## ADMINISTRATIVE APPEAL DECISION CLEAN WATER ACT KILLION PROPERTY FAIRBANKS NORTH STAR BOROUGH, ALASKA ALASKA DISTRICT FILE NUMBER POA-1991-673

DATE: 1 3 NOV 2009

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

Appellant: Eddie Packee (Environmental Consultant, agent for Mr. Killion)

District Representative: Ellen Lyons, Army Corps of Engineers, Alaska District

Authority: Clean Water Act (33 USC 1344 et seq.)

Receipt of Request for Appeal: 8 September 2008

**Appeal Meeting and Site Visit Date:** 10 June 2009

Summary of Decision: This Clean Water Act (CWA) jurisdictional determination is remanded to the District for further evaluation and consideration of information provided by the Appellant. In the District's original jurisdictional determination, it based its adjacency finding on shallow subsurface flow, which was inferred from well data and a referenced USGS survey report. That report did not provide substantial evidence that specifically linked the Killion wetland to the Tanana River, a Traditionally Navigable Water (TNW). The District has three options. If the District's final decision is based on the existence of a hydrological connection between the Killion wetland and the Tanana River, it shall specifically document the existence of that hydrologic connection. If the District's final decision is based on reasonable proximity between the Killion wetland and a TNW, the District shall document the evaluation and consideration that led to its final decision. If the District's final decision is that the Killion wetland is not an adjacent wetland of the Tanana River, it shall conduct and document a significant nexus evaluation of the wetland to support its final conclusion as to the jurisdictional status of the wetland. If, as a result of that significant nexus evaluation, the District comes to a conclusion that requires coordination with either the Environmental Protection Agency or Corps Headquarters, it shall engage in that coordination.

**Background Information:** The Property is described as Tax Lot 2317, located in Fairbanks, Alaska. The Property is located in Section 23, Township 1 South, Range 1 West, Fairbanks Meridian, Latitude 64.8196 North, Longitude 147.6859 West. The

topography of the site is relatively flat with a single ponded area toward the center of the property. Information in the administrative record suggests that the pond was excavated as part of a mining operation. The area was subsequently abandoned from its original purpose and wetland characteristics developed within the area in question.

On January 7, 2008, the Appellant's consultant submitted a letter to the District requesting a current jurisdictional determination for the property, because the original determination was made on October 21, 1991 and there had been changes in Corps jurisdiction over the years.

On July 10, 2008, the District responded that waters on the Appellant's property, including wetlands, remained within CWA jurisdiction as the District had previously concluded on April 21, 1992 and July 26, 2002. The Appellant disagreed and appealed, citing the reasons for appeal addressed in this appeal decision.

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

**REASON 1:** The Alaska District wrongly concluded that the subject wetlands are adjacent to the Tanana River without providing a factual basis supporting a conclusive standard for jurisdiction as provided by Justice Kennedy in Rapanos.

**FINDING:** This reason for appeal has merit.

ACTION: The District must further evaluate and document its determination that the wetland on the property is adjacent to a TNW If the District's final decision is based on the existence of a hydrological connection between the wetland on the property and the Tanana River, it shall specifically document the existence of that hydrologic connection. If the District's final decision that the wetland is adjacent to a TNW is based on reasonable proximity, the District shall document the evaluation and consideration that led to its final decision. If the District's final decision is that the wetland on the property is not an adjacent wetland of the Tanana River, it shall conduct and document a significant nexus evaluation of the wetland to support its final conclusion as to the jurisdictional status of the wetland. If, as a result of that significant nexus evaluation, the District comes to a conclusion that, based on the requirements of the December 2, 2008, "Revised Guidance on Clean Water Act Jurisdiction Following the Supreme Court Decision in Rapanos v. U.S. and Carabell v. U.S." (Revised December 2, 2008 guidance), requires coordination with either the Environmental Protection Agency or Corps Headquarters, it shall engage in that coordination.

**DISCUSSION:** In the Request for Appeal (RFA), the Appellant asserted that the Alaska District incorrectly concluded that the subject wetland is adjacent to the Tanana River without providing a factual basis supporting a conclusive standard for jurisdiction as provided by Justice Kennedy in Rapanos.

In response to questions asked at the Appeal Conference, the Appellant indicated that wetland on the property was not adjacent to the Tanana River because the District failed to demonstrate an unbroken surface connection to jurisdictional waters, a shallow

unbroken subsurface connection to jurisdictional waters, or an ecological connection that would not rely exclusively on migratory species, as required by the revised December 2008 guidance.

