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.

SEC	CTION I: BACKGROUND INFORMATION							
	 REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): June 5, 2013 DISTRICT OFFICE, FILE NAME, AND NUMBER: Los Angeles District, Soda Mountain Solar Project, SPL-2010-01042-SLP 							
	State: California County/parish/borough: San Bernardino City: near Baker							
	Center coordinates of site (lat/long in degree decimal format): Lat. 35.156433° N, Long116.180909° W.							
	Name of nearest waterbody: unnamed tributaries to Soda dry lake Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: N/A							
	Name of watershed or Hydrologic Unit Code (HUC): Soda dry lake subwatershed							
	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: June 5, 2013							
	Field Determination. Date(s):							
SEC	CTION II: SUMMARY OF FINDINGS							
	RHA SECTION 10 DETERMINATION OF JURISDICTION.							
The	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the							
	ew 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.							
The	re 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):							
	TNWs, including territorial seas							
	 □ Wetlands adjacent to TNWs □ Relatively permanent waters¹ (RPWs) that flow directly or indirectly into TNWs 							
	Non-RPWs that flow directly or indirectly into TNWs (no adjacent wetlands)							
	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs							
	Wetlands adjacent to but not directly abutting RPWs (with a surface connection) that flow directly into TNWs							
	Relatively permanent waters¹ (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs (no adjacent wetlands) Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs (with a surface connection) that flow directly 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							
	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 acres.							
	Wetlands: acres.							
	c. Limits (boundaries) of jurisdiction based on: Pick List							
	Elevation of established OHWM (if known):							
	2. Non-regulated waters/wetlands (check if applicable): ² Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not							
	jurisdictional. Explain: The subject project drainages (North Array, East Array, South Array, North Wash, East Wash, and							
	South Wash areas) are situated within the Mojave desert, surrounded by the Soda Mountains. Drainage flows in this area							
	extend both northeast (Basin A, consisting of North Array, East Array, North Wash, East Wash) and southeast (Basin B,							
	consisting of South Array, South Wash) into Soda dry lake. The width of the ephemeral washes generally range 16-29 feet in							

width, with the total linear feet of drainages within the three Array drainage areas ranging 53,858-248,045 linear feet. Acreages of the drainage areas (active floodplain) within the Wash and Arrary areas were more accurately calculated using GIS data and polygons. The subject project drainages flow only in response to storm events, with average regional annual

¹ 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).

Supporting documentation is presented in Section III.F.

precipitation ranging 3-5 inches. Within the project site the OHWM is identified by bed and banks and changes in soil character and vegetation. Onsite total acreage of the Array and Wash area drainages consist of approximately 411 acres. Drainages situated within the Basin B area join approximately 1,200 feet south of the project site, where surface drainage would have to flow approximately 3.7 miles southeast, ending at Soda dry lake. Similarly, flows from the project drainages situated within the Basin A area would have to flow approximately 5 miles northeast, also ending at Soda dry lake. The downstream hydrological terminus of all project drainages is Soda dry lake, an intrastate dry lake.

Soda dry lake is the elevation low point for drainages that fall within the Soda Lake Valley Groundwater Basin. It serves as the terminus for unnamed project drainages, as well as for all other waters within this isolated intermontane area. All surface flows that enter Soda dry lake either primarily evaporate or percolate into the groundwater table. Soda dry lake is located past the terminus of the Mojave River. Currently, there are no published commercial uses of the project drainages surface waters. Published uses for Soda Dry Lake are limited to few non-surface water uses, including (historic) salt mining and hiking. During record rainfall events, rare flows have been document to extend from Soda dry lake further northward to Silver dry lake (intrastate, isolated dry lake with no distributaries). Nonetheless, published uses for Silver Dry Lake are also limited to few non-surface water uses, including (historic) landing strips.

Soda dry lake, as the essential terminus for all project drainages, is NOT a TNW. Moreover, Soda dry lake is NOT an (a)(3) water as defined by 33 CFR 328.3. Soda dry lake does NOT meet criteria (a)(3)(i-iii), as it: i) DOES NOT have use for surface water recreation or other purposes by foreign or interstate travelers, ii) DOES NOT have harvesting activities of fish or shellfish that may be sold in interstate or foreign commerce, and iii) DOES NOT have surface water industrial usage by industries in interstate commerce. Lastly, the subject project drainages are NOT a (a)(3) waters as defined by 33 CFR 328.3. The above is based upon the URS jurisdictional delineation report submitted by Panorama Environmental Inc. (dated November 2009), additional jurisdictional delineation information submitted by Panorama Environmental Inc. (dated November 2009), additional jurisdictional delineation information submitted by Panorama Environmental Inc. (dated April 2012 and January 2013), the California Groundwater Bulletin 118: Soda Lake Valley Groundwater Basin (last updated February 27, 2004), the Summary of the Evolution of the Mojave River (David Miller, USGS 2005), and the review of aerial photographs (Google Earth) that also did not show surface water usage of the project drainages or the dry lake terminus. Therefore, since Soda dry lake is an intrastate isolated water without a surface water connection to commerce, the subject project drainages as part of the same overall watershed system are also isolated and additionally have no nexus to commerce.

