



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

CEMVS-RD

12 September 2025

MEMORANDUM FOR RECORD

SUBJECT: US Army Corps of Engineers (Corps) Pre-2015 Regulatory Regime
Approved Jurisdictional Determination in Light of *Sackett v. EPA*, 143 S. Ct. 1322
(2023),¹ MVS-2025-537²

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 For the purposes of this AJD, we have relied on section 10 of the Rivers and Harbors Act of 1899 (RHA),⁵ the Clean Water Act (CWA) implementing regulations published by the Department of the Army in 1986 and amended in 1993 (references 2.a. and 2.b. respectively), the 2008 *Rapanos-Carabell* guidance (reference 2.c.), and other applicable guidance, relevant case law and longstanding practice, (collectively the pre-2015 regulatory regime), and the *Sackett* decision (reference 2.d.) in evaluating jurisdiction.

This Memorandum for Record (MFR) constitutes the basis of jurisdiction for a Corps AJD as defined in 33 CFR §331.2. The features addressed in this AJD were evaluated consistent with the definition of “waters of the United States” found in the pre-2015 regulatory regime and consistent with the Supreme Court’s decision in *Sackett*. This AJD did not rely on the 2023 “Revised Definition of ‘Waters of the United States,’” as

¹ While the Supreme Court’s decision in *Sackett* 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, interstate water, or territorial seas 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.

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amended on 8 September 2023 (Amended 2023 Rule) because, as of the date of this decision, the Amended 2023 Rule is not applicable in Missouri due to litigation.

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).
 - i. T-1 (1190'), non-jurisdictional
 - ii. T-2 (960'), non-jurisdictional
 - iii. T-3 (385'), non-jurisdictional
 - iv. T-4b (315'), non-jurisdictional
 - v. T-4 (520'), jurisdictional, Section 404
 - vi. T-5 (1135'), non-jurisdictional
 - vii. T-6 (725'), jurisdictional, Section 404
 - viii. T-7 (1180'), non-jurisdictional
 - ix. T-13 (1450'), non-jurisdictional
 - x. T-14 (1000'), non-jurisdictional
 - xi. T-15 (115'), non-jurisdictional
 - xii. Buck Creek (3750'), jurisdictional, Section 404
 - xiii. Pond (0.16-acres), non-jurisdictional

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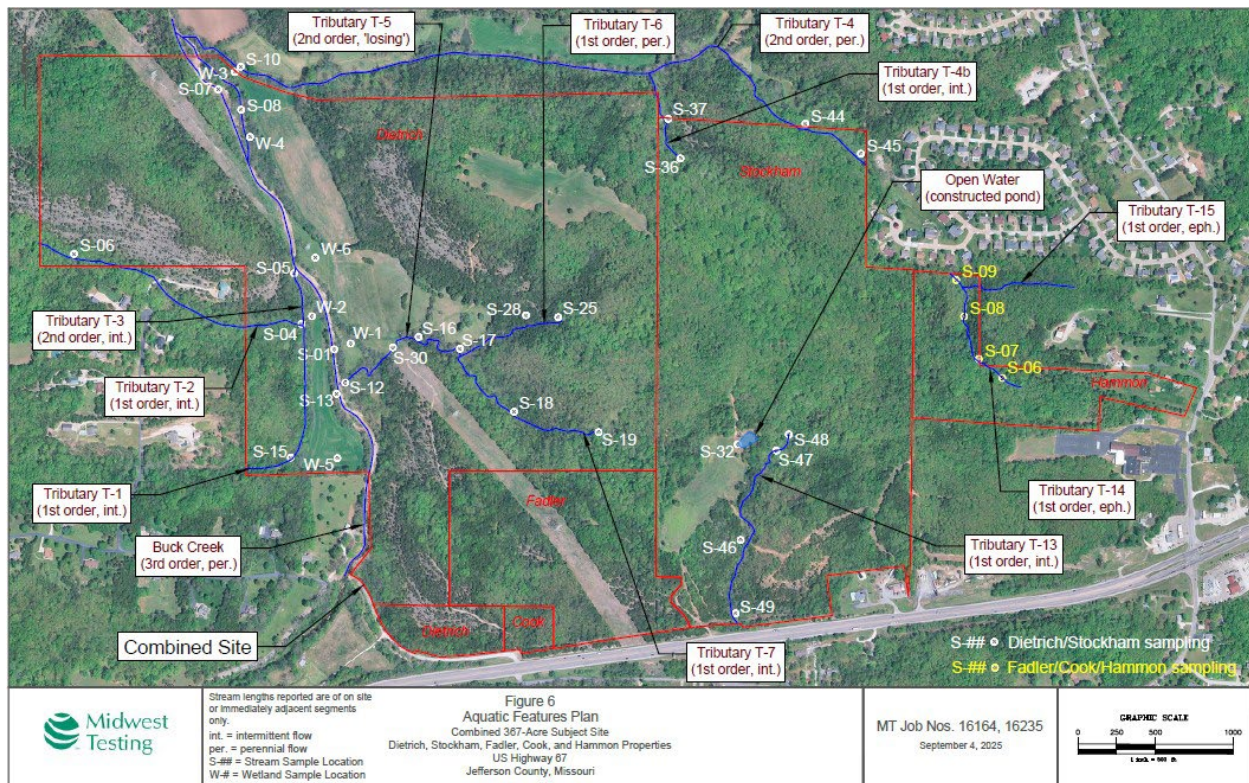