In response to questions asked at the Appeal Conference, the District stated that "the existing [emergent wetland] pond has approximately two to three feet of standing water, apparently groundwater. The District believes that groundwater levels this close to the Tanana River have been shown to directly reflect river stages".

The District provided this quote from its Hydraulics Hydrology Section as support for a likely ground water connection between the wetland and the Tanana and Chena Rivers: "We have reviewed available literature on ground water movement in the Fairbanks area and find that there probably is a hydrologic connection between the HC Contracting pond (Killion wetland) and the Tanana and Chena Rivers...The U.S. Geological Survey (USGS) has determined that the aquifer lying between the Tanana and Chena Rivers consists of highly transmissive sands and gravels. The USGS found that the aquifer water surface follows that of the Chena and Tanana Rivers. When the Tanana River rises due to increased run-off, the aquifer also rises and roughly follows the rise and fall of the river. The HC Contracting pond lies within this aquifer. The USGS monitored 120 wells in the Fairbanks/North Pole area from 1986-88. Several of the observation wells were in the vicinity of the HC Contracting pond. Data from the monitoring wells showed groundwater levels rose and fell in conjunction with the Tanana and Chena River indicating a hydrologic connection between the aquifer and the river" (from Memorandum for CEPOA-CO-R-N (Don Rice) from CEPOA-EN-HH (Kenneth J. Eisses, Chief, Hydraulics Hydrology Section) dated April 16, 2003)).

The District further indicated that water surface in the pond is roughly 8 – 10 feet below the surrounding upland ground surface. They indicated that a well, Well P-53, is the most comparably situated within the floodplain between the Chena and Tanana Rivers compared to the project site. The District stated that water levels in this well ranged from 8.04 to 9.46 feet below ground surface elevation (datum of 438.6 feet above sea level). The District's conclusion was that this indicates that the surface water in the pond is most likely a reflection of the surface of the highly transmissive, shallow, ground water aquifer between the Tanana and Chena Rivers. The District asserted that this shallow, highly transmissive groundwater aquifer provides an unbroken shallow sub-surface connection to the Tanana River and the Chena River, both TNWs, and that it is the Tanana River that most strongly influences the general direction of the ground water flow. Therefore the District concluded that the wetland pond is adjacent to the Tanana River.

The District further stated that the property in questions was historically part of a large wetland complex that was contiguous with the Tanana River and lying within the expansive floodplain between the Tanana and Chena Rivers. The District indicated that, over time, much of the wetland was fragmented and physically separated through development and construction activities such as roads, commercial and residential subdivisions, railroad, and gravel pits. The District stated that prior to the construction of the Tanana River Lakes Flood Control Project in 1981, the wetlands in question and surrounding area were mapped within the 100-year flood plain, and that supports a conclusion that the wetlands were reasonably close to the Tanana River. The District

further indicated that it was construction of flood control structures by the USACE that removed this area from the 100-year flood plain.

The District indicated that, although soils on the property are currently mapped as urban land, the surrounding soils that have not been altered from urban development remain mapped as hydric soils. The District stated that when the shallow subsurface hydrologic connection that was previously described and the landscape position of the property is considered in context with the historical flood-plain, wetlands, and soils, an ecological interconnection with the Tanana River is evident. The District asserted that the fact that a flood control project was constructed is evidence of both the ecological connection and the proximity between the wetlands and the Tanana River. Finally, the District asserted that, although the wetlands on the subject property have been physically separated from the wetland complex still remaining to the south and southeast by urbanization, those man-made physical barriers do not remove the wetlands from jurisdiction.

The Revised December 2, 2008 guidance indicates that EPA and Corps regulations define "adjacent" as follows: "The term adjacent means bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like are 'adjacent wetlands'". Under this definition, the agencies consider wetlands adjacent if one of following three criteria is satisfied. First, there is an unbroken surface or shallow sub-surface connection to jurisdictional waters. This hydrologic connection maybe intermittent. Second, they are physically separated from jurisdictional waters by man-made dikes or barriers, natural river berms, beach dunes, and the like. Or third, their proximity to a jurisdictional water is reasonably close, supporting the science-based inference that such wetlands have an ecological interconnection with jurisdictional waters. Due to the scientific basis for this inference, determining whether a wetland is reasonably close to a jurisdictional water does not generally require a case-specific demonstration of an ecologic interconnection. In the case of a jurisdictional water and a reasonably close wetland, such implied ecological interconnectivity is neither speculative nor insubstantial. For example, species, such as amphibians or anadramous and catadramous fish, move between such waters for spawning and their life stage requirements. Migratory species, however, shall not be used to support an ecologic interconnection. In assessing whether a wetland is reasonably close to a jurisdictional water, the proximity of the wetland (including all parts of a single wetland that has been divided by road crossings, ditches, berms, etc.) in question will be evaluated and shall not be evaluated together with other wetlands in the area.

