UPDATED DRAFT

Groundwater Monitoring and Mitigation Plan
Rugged Solar Project
Major Use Permit PDS2017-MUP-12-007W1
Boulevard, San Diego County, California

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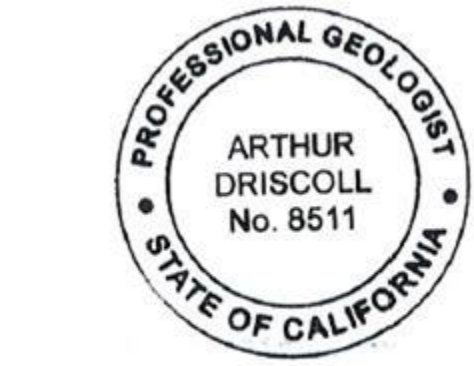
Update to Report dated October 2014

SIGNATURE PAGE

This updated draft Groundwater Monitoring and Mitigation Plan for the Rugged Solar Project has been prepared under the direction of a professional geologist licensed in the State of California consistent with professional standards of practice.



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1.0 INTRODUCTION

The proposed Rugged Solar Project (Rugged Project) consists of a 765-acre solar energy system located north of Interstate 8 (I-8) to the east of Ribbonwood Road and primarily west of McCain Valley Road in southeast San Diego County. The Rugged Project is crossed from east to west by Tule Mountain Road. Residents and government agencies in this area rely on groundwater as their sole source of water supply. The Rugged Project will pump groundwater from three on-site production wells (Wells 6a, 6b and 8) to meet all of its operational water demand. This Updated Groundwater Monitoring and Mitigation Plan (GMMP) has been prepared by Dudek in order to provide protection to nearby groundwater-dependent habitat and ensure adequate groundwater supply for other groundwater users in the area.

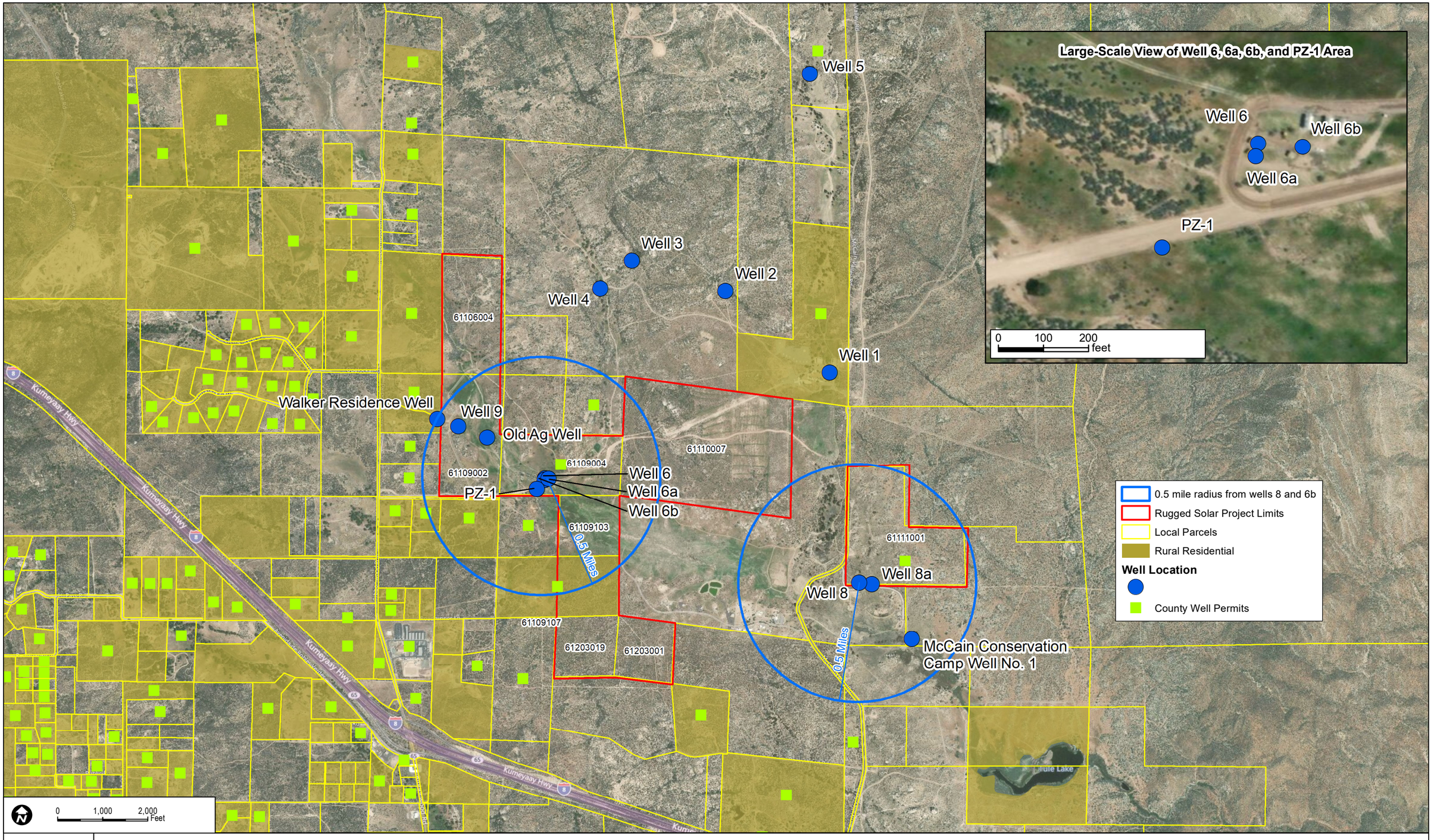
The Rugged Project will require an estimated 37 acre-feet of water during the 8 month construction period and 7.34 acre-feet per year (afy) thereafter to meet operational demand. All construction water will be supplied from off-site groundwater or municipal sources. Operational water demand includes application of soil binding stabilization agent, washing of the photovoltaic (PV) panels, landscape irrigation, and a contingency supply of 1.8 afy. It is anticipated that the estimated 7.34 acre-feet of average annual operational water demand will be entirely met using groundwater from the three on-site production wells. The operational demand has an annual average pumping rate of 13.7 gpm if the entire demand is supplied by a single well operated an average of 8 hours per day. Groundwater would be extracted from one or all of the on-site groundwater production wells: 6a, 6b and 8 (Figure 1).

