ADMINISTRATIVE APPEAL DECISION CLEAN WATER ACT LITTLE ROCK MINE, GRANT COUNTY, NEW MEXICO ALBUQUERQUE DISTRICT FILE NUMBER SPA-2017-00017-LCO

DATE: JUNE 24, 2020

Review Officer: Thomas J. Cavanaugh, U.S. Army Corps of Engineers (Corps), South Pacific Division, San Francisco, California

Appellant Representative: Anna McMullen, Tyrone Mine Environmental Manager (Appellant)

District Representative: Kelly Allen, U.S. Army Corps of Engineers, Albuquerque District (District)

Authority: Clean Water Act (33 U.S.C. 1344)

Receipt of Request for Appeal: February 12, 2019

Appeal Meeting and Site Visit Date: April 25, 2019

Summary of Decision: The reasons for appeal of this Clean Water Act (CWA) jurisdictional determination do not have merit. The District has sufficiently evaluated and documented its conclusion that Deadman Canyon has a significant chemical nexus with the Gila River, the nearest downstream Traditional Navigable Water (TNW), and is, therefore, subject to jurisdiction as a water of the United States.

Background Information: The approximately 682-acre property (Property) is located in Grant County, New Mexico and is bordered by the Tyrone Mine to the north and the Gila National Forest to the south and west, Latitude 32.65473°, Longitude -108.40218°.

For purposes of evaluation during the CWA jurisdictional determination, the District evaluated the site using the 1986 CWA, Section 404 definition of "waters of the U.S." (33 Code of Federal Regulations 328.3(a)) and the joint Environmental Protection Agency (EPA) and Corps "CWA Guidance to Implement the U.S. Supreme Court Decision for the Rapanos and Carabell Cases", (Rapanos Guidance); the 1987, Corps of Engineers Wetlands Delineation Manual (87 Manual); and supporting guidance.

The District's review included field visits to the site on March 22, 2017, and September 21, 2017. On December 14, 2018, the District issued its CWA jurisdictional determination for the Property at issue. The District concluded that the site contained approximately 2.11 acres (6635 linear feet) acres of non-wetland waters of the United States, within the survey area. Following three previous Approved Jurisdictional Determinations (AJD) (October 31, 2017, February 23,

2018, and July 7, 2018) and consideration of three requests for reconsideration from the Appellant (December 28, 2017, April 23, 2018, and September 7, 2018), the District determined that these waters are regulated under Section 404 of the Clean Water Act, as they are a non-Relatively Permanent Waters (RPW), which flow directly or indirectly into a TNW, the Gila River. The District's basis for its determination was detailed in its AJD form, dated December 14, 2018.

The Appellant submitted a Request for Appeal (RFA) on February 12, 2019. The Appellant disagreed with the District's conclusion that the 2.11 acres on the property are waters, subject to jurisdiction under Section 404 of the Clean Water Act. The Appellant asserts that waters on the property do not have a significant nexus with a downstream TNW. The Appellant also disagreed with the District's determination that the Gila River is a TNW.

Appeal Evaluation, Findings and Instructions to the District Engineer (DE):

Information Received and its Disposal during the Appeal Review: The administrative appeal was evaluated based on the District's administrative record, the Appellant's Request for Appeal, and discussions at the appeal meeting with the Appellant and the District.

REASON 1: Scientific evidence submitted by FMTI demonstrates that there is no significant nexus between Deadman Canyon and any Traditional Navigable Water: Deadman Canyon does not have a physical nexus with the Gila River; Deadman Canyon does not have a biological nexus with the Gila River; Deadman Canyon does not have a chemical nexus with the Gila River.

FINDING: This reason for appeal does not have merit.

ACTION: No action is required.

DISCUSSION: In the RFA, the Appellant asserts that, under both Supreme Court precedent and relevant guidance, a significant nexus exists when a tributary significantly affects the chemical, physical, and biological integrity of a traditional navigable water. The Appellant notes that the District made no attempt to allege a physical or biological nexus between Deadman Canyon and the Gila River. The Appellant asserts that the District relied on an incorrect interpretation of the law, in asserting jurisdiction based only on a chemical nexus with a downstream TNW. The Appellant further asserts that technical evidence, submitted by FMTI to the District, clearly demonstrates that there is little to no possibility for chemical transport between Deadman Canyon might reach the Gila River, FMTI's evidence demonstrates that they would be present at levels below regional background concentrations. The Appellant argues that the District has not established that Deadman Canyon has a significant effect on the chemical integrity of the Gila River.

