Appendix D
(Available on City website)

Hydrology and Hydraulic Study
Phase I & 2
January 2022

Hydrology and Water Quality CEQA Analysis Memo
January 2022

DUDEK
78-075 MAIN STREET, SUITE G-203
LA QUINTA, CALIFORNIA 92253
T 760.341.6660 F 760.346.6118

MEMORANDUM

To:	Patti Murphy, Desert Peak Energy Center LLC
From:	Kipp Vilker, Dudek
Subject:	Desert Peak Energy Center - Hydrology and Water Quality CEQA Analysis
Date:	January 28, 2022
cc:	Jennifer Sucha, Dudek

1 Introduction

This memorandum analyzes potential hydrology and water quality impacts of the proposed Desert Peak Energy Center (Project) and should be used to inform the California Environmental Quality Act Appendix G Hydrology and Water Quality section. This memorandum presents the environmental setting, impacts of the proposed Project on the environment, and proposed measures to mitigate any identified significant impacts. Information used to prepare this section is derived from the Hydrology and Hydraulic Study (Appendix A) and Preliminary Grading and Drainage Plans (Appendix B) prepared by Dudek. In addition, publicly available information was gathered to supplement the information found in Appendices A and B, primarily with regard to groundwater and water quality.

2 Environmental Setting

2.1 Regional Watersheds

The Project is located within the jurisdiction of the Colorado River Regional Water Quality Control Board (RWQCB), which administers the Water Quality Control Plan for the Colorado River Basin (Region 7) (Basin Plan) and other water quality programs for the Colorado River Basin. The Colorado River Basin region covers approximately 20,000 square miles and includes all of Imperial County and portions of the Counties of San Bernardino, Riverside, and San Diego (CRB RWQCB 2019). The Colorado River is the most important waterway in the region and supplies water for use within the region and elsewhere. Regional drainage waters resulting from Colorado River diversions and use, and which do not return to the Colorado River, drain into the Salton Sea. The portion of the region that does not drain into the Colorado River is referred to as the Colorado River Basin (West). The largest body of water in the Colorado River Basin (West) is the Salton Sea, which is replenished principally by irrigation drainage and stormwater. Flows through the Project Site end up in the Whitewater River and ultimately the Salton Sea.

Table 1 shows the watersheds that encompass the Project Site as designated by the U.S. Geological Survey Watershed Boundary Dataset and the Basin Plan. These watersheds generally constitute the geographic basis around which many surface water quality problems and goals/objectives are defined in the Basin Plan. The Project

Site is within the Whitewater hydrologic unit (Basin No. 719), the Coachella hydrologic area (Basin No. 719.40), and the 115-square-mile Mission Creek hydrologic subarea (Basin No. 719.42) (see Figure 1).

Table 1. Watershed Designations by Agency/Source

Agency/Source	HUC/Basin No.	Analysis Scale	Name	Size (Sq. Mi.)
USGS Watershed Boundary Dataset	6/181002	Basin	Salton Sea	8,220
	8/18100201	Subbasin	Whitewater River	1,501
	10/1810020103	Watershed	Headwaters Whitewater River	181
	12/181002010304	Subwatersheds	Garnet Wash	21
Water Quality Control Plan for the Colorado River Basin (Region 7)	7	RWQCB Region	Colorado River	—
	719	Hydrologic Unit	Whitewater	—
	719.40	Hydrologic Area	Coachella	—
	719.42	Hydrologic Subarea	Mission Creek	115

Sources: USGS 2021; CRB RWQCB 2019.
Notes: HUC = hydrologic unit code; sq. mi. = square miles; USGS = U.S. Geological Survey; RWQCB = Regional Water Quality Control Board.

2.2 Topography and Drainage Patterns

Regionally, the Project is located within the Colorado Desert, in the northwestern end of the Coachella Valley, which is generally bounded by the San Bernardino Mountains and Little San Bernardino Mountains to the north, the San Jacinto and Santa Rosa Mountains to the south, and the Salton Sea and Imperial Valley to the east. The site is subject to storm flows due to its location on an active desert alluvial fan and near a concentrated flow path. The site is relatively flat; however, elevations gradually slope from northwest to southeast. Elevation within the proposed Project area ranges from approximately 1,050 feet above mean sea level (amsl) in the northwest corner of the site to approximately 820 feet amsl in the southeast corner of the site.