The revised December 2, 2008 guidance further states that EPA and the Corps will continue to assert jurisdiction over "[a]ll waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide. These waters are referred to in this guidance as traditional navigable waters. The revised December 2, 2008 guidance requires the agencies to continue to assert jurisdiction over wetlands "adjacent" to traditional navigable waters as defined in the agencies' regulations. Finally, the revised December 2, 2008 guidance states that the Rapanos decision does not affect the scope of jurisdiction over wetlands that are adjacent to traditional navigable waters because at least five justices agreed that such wetlands are "waters of the United States".

The Revised December 2, 2008 guidance also indicates that Corps districts and EPA regions will demonstrate and document in the record that a particular water either fits within a class identified above as not requiring a significant nexus determination, or that the water has a significant nexus with a traditional navigable water.

Therefore, although the District has constructed a plausible argument for a potential groundwater connection, it has not sufficiently documented the existence of the shallow subsurface connection on which it based its decision to assert jurisdiction over the wetlands on the property. The District shall further evaluate and document its determination that the Wetland on the Property is adjacent to a TNW. If the District's final decision is based on the existence of a hydrological connection between the wetland on the property and the Tanana River, it shall specifically document the existence of that hydrologic connection. If the District's final decision that the wetland is adjacent to a TNW is based on reasonable proximity, the District shall document the evaluation and consideration that led to its final decision. If the District's final decision is that the wetland on the property is not an adjacent wetland of the Tanana River, it must conduct and document a significant nexus evaluation of the wetland to support its final conclusion as to the jurisdictional status of the wetland. If, as a result of that significant nexus evaluation, the District comes to a conclusion that, based on the requirements of the Revised December 2, 2008 guidance, require coordination with either the Environmental Protection Agency or Corps Headquarters, it shall engage in that coordination.

**REASON 2:** The subject property is a gravel pit surrounded by uplands.

**FINDING:** This reason for appeal has merit.

**ACTION:** The District shall further evaluate and document its determination that the wetland on the property is adjacent to a TNW as required under reason 1, above.

**DISCUSSION:** In the request for appeal, the appellant indicated that the gravel pit is 2.5 miles from the Tanana River and is surrounded by uplands. There is no surface water connection between the gravel pit and a water of the United States. The gravel pit was excavated prior to July 17, 1962, and both the gravel pit and surrounding uplands predate the passage of the Clean Water Act in 1972.

In response to questions asked at the appeal conference, the Appellant stated that there was no surface hydrologic connection between the subject property and the Tanana River. The Appellant referred to the District's conclusion in its 1991 jurisdictional determination that the gravel pit is surrounded by uplands. The Appellant further stated that there are multiple man-made barriers, including the flood control levee which prevents a surface connection to either the Chena or Tanana Rivers, the subsurface connection to the Tanana River is over a distance of 5 to 6 miles, and a potential surface connection would be over a distance of 2.5 miles to the Tanana River. The Appellant further stated that they felt that, even in the absence of man-made barriers, there would not be a surface hydrological connection to other wetlands or waters of the United States.

The Appellant indicated that they believed the wetland on the property to be a wetland adjacent to wetlands adjacent to the Tanana River.

In response to questions asked at the appeal conference, the District did not disagree and concurred that the wetland is surrounded by uplands and that there is no surface hydrologic connection between the wetland on the Killion property and the Tanana River. The District asserted that the shallow subsurface connection to the Tanana and Chena River is sufficient to constitute adjacency.

The revised December 2, 2008, guidance states, as described more fully above, that, in order to be considered adjacent, any one of three criteria must be satisfied: a surface or shallow subsurface connection, which may be intermittent; physical separation from jurisdictional waters by "man-made dikes or barriers, natural river berms, beach dunes and the like"; or "reasonably close" proximity to a jurisdictional water, supporting the "science based inference that such wetlands have an ecological connection" with the jurisdictional waters.

The District has not included sufficient documentation in the administrative record to support its decision. The District shall, therefore, further evaluate and document its determination that the Wetlands on the Property are adjacent to a TNW as required under reason 1, above. The District's documentation of its final decision shall include a consideration and discussion of the uplands surrounding the wetland.

**REASON 3:** Gravel Pits are not listed as "waters of the United States".

**FINDING:** This reason for appeal does not have merit.

**ACTION:** No action is required.

**DISCUSSION:** The appellant relies upon 40 CFR 122.2 to argue that a gravel pit is not a water of the United States. The Appellant questioned what regulation the District used to justify its jurisdiction over gravel pits constructed in upland areas.

In response to questions at the appeal conference, the Appellant indicated that the gravel pit was excavated in 1962 or earlier and predates the Clean Water Act. The Appellant asserted that the wetland on the property is a wetland adjacent to wetlands, which are adjacent to the Tanana River. The Appellant believes that the District's 1991 jurisdictional determination supports Appellant's position.

The District asserted in response to questions asked at the appeal conference that the wetland on the property was evaluated in 2002 due to a reported possible violation. The District indicated that, at that time, the emergent wetland pond was found to contain hydrophytic vegetation, hydric soils and hydrology, the three criteria necessary to classify a site as a wetland. The District indicated that the property contains a shallow open water pond with emergent obligate sedges and is surrounded by willows. The District further indicated that the 1979 aerial photography underlying the Wetlands Boundaries maps, Fairbanks North Star Borough, completed for the Corps of Engineers, shows that a pond

existed at the project site at the time the photo was taken. The District concluded that, had the pond originally been excavated for a gravel pit, it must have occurred prior to 1979. Thus, any alteration to the landscape at the project site had been done long enough ago that wetland characteristics have subsequently developed. The District indicated that it had re-assessed the property on June 26, 2008, and found that the site conditions had not changed. The District then determined the wetlands to be adjacent to the Tanana River, based on the presence of a shallow subsurface hydrologic connection, as described above.

The preamble to 33 CFR, in the section referencing part 328.3, indicates that "Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel are generally not considered to be waters of the United States unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States."

Therefore, given that the District documented that there had not been an ongoing operation associated with the purpose for which the ponded area was excavated on the property in approximately 19 years, and information provided by the Appellant suggests there had not been an ongoing operation in the wetland on the property for at least 47 years, the District was reasonable in concluding that the excavated area had been abandoned from its original purpose and would not be precluded from being determined to be a water of the United States, based on the portion of the preamble referenced above.

**REASON 4:** The stated groundwater connection is bogus because there is no comingling of water from the subject site and the TNW.

**FINDING:** This reason for appeal has merit.

**ACTION:** If the District's final decision is based on the existence of a hydrological connection between the wetland on the property and the Tanana River, it must further document the existence of that hydrologic connection as required in response to reason 1.

**DISCUSSION:** The Appellant indicated in the RFA that it does not believe that an ecological interconnection via groundwater exists between the wetland on the property and the Tanana River. The Appellant indicated that it believes the groundwater aquifer lays between 10 and 14 feet below the surface at the property. The Appellant believes that there is no evidence to support the District's conclusion that wetland on the property could or would affect the downstream water quality of a TNW and that there is no basis for a reasonable inference of ecological interconnection between the subject wetland and the TNW.

The Appellant indicated in response to questions asked at the appeal conference that there was no demonstratable shallow groundwater connection to the Tanana River. The Appellant believes that the District relied on correlations that groundwater in Fairbanks rises and falls with the stage of the Chena and Tanana Rivers. The Appellant suggests that groundwater flows in a northwest direction, away from the Tanana River and that

there is no comingling of the water from the subject wetlands and the Tanana River. The Appellant disagrees with the District's conclusion that there is a groundwater connection because the Tanana River is 5 to 6 miles, hydrologically, up gradient of the property. The Appellant further believes that the aquifer is not a shallow subsurface connection. The Appellant asserted that, for groundwater to be shallow, it must interact or impose constraints upon the surface vegetation community and soils. The Appellant also argues that seasonal high groundwater levels at the site are far below the rooting zone of native species.

The District indicated that both the Corps and EPA jointly define wetlands as those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. The District asserted that this shallow groundwater hydrologic connection with the Tanana River maintains the saturated soil conditions required for the wetland on the Killion property. The District referenced a Memorandum for CEPOA-CO-R-N (Don Rice) from CEPOA-EN-HH (Kenneth J. Eisses, Chief, Hydraulics Hydrology Section), dated April 16, 2003, which stated, "We have reviewed available literature on ground water movement in the Fairbanks area and find that there probably is a hydrologic connection between the HC contracting pond and the Tanana and Chena Rivers...The U.S. Geological Survey (USGS) has determined that the aguifer lying between the Tanana and Chena Rivers consists of highly transmissive sands and gravels. The USGS found that the aquifer water surface follows that of the Chena and Tanana Rivers. When the Tanana River rises due to increased run-off the aquifer also rises and roughly follows the rise and fall of the river. The HC Contracting pond lies within this aquifer. The USFS monitored 120 wells in the Fairbanks/North Pole area from 1986-88. Several of the observation wells were in the vicinity of the HC Contracting pond. Data from the monitoring wells showed groundwater levels rose and fell in conjunction with the Tanana and Chena River indicating a hydrologic connection between the aquifer and the river".

