ADMINISTRATIVE APPEAL DECISION CITY OF ROSENBERG APPROVED JURISDICTIONAL DETERMINATION GALVESTON DISTRICT SWG-2022-00749-AEF

Division Engineer: Colonel George H. Walter, Southwestern Division.¹

Review Officer: Krista Sabin, U.S. Army Corps of Engineers, South Atlantic Division

Appellant: City of Rosenberg, Texas

Regulatory Authority: Section 404 of the Clean Water Act (33 USC § 1344 et seq)

Date Acceptable Request for Appeal Received: April 9, 2024

Date of Appeal Meeting: July 24, 2024, Microsoft Teams.

Summary of Appeal Decision: The City of Rosenberg, Texas (Appellant) is challenging the Galveston District's (District) March 29, 2024, Approved Jurisdictional Determination (AJD) reconsideration², which concluded the U.S. Army Corps of Engineers (Corps) has Clean Water Act (CWA) jurisdiction over 10,254 linear feet of tributaries and 0.95 acre of wetlands, but does not have jurisdiction over 17,251 linear feet of ditches.³ The Appellant contends that all aquatic resources within the review area, except 656 linear feet of Dry Creek and 88 linear feet of Trib 1, should be considered non-jurisdictional waters. The Appellant submitted 12 reasons for appeal.

As detailed below, I find that reason 1, 2, 3, 4, 5, and 8 have merit, the remaining reasons for appeal do not have merit. Therefore, the AJD decision is being remanded to the Galveston District Engineer for further analysis and documentation in accordance with 33 C.F.R. § 331.10(b).

Background Information: The Appellant, represented by COMPASS Environmental Solutions, LLC (Agent), requested a reconsideration of an AJD dated December 1, 2022. On March 29, 2024, the reconsidered AJD was issued. An AJD is a Corps document stating the presence or absence of waters of the U.S. on a parcel.⁴ The AJD review area includes 7 linear project areas and a 23-acre site for the proposed Rabbs Bayou detention pond. The aquatic resources within the review area consist of 27,505

¹ Pursuant to 33 CFR 331.3(a), the division engineer has the authority and responsibility for administering the administrative appeal process. While the review officer served to assist the division engineer in reaching and documenting the division engineer's decision, the division engineer made the final decision on the merits of this specific appeal. The district engineer retains the final Corps decision-making authority for the approved JD.

² The March 29, 2024, AJD was a reconsideration of an AJD finalized on December 1, 2022.

³ AR 0008.

⁴ 33 C.F.R. §331.2.

linear feet of linear aquatic resources, and 0.95 acre of wetlands within the linear features.⁵ The project areas run throughout the City of Rosenberg in Fort County, Texas.

The District's review of the request included a site visit on February 15, 2024.⁶ On March 29, 2024, the District issued an AJD concluding that the Corps has regulatory authority over 0.95 acre of wetlands and 10,254 linear feet of tributaries pursuant to Section 404 of the CWA.⁷ On April 9, 2024, the Southwestern Division (SWD) received a Notification of Administrative Appeal Options and Process and Request for Appeal (NAO/NAP) form that the Agent had completed on behalf of the Appellant, along with a 15-page letter and attachments documenting the reasons for appeal. On April 26, 2024, SWD notified the Appellant that the request for appeal was complete and contained acceptable reasons for appeal. The notification also requested that the District provide identical copies of the administrative record (AR) to SWD and the Appellant. On May 15, 2024, SWD requested appeal review assistance from South Atlantic Division (SAD) for the subject appeal. SAD accepted the request for assistance. On July 24, 2024, an informal appeal meeting was held virtually using Microsoft Teams. The Appellant, Agent, District, and Review Officer (RO) were in attendance.

Information Received and its Disposition During the Appeal: The AR is limited to information contained in the record as of the date of the NAO/NAP form, which is March 29, 2024. No new information may be submitted on appeal;⁸ however, to assist the Division Engineer in making a decision on the appeal, the RO may allow the parties to interpret, clarify, or explain issues and information already contained in the AR. Such interpretation, clarification, or explanation does not become part of the AR because the District Engineer did not consider it in making the AJD decision. Consistent with Corps regulations, the Division Engineer may use such interpretation, clarification, or explanation in determining whether the AR provides an adequate and reasonable basis to support the District Engineer's decision.⁹ The information received during this appeal review, and its disposition, is as follows:

1) Request for Appeal sent by the Appellant's agent, Mr. Matthew Chastain, received by the Corps, SAD, on April 9, 2024.

