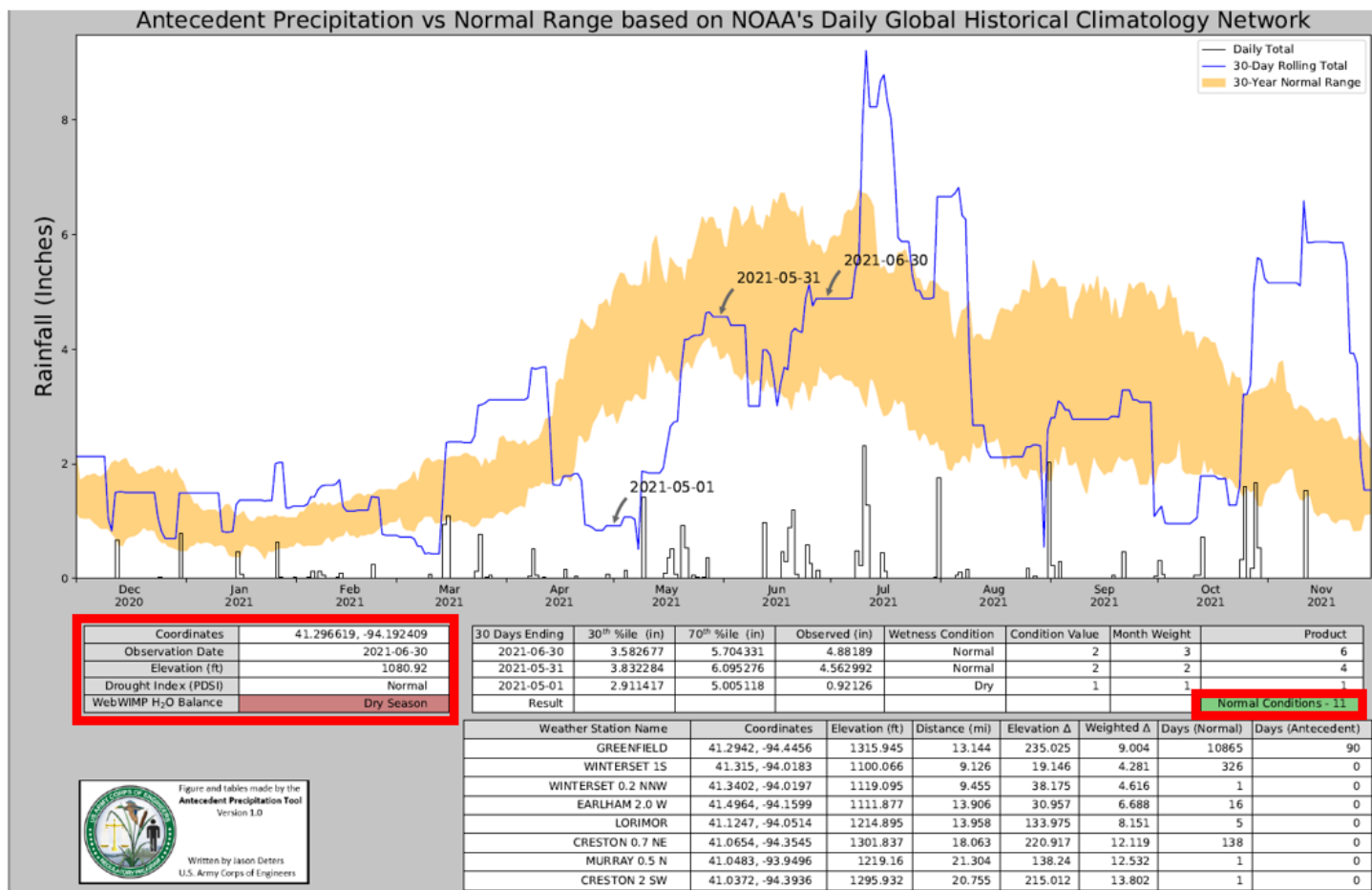
IEM Rainfall <https://mesonet.agron.iastate.edu/rainfall>
Date Generated: Tue, 31 May 2022 11:34:51 -0500
Request Method: Geocoded , winterest, iowa, IA
Latitude: 41.3308237 Longitude: -94.0138393 HRAP_I: 7507
Date, Estimate

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2021-05-08,	0.41
2021-05-09,	0.59
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2021-05-11,	0.00
2021-05-12,	0.00
2021-05-13,	0.00
2021-05-14,	0.09
2021-05-15,	0.57
2021-05-16,	0.59
2021-05-17,	0.13
2021-05-18,	0.04
2021-05-19,	0.30
2021-05-20,	1.07
2021-05-21,	0.06
2021-05-22,	0.20
2021-05-23,	0.04
2021-05-24,	0.02
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2021-05-27,	0.20
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2021-05-29,	0.00
2021-05-30,	0.00
2021-05-31,	0.00
2021-06-01,	0.00
2021-06-02,	0.00
2021-06-03,	0.00
2021-06-04,	0.00
2021-06-05,	0.00
2021-06-06,	0.00



Exhibit "C"

The appellant provided photos of the water inlet pipe taken on June 6, 2021, showing the level of the pond below the lip of the pipe and algae and mud on the lip of the water inlet pipe. The appellant has stated that the impoundment is the only source of hydrology for the stream. However, the stream hydrology can be met through other factors such as runoff from adjacent uplands, water flowing downstream through upstream tributaries/gullies, seeps, precipitation, groundwater in certain locations, etc. The photo showing the inlet does not provide further evidence for or against the flow regime of the tributary.



The appellant provided a photo of the culvert inlet and two closeup photos of the tributary taken on June 30, 2021, the APT calculated this to be taken during normal conditions and dry conditions. The drought index considered it to be moderate drought conditions.

U.S. Drought Monitor

Iowa

June 29, 2021

(Released Thursday, Jul. 1, 2021)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	14.40	85.60	67.49	35.62	0.00	0.00
Last Week 06-22-2021	7.54	92.46	76.16	43.88	0.00	0.00
3 Months Ago 03-30-2021	58.67	41.33	13.12	7.96	1.89	0.00
Start of Calendar Year 12-29-2020	37.84	62.16	36.35	17.59	4.03	0.00
Start of Water Year 09-29-2020	30.56	69.44	46.89	22.57	0.00	0.00
One Year Ago 06-30-2020	80.66	19.34	0.00	0.00	0.00	0.00

Intensity:

None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drought

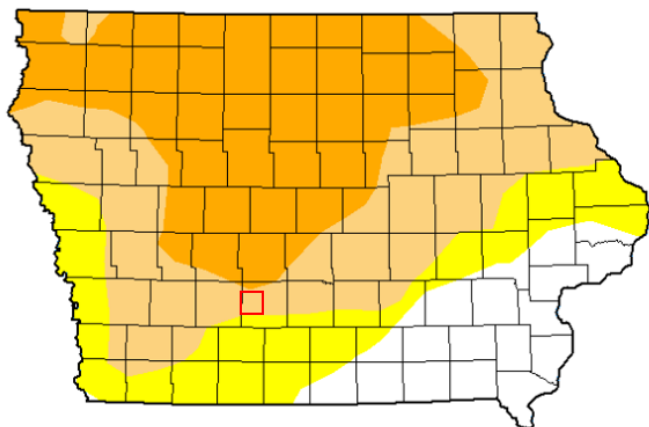
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

