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

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): February 9, 2009

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Sacramento Office, Walltown Quarry, SPK-2008-444

C. PROJECT LOCATION AND BACKGROUND INFORMATION: JD form #1, Carson Creek
State: **California** County/parish/borough: **Sacramento** City: **N/A**
Center coordinates of site (lat/long in degree decimal format): **Lat. 38.59006°, Long. 121.10655°**
Universal Transverse Mercator: **10S 664906 4272987**
Name of nearest waterbody: **Carson Creek**
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **Cosumnes River**
Name of watershed or Hydrologic Unit Code (HUC): **Upper Cosumnes, 18040013**
☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☒ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form. **SPK-2008-444, JD form #2 and #3**

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
☐ Office (Desk) Determination. Date:
☒ Field Determination. Date(s): **August 11, 2008**

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 waters[2] (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: **RPW- 10,021 linear feet by 75 feet wide; Non-RPW- 28,513 linear feet by 7 feet wide; Pond- 3.970 acres; Total= 25.806 acres**
Wetlands: **15.436 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:

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

[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.

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:

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 waterbody[4] 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: **25.3 square miles**
Drainage area: **632 square miles**
Average annual rainfall: **19.6 inches**
Average annual snowfall: **0 inches**

(ii) Physical Characteristics:
(a) Relationship with TNW:
☐ Tributary flows directly into TNW.
☒ Tributary flows through **2** tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.
Project waters are **1 (or less)** river miles from RPW.
Project waters are **15-20** 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: N/A

Identify flow route to TNW[5]: **Carson Creek flows to Deer Creek, which is tributary to the Cosumnes River (TNW)..**
Tributary stream order, if known:

(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):

[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.

Average width: **10 feet**
Average depth: **2 feet**
Average side slopes: **2:1.**

Primary tributary substrate composition (check all that apply):

☐ Silts	☒ Sands	☐ Concrete
☒ Cobbles	☒ Gravel	☐ Muck
☒ Bedrock	☒ Vegetation. Type/% cover: **10% cover of annuals such as Eryngium and Plagiobothrys**	
☐ Other. Explain: .		

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: **Actively eroding banks.**
Presence of run/riffle/pool complexes. Explain: **Present in portions of the intermittent drainages.**
Tributary geometry: **Meandering**
Tributary gradient (approximate average slope): **2 %**

(c) Flow:

Tributary provides for: **Seasonal flow**
Estimate average number of flow events in review area/year: **2-5**
Describe flow regime: **Carson Creek flows perennially and includes effluent contributed to the creek year-round by a waste water treatment plant upstream. The remaining intermittent and ephemeral drainages in the review area are heavily influenced by rain events, due to the deeply incised channels, moderate slopes on-site (up to 30% in some locations), and a largely impervious substrate (e.g., bedrock). The upper reaches only support ephemeral flows and small pools within the flatter portions of the drainages may remain inundated for a few days following rain events.**
Other information on duration and volume:

Surface flow is: **Discrete and confined.** Characteristics: **The majority of the drainages have a defined bed and bank with broader seasonal wetland swales in the upper reaches.**

Subsurface flow: **Unknown**. Explain findings:
☐ Dye (or other) test performed:

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☒ the presence of litter and debris
☒ changes in the character of soil	☐ destruction of terrestrial vegetation
☒ shelving	☐ the presence of wrack line
☐ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☒ scour
☐ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☒ abrupt change in plant community
☐ other (list):	

☐ Discontinuous OHWM.[7] Explain:

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

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

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: **Water quality is generally good, but some pollutants are likely present from cattle waste.**
Identify specific pollutants, if known: **cattle waste**

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

☐ Riparian corridor. Characteristics (type, average width): .
☐ Wetland fringe. Characteristics: .
☒ Habitat for:

[6]A 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.
[7]Ibid.

☐ Federally Listed species. Explain findings:
☒ Fish/spawn areas. Explain findings: **The stock pond contains nonnative fish such as large- and smallmouth bass. Tributary drainages on-site do not contain water for a sufficient period to provide spawning or rearing habitat for fish.**
☐ 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: **15.436 acres**
Wetland type. Explain: **Vernal pools, seasonal wetlands, seasonal wetland swales, seeps, and constructed ditches.**
Wetland quality. Explain: **Features are of relatively good quality, but somewhat degraded due to cattle use.**
Project wetlands cross or serve as state boundaries. Explain: **N/A**

(b) General Flow Relationship with Non-TNW:
Flow is: **Ephemeral flow**. Explain: **Flow between wetland features and non-TNW typically occurs only during and immediately following rain events. Although the seeps are groundwater-fed, they are primarily regions of prolonged saturation. Therefore, very little water flows out of them, except following rain events**.

Surface flow is**: Discrete and confined**
Characteristics: **Most surface flow is confined to seasonal wetland swales, but occasional overland sheet flow may also occur. Flow occurs almost exclusively during and immediately following rain events.**

Subsurface flow: **Unknown**. Explain findings:
☐ Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:
☒ Directly abutting
☒ Not directly abutting
☒ Discrete wetland hydrologic connection. Explain: **Connected via seasonal wetland swales or overland flow during extreme rain events.**
☐ Ecological connection. Explain:
☐ Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW
Project wetlands are **25-30** river miles from TNW.
Project waters are **15-20** aerial (straight) miles from TNW.
Flow is from: **Wetland to navigable waters.**
Estimate approximate location of wetland as within the **500-year or greater** floodplain. **Wetlands vary from being within the 2-5 year floodplain to being outside of the 500-year floodplain.**

(ii) Chemical Characteristics:
Characterize wetland system. Explain: **Water in most features is clear, but the water quality may be reduced due to cattle waste.**
Identify specific pollutants, if known: **Cattle waste.**

(iii) Biological Characteristics. Wetland supports (check all that apply):
☐ Riparian buffer. Characteristics (type, average width):
☒ Vegetation type/percent cover. Explain: **All of the wetlands are vegetated, most with 100% cover.**
☒ Habitat for:
☒ Federally Listed species. Explain findings: **Vernal pools and seasonal wetlands are potential habitat for Federally-listed branchiopods and plants. Branchiopod surveys have been conducted on most of the features on-site, and no listed branchiopods were detected. A few features are being sampled this year to determine presence or absence of listed branchiopods. Rare plant surveys were conducted on a large portion of the site in 2004-2005, during which no rare plants were observed. Additional rare plant surveys are scheduled for 2009.**
☒ Fish/spawn areas. Explain findings: **The stock pond contains nonnative fish such as large- and smallmouth bass. Tributary drainages on-site do not contain water for a sufficient period to provide spawning or rearing habitat for fish.**
☐ 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: **30 (or more)**