2) Notice from SAD to the Appellant accepting the request for appeal and stating that the request met the required criteria for an administrative appeal, sent by letter dated April 26, 2024.

3) The AR, a copy of which the District provided to SAD and the Appellant on May 9, 2024.

⁵ AR 012.

⁶ AR 201.

⁷ AR 011.

⁸ 33 C.F.R. §331.2.

⁹ 33 C.F.R. §331.7(f).

4) An informal appeal meeting, in accordance with 33 C.F.R. § 331.7 on July 24, 2024. The goal of the conference was to summarize and clarify the positions of both the Appellant and the District regarding the appeal. Topics discussed at the appeal conference are summarized in the document titled "City of Rosenberg Appeal Meeting MFR."

Evaluation of the Appellant's Reasons for Appeal, Findings, and Instructions to the District Engineer

The twelve reasons for appeal have been summarized from the request for appeal. The summarized reasons for appeal were coordinated with the Appellant in the appeal meeting agenda emailed to the Appellant and District on July 12, 2024. As documented in the Appeal Meeting Notes,¹⁰ the Appellant concurred with SAD's summarized reasons for appeal. The request for appeal contained several other points classified as reasons for appeal and are addressed in the following reasons for appeal. The Appellant claims that four drainage features within the project site should be non-jurisdictional, based on its interpretation of policy guidance and case law, and disputes jurisdiction over any wetlands within the review area.

The District and Appellant agree that the features are aquatic resources. Therefore, the lateral extent of these resources, such as ordinary high water mark delineation will not be discussed further.¹¹

Reason for Appeal 1 and 8, both contend that the linear aquatic resources are not jurisdictional because they are man-made drainages, excavated wholly through uplands, and drain only uplands. Therefore, they are both addressed below.

REASON FOR APPEAL 1: The linear aquatic resources are not jurisdictional because they are man-made drainages, excavated wholly through uplands, and drains [sic] only uplands without relatively permanent flow.

REASON FOR APPEAL 8: All portions of Dry Creek within the project area, from Louise Street east to FM 2218 are man-made, excavated wholly through uplands, and drain only uplands. Additionally, since the project site and downstream portions of Dry Creek exhibit large fluctuations in elevational data, portions of Dry Creek and Trib 1 within the project site do not extend any potentially jurisdictional OHWMs of Dry Creek near Smithers Lake into the project site. They do not replace any previous tributary or historical drain and therefore would meet the same non-jurisdictional definition as portions of Rabbs Bayou or of Dry Creek referenced by USACE Galveston staff.

¹⁰ Memorandum for Record of July 24, 2024, appeal meeting for the City of Rosenberg appeal of an approved jurisdictional determination file number SWG2022-00749-AEF. Dated October 5, 2024.

¹¹ The aquatic resources were originally delineated by the Agent in the Pre-USACE Verified Waters of the U.S. Delineation Report, AR 496.

FINDING: These reasons for appeal have merit.

ACTION: For the reasons discussed below, this AJD is remanded to the District for further evaluation, analysis, and documentation. The District must re-evaluate its observations and conclusions relative to the jurisdictional status of all aquatic features, even those identified as non-RPW, and clearly document the stream reach and order, as well as the flow regime.

The District adequately documented that the majority¹² of linear aquatic resources were excavated in uplands, so the "generally not jurisdictional" test was the correct test to apply. However, the AR does not support the determination adequately nor did the AR sufficiently document the flow regime of the linear aquatic resources.

DISCUSSION: This reason for appeal centers on the Appellant's argument that the ditch is not, for the purposes of the CWA¹³, a tributary and should be excluded from jurisdiction. As described in the Appellant's submittals to the District, the physical characteristics and flow path are not in material dispute. Tributaries include natural, man-altered, or man-made¹⁴ waterbodies and jurisdictional tributaries must be relatively permanent.¹⁵ The training materials provided after the *Sackett* decision reiterate that "non-relatively permanent tributaries are those that have flowing or standing water only in response to precipitation or that do not have continuously flowing or standing water at least seasonally.¹⁶

¹² AR 168 noted that according to historical aerial imagery and property boundary maps provided by the City of Rosenberg, Trib 1 and the southern portion of Dry Creek are the natural, historical Dry Creek channel bed that drains south to Smither's Lake.

¹³ As a result of litigation, waters of the U.S. within the state of Texas are determined consistent with the pre-2015 regulatory regime and consistent with the Supreme Court's decision in Sackett (pre-2015 Regime). The "pre-2015 Regime" refers to the agencies' pre-2015 definition of "waters of the U.S.," implemented consistent with relevant case law and longstanding practice, as informed by applicable guidance, training, and experience. Additionally, the agencies are interpreting the phrase "waters of the U.S." consistent with the Supreme Court's decision in Sackett v. Environmental Protection Agency, 598 U.S. 651 (2023).

¹⁴ *Rapanos guidance* at footnote 24. Final Rule for Regulatory Programs of the Corps of Engineers, 51 FR 41206, 41216–17 (13 November 1986). These re-codified regulations, including the 1993 exclusion, are generally called the "1986 Regulations." EPA and Army Webinar Slides at

https://www.epa.gov/system/files/documents/2023-11/wotus-overview_tribes-and-states_11-15-23_508.pdf and *Rapanos Guidance* at footnote 24

¹⁵ Relatively permanent waters include tributaries that typically have flowing or standing water year-round or continuously at least seasonally (e.g., typically three months). The duration of seasonal flowing or standing water may vary regionally, but the tributary must have predictable flowing or standing water seasonally. *Rapanos* guidance, p. 4. and EPA and Army Webinar Slides at

https://www.epa.gov/system/files/documents/2023-11/wotus-overview_tribes-and-states_11-15-23_508.pdf

¹⁶ Updates for Tribes and States on "Waters of the United States" Slide 45 (15 November 2023). Available online at: https://www.epa.gov/system/files/documents/2023-11/wotus-overview_tribes-and-states_11-15-23_508.pdf

The 2008 *Rapanos* guidance states, "In addition, ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water are generally not waters of the United States because they are not tributaries..." There is no current legal definition of ditch for CWA purposes. Generally, a ditch is a man-made channel, not a relocated/manipulated tributary, constructed for a purpose such as drainage, irrigation, etc. Under the Pre-2015 Regulatory Regime a three-part test is used to determine if a ditch falls within the "generally not jurisdictional" category: 1) excavated wholly in uplands, 2) draining only uplands, and 3) that do not carry relatively permanent flow of water.¹⁷

The District applied the "generally not jurisdictional" ditch test to all linear aquatic resources.¹⁸ The District determined that four of the seven linear aquatic resources satisfied the three-part test and were "generally not jurisdictional." The District determined that the remaining three linear aquatic resources did not meet the "generally not jurisdictional" criteria because they had a relatively permanent flow or because they were not dug from uplands and contained a relatively permanent flow. The District used aerial photography and topographic maps to determine whether the features were manmade or not.¹⁹ Determining all were man-made except for Trib 1 and a small part of Dry Creek South. The Appellant also indicated these features were regarding the second part of the test, the District made statements that the features were draining only uplands, but the rationale for that determination was not clear. The AR includes a list and a map of soils found in the review area as well as an NWI map; however, the AR does not indicate how those resources were used to make the determination that the features are draining only uplands.

The flow characteristics of a particular tributary generally will be evaluated at the farthest downstream limit of such tributary (i.e., the point the tributary enters a higher order stream). ²⁰ Non-RPW tributaries are those that have flowing or standing water only in response to precipitation or that do not have continuously flowing or standing water at least seasonally.²¹ The duration of seasonal flowing or standing water may vary regionally, but a RPW tributary must have predictable flowing or standing water seasonally.²²

The rationale used to evaluate the third test, whether the ditch carries a relatively permanent flow," is summarized below for each feature.

 Dry Creek Stream North (from the confluence of Theater Ditch and Dry Creek (29.543735°, -95.788286°) west to the end of the project area at 29.547281°, -95.809641) and Rabbs Bayou Extension:

¹⁷ 2008 *Rapanos* guidance, page 12

¹⁸ AR 014.

¹⁹ AR 168

²⁰ 2008 Rapanos Guidance, FN 24.

²¹ 2008 Rapanos Guidance.

²² 88 FR 3038. The 2023 preamble defines the "relatively permanent standard" test of the plurality opinion in *Rapanos* to mean "waters that are relatively permanent, standing or continuously flowing waters" connected to paragraph (a)(1) TNWs, interstate waters, and the territorial seas."

- District made a statement saying it does not carry a relatively permanent flow of water; however, the stream reach and order were not identified.
- Noted physical indicators of flow such as shelving, wracking, water staining, sediment sorting, and scour present at the locations along Theater Ditch South, Theater Ditch North, Dry Creek South and Trib1 visited by the District and the Agent on February 15, 2024.
- Historical aerial photographs and APT
- Theater Ditch South starting below 29.550361°, -95.785741° and flowing south to the confluence of Theater Ditch and Dry Creek: The District determined the stream reach has a stream order of 1 and used the estimated flow chart submitted by the Agent to determine that this portion of Theater Ditch South does not carry a relatively permanent flow of water.
- Theater Ditch Complex consisting of Theater Ditch South starting at 29.550361°, -95.785741° and moving north, Theater Ditch North, Theater Ditch Culvert: Reach with stream order 1. ²³ The AR noted that "Google Earth aerials and the estimated flow chart submitted by the Agent, show that the majority of this reach flowing north toward the Brazos River has relatively permanent flow. Therefore, the entire reach is a relatively permanent tributary of the Brazos River."²⁴
- Dry Creek Stream (South): The District determined that this linear aquatic resource has a stream order of 2 based on aerial imagery.
- Trib 1: District used the estimated flow chart submitted by the Agent along with aerial photography shows that a majority of Dry Creek, once it leaves the project area, has permanent flow as it moves towards Smither's Lake.

Based on the Districts determination of stream order, the jurisdictional tributaries are evaluated as two reaches. Stream order was calculated using the Strahler stream-ordering method.²⁵ The first reach includes the north theater ditch, and the second reach is dry creek south. It appears the basis of the District's flow regime determination for Dry Creek was based on a previous jurisdictional determination²⁶ and the Agent's flow chart.²⁷ The basis of the District's flow regime determination for Theater Ditch was Google Earth aerial imagery and the Agent's flow chart.²⁸ The AJD MFR describes the entire reach of the Dry Creek South tributary to extend south and east through Smithers

²³ AR 173.

²⁴ AR 015.

²⁵ "Strahler" refers to a method described by A.N. Strahler in 1957 to determine stream order. This method classifies streams based on their relative position in the watershed. Streams with no upstream tributaries are first-order streams and the confluence of two streams of the same order results in an increase in stream order. A second order stream is formed where two first order streams join, and a third order stream is formed where two second order streams join, and etc. When streams of different order join, there is no change in stream order.

²⁶ This jurisdictional determination was not included in the AR.

²⁷ AR 173.

²⁸ AR 173.

Lake, identifying the "majority of the reach" as being an RPW.²⁹ However, there is no measurement given for the reach, or how the determination that a "majority" was reached for either of the two reaches. It is unclear whether the wetlands in the Dry Creek path were considered in this evaluation of the flow regime. The District states that "[A]erial photography shows that a majority of Dry Creek, once it leaves the project area, has permanent flow…" however, it is not clear what aerial photography was used and how it was used in the determination of the reach flow regime.

REASON FOR APPEAL 2: The District staff have presented no information to determine the hydrological regime of the any drainage mapped within the project site, instead relying on third parties to conduct work normally completed internally.

FINDING: This reason for appeal has merit.

ACTION: See Reason for Appeal 1 Action instructions.

DISCUSSION: As discussed in Reason for Appeal 1, the District did not properly document the flow regime for any of the seven linear aquatic resources in the AR. Therefore, this reason for appeal has merit, and should be addressed in accordance with the instructions provided in reason for appeal 1.

Regarding the District's reliance on data submitted by the Agent, the District can rely on information provided by applicants and their Agents, provided the information is accurate and reliable.³⁰ The District used the data submitted by the applicant as well as additional publicly available data to make their determination. All data used for the AJD are listed in Section 9 of the AJD MFR.³¹ The District was following proper procedure by using the best available information, including information submitted by the applicant, when completing the AJD.

