

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

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This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): December 23, 2019

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Sacramento District, Flores Avenue, LLC Property, SPK-2019-00436

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: **California** County/parish/borough: **Tehama County** City:
Center coordinates of site (lat/long in degree decimal format): Lat. **40.098588°**, Long. **-122.214292°**
Universal Transverse Mercator: **10 566971.61 4438995.4**

Name of nearest waterbody: **Coyote Creek**

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **The Sacramento River**

Name of watershed or Hydrologic Unit Code (HUC): **Thomes Creek-Sacramento River, 18020156**

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., onsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form:

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date: **February 12, 2020**

Field Determination. Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **are** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs

Non-RPWs that flow directly or indirectly into TNWs

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Impoundments of jurisdictional waters

Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: 2068 linear feet, 109 feet wide, and 10.04 acres.

Wetlands: 6.84 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual

Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: **The proposed project site contains approximately 0.99 acre of aquatic resources consisting of: WF01-WF03, WF07, WF10-23, WF26-WF29, WF34, WF43, and WF44, which are isolated, intrastate waters with no interstate or foreign commerce connection. Reviewing the attached maps with aerial photography from February 23, 2017, which in the previous seven days there was a consistent rainfall each day, and totaled approximately 3.47 inches of rain according to the climatological data from the Red Bluff Municipal Airport. Looking over the aerial imagery, the hydrology in these aquatic resources appear to be isolated.**

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW: N/A

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: **645,686 acres**

Drainage area: **1,155 acres**

Average annual rainfall: **23.11** inches

Average annual snowfall: **N/A**

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through **1** tributary before entering TNW.

Project waters are **5-10** river miles from TNW.

Project waters are **1 (or less)** river miles from RPW.

Project waters are **2-5** aerial (straight) miles from TNW.

Project waters are **1 (or less)** aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: No.

Identify flow route to TNW⁵: Coyote Creek is within the Study area. Coyote Creek flows into Oat Creek, which flows into the Sacramento River, which is a Traditional Navigable Water.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

Tributary stream order, if known: Coyote Creek is a stream order one.

(b) General Tributary Characteristics (check all that apply):

- Tributary** is: Natural
 Artificial (man-made). Explain:
 Manipulated (man-altered). Explain:

Tributary properties with respect to top of bank (estimate):

Average width: **varies**
Average depth: **unknown**
Average side slopes: **Varies.**

Primary tributary substrate composition (check all that apply):

- | | | |
|--|--|-----------------------------------|
| <input type="checkbox"/> Silts | <input type="checkbox"/> Sands | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Cobbles | <input type="checkbox"/> Gravel | <input type="checkbox"/> Muck |
| <input type="checkbox"/> Bedrock | <input checked="" type="checkbox"/> Vegetation. 70% cover: | |
| <input type="checkbox"/> Other. Explain: | | |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:

Presence of run/riffle/pool complexes. Explain:

Tributary geometry: **Meandering**

Tributary gradient (approximate average slope): Unknown

(c) Flow:

Tributary provides for: **Intermittent but not seasonal flow**

Estimate average number of flow events in review area/year: **Varies**

Describe flow regime: **Coyote Creek is an intermittent stream that has observed flow more than six months out of the year based off of google earth aerial photos.**

Other information on duration and volume:

Surface flow is: **Discrete**. Characteristics: **Flow often is not confined to the stream, but flows through vernal swales.**

Subsurface flow: **Unknown**. Explain findings:

- Dye (or other) test performed:

Tributary has (check all that apply):

