



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO CA 95814-2922

CERTIFIED MAIL RETURN RECEIPT REQUESTED

April 13, 2017

Regulatory Division (SPK-2012-00991)

Hunton & Williams, LLP
Attn: Mr. Tom Boer
575 Market Street, Suite 3700
San Francisco, California 94105

Dear Mr. Boer:

Please reference the South Pacific Division's Administrative Appeal Decision dated October 19, 2016. This Administrative Appeal Decision pertained to a May 29, 2015, Approved Jurisdictional Determination this office made in regards to the Stegall Agricultural Conversion Subject Area (Subject Area) located north of Colusa, California, in a historic oxbow of the Sacramento River in un-sectioned portions of the Colusa (Cachil Dehe) Rancheria Mexican Land Grant, Township 16 North, Range 2 West, Mount Diablo Meridian, Latitude 39.2624°, Longitude -122.0275°, Colusa County, California.

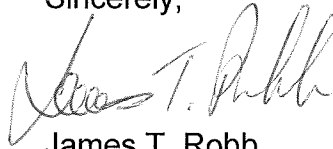
The above referenced Administrative Appeal Decision remanded the jurisdictional determination back to this office with instructions to take certain actions in regards to appeal reasons two and five. We have taken these actions as instructed and have made our final district decision in the enclosed memorandum for record dated April 13, 2017. In summary:

Response to reason two: The District evaluated the potential for the subject aquatic resources to be navigable waters of the U.S. pursuant to the Rivers and Harbors Act and finds that the subject aquatic resources are not navigable waters of the U.S. as defined in 33 C.F.R. Part 329.

Response to reason five: The District has reviewed the documentation provided by NRCS as directed by the Appeal Decision and has determined that NRCS made no errors that would affect the District's determination that the subject area contains 18.69 acres of jurisdictional wetlands.

Please refer to identification number SPK-2012-00991 in correspondence concerning this matter. If you have any questions please contact me by email at James.T.Robb@usace.army.mil, or telephone at (916) 557-7610. For more information regarding our program, please visit our website at www.spk.usace.army.mil/Missions/Regulatory.aspx.

Sincerely,

A handwritten signature in black ink, appearing to read "James T. Robb", written over a horizontal line.

James T. Robb
Wetland Specialist

Enclosure

cc: (w/ encl)

Tom Cavanaugh, Review Officer, South Pacific Division,
jennifer.cavanaugh@ca.usda.gov
Jennifer Cavanaugh, State Wetlands Biologist, USDA-NRCS,
jennifer.cavanaugh@ca.usda.gov

MEMORANDUM FOR RECORD

SUBJECT: Response to Remand of the Administrative Appeal of the Approved Jurisdictional Determination, Stegall Agricultural Conversion Project (Regulatory Division SPK-2012-00991)

1. The Sacramento District issued an Approved Jurisdictional Determination for the subject area on 29 May 2015. The Appellant requested an appeal on 28 July 2015 and later withdrew this request on 18 August 2015 and instead requested the District reconsider its determination. The District reconsidered its determination and responded by letter on 1 October 2015. On 30 November 2015 the Appellant renewed their request for appeal. The Review Officer requested the Administrative Record on 22 January 2016. The District provided the administrative record to the Review Officer and to the Appellant on 5 February 2016. The appeal meeting and site visit occurred on 7 April 2016. The South Pacific Division (SPD) issued its administrative appeal decision on 19 October 2016 remanding the jurisdictional determination to the District for reconsideration finding that reasons #2 and #5 of the appeal had merit.

2. Under appeal reason #2, SPD directed the District to take the following action: "The District must complete an evaluation of the potential for aquatic features on the Property to be navigable waters of the U.S., within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329), document its conclusion, and provide that conclusion to the Appellant."

Response: The District evaluated the potential for the subject aquatic resources to be navigable waters of the U.S. pursuant to the Rivers and Harbors Act and finds that the subject aquatic resources are not a navigable waters of the U.S. as defined in 33 C.F.R. Part 329.

