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): 10/30/2020
ORM Number: LRL-2020-00341-mlk
Associated JDs: N/A
Review Area Location[1]: State/Territory: Kentucky City: Lebanon County/Parish/Borough: Marion
Center Coordinates of Review Area: Latitude 37.60472222 Longitude -85.24972222

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
None	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
None	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
SSM001	105	linear feet	(a)(2) Perennial tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	Stream SSM001 is a named stream, Cartwright Creek, is an NHD mapped stream and a perennial stream on USGS topographic mapping and was flowing at the time of the survey. Substrate consisted of bedrock, boulder, cobble, gravel, silt, sand, and clay. Rain occurred within 24 hours (0.22 inches on 12/9/19). This stream contained continuous bed and bank within the survey area. Cartwright Creek (SSM001) flows to Beech Fork, to Rolling Fork, to Salt River, to the Ohio River (a

[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 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.

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
				Traditionally Navigable Water).
SSM002	78	linear feet	(a)(2) Intermittent tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	SSM002 (UNT to Cartwright Creek) was flowing at the time of survey. Rain occurred within 24 hours (0.22 inches on 12/9/19). This stream contained continuous bed and bank within the survey area through a wetland complex and based on aerial imagery, exhibits continuous bed and bank outside the survey area and is impounded into a pond (between 2004 and 2006 based on historical aerials), then outlets into a channel until it is culverted under Radio Station Rd and flows into Cartwright Creek. This stream is identified as a drainage on USGS StreamStats. This stream exhibited OHWM indicators (break in slope and scour), an average water depth of 4 inches, and substrate consisting of silt, clay, and gravel. This unnamed tributary to Cartwright Creek flows to Cartwright Creek, which flows into Beech Fork, to Rolling Fork, to Salt River, to the Ohio River (a Traditionally Navigable Water).
SSM003	150	linear feet	(a)(2) Perennial tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	SSM003 (UNT to Cartwright Creek) was flowing at the time of survey. Rain occurred within 24 hours (0.22 inches on 12/9/19). This stream contained continuous bed and bank within the survey area through a wetland complex until it lost bed and bank at the valley bottom within jurisdictional wetland WSM001. This stream exhibited OHWM indicators (break in slope and scour), an average water depth of 6 inches, and substrate consisting of silt, clay, and gravel. This unnamed tributary to Cartwright Creek flows to Cartwright Creek, which flows into Beech Fork, to Rolling Fork, to Salt River, to the Ohio River (a Traditionally Navigable Water).
SSM004	528	linear feet	(a)(2) Perennial tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	SSM004 (UNT to Cartwright Creek) is an NHD mapped stream and a perennial stream on USGS topographic mapping and was flowing at the time of survey. This stream contained continuous bed and bank, exhibited indicators of OHWM (break in slope, scour, bank undercutting), an average water depth of 6 inches and substrate consisting of silt, clay, gravel, and cobble. This unnamed tributary to Cartwright Creek flows to Cartwright Creek, which flows into Beech Fork, to Rolling Fork, to Salt River, to the Ohio River (a Traditionally Navigable Water).
SSM006	262	linear feet	(a)(2) Intermittent tributary contributes	SSM006 (UNT to Cartwright Creek) was flowing at the time of survey. Rain occurred within 24 hours (0.33 inches on 12/10/19) but surrounding