In its December 14, 2018, AJD for the Property, the District concluded that the approximately 6635 linear feet or 2.11 acres of Deadman Creek on the Property is regulated under Section 404 of the Clean Water Act.

The District completed one AJD form for the Property. In Section II of the AJD form, "Summary of Findings", under part B, the District determined that there are waters of the U.S. within Clean Water Act Jurisdiction (as defined by 33 CFR part 328) in the review area. The District further determined in that section that the review area contained non-RPWs that flow directly or indirectly into TNWs and impoundments of jurisdictional waters.

In Section III.B.1 of the AJD form, the District described Deadman Canyon as formed by the confluence of two second order streams near the Burro Mountain Road crossing. Deadman Canyon, the relevant reach, continues as a third order stream for approximately 12,755 feet until its confluence with another third order stream, Whitewater Canyon, at the 90-degree corner where these streams have been re-routed around the southwest corner of No. 1 Series Tailings Facilities (Tyrone Mine). The flow path of Deadman Canyon joins Mangas Creek (including the RPW segment of Mangas Creek from Mangas Springs to the Gila River), which flows into the Gila River. Under Section I.C of the AJD form the District indicated that the nearest TNW into which the aquatic resource flows is the Gila River.

In Section III.C of its AJD form, "Significant Nexus Determination", the District concluded that Deadman Canyon has more than an insubstantial or speculative effect on the chemical integrity of the downstream TNW, the Gila River at the confluence with Mangas Creek and stated that a detailed analysis is provided in Section IV.B.

In Section IV.B., the District stated that Deadman Canyon flows through a significantly disturbed mining district that has undergone decades of water contaminant control intervention. The District stated that segments of Deadman Canyon flow in the natural channel, but large stretches have been rerouted into man made diversion channels as the footprint of mine areas increased. Despite these disturbances, the District concluded that hydrologic connection remains intact between Deadman Canyon and the Gila River.

The District concluded that the relevant reach traps pollutants, preventing them from reaching the Gila River. In particular, the District determined that earthen dike 1 and earthen dike 2 areas along with the Tyrone mine tailing facilities, have altered the flow pattern, direction, and functions of local drainages including Deadman Canyon. The District stated that the earthen dikes described in "Little Rock Mine Approved Jurisdictional Determination Grant County, NM, August 2017" (HilgartWilson report) are obstructions to flow, creating "delta" areas that pond water which can flow into constructed diversion channels (Cross-Cut Channel and Deadman Diversion Channel) during sufficiently sized storm events. The District concluded that those "delta" areas have been artificially created and effectively perform as settling basins, particularly in the case of the Deadman Canyon delta. The District noted that earthen berms 1 and 2 were originally constructed to keep surface water in Deadman Canyon from flowing into the Tyrone mine tailing impoundments that are adjacent to the stream, but that the berms provide additional functionality by slowing water which causes sediment to drop out.

The District referenced the HilgartWilson report, site observations, and anecdotal evidence from long term Tyrone personnel as indicating that surface flows in the constructed Deadman Diversion Channel down gradient of the Whitewater Canyon delta area occur roughly every three to five years. The District stated that the report also indicates that both of the earthen dikes are expected to convey flow in a 10 year 24-hour storm event (i.e. surface water is expected to flow past the earthen berms, on average, once every 10 years).

The District supported the significance of a 10 year event by referencing the USACE arid west field guide for identification of the Ordinary High Water Mark, which states that the dominant precipitation event in the Arid West is the low to moderate (5-10 year) discharge event. "Low to moderate events are capable of carrying the largest proportion of sediment over time in arid channels, making them the dominant or effective discharges in the region (Wolman and Miller 1960)." "These low to moderate events, which are responsible for the majority of the impact, are similar in concept to the every-other-year frequency of the bankfull discharge (Dunne and Leopold 1978, Rosgen 1996) in more humid regions." (USACE OHWM Arid West Manual 2008) The District concluded that, despite the extensive manipulation of the tributary system and landscape within the mining district (including dikes, delta areas, and associated shallow groundwater storage) anecdotal reports and projected flow recurrence intervals are within the normal ranges that one would expect to see in this type of an arid environment.

The District described water quality control features constructed within the relevant reach of Deadman Canyon, including a cut-off wall that was completed in 2017 to help control contaminated seepage that emanates from the adjacent Tyrone Mine and prevent surface water from becoming contaminated and moving contaminants downstream. The District determined that, in the event of large storm events, surface water can flow over the cut-off wall. The District concluded that water quality controls installed in Deadman Canyon, as mandated by New Mexico Environment Department (NMED), indicate concern about a nexus with downstream waters and that the cut-off wall and other water quality control systems would not be needed if there was no chance of contaminants moving offsite into downstream waters.

