



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, ST. LOUIS DISTRICT
1222 SPRUCE STREET
ST. LOUIS, MISSOURI 63103

CEMVS-RD

November 26, 2024

MEMORANDUM FOR RECORD

SUBJECT: US Army Corps of Engineers (Corps) Approved Jurisdictional Determination in accordance with the "Revised Definition of 'Waters of the United States'"; (88 FR 3004 (January 18, 2023) as amended by the "Revised Definition of 'Waters of the United States'; Conforming" (8 September 2023) ,¹ [MVS-2024-289](#)²

BACKGROUND. An Approved Jurisdictional Determination (AJD) is a Corps document stating the presence or absence of waters of the United States on a parcel or a written statement and map identifying the limits of waters of the United States on a parcel. AJDs are clearly designated appealable actions and will include a basis of JD with the document.³ AJDs are case-specific and are typically made in response to a request. AJDs are valid for a period of five years unless new information warrants revision of the determination before the expiration date or a District Engineer has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit re-verification on a more frequent basis.⁴

On January 18, 2023, the Environmental Protection Agency (EPA) and the Department of the Army ("the agencies") published the "Revised Definition of 'Waters of the United States,'" 88 FR 3004 (January 18, 2023) ("2023 Rule"). On September 8, 2023, the agencies published the "Revised Definition of 'Waters of the United States'; Conforming", which amended the 2023 Rule to conform to the 2023 Supreme Court decision in *Sackett v. EPA*, 598 U.S., 143 S. Ct. 1322 (2023) ("*Sackett*").

This Memorandum for Record (MFR) constitutes the basis of jurisdiction for a Corps AJD as defined in 33 CFR §331.2. For the purposes of this AJD, we have relied on Section 10 of the Rivers and Harbors Act of 1899 (RHA),⁵ the 2023 Rule as amended, as well as other applicable guidance, relevant case law, and longstanding practice in evaluating jurisdiction.

¹ While the Revised Definition of "Waters of the United States"; Conforming had no effect on some categories of waters covered under the CWA, and no effect on any waters covered under RHA, all categories are included in this Memorandum for Record for efficiency.

² When documenting aquatic resources within the review area that are jurisdictional under the Clean Water Act (CWA), use an additional MFR and group the aquatic resources on each MFR based on the TNW, the territorial seas, or interstate water that they are connected to. Be sure to provide an identifier to indicate when there are multiple MFRs associated with a single AJD request (i.e., number them 1, 2, 3, etc.).

³ 33 CFR 331.2.

⁴ Regulatory Guidance Letter 05-02.

⁵ USACE has authority under both Section 9 and Section 10 of the Rivers and Harbors Act of 1899 but for convenience, in this MFR, jurisdiction under RHA will be referred to as Section 10.

1. SUMMARY OF CONCLUSIONS.

- a. Provide a list of each individual feature within the review area and the jurisdictional status of each one (i.e., identify whether each feature is/is not a water of the United States and/or a navigable water of the United States).

- 1) Ephemeral Stream 1 (132 feet), non-jurisdictional
- 2) Ephemeral Stream 2 (379 feet), non-jurisdictional
- 3) Ephemeral Stream 3 (1,139 feet), non-jurisdictional
- 4) Wetland 1 (0.04-acre), non-jurisdictional
- 5) Wetland 2 (0.17-acre), non-jurisdictional
- 6) Wetland 3 (2.25-acre), non-jurisdictional
- 7) Wetland 4 (0.30-acre), non-jurisdictional
- 8) Wetland 5 (0.21-acre), non-jurisdictional