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
			surface water flow directly or indirectly to an (a)(1) water in a typical year.	pastureland was dry. This stream contained continuous bed and bank within the survey area and exhibits continuous bed and bank outside the survey area on aerials until it is culverted under Radio Station Rd and flows into Cartwright Creek. This stream exhibited OHWM indicators (break in slope, change in vegetation characteristics), an average water depth of 3 inches and substrate consisting of silt, clay, gravel, and cobble. Additionally, hydrophytic vegetation was present off site within bed and bank, demonstrating wet conditions within the channel. This unnamed tributary to Cartwright Creek flows to Cartwright Creek, which flows into Beech Fork, to Rolling Fork, to Salt River, to the Ohio River (a Traditionally Navigable Water).
SSM007	203	linear feet	(a)(2) Intermittent tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	SSM007 (UNT to Cartwright Creek) was flowing at the time of survey. Rain occurred within 24 hours (0.33 inches on 12/10/19) but surrounding pastureland was dry. This stream contained continuous bed and bank within the survey area and exhibits continuous bed and bank outside the survey area on aerials until it is culverted under Radio Station Rd and flows into Cartwright Creek. This stream exhibited OHWM indicators (break in slope, change in vegetation characteristics), an average water depth of 2 inches and substrate consisting of silt, clay, and sand. Additionally, hydrophytic vegetation was present off site within bed and bank, demonstrating wet conditions within the channel. This unnamed tributary to Cartwright Creek flows to Cartwright Creek, which flows into Beech Fork, to Rolling Fork, to Salt River, to the Ohio River (a Traditionally Navigable Water).
SSM009	70	linear feet	(a)(2) Perennial tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	UNT to Cartwright Creek, Cartwright Creek, Beech Fork SSM009 (UNT to Cartwright Creek) was flowing at the time of survey. Rain occurred within 24 hours (0.33 inches on 12/10/19). This stream contained continuous bed and bank within the survey area and based on aerial imagery, exhibits continuous bed and bank outside the survey area until it flows into a perennial UNT to Cartwright Creek (upstream of the segment delineated as SSM013). This stream is identified as a drainage on USGS StreamStats. This stream exhibited OHWM indicators (break in slope and scour), an average water depth of 3 inches, and substrate consisting of silt, clay, sand, gravel,

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
				cobble, boulders, and bedrock. This unnamed tributary to Cartwright Creek flows to Cartwright Creek, which flows into Beech Fork, to Rolling Fork, to Salt River, to the Ohio River (a Traditionally Navigable Water)..
SSM011	104	linear feet	(a)(2) Perennial tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	SSM011 (UNT to Cartwright Creek) was flowing at the time of survey. Rain occurred within 24 hours (0.33 inches on 12/10/19). This stream contained continuous bed and bank within the survey area and based on aerial imagery, exhibits continuous bed and bank outside the survey area until it flows into a perennial UNT to Cartwright Creek (upstream of the segment delineated as SSM013). This stream is identified as a drainage on USGS StreamStats. This stream exhibited OHWM indicators (break in slope, changes in vegetation characteristics, and scour), an average water depth of 4 inches, and substrate consisting of silt, clay, sand, gravel, and cobble. Cartwright Creek eventually flows into Beech Fork.
SSM012	124	linear feet	(a)(2) Perennial tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	SSM012 (UNT to Cartwright Creek) was flowing at the time of survey. Rain occurred within 24 hours (0.33 inches on 12/10/19). This stream contained continuous bed and bank within the survey area and based on aerial imagery, exhibits continuous bed and bank outside the survey area until it flows into a perennial UNT to Cartwright Creek (upstream of the segment delineated as SSM013). This stream is identified as a drainage on USGS StreamStats. This stream exhibited OHWM indicators (break in slope and changes in vegetation characteristics), an average water depth of 3 inches, and substrate consisting of silt, clay, sand, gravel, and cobble. This unnamed tributary to Cartwright Creek flows to Cartwright Creek, which flows into Beech Fork, to Rolling Fork, to Salt River, to the Ohio River (a Traditionally Navigable Water).
SSM013	201	linear feet	(a)(2) Perennial tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	SSM013 (UNT to Cartwright Creek) is an NHD mapped stream and a perennial stream on USGS topographic mapping and was flowing at the time of survey. This stream contained continuous bed and bank, exhibited indicators of OHWM (break in slope, scour, bank undercutting), an average water depth of 9 inches and substrate consisting of silt, clay, gravel, sand, boulders, and cobble. This unnamed tributary to Cartwright Creek flows to Cartwright Creek, which flows into Beech Fork, to Rolling Fork, to Salt River, to the Ohio River (a Traditionally Navigable Water).

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
SSM014	241	linear feet	(a)(2) Perennial tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	SSM014 (UNT to Cartwright Creek) was flowing at the time of survey. No rain occurred within 24 hours of the survey. Last precipitation event was 12/10/19. This stream contained continuous bed and bank within the survey area and was delineated until its confluence with perennial stream SSM013. This stream is identified as a drainage on USGS StreamStats and fish were observed at the time of the delineation. This stream exhibited OHWM indicators (break in slope and changes in vegetation characteristics), an average water depth of 3 inches, and substrate consisting of silt, clay, sand, gravel, and cobble. This unnamed tributary to Cartwright Creek flows to Cartwright Creek, which flows into Beech Fork, to Rolling Fork, to Salt River, to the Ohio River (a Traditionally Navigable Water).
SSM015	289	linear feet	(a)(2) Perennial tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	SSM015 (UNT to Hood Branch) was flowing at the time of survey. No rain occurred within 24 hours of the survey. Last precipitation event was 12/10/19. This stream contained continuous bed and bank within the survey area and was delineated until its confluence with perennial stream SSM013. This stream is identified as a drainage on USGS StreamStats. This stream exhibited OHWM indicators (break in slope, scour, and changes in vegetation characteristics), an average water depth of 6 inches, and substrate consisting of silt, clay, sand, gravel, boulders, and cobble. Algae was also present in the channel, indicating presence of water for an extended period of time. This unnamed tributary to Hood Branch flows to Hood Branch, to Hardins Creek, Beech Fork, which flows to Rolling Fork, to Salt River, to the Ohio River (a Traditionally Navigable Water).
SSM016	33	linear feet	(a)(2) Perennial tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	SSM016 (UNT to Hood Branch) was flowing at the time of survey. No rain occurred within 24 hours of the survey. Last precipitation event was 12/10/19. This stream contained continuous bed and bank within the survey area and was delineated until its confluence with perennial stream SSM015. This stream exhibited OHWM indicators (break in slope, scour, and changes in vegetation characteristics), an average water depth of 6 inches, and substrate consisting of silt, clay, sand, gravel, boulder, and cobble. Algae was also present in the channel, indicating presence of water for an extended period.

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
				This unnamed tributary to Hood Branch flows to Hood Branch, to Hardins Creek, Beech Fork, which flows to Rolling Fork, to Salt River, to the Ohio River (a Traditionally Navigable Water).
SSM017	29	linear feet	(a)(2) Perennial tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	SSM017 (UNT to Hood Branch) was flowing at the time of survey. No rain occurred within 24 hours of the survey. Last precipitation event prior to field work was 12/10/19. This stream contained continuous bed and bank within the survey area and was delineated until its culvert inflow connecting it to perennial stream SSM015. This stream is identified as a drainage on USGS StreamStats. This stream exhibited OHWM indicators (break in slope and changes in vegetation characteristics), an average water depth of 6 inches, and substrate consisting of silt, clay, sand, gravel, and cobble. Algae was also present in the channel, indicating presence of water for an extended period. This unnamed tributary to Hood Branch flows to Hood Branch, to Hardins Creek, Beech Fork, which flows to Rolling Fork, to Salt River, to the Ohio River (a Traditionally Navigable Water).
SSM018	1105	linear feet	(a)(2) Perennial tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	SSM018 (UNT to Hood Branch) was flowing at the time of survey. No rain occurred within 24 hours of the survey. Last precipitation event was 12/10/19. This stream contained continuous bed and bank within the survey area and was delineated until its confluence with perennial stream SSM017. This stream exhibited OHWM indicators (break in slope and scour), an average water depth of 6 inches, and substrate consisting of silt, clay, sand, and gravel. Algae was also present in the channel, indicating presence of water for an extended period. This unnamed tributary to Hood Branch flows to Hood Branch, to Hardins Creek, Beech Fork, which flows to Rolling Fork, to Salt River, to the Ohio River (a Traditionally Navigable Water).
SSM019	222	linear feet	(a)(2) Intermittent tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	SSM019 (UNT to Hood Branch) was flowing at the time of survey. No rain occurred within 24 hours of the survey. Last precipitation event was 12/10/19. Aerial imagery shows this channel. This stream exhibited OHWM indicators (break in slope, scour, and changes in vegetation characteristics), an average water depth of 6 inches, and substrate consisting of silt, clay, sand, and gravel. This stream contained defined bed and bank within the survey

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
				area until it lost its channel eventually in WSM017. Wetland WSM017 and stream SSM019 are visible on aerial imagery as eventually abutting Hood Branch. This unnamed tributary to Hood Branch flows to Hood Branch, to Hardins Creek, Beech Fork, which flows to Rolling Fork, to Salt River, to the Ohio River (a Traditionally Navigable Water).
SSM020	173	linear feet	(a)(2) Intermittent tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	SSM020 (UNT to Hood Branch) was flowing at the time of survey. No rain occurred within 24 hours of the survey. Last precipitation event was 12/10/19. Aerial imagery shows this channel. This stream exhibited OHWM indicators (break in slope, scour, and changes in vegetation characteristics), an average water depth of 6 inches, and substrate consisting of silt, clay, sand, cobble, and gravel. This stream contained defined bed and bank within the survey area until it lost its channel eventually in WSM017, which continues downslope into the valley bottom where the wetland WSM017 abuts intermittent stream SSM019. WSM017 and SSM019 are visible on aerial imagery as eventually abutting Hood Branch. This unnamed tributary to Hood Branch flows to Hood Branch, to Hardins Creek, Beech Fork, which flows to Rolling Fork, to Salt River, to the Ohio River (a Traditionally Navigable Water).
SSM021	232	linear feet	(a)(2) Intermittent tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	SSM021 (UNT to Hood Branch) was flowing at the time of survey. No rain occurred within 24 hours of the survey. Last precipitation event was 12/10/19. Aerial imagery shows this channel. This stream exhibited OHWM indicators (break in slope, scour, and changes in vegetation characteristics), an average water depth of 3 inches, and substrate consisting of silt, clay, sand, cobble, and gravel. This stream contained defined bed and bank within the survey area until it lost its channel eventually in WSM018, which continues northwest where it abuts Hood Branch and is visible on aerial imagery. This unnamed tributary to Hood Branch flows to Hood Branch, to Hardins Creek, Beech Fork, which flows to Rolling Fork, to Salt River, to the Ohio River (a Traditionally Navigable Water).
SSM022	348	linear feet	(a)(2) Intermittent tributary contributes surface water flow directly or indirectly to an	SSM022 (UNT to Hood Branch) was flowing at the time of survey. No rain occurred within 24 hours of the survey. Last precipitation event prior to fieldwork was 12/10/19. Aerial imagery shows this as a channel. This stream exhibited OHWM indicators (break in slope, scour, and changes in vegetation

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
			(a)(1) water in a typical year.	characteristics), an average water depth of 3 inches, and substrate consisting of silt, clay, sand, cobble, and gravel. This stream contained continuous bed and bank within the survey area until its confluence with SSM023/ Hardins Creek. This unnamed tributary to Hood Branch flows to Hood Branch, to Hardins Creek, Beech Fork, which flows to Rolling Fork, to Salt River, to the Ohio River (a Traditionally Navigable Water).
SSM023	106	linear feet	(a)(2) Perennial tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	SSM023 is a segment of Hardins Creek which eventually flows into Beech Fork. Stream SSM023 is an NHD mapped stream and a perennial stream on USGS topographic mapping and was flowing at the time of survey. Substrate consisted of bedrock, boulder, cobble, and gravel. This stream contained continuous bed and bank within the survey area. No rain occurred within 24 hours of the survey. Last precipitation event prior to fieldwork was 12/10/19. This segment is Hardins Creek, which flows to Beech Fork, which flows to Rolling Fork, to Salt River, to the Ohio River (a Traditionally Navigable Water).
SSM024	281	linear feet	(a)(2) Intermittent tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	SSM024 (UNT to Hood Branch) was flowing at the time of survey. No rain occurred within 24 hours of the survey. Last precipitation event prior to fieldwork was 12/10/19. Aerial imagery shows this channel. This stream exhibited OHWM indicators (break in slope, scour, and changes in vegetation characteristics), an average water depth of 2 inches, and substrate consisting of silt and clay. This stream contained continuous bed and bank within the survey area until it lost its channel within WSM024, but regained a channel until it flowed outside the survey area into Hood Branch, a connection that is visible on aerial imagery. This unnamed tributary to Hood Branch flows to Hood Branch, to Hardins Creek, Beech Fork, which flows to Rolling Fork, to Salt River, to the Ohio River (a Traditionally Navigable Water).
SSM025	408	linear feet	(a)(2) Perennial tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	SSM025 (UNT to Hood Branch) was flowing at the time of survey. Rain was occurring at the time of the survey. Aerial imagery shows this channel. This stream exhibited OHWM indicators (break in slope, scour, and changes in vegetation characteristics), an average water depth of 6 inches, and substrate consisting of silt and clay. This stream is identified as a drainage on USGS StreamStats. This stream