The District referenced NMED required permits, under authority of the New Mexico Water Quality Act, to control the discharge of pollutants into surface and ground water from the mines and stated that these permits require ongoing monitoring and corrective action when spills occur, including installation of interception and barrier systems; installation of a secondary collection trench, and installation of seepage collection systems. The District pointed out that discharge permits also address closure of mine facilities, resulting in reclamation of tailing impoundments and storm water being redirected to drainage areas that flow into Deadman Canyon.

The District concluded that despite containment efforts, surface water within the review area has been contaminated from mining operations and included a description of pollutants and their contamination of groundwater from several sources, including the "Affected Areas Study Work Plan, Tyrone Mine Facility", prepared for Phelps Dodge Tyrone, Inc. by Daniel B. Stephens and Associates, April 2005. The District noted that the discharge of ground water to seeps and springs is documented. (Affected Areas Study Work Plan, Tyrone Mine Facility, Prepared for Phelps Dodge Tyrone, Inc. by Daniel B. Stephens and Associates, April 2005).

The District then included documentation that mine related pollutants were being transported through Deadman Canyon, the relevant reach, to the Gila River. Among the sources cited by the District to support that conclusion is a report, prepared by Daniel B. Stephens and Associates on behalf of FMTI, entitled "Review of Jurisdictional Determination for Little Rock Mine" (referred to here as the 2017 DBS Report) which was submitted to the Corps, as new information, on December 28, 2017. The District stated that the report provided additional water quality data for the review area and downstream waters and that Time series plots and other figures included in the report show spikes in concentrations of mine-related contaminants in waters along the Deadman Canyon to Mangas Creek to Gila River flow path.

Given the above, the District determined that hydrologic connection remains intact between Deadman Canyon and the Gila River, a TNW. The District documented water quality controls, which have been intentionally and unintentionally created in Deadman Canyon that confine/remove metal pollutants from the leach pile seepage that discharges into Deadman Canyon. The District documented that the "delta" formations created along the rerouted Deadman Canyon flowpath remove sediment, metal pollutants and water from surface flow, which decreases the contribution to the Gila River and improves water quality. The District concluded that, if not for the controls, pollutants will move unchecked downstream to Mangas Creek and ultimately the Gila River. The relevant reach, Deadman Canyon, traps pollutants preventing them from reaching the Gila River, which establishes a chemical nexus. The District determined that, absent the controls in Deadman Canyon, more pollutants will be found in the Gila River. The District cited water quality data shows that the same contaminants present in Deadman Canyon have been found in downstream waters, including the Gila River. The District further concluded that pollutant transport in Deadman Canyon to the Gila River is a chemical nexus. Based on available information, the District determined that Deadman Canyon has more than an insubstantial or speculative effect on the chemical integrity of the downstream TNW, the Gila River at the confluence with Mangas Creek. Based on that analysis, the District concluded that Deadman Canyon has a significant chemical nexus to the Gila River; therefore, Deadman Canyon is a waters of the U.S.

The District fully documented its consideration of available information, including scientific evidence submitted by FMTI, and concluded that information supported a determination that there is significant chemical nexus between Deadman Canyon and the Gila River, a Traditional Navigable Water. I have, therefore, determined that this reason for appeal does not have merit. The District has sufficiently documented that Deadman Canyon has a significant chemical nexus with the Gila River, the nearest downstream TNW.

REASON 2: The District's assertion of jurisdiction over Deadman Canyon is arbitrary and capricious and contrary to law. The District did not articulate a defensible rationale for rejecting FMTI's demonstrations that there is no chemical nexus and did not base its assertions of chemical nexus on sufficient record evidence. The District misapplied Justice Kennedy's Significant Nexus test and failed to follow Corps Guidance.

FINDING: This reason for appeal does not have merit.

ACTION: No action is required.

DISCUSSION: The Appellant asserts that the District failed to properly consider its three requests for reconsideration (December 28, 2017, April 23, 2018, and September 7, 2018).