The subject area is located north of Colusa, California, in a historic oxbow of the Sacramento River which was, at some point in time, part of the main channel of the Sacramento River. On 15 February 1978, the South Pacific Division determined that the Sacramento River is navigable for 301 miles from its mouth up to Keswick Dam. Over time, the main channel of the Sacramento River has moved such that the oxbow is no longer part of the main channel. After reviewing data and information available in the administrative record, and as described below, the District has concluded that the changes in the oxbow were due to natural causes and occurred gradually over a period of time, thus the aquatic features within the oxbow are not a navigable water of the U.S. pursuant to 33 C.F.R. § 329.13¹. Since the channel movement and subsequent natural levee

¹ "Permanent changes of the shoreline configuration result in similar alterations of the boundaries of the navigable waters of the United States. Thus, gradual changes which are due to natural causes and are perceptible only over some period of time constitute changes in the bed of a waterbody which also change the shoreline boundaries of the navigable waters of the United States. However, an area will remain

formation constitutes a gradual shift in the Sacramento River due to natural causes, and since there is no reason to believe that this cut-off oxbow was independently navigable apart from its being at one time a part of the Sacramento River, evaluation of past or potential future interstate or foreign commerce under 33 C.F.R. § 329.6 - 329.9 is unnecessary².

As we stated in our 1 October 2015 letter, we agree that this oxbow was historically a channel of the Sacramento River that was cut off by movement of the main Sacramento River channel and natural river berm formation processes³. Subsequently⁴, manmade levees and a railroad grade were constructed on top of the natural river berm. While channel movement and meander cut-offs can occur in a single stochastic event, the natural river berm formation process takes years of repeated flooding. When the river rises to near flood stage its velocity is high and the amount and size of sediment transported is large. When the river overtops its banks, the water spreads out, decreasing velocity. When the water loses velocity, it can no longer carry as much sediment. Larger and greater volumes of sediment are deposited closest to the river. Through repeated flood events a natural river berm grows higher and wider through this repeated deposition process.

The District also considered the memoranda issued by the Assistant Secretary of the Army (Civil Works) dated 24 September 2008 (Traditional Navigable Water Determinations under the Clean Water Act) and issued by the Director for Civil Works dated 16 October 2008 (Stand-Alone Traditional Navigable Water Determinations Under the Clean Water Act – Clarifying Guidance). This guidance does not address the situation at issue here because: a) these memoranda are specific to the Clean Water Act not Section 10 of the Rivers and Harbors Act⁵; and b) these memoranda specifically exclude determinations made as a part of an approved jurisdictional determination. These memoranda therefore cannot be construed as requiring the Division Commander to make this navigability determination, nor the District to prepare a report of findings or legal opinion pursuant to 33 C.F.R. § 329.14(c).

navigable in law, even though no longer covered with water, whenever the change has occurred suddenly, or was caused by artificial forces intended to produce that change. For example, shifting sand bars within a river or estuary remain part of the navigable water of the United States, regardless that they may be dry at a particular point in time." [Emphasis added, internal quotes removed]

² We also note that the subject area is not subject to the ebb and flow of the tide. Tidal influence in the Sacramento River stops at approximately Verona, California, according to the 1978 navigation determination and we are aware of no court decisions which address the navigability of the subject area.

³ In Reason 1 of their appeal, the Appellant challenged our finding that the intervening upland area is "like" man-made dikes or barriers, natural river berms, beach dunes and the like within the meaning of 33 CFR § 328.3(c). The Appeal Decision found that Reason 1 did not have merit.

⁴ By the time of the 1978 navigability determination, this oxbow had already been cut-off and was no longer an active channel of the Sacramento River as evidenced by the structures on top of the natural river berm at this location prior to the 1978 navigability determination (i.e., levees and railroad grade).

⁵ The Appeal Decision directs the Corps to, "provide the Appellant with a determination as to whether the Property is subject to jurisdiction under Section 10 of the Rivers and Harbors Act."