Results of the Groundwater Resources Investigation indicate that operational water demands for the Rugged Project are relatively low, well within the sustainable yield of the aquifer system, and have minimal impact. However, the Rugged Project is relying on the same water wells as the Rough Acres Ranch Project (RAR Project) that includes construction of a Lodge and Campground Facility. The RAR Project anticipates that it will use 2.95 acre-feet of water for phased project construction over about four years. At full build-out, it is estimated that the RAR Project's long-term operational groundwater demand will require an additional 12.25 afy above its existing usage of 7.4 afy, for a total of 19.65 afy. Water for construction and operations will be provided primarily from the Rough Acres Ranch Non-Community Public Water System Well 6a and backup well 6b. Well 8 may provide a source of non-potable water as a contingency water supply. The contingency water from Well 8 would be trucked to the RAR Project site if it is needed.

Because actual conditions during groundwater extraction for the Project and RAR Project may vary from conditions assumed in the Groundwater Resources Investigation (Dudek 2021), this Updated GMMP has been prepared for the Rugged Project. This Updated GMMP establishes protective groundwater drawdown thresholds for off-site well interference and groundwater-

dependent habitat and provides the technical basis for the application of water level (drawdown) thresholds.

This Updated GMMP also describes the monitoring, mitigation and reporting procedures by which the County of San Diego Planning and Development Services (PDS) can ensure that the conditions and criteria for the Project's groundwater extraction activities are continually being upheld. Up to a 5 year monitoring period is proposed to assess the impact of the operational water demands.



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SOURCE: SanGIS 2012, GLA 2012, SANDAG 2009

FIGURE 1

On-site, Off-site, and Monitoring Well Locations

GROUNDWATER MONITORING AND MITIGATION PLAN - RUGGED SOLAR FARM

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2.0 ESTABLISHMENT OF GROUNDWATER THRESHOLDS

According to the County of San Diego Guidelines for Determining Significance and Report Format Content Requirements (County of San Diego, 2007), this Project-related groundwater extraction would incur a significant well interference impact if it results in a decrease in saturated thickness of 5% (20 feet or greater off-site groundwater drawdown in a fractured rock aquifer assuming 400 feet saturated thickness and a 5 foot or greater off-site groundwater drawdown in an alluvial aquifer assuming 100 feet of saturated thickness). As the aquifers underlying the site consist of both alluvium and fractured rock, a hybrid threshold of 10 feet was developed for the combined aquifers. Additionally, the County's Guidelines for Determining Significance for Biological Resources (County of San Diego, 2010) defines a project-related drawdown of 3 feet below historical low groundwater levels as causing a significant impact to riparian habitat or a groundwater sensitive natural community. The thresholds established below incorporate these guidelines and represent a conservative basis for monitoring and mitigating potential groundwater impacts related to the Project.