Approximately **15.436 acres** in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Feature ID	Directly Abuts?	Size (Acres)	Feature ID	Directly Abuts?	Size (Acres)	Feature ID	Directly Abuts?	Size (Acres)
VP-1	N	0.001	SW-1	N	0.015	SWS-1	N	0.116
VP-2	N	0.006	SW-2	N	0.010	SWS-2	N	0.048
VP-3	N	0.016	SW-3	N	0.002	SWS-3	N	0.020
VP-5	N	0.002	SW-4	N	0.020	SWS-4	N	0.066
VP-6	N	0.002	SW-5	N	0.004	SWS-5	N	0.087
VP-7	N	0.002	SW-6	N	0.008	SWS-6	N	0.084
VP-8	N	0.005	SW-7	N	0.007	SWS-7	N	0.029
VP-9	N	0.010	SW-8	N	0.002	SWS-8	N	0.060
VP-10	N	0.009	SW-9	N	0.002	SWS-9	N	0.043
VP-11	N	0.037	SW-10	N	0.190	SWS-10	N	0.157
VP-12	N	0.005	SW-11	N	0.135	SWS-11	N	0.009
VP-13	N	0.005	SW-12	N	0.004	SWS-12	N	0.004
VP-14	N	0.016	SW-13	N	0.002	SWS-13	N	0.027
VP-15	N	0.008	SW-14	N	0.002	SWS-14	N	0.014
VP-17	N	0.005	SW-15	N	0.001	SWS-15	N	0.079
VP-18	N	0.001	SW-16	N	0.001	SWS-16	N	0.059
VP-19	N	0.005	SW-17	N	0.001	SWS-17	N	0.059
VP-20	N	0.001	SW-18	N	0.002	SWS-18	N	0.006
VP-21	N	0.001	SW-19	N	0.000	SWS-19	N	0.003
VP-22	N	0.001	SW-20	N	0.001	SWS-20	N	0.286
VP-23	N	0.002	SW-21	Y	1.597	SWS-21	N	0.197
VP-24	N	0.006	SW-22	N	0.004	SWS-22	N	0.039
VP-25	N	0.000	SW-23	N	0.007	SWS-23	N	0.017
VP-26	N	0.001	SW-24	N	0.008	SWS-24	N	0.025
VP-27	N	0.001	SW-25	N	0.036	SWS-25	N	0.026
VP-28	N	0.003	SW-26	N	0.006	SWS-26	N	0.345
VP-29	N	0.030	SW-27	Y	0.102	SWS-27	N	0.029
VP-30	N	0.004	SW-29	Y	0.572	SWS-28	N	0.135
VP-31	N	0.009	SW-30	Y	0.015	SWS-29	N	0.012
VP-32	N	0.004	SW-31	Y	0.354	SWS-30	N	0.031
VP-33	N	0.001	SW-32	N	0.005	SWS-31	N	0.046
VP-34	N	0.022	SW-33	N	0.007	SWS-32	N	0.216
VP-35	N	0.001	SW-34	N	0.013	SWS-33	N	0.024
VP-36	N	0.002	SW-35	N	0.037	SWS-34	N	0.191
VP-37	N	0.004	SW-36	N	0.015	SWS-35	Y	0.039
VP-38	N	0.003	SW-37	N	0.005	SWS-36	N	0.004
VP-39	N	0.003	SW-38	N	0.013	SWS-37	N	0.233
VP-40	N	0.026	SW-39	N	0.013	SWS-38	N	0.007
VP-41	N	0.017	SW-40	N	0.017	SWS-39	N	0.006
VP-42	N	0.007	SW-41	N	0.007	SWS-40	N	0.604
VP-43	N	0.005	SW-42	N	0.055	SWS-41	N	0.250
VP-44	N	0.011	SW-43	N	0.019	SWS-42	N	0.004
VP-45	N	0.001	SW-44	N	0.007	SWS-43	N	0.021
VP-46	N	0.004	SW-45	N	0.004	SWS-44	N	0.050
VP-47	N	0.006	SW-46	N	0.058	SWS-45	N	0.058
SEEP-1	N	0.208	SW-47	N	0.018	SWS-46	N	0.758
SEEP-2	N	0.040	SW-48	N	0.022	SWS-47	N	0.783
SEEP-3	N	0.441	SW-49	N	0.118	SWS-48	N	0.918

SEEP-5	N	0.010	SW-50	N	0.065	SWS-49	N	0.032
SEEP-6	N	0.192	SW-51	N	0.394	SWS-50	N	0.128
SEEP-7	N	0.187	SW-52	N	0.087	SWS-51	N	0.065
CD-1	N	0.005	SW-60	N	0.000	SWS-52	N	0.086
CD-2	N	0.003	SW-61	N	0.001	SWS-53	N	0.031
CD-3	N	0.011	SW-62	N	0.001	SWS-54	N	2.460
CD-4	N	0.004	SW-63	N	0.006	SWS-55	N	0.143
CD-5	N	0.003	SW-64	N	0.006	SWS-59	N	0.012
CD-6	N	0.002	SW-65	N	0.012	SWS-60	N	0.078
CD-7	N	0.001	SW-66	N	0.005	SWS-61	N	0.048
CD-8	N	0.001	SW-67	N	0.001	SWS-62	N	0.089
						SWS-63	N	0.008
						SWS-64	N	0.013
						SWS-65	Y	0.107
						SWS-70	Y	0.068
						SWS-71	N	0.051
						SWS-72	N	0.028
						SWS-73	N	0.027
						SWS-74	N	0.006
						SWS-75	N	0.017
						SWS-76	N	0.009
						SWS-77	N	0.023
						SWS-78	N	0.039
						SWS-79	N	0.002
						SWS-80	N	0.002