Figure 1: Aquatic Features Plan

2. REFERENCES.

- a. Final Rule for Regulatory Programs of the Corps of Engineers, 51 FR 41206 (November 13, 1986).
- b. Clean Water Act Regulatory Programs, 58 FR 45008 (August 25, 1993).
- c. U.S. EPA & U.S. Army Corps of Engineers, Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United States & Carabell v. United States* (December 2, 2008)
- d. *Sackett v. EPA*, 598 U.S. 651, 143 S. Ct. 1322 (2023)
- e. Memorandum To The Field Between The U.S. Department Of The Army, U.S. Army Corps Of Engineers And The U.S. Environmental Protection Agency Concerning The Proper Implementation Of 'Continuous Surface Connection' Under The Definition Of "Waters Of The United States" Under The Clean Water Act" (March 12, 2025).

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3. REVIEW AREA. The review area totals approximately 367-acres, encompassing the following tracts: 199-acre and 6.4-acre Dietrich properties, the approximately 110-acre Stockham property, the approximately 31-acre Fadler property, 2-acre Cook property, and 18-acre Hammon property. Latitude 38.1958, Longitude -90.4292. Festus, Jefferson County, Missouri.

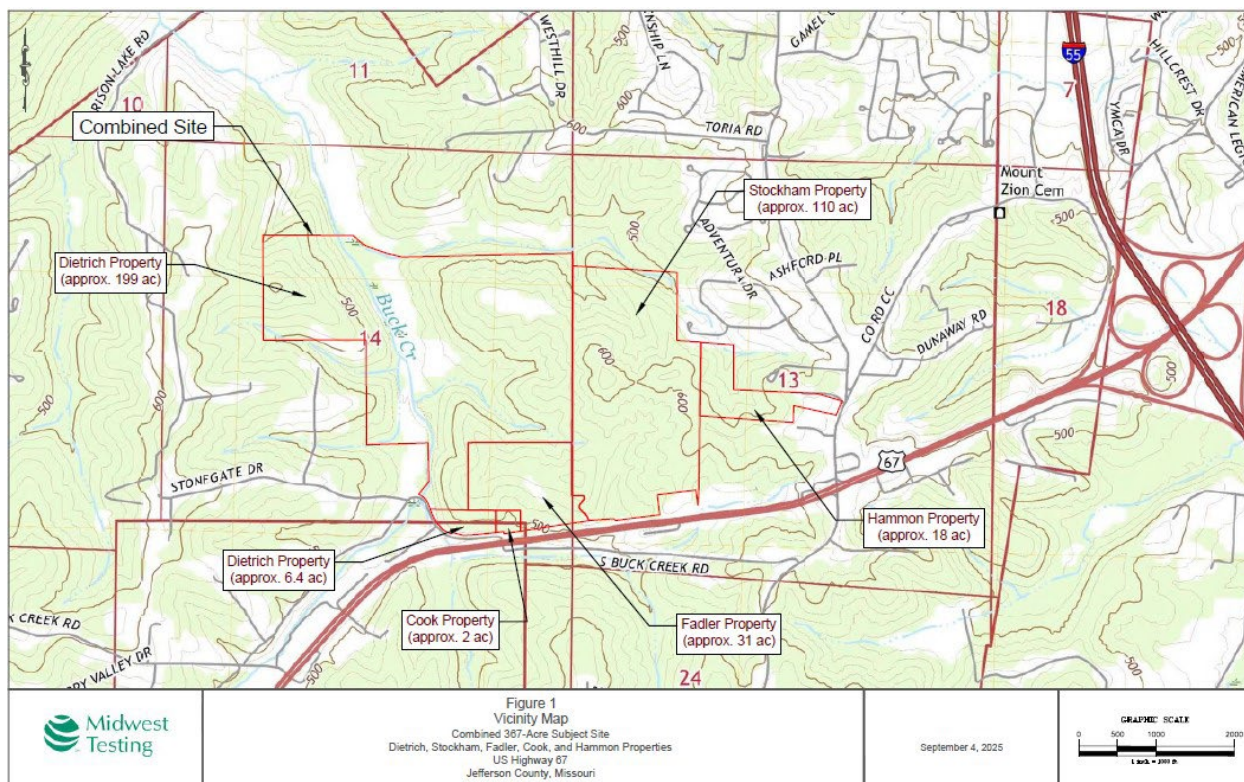


Figure 2: Vicinity Map

4. NEAREST TRADITIONAL NAVIGABLE WATER (TNW), INTERSTATE WATER, OR THE TERRITORIAL SEAS TO WHICH THE AQUATIC RESOURCE IS CONNECTED. [Mississippi River](#).⁶
5. FLOWPATH FROM THE SUBJECT AQUATIC RESOURCES TO A TNW, INTERSTATE WATER, OR THE TERRITORIAL SEAS. [The site drains into Buck Creek, then Joachim Creek, a primary tributary to the Mississippi River. The Mississippi River is a navigable in-fact water throughout the St. Louis District.](#)

⁶ This MFR should not be used to complete a new stand-alone TNW determination. A stand-alone TNW determination for a water that is not subject to Section 9 or 10 of the Rivers and Harbors Act of 1899 (RHA) 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 upstream or downstream limits or lake borders are established.

6. SECTION 10 JURISDICTIONAL WATERS⁷: 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 10.⁸ 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 pre-2015 regulatory regime and 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 pre-2015 regulatory regime. 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. TNWs (a)(1): N/A
 - b. Interstate Waters (a)(2): N/A
 - c. Other Waters (a)(3): N/A
 - d. Impoundments (a)(4): N/A
 - e. Tributaries (a)(5):

T-4 (520') – T-4 is a 2nd order stream segment identified as having perennial flow. T-4 begins east of the site at the confluence of two 1st order ephemeral Streams (T-14 & T-15), and flows into Buck Creek near the northwest corner of the site. T-4 flows along the base of forested hillslopes along a narrow-grassed floodplain north of the site. The channel of T-4 is 10 to 15 feet wide and 10 to 16 inches deep at the OHWM, and 20 feet wide and 5 feet deep overall. Clear, steady trickle flow, with riffles and pooling 12 inches deep, was present on the days of the May observations (moderate wetness, wet season, wetter than normal) and the June observations (moderate wetness, dry season, normal

⁷ 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.

⁸ 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.

conditions). The substrate comprises gravel, cobble, and bedrock. T-4 drains an approximately 350-acre watershed and has an overall slope of 1.8%. Additionally, the Missouri Water Quality Standard Stream Classification from 2019 lists T-4 as a “Class C” stream which is a “stream that may cease flow in dry periods but maintains permanent pools which support aquatic life.” The weight of evidence for T-4 is that it flows continuously at least seasonally. As such, USACE has determined it to be a relatively permanent tributary.

T-6 (725’) – T-6 is a spring-fed 1st order stream segment identified as having intermittent flow. T-6 begins at the confluences of ephemeral hillslope drainage features and flows west down forested hillslopes and into the upper floodplain of Buck Creek where it merges with Tributary T-7 to form Tributary T-5. The channel of Tributary T-6 is 5 to 10 feet wide and 6 to 10 inches deep at the OHWM, and 6 to 10 feet wide and 3 feet deep overall. Clear trickle flow, with riffles and pooling 8 inches deep, was present on the days of the May observations (moderate wetness, wet season, wetter than normal) and June observations (moderate wetness, dry season, normal conditions). The substrates comprise gravel, cobble, and bedrock. Tributary T-6 drains an approximately 30-acre watershed and has an overall slope of 5.9%. Despite the small watershed and relatively steep slope, the spring-fed T-6 has a weight of evidence for continuous flow at least seasonally, and USACE has determined it to be a relatively permanent tributary.

Buck Creek (3750’) – Buck Creek is a 3rd order stream segment identified as having perennial flow. Buck Creek begins approximately 3 miles south of the site and flows northward to its confluence with Joachim Creek approximately 1 mile north of the site. The upper third of Buck Creek flows through forested land and the lower two thirds through or along grass or row crop agriculture fields. On the subject site, Buck Creek flows along the foot of hillslopes to the west and a grass hayfield in floodplain to the east. Near the north side of the subject site, Buck Creek splits and a narrow ‘braided’ side channel flows parallel with the main channel for 500 to 700 feet before rejoining the main channel. A narrow wooded ‘island’ is located between the main and side channels of the creek. The channel of Buck Creek on or adjacent to the site is 35 to 40 feet wide and 12 to 18 inches deep at the OHWM, and 50 feet wide and 10 feet deep overall. Clear, steady flow up to 24 inches deep was present on the days of the May observations (moderate wetness, wet season, wetter than normal) and June observations (moderate wetness, dry season, normal conditions). The substrates comprise gravel, cobble, and bedrock, with exposed gravel bars at bends. Buck Creek, at this location, drains an approximately 4,825-acre watershed and has an overall slope of 0.5%. Additionally, the Missouri Water Quality Standard Stream Classification from 2019 lists Buck Creek as a “Class

C” stream which is a “stream that may cease flow in dry periods but maintains permanent pools which support aquatic life.” The weight of evidence for Buck Creek is that it flows continuously at least seasonally, and USACE has determined it to be a relatively permanent tributary.

- f. The territorial seas (a)(6): N/A
- g. Adjacent wetlands (a)(7): N/A

8. NON-JURISDICTIONAL AQUATIC RESOURCES AND FEATURES

- a. Describe aquatic resources and other features within the review area identified as “generally non-jurisdictional” in the preamble to the 1986 regulations (referred to as “preamble waters”).⁹ Include size of the aquatic resource or feature within the review area and describe how it was determined to be non-jurisdictional under the CWA as a preamble water.

Pond (0.16-acres) - An approximately 0.16-acre constructed pond is located at the edge of a grassy open area on the southeast portion of the review area. The pond was constructed in uplands as a hillslope ‘berm’ pond and collects stormwater as sheet flow from uphill forested area. The pond is steep-sided and no submergent or emergent vegetation was present. No channels into or away from the pond were noted. Features constructed in uplands, draining only uplands, for the purpose of sediment capture are generally not jurisdictional according to the 1986 preamble.