2.1 Potential Off-Site Well Interference

Based on the findings of the Groundwater Resources Investigation Report (Dudek, 2021), two well interference thresholds have been established: one for Wells 6a and 6b, and one for Well 8.

2.1.1 Wells 6a and 6b

Three off-site residential wells have been identified within 2,700 feet of pumping Wells 6a and 6b (Dudek 2013, Dudek 2021; GLA 2010; GLA 2012). However, the exact location of only one of these wells, the Walker Residence Well, is known. This well is located approximately 2,700 feet northwest of Wells 6a and 6b. The closest property line is 439 feet south of the pumping wells, which is shared with a non-residential, undeveloped parcel. The closest property with a residential groundwater well (APN 611-091-07) is located 1,742 feet from the pumping wells (Table 1). As shown in Table 1, the closest property line to Wells 6a/6b with record of a groundwater well is located 439 feet to the south (Well No. 17532). Aerial photography and County land use records indicate the subject parcel is undeveloped.

Table 1
Well Users within 0.5 Mile Radius of Wells 6a/6b

Well Number	APN	Use	Distance from Wells 6a/6b
Old Ag Well	611-090-02 (RAR Well)	Agriculture	1,571
Well 9	611-090-02 (RAR Well)	Agriculture	2,262
Walker Weill	611-090-19	Domestic	2,700

Table 1
Well Users within 0.5 Mile Radius of Wells 6a/6b

Well Number	APN	Use	Distance from Wells 6a/6b
Off-site Wells[b]			
17532		Domestic	439[a]
11104		Domestic	1,742[a]
9119		Agriculture	2,326[a]
10107		Agriculture	2,421[a]
11106		Domestic	2,429[a]

Notes:
[a] Reported distance is to property line as the exact well location is unknown.
[b] Assessor parcel numbers (APN) are redacted for off-site well logs.

Existing on-site wells will be equipped with pressure transducers to record water levels. Multiple manual water level measurements will be recorded with a sounder to confirm the accuracy of the transducers.

Groundwater was extracted from wells 6a and 6b during construction of the Tule Wind. As the baseline water levels need to be established prior to the onset of any water extraction, baseline water level conditions will need to be established from water level measurements recorded by the pressure transducer at least 1 month prior to the onset of the completed Tule Wind Project.

During pumping at Wells 6a and 6b, a maximum drawdown of 14 feet (rounded) below the static groundwater level baseline at PZ-1 located 300 feet from Well 6a will be allowed. This threshold is protective of a maximum drawdown of 10 feet at the closest property with a residential groundwater well located approximately 1,742 feet from the pumping wells. This protective threshold will prevent drawdown at the nearest off-site wells, which are farther from PZ-1, from approaching the 10 feet threshold set forth by the County. The 10 feet limit is a hybrid of the 20 feet or greater off-site groundwater drawdown in a fractured rock aquifer and the 5 feet or greater off-site groundwater drawdown in an alluvial aquifer developed in consultation with the County Groundwater Geologist as both alluvial and fractured rock aquifers are present in the vicinity of Wells 6a and 6b. This threshold is also protective of water levels within Well No. 17532, which is on a property bordering the southern part of the Rugged site

2.1.2 Well 8

The nearest off-site well to the pumping well, Well 8, is the McCain Conservation Camp Well, located approximately 1,800 feet southeast of Well 8 (Figure 1), which will likely not be accessible for monitoring during pumping at Well 8 (Table 2).

Table 2
Well 8 Well Users within 0.5 Mile Radius

Well Number	APN	Use	Distance from Well 8
McCain Conservation Camp Well[a]	611-100-06	Government/Potable	1,800

Notes:
[a] McCain Conservation Camp was closed by California Department of Corrections and Rehabilitation in 2020.

As the McCain Conservation Camp well will unlikely be accessible for monitoring, on-site Well 8a (located 286 feet east of Well 8) will serve as the Well 8 monitoring point for compliance with groundwater drawdown guidelines established by the County. It will be fitted with a pressure transducer one month prior to the onset of groundwater extraction from any of the projects slated to use Well 8. The pressure transducer will record the water level in the well at 15 minute intervals. Transducer accuracy will be confirmed through manual water level measurements recorded with a sounder. The measurements collected from Well 8a will be used to establish a water level baseline. During pumping at Well 8, a maximum drawdown of 25 feet below the static groundwater level baseline at Well 8a will be allowed. This threshold is based on a distance drawdown at Well 8a (located 286 feet east of Well 8) that would be protective of a drawdown of 10 feet at the McCain Conservation Camp (located 1,800 feet form Well 8).