While the aforementioned memoranda are confined to traditional navigable waters determinations for jurisdiction under the Clean Water Act, the memoranda reference the report of findings at 33 CFR 329.14(c), which is specific to navigable waters of the United States under the Rivers and Harbors Act. The Appeal Decision also generally references 33 C.F.R. Part 329. Although 33 CFR §329.15 states, "Findings and determinations should be made whenever a question arises regarding the navigability of a waterbody. Where no determination has been made, a report of findings will be prepared and forwarded to the division engineer..." It is the District's position that a report of findings is unnecessary in this situation and the effort involved in completing such an analysis is not commensurate with the impacts at issue here. Completing this analysis would result in an undue burden on the District and unwarranted delay in response to the Appellant. Furthermore the finding would be moot, since the District has not and does not intend to investigate or recommend enforcement action under the Rivers and Harbors Act. Our investigation and allegations of unauthorized discharges are confined to the Clean Water Act (see Notice of Violation dated 11 October 2012).

3. Under appeal reason #5, SPD directed the District to take the following action: "The District must reconsider its acceptance of the wetland delineation map and any supporting materials provided by NRCS and clearly document the consideration that led its acceptance or rejection of those materials. In doing so, the District should clearly describe the documentation provided by NRCS and whether or how it evaluated each piece of documentation for accuracy, in order to support its final determination as to the presence and extent of waters of the United States, including wetlands on the Property. If, as a result of this reconsideration, the extent of wetlands on the Property changes, the District must reconsider whether that would have any effect on its determination the wetlands on the Property are adjacent to the Sacramento River, a TNW."

Additionally, on 26 January 2017, counsel for the Appellant sent a letter which included a memorandum from their Agent, WRA, also dated 26 January 2017. Portions of this letter are a critical evaluation of the USDA-NRCS Certified Wetland Determination.

Response: The District has reviewed the documentation provided by NRCS as directed by the Appeal Decision and has determined that NRCS made no errors that would affect the District's determination that the subject area contains 18.69 acres of jurisdictional wetlands.

Based on the instructions found in the 25 February 2005 memorandum between the USDA-NRCS and the U.S. Department of the Army on the subject of "Guidance on Conducting Wetland Determinations for the Food Security Act of 1985 and Section 404 of the Clean Water Act, we relied on the USDA-NRCS's Certified Wetland Determination⁶. As noted in our response to request for reconsideration, the results of the USDA-NRCS's Certified Wetland Determination matched what we had observed in the field and was corroborated by aerial imagery, soils maps, topography, the National Wetland Inventory,

⁶ The 25 February 2005 memorandum instructs, "To the maximum extent permissible by current statute and regulation, NRCS and COE will rely on each other's wetland determinations."

etc. We believed that reliance on this Certified Wetland Determination was permissible by current statute and regulation. The Appeal Decision, however, sets the standard of review of USDA-NRCS Certified Wetland Determinations as on par with "...information from a consultant, prepared on behalf of a prospective applicant..." and directs the District to "...clearly describe the documentation provided by NRCS and whether or how it evaluated each piece of documentation for accuracy..." Let me be clear, however, that we do not review every delineation prepared on behalf of a prospective applicant in this manner. We can and do accept and verify delineations that match our field observations or are corroborated by supplemental information such as aerial imagery, soils maps, topography, National Wetland Inventory, etc. We do not have the resources and it would result in unnecessary delays to go through every delineation prepared on behalf of a prospective applicant with this level of rigor. This item by item review is generally reserved for delineations that do not match our field observations or are not corroborated by supplemental information. That was not the case with the USDA-NRCS Certified Wetland Determination.

Table 1. Documents received from USDA-NRCS relevant to the wetland delineation and Jurisdictional Determination.

Date	Description
31 July 2013	Email from USDA-NRCS transmitting preliminary wetland determination
13 January 2014	Final Certified Wetland Determination. As discussed in our response to reconsideration request we independently evaluated this Final Certified Wetland Determination. It matched our observations in the field as well as aerial imagery, topography, soils maps, and the National Wetland Inventory, etc. See the AJD form and the response to reconsideration request for the full list of corroborating information. The Corps received this on 21 April 2014.
26 October 2015	Email from USDA-NRCS which included a note to file which described the USDA-NRCS review. This note to file included aerial imagery and ground photography as well as correspondence related to the USDA-NRCS wetland determination and Food Security Act exemption decision.
28 April 2016	Email from USDA-NRCS transmitting the datasheets used in their wetland determination
15 November 2016	Email from USDA-NRCS transmitting GIS files with their GPS points. How these GPS points related to the datasheets was unclear until the email dated 13 March 2017

8 March 2017	Email from USDA-NRCS concerning response to the Appellant's 26 January 2017 correspondence which was critical of the USDA-NRCS Final Certified Wetland Determination. This email provided only very general comment
13 March 2017	Email from USDA-NRCS with GIS files clarifying the location of the USDA-NRCS datasheets used in the Final Certified Wetland Determination.