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
				contained continuous bed and bank within the survey area and flows outside the survey area into Hood Branch. This unnamed tributary to Hood Branch flows to Hood Branch, to Hardins Creek, Beech Fork, which flows to Rolling Fork, to Salt River, to the Ohio River (a Traditionally Navigable Water).
SSM026	146	linear feet	(a)(2) Intermittent tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	UNT to Hardins Creek, Hardins Creek, Beech Fork SSM026 (UNT to Hardins Creek) was flowing at the time of survey. Rain was occurring at the time of the survey. Aerial imagery shows this channel. This stream exhibited OHWM indicators (break in slope, scour, bank undercutting, and changes in vegetation characteristics), an average water depth of 12 inches, and substrate consisting of silt and clay. This stream is an NHD mapped stream and an intermittent stream on USGS topographic mapping. This stream contained continuous bed and bank within the survey area and flows outside the survey area into Hardins Creek, a connection that is visible on aerial imagery. Hardins Creek flows into Beech Fork, which flows to Rolling Fork, to Salt River, to the Ohio River (a Traditionally Navigable Water).
SSM027	353	linear feet	(a)(2) Intermittent tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	SSM027 (UNT to Hood Branch) was flowing at the time of survey. Rain was occurring at the time of the survey. This stream exhibited OHWM indicators (break in slope and scour), an average water depth of 4 inches, and substrate consisting of silt, cobble, and clay. This stream contained defined bed and bank within the survey area, flowed into PSM007, regained a channel, and flowed outside the survey area into Hood Branch, a connection that is visible on aerial imagery. This unnamed tributary to Hood Branch flows to Hood Branch, to Hardins Creek, Beech Fork, which flows to Rolling Fork, to Salt River, to the Ohio River (a Traditionally Navigable Water).
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
PSM001	2.51	acre(s)	(a)(3) Lake/pond or impoundment of a jurisdictional water contributes surface water flow directly or indirectly to an	Impoundment of intermittent stream SSM006/ UNT to Cartwright Creek, Cartwright Creek, Beech Fork.

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
			(a)(1) water in a typical year.	
PSM002	1.19	acre(s)	(a)(3) Lake/pond or impoundment of a jurisdictional water contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	Impoundment of intermittent stream SSM007/ UNT to Cartwright Creek, Cartwright Creek, Beech Fork
PSM003	0.04	acre(s)	(a)(3) Lake/pond or impoundment of a jurisdictional water contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	Impoundment of intermittent stream SSM019/ UNT to Hood Branch, Hood Branch, Hardins Creek, Beech Fork
PSM004	0.08	acre(s)	(a)(3) Lake/pond or impoundment of a jurisdictional water contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	Impoundment of intermittent stream SSM021/ UNT to Hood Branch, Hood Branch, Hardins Creek, Beech Fork
PSM005	0.68	acre(s)	(a)(3) Lake/pond or impoundment of a jurisdictional water contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	Impoundment of intermittent stream SSM022/ UNT to Hardins Creek, Hardins Creek, Beech Fork
PSM006	0.75	acre(s)	(a)(3) Lake/pond or impoundment of a jurisdictional water contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	Impoundment of perennial stream SSM025/ UNT to Hood Branch, Hood Branch, Hardins Creek, Beech Fork

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
PSM007	0.24	acre(s)	(a)(3) Lake/pond or impoundment of a jurisdictional water contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	Impoundment of intermittent stream SSM027/ UNT to Hood Branch, Hood Branch, Hardins Creek, Beech Fork