Summarize overall biological, chemical and physical functions being performed: **All functions being performed are summarized in the significant nexus summary below.**

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:

A significant nexus can be established between the Cosumnes River (applicable TNW) and the drainages on-site, based on the the floodwater conveyance functions that they serve, and the potential for contribution of pollutants. Given the vertical nature of the drainages' banks, it is not likley that they will reduce floodwaters, but they do convey them. Due to the high use of the watershed for cattle grazing, the drainages on-site have the potential to convey high levels of nitrogen from the cattle waste downstream to the River.

A significant nexus can be established between the Cosumnes River and the wetlands within the review area that are abutting and adjacent to the non-RPWs on-site based on their potential to convey floodwaters and contribute organic carbon and nutrients to the drainage system during or shortly after rain events. The numerous wetlands throughout the review area likely provide significant filtering functions and decrease the magnitude of nitrogen contributed to the system. The depressional wetlands within the review area may contribute a substantial amount of organic carbon to the downstream foodweb as well. Many macroinvertebrates in seasonal depressions hatch and mature in a matter of days following rain events. When these depressions fill and overflow, these macroinvertebrates get washed downstream, and are consumed by a variety of wildlife species.

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:

A significant nexus can be established between the Cosumnes River and the wetlands within the review area that are adjacent to Carson Creek based on their potential to convey floodwaters and contribute organic carbon and nutrients to the drainage system during or shortly after rain events. The numerous wetlands adjacent to Carson Creek likely provide significant filtering functions and decrease the magnitude of nitrogen contributed to the system. The depressional wetlands may contribute a substantial amount of organic carbon to the downstream foodweb as well. Many macroinvertebrates in seasonal depressions hatch and mature in a matter of days following rain events. When these depressions fill and overflow, these macroinvertebrates get washed downstream, and are consumed by a variety of wildlife species.

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:
   - ☐ Wetlands adjacent to TNWs:

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: **Carson Creek was observed flowing during all site visits conducted by ECORP (wetland consultant) throughout the past several years. Furthermore, a waste water treatment plant upstream of the site contributes effluent to the creek year-round.**
   - ☐ 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:

   Provide estimates for jurisdictional waters in the review area (check all that apply):
   - ☒ Tributary waters: **10,021 linear feet by 75 wide, (17.254 acres)**
   - ☐ Other non-wetland waters: acres.
     Identify type(s) of waters:.

3. **Non-RPWs[8] 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: **28,513 linear feet by 7 wide (4.582 acres)**
   - ☐ Other non-wetland waters:
     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.

[8]See Footnote # 3.

☒ 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: **See attached wetland delineation map.**

☐ 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: .

Provide acreage estimates for jurisdictional wetlands in the review area: **2.854 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 jurisidictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: **0.375 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: **12.207 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).

Pond-1 is a pond created by damming ID-2/ID-3, a jurisdictional intermittent tributary to Carson Creek. Acreage of Pond-1 is 3.970 acres.

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:
☐ Other non-wetland waters:
Identify type(s) of waters:
☐ Wetlands:

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):

[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.*

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

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):
☐ Lakes/ponds:
☐ Other non-wetland waters:
☐ Wetlands:

SECTION IV: DATA SOURCES.