Methodology. NRCS used reference points within relatively undisturbed portions of the subject area consistent with Section F of the 1987 Delineation Manual, and the Arid West Regional Supplement. This is the process for wetland delineations in atypical situations. The Appellant acknowledges that this is the proper methodology in the 26 January 2017 report from WRA: "It appears that the NRCS properly used an approach similar to the atypical wetland determination process in which they used relatively undisturbed reference areas to assess the presence of the three criteria prior to the agricultural activities." There is no disagreement, then, that the NRCS used the appropriate methodology.

The Appellant questions where the locations of these sample points were, but does not disagree that they were within the subject area. We agree that these locations were not clearly indicated on the maps provided at the time of our verification (29 May 2015) or our response to the request for reconsideration (1 October 2015). Since that time, via an email dated 13 March 2017, NRCS has provided the locations of their sample points (Enclosed map titled, "NRCS Sample Points Compared to Appellant's Potential Wetland Map").

Sample Point 49 (Herbaceous Reference). The Appellant agrees that the herbaceous wetland reference sample point (NRCS Sample Point 49) is wetland and that it adequately describes the herbaceous portions of the subject area, "As explained below, the areas within area WX that were designated as similar to the herbaceous reference wetland appear to meet the criteria necessary to be considered a wetland using Corps guidance documents..." (WRA 26 January 2017).

Sample Point 23 (Forested Reference). The Appellant disagrees with NRCS in that they do not believe the forested reference sample point (NRCS Sample Point 23) meets wetland criteria, "[T]he areas within area WX designated as similar to the forested reference wetland do not meet the criteria necessary to be considered a wetland using Corps guidance documents and are not wetlands under the CWA" (internal quotation marks removed, WRA 26 January 2017). The Appellant's rationale is that while the vegetation and soils meet wetland criteria, the hydrology does not. NRCS observed four indicators of hydrology: surface soil cracks (B6) a primary indicator, water marks (B1) a secondary indicator in the riverine setting but a primary indicator in all other settings, dry-season water table (C2) a secondary indicator, and shallow aquitard (D3) a secondary

indicator. It should be noted that this area used as the wetland reference area by NRCS, has been further modified by the Appellant since these observations such that we cannot review these indicators in the field. The Appellant does not provide any evidence controverting the observations by NRCS, but instead question the documentation of these indicators or their legitimacy.

a. Surface Soil Cracks (B6). The Appellant challenges the legitimacy of indicator B6 as a primary indicator: "Because of its unreliability in determining duration of saturation in the root zone, it [indicator B6 Surface Soil Cracks] is considered a secondary indicator in most of the Regional supplements and without additional hydrologic information cannot be considered definitive for this site" (WRA 26 January 2017). Surface Soil Cracks (B6) is a legitimate primary indicator pursuant to the Arid West Regional Supplement⁷. NRCS therefore made no error in using indicator B6 as primary indicator of hydrology consistent with the Regional Supplement. Next the Appellant challenges NRCS's use of this indicator on the grounds that, "it did not provide any photographic support." Neither the 1987 Delineation Manual, nor the Regional Supplement require photographic documentation of this or any other indicator. It is sufficient for NRCS to indicate observation of this indicator on the data sheet. Additionally, the Corps' observations corroborate the NRCS observations. On 20 September 2012, Corps personnel also observed surface soil cracking in the remnant unfilled areas of the oxbow, the same general area where the NRCS located their Forested Reference (31 October 2014 Form 3 - Atypical situations).