The existing Project Site is characterized as an active wind turbine farm with associated development (i.e., concrete pads, wind turbines, storage yard, and associated dirt roads), with the remaining portions containing native desert scrub vegetation. There are residential homes and part of the Southern California Edison Devers Substation, as well as native desert vegetation, immediately adjacent to the Project Site. Existing adjacent land uses include a mix of associated wind turbine farms and vacant lands to the north, east, south, and west.

The site is subject to storm flows due to its location on an active desert alluvial fan and near a concentrated flow path. Four watersheds totaling 13.2 square miles contribute flow to the site and all four are within the Whitewater watershed. Southeasterly flowing intermittent streams and washes fan out from the San Bernardino Mountains in the northwest and flow through the site. The National Hydrography Dataset (USGS 2021) depicts one stream within the northern portion of the Site, bisecting the Site from northwest to southeast. The National Wetlands Inventory (USFWS 2021) generally depicts the same riverine feature. The National Hydrography Dataset (USGS 2021) depicts two streams within the southern portion of the Site, one stream bisecting the southwestern corner and one continuing from the northern portion of the Site and bisecting the northwestern and southeastern portions of the southern portion of the Site. The National Wetland Inventory (USFWS 2021) depicts the same riverine features and an additional riverine feature continuing from the northern portion of the Site and bisecting the southern portion of the Site north to south.

The drainages contributing flows to the property are braided, ephemeral washes that originate from precipitation within the higher elevation peaks in the northwest. The average slope of the contributing watershed flow paths is approximately 5% carrying channelized or sheet flow. Some of the drainages within the Project area either show evidence of bed and bank or ephemeral flow, while others are more characteristic of sheet flow. Stormwater runoff on site is currently unmanaged and flow through the site continues southeast until the confluence with Garnet Wash, which flows 0.3 miles south under Interstate 10 through a series of box culverts, continuing 0.5 miles southeast until its confluence with the Whitewater River. The Whitewater River continues approximately 39 miles southeast ultimately terminating into the Salton Sea.

2.3 Flood Hazards

Federal Emergency Management Agency Special Flood Hazard Areas

Flood zones identified on Federal Emergency Management Agency Flood Insurance Rate Maps are identified as Special Flood Hazard Areas and "other areas of flood hazard." A Special Flood Hazard Area is defined as an area that will be inundated by a flood event having a 1% chance of being equaled or exceeded in any given year. The 1% annual-chance flood is also referred to as the base flood or 100-year flood, and is the national standard used by all federal agencies for the purposes of requiring the purchase of flood insurance and regulating new development. Federal Emergency Management Agency defines "other areas of flood hazard" as including areas with a 0.2% annual chance of flooding (i.e., the 500-year flood zone), and areas with reduced risk due to a levee. Special Flood Hazard Areas are considered high-risk flood areas, whereas other areas of flood hazard are considered low- to moderate-risk areas.

The proposed Project is located in Federal Emergency Management Agency Zone X, an area of minimal flood hazard (FEMA 2022). According to the Flood Insurance Rate Maps, the Project area is approximately 1.2 miles north of the boundary of a Special Flood Hazard Area Zone A area, which can be attributed to the Whitewater River.

Sea-Level Rise, Tsunami Inundation, and Seiche

The Project Site is not subject to sea-level rise, tsunami inundation, or seiche wave. The preconditions necessary for a project to be at risk of such hazards are that it be located within a reasonable distance and elevation relative to a coastline (for sea-level rise or seiche) or large body of water (for seiche waves). The Project is located at 820 to 1,050 feet amsl in elevation and is not next to a large water body subject to seiche.