2. REFERENCES.

- a. "Revised Definition of 'Waters of the United States,'" 88 FR 3004 (January 18, 2023) ("2023 Rule")
- b. "Revised Definition of 'Waters of the United States'; Conforming" 88 FR 61964(September 8, 2023) (2023 Rule, as amended)
- c. *Sackett v. EPA*, 598 U.S. 651, 143 S. Ct. 1322 (2023)
- d. Citing to the 27 September coordination memo, specifically to the language which reads, "Because the Supreme Court in *Sackett* adopted the Rapanos plurality standard and the 2023 rule preamble discussed the Rapanos plurality standard, the implementation guidance and tools in the 2023 rule preamble that address the regulatory text that was not amended by the conforming rule, including the preamble relevant to the Rapanos plurality standard incorporated in paragraphs (a)(3), (4), and (5) of the 2023 rule, as amended, generally remain relevant to implementing the 2023 rule, as amended."
- e. Citing to the "Technical Support Document for the Final "Revised Definition of 'Waters of the United States'" Rule dated December 2022.

3. REVIEW AREA. The Review Area consists of approximately 208-acres proposed for solar development near Hagarstown, Fayette County, Illinois. The Review Area generally lies in Sections 14 and 23, Township 6 North, and Range 1 West. Approximate coordinates for the center of the Review Area are Latitude 38.9617° and Longitude -89.1662°.

4. NEAREST TRADITIONAL NAVIGABLE WATER (TNW), THE TERRITORIAL SEAS, OR INTERSTATE WATER TO WHICH THE AQUATIC RESOURCE IS CONNECTED. [Kaskaskia River](#)
5. FLOWPATH FROM THE SUBJECT AQUATIC RESOURCES TO A TNW, THE TERRITORIAL SEAS, OR INTERSTATE WATER. [Raccoon Creek is the receiving waters for all the surface drainage that leaves the Review Area. Raccoon Creek flows into Hurricane Creek eventually intersecting the Kaskaskia River, a TNW, south of Carlyle Lake where it is considered a Section 10 water.](#)
6. SECTION 10 JURISDICTIONAL WATERS⁶: Describe aquatic resources or other features within the review area determined to be jurisdictional in accordance with Section 10 of the Rivers and Harbors Act of 1899. Include the size of each aquatic resource or other feature within the review area and how it was determined to be jurisdictional in accordance with Section 10.⁷ [N/A](#)
7. SECTION 404 JURISDICTIONAL WATERS: Describe the aquatic resources within the review area that were found to meet the definition of waters of the United States in accordance with the 2023 Rule as amended, consistent with the Supreme Court's decision in *Sackett*. List each aquatic resource separately, by name, consistent with the naming convention used in section 1, above. Include a rationale for each aquatic resource, supporting that the aquatic resource meets the relevant category of "waters of the United States" in the 2023 Rule as amended. The rationale should also include a written description of, or reference to a map in the administrative record that shows, the lateral limits of jurisdiction for each aquatic resource, including how that limit was determined, and incorporate relevant references used. Include the size of each aquatic resource in acres or linear feet and attach and reference related figures as needed.
 - a. Traditional Navigable Waters (TNWs) (a)(1)(i): [N/A](#)
 - b. The Territorial Seas (a)(1)(ii): [N/A](#)
 - c. Interstate Waters (a)(1)(iii): [N/A](#)
 - d. Impoundments (a)(2): [N/A](#)
 - e. Tributaries (a)(3): [N/A](#)
 - f. Adjacent Wetlands (a)(4): [N/A](#)
 - g. Additional Waters (a)(5): [N/A](#)

⁶ 33 CFR 329.9(a) A waterbody which was navigable in its natural or improved state, or which was susceptible of reasonable improvement (as discussed in § 329.8(b) of this part) retains its character as "navigable in law" even though it is not presently used for commerce, or is presently incapable of such use because of changed conditions or the presence of obstructions.

⁷ This MFR is not to be used to make a report of findings to support a determination that the water is a navigable water of the United States. The district must follow the procedures outlined in 33 CFR part 329.14 to make a determination that water is a navigable water of the United States subject to Section 10 of the RHA.

8. NON-JURISDICTIONAL AQUATIC RESOURCES AND FEATURES

Please note: Aquatic resource naming conventions were assigned by the Agent during field delineation efforts. The Corps has adopted the naming conventions for documentation consistency, although they may not directly coincide with the feature being described or their jurisdictional status.