Deborah Bathke
National Drought Mitigation Center



droughtmonitor.unl.edu



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Iowa Environmental Mesonet



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IEM Rainfall <https://mesonet.agron.iastate.edu/rainfall>
Date Generated: Tue, 31 May 2022 11:34:51 -0500
Request Method: Geocoded , winterest, iowa, IA
Latitude: 41.3308237 Longitude: -94.0138393 HRAP_I: 7507
Date, Estimate

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2021-06-02,	0.00
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2021-06-04,	0.00
2021-06-05,	0.00
2021-06-06,	0.00
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2021-06-14,	0.00
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2021-06-17,	0.17
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2021-06-23,	0.00
2021-06-24,	0.92
2021-06-25,	0.00
2021-06-26,	0.07
2021-06-27,	0.00
2021-06-28,	0.00
2021-06-29,	0.00
2021-06-30,	0.00



The appellant provided photos of dry sections of the stream bed taken on June 30, 2021. There was 0.07" of precipitation three days prior to this and a total of 0.99" of precipitation the week prior. During the May 7, 2021, the Corps verified there were sections of dry streambed and sections without flowing water that was also collected during normal conditions. The close-ups on the streambed that did not show further upstream or downstream where other sections of the stream may have had water present/flowing. Based on the image provided water may be flowing into the inlet pipe based on the riffle of water visible and leaves appearing to overflow from the pond into the inlet.



NOWData - NOAA Online Weather Data

1. Location »

View map

Rathbun Dam, IA
Rockwell City, IA
Sac City, IA
Swea City 4w, IA
Titonka, IA
Toledo 3n, IA
Tripoli, IA
Waterloo Municip, IA
Webster City, IA
Winterset 2 Nnw, IA

2. Product »

☐ Daily data for a month
☐ Daily almanac
☒ Monthly summarized data
☐ Calendar day summaries
☐ Daily/monthly normals
☐ Climatology for a day
☐ First/last dates
☐ Temperature graphs
☐ Accumulation graphs

3. Options »

Year range: 2000 - 2022
Variable: Precipitation
Summary: Sum

4. View »

Go

Product Description:

MONTHLY SUMMARIZED DATA - calculates averages, totals, daily extremes or frequencies for the selected variable for each month of the year for the selected range of years. Note: trace precipitation/snowfall/snow depth amounts are treated as zero in sums, mean, and number of days counts. Annual average temperatures are the average of the twelve monthly values. Temperatures are reported in degrees F; precipitation,

- Common questions -
- Submit a question/comment -

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ACIS
NOAA Regional Climate Centers

Monthly Total Precipitation for WINTERSET 1S, IA

Click column heading to sort ascending, click again to sort descending.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2000	0.43	1.20	1.62	M	1.81	5.79	4.61	1.18	1.76	1.32	2.13	2.37	M
2001	1.91	2.46	1.45	3.08	6.13	2.98	1.55	1.71	5.84	1.97	0.75	0.43	30.26
2002	0.32	0.90	M	3.46	5.54	1.52	2.58	3.44	1.73	4.46	0.13	M	M
2003	0.42	1.54	0.79	4.34	4.70	4.45	2.21	1.23	3.41	1.27	5.52	0.96	30.84
2004	1.72	1.45	4.44	1.28	10.61	2.54	5.17	5.04	2.23	0.84	2.27	0.62	38.21
2005	1.43	1.52	1.13	3.22	6.24	3.75	3.35	1.26	1.70	0.78	0.91	1.01	26.30
2006	0.46	0.08	4.27	4.09	3.54	0.79	3.51	7.27	4.08	1.74	1.96	2.13	33.92
2007	M	M	2.47	3.92	6.74	1.27	2.10	8.93	4.29	6.35	0.27	M	M
2008	M	M	1.61	4.83	4.77	12.78	9.22	1.30	4.48	4.38	2.33	1.49	M
2009	M	0.42	4.22	4.59	3.88	6.84	2.97	5.38	1.42	6.25	1.10	1.86	M
2010	1.04	M	1.72	3.38	M	10.80	9.22	6.42	6.90	0.61	2.40	0.40	M
2011	M	M	M	M	M	M	M	M	M	2.56	1.99	2.30	M
2012	0.11	2.14	2.79	6.04	2.04	2.93	0.35	2.32	1.11	3.93	1.39	1.09	26.24
2013	0.70	0.97	1.66	5.64	6.44	4.12	1.61	0.32	4.30	4.25	1.33	0.21	M
2014	M	M	M	M	M	M	M	M	M	3.60	M	M	M
2015	M	M	M	M	M	M	8.29	M	M	M	M	M	M
2016	M	M	M	3.86	4.48	2.07	M	M	M	1.49	0.94	0.32	M
2017	1.10	0.58	M	M	M	M	M	M	M	M	M	M	M
2018	M	M	M	M	M	M	M	M	M	M	M	M	M
2019	M	M	M	M	M	M	M	M	M	M	M	M	M
2020	M	M	M	M	M	M	M	M	M	M	M	M	M
2021	M	M	M	M	M	M	M	M	M	M	M	M	M
2022	M	M	M	M	M	M	M	M	M	M	M	M	M
Mean	0.88	1.21	2.35	3.98	5.15	4.47	4.05	3.52	3.33	2.86	1.69	1.17	30.96
Max	1.91 2001	2.46 2001	4.44 2004	6.04 2012	10.61 2004	12.78 2008	9.22 2008	8.93 2007	6.90 2010	6.35 2007	5.52 2003	2.37 2000	38.21 2004
Min	0.11 2012	0.08 2006	0.79 2003	1.28 2004	1.81 2000	0.79 2006	0.35 2012	0.32 2013	1.11 2012	0.61 2010	0.13 2002	0.21 2013	26.24 2012

Average precipitation from 2000 – 2022 is 31"/year

Monthly Total Snowfall for WINTERSET 1S, IA

Click column heading to sort ascending, click again to sort descending.