Based on the above information, the Corps concludes the unnamed drainages within the six project areas designated as North Array, East Array, South Array, North Wash, East Wash, and South Wash (isolated non-RPWs) are NONJURISDICTIONAL waters of the United States, since the waters are NOT tributary to either a TNW or an (a)(3) water and are NOT (a)(3) waters themselves. The Corps makes such a conclusion since the waters are tributary to an isolated, intrastate dry lake.

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 waterbody³ 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 rainfall: inches Average annual snowfall: inches (ii) Physical Characteristics: (a) Relationship with TNW: 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.

³ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

	Project waters cross or serve as state boundaries. Explain: .						
	Identify flow route to TNW^4 : . 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): Average width: feet Average depth: feet Average side slopes: Pick List.						
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:						
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Presence of run/riffle/pool complexes. Explain: Tributary geometry: Pick List Tributary gradient (approximate average slope): %						
(c)	Flow: 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 ⁵ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. ⁶ 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:						
Che	emical Characteristics:						

(iii)

⁴ 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.

⁵A 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. ⁶Ibid.

	Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristi Explain:								
Identify specific pollutants, if known:									
	(iv)	Bio	Wetland fringe. Characteri Habitat for: Federally Listed species Fish/spawn areas. Expla	eristics (type, average width stics: Explain findings: in findings: sensitive species. Explain fi): .				
2.	Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW								
	(i)		rsical Characteristics: General Wetland Character Properties: Wetland size: acre Wetland type. Explain: Wetland quality. Expla Project wetlands cross or se	es	olain: .				
		(b)	General Flow Relationship Flow is: Pick List . Explain						
			Surface flow is: Pick List Characteristics:						
			Subsurface flow: Pick List Dye (or other) test p						
		(c)	Wetland Adjacency Determ Directly abutting Not directly abutting Discrete wetland hy Ecological connecti	drologic connection. Expla	in: .				
		(d)	Flow is from: Pick List.						
	(ii) Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general water characteristics; etc.). Explain: Identify specific pollutants, if known:								
	(iii)	Bio	Riparian buffer. Characterive Vegetation type/percent control Habitat for: Federally Listed species Fish/spawn areas. Explation Other environmentally-	stics (type, average width): ver. Explain: Explain findings: in findings: sensitive species. Explain fi					
3.	Cha	All	veristics of all wetlands adja wetland(s) being considered proximately () acres in		Pick List				
		For	each wetland, specify the following	llowing:					
			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):

1.	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. 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					
	Provide estimates for jurisdictional waters in the review area (check all that apply):					
	☐ Tributary waters: linear feet width (ft).					
	Other non-wetland waters: acres.					
	Identify type(s) of waters:					

3.	Non-RPWs ⁷ 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 width (ft). 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 i 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.	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).
SUC 	CLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 9 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:
Ide	ntify water body and summarize rationale supporting determination:
	vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .

E.

 ⁷See Footnote # 3.
 ⁸ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
 ⁹ 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.

	☐ We	etlands:	acres.						
F.	☐ If W Re	potential we retland Delin eview area in Prior to th "Migrator detres do not	etlands were asse leation Manual a locluded isolated ne Jan 2001 Supery Bird Rule" (M	ssed within the and/or appropriate waters with no streme Court decided. The strength of the s	te Regional Suppubstantial nexus sion in "SWANC"	e areas did no lements. to interstate (c," the review	t meet the criteri or foreign) comn area would hav	a in the 1987 Corp	ased <u>solely</u> on the
	factors judgme No La Ot	(i.e., presendent (check all	ce of migratory l l that apply): waters (i.e., river acres.	oirds, presence of s, streams):		width (ft).		basis of jurisdictic agriculture), using	
	a findir No La	ng is required	d for jurisdiction waters (i.e., river acres.	(check all that a s, streams):		width (ft).	not meet the "Sig	nificant Nexus" st	andard, where such
	SUPPO: and req and req Pa In Ap	RTING DA quested, appr laps, plans, p anorama Env ac. (dated No pril 2012 and ata sheets pro Office cond Office does	opriately referer olots or plat subnitronmental Inc. vember 2009); at d January 2013) epared/submitted curs with data shand concur with	nece sources belowitted by or on be ditted November dittional jurisdictional jurisdictional details are the source of the source	w): ehalf of the applier 2009); URS hy ctional delineation f of the applicant report.	cant/consultar drology study on information	nt: URS jurisdict		
	Cc U.	orps navigab S. Geologica USGS NHI USGS 8 an S. Geologica SDA Natura ational wetla ate/Local we EMA/FIRM 00-year Flood	ad 12 digit HUC al Survey map(s I Resources Con ands inventory metland inventory maps: dplain Elevation	maps.). Cite scale & q servation Serviciap(s). Cite nammap(s): is: (Nation	e Soil Survey. C		of 1929)		
	Pr Pr Ap Ap On Fee	notographs: [or] revious deter pplicable/sup pplicable/sup ther informatebruary 27, 2	Aerial (Name ✓ Other (Name mination(s). Fil poorting case lav poorting scientifition (please spec	e & Date): & Date): e no. and date of v: ic literature: ify): California	f response letter: Groundwater Bu	SPL-2006000	242-WJC, dated da Lake Valley (2/9/2006. Groundwater Basin 2005), and the rev	

B. ADDITIONAL COMMENTS TO SUPPORT JD: