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): 7/29/2020
ORM Number: NWK-2020-00437
Associated JDs: N/A
Review Area Location[1]: State/Territory: Kansas City: ½ mile north of Cairo County/Parish/Borough: Pratt
Center Coordinates of Review Area: Latitude 37.661145º Longitude -98.560519º

II. FINDINGS

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

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

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

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

C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters):[3]				
(a)(1) Name	(a)(1) Size		(a)(1) Criteria	Rationale for (a)(1) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):				
(a)(3) Name	(a)(3) Size		(a)(3) Criteria	Rationale for (a)(3) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Adjacent wetlands ((a)(4) waters):				
(a)(4) Name	(a)(4) Size		(a)(4) Criteria	Rationale for (a)(4) Determination
N/A.	N/A.	N/A.	N/A.	N/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.

D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12)):[4]				
Exclusion Name	Exclusion Size		Exclusion[5]	Rationale for Exclusion Determination
NWK-2020-00437-1	1.7	acre(s)	(b)(1) Non-adjacent wetland.	Flooding from the nearby South Fork Ninnescah River, or any other (a)(1), (2), or (3) water, does not occur in a typical year (see additional comments in section C below).
NWK-2020-00437-2	16.7	acre(s)	(b)(1) Non-adjacent wetland.	Flooding from the nearby South Fork Ninnescah River, or any other (a)(1), (2), or (3) water, does not occur in a typical year (see additional comments in section C below).
NWK-2020-00437-3	40.8	acre(s)	(b)(1) Non-adjacent wetland.	Flooding from the nearby South Fork Ninnescah River, or any other (a)(1), (2), or (3) water, does not occur in a typical year (see additional comments in section C below).

III. SUPPORTING INFORMATION

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

☐ Information submitted by, or on behalf of, the applicant/consultant: Title(s) and date(s)
This information Select. 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: Other: Photos taken by Corps project manager on 07-22-2020 and 05-27-2020 – see Mapped Photo Logs in project file.

☒ Corps site visit(s) conducted on: Primary site visit conducted on 07-22-2020. Preliminary site visit was conducted on 05-27-2020, however, the applicant's plans subsequently changed and the review area increased in size.

☐ Previous Jurisdictional Determinations (AJDs or PJDs): N/A

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

☐ USDA NRCS Soil Survey: Title(s) and/or date(s).

☒ USFWS NWI maps: USFWS NWI – compiled in 1980s

☒ USGS topographic maps: 1:24,000, CAIRO-KS (2015); 1:250,000, PRATT-KS (1955); 1:250,000, PRATT-KS (1894);

Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
USGS Sources	USGS Topo maps listed above in section III.A. and USGS stream gage height graphs (see attached Pratt & Murdock gage height graphs).
USDA Sources	N/A.
NOAA Sources	N/A.
USACE Sources	Onsite visits on 05-27-2020 and 07-22-2020

[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.

Data Source (select)	Name and/or date and other relevant information
State/Local/Tribal Sources	N/A.
Other Sources	Numerous aerial imagery resources :Google Earth Pro (1991, 2002, 2005, 2006, 2008, 2010, 2011, 2013, 2015, and 2019). Digital Globe: July 2, 2018, December 5, 2019 and January 19, 2020.

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

C. Additional comments to support AJD: There is no likelihood that the wetlands reviewed in this AJD form could be inundated by any (a)(1), (2), or (3) water in a typical year.

The wetlands do not meet the definition of adjacency outlined in the NWPR. They are geographically distant from the South Fork Ninnescah River and are not merely "separated from jurisdictional waters only by a natural berm, bank, dune, or similar natural feature". Furthermore, it has also been demonstrated that these wetlands are not '"inseparably bound up with'' and adjacent to those waters' (the South Fork Ninnescah River).

[Physically remote isolated wetlands (i.e., wetlands that do not abut, are separated by more than a natural berm from, are not inundated by flooding in a typical year from, and do not have a direct hydrologic surface connection in a typical year to a jurisdictional nonwetland water) are not adjacent wetlands under the final rule.] These wetlands meet that "physically remote isolated wetlands" definition and are therefore nonadjacent.