- b. Describe aquatic resources and features within the review area identified as “generally not jurisdictional” in the *Rapanos* guidance. Include size of the aquatic resource or feature within the review area and describe how it was determined to be non-jurisdictional under the CWA based on the criteria listed in the guidance. N/A
- c. Describe aquatic resources and features identified within the review area as waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA. Include the size of the waste treatment system within the review area and describe how it was determined to be a waste treatment system. N/A
- d. Describe aquatic resources and features within the review area determined to be prior converted cropland in accordance with the 1993 regulations (reference

⁹ 51 FR 41217, November 13, 1986.

2.b.). Include the size of the aquatic resource or feature within the review area and describe how it was determined to be prior converted cropland. [N/A](#)

- e. Describe aquatic resources (i.e. lakes and ponds) within the review area, which do not have a nexus to interstate or foreign commerce, and prior to the January 2001 Supreme Court decision in “*SWANCC*,” would have been jurisdictional based solely on the “Migratory Bird Rule.” Include the size of the aquatic resource or feature, and how it was determined to be an “isolated water” in accordance with *SWANCC*. [N/A](#)
- f. 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 pre-2015 regulatory regime consistent with the Supreme Court’s decision in *Sackett* (e.g., tributaries that are non-relatively permanent waters; non-tidal wetlands that do not have a continuous surface connection to a jurisdictional water).

T-1 (1190’) & T-2 (960’) – T-1 and T-2 are similar 1st intermittent streams located on the west side of Buck Creek. T-1 and T-2 begin west of the subject site along a large-lot residential development and flow east down hillslopes and into the floodplain of Buck Creek. The tributaries join to form Tributary T-3, which flows a short distance before joining Buck Creek. Both Tributaries T-1 and T-2 are within shallow ravines in wooded hillslopes. Tributary T-1 begins at or near the edge of the site and Tributary T-2 begins up to 1,500 feet west of the site. The channels of Tributaries T-1 and T-2 are 4 to 6 feet wide and 4 to 12 inches deep at the Ordinary High Water Mark (OHWM), and 8 to 10 feet wide and 3 to 4 feet deep overall. Clear trickle flow, with riffles and pooling 6 to 8 inches deep, was present on the days of the May observations (moderate wetness, wet season, wetter than normal). No flow was observed during the June observations (moderate wetness, dry season, normal conditions) despite the site receiving 1.5” of rain 4 days prior to the June visit. The substrates comprise gravel and cobble. Tributaries T-1 and T-2 drain approximately 70 and 75-acre watersheds, respectively. T-1 has an overall slope of 3.5%, while T-2 has an overall slope of 7%. The Missouri Water Quality Standard Classification of 2019 does not list T-1 or T-2, meaning they are likely “Class E” streams, meaning that they are “Streams that do not maintain permanent surface flow or permanent pools, but have ephemeral surface flow or pools in response to precipitation events.” The weight of evidence for T-1 & T-2 is that they do not flow continuously as least seasonally, and USACE has determined that they are not relatively permanent tributaries.

T-3 (385') – T-3 is a 2nd order intermittent stream located on the west side of Buck Creek. T-3 begins at the confluence of Tributaries T-1 and T-2 and ends where it joins Buck Creek. Tributary T-3 flows along the base of hillslopes in the floodplain of Buck Creek. The channel of Tributary T-3 is 4 to 6 feet wide and 10 to 12 inches deep at the OHWM, and 10 to 15 feet wide and 5 feet deep overall. Clear trickle flow with riffles and pooling 10 inches deep was present on the days of the May observations (moderate wetness, wet season, wetter than normal). No flow was observed during the June observations (moderate wetness, dry season, normal conditions) despite the site receiving 1.5" of rain 4 days prior to the June visit. The substrate comprises gravel, cobble, and bedrock. Tributary T-3 drains an approximately 150-acre watershed with an overall slope of 3%. The Missouri Water Quality Standard Classification of 2019 does not list T-3, meaning it is likely a "Class E" stream, meaning it is a "Stream that does not maintain permanent surface flow or permanent pools, but has ephemeral surface flow or pools in response to precipitation events." The weight of evidence for T-3 is that they do not flow continuously as least seasonally, and USACE has determined that it is not a relatively permanent tributary.

T-4b (315') – Tributary T-4b is a 1st order intermittent stream located in the northeast corner of the subject site. Tributary T-4b begins at the confluence of two ephemeral hillslope drainage features and flows northwest in a forested hillslope ravine. The channel of T-4b is 3 to 8 feet wide and 4 to 8 inches deep at the OHWM, and 4 to 10 feet wide and 2 to 3 feet deep overall. Clear, trickle flow, with riffles and pooling up to 12 inches deep, was present on the days of the May observations (moderate wetness, wet season, wetter than normal). No flow was observed during the June observations (moderate wetness, dry season, normal conditions) despite the site receiving 1.5" of rain 4 days prior to the June visit. The substrates comprise gravel, cobble, and bedrock. Tributary T-4b drains an approximately 35-acre watershed with an overall slope of 1.1%. The Missouri Water Quality Standard Classification of 2019 does not list T-4b, meaning it is likely a "Class E" stream, meaning that it is a "Stream that does not maintain permanent surface flow or permanent pools, but has ephemeral surface flow or pools in response to precipitation events." The weight of evidence for T-4b is that they do not flow continuously as least seasonally, and USACE has determined that it is not a relatively permanent tributary.

T-5 (1135') – Tributary T-5 is a 2nd order intermittent stream located in the central west portion of the subject site. Tributary T-5 begins at the confluence of Tributaries T-6 and T-7, and flows into Buck Creek at the west edge of the site. Tributary T-5 flows out of the lower forested hillslopes and into a grassed hayfield, then down into the floodplain of Buck Creek and into Buck Creek. The channel of Tributary T-5 is 4 to 6 feet wide and 4 to 12 inches deep at the

OHWM, and 8 to 20 feet wide and 4 to 10 feet deep overall. Clear, steady trickle flow, with riffles and pooling up to 10 inches deep, was present in the upper and middle reaches of Tributary T-5 on the days of the May observations (moderate wetness, wet season, wetter than normal). No flow was observed during the June observations (moderate wetness, dry season, normal conditions) despite the site receiving 1.5" of rain 4 days prior to the June visit. The downstream segment of Tributary T-5 within the floodplain of Buck Creek displayed characteristics of a losing stream, in that sections of dry bed were present. The substrates comprise gravel, cobble, and bedrock, with increasing amounts of sediment near Buck Creek. Tributary T-5 drains an approximately 85-acre watershed with an overall slope of 2%. The Missouri Water Quality Standard Classification of 2019 does not list T-5, meaning it is likely a "Class E" stream, meaning that it is likely a "Stream that does not maintain permanent surface flow or permanent pools, but has ephemeral surface flow or pools in response to precipitation events." The weight of evidence for T-5 is that it does not flow continuously as least seasonally, and USACE has determined that it is not a relatively permanent tributary.

T-7 (1180') – T-7 is a 1st order intermittent stream located in the central part of the subject site. Tributary T-7 begins at the confluences of ephemeral hillslope channels and flows west down forested hillslopes and into the upper floodplain of Buck Creek where it merges with Tributary T-6 to form Tributary T-5. The channel of Tributary T-7 is 5 to 10 feet wide and 6 to 10 inches deep at the OHWM, and 6 to 10 feet wide and 3 feet deep overall. Clear trickle flow, with riffles and pooling 8 inches deep, was present on the days of the May observations (moderate wetness, wet season, wetter than normal). No flow was observed during the June observations (moderate wetness, dry season, normal conditions) despite the site receiving 1.5" of rain 4 days prior to the June visit. The substrates comprise gravel, cobble, and bedrock. Tributary T-7 drains an approximately 40-acre watershed with an overall slope of 10%. The Missouri Water Quality Standard Classification of 2019 does not list T-7, meaning that it is likely a "Class E" streams, meaning that they are "Streams that do not maintain permanent surface flow or permanent pools, but have ephemeral surface flow or pools in response to precipitation events." The weight of evidence for T-7 is that it does not flow continuously as least seasonally, and USACE has determined that it is not a relatively permanent tributary.