The District's December 14, 2018 AJD followed three previous AJDs (October 31, 2017, February 23, 2018, and July 7, 2018) and resulted from consideration of three requests for reconsideration from the Appellant (December 28, 2017, April 23, 2018, and September 7, 2018). The District determined that reconsideration requests dated December 28, 2017, and April 23, 2018, provided new information under 33 CFR Sec. 331.6(c). The USACE issued revised AJDs on February 23, 2018, and July 7, 2018 incorporating evaluations of the new information provided by the Appellant. The District determined that the third reconsideration request, dated September 7, 2018, from the Appellant did not contain new information.

The Appellant asserts that the District failed to meaningfully respond to its submissions and that the District's conclusion that there is a chemical nexus is not supported by the record. The Appellant believes that information in the record, supporting the revised AJD for Deadman Canyon, is not sufficient to establish a significant chemical nexus and that the District's assertion of jurisdiction, based on the facts in the record, is arbitrary and capricious.

The Appellant further asserts that the District's conclusion that there is a chemical nexus is also arbitrary and capricious because it fails to comply with the Corps' 2008 Rapanos Guidance, which requires that any asserted chemical nexus be based upon the capacity of the water in question to carry pollutants to a traditional navigable water. The Appellant objected to the District's conclusion that there is a chemical nexus between Deadman Canyon and the Gila River because "the relevant reach traps pollutants preventing them from reaching the Gila River." The Appellant acknowledged that the Rapanos Guidance recognizes that non-RPWs can have a significant nexus with a TNW, due to their ability "to reduce the amount of pollutants that would otherwise enter the traditional navigable water," but asserts that, in order to comply with Justice Kennedy's test, the District must document in the record whether the tributary under review will "have more than a speculative or insubstantial effect on the chemical, physical, and biological integrity of a traditional navigable water." The Appellant argues that, as the District has asserted neither a physical nor a biological nexus, it cannot assert jurisdiction over Deadman Canyon.

As summarized above, in response to Reason 1, and detailed in the District's AJD form, the District extensively documented its consideration of data and available information, in developing its conclusion that Deadman Canyon has a significant chemical nexus with the Gila River, which it determined to be a TNW. The District described its consideration of information, provided by the appellant, and clearly stated reasons for rejecting the Appellant's conclusions, when it did so. Ultimately, the District included sufficient information and analysis to support its conclusion that a significant chemical nexus existed between Deadman Canyon and the Gila River.

The District did not claim that a significant physical or biological nexus existed between Deadman Canyon and the Gila River, nor were they required to do so. The Rapanos Guidance directs the agencies to consider the functions performed by the tributary, together with functions performed by any adjacent wetlands. One such factor is the extent to which the tributary and adjacent wetlands have the capacity to carry pollutants (e.g., petroleum wastes, toxic wastes, sediment) or flood waters to TNWs. Another factor is the extent to which the tributary and adjacent wetlands have the capacity to reduce the amount of pollutants or flood waters that would otherwise enter TNWs. In this case, the District documented the extent to which the tributary has the capacity to reduce the amount of pollutants that would otherwise enter the TNW.

The District's conclusion is, therefore, consistent with the Rapanos Guidance and its documentation and observations are sufficient to support its conclusion that Deadman Canyon has a more than speculative significant chemical nexus with the Gila River.

The District did not claim that a significant physical or biological nexus existed between Deadman Canyon and the Gila River. The Rapanos Guidance (footnote 35) quotes Justice Kennedy as stating: "The required nexus must be assessed in terms of the statute's goals and purposes. Congress enacted the [CWA] to 'restore and maintain the chemical, physical, and biological integrity of the Nation's waters' ... " 126 S. Ct. at 2248. The Appellant asserts that the District must, therefore, document a significant nexus that is chemical, physical, *and* biological. However, the Rapanos footnote concludes that, consistent with Justice Kennedy's instruction, EPA and the Corps will apply the significant nexus standard in a manner that restores and maintains *any* of these three attributes of traditional navigable waters. The District's determination of a significant chemical nexus is, therefore, consistent with the Rapanos Guidance.

Finally, as acknowledged by the Appellant, the Rapanos Guidance recognizes that non-RPWs can have a significant nexus with a TNW, due to their ability "to reduce the amount of pollutants that would otherwise enter the traditional navigable water. Therefore, it would be inaccurate to characterize that relationship as a "no-nexus nexus".

The Appellant essentially argues that different conclusions could or should be drawn from its reports and other available information. The District has clearly considered all available information and the Appellant's three requests for reconsideration and has made its decision, based on that consideration. As stated above, the District has properly described and supported its conclusions concerning the role of Deadman Canyon in reducing the level of pollutants that would otherwise enter the Gila River and sufficiently supported its conclusion that Deadman Canyon has a significant chemical nexus with the Gila River. The District did not misapply Justice Kennedy's significant nexus test and did not fail to follow Corps guidance. I have, therefore, determined that this reason for appeal does not have merit.