b. Water Marks (B1). The Appellant challenges the NRCS's observation of indicator B1 stating that, "No photographs or description of the water marks is given on the datasheet or in the report." Neither the 1987 Delineation Manual, nor the Regional Supplement require photographic documentation of this or any other indicator. It is sufficient for NRCS to indicate observation of this indicator on the data sheet. It is also worth noting that the NRCS considered this as a secondary indicator due to the location's riverine setting. The Appellant continues to argue that the subject area is not adjacent to the Sacramento River and is unaffected by the Sacramento River. If we were to agree with the Appellant on this matter, we also would have to conclude that indicator B1, in this hypothetical non-riverine context, is a primary rather than secondary indicator of hydrology.

c. Dry-Season Water Table (C2). NRCS indicates that they observe evidence of a dry-season water table at this sample point. The Appellant notes that the datasheet states that the water table was below 50 inches of the surface at the time of observation. This is deeper than the 12-24 inches specified by indicator C2. The NRCS supports their argument that the water-table is high in this location by noting the gleyed soils at 6 inches. While this gleyed soil is suggestive and does corroborate the NRCS's overall assertion of wetland hydrology, the documentation provided does not support use of indicator C2.

⁷ Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). U.S. Army Corps of Engineers. ERDC/EL TR-08-28. September 2008.

Since wetland hydrology is already documented by other indicators this does not change the wetland determination.

d. Shallow Aquitard (D3). NRCS indicates that they observed evidence of a shallow aquitard at this location. The Appellant disagrees, not based on any of their own observations, but on the description of the soil the NRCS observed, "The soil texture throughout the profile is silty clay loam. No clay or cemented layer was noted." According to the Regional Supplement, "This indicator occurs in and around the margins of depressions, such as temporary pools, and consists of the presence of an aquitard within the soil profile that is potentially capable of perching water within 12 in[ches] (30 cm) of the surface. Indicators of hydrophytic vegetation and hydric soil must also be present." There is no dispute that this sample is within the margins of a depression. Nor is there any dispute that this sample point documented hydric soils and vegetation. The remaining issue is whether or not NRCS observed an aquitard within the soil profile that is "potentially capable of perching water within 12 inches of the surface." The Appellant points out that the NRCS observed silty clay loam and not "clay or cemented layer." However, nothing within this indicator specifies that the NRCS must find clay or a cemented layer for the shallow aquitard indicator to be met⁸. While finding clay or a cemented layer that is potentially capable of perching water within 12 inches of the surface would meet this indicator, the Cautions and User Notes for this indicator do not restrict NRCS to only those circumstances. Since the list of potential aquitards (i.e., fragipans, cemented layers, dense glacial till, lacustrine deposits, and clay layers) is not exhaustive and since this indicator does provide other methods for identifying a shallow aquitard (e.g., lack of root penetration, redoximorphic features evident in layers above the aquitard), we cannot find that the NRCS observation of a shallow aquitard in this location is in error. Their finding is further supported by the other sample points within the subject area. In sample point 998 they record a clay percentage as 35% just below the fill in what was the native soil. At Sample Point 989 NRCS documents clay content of 38% just below the fill. At Sample Point 37, NRCS documents 33 percent clay at the surface and increasing to 38% at 12 inches. At sample point 36, NRCS documents 37% clay content just below the fill. All of these sample points are close to one another, are all in the same oxbow depression, and all contain a high proportion of clay corroborating the NRCS finding of a shallow aquitard at this sample point.

Sample Point 21. NRCS found that this sample point met all three parameters: hydrophytic vegetation, hydric soils, and wetland hydrology. Vegetation was noted as significantly disturbed. Consistent with procedures in Section F of the 1987 Delineation Manual and

⁸ According to the Cautions and User Notes: "An aquitard is a relatively impermeable soil layer or bedrock that slows the downward infiltration of water and can produce a perched water table, generally in flat or depressional landforms. In some cases, the aquitard may be at the surface and cause water to pond on the surface. Potential aquitards include fragipans, cemented layers, dense glacial till, lacustrine deposits, and clay layers, and can often be identified by the lack of root penetration through the layer. Redoximorphic features often are evident in the layer(s) above the aquitard. Local experience and professional judgement should indicate that the perched water table is likely to occur during the growing season for sufficient duration in most years."