REASON FOR APPEAL 3: The District staff used the Agent's review of historical aerial photographs as the sole determination for flow regime within the drainage ditches on the project site. This is an unscientific and unsupported form of analysis, since historical aerials only provide a snapshot in time, and not a continuous evaluation of flow. The Appellant only provided that assessment to assist the District staff in observing the lack of flow in the area, as that assessment was intended to be used in conjunction with all of the other data we cited such watershed area, hydrologic inflows like wastewater treatment plants and storms sewers, and the discontinuous flow regime throughout all drainage ditches within the project site as evidence by ditch-wetland-dry channel patterns in the bottom of every drainage. That assessment is not a standalone dataset.

FINDING: This reason for appeal does not have merit.

²⁹ AR 014.

³⁰ Question and Answer Regulatory Guidance Letter 16-01, Question 8.

³¹ AR 017

ACTION: No further action.

DISCUSSION: The District used several resources to evaluate the flow regime including aerial photographs in conjunction with Antecedent Precipitation Tool, as well as the Agent's delineation report and flow evaluation.³² This method is one of the tools that can be used to determine whether tributaries are relatively permanent. In addition, the District verified site conditions during a site visit.

REASON FOR APPEAL 4: Because the ditches should not be jurisdictional, the wetlands wouldn't be either.

FINDING: This reason for appeal has merit.

ACTION: For the reasons discussed below, this AJD is remanded to the District for further evaluation, analysis, and documentation. The District must re-evaluate the AJD, clearly identifying and making a jurisdictional determination for each of the 10 wetlands in the review areas.

DISCUSSION: Based on the 2022 Pre-USACE Verified Waters of the U.S. Delineation report submitted with the original jurisdictional determination request and referenced in the reconsidered AJD, there are approximately³³ 10 separate wetlands located in Dry Creek Stream (North), Dry Creek Stream (South), Theater Ditch South, Rabbs Bayou Extension, and Theater Ditch North. However, the AJD failed to include a jurisdictional determination for three wetlands in Dry Creek North and one wetland in Rabbs Bayou Extension.

Wetlands have a continuous surface connection when they physically abut³⁴ or touch a jurisdictional water. Wetlands also have a continuous surface connection when they are connected to a jurisdictional water by a discrete feature like a non-jurisdictional ditch, swale, pipe, or culvert (per pre-2015 case law, *see United States v. Cundiff* (2009), and prior EPA practice). The District did not evaluate the wetlands in Dry Creek North and Rabbs Bayou Extension to determine if the non-jurisdictional linear aquatic resources served as a CSC.

Change in vegetation is one indicator of an OHWM, the District should re-evaluate the wetlands and ensure they are in fact wetlands and not an RPW or non-RPW portion of the linear aquatic resource. Due to the lack of detail in the wetland data sheets, field-verification of the wetlands may be required. Furthermore, the District should include a

³² Updates for Tribes and States on "Waters of the United States" Slide 45 (15 November 2023). Available online at: https://www.epa.gov/system/files/documents/2023-11/wotus-overview_tribes-and-states_11-15-23_508.pdf

³³ AR 621-628. In Dry Creek South, there appears to be multiple small wetlands close together and due to the scale of the map it is difficult to determine if they are one or multiple wetlands.

³⁴ Abutting wetlands are those that "touch" a jurisdictional water (i.e., they are not separated by uplands, a berm, dike, or similar barrier from the OHWM of the water to which they are adjacent).

jurisdictional determination for the wetlands in Dry Creek North and Rabbs Bayou Extension

REASON FOR APPEAL 5: The District selected the wrong location for the highest point of elevation (the starting point of jurisdiction) for Theater Ditch South. The starting point for jurisdiction identified by the District is arbitrary and capricious and had no basis in fact or data.

FINDING: This reason for appeal has merit.

ACTION: For the reasons discussed below, this AJD is remanded to the District for further evaluation, analysis, and documentation. The District must clearly document why the Applicant's data was not used in the determination.