- | | |
|--|--|
| <input checked="" type="checkbox"/> Bed and banks | |
| <input checked="" type="checkbox"/> OHWM ⁶ (check all indicators that apply): | |
| <input type="checkbox"/> clear, natural line impressed on the bank | <input type="checkbox"/> the presence of litter and debris |
| <input type="checkbox"/> changes in the character of soil | <input type="checkbox"/> destruction of terrestrial vegetation |
| <input type="checkbox"/> shelving | <input type="checkbox"/> the presence of wrack line |
| <input type="checkbox"/> vegetation matted down, bent, or absent | <input type="checkbox"/> sediment sorting |
| <input type="checkbox"/> leaf litter disturbed or washed away | <input type="checkbox"/> scour |
| <input type="checkbox"/> sediment deposition | <input type="checkbox"/> multiple observed or predicted flow events |
| <input type="checkbox"/> water staining | <input checked="" type="checkbox"/> abrupt change in plant community |
| <input type="checkbox"/> other (list): | |
| <input type="checkbox"/> Discontinuous OHWM. ⁷ Explain: | |

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- | | |
|--|--|
| <input type="checkbox"/> High Tide Line indicated by: | <input type="checkbox"/> Mean High Water Mark indicated by: |
| <input type="checkbox"/> oil or scum line along shore objects | <input type="checkbox"/> survey to available datum; |
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings; |
| <input type="checkbox"/> physical markings/characteristics | <input type="checkbox"/> vegetation lines/changes in vegetation types. |
| <input type="checkbox"/> tidal gauges | |
| <input type="checkbox"/> other (list): | |

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: **Water color is relatively clear, the tributaries within the watershed collect,**

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

retain, filter and more slowly release runoff from surrounding roads, housing, pastures, farms, and other surrounding land uses. Collection of runoff onto these wetlands and stream on the site reduces chemicals and other pollutants normally found in runoff water.

Identify specific pollutants, if known: **Non-point source pollution from adjacent properties mainly comprised of agriculture land and residential roads.**

(iv) Biological Characteristics. Channel supports (check all that apply):

Riparian corridor. Characteristics (type, average width):

Wetland fringe. Characteristics:

Habitat for:

Federally Listed species. Explain findings: **The lower reaches of Coyote Creek provide habitat for listed salmonids and Steelhead, and there are no barriers preventing listed species getting upstream.**

Fish/spawn areas. Explain findings:

Other environmentally-sensitive species. Explain findings:

Aquatic/wildlife diversity. Explain findings:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size:

- **0.969 acre of vernal pool**
- **3.887 acres of vernal swale**
- **1.01 acres of seasonal swale**

Wetland type. Explain: **Vernal pools, vernal swales, and seasonal swales.**

Wetland quality. Explain: **disturbed from previous agricultural activities.**

Project wetlands cross or serve as state boundaries. Explain: **No.**

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittent flow.** Explain: **The vernal pools, vernal swales and seasonal swales that are abutting and adjacent to Coyote Creek provide both discrete surface connections, overland sheetflow, and likely subsurface connections. The flow is intermittent during the rainy season, before the wetlands dry up during the summer.**

Surface flow is: **Discrete and overland sheetflow.**

Characteristics: **Some of the wetlands adjacent to and abutting Gerber Creek are discrete connections, as well as overland sheetflow.**

Subsurface flow: **Unknown.** Explain findings: **While no dye or other test has been performed, it is likely that there is some subsurface connection between the wetlands abutting and adjacent to Gerber Creek, due to their proximity and the soils overlaying a hardpan on the site.**

Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: **Some of the wetlands have a discrete wetland hydrologic connection to Gerber Creek.**

Ecological connection. Explain: **Some of the wetlands have an ecological connection to Coyote Creek, including providing wildlife corridors, and providing habitat for Federally-listed vernal pool fairy shrimp (*Branchinecta lynchi*) and vernal pool tadpole shrimp (*Lepidurus packardii*).**

Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are **5-10** river miles from TNW.

Project waters are **2-5** aerial (straight) miles from TNW.