- a. Describe aquatic resources and other features within the review area identified in the 2023 Rule as amended as not “waters of the United States” even where they otherwise meet the terms of paragraphs (a)(2) through (5). Include the type of excluded aquatic resource or feature, the size of the aquatic resource or feature within the review area and describe how it was determined to meet one of the exclusions listed in 33 CFR 328.3(b).⁸
 - **Ephemeral Stream 1** is a channelized drainage ditch that has developed wetland characteristics. The drainage ditch flows from north to south paralleling the western limits of the Review Area. Review of historic aerial photography dating back to 1938 illustrates the lack of a previously existing tributary or other natural drainage feature, including wetlands, prior to the construction of the ditch. Additionally, wetland data forms were completed adjacent to the ditch within wetness signatures throughout the agricultural field (SP-10, 11, and 12). None of these data forms demonstrate the ditch currently drains adjacent wetlands within the Review Area. Ephemeral Stream 1 is excluded as a paragraph (b)(3) water as it is a constructed ditch that was excavated wholly in and draining only dry land and does not carry a relatively permanent flow of water.
- b. Describe aquatic resources and features within the review area that were determined to be non-jurisdictional because they do not meet one or more categories of waters of the United States under the 2023 Rule as amended (e.g., tributaries that are non-relatively permanent waters; non-tidal wetlands that do not have a continuous surface connection to a jurisdictional water).
 - **Ephemeral Stream 3** is a channelized tributary that lies along the limits of active agricultural fields. The channelization of this feature was performed to convey water more quickly off the adjacent agricultural fields. Ephemeral Stream 3 is 1,139 feet in length and is oriented west to east within the Review Area, with a 2-foot increase in elevation to its culvert outlet. The tributary was observed being dry within the Review Area during the wet season (October), in a period of Moderate Wetness. After leaving the Review Area, the first order non-RPW tributary (4,596 feet outside of

⁸ 88 FR 3004 (January 18, 2023)

Review Area) continues south and east before entering an unnamed RPW tributary at Latitude 38.9529° and Longitude -89.1520°. Based on field visit documentation, desktop analyses and modeled flow-duration statistics, greater than half the length (4,185 feet of the total reach length 5,735) of the non-RPW tributary contains non-relatively permanent flows. The lack of standing or flowing water for more than a short duration in direct response to precipitation best characterizes this feature and therefore it would not meet the Relatively Permanent Standard.

- **Ephemeral Stream 2** is a non-RPW drainage pattern within Wetland 3, which flows 379 feet north into a roadside drainage ditch, which lacks an ordinary high-water mark along I-70. The ditch physically connects the feature to a tributary; however, the ditch lacks indicators of flow to the northeast. This is supported by Elevation Profiles Exhibit 3 in Section 10 below, which illustrates the lowest elevation of the ditch is at its confluence with Ephemeral Stream 2. As such, the feature would not meet the definition of an (a)(1) through (a)(5) water.
- **Wetland 1** and **Wetland 2** are depressional wetlands within an active agricultural field that collect surface run-off. No discrete features or non-RPW tributaries were identified exiting the wetland features downslope.
 - Flow Path: None
- **Wetland 3** abuts the upland ditch (no OHWM) along the eastbound lane of I-70, which does not exhibit evidence of flow, but continues northeast for ~1,565 feet before intersecting a channelized non-RPW tributary (downstream reach of Ephemeral Stream 3). The non-RPW tributary flows east and then abruptly turns south for a total length of 4,495 feet before entering an unnamed RPW tributary at Latitude 38.9529° and Longitude -89.1520°.
 - Flow Path: Wetland 3 -> upland ditch (1,595 feet) -> culvert (50 feet) -> non-RPW tributary (4,495 feet) -> Requisite Water – unnamed RPW tributary.