2.4 Groundwater Resources

Groundwater Basin Status

The proposed Project is located within the Mission Creek Subbasin (California Department of Water Resources [DWR] Basin No. 7-021.02) and the Indio Subbasin (DWR Basin No. 7-021.01) of the Coachella Valley Groundwater Basin as designated by DWR (Figure 1; DWR 2022a). According to the 2019 Sustainable Groundwater Management Act Basin Prioritization (finalized in May 2020), both subbasins were designated as medium priority (DWR 2022a). The medium-priority designation for both subbasins is due primarily to the high number of public supply wells, the high population growth within the subbasin, and the high reliance of water supply sourced from groundwater. The medium-priority designation means it is subject to the statewide

requirements of the 2014 Sustainable Groundwater Management Act. Local public agencies and groundwater sustainability agencies are required to develop and implement groundwater sustainability plans or alternatives to groundwater sustainability plans for groundwater basins designated by DWR as medium and high priority. Alternative plans that were designed to be functionally equivalent to a groundwater sustainability plans were completed for the Mission Creek and Indio Subbasins.

The Project area is within the service area of the Mission Springs Water District (MSWD), which provides domestic water to the Desert Hot Springs area using 1.25 million feet of pipelines, 15 water wells, and 24 reservoirs. The MSWD has approximately 12,810 connections and serves an area of 135 square miles, which includes the City of Desert Hot Springs, 10 smaller communities in Riverside County, and communities in the City of Palm Springs. The MSWD's water supply source is 100% groundwater produced from MSWD-owned and operated wells (Psomas 2016).

An updated Urban Water Management Plan (UWMP) was prepared in June 2016 (Psomas 2016) for the MSWD through the year 2015. MSWD currently receives 100% of its water supply from groundwater produced from within the Coachella Valley Groundwater Basin, which underlies the MSWD water service area. MSWD primarily produces groundwater from the Mission Creek Subbasin via 10 active wells. To a lesser extent, the MSWD also produces groundwater from the San Gorgonio Pass Subbasin via four active wells and from the Garnet Hill Subbasin via one active well (Psomas 2016).

As described in its 2015 UWMP, MSWD has projected supply surpluses for normal, dry-year, and multi-year demand scenarios (Psomas 2016) and water supplies are available that could serve the Project under all planning scenarios.

Local Groundwater Levels

The historical fluctuations of groundwater levels in the Indio Subbasin indicate a steady decline in the levels throughout the subbasin prior to 1949 (Psomas 2016). Water levels in the deeper aquifers rose from 1950 to 1980 with the use of Colorado River water from the Coachella Canal in lieu of groundwater extraction. However, since the early 1980s, water levels in the area declined through 2012, partly due to increasing urbanization and groundwater usage (CVWD 2012). DWR has no documented groundwater level declines within the Indio Subbasin as part of its prioritization process (DWR 2020). Within a U.S. Geological Survey well (335348116352703) located approximately 1.6 miles southwest of the Project Site within the Indio Subbasin, the groundwater level has declined by 250 feet from 500 feet amsl in 1979 to 250 amsl feet in 2020 (DWR 2022b).

Groundwater well data from the Project Site was unavailable. However, data from DWR's Sustainable Groundwater Management Act Data Viewer indicates that the groundwater level at the site was approximately 300 to 400 feet below ground surface in 2021 (DWR 2022b).

2.5 Water Quality

Water quality in surface and groundwater bodies is regulated by the State Water Resources Control Board and RWQCBs. The Project Site is under the jurisdiction of the Colorado River Basin RWQCB, which is responsible for the implementation of state and federal water quality protection statutes, regulations, and policies in the vicinity of the Project Site. The Colorado River Basin RWQCB implements the Basin Plan, a master policy document for managing water quality in the region (CRB RWQCB 2019).

One water body within the watershed which is downstream of the Project area is designated as "water quality-limited" for water quality impairments under the federal Clean Water Act (CWA) Section 303(d) (Table 2). Being water quality-limited means that a water body is "not reasonably expected to attain or maintain water quality standards" without additional regulation. The law requires that the U.S. Environmental Protection Agency develop total maximum daily loads[1] for each impaired water body in the nation. The most recently approved Section 303(d) List of Water Quality Limited Segments, as listed in the Basin Plan (SWRCB 2019), lists the Coachella Valley Stormwater Channel as an impaired water body under Section 303(d) of the CWA.

As indicated in Table 2, the Coachella Valley Stormwater Channel is identified as impaired for dichlorodiphenyltrichloroethane, dieldrin, polychlorinated biphenyls, pathogens, and toxaphene. Polychlorinated biphenyls were once widely used as dielectric and coolant fluids in electrical apparatus and are a persistent organic pollutant that has caused adverse impacts on fish and wildlife.

Based on the sources of the pollutants listed as impaired, the Project Site is not currently or expected to be a potential contributor to a CWA Section 303(d) impairment.

Table 2. CWA Section 303(d) Impairments

Name	Pollutant/Stressor	Potential Sources	TMDL Status	Year
Coachella Valley Stormwater Channel	DDT	Source Unknown	Scheduled Completion Date	2021
	Dieldrin	Source Unknown	Scheduled Completion Date	2021
	PCBs	Source Unknown	Scheduled Completion Date	2021
	Pathogens	Source Unknown	Scheduled Completion Date	2010
	Toxaphene	Source Unknown	Scheduled Completion Date	2019

Source: SWRCB 2019.
Notes: CWA = Clean Water Act; TMDL = total maximum daily load; DDT = Dichlorodiphenyltrichloroethane; PCBs = polychlorinated biphenyls.

3 Impacts

3.1 Methods of Analysis

Impacts with respect to hydrology and water quality are assessed by comparing conditions expected under the proposed Project to the existing environmental setting described above. Post-Project hydrology is assessed using the Hydrology and Hydraulics report prepared for the proposed Project by the applicant's consultant, included as Appendix A, as well as Preliminary Grading and Drainage Plans included as Appendix B. The analysis considers impacts on hydrology, water quality, flooding, and groundwater resources in the context of broader issues and concerns affecting the region. The study area for surface water hydrology is the watersheds contributing flow to the proposed Project within the Garnet Wash subwatershed (see Table 1), and the study area for groundwater resources is the Mission Creek and Indio Subbasins of the Coachella Valley Groundwater Basin.

[1] A total maximum daily load specifies the maximum amount of a pollutant a water body can receive and still meet water quality standards. A total maximum daily load may also include a plan for bringing an impaired water body back within standards.

3.2 Thresholds of Significance

The significance criteria used to evaluate the Project impacts to hydrology and water quality are based on Appendix G of the California Environmental Quality Act Guidelines. According to Appendix G, a significant impact would occur if development of the proposed Project would do any of the following:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
  - result in substantial erosion or siltation on or off site;
  - substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
  - create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
  - impede or redirect flood flows.
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

3.3 Impacts and Mitigation Measures

Impact 3.3-1: Would the Project violate water quality standards or waste discharge requirements or degrade surface or ground water quality?

Construction

The proposed Project would involve up to approximately 66 acres of soil disturbance. The southern portion of the Project is anticipated to begin as early as 2 years after the commencement of northern portion.

Although the Project Site is fairly level, grading would be required throughout most of the site, especially for the construction of roads, on-site substation, the battery enclosures, and inverter pads. This would be accomplished with scrapers, graders, water trucks, dozers, and compaction equipment. The enclosure modules would be off-loaded and installed using cranes, boom trucks, forklifts, rubber-tired loaders, rubber-tired backhoes, and other small- to medium-sized construction equipment, as needed. Construction equipment would be delivered to the site on low-bed trucks unless the equipment can be driven to the site.

Vegetation on the site would be modified only where necessary. Vegetation would be removed where gravel roads would be constructed, where fill would be placed from grading operations, where structures are to be constructed, and where gen-tie poles would be installed. At locations where gen-tie poles would be installed, minor cuts may be required where the foundation would be driven. Minor earthwork would also occur to install aggregate base access

roads and gen-tie line maintenance roads. The surfaces of the roads would be at grade to allow water to sheet flow across the site as it currently does. Throughout the remainder of the developed area on the Project Site, the vegetation root mass would generally be left in place to help maintain existing drainage patterns on a micro level and to assist in erosion control. During construction of the facility, it is expected that most of the vegetation would be cut, trimmed, or flattened as necessary but left otherwise undisturbed so that re-establishment is possible.