Flow is from: **Wetland to navigable waters.**

Estimate approximate location of wetland as within the **100 - 500-year** floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: **The chemical characteristics of the wetlands on the site are not known, although due to previous agricultural activities, some introduction of pollutants into the wetlands is likely.**

Identify specific pollutants, if known: **Unknown.**

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. Explain: **annual grassland and vernal pool vegetation.**
- Habitat for:
 - Federally Listed species. Explain findings: **The wetlands potentially provide habitat for vernal pool fairy shrimp and vernal pool tadpole shrimp.**
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings:

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: **15-20**

Approximately **5.87** acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
WF36: Y	0.23	WF35: N	0.06
WF37: Y	1.67	WF39: N	0.15
WF45: Y	0.14	WF41: N	0.01
WF04: N	1.24	WF08: N	0.004
WF05: N	0.14	WF09: N	0.003
WF06: N	0.96	WF24: N	0.18
WF30: N	0.003	WF25: N	0.12
WF31: N	0.002	WF40: N	0.93
WF32: N	0.01	WF42: N	0.01
WF33: N	0.004		

Summarize overall biological, chemical and physical functions being performed: **The vernal pools, vernal swales, and seasonal swales on the proposed project site function for water storage, filtration, habitat for federally-listed species, and wildlife corridors. These waters filter water before entering Coyote Creek, which improves water quality before entering Oat Creek, and the Sacramento River, which assists in improving water quality in these degraded streams.**

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: **The approximately 2.58 acres of vernal pools, vernal swales, and seasonal swales on the site have a hydrologic connection to Coyote Creek, downstream into Oat Creek, and the Sacramento River. Coyote Creek, Oat Creek, and the Sacramento River are listed on the California 303(d) list as impaired waters for a variety of pollutants. The wetlands on the project site function for filtration and water storage, which decreases some of the pollutants that flow to the downstream RPWs and navigable waters. In addition, the water storage in the adjacent wetlands alleviates some flooding risk to downstream areas. Therefore, we have determined that these adjacent waters have a significant nexus to navigable waters.**

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
 TNWs: linear feet, wide, Or acres.
 Wetlands adjacent to TNWs: acres.
2. **RPWs that flow directly or indirectly into TNWs.**
 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
 Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: **See Section III.B**

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: **2068** linear feet, **109 feet** wide, and **5.18** acres.
 Other non-wetland waters: acres.
Identify type(s) of waters:

3. **Non-RPWs⁸ that flow directly or indirectly into TNWs.**
 Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

- Tributary waters: linear feet, wide.
 Other non-wetland waters: acres.
Identify type(s) of waters:

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
 Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

 Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: **The aquatic features, WF36, WF37, and WF45 are directly abutting an RPW that flows indirectly into the Sacramento River, which is a TNW.**

Provide acreage estimates for jurisdictional wetlands in the review area: **2.04** acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
 Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

⁸See Footnote # 3.

Provide acreage estimates for jurisdictional wetlands in the review area: **3.82** acres.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: _____ acres.

7. Impoundments of jurisdictional waters.⁹

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from "waters of the U.S.," or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain:
- Other factors. Explain:

Identify water body and summarize rationale supporting determination:

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: _____ linear feet, _____ wide.
- Other non-wetland waters: _____ acres.
- Identify type(s) of waters:
- Wetlands: _____ acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:
- Other: (explain, if not covered above):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): _____ linear feet, _____ wide.
- Lakes/ponds: _____ acres.
- Other non-wetland waters: _____ acres. List type of aquatic resource:
- Wetlands: **0.99** acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): _____ linear feet, _____ wide.
- Lakes/ponds: _____ acres.
- Other non-wetland waters: _____ acres. List type of aquatic resource:
- Wetlands: _____ acres.

SECTION IV: DATA SOURCES.

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: *Draft Delineation of Waters of the United States*, dated February 28, 2019.
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps:
- Corps navigable waters' study:
- U.S. Geological Survey Hydrologic Atlas: **18020156**
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: **1:24K; Gerber**
- USDA Natural Resources Conservation Service Soil Survey. Citation: *Draft Delineation of Jurisdictional Waters of the United States*, dated March 2019.
- National wetlands inventory map(s). Cite name: Custom mapped dated February 11, 2020.
- State/Local wetland inventory map(s):
- FEMA/FIRM maps: 06103C1150H, effective 9/29/2011
- 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): Digital globe aerial photo dated, February 23, 2017
or Other (Name & Date):
- Previous determination(s). File no. and date of response letter:
- Applicable/supporting case law:
- Applicable/supporting scientific literature:
- Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD:

WF01 (0.004 acre), WF02 (0.01 acre), WF03 (0.004 acre), WF07 (0.004 acre), WF10 (0.03 acre), WF11 (0.03 acre), WF12 (0.01 acre), WF13 (0.42 acre), WF14 (0.16 acre), WF15 (0.05 acre), WF16 (0.02 acre), WF17 (0.01 acre), WF18 (0.05 acre), WF19 (0.03 acre), WF20 (0.05 acre), WF21 (0.004 acre), WF22 (0.02 acre), WF23 (0.01 acre), WF26 (0.01 acre), WF27 (0.02 acre), WF28 (0.02 acre), WF29 (0.001 acre), WF34 (0.002 acre), WF43 (0.01 acre), WF44 (0.01 acre) are isolated, intrastate waters with no interstate or foreign commerce connection.

T01 (5.18 acres) is a relatively permanent water that flows indirectly into the Sacramento River (Traditional Navigable Water), therefore this water is a water of the United States.

WF36 (0.23 acre), WF37 (1.67 acres), and WF45 (0.14 acre) are wetlands that directly abut a RPW that flows indirectly into the Sacramento River, therefore these waters are waters of the United States.

WF04 (1.24 acres), WF05 (0.14 acre), WF06 (0.96 acre), WF30 (0.003 acre), WF31 (0.002 acre), WF32 (0.01 acre), WF33 (0.004 acre), WF35 (0.06 acre), WF39 (0.15 acre), WF08 (0.004 acre), WF09 (0.003 acre), WF24 (0.18 acre), WF25 (0.12 acre), WF40 (0.93 acre), WF42 (0.01 acre and WF41 (0.01 acre) are wetlands adjacent to but not directly abutting a RPW that flows indirectly into the Sacramento River, and have a significant nexus, therefore these waters are waters of the United States.

T02 (4.86 acres) is an impoundment was created from a water of the United States and flows indirectly into the Sacramento River, therefore it is a water of the United States.

REFERENCES:

- 1. Regulatory Programs of the Corps of Engineers, as amended (33 CFR 328), dated November 13, 1986.**
- 2. Regulatory Guidance Letter 16-01 on Jurisdictional Determinations effective October, 2016.**
- 3. Clean Water Act Jurisdiction Memorandum, dated December 2, 2008.**
- 4. U.S. Army Corps of Engineers Jurisdictional Determinations Form Instructional Guidebook, dated May 30, 2007.**

WETS Station: RED BLUFF MUNICIPAL AP, CA

Requested years: 1991 - 2020

Month	Temperature (°F)			Precipitation (inches)				
	Avg daily max	Avg daily min	Avg daily mean	Avg	30% chance will have		Avg number of days with 0.10 inch or more	Average total snowfall
					less than	more than		
Jan	56.5	38.2	47.3	4.49	1.67	5.27	7	-
Feb	60.6	40.8	50.7	4.08	1.64	4.96	7	-
Mar	65.7	43.7	54.7	2.99	1.44	3.66	6	-
Apr	71.8	47.1	59.4	1.52	0.75	1.86	3	-
May	81.6	54.3	67.9	1.28	0.52	1.52	3	-
Jun	90.9	61.9	76.4	0.45	0.16	0.47	1	-
Jul	98.0	65.9	82.0	0.06	0.00	0.00	0	-
Aug	96.2	63.4	79.8	0.05	0.00	0.03	0	-
Sep	91.2	59.0	75.1	0.25	0.00	0.19	1	-
Oct	78.7	51.1	64.9	1.10	0.39	1.22	2	-
Nov	63.8	42.6	53.2	2.57	1.26	3.14	5	-
Dec	55.5	37.9	46.7	4.25	1.51	5.12	8	-
Annual:					17.62	26.59		
Average	75.9	50.5	63.2	-	-	-	-	-
Total	-	-	-	23.11			44	-

GROWING SEASON DATES

Requested years of data: 1991 - 2020
Years with missing data: 24 deg = 3 28 deg = 2 32 deg = 1
Years with no occurrence: 24 deg = 24 28 deg = 4 32 deg = 0
Data years used: 24 deg = 27 28 deg = 28 32 deg = 29

Probability	Temperature		
	24 F or higher	28 F or higher	32 F or higher
	Beginning and Ending Dates Growing Season Length		
50 percent *	No occurrence	1/13 to 12/25 346 days	2/22 to 11/30 281 days

Drainage Area (SPK-2019-00436)



Drainage Area: 1,155 acres



Climatological Data for RED BLUFF MUNICIPAL AP, CA - February 2017

Date	Max Temperature	Min Temperature	Avg Temperature	GDD Base 40	GDD Base 50	Precipitation	Snowfall	Snow Depth
2017-02-01	56	37	46.5	7	0	0.00	0.0	0
2017-02-02	53	44	48.5	9	0	0.50	0.0	0
2017-02-03	61	53	57.0	17	7	0.15	0.0	0
2017-02-04	58	53	55.5	16	6	T	0.0	0
2017-02-05	60	49	54.5	15	5	0.11	M	0
2017-02-06	60	53	56.5	17	7	0.17	0.0	0
2017-02-07	64	52	58.0	18	8	0.66	0.0	0
2017-02-08	62	52	57.0	17	7	0.11	0.0	0
2017-02-09	61	56	58.5	19	9	0.25	0.0	0
2017-02-10	61	49	55.0	15	5	0.09	M	0
2017-02-11	63	44	53.5	14	4	0.00	0.0	0
2017-02-12	70	42	56.0	16	6	0.00	0.0	0
2017-02-13	60	40	50.0	10	0	0.00	0.0	0
2017-02-14	70	35	52.5	13	3	0.00	0.0	0
2017-02-15	60	47	53.5	14	4	T	0.0	0
2017-02-16	65	49	57.0	17	7	0.27	M	0
2017-02-17	51	48	49.5	10	0	2.34	M	0
2017-02-18	60	49	54.5	15	5	0.37	M	0
2017-02-19	53	47	50.0	10	0	0.03	M	0
2017-02-20	56	50	53.0	13	3	0.23	0.0	0
2017-02-21	60	44	52.0	12	2	0.10	M	0
2017-02-22	54	39	46.5	7	0	0.13	0.0	0
2017-02-23	55	32	43.5	4	0	T	0.0	0
2017-02-24	52	32	42.0	2	0	0.00	0.0	0
2017-02-25	55	38	46.5	7	0	0.00	0.0	0
2017-02-26	54	31	42.5	3	0	0.00	0.0	0
2017-02-27	53	29	41.0	1	0	0.00	0.0	0
2017-02-28	59	32	45.5	6	0	0.00	0.0	0
Average Sum	58.8	43.8	51.3	324	88	5.51	0.0	0.0

