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): 5 June 2014

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2013-00709-BEM

C. PROJECT LOCATION AND BACKGROUND INFORMATION: Valley Crest and Yucca Reservoirs - Drainage Feature A and B State: California County/parish/borough: San Bernardino City: Apple Valley_

Center coordinates of site (lat/long in degree decimal format): Lat. 34.559639° N, Long. -117.146371° W.

Universal Transverse Mercator: Zone 11

Name of nearest waterbody: Mojave River

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: N/A

Name of watershed or Hydrologic Unit Code (HUC): Mojave Watershed HUC 18090208

- 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.

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

Office (Desk) Determination. Date: 30 May 2014 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 no "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: linear feet: width (ft) and/or a
 - Non-wetland waters: linear feet: width (ft) and/or acres. Wetlands: acres.
- **c. Limits (boundaries) of jurisdiction** based on: <u>Pick List</u> 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 project area is located within the Mojave watershed (HUC 18090208) at the southern base of the Fairview Mountains and occurs in a rural area of Apple Valley in western San Bernardino County. Two earthern ephemeral

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.

drainages, Drainages A and B are ephemeral drainages within the project area that originate from the Fairview Mountains to the north. Drainage A flows north to south across the central portion of the study area and as Drainage A leaves the study area, surface flows are conveyed south across Waalew Road into residential areas. Surface waters then fan out and infiltrate shortly after entering residential areas. Drainage A does not possess a surface hydrologic connection to any downstream waters of the U.S. Drainage B flows from the northeast corner of the study area and generally directs flows to the southwest and discharges into an existing infiltration basin. Historically, Drainage B conveyed flows west to Drainage A; however, due to the recent construction of a facility, connection to Drainage A has been eliminated. Drainage Feature B does not possess a surface hydrologic connection to any downstream waters of the U.S. Based on the above information, Drainages A and B do not have a hydrologic connection to jurisdictional waters and are isolated. Additionally, there is no current, on-site surface water-related interstate commerce. Based on the above information, the Corps has determined that pursuant to the Supreme Court decision in the Solid Waste Authority of Northern Cook County vs. U.S. Army Corps of Engineers (SWANCC), these waters are not jurisdictional.

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:

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:	Pick	List
Drainage area:	Pick	List
Average annual rainfa	11:	inches
Average annual snow	all:	inches

(ii) Physical Characteristics:

(a) <u>Relationship with TNW:</u>
 ☐ Tributary flows directly into TNW.
 ☐ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are Pick List river miles from TNW.
Project waters are Pick List river miles from RPW.
Project waters are Pick List aerial (straight) miles from TNW.
Project waters are Pick List aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

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.

(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: feet Average depth: feet Average side slopes: Pick List.		
	Primary tributary substrate composition (check all that apply):		
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:.Presence of run/riffle/pool complexes. Explain:.Tributary geometry:Pick ListTributary gradient (approximate average slope):%		
 (c) <u>Flow:</u> Tributary provides for: Pick List Estimate average number of flow events in review area/year: Pick List Describe flow regime: . Other information on duration and volume: . 			
	Surface flow is: Pick List. Characteristics:		
	Subsurface flow: Pick List . Explain findings: Dye (or other) test performed: .		
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): the presence of litter and debris 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: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list):		
Che	mical Characteristics:		

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain:

Identify specific pollutants, if known:

(iii)

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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.

(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:
 - 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) <u>General Wetland Characteristics:</u> Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
- (b) <u>General Flow Relationship with Non-TNW</u>: Flow is: **Pick List**. Explain:

Surface flow is: Pick List Characteristics:

Subsurface flow: **Pick List**. Explain findings:

(c) <u>Wetland Adjacency Determination with Non-TNW:</u>

- Directly abutting
- □ Not directly abutting
 - Discrete wetland hydrologic connection. Explain:
 - Ecological connection. Explain:
 - Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW. Project waters are **Pick List** aerial (straight) miles from TNW. Flow is from: **Pick List**. Estimate approximate location of wetland as within the **Pick List** 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: . Identify specific pollutants, if known:

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

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. Explain:
- Habitat for:
 - Federally Listed species. Explain findings:
 - 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: **Pick List** Approximately () acres in total are being considered in the cumulative analysis. For each wetland, specify the following:

Directly abuts? (Y/N) Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

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:

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

- TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:
 TNWs: linear feet width (ft), Or, acres.
 Wetlands adjacent to TNWs: acres.
- 2. <u>RPWs that flow directly or indirectly into TNWs.</u>
 - 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:

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

acres.