REASON 3: The District's Determination That the Gila River as a Traditional Navigable Water is arbitrary and capricious and contrary to law. The District's traditional navigable water determination is inconsistent with any test, including Appendix D's 'navigability-in-fact' test. The correct test is the test for 'navigable waters of the United States' as set out in The Daniel Ball and its progeny. The District's traditional navigable water determination is inconsistent with the 'navigable waters of the United States' test.

FINDING: This reason for appeal does not have merit.

ACTION: No action is required.

DISCUSSION: In the RFA, the Appellant asserts that the District erred in designating the Gila River as a traditional navigable water.

The Appellant asserts that the District's conclusion that the Gila River is navigable is arbitrary and capricious for two reasons. First, the Appellant has asserts that the District has not presented sufficient evidence to establish that the Gila River is a traditional navigable water under the Rapanos Guidance, which requires that a water be navigable-in-fact (i.e., useful as a highway for waterborne commerce). The Appellant also asserts that the District applied the wrong test when designating the Gila River a traditional navigable water, as Appendix D fundamentally misinterprets the common law test governing the scope of that phrase and that traditional navigable waters encompass only those waters that satisfy the test for 'navigable waters of the United States' articulated in The Daniel Ball. The Appellant asserts that navigable-in-fact waters must not only be useful for waterborne commerce generally, they must also be part of a continued interstate highway that could be used for interstate waterborne commerce. Additionally, the Appellant asserts that the District's evidence of kayaking and rafting trips as the basis for declaring the relevant reach of the Gila River a traditional navigable water fails to demonstrate navigability as required by the Corps' relevant guidance.

In its AJD form, the District described he Gila River as an (a)(1) water at the confluence with Mangas Creek, where the flow from the relevant reach, Deadman Canyon, enters the Gila River. The District based its assessment on the susceptibility of the Gila River at this location to use in interstate commerce, as demonstrated by reaches upstream and downstream of this location being used for commercial and recreational rafting. The District concluded that evidence that interstate travelers use these commercial rafting services, and the fact that the physical characteristics of the Gila River at the confluence with Mangas Creek are substantially similar to those of the reaches currently used for commercial recreational rafting supported their conclusion. In its AJD form, the District described the characteristics of the Gila River and detailed evidence of commercial rafting, of permits being obtained for commercial rafting, and advertising on websites of rafting opportunities as support for its conclusion. Based on that information, the District determined that the Gila River is a traditional navigable water, based on its use for interstate, commercial, water borne recreation and its susceptibility to such use throughout its course.

Corps and EPA headquarters have made it clear that "traditional navigable water" include waters that are "navigable-in-fact". While the appellant cites and relies on the "the continued highway" requirement from "The Daniel Ball, 77 U.S. (10 Wall.) 557 (1879)" and reaffirmations in other court cases, this does not represent the standard by which Corps Districts have been directed to evaluate "traditional navigable waters". 33 C.F.R. Part 329 did not adopt the referenced standard from The Daniel Ball as a limitation on the scope of jurisdiction for Sections 9 and 10 of the Rivers and Harbors Act of 1899. Consequently, the position taken by Appendix D regarding Clean Water Act jurisdiction is that TNW's include some rivers that do not constitute part of a

continuous highway for the transportation by water of interstate water borne commerce. The Albuquerque District has appropriately applied the standard for determining a water to be a "traditional navigable water". As described in the above paragraph, the District's evaluation of the Gila River in its AJD is sufficient to support its determination. I have, therefore, determined that the Albuquerque District has sufficiently documented that the Gila River is a "traditional navigable water". Finally, as the Appellant's objection to Appendix D is an objection to the regulation, itself, it, as such, cannot be resolved through the administrative appeal process.

Therefore, this reason for appeal does not have merit.

CONCLUSION:

I conclude that the Appellant's reasons for appeal do not have merit. The District has sufficiently evaluated and documented its conclusion that Deadman Canyon has a significant chemical nexus with the Gila River, the nearest downstream TNW, and is, therefore, subject to jurisdiction as a water of the United States. The District's determination was not arbitrary, capricious, or an abuse of discretion. The District's decision was not contrary to applicable law or policy. No further action is required. This concludes the Administrative Appeal Process.

Thomas J. Cavanaugh

Thomas J. Cavanaugh Administrative Appeal Review Officer