Year	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Season
1999-2000	0.0	0.0	0.0	0.0	0.0	8.5	M	5.5	6.0	M	0.0	0.0	M
2000-2001	0.0	0.0	0.0	0.0	0.0	25.8	9.5	6.5	7.5	0.0	0.0	0.0	M
2001-2002	0.0	0.0	0.0	0.0	M	1.5	M	2.5	M	0.0	0.0	0.0	M
2002-2003	0.0	0.0	0.0	1.3	1.5	M	5.0	15.5	3.5	6.0	0.0	0.0	M
2003-2004	0.0	0.0	0.0	0.0	0.0	9.0	15.0	15.0	16.5	0.0	0.0	0.0	55.5
2004-2005	0.0	0.0	0.0	0.0	1.5	1.5	M	4.5	0.0	0.0	0.0	0.0	M
2005-2006	0.0	0.0	0.0	0.0	3.0	10.0	1.0	1.3	5.5	0.0	0.0	0.0	20.8
2006-2007	0.0	0.0	0.0	0.0	0.6	T	9.3	13.0	7.0	3.4	0.0	0.0	33.3
2007-2008	0.0	0.0	0.0	0.0	4.5	M	7.2	M	5.5	1.0	0.0	0.0	M
2008-2009	0.0	0.0	0.0	0.0	2.9	7.7	13.7	8.3	0.6	2.0	0.0	0.0	35.2
2009-2010	0.0	0.0	0.0	2.9	0.0	24.5	M	16.7	6.4	0.0	0.0	0.0	M
2010-2011	0.0	0.0	0.0	0.0	0.0	7.1	M	M	M	M	M	M	M
2011-2012	M	M	M	M	M	M	M	M	M	M	M	M	M
2012-2013	M	M	M	M	M	M	M	M	M	M	M	M	M
2013-2014	M	M	M	M	M	M	M	M	M	M	M	M	M
2014-2015	M	M	M	0.0	M	M	M	M	M	M	M	M	M
2015-2016	0.0	M	M	M	M	M	M	M	M	0.0	0.0	0.0	M
2016-2017	M	M	M	0.0	0.0	M	1.0	M	M	M	M	M	M
2017-2018	M	M	M	M	M	M	M	M	M	M	M	M	M
2018-2019	M	M	M	M	M	M	M	M	M	M	M	M	M
2019-2020	M	M	M	M	M	M	M	M	M	M	M	M	M
2020-2021	M	M	M	M	M	M	M	M	M	M	M	M	M
2021-2022	M	M	M	M	M	M	M	M	M	M	M	M	M
Mean	0.0	0.0	0.0	0.3	1.2	9.6	7.7	8.9	5.9	1.1	0.0	0.0	36.2
Max	0.0 2015	0.0 2010	0.0 2010	2.9 2009	4.5 2007	25.8 2000	15.0 2004	16.7 2010	16.5 2004	6.0 2003	0.0 2016	0.0 2016	55.5 2004
Min	0.0 2015	0.0 2010	0.0 2010	0.0 2016	0.0 2016	T 2006	1.0 2017	1.3 2006	0.0 2005	0.0 2016	0.0 2016	0.0 2016	20.8 2006

Average snowfall from 1999 to 2022 is 36"/year

StreamStats Report

Region ID:
Workspace ID:
Clicked Point (Latitude, Longitude):
Time:

IA
IA20220506152635860000
41.29765, -94.19204
2022-05-06 10:27:03 -0500

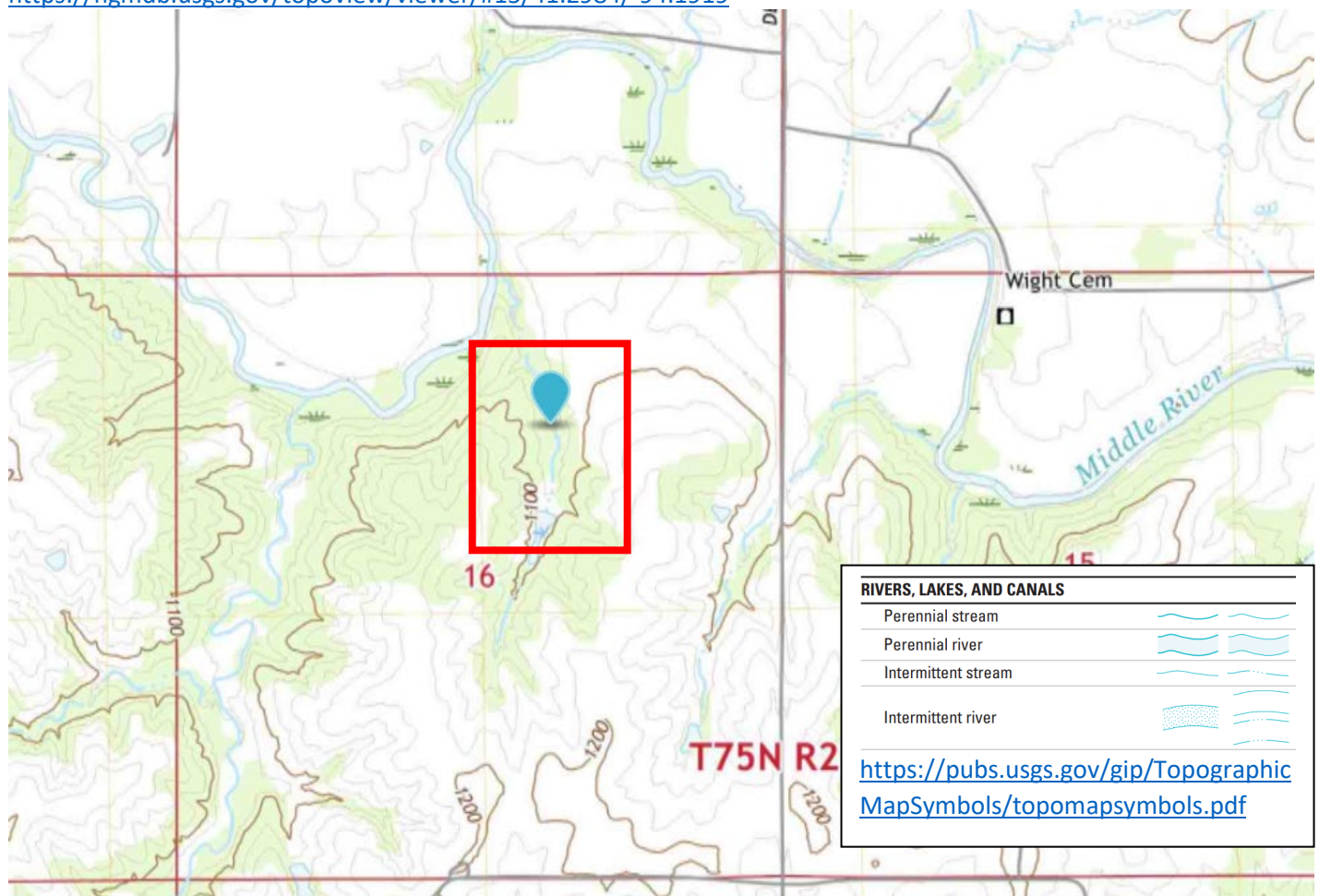


Basin Characteristics

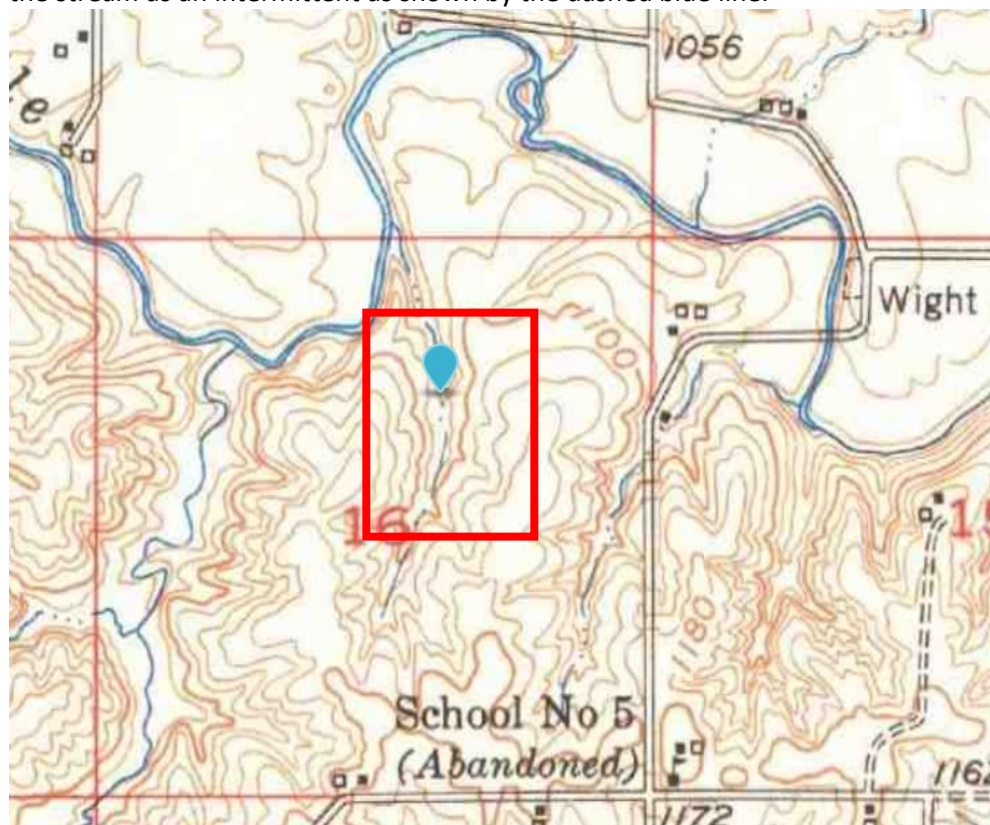
Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.18	square miles
DRNFREQ	Number of first order streams per square mile of drainage area	5.55	1st-order streams per square mile
FOSTREAM	Number of First Order Streams	1	dimensionless

The review area has a drainage area of 115.2 acres.

<https://ngmdb.usgs.gov/topoview/viewer/#15/41.2984/-94.1919>

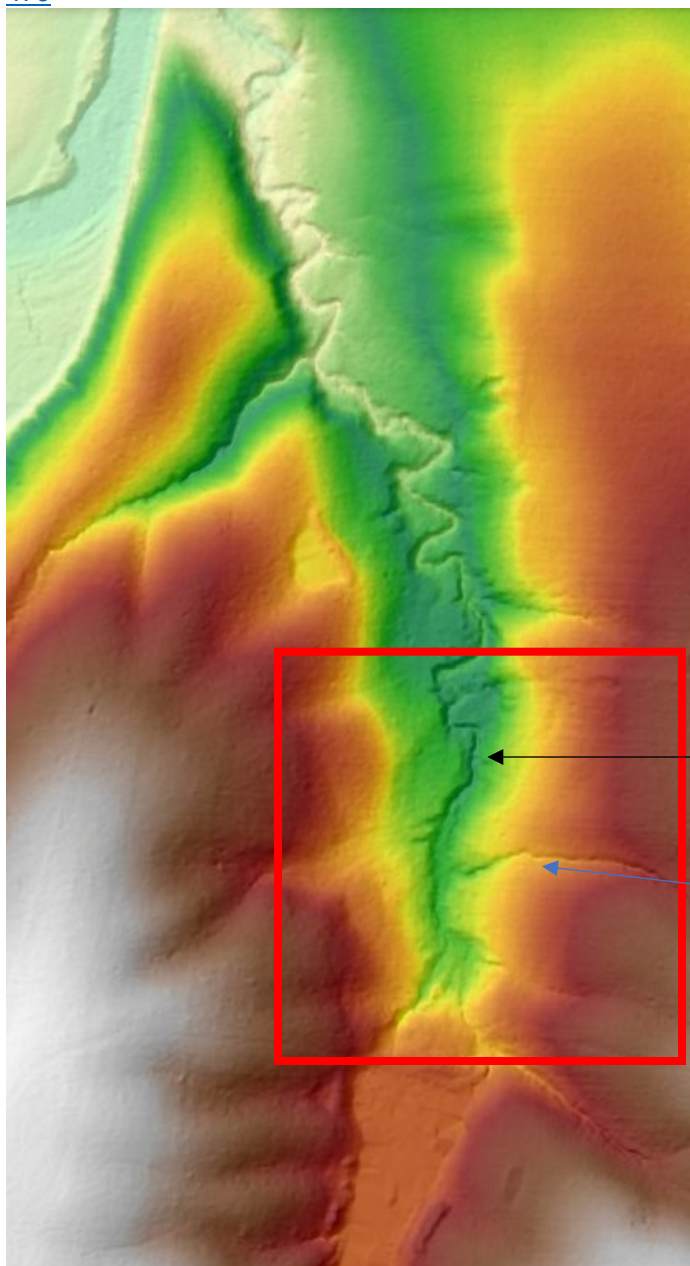


US Geological Service topographic maps 2022 (above _ Scale 1:24000) and the 1952 (below _ Scale 1:62500) indicates the stream as an intermittent as shown by the dashed blue line.