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: **Walltown Quarry Wetland Delineation, ECORP Consulting, Inc., August 21, 2008.**
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☒ Office concurs with data sheets/delineation report as modified: **Wetland Delineation for Walltown Quarry, Sacramento County, California, September 17, 2007; revised September 17, 2008.**
☐ 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:
☐ USGS NHD data.
☐ USGS 8 and 12 digit HUC maps.
☒ U.S. Geological Survey map(s). Cite scale & quad name:**7.5 minute / Folsom SE, California**.
☒ USDA Natural Resources Conservation Service Soil Survey. Citation: **Soil Survey of Sacramento County, California. (USDA, SCS 1993)**
☒ National wetlands inventory map(s). Cite name: **U.S. Department of the Interior, Fish and Wildlife Service (USFWS). 2007. National Wetlands Inventory – Wetland Digital Data. http://wetlandsfws.er.usgs.gov/NWI/index.html.**
☐ State/Local wetland inventory map(s):
☒ FEMA/FIRM maps: **Map ID 0602620275D.**
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): **Air Photo USA May 2006.**
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):
- **Special-Status Plant Survey for Walltown Quarry. Dated August 25, 2005. ECORP Consulting, Inc.**
- **Report of Findings Regarding Federally-Listed Branchiopods for Walltown Quarry. Dated November 8, 2004. ECORP Consulting, Inc.**
- **Report of Findings Regarding Federally-Listed Branchiopods for Walltown Quarry. Dated August 25, 2005. ECORP Consulting, Inc.**
- **2007-2008 Wet Season 90-day Report of Findings Regarding Federally-Listed Branchiopods for Walltown Quarry (Additional 275 acres). Dated June 3, 2008. ECORP Consulting, Inc.**

B. ADDITIONAL COMMENTS TO SUPPORT JD:

A significant nexus can be established between the Cosumnes River (applicable TNW) and the drainages on-site, based on the the floodwater conveyance functions that they serve, and the potential for contribution of pollutants. Given the vertical nature of the drainages' banks, it is not likley that they will reduce floodwaters, but they do convey them. Due to the high use of the watershed for cattle grazing, the drainages on-site have the potential to convey high levels of nitrogen from the cattle waste downstream to the River.

A significant nexus can be established between the Cosumnes River and the wetlands within the review area that are adjacent to Carson Creek and abutting and adjacent to the non-RPWs on-site based on their potential to convey floodwaters and contribute organic carbon and nutrients to the drainage system during or shortly after rain events. The numerous wetlands throughout the review area likely provide significant filtering functions and decrease the magnitude of nitrogen contributed to the system. The depressional wetlands within the review area may contribute a substantial amount of organic carbon to the downstream foodweb as well. Many macroinvertebrates in seasonal depressions hatch and mature in a matter of days following rain events. When these depressions fill and overflow, these macroinvertebrates get washed downstream, and are consumed by a variety of wildlife species.

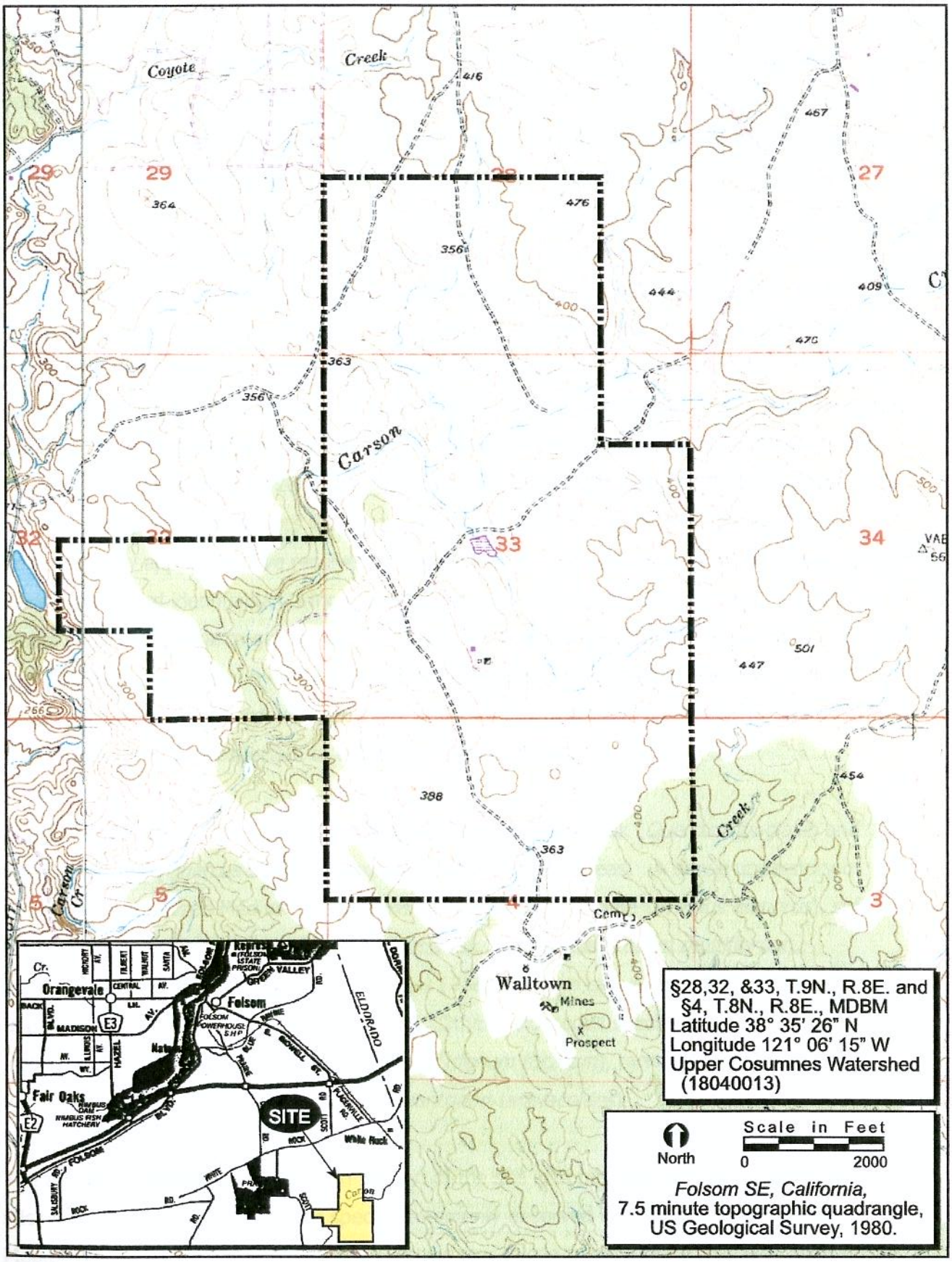

FIGURE 1. Project Site and Vicinity

2003-067 Walltown Quarry

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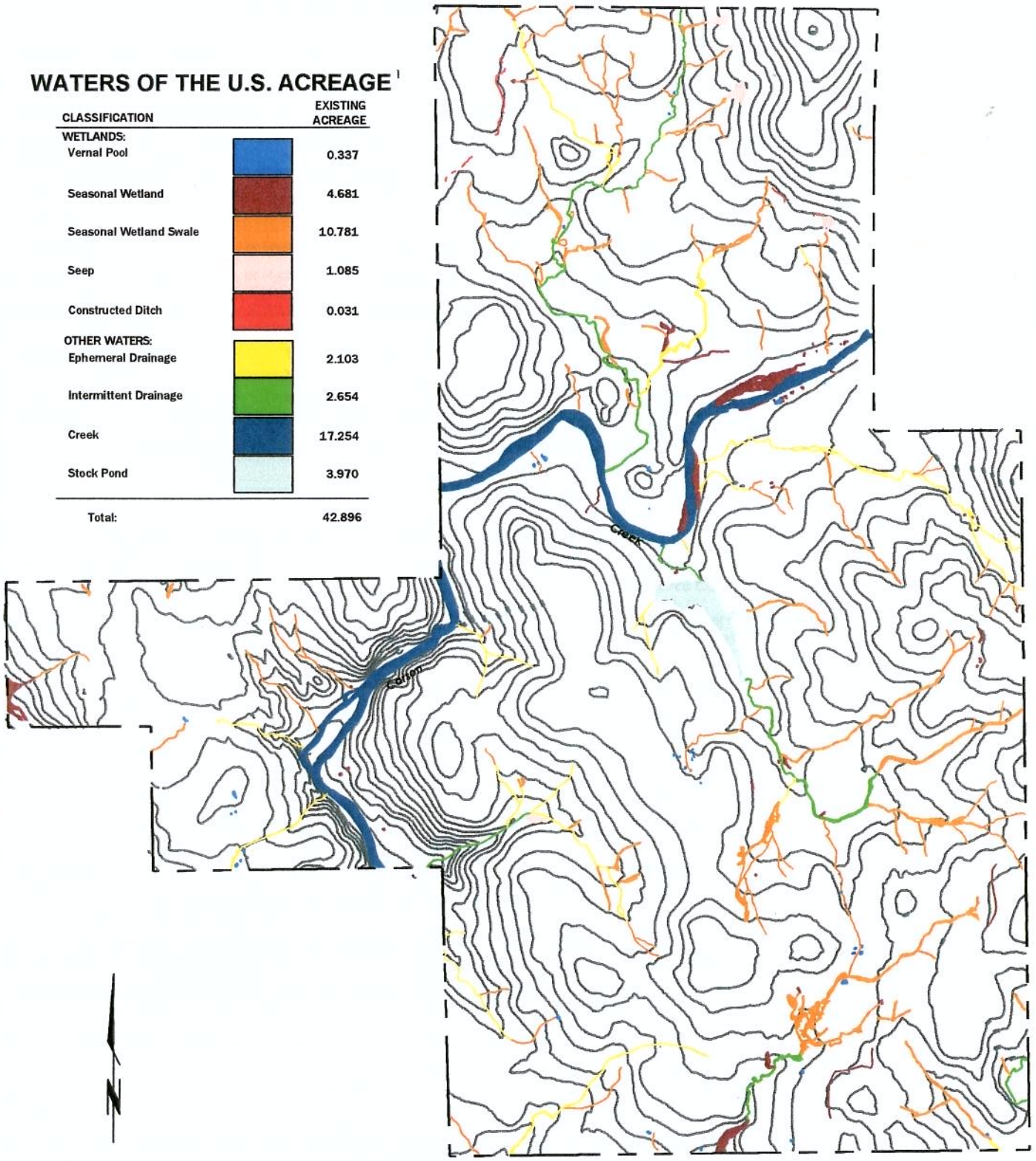
WATERS OF THE U.S. ACREAGE[1]

CLASSIFICATION	EXISTING ACREAGE
WETLANDS:	
Vernal Pool	0.337
Seasonal Wetland	4.681
Seasonal Wetland Swale	10.781
Seep	1.085
Constructed Ditch	0.031
OTHER WATERS:	
Ephemeral Drainage	2.103
Intermittent Drainage	2.654
Creek	17.254
Stock Pond	3.970
Total:	42.896



SCALE IN FEET
0 650 1300
SCALE: 1"=1300'

[1] *Subject to U.S. Army Corps of Engineer's verification. This exhibit depicts information and data produced in strict accord with the U.S. Army Corps of Engineers wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and conforms to specifications per the Corps Sacramento District. However, wetland boundaries have not been legally surveyed and may be subject to minor adjustments if exact locations are required.*

Delineators: D. Snider, D. Sykes, M. Buchalski, A. Ballard, S. Hoover

X:\2003-067 Walltown Quarry\WETLAND_DELINEATION\WQ-WDv10.dwg8/21/08

FIGURE 4. Wetland Delineation

2003-067 WALLTOWN QUARRY

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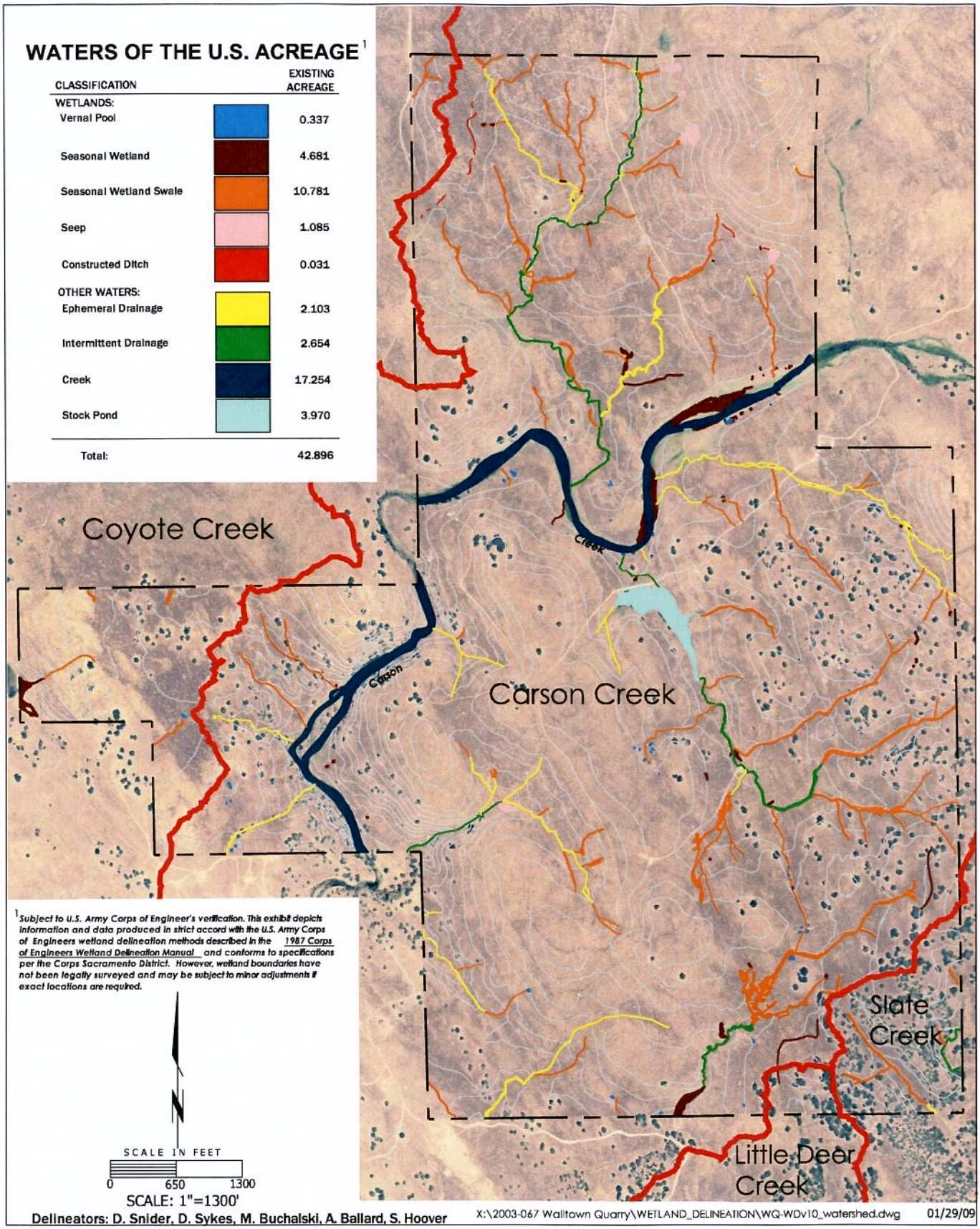

Wetland Delineation and Watersheds

2003-067 WALLTOWN QUARRY

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