During this period, soil erosion may result in discharges of sediment-laden stormwater runoff into nearby receiving waters. Existing runoff from the Project Site may eventually directly or indirectly flow to the Whitewater River and ultimately the Salton Sea.

The primary potential pollutant associated with construction activity is sediment (i.e., high turbidity) generated from site preparation and grading activities. Although Coachella Valley Stormwater Channel is not listed under CWA Section 303(d) as impaired for sedimentation/siltation, a measurable increase in sedimentation/siltation from construction activities on the site could temporarily violate Basin Plan objectives, if not properly controlled. In addition to sediment, other pollutants associated with construction activity could include heavy metals, oil/grease, fuels, trash, and other pollutants from accidental spills or releases of refuse, paints, solvents, sanitary wastes, and concrete curing compounds. Without adequate precautions, construction activities could generate pollutants and/or mobilize sediment such that it contributes to water quality degradation of receiving waters and/or violates Basin Plan objectives.

However, compliance with the Construction General Permit and the approval of the Grading and Drainage Plans would require implementation of a Stormwater Pollution Prevention Plan (SWPPP) to address potential construction-related impacts on water quality. The SWPPP must specify the location, type, and maintenance requirements for Best Management Practices (BMPs) necessary to prevent stormwater runoff from carrying construction-related pollutants into the Coachella Valley Stormwater Channel and/or the underlying groundwater basin. BMPs must be implemented to address potential release of fuels, oil, and/or lubricants from construction vehicles and equipment (e.g., drip pans, secondary containment, washing stations); release of sediment from material stockpiles and other construction-related excavations (e.g., sediment barriers, soil binders); and other construction-related activities with the potential to adversely affect water quality. The SWPPP must also include a construction site monitoring program that identifies specific requirements for dry weather visual observations of pollutants at all discharge locations, and any additional measures, as appropriate.

SWPPPs must be developed and implemented by a Construction General Permit Qualified SWPPP Developer (QSD)/Qualified SWPPP Practitioner (QSP). The QSD/QSP is tasked with determining the receiving water risks (including beneficial uses and CWA Section 303d impairments), monitoring site activities that could pose risks to water quality, and developing a comprehensive strategy to control construction-related pollutant loads in site runoff. Minimum standard BMPs include erosion and sediment controls; site management/housekeeping/waste management; management of non-stormwater discharges; run-on and runoff controls; and BMP inspection, maintenance, and repair activities. A rain event action plan must also be prepared by the QSD/QSP to outline the procedures to prepare the construction site for rain events and minimize the potential release of construction-related contaminants. It is at the discretion of the QSD/QSP to use as many BMPs as available that would successfully protect on- and off-site resources from erosion, sedimentation, and pollution.

The following list includes examples of treatment control BMPs commonly employed during construction, although these would vary based on the nature of construction activities, the characteristics of the site, and the existing receiving waters impairments (these features would appear as notes on any final design plans):

- Silt fences installed along limits of work and/or the construction site
- Stockpile containment (e.g., visqueen, fiber rolls, gravel bags)
- Exposed soil stabilization structures (e.g., fiber matrix on slopes and construction access stabilization mechanisms)
- Street sweeping
- Tire washes for equipment
- Runoff control devices (e.g., drainage swales, gravel bag barriers/chevrons, velocity check dams) and slope protection
- Drainage system inlet protection
- Wind erosion (dust) controls
- Tracking controls
- Prevention of fluid leaks (inspections and drip pans) from vehicles
- Dewatering operations best practices
- Materials pollution management
- Proper waste management (e.g., concrete waste management)
- Regular inspections and maintenance of BMPs

Based on the local groundwater levels described in the setting, the need for groundwater dewatering of subsurface excavations and/or utility trenches is not anticipated. The applicant's erosion control plan should include the placement of fiber rolls around the perimeter of disturbed areas to filter out sediment, debris, and floatable material; storm drain inlet protection; use of hazardous material spill kits; and stabilized construction zone ingress/egress. These plans are to be further developed through preparation of a SWPPP in compliance with the Construction General Permit.