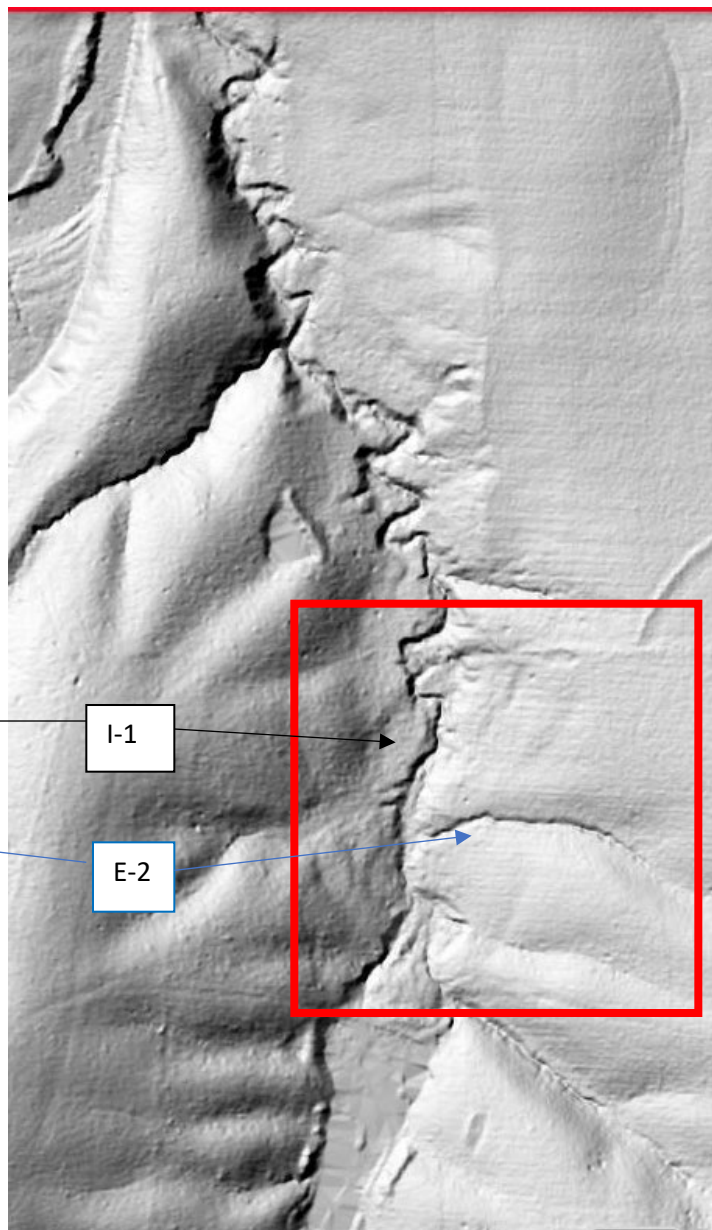


Rock Island District Regulatory Viewer

<https://geoportal.mvr.usace.army.mil/b5portal/apps/MapSeries/index.html?appid=a8f1e944e1814709b2058092d667d470>



IA LiDAR DEM 1m NAVD88ft & IA LiDAR DEM 1m hillshade



IA LiDAR DEM 1m hillshade

Rock Island District Regulatory Viewer

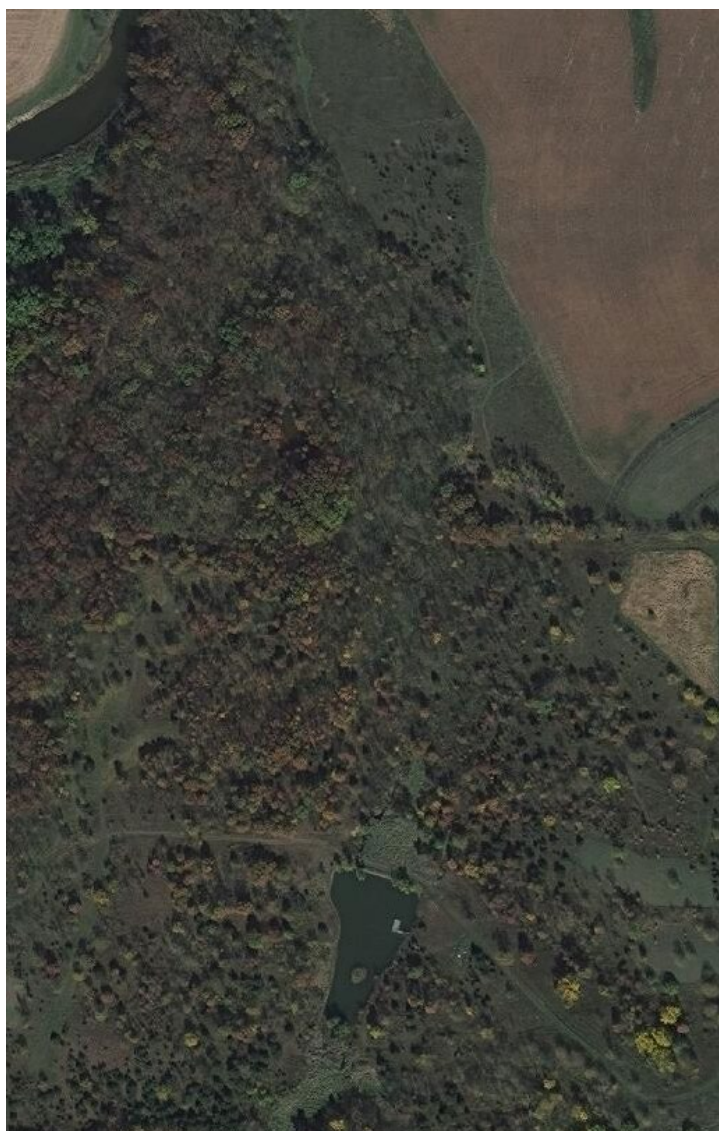


1930 aerial



1980 aerial

The area was an open meandering stream from at least 1930 to the 1980 aerial as shown above.