West Side Hwy

5





WF01

T02

WF31

WF30

WF33

T01

WF41

WF32

WF45

T01

WF37

WF35

5

Wes

WF06

WF04

WF27

WF28

WF29

T02

WF02





West Side Hwy

WF24

WF42

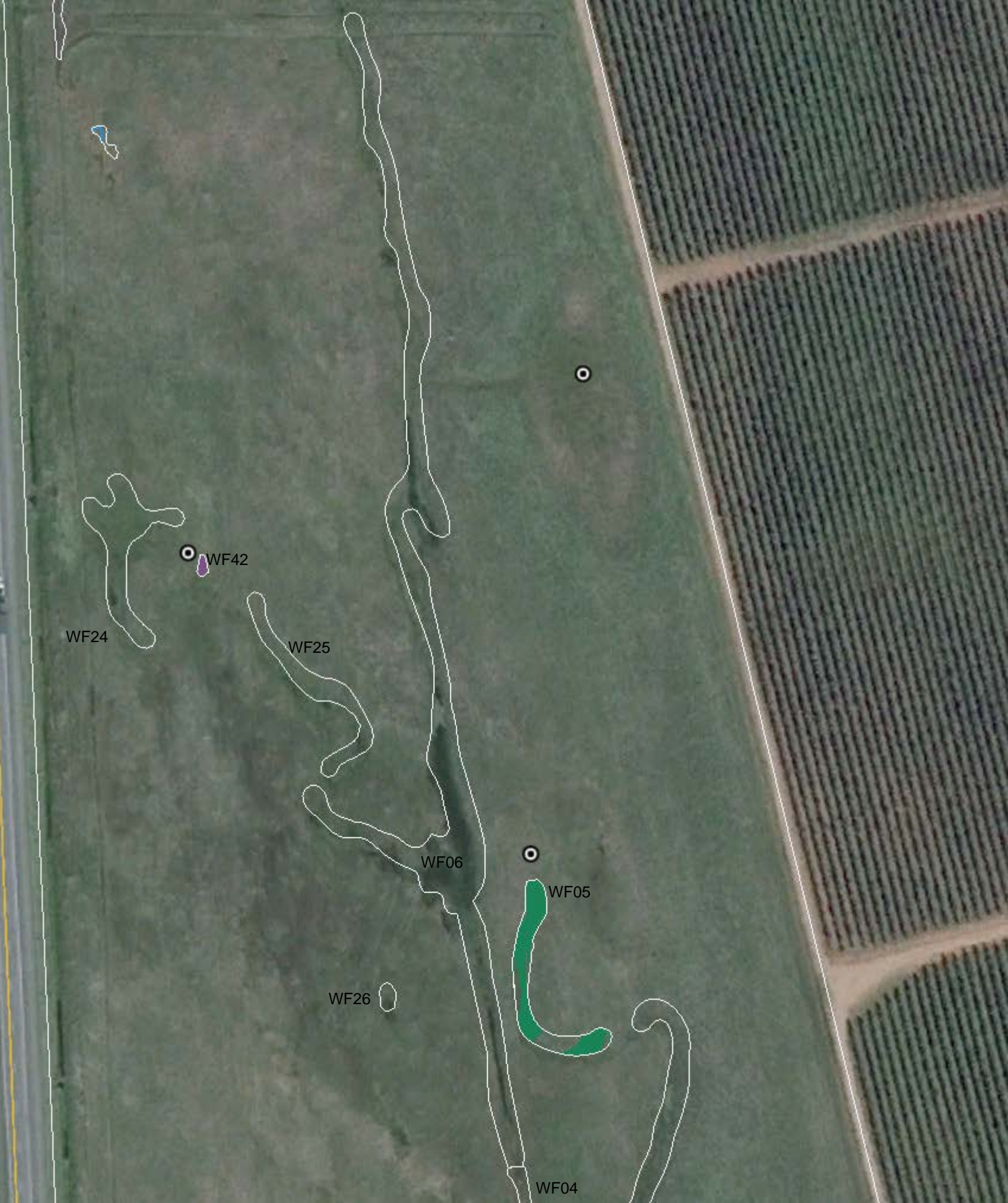
WF25

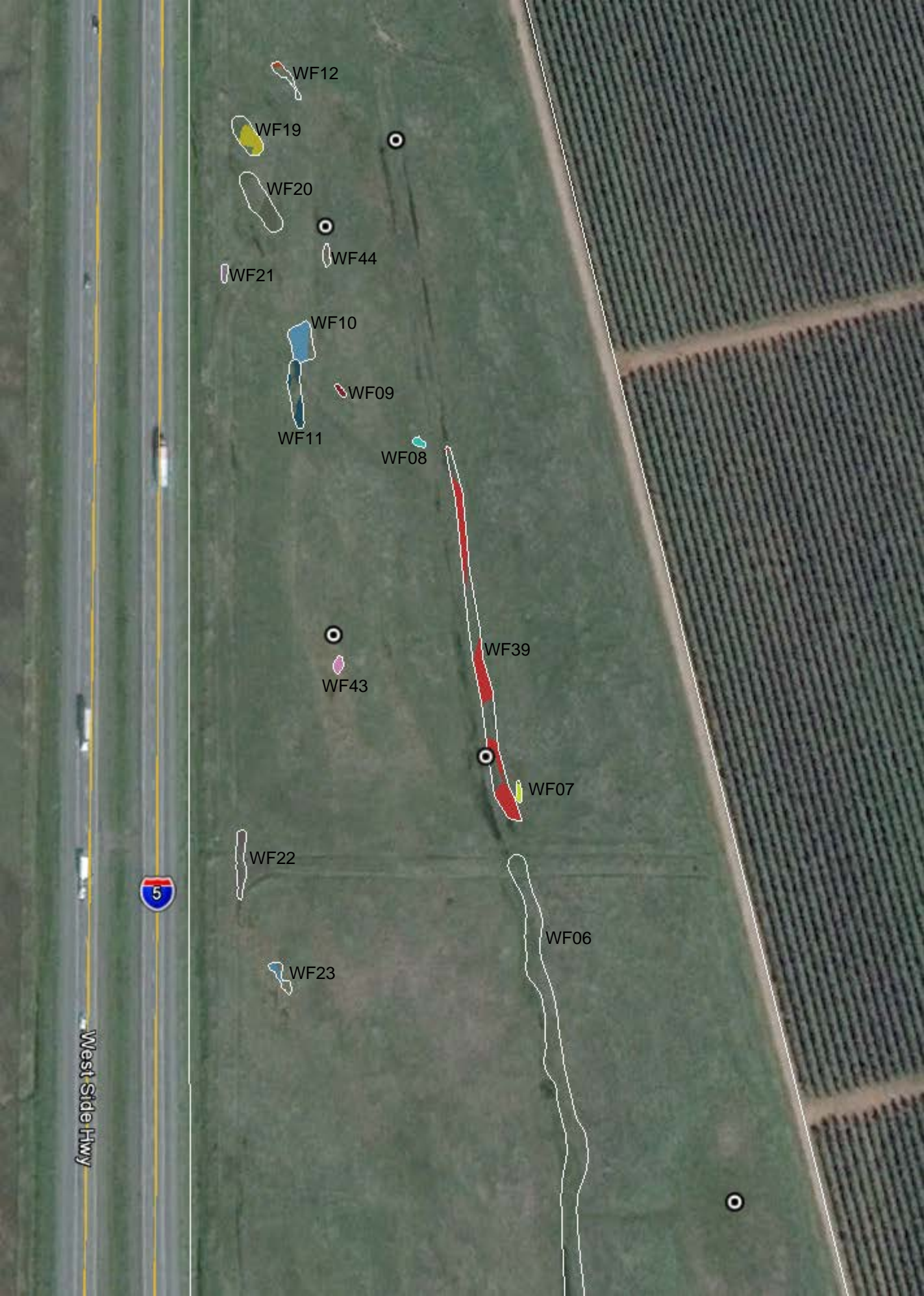
WF06

WF05

WF26

WF04





WF12

WF19

WF20

WF21

WF44

WF10

WF09

WF11

WF08

WF43

WF39

WF07

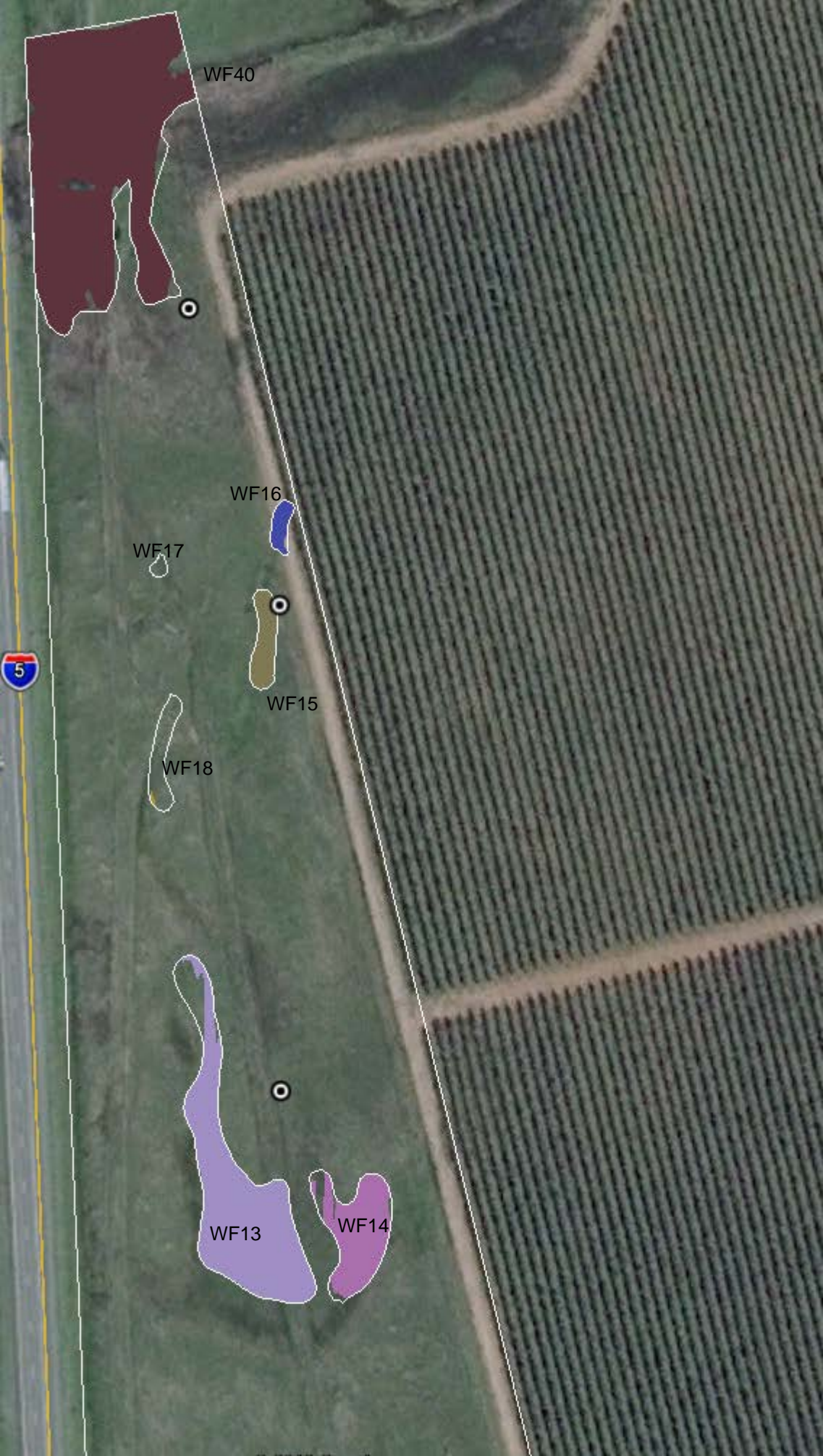
WF22

WF23

WF06

West Side Hwy





WF40



WF16

WF17



WF15

WF18



WF13

WF14

5

National Flood Hazard Layer FIRMette



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) <i>Zone A, V, A99</i>
		With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i>
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i>
		Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>
		Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i>
		Area with Flood Risk due to Levee <i>Zone D</i>
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i>
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard <i>Zone D</i>
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance
		17.5 Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
MAP PANELS		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **2/11/2020 at 1:55:56 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

40°6'6.11"N
122°13'14.43"W



USGS The National Map: Orthoimagery, Data refreshed April, 2019.

0 250 500 1,000 1,500 2,000 Feet 1:6,000

40°5'38.59"N
122°12'36.98"W