Adjacent wetlands ((a)(4) waters):				
(a)(4) Name	(a)(4) Size		(a)(4) Criteria	Rationale for (a)(4) Determination
WSM001	0.20	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Abuts an intermittent UNT to Cartwright Creek, delineated as stream SSM002, an UNT to Cartwright Creek, which flows into Cartwright Creek, which flows into Beech Fork
WSM002	0.06	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Abuts a perennial UNT to Cartwright Creek, delineated as stream SSM003 ((a)(2) water), which flows into SSM002 ((a)(2) water), another jurisdictional UNT to Cartwright Creek, Cartwright Creek, Beech Fork.
WSM003	<0.01	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Abuts a perennial UNT to Cartwright Creek, delineated as SSM004 ((a)(2) water), Cartwright Creek, Beech Fork.
WSM004	0.03	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Abuts PSM001 as a wetland fringe in a depression which outlets as intermittent stream SSM006/ UNT to Cartwright Creek, Cartwright Creek, Beech Fork
WSM005	0.04	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Abuts PSM002 as a wetland fringe in a depression which outlets as intermittent stream SSM007/ UNT to Cartwright Creek. Cartwright Creek eventually flows into Beech Fork
WSM006	0.06	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Abuts perennial UNT to Cartwright Creek, delineated as SSM011, Cartwright Creek, Beech Fork
WSM009a	0.05	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Abuts a perennial UNT to Cartwright Creek, delineated stream SSM013 ((a)(2) water), which flows into Cartwright Creek. Cartwright Creek eventually flows into Beech Fork.
WSM009b	0.03	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Abuts a perennial UNT to Cartwright Creek, delineated stream SSM013 ((a)(2) water), which flows into Cartwright Creek. Cartwright Creek eventually flows into Beech Fork.
WSM010	0.04	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Abuts a perennial UNT to Cartwright Creek, delineated stream SSM014 ((a)(2) water). Cartwright Creek eventually flows into Beech Fork.

Adjacent wetlands ((a)(4) waters):				
(a)(4) Name	(a)(4) Size		(a)(4) Criteria	Rationale for (a)(4) Determination
WSM014	0.41	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Abuts perennial UNTs to Hood Branch, delineated as SSM015 and SSM017 ((a)(2) waters), Hood Branch eventually flows into Beech Fork via Hardins Creek. Three additional linear segments of WSM014 north and south of Danville Hwy and were delineated and were connected via culverts. Water was actively flowing through culverts despite no rain within 24 hours. Water is visible on multiple aerials.
WSM015	0.16	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Abuts perennial UNT to Hood Branch, delineated as SSM018 ((a)(2) water). Hood Branch eventually flows into Beech Fork via Hardins Creek.
WSM017	0.62	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Abuts intermittent UNTs to Hood Branch, delineated as SSM019 and SSM020 ((a)(2) waters). Wetland also extends west beyond the survey area and abuts Hood Branch, according to aerial imagery desktop review. Hood Branch eventually flows into Beech Fork via Hardins Creek.
WSM018a	0.13	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Abuts intermittent UNT to Hood Branch, delineated as SSM021. Wetland also extends northwest beyond the survey area and abuts Hood Branch, according to aerial imagery desktop review. Hood Branch eventually flows into Beech Fork via Hardins Creek.
WSM018b	0.05	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Abuts intermittent UNT to Hood Branch, delineated as SSM021 ((a)(2) water). Wetland also extends northwest beyond the survey area and abuts Hood Branch, according to aerial imagery desktop review. Hood Branch eventually flows into Beech Fork via Hardins Creek.
WSM019	0.09	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Abuts intermittent UNT to Hardins Creek, delineated as stream SSM022 ((a)(2) water). Hardins Creek eventually flows into Beech Fork.
WSM020a	0.04	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Abuts jurisdictional PSM005 ((a)(3) water), which is an impoundment of intermittent SSM022/UNT to Hardins Creek ((a)(2) water). Hardins Creek eventually flows into Beech Fork.
WSM020b	0.04	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Abuts jurisdictional PSM005 ((a)(3) water), which is an impoundment of intermittent SSM022/UNT to Hardins Creek ((a)(2) water). Hardins Creek eventually flows into Beech Fork.
WSM022	0.59	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Abuts intermittent UNT to Hood Branch, delineated as SSM024 ((a)(2) water). Hood Branch eventually flows into Beech Fork via Hardins Creek.
WSM023	0.05	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Abuts jurisdictional PSM006 ((a)(3) water), and perennial stream SSM025/ UNT to Hood Branch