2.1.3 Baseline Groundwater Levels and Maximum Drawdown Thresholds

Baseline groundwater levels for the Project and RAR Project were established prior to the onset of construction for the completed Tule Wind Project. Baseline groundwater levels and maximum drawdown thresholds below baseline groundwater levels are provided in Table 3.

Table 3
Baseline Groundwater Levels and Maximum Drawdown Thresholds

Well Number	Baseline Depth to Groundwater (feet below top of casing)[a]	Maximum Drawdown Threshold (feet)	Maximum Drawdown Threshold (feet below top of casing)
PZ-1	31	14	45
Well 8a	29.55	25	54.55

Source: GLA 2021
Notes:
[a] Pre-pumping baseline groundwater levels established on September 27, 2016 prior to the start of the Tule Wind Project.

2.2 Groundwater Dependent Habitat

The Groundwater Resources Investigation Report identifies two groundwater-dependent vegetation communities mapped near Wells 6a and 6b (Figure 2) that can likely access water from the alluvial aquifer; coast live oak (*Quercus agrifolia*) and mixed oak woodland and tamarisk scrub (*Tamarix ramoissima*). The nearest coast live oak woodland and tamarisk scrub are located 447 feet and 700 feet, respectively from Wells 6a and 6b. Of these two communities, the coast live oak woodland is of greater concern due to its closer proximity to the pumping wells and because tamarisk scrub is an invasive species. The root system of individual coast live oaks has been found to extend to depths of 36 feet below ground surface (Candell et al. 1996). The historical low groundwater level in the vicinity of the oak woodland is not known over the period corresponding to the lifespan of mature oaks. This lack of historical water level data precludes determination of a water level threshold 3 feet below the historical low. Therefore, using the water levels measured on September 27, 2016 (prior to the start of the Tule Wind construction project), the pre-pumping baseline water level at piezometer PZ-1 (31 feet btoc) has been established with the three-foot drawdown threshold set forth by the County for protection of groundwater-dependent habitat. A maximum drawdown water level of 3.5 feet (34.5 feet btoc) at PZ-1 is expected to prevent drawdown at the nearest coast live oak from approaching the three-foot threshold set forth by the County, and will be established to be protective of the coast live oaks associated with project pumping (GLA 2021). If groundwater levels in piezometer PZ-1 exceed 34.5 feet btoc than the Project will commence biological monitoring of the oak woodland and groundwater pumping will cease—with the exception of pre-project baseline amount of 7.4 afy—until groundwater levels recover above the threshold for at least 30 days.

Biological monitoring procedures are described below in section 3.2. If an International Society of Arboriculture (ISA) Certified Arborist or Registered Profession Forester observes that no impact to the oak woodland has occurred over the first five years from the inception of monitoring, biological monitoring of the oak woodland will cease.

Big sagebrush (*Artemisia tridentata*) is the only potentially groundwater-dependent habitat on the Rugged site that is mapped near Well 8. However, big sagebrush scrub requires groundwater to be present in shallow soil horizons and therefore is dependent on surface water or perched groundwater. The alluvial water table near Well 8 is currently at approximatley18 feet bgs. Thus, the roots of the big sagebrush scrub do not intercept the alluvial aquifer and no impact to the big sagebrush scrub is expected.

In addition to the mapped vegetation communities in the vicinity of Well 8, there are potential areas of oak woodland visible in aerial photographs bordering the site to the west of Well 8 (Figure 2). Field verification of the extent of the potential oak woodland areas has not been performed, but

based on a review of the aerial photographs these areas of potential habitat are located approximately 1,000 feet to the west and northwest of Well 8. The majority of this potential habitat lies outside the limits of the Rugged Solar project. Therefore, all proposed monitoring activities will require permission of the current landowner. During pumping at Well 8, a drawdown of 4.1 feet below the static groundwater level baseline at Well 8a would be protective of potential groundwater dependent vegetation located approximately 1,000 feet from Well 8. This threshold is based on a distance drawdown at Well 8a (located 286 feet east of Well 8) that would be protective of a drawdown of 3 feet at the off-site groundwater vegetation. If groundwater levels in Well 8a decline below the threshold of 4.1 feet (33.65 feet btoc) below the pre-pumping level of 29.55 feet btoc (recorded prior to the start of the Tule Wind construction project on September 27, 2016) than the Project will cease pumping groundwater from Well 8 until groundwater levels recover above the threshold for at least 30 days.