Based on the length of the flow path (6,140 feet) through three (3) features, the Corps has determined that the approximately 1.16-mile physical connection between the wetland and the relatively permanent water is long, and the connection is via ditches, culverts, and other non-relatively permanent waters that have varying (weak to no) physical indicators of flow frequency, and duration. Although a physical connection, the upland ditch lacks indicators of flow, let alone a sufficient level of flow

between the wetland and the requisite water. After consideration of flow, the number, the types, and the length of connection, the 6,140-foot length of connection here between this wetland and the requisite covered water is not physically close enough to meet the continuous surface connection requirement. Thus, Wetland 3 does not have a continuous surface connection to the downstream relatively permanent tributary and, consistent with *Sackett*, is not “adjacent.”

- **Wetland 4** is a depressional wetland within an active agricultural field that is routinely ditched to promote surface drainage and reduce inundation of the row-crops. The wetland flows south through a constructed erosional feature into an upland ditch (no OHWM) along Highway 40, which continues northeast for ~1,120 feet before intersecting a channelized non-RPW tributary (downstream reach of Ephemeral Stream 3) at a culvert (80 feet). The series of culverts (270 feet) and non-RPW tributary (101 feet) segments traverses Interstate 70 before finally reaching the non-RPW tributary south of 1540 N. The non-RPW tributary continues east and then abruptly turns south for a total length of 4,495 feet before entering an RPW at Latitude 38.9529° and Longitude -89.1520°.
 - Flow Path: Wetland 4 -> constructed erosional feature (63 feet) -> upland ditch (1,120 feet) -> culvert (80 feet) -> non-RPW tributary (40 feet) -> culvert (220 feet) -> non-RPW tributary (61 feet) -> culvert (50 feet) -> non-RPW tributary (4,495 feet) -> Requisite Water – unnamed RPW tributary.

Based on the length of the flow path (6,129 feet) through eight (8) features, the Corps has determined that the approximately 1.16-mile physical connection between the wetland and the relatively permanent water is long, and the connection is via ditches, culverts, and other non-relatively permanent waters that have varying (weak to no) physical indicators of flow frequency and duration. Although a physical connection, the upland ditch lacks indicators of flow, let alone a sufficient level of flow between the wetland and the requisite water. After consideration of flow, the number, the types, and the length of connection, the 6,129-foot length of connection between this wetland and the requisite covered water is not physically close enough to meet the continuous surface connection requirement. Thus, Wetland 4 does not have a continuous surface connection to the downstream relatively permanent tributary and, consistent with *Sackett*, is not “adjacent.”

- **Wetland 5** abuts Ephemeral Stream 3, a channelized non-RPW, which exits the Review Area and flows south under I-70 through a series of culverts (315 feet) and non-RPW tributary (171 feet) segments traverses Interstate 70 before finally reaching the non-RPW tributary south of 1540 N. The non-RPW tributary continues east and then abruptly turns south for a total length of 4,495 feet before entering an RPW at Latitude 38.9529° and Longitude -89.1520°.
 - Flow Path: Wetland 5 -> channelized non-RPW tributary (1,139 feet) -> culvert (45 feet) -> non-RPW tributary (70 feet) -> culvert (80 feet) -> non-RPW tributary (40 feet) -> culvert (220 feet) -> non-RPW tributary (61 feet) -> culvert (50 feet) -> non-RPW tributary (4,495 feet) -> Requisite Water – unnamed RPW tributary.

Based on the length of the flow path (6,200 feet) through nine (9) features, the Corps has determined that the approximately 1.17-mile physical connection between the wetland and the relatively permanent water is long, and the connection is via ditches, culverts, and other non-relatively permanent waters that have varying physical indicators of flow frequency, and duration. At capacity, hydrology from Wetland 5 enters the channelized non-RPW tributary (Ephemeral Stream 3) where it is conveyed east. The tributary would pool, until sufficient surface water is accumulated to by-pass the 2-foot elevation change within the channel (profiles present in Section 10). Prior to by-passing the elevation change, the surrounding fields would become inundated as they are lower than the culvert, indicating limited conveyance would only occur during and/or shortly after extreme precipitation events in the <100-acre watershed. After consideration of flow, the number, the types, and the length of connection, the 6,200-foot length of connection between this wetland and the requisite covered water is not physically close enough to meet the continuous surface connection requirement. Thus, Wetland 5 does not have a continuous surface connection to the downstream relatively permanent tributary and, consistent with *Sackett*, is not “adjacent.”