T-13 (1450') – Tributary T-13 is a 1st order intermittent stream located on the southern side of the subject site. Tributary T-13 begins at the confluence of several ephemeral hillslope drainage features and flows south through a forested ravine. Tributary T-13 flows off site beneath Highway 67 and joins another tributary to Buck Creek south of the. The channel of Tributary T-13 is 2 to 6 feet

wide and 4 to 10 inches deep at the OHWM, and 5 to 10 feet wide and 1 to 5 site feet deep overall. Clear, trickle flow, with riffles and pooling up to 6 inches deep, was present on the days of the May observations (moderate wetness, wet season, wetter than normal). No flow was observed during the June observations (moderate wetness, dry season, normal conditions) despite the site receiving 1.5" of rain 4 days prior to the June visit. The substrates comprise gravel, cobble, and bedrock with sediment in the lower reach. Tributary T-13 drains an approximately 40-acre watershed with an overall slope of 3.5%. The Missouri Water Quality Standard Classification of 2019 does not list T-13, meaning that it is likely a "Class E" stream, meaning that it is a "Stream that does not maintain permanent surface flow or permanent pools, but has ephemeral surface flow or pools in response to precipitation events." The weight of evidence for T-13 is that it does not flow continuously as least seasonally, and USACE has determined that it is not a relatively permanent tributary.

T-14 (1000') – T-14 is located on the Hammon property and is approximately 1,000 linear feet long. T-14 begins on the northwest facing hillside and flows north-northwest, terminating at a culvert inlet at the edge of a residential subdivision on the north side of the Hammon property. An approximately 40-linear foot segment crosses onto an adjacent property before flowing back onto the Hannon property. Several ephemeral hillside drainage features lacking continuous bed and bank and OHWM features flow into Tributary T-14. Tributary T-14 drains an approximately 25-acre watershed. The channel of Tributary T-14 is 4 to 8 feet wide and 4 to 8 inches deep at the OHWM. The channel comprises gravel, cobble, and bedrock. Leaf litter, tree roots, and herbaceous vegetation growth were noted within the channel. No flow was present on the day of the site visit; however, shallow pooling (1 to 2 inches deep) limited in area (1 to 2 feet in diameter) was noted along less than 10 percent of the overall stream length. The weight of evidence for T-14 is that it does not flow continuously as least seasonally, and USACE has determined that it is not a relatively permanent tributary.

T-15 (115') – T-15 is located on the Hammon property and is approximately 115 linear feet long. T-15 begins off site approximately 600 linear feet east. Tributary T-15 joins Tributary T-14 on the Hammon property, just upstream from the subdivision culvert. The channel of Tributary T-15 is similar to that of T-14. Tributary T-15 and its side channels drain an approximately 25-acre watershed. The weight of evidence for T-15 is that it does not flow continuously as least seasonally, and USACE has determined that it is not a relatively permanent tributary. NOTE: T-14 & T-15 form the headwaters of the second order tributary T-4.

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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. Dietrich & Stockham Aquatic Features Delineation Report – 4 September 2025.
 - b. Fadler, Cook, & Hammon Aquatic Features Delineation Report – 4 September 2025.
 - c. USACE Regulatory GIS Viewer (imagery, DEM, Hillshade, Missouri stream data) – accessed 10 September 2025.
10. OTHER SUPPORTING INFORMATION. The soils on site (Moko-Rock outcrop complex, Useful-Sonsac complex, Sonsac gravely silt loam, Useful silt loam, & Wrengart silt loam) range from moderately well drained to well drained. Formed in loess and colluvium, very coarse textured, water generally moves very freely through the soil or fails to infiltrate due to steep slopes. Depth to bedrock is relatively shallow, and groundwater influence into the streams is likely short tenured after precipitation events.
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.