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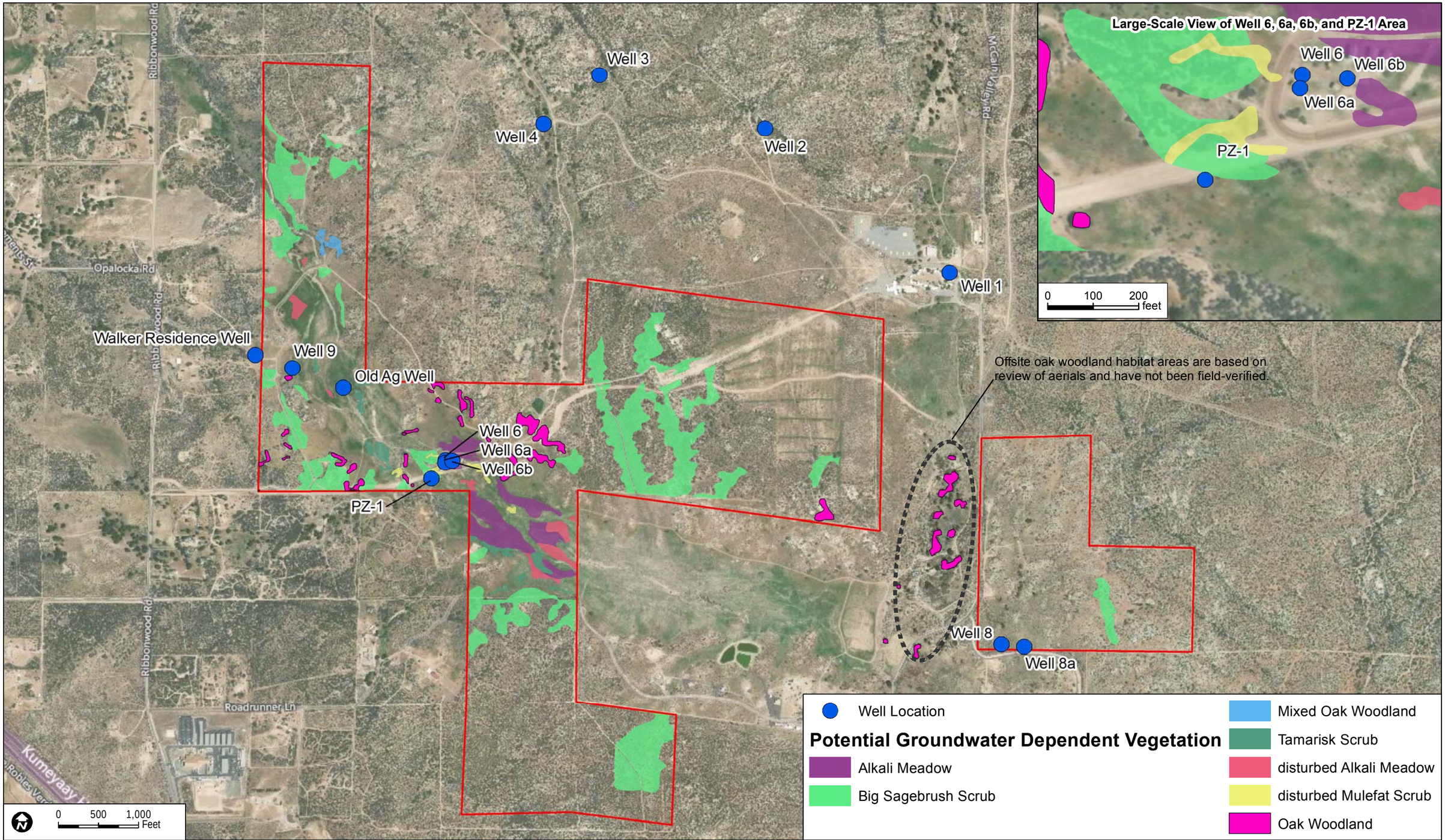

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SOURCE: BingMaps, SanGIS 2012, Dudek 2012

FIGURE 2

Potential Groundwater-Dependent Vegetation

GROUNDWATER MONITORING AND MITIGATION PLAN - RUGGED SOLAR FARM

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3.0 MONITORING PROCEDURES AND MITIGATION CRITERIA

The groundwater monitoring procedures and mitigation criteria outlined below will be followed during the operation of the project. The groundwater dependent habitat monitoring program outlined below will be followed for up to 5 years, if deemed necessary as described in further detail in Sections 3.2 and 3.3. The groundwater monitoring program defined herein will be carried out throughout the life of the Major Use Permit under the direction of a Certified Hydrogeologist registered in the State of California. The groundwater-dependent habitat monitoring will be carried out under the direction of an ISA Certified Arborist or Registered Professional Forester.

3.1 Groundwater Production and Water Level Monitoring

Pressure transducers will be maintained in four existing on-site monitoring wells (Well 6, Well 8a, Well 9 and Old Ag Well, Figure 1), five off-site monitoring wells (Well 1, Well 2, Well 3, Well 4, and Well 5, Figure 1) and two on-site production wells (Well 6b and Well 8). A transducer will also be installed in the piezometer, PZ-1, completed near pumping Wells 6a and 6b.. The pressure transducers will be programed to record the water level every 15 minutes. In addition, ambient barometric pressure and temperature will be recorded at 15 minute intervals with a barometric logger.

Transducer data will be downloaded semi-annually during Project operation. Instantaneous flow meters will be installed on the three production wells (Well 6a, Well 6b and Well 8) to monitor cumulative groundwater usage. Flow rate and volume measurements will be recorded monthly during project operation and will be used to ensure groundwater production caps established as conditions of approval of the project are not exceeded.

At the request of and with permission from adjacent landowners, pressure transducers will also be installed in private domestic wells and monitored in a similar manner described above.

3.2 Groundwater Dependent Habitat Monitoring

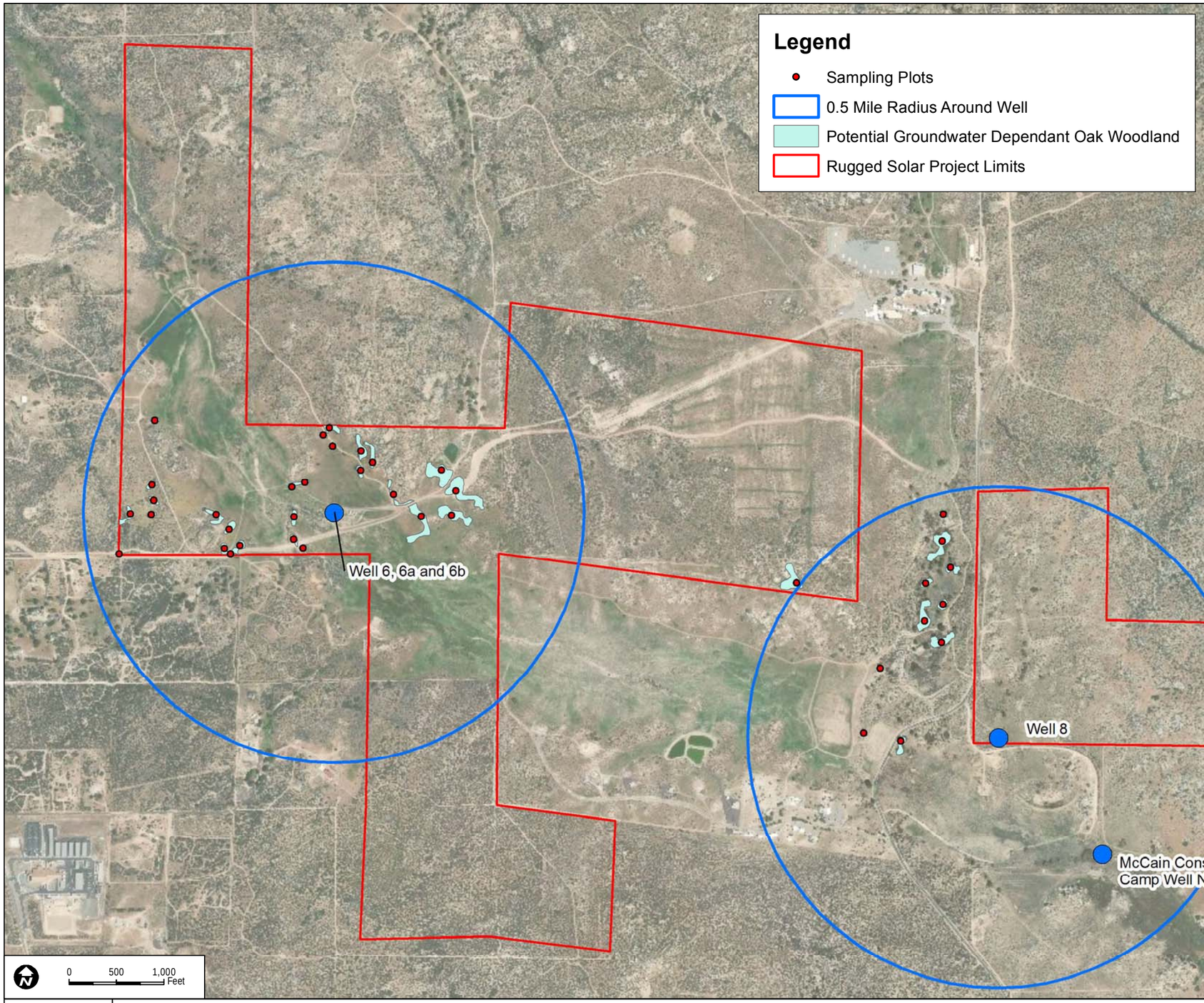
The following monitoring program will establish the current status and health of the existing oak woodland and document oak conditions over a maximum of 5 years post-construction timeframe. The goal is to determine if the Project's use of groundwater is impacting area oak trees/woodlands.

3.2.1 Baseline Data Collection

Baseline data on the status and health of the oak habitat will be collected over the course of up to 1 year prior to Project-related groundwater extraction. Potentially affected native trees within the study area will be evaluated for overall physical condition and attributes. The trees shall be inventoried by an ISA Certified Arborist or Registered Professional Forester with specific

experience evaluating native oak species, in particular coast live oaks. The baseline monitoring evaluations will include the following:

- Establishment of 38 pseudo-randomized 0.2 acre plots around oak groupings and scattered individual trees (Figure 3). Sample plots would include the range of existing habitat conditions, including elevation, slope and aspect, proximity to roads and other land uses. If an oak woodland monitoring site is less than 0.1 acre, the entire site will be evaluated.
- Tagging of trees and recording species, tag number, trunk diameter at breast height (dbh) (in.), height (ft.) and dominance (i.e., whether the tree is under the canopy of another tree or forms the uppermost canopy). Slope, aspect, and elevation of each tree location, existing understory species (including proportion of natives to exotics), presence of debris and litter, and soil type, depth, and parent material will be noted for each tree or plot.
- Placement of tensiometers (or similar) to measure soil moisture levels
    - Soil moisture levels will be recorded quarterly at depths up to 48-inches
- Assessment of tree status, including documentation of:
    - Dbh, measured at 4.5 feet above ground (according to standard practices)
    - Number of stems
    - Overall tree height (based on ocular estimates)
    - Tree crown spread (measurement in each cardinal direction, based on ocular estimate)
    - Overall tree health condition (Good, Fair, Poor, Dead)
    - Overall tree structural condition (Good, Fair, Poor, Dead)
    - Pest presence (Type, Extent – minimal, moderate, high)
    - Disease presence (Type, Extent – minimal, moderate, high)
    - Other specific comments
- Assessment of acorn production, seedling establishment and sapling tree densities and conditions
- The data collection procedure will include full data collection at each plot so that consistency is maintained among sampling plots.
- Creation of oak tree database using GIS or similar application



Monitoring Site	Habitat Type	Habitat Description	Acres	Number of 1/10 acre monitoring plots	Monitoring Well within 0.5 Miles
1	CLOW	Coast Live Oak Woodland	0.23	1	Wells 6, 6a and 6b
2	CLOW	Coast Live Oak Woodland	0.11	1	Wells 6, 6a and 6b
3	CLOW	Coast Live Oak Woodland	0.05	1	Wells 6, 6a and 6b
4	CLOW	Coast Live Oak Woodland	0.30	1	Wells 6, 6a and 6b
5	CLOW	Coast Live Oak Woodland	0.16	1	Wells 6, 6a and 6b
6	CLOW	Coast Live Oak Woodland	0.21	1	Wells 6, 6a and 6b
7	CLOW	Coast Live Oak Woodland	0.83	1	Wells 6, 6a and 6b
8	CLOW	Coast Live Oak Woodland	0.09	1	Wells 6, 6a and 6b
9	CLOW	Coast Live Oak Woodland	0.12	1	Wells 6, 6a and 6b
10	CLOW	Coast Live Oak Woodland	0.12	1	Wells 6, 6a and 6b
11	CLOW	Coast Live Oak Woodland	0.25	1	Wells 6, 6a and 6b
12	CLOW	Coast Live Oak Woodland	0.96	1	Wells 6, 6a and 6b
13	CLOW	Coast Live Oak Woodland	0.13	1	Wells 6, 6a and 6b
14	CLOW	Coast Live Oak Woodland	0.09	1	Wells 6, 6a and 6b
15	CLOW	Coast Live Oak Woodland	0.27	1	Wells 6, 6a and 6b
16	CLOW	Coast Live Oak Woodland	0.37	1	Wells 6, 6a and 6b
17	CLOW	Coast Live Oak Woodland	0.10	1	Wells 6, 6a and 6b
18	MOW	Mixed Oak Woodland	0.01	1	Wells 6, 6a and 6b
19	MOW	Mixed Oak Woodland	0.76	1	Wells 6, 6a and 6b
20	MOW	Mixed Oak Woodland	1.09	1	Wells 6, 6a and 6b
21	CLOW	Coast Live Oak Woodland	0.02	1	Wells 6, 6a and 6b
22	CLOW	Coast Live Oak Woodland	0.78	1	None
23	CLOW	Coast Live Oak Woodland	0.16	1	Wells 6, 6a and 6b
24	CLOW	Coast Live Oak Woodland	0.20	1	Wells 6, 6a and 6b
25	CLOW	Coast Live Oak Woodland	0.03	1	Wells 6, 6a and 6b
26	CLOW	Coast Live Oak Woodland	0.02	1	Wells 6, 6a and 6b
27	MOW	Mixed Oak Woodland	0.21	1	Wells 6, 6a and 6b
28	MOW	Mixed Oak Woodland	0.05	1	Wells 6, 6a and 6b
29	Unknown	Potential Oak Woodland	0.09	1	Well 8
30	Unknown	Potential Oak Woodland	0.75	1	Well 8
31	Unknown	Potential Oak Woodland	0.25	1	Well 8
32	Unknown	Potential Oak Woodland	0.19	1	Well 8
33	Unknown	Potential Oak Woodland	0.62	1	Well 8
34	Unknown	Potential Oak Woodland	0.24	1	Well 8
35	Unknown	Potential Oak Woodland	0.06	1	Well 8
36	Unknown	Potential Oak Woodland	0.04	1	Well 8
37	Unknown	Potential Oak Woodland	0.52	1	Well 8
38	Unknown	Potential Oak Woodland	0.19	1	Well 8