The standard requirements contained in a SWPPP are sufficient to address a project's potential to violate water quality standards or waste discharge requirements.

The construction-related impact of the Project on water quality would be less than significant, because existing permitting requirements and conditions of approval are sufficient to avoid water quality degradation, meet water quality standards and Basin Plan objectives, and prevent adverse effects on beneficial uses.

Operation

The battery energy storage system would be unmanned, and operational control would be from an off-site control room through the supervisory control and data acquisition system. Operational staff would also perform periodic inspections and maintenance as necessary. Potable water will be required to support site wildfire suppression and site maintenance. There are no aspects of operation of the facility that should impact water quality.

Impacts associated with Project construction and operation on water quality would be less than significant, because existing permitting requirements and conditions of approval are sufficient to avoid water quality degradation, meet water quality standards and Basin Plan objectives, and prevent adverse effects on beneficial uses.

Mitigation Measures

None required.

Impact 3.3-2: Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?

The Project does not propose any on-site groundwater wells, nor would it indirectly result in the off-site construction of groundwater wells. The regional static groundwater level underlying the proposed Project is in excess of 300 feet below ground surface, based on regional monitoring (DWR 2022b). Therefore, construction excavations are not anticipated to intercept the groundwater table. Infiltration rates will not be affected as a result of the Project. Therefore, potential impacts to groundwater supplies or to sustainable groundwater management would be limited to the indirect impacts from the water demand for the proposed Project.

The proposed Project would require approximately 20 acre-feet of water to support construction over the two 13-15 month periods. Water consumption during construction would be needed for dust suppression and earthwork. Thereafter, the Project would require up to 2 acre-feet per year for fire suppression purposes.

An updated UWMP was prepared in June 2016 (Psomas 2016) for the MSWD through the year 2015. MSWD currently receives 100% of its water supply from groundwater produced within the Coachella Valley Groundwater Basin, which underlies the MSWD water service area. As described in its 2015 UWMP, MSWD has projected supply surpluses for normal, dry-year, and multi-year demand scenarios (Psomas 2016) and water supplies are available that could serve the Project under all planning scenarios. The conclusions of the UWMP regarding the sufficiency of future water supplies and the efficacy of water conservation programs and drought contingency planning would be unaffected by the proposed Project. Given the proposed Project construction and operational water demand estimates would comprise an insignificant fraction of the Indio Subbasin demand, it would have a negligible and less-than-significant impact with respect to the sustainable management of the groundwater basin.

Mitigation Measures

None required.

Impact 3.3-3: Would the Project substantially alter the existing drainage pattern of the site or area through the addition of impervious surfaces resulting in erosion or siltation on- or off-site; increasing the rate or amount of surface runoff resulting in flooding on- or off-site; contributing runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide polluted runoff; or impede or redirect flood flows?

The grading involved in the development of the battery energy storage system locations will slightly alter the existing drainage patterns in several locations. The grading will be limited such that off-site flow that enters the Project Site would continue to flow southeast through the Project Site as much as it does currently. It is expected that site conditions and soils would continue to convey storm flows following Project implementation, and the Project is not expected to significantly affect the braided ephemeral drainages or sheet flow in the Project vicinity. In the areas

where the grading will alter the flow path, it is expected that flow will infiltrate or gradually migrate into existing drainage patterns downstream.

Although implementation of the Project is not anticipated to substantially alter existing drainage patterns of the site or surrounding area, construction of the Project has the potential to alter existing on-site drainage patterns and flow paths to some degree. Construction activity could temporarily concentrate flows from storms and construction water usage, thus resulting in increased erosion of existing soils on site and sedimentation of water. Ground disturbance in drainage areas has a higher likelihood of resulting in erosion and sedimentation because water flow is more concentrated in these areas and has greater erosive potential. BMPs implemented under the SWPPP such as fiber rolls and silt fence should mitigate the temporary effects of erosion and sedimentation during construction.