DISCUSSION: The Appellant submitted a field verified location using Real Time Kinematics (RTK) GPS data with sub centimeter accuracy of the highest point of elevation.³⁵ The District did not rely on this data and used LiDAR to identify the highest point.³⁶ However, the AR did not indicate why the District decided not to use the GPS data. During the Appeal Meeting the District stated that the survey submitted by the Agent did not include the datum used; therefore, they could not use it in their determination. Because the survey completed is generally more accurate than LiDAR and the District did not sufficiently document why they did not use the GPS data or give the Agent an opportunity to clarify the survey, this reason for appeal has merit. The District should reassess the highest point of elevation which was used identify the flow path and stream reach.

When posed with evaluating and determining the jurisdictional status of a particular feature, the District is required to interpret and apply regulation, guidance, and policy. The *Standard Operating Procedures for the U.S. Army Corps of Engineers Regulatory Program* (SOP) instruct staff to provide supportive rationale in the AR, disclose the data and information relied upon, and if applicable, explain what data or information received greater or lesser weight, and what professional judgment or assumptions were used in reaching the determination.³⁷ Documentation must provide a comprehensible foundation for the decision, explain gaps in the AR, and include logical argument to address inconsistent information.³⁸ The District is to note which specific aspect(s) of a submittal are not relied upon, state the reason why any such aspects were not relied upon, address objections from the requestor, and "clearly document the reasons for reaching a contrary conclusion."³⁹

³⁶ AR 172 and City of Rosenberg Appeal Meeting MFR.

³⁷ See SOP, p. 9.

³⁸ U.S. Army Corps of Engineers. 2016. Regulatory Guidance Letter, Subject: Jurisdictional Determinations. RGL 16-01. Department of the Army, Washington, D.C. *See* Questions and Answers #8.

REASON FOR APPEAL 6: The District staff never verified the flow path, flow regime, or segment characteristics they assert for any portion of Theater Ditch including the Theater Ditch Culvert during their field visit on February 14, 2024.

FINDING: This reason for appeal does not have merit.

ACTION: No further action.

DISCUSSION: The District verified the delineation report submitted by the Agent by reviewing the various resources listed in the resources section of the AJD MFR. In addition, the District field-verified portions of the project site on February 14, 2024. Field-verification of the entire project site is not required.

REASON FOR APPEAL 7: The Theater Ditch North is connected to the Theater Ditch Culvert through over 1,600 linear feet of man-made curb/gutter underground storm sewers before reaching the railroad tracks to the north. The District was inconsistent with previous AJDs when they determine that the 1,600 linear feet of manmade curb/gutter underground storm sewers did not act as a "break" in a consistent or continuous hydrological connection and that areas upgradient are non-jurisdictional.

FINDING: This reason for appeal does not have merit.

ACTION: No further action.

DISCUSSION: The regulation at 33 CFR part 331.7(f) describes the review procedures associated with the Corps administrative appeal process. Specifically, it states 'The appeal of an approved JD, a permit denial, or a declined permit is limited to the information contained in the administrative record by the date of the NAP for the application or approved JD, the proceedings of the appeal conference, and any relevant information gathered by the RO as described in §331.5. Neither the appellant nor the Corps may present new information not already contained in the administrative record, but both parties may interpret, clarify or explain issues and information contained in the record."

Although districts strive for consistency in decision making, each individual request contains unique facts, circumstances, and site conditions that drive the decision-making process. While there may be similarities between the subject appeal and the projects cited by the Appellant, the facts and circumstances associated with decisions on those projects are unique to them, are not a part of this AR, and are thus outside the context of this appeal process. For these reasons, RFA 7 is not an acceptable reason for appeal, and is not considered further in this document.

REASON FOR APPEAL 9: The features identified as jurisdictional tributaries in the AJD cannot be adequately defined by either the Strahler (1952 and 1957) or Shreve (1966 and 1967) methods, which apply to natural tributaries and channels.

These stream order methods were developed to measure the complexity of rivers and streams, not man-made drainage ditches.

FINDING: This reason for appeal does not have merit.

ACTION: No further action.

DISCUSSION: Characterization of a water feature as a ditch is not a determining factor for CWA jurisdiction, in and of itself. Footnote 24 of the 2008 Rapanos Memorandum states that a tributary is the entire reach of the stream that is of the same order (from the point of confluence, where two lower order streams meet to form the tributary, downstream to the point such tributary enters a higher order stream). Stream order is determined by first identifying the streams (channels which exhibit an ordinary highwater mark (OHWM)) in a watershed, either using mapping or field observations. The streams are then assigned a stream order. The method to assign stream order outlined in Footnote 24 is modified from Strahler. In Strahler, flow regimes (e.g., intermittent or perennial) are assigned to streams before determining stream order. In the Rapanos Guidance, stream order is assigned to each stream channel first to identify the reach of each tributary and then flow characteristics of each tributary are determined thereafter.⁴⁰ This concept of assigning stream orders to identify stream reaches for purposes of assessing the jurisdictional status of tributaries was not affected by the decision in Sackett. The flow characteristics of a particular tributary generally will be evaluated at the farthest downstream limit of such tributary (i.e., the point the tributary enters a higher order stream). However, for purposes of determining whether the tributary is relatively permanent, where data indicates the flow regime at the downstream limit is not representative of the entire tributary (e.g., where data indicates the tributary is relatively permanent at its downstream limit but not for the majority of its length, or vice versa), the flow regime that best characterizes the entire tributary should be used. A primary factor in making This determination is the relative lengths of segments with differing flow regimes.⁴¹

REASON FOR APPEAL 10: Even if it were appropriate to classify the Theater Ditch complex, a 1st order stream is ephemeral by its very definition, and would not exhibit perennial or relatively permanent flow, and therefore, should not be classified as a 1st order stream.

FINDING: This reason for appeal does not have merit.

ACTION: No further action.

DISCUSSION: As discussed in Reason for Appeal 9, the Rapanos Guidance provides a modified form of Strahler stream order method where the stream order is identified first, then the flow regime is evaluated. Once the stream order is identified, the flow regime is evaluated using the guidance and definitions provided in the Rapanos guidance.

⁴⁰ See Rapanos Guidance.

⁴¹ 2008 Rapanos Memorandum, Footnote (FN) 24.

Because the District applied the Strahler stream order method as required by the Rapanos guidance, this reason for appeal does not have merit.

Reason for Appeal 11 and 12 both question the District's evaluation of stream order for Dry Creek; therefore, they will be discussed together.

REASON FOR APPEAL 11: The District staff continue to be arbitrary and capricious in their decision-making process. On the December 20, 2023, AJD, they stated "Dry Creek changes from a stream order 1 to a stream order 2 at 29.503999°, -95.707411°. This point is approximately 6.27 river miles southeast of the end of the Dry Creek South project area. Most of Dry Creek southeast of the project site has permanent flow." Now as then, USACE Galveston staff provide no data, measurement, or evidence to support this claim.

REASON FOR APPEAL 12: Based on previously submitted field measurements and RTK-grade GPS data, the Agent asserts that Dry Creek needs to be evaluated appropriately based on the flow regime within a specific stream reach in the project site. USACE Galveston staff erred in their assessment of Dry Creek by extending its reach across different stream orders and flow regimes over a 9mile-long stretch of ditch. Dry Creek should be divided in appropriate segments to be evaluated independently.

FINDING: These reasons for appeal do not have merit.

ACTION: No further action.

DISCUSSION: The Appellant asserts that the District is being arbitrary and capricious because the reconsidered AJD revised the stream order for Dry Creek and did not provide data measurement, or evidence to support their determination. In addition, the Appellant disagrees with the District's stream order and reach determination for Dry Creek. As discussed in Reason for Appeal 9, the Rapanos Guidance provides a modified form of Strahler stream order method where the stream order is identified first, then the flow regime is evaluated. The District describes their re-evaluation process in the AJD MFR⁴² adequately identifying the stream order and rationale. The AR supports the Districts determination of Dry Creek's stream order reach. Therefore, this reason for appeal does not have merit.

⁴² AR 014

CONCLUSION: Reasons for appeal 1, 2, 3, 4, 5, and 8 have merit. Reasons for appeal 6, 7, 9, 10, and 11 do not have merit. This action is remanded to the District for reconsideration consistent with the discussion in this appeal decision document.

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KRISTA SABIN Regulatory Review Officer South Atlantic Division