10-12-2020



11-09-2021 VIVID

Regulatory Viewer

Regulatory Map

Compliance Viewer

IPaC

I-Sites

Mitigation Banking

IL IAS

Rock Island District Regulatory Viewer



+

-

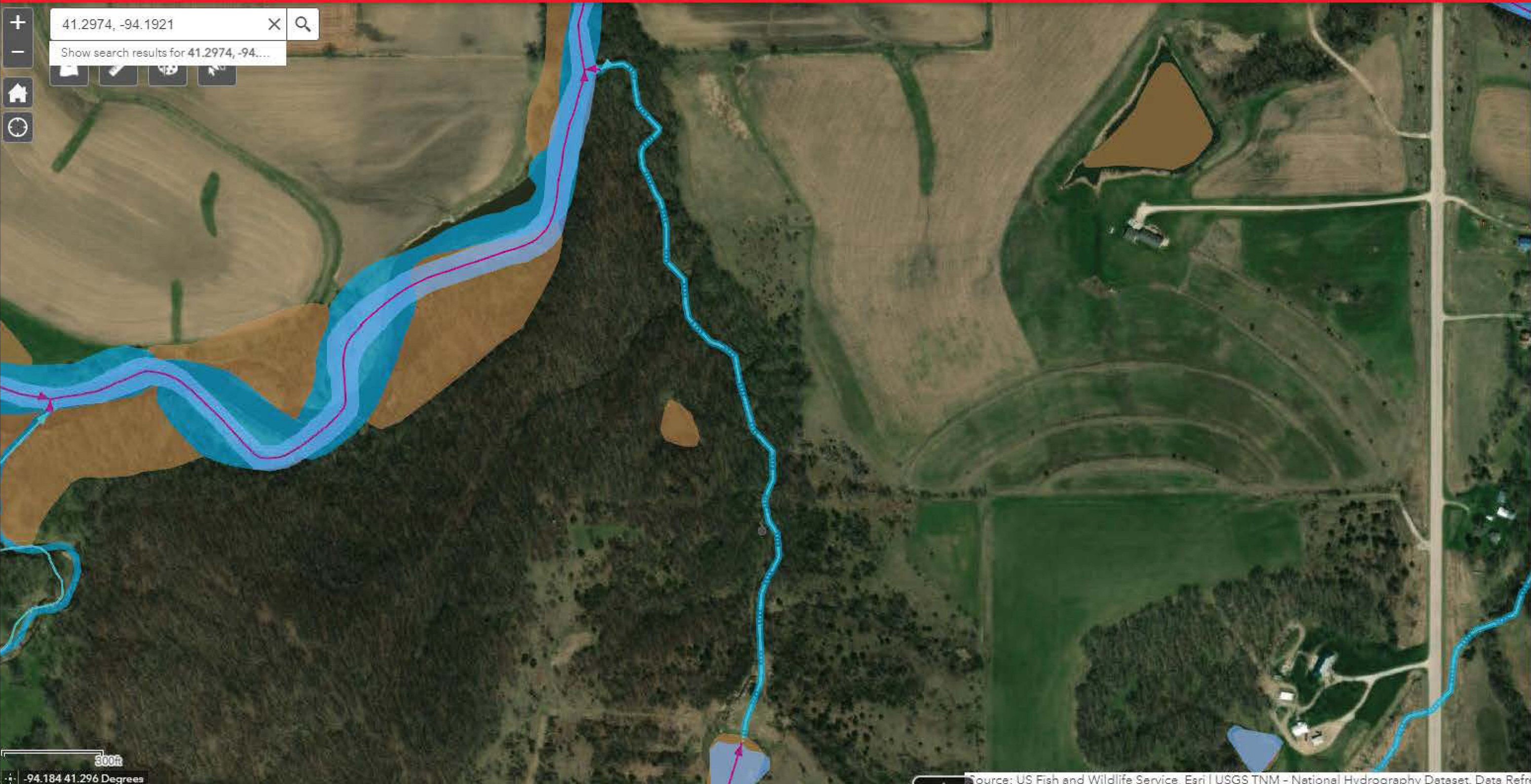
Home

Refresh

41.2974, -94.1921

Show search results for 41.2974, -94.1921

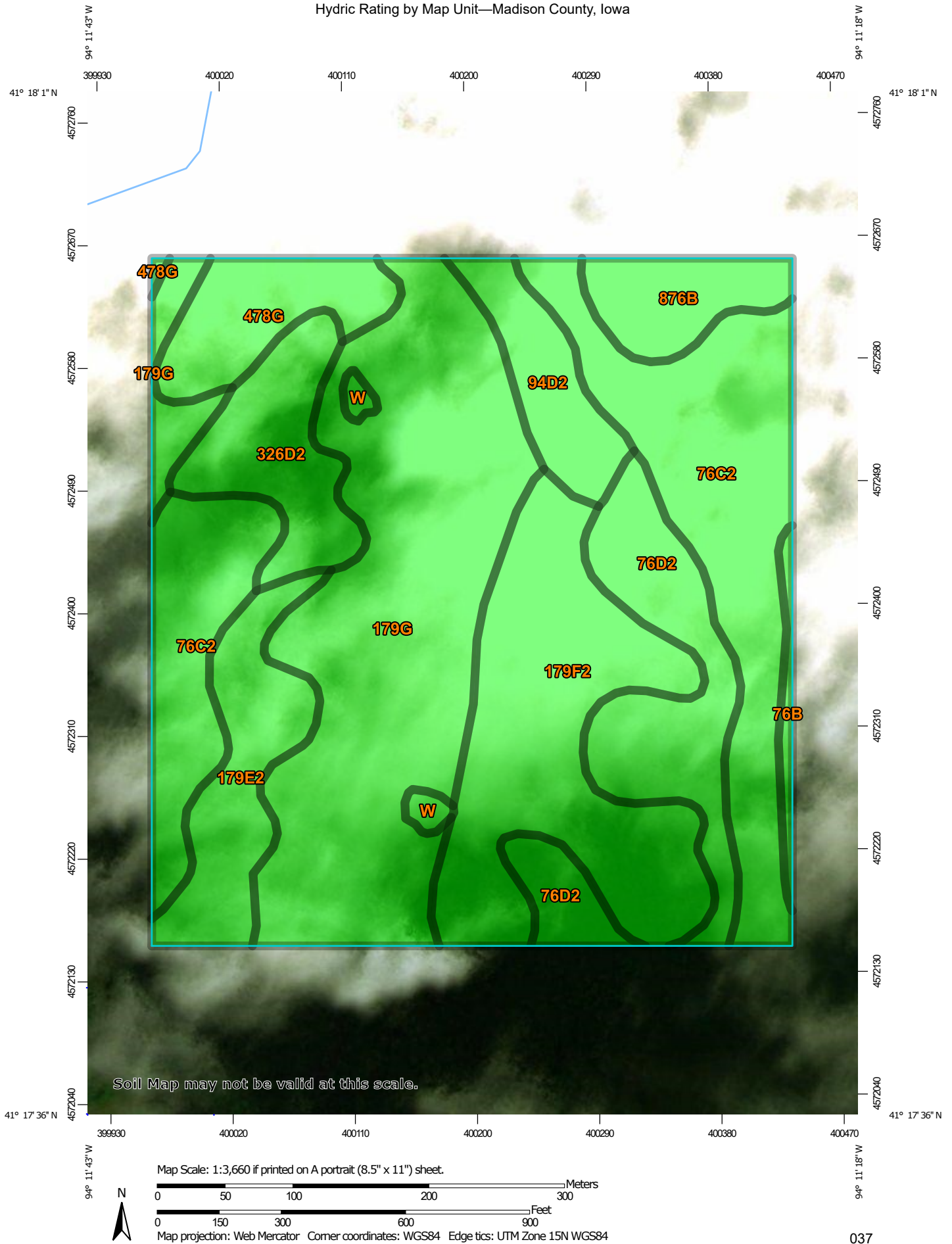
Search










Layer List

- ☐ Service)
- ☐ NLD - Floodwalls (External Web GIS Service) ...
- ☐ NLD - Gravity Drains (External Web GIS Service) ...
- ☐ NLD - Rehabilitations (External Web GIS Service) ...
- ☐ NLD - Toe Drains (External Web GIS Service) ...
- ☐ NLD - Leveed Areas (External Web GIS Service) ...
- ☐ USACE_Boundaries - USACE Districts ...
- ☐ MVR Counties ...
- ☐ Roads ...
- ☐ Localities for Reg Viewer ...
- ☐ PLSS ...
- ☐ PADUS (External Web GIS Service) ...
- ☐ Real Estate for Reg Viewer ...
- ☒ National Hydrography Dataset (NHD) (External Web GIS Service) ...
- ☐ Watersheds (External Web GIS Service) ...
- ☐ Section 10 Waters ...
- ☒ National Wetlands Inventory (External Web GIS Service) ...
- ☐ USA Soils Hydric Class (External Web GIS Service) ...
- ☐ USA Soils Map Units (External Web GIS Service) ...