[The agencies (EPA and the Corps) expect that bankfull discharge flows will occur in a typical year in many riverine systems such that those flooded wetlands will be jurisdictional under the final rule. Additionally, the bankfull discharge flow conditions—and sediments carried in those flood waters and deposited landward—commonly create a natural river berm between the active channel and nearby wetlands.]
This is not the case in this situation, these wetlands are in no way "inseparably bound up with the South Fork Ninnescah River". Just as some wetlands may form in depressional areas supplied by overland sheetflow hydrology, so also, other wetland hydrology may be supplied by nearby springs and seeps. In this case, springs are present at the toe of the hillslope (approximately 2000' north of the (a)(2) water) and the wetlands are "inseparably bound up with" those springs, not the (a)(2) water – the South Fork Ninnescah River. It has already been demonstrated that these wetlands do not rely on the hydrology of the nearby (a)(2) water in a typical year, and by all accounts may only receive hydrologic interaction with the (a)(2) water in one or two years within a 30 year period (far from the "typical year" inundation required in the NWPR – see attached USGS peak gage height graphs).

[The agencies (EPA and the Corps) concluded that the presence of a natural berm, bank, dune, or similar natural feature indicates that a sufficient surface water connection occurs between the jurisdictional water and the wetland. For example, a natural river berm can be created by repeated flooding and sedimentation events when a river overtops its banks and deposits sediment between the river and a wetland. The wetland could have been formed at the same time as or after the formation of the natural river berm due to repeated flooding and the impeded return flow created by the berm. Adjacent wetlands separated only by a bank from a paragraph (a)(1) through (3) water can also occur when there is an elevation difference between the wetland and the paragraph (a)(1) through (3) water (e.g., when the stream is incised). The surface water flow of the tributary over time can erode a channel to contain the tributary which separates itself from the adjacent wetland by a bank. As with berms, these banks are indicators of a regular surface

water connection and being inseparably bound up with the tributary's aquatic system. The agencies clarify that while natural barriers may at times occur within a floodplain, the existence of a floodplain generally (and other land masses similar to a floodplain, such as a riparian area or fluvial terrace) is not sufficient to indicate a direct hydrological surface connection.]
As previously discussed, the wetlands are not regularly inundated and therefore, did not form due to impeded return flow to the (a)(2) water but rather from the natural springs common at the toe of hillslopes in this area. Additionally, the north streambank of the nearby (a)(2) water is approximately 8' to 10' in height. It may be considered incised in relation to other segments of this same water that have more interaction with the floodplain, though the south side of the river has lower banks and the floodplain south of the river likely has more interaction with the river.

[The NWPR provides a definition of ''adjacent wetlands'' that includes wetlands that abut, meaning to touch at least at one point or side of, a water identified in paragraph (a)(1), (2), or (3). Abutting occurs at the interface between the adjacent wetland and the paragraph (a)(1) through (3) water. In the field, the agencies would identify the presence of a paragraph (a)(1) through (3) water and delineate the boundary of such water at the lateral extent identified by the ordinary high water mark or high tide line, depending on which is appropriate. See 33 CFR 328.4. The agencies would then delineate the wetlands within the review area to determine whether the wetland boundary touches the paragraph (a)(1) through (3) water boundary at any point or side.]
The Corps conducted a thorough site visit (see 07-22-2020 Photo Log in project file) and no potential wetland areas were observed abutting any portion of the bank of the nearby (a)(2) water or any potential "fore-berm". The closest point of any nearby wetland, appears to be a minimum of 90' to 100' away from the bank. Additionally, although there is some deposition of material along portions of the north bank, it occurs primarily near the bridge where flow restrictions during the most historic flood events at that location have caused sediment to drop out. This has resulted in not so much a berm as several mounded areas of sediment build up (or what could potentially be viewed as a "foreberm" and "backberm" areas. The further away from the bridge the less any sort of berm or deposition of material was observed. By 400' to 500' west of the bridge no appreciable deposition was observed at all.

[Under the final rule, wetlands may be separated from a paragraph (a)(1) through (3) water by only one natural feature, such as a single river berm or dune, in order to be considered adjacent. The agencies intend for wetlands separated by several natural features, such as a series of natural berms or a foredune and a backdune, from the paragraph (a)(1) through (3) water to be too remote from the jurisdictional water and therefore nonadjacent.]
The wetlands in the review area do not extend to the deposition that occurs closest to the (a)(2) water and do not meet the definition of abutting these deposition areas and would not be adjacent by definition, even if the deposited material were considered a berm. Furthermore, since multiple depositional areas occur between the wetlands and the (a)(2) water (at least in the area extending approximately 500' upstream of the bridge), even if they were considered to be berms, the fact that there are multiple separations constitute that the wetlands are "too remote from the jurisdictional water and therefore nonadjacent."