Adjacent wetlands ((a)(4) waters):				
(a)(4) Name	(a)(4) Size		(a)(4) Criteria	Rationale for (a)(4) Determination
				((a)(2) water). Hood Branch eventually flows into Beech Fork via Hardins Creek.
WSM028	0.04	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Abuts jurisdictional PSM006, and perennial stream SSM025/ UNT to Hood Branch ((a)(2) water). Hood Branch eventually flows into Beech Fork via Hardins Creek.
WSM034	0.02	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Abuts intermittent stream SSM026/ UNT to Hardins Creek ((a)(2) water) offsite to the west. Hardins Creek eventually flows into Beech Fork.
WSM035	0.67	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Abuts intermittent UNT to Hood Branch, delineated as SSM027 ((a)(2) water). Hood Branch flows into Beech Fork via Hardins Creek.
WSM036	0.37	acre(s)	(a)(4) Wetland separated from an (a)(1)-(a)(3) water only by a natural feature.	Abuts intermittent UNT to Hood Branch located offsite to the southeast. This waterbody is visible on aerial imagery until it is joins stream SSM027. Water was flowing at the time of the survey, rain was falling at the time of the survey, but due to distance from survey area / property lines was not evaluated further.

D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12)):[4]				
Exclusion Name	Exclusion Size		Exclusion[5]	Rationale for Exclusion Determination
SSM005	43	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Ephemeral stream. There was continuous bed and bank and indicators of OHWM (Change in vegetation characteristics, break in slope) until it flowed via culvert in WSM003, which directly abuts perennial stream SSM004. No water was in the channel despite rain within 24 hours of the survey (0.33 in on 12/10/19).
SSM008	98	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Ephemeral stream. There was continuous bed and bank and indicators of OHWM (Change in vegetation characteristics, head cut, break in slope) until it flowed offsite. Aerial imagery shows the channel continuing to a pond that appears to be part of a larger wetland complex. No water was in the channel despite rain within 24 hours of the survey (0.33 in on 12/10/19).
SSM010	38	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Ephemeral stream. There was continuous bed and bank and indicators of OHWM (scour, bank undercutting, and break in slope) until it flowed offsite. Aerial imagery shows the channel continuing east towards perennial stream

[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.

Excluded waters ((b)(1) – (b)(12)):[4]				
Exclusion Name	Exclusion Size		Exclusion[5]	Rationale for Exclusion Determination
				SSM013 (UNT to Cartwright Creek). No water was in the channel despite rain within 24 hours of the survey (0.33 inches on 12/10/19).
SSM028	43	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Ephemeral stream. There was continuous bed and bank and indicators of OHWM (change in vegetation characteristics and break in slope) until it flowed into intermittent stream SSM024. No water was in the channel and no rain occurred within 24 hours of the survey. Last precipitation event prior to field work was 0.33 inches on 12/10/19.
WSM007	<0.01	acre(s)	(b)(1) Non-adjacent wetland.	Wetland WSM007 drains via ephemeral flow from culvert to perennial UNT to Cartwright Creek, delineated as SSM012. Wetland did not have hydrologic indicators of a high-water table during delineation but exhibited surface water. Rain occurred within 24 hours of the survey (0.33 in on 12/10/19).
WSM011	0.02	acre(s)	(b)(1) Non-adjacent wetland.	Wetland WSM011 drains via overland sheet flow into a culvert. Culvert was dry during surveys and has ephemeral flow after rain events. Wetland does not directly abut a jurisdictional waterbody.
WSM012	0.31	acre(s)	(b)(1) Non-adjacent wetland.	Wetland WSM012 drains via overland sheet flow into a culvert. Culvert was dry during surveys and has ephemeral flow after rain events. Wetland does not directly abut a jurisdictional waterbody.
WSM013	0.06	acre(s)	(b)(1) Non-adjacent wetland.	Wetland WSM013 drains via overland sheet flow into a culvert. Culvert was dry during surveys and has ephemeral flow after rain events. Wetland does not directly abut a jurisdictional waterbody.
WSM016	0.1	acre(s)	(b)(1) Non-adjacent wetland.	Wetland WSM016 does not directly abut a jurisdictional water. Wetland is a linear feature along a roadside with a pocket nearby connected to each other via overland sheet flow. Hood Branch is nearby offsite, but this wetland does not abut the waterbody.
WSM021	0.04	acre(s)	(b)(1) Non-adjacent wetland.	Wetland WSM021 does not directly abut a jurisdictional water. Wetland is a linear feature that is located upslope of jurisdictional streams and is only connected via overland sheetflow.
WSM024	0.06	acre(s)	(b)(1) Non-adjacent wetland.	Located approximately 115 feet from jurisdictional perennial stream SSM025 (UNT to Hood Branch). Contours allow for sheet flow