Tributary waters: linear feet width (ft).

- Other non-wetland waters:
 - 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):

acres.

- Tributary waters: linear feet width (ft).
- 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.

- 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:

Provide acreage estimates for jurisdictional wetlands in the review area: 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: 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:

⁸See Footnote # 3.

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*.

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

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Tributary waters: linear feet width (ft).

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 <u>solely</u> 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 <u>sole</u> 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	width (ft).
Lakes/ponds: acres.			
Other non-wetland waters:	acres. List type	e of aquatic resou	urce: .
Wetlands: 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, width (ft).
 - Lakes/ponds: acres.
 - Other non-wetland waters: acres. List type of aquatic resource:
- Wetlands: acres.

SECTION IV: DATA SOURCES.

A.	SUP	PORTING 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):
	\bowtie	Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:
	\bowtie	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:
- USGS NHD data.
- USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: Apple Valley North, USGS 7.5-minute topographic quadrangle.

USDA Natural Resources Conservation Service Soil Survey. Citation: Web Soil Survey, http://websoilsurvey.nrcs.usda.gov/app/.

- National wetlands inventory map(s). Cite name:
- State/Local wetland inventory map(s):
- FEMA/FIRM maps:
- 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): Eagle Aerial, 2012 (provided by applicant), google Earth aerials 2003-2013, Corps Maps. or Other (Name & Date): Site Photographs provided by applicant in the JD report.
- Previous determination(s). File no. and date of response letter:
- Applicable/supporting case law:
- Applicable/supporting scientific literature:
- Other information (please specify): Delineation of Jurisdictional Waters, RBF Consulting (August 2013).

B. ADDITIONAL COMMENTS TO SUPPORT JD: N/A

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14725 Alton Parkway Irvine, CA 92618-2027 949.472.3505 949.472.8373 Fax www.rbf.com www.mbakercorp.com

September 16, 2013

U.S. ARMY CORPS OF ENGINEERS Los Angeles District Attn: Mr. Gerry Salas 915 Wilshire Blvd, Suite1101 Los Angeles, California 90017

SUBJECT: Approved Jurisdictional Determination Request for the Valley Crest and Yucca Reservoirs Project, located in the Town of Apple Valley, San Bernardino County, California

Dear Mr. Salas:

Enclosed please find one (1) copy of the Delineation of Jurisdictional Waters for the subject project. RBF Consulting (RBF) is seeking a U.S. Army Corps of Engineers' (Corps) concurrence of the delineation so it can be utilized for further environmental planning activities.

RBF has preliminarily determined that no jurisdictional features are located within the boundaries of the project site. On-site drainages documented during the delineation did not exhibit a surface water connection to a river, lake, ocean, or other body of water. Due to the absence of a hydrological connection to any off-site waters or an apparent interstate or foreign commerce connection it is our professional opinion that they would be considered intrastate isolated waters.

The enclosed document includes our delineation report, documentation, and jurisdictional determination forms. The required forms and exhibits have been prepared to aid in your review. Please do not hesitate to contact me at (949) 855-3687 or at <u>Rbeck@rbf.com</u> should you have any questions or require further information.

Sincerely,

chand Back

Richard Beck, PWS Vice President Natural Resources/Regulatory Permitting



14725 Alton Parkway Irvine, CA 92618-2027 949.472.3505 949.472.8373 Fax www.rbf.com www.mbakercorp.com

August 8, 2013

Golden State Water Company

Attention: Ms. Stacey Roberts 13608 Hitt Road Apple Valley, California 92308

SUBJECT: Delineation of Jurisdictional Waters for the Valley Crest and Yucca Reservoirs Project, Town of Apple Valley, San Bernardino County, California

Dear Ms. Roberts:

RBF Consulting (RBF) conducted a delineation of jurisdictional waters for the Valley Crest and Yucca Reservoirs Project located in the Town of Apple Valley, San Bernardino County, California. More specifically, the project site is depicted on the Apple Valley North United States Geological Survey (USGS) 7.5-minute quadrangle within Section 36 of Township 6 north, Range 3 west (please refer to *Exhibits 1 - 2*). The field work for this delineation was conducted on July 25, 2013 by RBF Professional Wetland Scientist, Wesley Salter, and regulatory analyst, Thomas C. Millington, to document baseline conditions and delineate the jurisdictional authority of the U.S. Army Corps of Engineers (Corps), the Lahontan Regional Water Quality Control Board's (RWQCB), and the California Department of Fish and Wildlife (CDFW).