[Under this final rule, the definition of ''adjacent wetlands'' also encompasses wetlands that are physically separated from a paragraph (a)(1) through (3) water only by an artificial dike, barrier, or similar artificial structure, so long as that structure allows for a direct hydrologic surface connection between the wetlands

and the paragraph (a)(1) through (3) water in a typical year, such as through a culvert, flood or tide gate, pump, or similar artificial feature.]
A road (County Rd 26) acts as an artificial berm between the wetland and the nearby (a)(2) water. A small (approximately 18" diameter) pipe exists between the wetland (on the west side of County Rd 26) and a stockwater pond (on the east side of County Rd 26). County Rd 26 was likely built around 100 years ago (the road is not on the 1894 topo maps but is shown on the 1955 topo maps). Even if one would presume that the current wetland on the west side of the roadway extended east and was subdivided when the road was constructed and the stockwater pond that was also built in some undetermined time in the past was constructed in a portion of that wetland that was subdivided by the road, there is not any observable outfall from that pond into the nearby (a)(2) water. No outfall pipe, culvert, flood gate, pump, or similar artificial feature was observed (see 07-22-2020 Photo Log in project file) and there appears to be a consistent 2' to 3' of freeboard above the static pool of the stockwater pond and the top of the artificial berm that separates it from the (a)(2) water. The stockwater pond appears to receive very little runoff but instead appears to primarily be influenced by the wetland hydrology through the road culvert. The wetland itself (NWK-2020-00437-2) is large and broad and appears to only fluctuate a few inches in depth in most typical years as its primary hydrologic source appears to be the springs that feed it. The drainage area of wetland NWK-2020-00437-2 is rather small in relation to the overall size of the wetland, as well as the size of the upslope wetland (NWK-2020-00437-3) that likely also sequesters overland runoff flows. Additionally, all indications are that the (a)(2) water does not inundate the stockwater pond in a typical year. Furthermore, it is highly probable that the stockwater pond and possibly many of the wetland areas adjacent to County Rd 26 were not subdivided by the roadway, but rather, these areas developed wetland features (and became a stockwater pond) as a result of the vast volumes of soil borrowed from the adjacent areas to construct the roadway at an elevation that could provide safe traffic conditions during 50 or 100 year flood flows. Roadway construction often results in borrow pits and depressional areas that develop into ponds and wetlands. Lastly, an oxbow wetland (meander scar) appears to be present immediately north of the present day location of the (a)(2) water. There is an artificial berm at the west end of the oxbow (wetland NWK-2020-00437-1) and County Rd 26 separates the oxbow within the review area form the oxbow located on the other side of the highway. Neither the artificial berm on the west end or the highway on the east have any outfall pipe, culvert, flood gate, pump, or similar artificial feature. As previously explained, the (a)(2) water does not rise the necessary 8-10' in elevation in a typical year that would be necessary to breach the artificial berms in order to inundate this oxbow located within the review area (although that might not be the case where the east end of the oxbow enters the (a)(2) water off-site and outside of the review area, but that is a moot point due to the lack of connectivity with that portion of the oxbow).

It should be noted that this region does not have a FEMA mapped floodplain. Therefore the Corps relied heavily upon the landowner's observational records and confirming his statements with corresponding USGS peak gage height records (see attached USGS charts). Although Mr. Davidson only recently aquired the eastern portions of the review area, he has owned the property immediately west of the site since 1980. Mr. Davidson stated that the South Fork Ninnescah River did get out of its banks several times during the historic 2019 floods, but prior to that the wetlands had not been inundated by the river since 1992. The nearest stream gauges are located at Pratt, KS (nearly 15 river miles upstream) and Murdock, KS (over 40 river miles downstream) so more localized flooding at the review area cannot be confirmed categorically, however, the gage data does appear to match very nicely with Mr. Davidson's accounts. The gage data only went back approximately 13 years (to 2007) but in that period of time the peak height at the Pratt gage (upstream) reached flood stage only 6 times in 13 years of which 5 of the 6 occurances appears to have taken place in the 2019 timeframe. The only other instance when the river reached floodstage at

the Pratt gaging station appears to have occurred in 2010 or 2011 and appears to have been slightly lower than the lowest of the 2019 peak flow heights. Extrapolating confirmations off of the Murdock station (approximately 40+ miles downstream) is more difficult due to the additional drainage basins that converge upstream of the station. At that station the river never even had “minor overflow” events in 2010/11 but did experience one flow event in 2016 or 17 that was above “moderate flood stage”. And again, the only other events in the 13 years of recorded data that exceded the “moderate flood stage” mark appear to be the 4 highest flows on record, all of which appear to have occurred in the 2019 timeframe. Therefore, all available evidence indicates that Mr. Davidson’s account is dependable and accurate. A review of aerial imagery, lidar, topographic maps, USGS stream gage data and on-site observations indicate that the nearby (a)(2) water only inundates portions of the review area in the most extreame flood events during the most extreme weather cycles (only 2 years in 30), far from occurring in a typical year. Therefore, all wetlands within the review area are nonadjacent.