9. DATA SOURCES. List sources of data/information used in making determination. Include titles and dates of sources used and ensure that information referenced is available in the administrative record.

- a. [Wetland Delineation Report dated December 2023](#)
- b. [USACE Site Visit](#)
- c. [USGS Topographic Maps, 1:24,000 Scale, Hagarstown, IL Quad](#)
- d. [USGS NHDPlus](#)
- e. [USGS Stream Stats](#)
- f. [Antecedent Precipitation Tool](#)
- g. [USDA-NRCS Soil Survey for Fayette County, Illinois](#)
- h. [USGS Illinois Geologic Maps](#)
- i. [USFWS National Wetland Inventory, Color Infrared, 1980's, 1:58,000 Scale](#)
- j. [Illinois Height Modernization \(ILHMP\) LiDAR Data](#)
- k. [Illinois Historic Aerial Photography – ISGS Geospatial Data Clearinghouse](#)
- l. [Google Earth Pro Aerial Imagery, Various Aerial Images](#)

10. OTHER SUPPORTING INFORMATION.

Antecedent Precipitation Tool Results

Delineation Field Evaluation Dates:

October 25, 2022: Wet Season / Normal Conditions / Moderate Wetness

Elevation Profiles for Ephemeral Stream 3

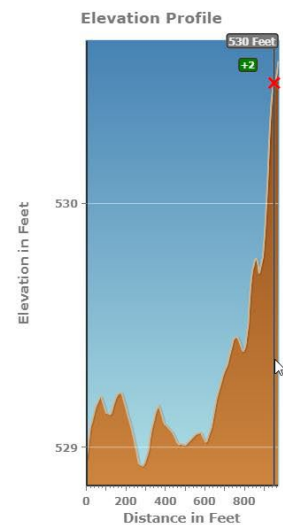
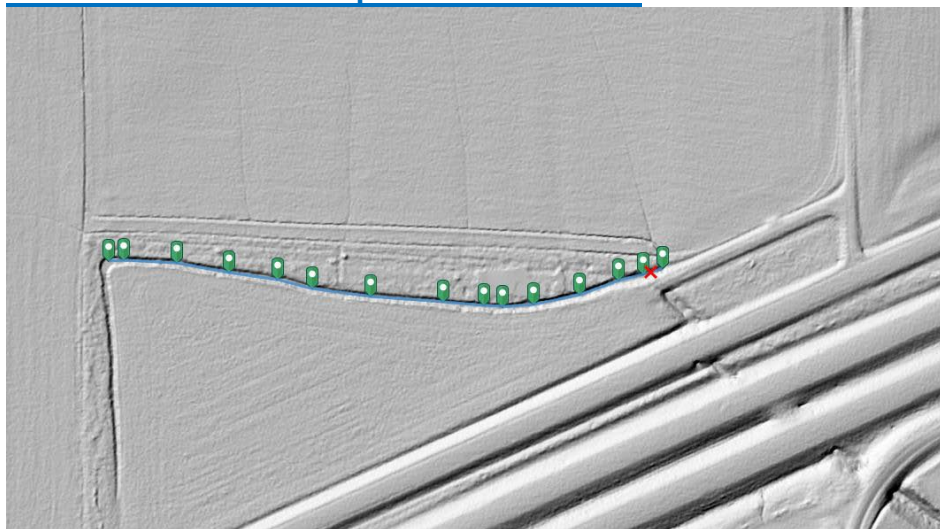


Exhibit 1: Elevation Profile along bed of Ephemeral Stream 3

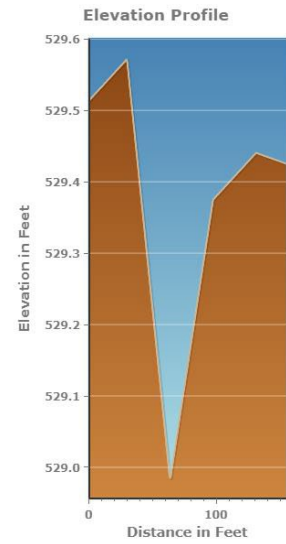
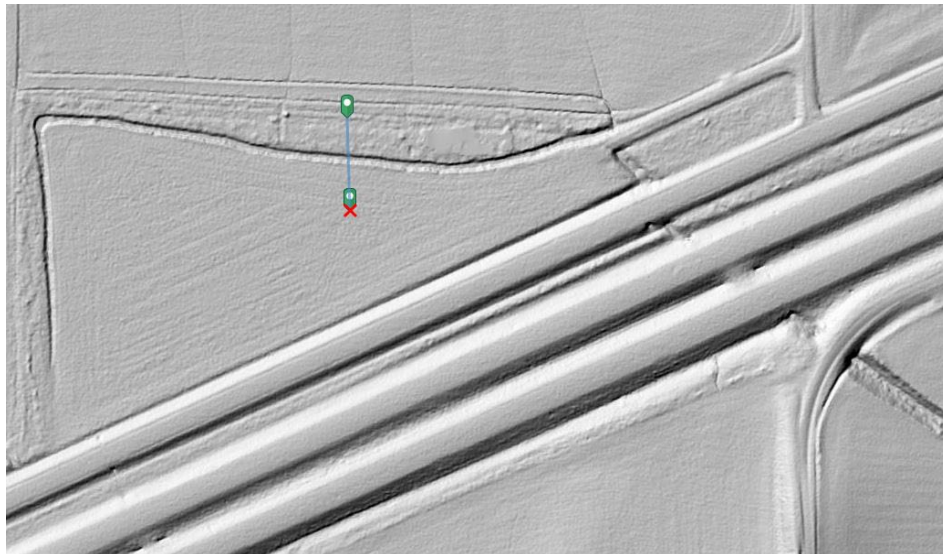


Exhibit 2: Elevation Profile perpendicular to Ephemeral Stream 3

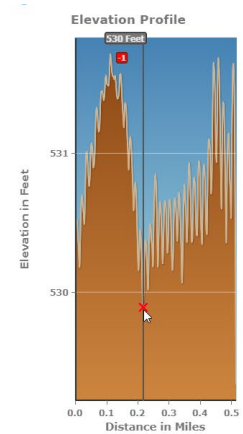
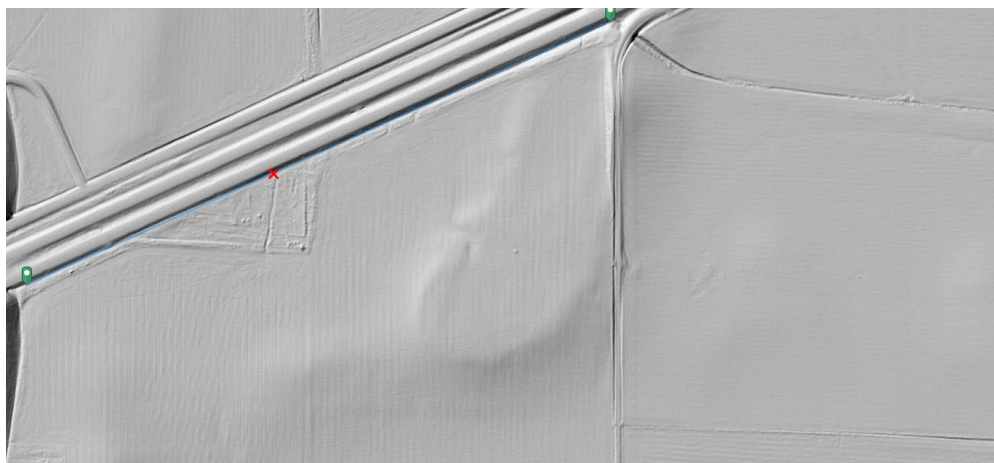


Exhibit 3: Elevation Profile along southern I-70 Drainage Ditch

Table 1. Tributaries & Ditches Identified within the Review Area

Feature ID	Latitude	Longitude	Length (feet)	Stream Order	Watershed Size (acres)	Flow Characteristics	WOTUS
Ephemeral Stream 1	38.9542	-89.1753	132	1 st	132	NRPW	No
Ephemeral Stream 2	38.9571	-89.1666	379	1 st	42	NRPW	No
Ephemeral Stream 3	38.9601	-89.1642	1,139	1 st	107	NRPW	No

Table 2. Wetlands Identified within the Review Area

Wetland ID	Latitude	Longitude	Area (Acres)	Wetland Type	CSC	WOTUS
Wetland 1	38.9563	-89.1691	0.04	PEM	No	No
Wetland 2	38.9564	-89.1685	0.17	PEM	No	No
Wetland 3	38.9571	-89.1668	2.25	PEM / PFO	No	No
Wetland 4	38.9588	-89.1665	0.30	PEM	No	No
Wetland 5	38.9602	-89.1663	0.21	PEM	No	No

Other Citations:

Joint Policy Memorandums: [NWK-2024-00392](#), [POH-2023-187](#), [NWK-2022-00809](#), [NAP-2023-01223](#), & [SWG-2023-00284](#)

11. NOTE: The structure and format of this MFR were developed in coordination with the EPA and Department of the Army. The MFR's structure and format may be subject to future modification or may be rescinded as needed to implement additional guidance from the agencies; however, the approved jurisdictional determination described herein is a final agency action.



Legend







- ▭ Project Site
- Sample Point
- + Culverts
- ▭ Delineated Wetlands
- Delineated Linear Features**
- Ephemeral Stream
- Channel
- Erosional Feature
- - - Roadside Ditch
- - - Roadside Ditch (Level 1)

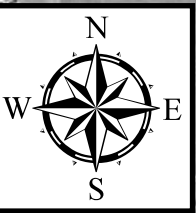
Figure 6. Delineation Summary Map

Pike Solar
Birch Creek Development, LLC

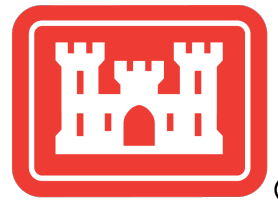


Legend

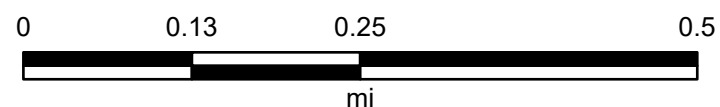
-  Upland Ditch
-  Erosion Feature
-  Non-RPW Drainage
-  Wetland
-  Culvert
-  Confluence with RPW



Missouri Dept. of Conservation, Esri, HERE, Garmin, INCREMENT P, USGS, EPA, USDA, Copyright DigitalGlobe Inc.



MVS-2024-289

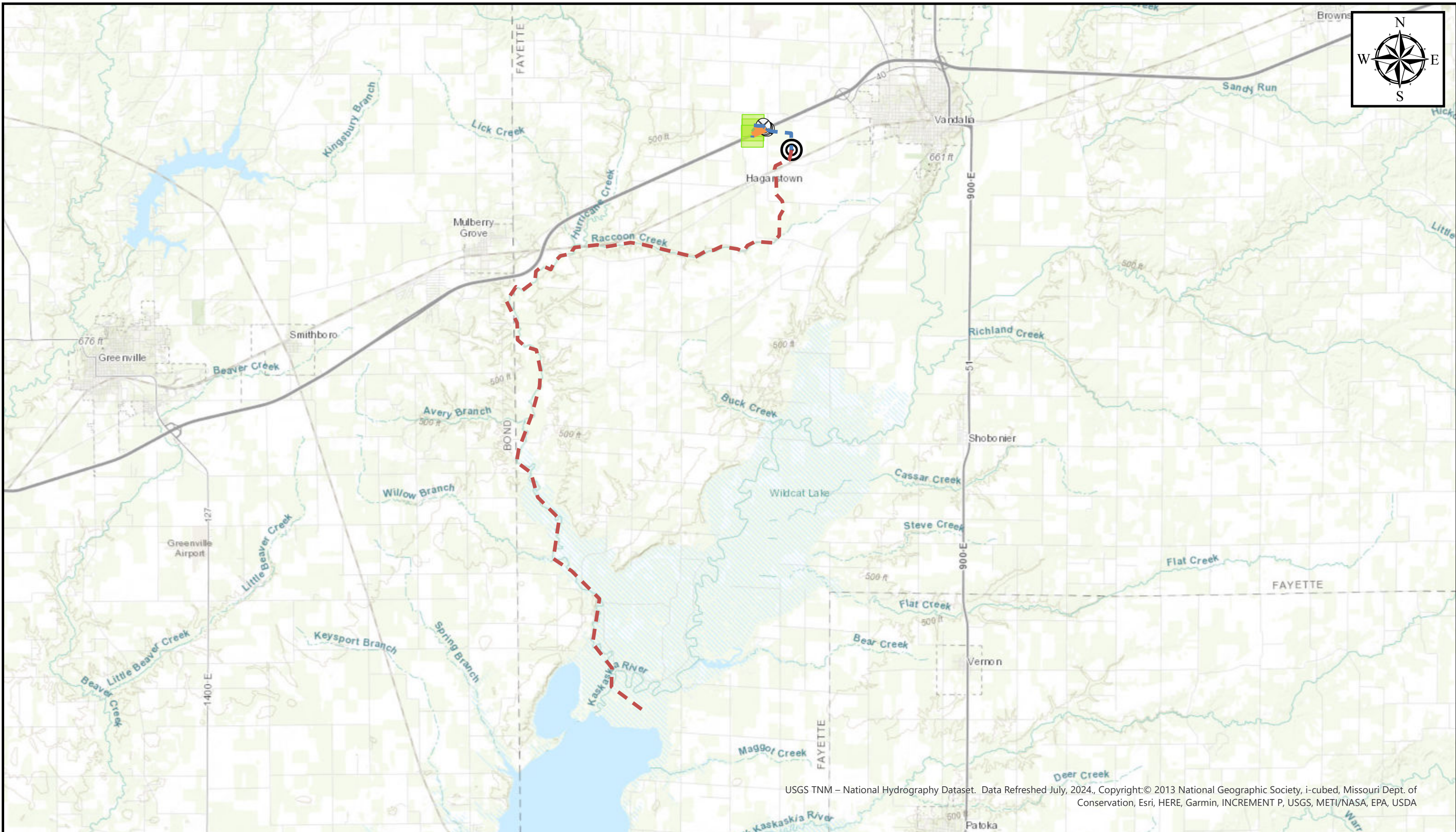


Map Center: 89.160244°W 38.957225°N

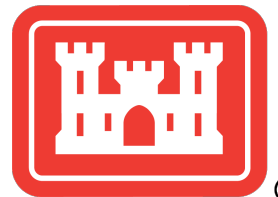
Map Created by: K. Metzger

Date: 7/17/2024

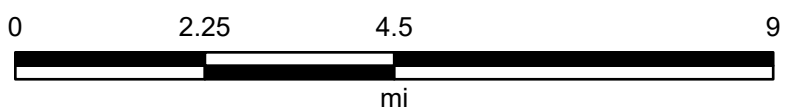
Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere
Projection: Mercator Auxiliary Sphere



USGS TNM – National Hydrography Dataset. Data Refreshed July, 2024. Copyright:© 2013 National Geographic Society, i-cubed, Missouri Dept. of Conservation, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA



MVS-2024-289 to Kaskaskia River



Map Center: 89.175157°W 38.874688°N

Map Created by: K. Metzger

Date: 7/17/2024

Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere
Projection: Mercator Auxiliary Sphere