While the proposed development involves grading alterations and the introduction of roadways, pads, and structures, there are no topographical changes outside of the site and no alteration of land cover within the contributing watersheds, so the pre- and post-Project discharge flows and volumes are expected to remain unchanged (Appendix A). The compacted roadways, pads, and battery energy storage system units have the potential to increase the imperviousness of the development areas and increase localized runoff. However, these increased runoff rates will be slowed by a combination of retention basins and energy dissipation devices in the form of riprap downstream of the development areas. These mitigation measures, which will reduce the potential for scour and erosion, can be found in the Preliminary Grading and Drainage Plans (Appendix B).

Because the alterations to drainage patterns are minor, and project design features such as retention basins and energy dissipations devices will be implemented downstream of the developed areas in order to reduce localized increases in runoff rates, the impact of the Project on drainage patterns and runoff rates would be less than significant.

Mitigation Measures

None required.

Impact 3.3-4: Would the Project release pollutants during flooding?

The Project Site would be subject to flooding only in a highly unlikely, catastrophic scenario as described above. Implementation of the Grading and Drainage Plan would ensure that proper drainage and design considerations are implemented. Implementation of a Hazardous Materials Business Plan would ensure safe storage and safe handling of hazardous materials on site and would provide the means for prompt cleanup in the event of an accidental hazardous material release. Additionally, the Project Site is located well inland and far from the ocean and any enclosed or semi-enclosed water body such that there would be no potential threat from tsunami or seiche hazards.

Therefore, with implementation of a Grading and Drainage Plan that will provide equipment and materials with adequate freeboard, the negligible changes in flood water surface elevations from the Project, and the implementation of a Hazardous Materials Business Plan, the potential for release of pollutants due to Project inundation would be less than significant with mitigation.

Mitigation Measures

MM HYD-1: The project applicant shall prepare and maintain a Hazardous Materials Business Plan HMBP, as applicable, pursuant to Article 1 and Article 2 of California Health and Safety Code. The Hazardous

Materials Business Plan all required information shall be submitted to the California Environmental Reporting System at http://cers.calepa.ca.gov/ for review and approval.

a. The Hazardous Materials Business Plan shall:

    1. Delineate hazardous material and hazardous waste storage areas;

    2. Describe proper handling, storage, transport, and disposal techniques, including which routes will be used to transport hazardous materials;

    3. Describe methods to be used to avoid spills and minimize impacts in the event of a spill;

    4. Describe procedures for handling and disposing of unanticipated hazardous materials encountered during construction;

    5. Establish public and agency notification procedures for spills and other emergencies including fires; and

    6. Include procedures to avoid or minimize dust from existing residual pesticide and herbicide use that may be present on the site.

b. The project proponent/operator shall provide the Hazardous Materials Business Plan to all contractors working on the project and shall ensure that one copy is available at the project site at all times.

Impact 3.3-5: Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

As discussed under Impact 3.3-1, the Project would comply with applicable regulations and permits designed to comply with the Basin Plan. The SWPPP would be effective at meeting water quality objectives of the Basin Plan during construction. As discussed under Impact 3.3-2, MSWD has projected supply surpluses for normal, dry-year, and multi-year demand scenarios (Psomas 2016) and water supplies are available that could serve the Project under all planning scenarios.

For the reasons discussed therein, the groundwater demand of the Project would not have an appreciable impact on sustainable management of groundwater within the Indio or Mission Creek Subbasin. Therefore, the impact of the Project on water quality and groundwater management plans would be less than significant.

Mitigation Measures

None required.