Hydric Rating by Map Unit—Madison County, Iowa









MAP LEGEND**Area of Interest (AOI)**
 Area of Interest (AOI)
Soils**Soil Rating Polygons**


-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available






Soil Rating Lines


-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Soil Rating Points

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Water Features
 Streams and Canals
Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background
 Aerial Photography
MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Madison County, Iowa
Survey Area Data: Version 24, Jun 10, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 21, 2009—Sep 19, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
76B	Ladoga silt loam, 2 to 5 percent slopes	0	0.5	0.9%
76C2	Ladoga silt loam, dissected till plain, 5 to 9 percent slopes, eroded	0	12.2	20.7%
76D2	Ladoga silt loam, 9 to 14 percent slopes, eroded	0	5.8	9.9%
94D2	Caleb-Mystic loams, 9 to 14 percent slopes, moderately eroded	0	2.3	3.9%
179E2	Gara loam, dissected till plain, 14 to 18 percent slopes, eroded	0	3.7	6.3%
179F2	Gara loam, dissected till plain, 18 to 25 percent slopes, eroded	0	9.6	16.2%
179G	Gara loam, dissected till plain, 25 to 40 percent slopes	0	16.3	27.5%
326D2	Dunbarton silt loam, deep variant, 9 to 14 percent slopes, moderately eroded	0	3.4	5.8%
478G	Steep rock land	0	2.7	4.6%
876B	Ladoga silt loam, terrace on dissected till plain, 2 to 5 percent slopes	0	2.1	3.5%
W	Water	0	0.4	0.6%
Totals for Area of Interest			59.0	100.0%

Description

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Rating Options

Aggregation Method: Percent Present

Component Percent Cutoff: None Specified

Tie-break Rule: Lower



US Army Corps
of Engineers®

REGULATORY GUIDANCE LETTER

No. 05-05

Date: 7 December 2005

SUBJECT: Ordinary High Water Mark Identification

1. Purpose and Applicability

- a. **Purpose.** To provide guidance for identifying the ordinary high water mark.
- b. **Applicability.** This applies to jurisdictional determinations for non-tidal waters under Section 404 of the Clean Water Act and under Sections 9 and 10 of the Rivers and Harbors Act of 1899.

2. General Considerations

- a. **Regulation and Policy.** Pursuant to regulations and inter-agency agreement,¹ the U.S. Army Corps of Engineers (Corps) determines, on a case-by case basis, the extent of geographic jurisdiction for the purpose of administering its regulatory program. For purposes of Section 404 of the Clean Water Act (CWA), the lateral limits of jurisdiction over non-tidal water bodies extend to the ordinary high water mark (OHWM), in the absence of adjacent wetlands. When adjacent wetlands are present, CWA jurisdiction extends beyond the OHWM to the limits of the adjacent wetlands. For purposes of Sections 9 and 10 of the Rivers and Harbors Act of 1899, the lateral extent of Federal jurisdiction, which is limited to the traditional navigable waters of the United States, extends to the OHWM, whether or not adjacent wetlands extend landward of the OHWM.

Corps regulations define the term “ordinary high water mark” for purposes of the CWA lateral jurisdiction at 33 CFR 328.3(e), which states:

“The term *ordinary high water mark* means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.”

1. Memorandum of Agreement between the Department of the Army and Environmental Protection Agency Concerning the Determination of the Geographical Jurisdiction of the Section 404 Program and the Application of the Exemptions under Section 404(f) of the Clean Water Act, January 19, 1989

This definition is virtually identical to the definition of the term “ordinary high water mark” found at 33 CFR Section 329.11(a)(1), describing the lateral extent of Federal jurisdiction over non-tidal traditional navigable waters of the United States subject to Sections 9 and 10 of the Rivers and Harbors Act of 1899 (RHA). When the definition from 33 CFR Section 329.11(a)(1) was reproduced at 33 CFR 328.3(e), the semi-colons of the former definition were mistakenly changed to commas in the latter definition. Consequently, the definition of “ordinary high water mark” in Part 328 is not as clear in meaning as is the definition of the same term in Part 329, even though the two definitions were to serve the same basic purpose (i.e., establishing the lateral extent of jurisdiction, in the absence of adjacent wetlands).²

Both definitions of the term “ordinary high water mark” begin by discussing physical characteristics that indicate the location of the OHWM on the shore of a water body. Furthermore, both OHWM definitions conclude with the statement the OHWM can be determined using “other appropriate means that consider the characteristics of the surrounding areas”.³ Prior to this Regulatory Guidance Letter (RGL), neither the Corps nor the U.S. Environmental Protection Agency has issued any additional clarifying national guidance for use by Corps regulatory program staff in identifying the location of the OHWM for the CWA on a case-by-case basis.⁴

b. Practice. In making OHWM determinations, Corps districts generally rely on physical evidence to ascertain the lateral limits of jurisdiction, to whatever extent physical evidence can be found and such evidence is deemed reasonably reliable. Physical indicators include the features listed in the definitions at 33 CFR Sections 328.3(e) and 329.11(a)(1) and other appropriate means that consider the characteristics of the surrounding areas. In addition, districts use other methods for estimating the line on the shore established by the fluctuations of water, including, but not limited to, lake and stream gage data, flood predictions, historic records of water flow, and statistical evidence. To the maximum extent practicable, districts generally use more than one physical indicator or other means for determining the OHWM.

3. Guidance.

a. In determining the location of the OHWM for non-tidal water bodies under the CWA or the RHA, districts should give priority to evaluating the physical characteristics of the area that are determined to be reliable indicators of the OHWM. Physical evidence to be evaluated includes those items listed in the definitions at 33 CFR Sections 328.3(e) and 329.11(a)(1). Because many types of water bodies occur with varying conditions, including topography, channel morphology and flow dynamics, districts may consider other physical characteristics indicative of the OHWM.

2. CWA jurisdiction extends laterally landward of the OHWM to include all adjacent wetlands wherever such adjacent wetlands are present. This guidance addresses situations where no such adjacent wetlands exist.