The District stated that the water surface in the ponds is roughly eight to ten feet below the surrounding upland ground surface. The District stated that water levels at the most comparably situated well location within the floodplain between the Chena and Tanana Rivers, Well P-53, ranged from 8.04 to 9.46 feet below ground surface elevation from 1986-88 (datum of 438.6 feet above sea level). According to the District, this indicates that the surface water in the pond is most likely a reflection of the highly transmissive, shallow, ground water aquifer between the Tanana and Chena Rivers, providing an unbroken shallow sub-surface connection to the Tanana River and the Chena River, both TNWs. The District further indicated that it is the Tanana River that most strongly influences the general direction of the ground water flow and, from that, the District concluded that the wetland on the property is adjacent to the Tanana River.

Although, as indicated in Reason 1, the District has constructed a plausible argument for a potential groundwater connection, it has not sufficiently documented the existence of the shallow subsurface connection on which it based its decision to assert jurisdiction over the wetland on the property. The referenced memo from the District's Hydraulics Hydrology Section, while supportive of a likely connection, does not document the hydrological connection, which is the basis of the District's jurisdictional determination.

The District must, therefore, further evaluate and document its determination that the wetland on the property is adjacent to a TNW as described above in response to reason 1. If the District's final decision is based on the existence of a hydrological connection between the wetland on the property and the Tanana River, it must further document the existence of that hydrologic connection.

**REASON 5:** The use of uncontaminated groundwater is inapplicable. The 1987 Manual makes no mention of groundwater being used as a connection between a wetland and a water of the United States. There is no precedent where uncontaminated groundwater is used to make a connection.

**FINDING:** This reason for appeal does not have merit.

**ACTION:** No action is required.

**DISCUSSION:** The Appellant indicated in the RFA that the 1987 Manual makes no mention of groundwater being used as a connection between a wetland and a water of the United States. There is no precedent where uncontaminated groundwater is used to make a connection.

The Appellant's agent indicated in response to questions asked at the appeal conference that he believed that the District assumed that because water table goes up and down in the area that there is a connection to the Tanana River from the wetland on the property. The Appellant believes this to be a false assumption and that the District made its decision without evidence of a connection. The Appellant suggested that contaminant plume maps prepared by the Alaska Department of Environmental Conservation clarify that contaminants would not migrate from the wetland on the property to the Tanana River.

The District indicated in response to questions asked at the Appeal Conference that the degree of contamination of groundwater was not factored into the District's final decision, and is not required to be evaluated under current regulations and guidance.

There is no requirement in EPA or Corps regulations for upstream or adjacent waters to be, in any way, contaminated for those waters to be considered jurisdictional under the Clean Water Act as waters of the United States. Additionally, the Corps' 1987 wetland delineation manual is a manual for determining the extent of areas that may be classified as wetlands. A wetland delineation done in accordance with the 1987 manual is independent from a jurisdictional determination using the revised December 2, 2008, guidance. Therefore no action is required from the District, in response to this reason for appeal.

## Information received and its disposition during the appeal review:

The administrative appeal was evaluated based on the District's administrative record, the Appellant's Request for Appeal, and responses from the Appellant and the District to questions provided with the agenda and discussed at the Appeal Conference

CONCLUSION: I conclude that the District shall further evaluate and consider information provided by the Appellant. The District shall further evaluate and document its determination that the wetland on the Killion property is adjacent to a TNW. If the District's final decision is based on the existence of a hydrological connection between the wetland on the property and the Tanana River, it shall specifically document the existence of that hydrologic connection. If the District's final decision that the wetland is adjacent to a TNW is based on reasonable proximity, the District shall document the evaluation and consideration that led to this final decision. If the District's final decision is that the wetland on the property is not an adjacent wetland of the Tanana River, it shall conduct and document a significant nexus evaluation of the wetland to support its final conclusion as to the jurisdictional status of the wetland. If, as a result of that significant nexus evaluation the District comes to a conclusion that requires coordination with either the Environmental Protection Agency or Corps Headquarters based on the requirements of the Revised December 2, 2008 guidance, the District shall engage in that coordination.

Mark W. Yenter, Brigadier General, US Army

Commanding