DUDEK
78-075 MAIN STREET, SUITE G-203
LA QUINTA, CALIFORNIA 92253
T 760.341.6660 F 760.346.6118

4 References

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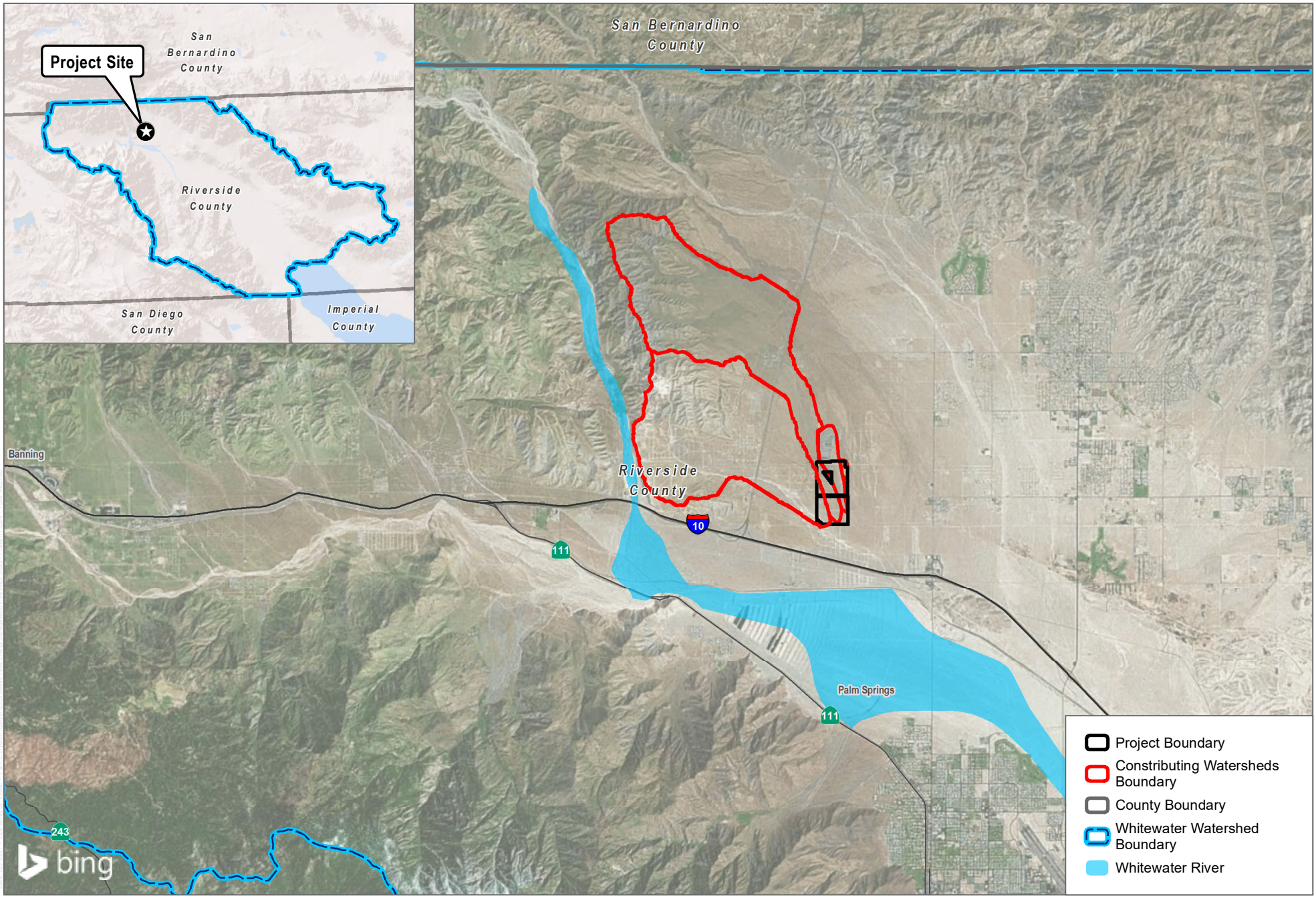

SOURCE: Bing Maps

DUDEK

0 1 2 Miles

FIGURE 1

Project Location

Hydrology Study - Desert Peak Energy Center - Phase 1 and 2

Appendix A
Hydrology and Hydraulic Study

Appendix B
Preliminary Grading and Drainage Plans