Project Description

Golden State Water Company (GSWC) is a public utility that provides service to communities throughout California, including the Town of Apple Valley. In order to meet increases in demand and improve service to surrounding residents, GSWC is proposing to construct two 500,000 gallon above ground reservoir tanks and associated underground transmission lines (refer to Exhibit 3, *Depiction of Proposed Project*). The first reservoir will be located approximately 0.10-miles north of the Sunset Hills Memorial Park and Mortuary (SHMPM) and the second reservoir will be located approximately 0.07-mile to the east of the terminus of Valley Crest Terrace Road. Each proposed reservoir will be 24 feet in height and 68 feet in diameter. Each pad site will be 200 feet by 200 feet in area protected by an eight foot block wall.

Methodology

RBF's work effort included conducting a thorough literature review and field survey in order to document the jurisdictional authority of the Corps, RWQCB, and CDFW pursuant to Sections 401 and 404 of the Federal Clean Water Act, the California Porter-Cologne Water Quality Control Act, and Section 1600 of the Fish and Game Code. Jurisdictional features identified on aerial photographs were field verified and recorded onto a base map at a scale of 1" = 100' using topographic contours and visible landmarks as guidelines. Data points were obtained with a Garmin 62 Ground Positioning System (GPS) Map62 and then transferred via USB port as a .shp file and added to the project's jurisdictional map using ESRI ArcInfo Version 10.

Golden State Water Company Ms. Stacey Roberts Page 2

Site Conditions

The project site is located within the Mojave watershed (Hydrologic Unit Code 18090208) at the southern base of the Fairview Mountains and occurs in a rural area of Apple Valley in western San Bernardino County. Onsite elevation ranges from 3,125 to 3,330 feet above mean sea level and generally slopes to the southwest. According to the USDA Natural Resources Conservation Service Soil Survey, surface soils on and adjacent to the project site include Cajon Sand (2-9 percent slopes), Wasco Sandy Loam (2-5 percent slopes), Rock Outcrop-Lithic Torriorthents Complex (15-50 percent slopes), and Dune Land (please refer to Exhibit 4, *Soils Map*).

Two (2) earthen, ephemeral drainages are located within the boundaries of the study area. These drainage features originate from the Fairview Mountain to the north and are expected to flow only during significant storm events. The first drainage, identified as Drainage A, is owned and maintained by the San Bernardino County Flood Control District and flows north to south across the central portion of the study area. Substrate within the channel bottom is loose and composed of fine sediments and gravel. No surface water was present within Drainage A; however, the following indicators of surface hydrology were observed: shelving; scour; and sediment deposits. Drainage A is relatively unvegetated and ranges from 3 to 85 feet in width. Plant species occurring within Drainage A include creosote (*Larrea tridentata*), California buckwheat (*Eriogonum fasciculatum*), coyote melon (*Cucurbita palmata*), California croton (*Croton californicus*), thick-leaved ground-cherry (*Physalis crassifolia*), Mexican bladder sage (*Scutellaria mexicana*), brittlebush (*Encelia farinosa*), sweetbush (*Bebbia juncea*), skeleton weed (*Eriogonum deflexum*), and burrobrush (*Ambrosia salsola*). No riparian plant species were observed.

A second drainage, identified as Drainage B, flows from the northeast corner of the study area and ranges from 1 to 4 feet in width. Drainage B generally directs flows to the southwest and discharges into an existing infiltration basin located immediately to the north of the SHMPM. Historically, Drainage B conveyed flows west to Drainage A; however, due to the construction of the SHMPM and infiltration basin, fluvial connection to Drainage A has been eliminated. Indicators of surface hydrology within Drainage B included sediment deposits and scour. Substrate within the channel bottom is loose and composed of fine sediments, cobble, and some boulders. Plant species occurring within Drainage B include creosote, cheesebush, skeleton weed, bladder sage, California croton, California buckwheat, sweetbush, desert tea (*Ephedra californica*), and desert thorn (*Lycium brevipes*). No riparian plant species or surface water was observed.

Jurisdictional Analysis

As Drainage A leaves the project site, surface flows are conveyed south across Waalew Road into residential areas and eventually fan out and infiltrate. Drainage B conveys flows to an existing infiltration basin and no longer exhibits a fluvial connection to Drainage A. Both drainage features exhibited evidence of an ordinary high water mark; however, these features do not possess a surface hydrologic connection to any traditional navigable water (TNW) or tributary to a TNW. Drainage A and Drainage B as identified on Exhibit 5, *Jurisdictional Map*, are intrastate isolated waters with no apparent interstate or foreign commerce connection. As such, these features are not currently regulated by the Corps.

Although they lack federal CWA protection, Drainage A and Drainage B qualify as "Waters of the State" and fall under the regulatory authority of the RWQCB and CDFW. Approximately 3.02-acres of RWQCB/CDFW jurisdiction is located within the boundaries of the study area (refer to Exhibit 5, *Jurisdictional Map*). No wetland features or riparian vegetation occur within the study area.

Golden State Water Company Ms. Stacey Roberts Page 3

Conclusion and Recommendations

Approximately 3.03-acres of surface waters are located within the boundaries of the project site. The surface waters/streambeds would fall under the jurisdiction of the RWQCB and CDFW. Based on a detailed review of current site conditions and project improvements, approximately 0.035-acre of RWQCB and CDFW jurisdiction would be impacted (0.005-acre temporary / 0.03-acre permanent) by the proposed project. Impacts to jurisdictional areas would occur due to the installation of underground transmission lines and construction of a 200' x 200' pad at the eastern reservoir location. GSWC will need to obtain the following permits prior to construction within jurisdictional areas: RWQCB Report of Waste Discharge; and, CDFW Section 1602 Streambed Alteration Agreement. Regulatory approval from the Corps will not be required; however, processing of a Jurisdictional Determination through the Corps is recommended.

Please do not hesitate to contact me at 949/855-6387 or <u>rbeck@rbf.com</u> should you have any questions or require further information.

Sincerely,

ichand Back

Richard Beck Director of Regulatory Services Natural Resources/Regulatory Permitting

Appendices:

- A. Project Exhibits
 - 1. Regional Vicinity
 - 2. Site Vicinity
 - 3. Depiction of Proposed Project
 - 4. Soils Map
 - 5. Jurisdictional Map
- B. Site Photographs

In Millington

Thomas C. Millington Regulatory Analyst Natural Resources/Regulatory Permitting

Appendix A Project Exhibits







Exhibit 2

4/5/2013 JN Mdats1722204/G/S/WC Apple Valley tank site/02 Local Vicinity map.mxd



Exhibit 3





Source: Eagle Aerial -- 2012

Drainage Feature B

Legend		
А	Drainage Feature	
	Pipeline Alignment	
	RWQCB/CDFW Jurisdiction	
03-Ac	RWQCB/CDFW Jurisdiction (Permanent Impact)	
.005 Ac.	RWQCB/CDFW Jurisdiction (Temporary Impact)	
2.99 Ac.	RWQCB/CDFW Jurisdiction	
	Reservoir Sites	
	Boundary	

VALLEY CREST AND YUCCA RESERVOIRS

Exhibit 5

Appendix B Site Photographs



Drainage A at the northern boundary of the study area.



Drainage A in the central portion of the study area.



Drainage A at the southern boundary of the study area from Waalew Road.



Residential areas to the south of Waalew Road and discharge location of Drainage A.



Delineation of Jurisdictional Waters



Drainage B within the northeast portion of the study area.



Infiltration basin located at the terminus of Drainage B.



Sediment deposits within Drainage B.



Central portion of Drainage B.

Valley Crest and Yucca Reservoirs Project Site Photographs



Delineation of Jurisdictional Waters