Excluded waters ((b)(1) – (b)(12)):[4]				
Exclusion Name	Exclusion Size		Exclusion[5]	Rationale for Exclusion Determination
				drainage to this waterbody but this wetland is not abutting.
WSM025	0.02	acre(s)	(b)(1) Non-adjacent wetland.	Located approximately 210 feet from jurisdictional perennial stream SSM025 (UNT to Hood Branch). Contours allow for sheet flow drainage to this waterbody but this wetland is not abutting.
WSM026	0.08	acre(s)	(b)(1) Non-adjacent wetland.	Located approximately 100 feet from Hood Branch (offsite). Contours allow for sheet flow drainage to this waterbody but is not abutting.
WSM027	0.07	acre(s)	(b)(1) Non-adjacent wetland.	Located approximately 35 feet from jurisdictional perennial stream SSM025 (UNT to Hood Branch). Contours allow for sheet flow drainage to this waterbody but this wetland is not abutting.
WSM029	0.01	acre(s)	(b)(1) Non-adjacent wetland.	Wetland WSM029 does not directly abut a jurisdictional water. Wetland is located upslope of jurisdictional stream and is only connected via overland sheet flow.
WSM030	0.1	acre(s)	(b)(1) Non-adjacent wetland.	Wetland WSM030 does not directly abut a jurisdictional water. Wetland is located upslope of jurisdictional stream and is only connected via overland sheet flow.
WSM031	0.07	acre(s)	(b)(1) Non-adjacent wetland.	Wetland WSM031 does not directly abut a jurisdictional water. Wetland is located upslope of jurisdictional stream and is only connected via overland sheet flow.
WSM032	0.1	acre(s)	(b)(1) Non-adjacent wetland.	Wetland WSM032 does not directly abut a jurisdictional water. Wetland is located upslope of jurisdictional stream and is only connected via overland sheet flow.
WSM033	<0.01	acre(s)	(b)(1) Non-adjacent wetland.	Within FEMA 100-year floodplain (Zone A) of SSM023/ Hardins Creek and 25 feet away from jurisdictional perennial waterbody SSM023/ Hardins Creek. After one site visit and after desktop review, evidence of inundation at least once a year by Hardins Creek cannot be demonstrated.
WSM008	0.03	acre(s)	(b)(1) Non-adjacent wetland	Wetland WSM008 does not directly abut any (a)1-(a)(3) waters. There are no direct connections to any downstream waters.

III. SUPPORTING INFORMATION

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

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: Delineation Report dated April 14, 2020

This information is sufficient for purposes of this AJD.

Rationale: N/A or describe rationale for insufficiency (including partial insufficiency).

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

☒ Photographs: Aerial and Other: Site photographs, (December 10-17, 2019) and aerial photography

☐ Corps site visit(s) conducted on: Date(s).

☐ 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 of Marion County, Kentucky

☒ USFWS NWI maps: 2019

☒ USGS topographic maps: Lebanon West and East, 24K

Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
USGS Sources	StreamStats web application https://streamstats.usgs.gov/ss/
USDA Sources	N/A.
NOAA Sources	N/A.
USACE Sources	N/A.
State/Local/Tribal Sources	N/A.
Other Sources	FEMA Firmette WSM033

B. Typical year assessment(s): N/A.

C. Additional comments to support AJD: N/A.