Chapter 5 of the Regional Supplement, the NRCS used a reference sample for vegetation (sample point 23). The Appellant disputes the NRCS findings on hydrology. NRCS found: surface soil cracks (B6), dry-season water table (C2) and FAC-Neutral Test (D5).

a. Surface Soil Cracks (B6) is a primary indicator in the Arid West. Although the Appellant does not specifically state an objection to using this indicator at this sample point, their challenge of the legitimacy of indicator B6 and NRCS's lack of photo documentation in the discussion of Sample Point 23 is assumed to apply to all uses of this indicator. See above for discussion. We reach the same conclusion here that NRCS's use of this indicator is not in error.

b. Dry-Season Water Table (C2) is a secondary indicator in the Arid West. As with Sample Point 23 above we find that NRCS did not support use of this indicator in this circumstance. However, this does not change the determination due to the documentation of a primary indicator (B6).

c. FAC-Neutral Test (D5) is a secondary indicator in the Arid West. The NRCS checked this indicator at Sample Point 21. The Appellant disagrees, not based on any of their own observations, but rather on the documentation provided by NRCS. The applicant's objections are a) use of the reference sample is not appropriate for purposes of the FAC-neutral test and b) the FAC-neutral test does not apply at reference sample 23 because there are no FAC species there. NRCS indicated that normal circumstances are not present and in their remarks indicated that it had been drier than normal. While Chapter 5 of the Arid West Supplement does include provision for using reference sites for hydrology indicators, we would only use this method if Sample Point 21 had lacked indicators of wetland hydrology itself. Since NRCS observed a primary indicator (B6) the use of FAC-Neutral test at the reference is not necessary and moot. Although it makes no difference here, the Appellant is mistaken when they state that the FAC-neutral test does not apply when there are no FAC species. In fact the Arid West supplement states this clearly, "This indicator may be used in communities that contain no FAC dominants."

Sample Point 37. NRCS found that this sample point met all three parameters: hydrophytic vegetation, hydric soils, and wetland hydrology. Vegetation was noted as significantly disturbed and, consistent with procedures in Section F of the 1987 Delineation Manual and Chapter 5 of the Regional Supplement, the NRCS used a reference sample for vegetation (sample point 23). The Appellant disputes the NRCS findings on hydrology. NRCS found: inundation visible on aerial imagery (B7), presence of reduced iron (C4), dry-season water table (C2), saturation visible on aerial imagery (C9), and shallow aquitard (D3). Of these, the Appellant objects to a) dry-season water table (C2) and inundation visible on aerial imagery (B7). The Appellant does not mention the other indicators NRCS documented on their datasheet. The Appellant provides no controverting data or evidence and instead relies on NRCS's own documentation.

a. Dry-Season Water Table (C2). NRCS indicates that they observe evidence of a dry-season water table at this sample point using the nearest deep hole at point 999. The

datasheet indicates that the Water Table was 49" below the surface at point 999. There is no separate description or data sheet for point 999. Because of this lack of documentation we do not know if this 49" is with fill or without fill or how deep the fill might have been at point 999. We therefore agree with the Appellant that the documentation provided does not support use of indicator C2. Since wetland hydrology is already documented by other indicators this does not change the wetland determination.

b. Inundation Visible on Aerial Imagery (B7). NRCS checked that this indicator was present. The Appellant disagrees, not based on any of their own observations, but rather on the documentation provided by NRCS: "NRCS also noted that inundation and saturation were observed on aerial photographs; however, no evidence or dates were provided by NRCS for those observations." In fact NRCS did document which aerial images it looked at and some do in fact show inundation. We received this documentation via an email dated 26 October 2015 which included a note to the file dated 5 September 2013. This note to file includes aerial imagery dates: May 1993, July 1993, May 1994, July 1994, August 1995, May 1996, July 1996, July 1997, July 1998, July 1999, July 2000, July 2002, July 2003, Summer 1958, July 1970, Summer 1993. Additionally, I have independently verified that point 37 is inundated on the following image dates: 12 March 1973, 3 April 1974, and 22 April 1982⁹.

NRCS Sample Point 40. NRCS found that this sample point met all three parameters: hydrophytic vegetation, hydric soil, and wetland hydrology. This sample point is approximately 15 yards north of what the Appellant suggests is potentially wetland¹⁰. However, in their 26 January 2017 correspondence concerning the appeal decision, which describes what they perceive to be deficiencies in the NRCS Determination, they did not address this sample point. NRCS appropriately determined that this sample point had hydrophytic vegetation using a reference¹¹. NRCS noted that 30 inches of fill had been placed over the native soils in this location and that even in the fill, contemporary hydric soil indicators were forming sufficient to meeting indicator F3, depleted matrix (the native soils met indicator F2 loamy gleyed matrix). We find no error in NRCS's documentation of this point.

NRCS Sample Points 17, 19, 20, 36, 985 and 998. NRCS found that these sample points met all three parameters: hydrophytic vegetation, hydric soil, and wetland hydrology. These sample points fall within the area previous indicated by the Appellant as potentially wetland. The Appellant did not address these sample points in their 26 January 2017 correspondence. The Corps reviewed each of these data sheet and found no errors that would change the determination. Since these sample points are not the subject of

⁹ A full list of aerial imagery the Corps evaluated is included in the 29 May 2015 AJD form and updated in the 1 October 2015 response to request for reconsideration.

¹⁰ See Exhibit G of the 27JUN2015 technical report from WRA and Figure 3 in the 26JAN2017 memo from WRA.

¹¹ It is also worth noting that the managed vegetation community that had established also met the dominance test for hydrophytic vegetation.

disagreement we will not belabor this response with further discussion of these sample points.

4. Adjacency and subsurface hydrologic connection. The Appellant again argues in their 26 January 2017 correspondence that the subject area is not connected to the Sacramento River and provides well monitoring data as evidence. In essence they argue again their first and sixth reasons for appeal, both of which the 19 October 2016 Administrative Appeal Decision found did not have merit. Although we are not required to address these reasons for appeal again, we do so here for the sake of clarity. Even if the Appellant were able to show that the subject area is not connected to the Sacramento River, this would have no effect on our determination as this subject area would still meet the other two criteria for adjacency as it is physically separated from jurisdictional waters by man-made dikes or barriers, natural river berms, beach dunes and the like and because its proximity to jurisdictional water is reasonably close supporting the science based inference that such wetlands have an ecological interconnection with jurisdictional waters. Nevertheless we have evaluated the well monitoring information provided and we find it is not compelling for the following reasons:

a. WRA's analysis is based upon monitoring data gathered by Luhdorff & Scalmanini, Consulting Engineers (LSCE). The underlying data gathered by LSCE was not provided to the Corps, therefore we are unable to independently review that data.

b. The methodology included in the WRA report lacks detail and is inadequate. We are told that the locations and elevations were surveyed but we are not told by whom or provided with documents signed or sealed by a surveyor or even what those elevations and locations were. We are not told how deep the wells were, what type of transducers were used, when they were monitored, or what datum the elevation data is in.

c. Precipitation information is provided on the graph but we are not told where that precipitation data came from.

d. This monitoring shows only portions of a single water-year excluding most of the wet season.

e. There is no data provided concerning the normality of the River levels, precipitation or any other variables within the monitored time frame.

f. What little information we do have seems to controvert the Appellant's assertions. They provide three well locations – as one moves from furthest away to closest to the Sacramento River the water-table elevation rises indicating the increasing influence of the Sacramento River on the groundwater table as you approach the River. The trend of the Sacramento is more or less "U" shaped showing the dry-down period in late spring and then a wet-up in the fall. While smoother, the general trend is the same in the west pit (the well with the longest dataset presented). It is in general "U" shaped with the draw-down period and wet-up period lagging behind the River (and cut off by the truncated monitoring

period). Although there is insufficient information to reach any conclusion based on the information provided, it does not support the Appellant's assertions.

Encl

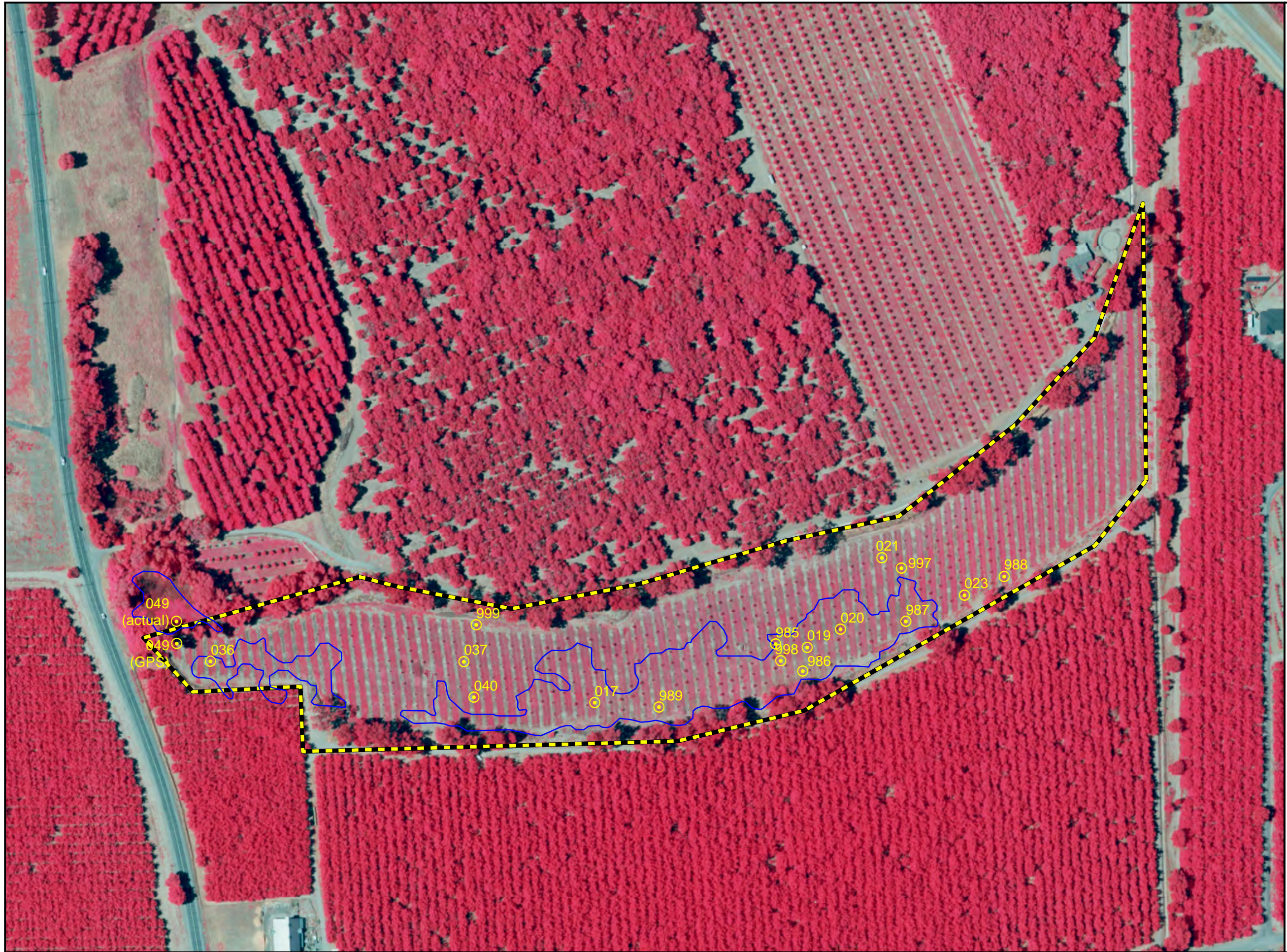
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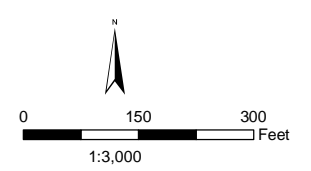
**JAMES ROBB
WETLAND SPECIALIST**

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- Legend**
- NRCS_samples
 - Appellant's "Potential Wetlands"
 - ▨ Subject Area

Data Source: Appellant's "Potential Wetlands" digitized from Exhibit G of the 27 June 2015 technical report from WRA. NRCS Samples are from Shape Files emailed from the NRCS on 13 March 2017
Coordinate System: NAD 83 UTM 10N



NRCS Sample Points Compared to Appellant's Potential Wetland Map