3. Changes in the limits of waters of the U.S. are addressed in 33 CFR 328.5.

4. On 3 June 1983 the Corps of Engineers’ Chief Counsel distributed legal guidance to all Corps district and division counsel offices regarding certain legal questions relating to the geographic jurisdiction of Section 10 of the Rivers and Harbors Act of 1899, including questions relating to the OHWM.

b. The following physical characteristics should be considered when making an OHWM determination, to the extent that they can be identified and are deemed reasonably reliable:

Natural line impressed on the bank	Sediment sorting
Shelving	Leaf litter disturbed or washed away
Changes in the character of soil	Scour
Destruction of terrestrial vegetation	Deposition
Presence of litter and debris	Multiple observed flow events
Wracking	Bed and banks
Vegetation matted down, bent, or absent	Water staining
	Change in plant community

This list of OHWM characteristics is not exhaustive. Physical characteristics that correspond to the line on the shore established by the fluctuations of water may vary depending on the type of water body and conditions of the area. There are no “required” physical characteristics that must be present to make an OHWM determination. However, if physical evidence alone will be used for the determination, districts should generally try to identify two or more characteristics, unless there is particularly strong evidence of one.

c. Where the physical characteristics are inconclusive, misleading, unreliable, or otherwise not evident, districts may determine the OHWM by using other appropriate means that consider the characteristics of the surrounding areas, provided those other means are reliable.⁵ Such other reliable methods that may be indicative of the OHWM include, but are not limited to, lake and stream gage data, elevation data, spillway height, flood predictions, historic records of water flow, and statistical evidence.

d. When making OHWM determinations, districts should be careful to look at characteristics associated with ordinary high water events, which occur on a regular or frequent basis. Evidence resulting from extraordinary events, including major flooding and storm surges, is not indicative of the OHWM. For instance, a litter or wrack line resulting from a 200-year flood event would in most cases not be considered evidence of an OHWM.

e. Districts will document in writing the physical characteristics used to establish the OHWM for CWA and/or RHA jurisdiction. If physical characteristics are inconclusive, misleading, unreliable, or not evident, the Districts’ written documentation will include information about the physical characteristics (or lack thereof) and other appropriate means that consider the characteristics of the surrounding areas, which it used to determine the OHWM.

f. To complete an approved jurisdictional determination, districts will have complete and accurate documentation that substantiates the Corps decision. At a minimum, decisions will be documented using the standardized jurisdictional determination information sheet established by

5. In some cases, the physical characteristics may be misleading and would not be reliable for determining the OHWM. For example, water levels or flows may be manipulated by human intervention for power generation or water supply. For such cases, districts should consider using other appropriate means to determine the OHWM.

Headquarters and provided to the districts on August 13, 2004 (or as further amended by Headquarters). Documentation will allow for a reasonably accurate replication of the determination at a future date. In this regard, documentation will normally include information such as data sheets, site visit memoranda, maps, sketches, and, in some cases, surveys and photographs documenting the OHWM.

4. **Duration.** This guidance remains in effect unless revised or rescinded.



DON T. RILEY
Major General, US Army
Director of Civil Works



U.S. ARMY CORPS OF ENGINEERS
REGULATORY PROGRAM
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)
NAVIGABLE WATERS PROTECTION RULE

I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): 12-MAY-2021

ORM Number: MVR-2021-00208-AM

Associated JDs: N/A or ORM numbers and identifiers (e.g. HQS-2020-00001-MSW-MITSITE)

Review Area Location¹:

State/Territory: IA City: County/Parish/Borough: Madison County

Center Coordinates of Review Area: Latitude 41.296619 Longitude -94.192409

II. FINDINGS

A. Summary: Check all that apply. At least one box from the following list **MUST** be selected. Complete the corresponding sections/tables and summarize data sources.

- ☐ The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: N/A or describe rationale.
- ☐ There are "navigable waters of the United States" within Rivers and Harbors Act jurisdiction within the review area (complete table in section II.B).
- ☒ There are "waters of the United States" within Clean Water Act jurisdiction within the review area (complete appropriate tables in section II.C).
- ☒ There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in section II.D).

B. Rivers and Harbors Act of 1899 Section 10 (§ 10)²

§ 10 Name	§ 10 Size	§ 10 Criteria	Rationale for § 10 Determination
N/A	N/A	N/A	N/A

C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters)³

(a)(1) Name	(a)(1) Size	(a)(1) Criteria	Rationale for (a)(1) Determination
N/A	N/A	N/A	N/A

Tributaries ((a)(2) waters):

(a)(2) Name	(a)(2) Size	(a)(2) Criteria	Rationale for (a)(2) Determination
I-1	720 feet	(a)(2) Intermittent tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year	This stream flows directly into the Middle River, which flows

Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):

(a)(3) Name	(a)(3) Size	(a)(3) Criteria	Rationale for (a)(3) Determination
N/A	N/A	N/A	N/A

Adjacent wetlands ((a)(4) waters):

¹ Map(s)/Figure(s) are attached to the AJD provided to the requestor.

² If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.

³ A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where independent upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD form.

⁴ Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps Districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.

⁵ Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.



U.S. ARMY CORPS OF ENGINEERS
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NAVIGABLE WATERS PROTECTION RULE

(a)(4) Name	(a)(4) Size	(a)(4) Criteria	Rationale for (a)(4) Determination
N/A	N/A	N/A	N/A

D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12))⁴:

Exclusion Name	Exclusion Size	Exclusion ⁵	Rationale for Exclusion Determination
E-2	110 feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool	Ephemeral streams are no longer jurisdictional under the NWPR

III. SUPPORTING INFORMATION

A. Select/enter all resources that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.

☒ Information submitted by, or on behalf of, the applicant/consultant: *Joint Application, February 4, 2021*

This information *is not* sufficient for purposes of this AJD.

Rationale: *A wetland delineation was not submitted in this application and online data conflicted with what was submitted.*

Data sheets prepared by the Corps: *Title(s) and/or date(s).*

☒ Photographs: *Site photographs, May 7, 2021; Regulatory Viewer with LIDAR, hillshade, and aerial photographs, March 2021*

☒ Corps Site visit(s) conducted on: *May 7, 2021*

Previous Jurisdictional Determinations (AJDs or PJDs): *ORM Number(s) and date(s).*

☒ Antecedent Precipitation Tool: *provide detailed discussion in Section III.B.*

☒ USDA NRCS Soil Survey: *Web Soil Survey, March 2021*

☒ USFWS NWI maps: *Regulatory Viewer with NWI Layer, March 2021*

☒ USGS topographic maps: *Regulatory Viewer with topo layer, March 2021*

Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
USGS Sources	N/A.
USDA Sources	N/A.
NOAA Sources	N/A.
USACE Sources	N/A.
State/Local/Tribal Sources	N/A.
Other Sources	N/A.

B. Typical year assessment(s): The APT shows that the site is in normal conditions and not in a drought.

¹ Map(s)/Figure(s) are attached to the AJD provided to the requestor.

² If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.

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⁴ Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps Districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.

⁵ Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.



U.S. ARMY CORPS OF ENGINEERS
REGULATORY PROGRAM
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)
NAVIGABLE WATERS PROTECTION RULE

- C. Additional comments to support AJD:** A site visit was conducted to determine what type of stream was present on site. There was no indication of wetlands on site (no NWI mapped wetlands, no mapped hydric soils) and site topography made wetlands on site highly unlikely. The entire stream reach on site was walked and the stream had many indicators of an OHWM such as, but not limited to: very strong bed and banks, sediment sorting, presence of debris and litter, a natural line impressed on the bank, and flowing water. This stream was determined to be intermittent. An ephemeral stream was also discovered that flows into the intermittent stream on site. The ephemeral stream had weak bed and banks, had vegetation in its channel, and had no water in its channel.

¹ Map(s)/Figure(s) are attached to the AJD provided to the requestor.

² If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.

³ A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where independent upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD form.

⁴ Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps Districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.

⁵ Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.