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SOURCE: BingMaps, SanGIS 2012, Dudek 2012

FIGURE 3

Oak Woodland Habitat Monitoring Locations

GROUNDWATER MONITORING AND MITIGATION PLAN - RUGGED SOLAR FARM

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3.2.2 Ongoing Monitoring

Ongoing monitoring will be carried out semi-annually during the first five years of Project operation, and five years following the inception of biological monitoring, if required. If the ISA Certified Arborist or Registered Professional Forester observes an impact to the oak woodland after this period, monitoring will continue in years 2 through 5 following initiation of Project-related groundwater extraction. Monitoring will include the following components:

- Monitoring inspections will include re-evaluation of the baseline data as well as collection of soil moisture data from pre-placed tensiometers.
- Monitoring will include re-evaluating the trees to determine if changes are occurring that may indicate ground water drawdown is having a deleterious effect on oak woodlands or individual trees. The following information will be recorded during each monitoring visit and the data will be compared to previous monitoring results:
    - Dbh, measured at 4.5 feet above ground (according to standard practices)
    - Number of stems
    - Overall tree height (based on ocular estimates)
    - Tree crown spread (measurement in each cardinal direction, based on ocular estimate)
    - Overall tree health condition (Good, Fair, Poor, Dead)
    - Overall tree structural condition (Good, Fair, Poor, Dead)
    - Pest presence (Type, Extent – minimal, moderate, high)
    - Disease presence (Type, Extent – minimal, moderate, high)
    - Other specific comments

In particular, monitoring evaluations will focus on examining crowns for discoloration, loss of vigor, foliage curling, and/or pest presence; and trunks and root crowns for beetle/borer symptoms, bleeding cankers, or seeping areas (indicative of fungal infections). These and similar signs may indicate that a tree or a grouping of trees is experiencing stress, which can be corroborated by tensiometer readings. Trees under stress are more susceptible to disease and insect attacks.

3.3 Groundwater Mitigation Criteria

The following mitigation criteria will be established to protect groundwater resources and groundwater-dependent habitat in the Project area:

- A groundwater production cap of 7.34 afy for Rugged Project operations and maintenance is placed on Wells 6a, 6b and 8. In addition, the combined projects production cap for Wells 6a and 6b is 42 afy and for Well 8 is 27 afy.
- If the groundwater level at well PZ-1 reaches or drops below 34.5 feet btoc (3.5 feet below the pre-pumping baseline level of 31 feet btoc) than the Project will commence biological monitoring of the oak woodland and groundwater pumping at Wells 6a and 6b will cease— with the exception of pre-project baseline amount of 7.4 afy— until the water level at PZ-1 has increased above the threshold and remained there for at least 30 continuous days. This threshold will prevent water levels at the closest property with a residential groundwater well from dropping below 10 feet of the pre-pumping baseline, as described in section 2.1.1. Additionally, written permission from the County PDS must be obtained before production may be resumed.
- If the groundwater level at Well 8a reaches or drops below 33.65 feet btoc (4.1 feet below the pre-pumping baseline level of 29.55 feet btoc), groundwater pumping at Well 8 will cease until the water level at Well 8a has increased above the threshold and remained there for at least 30 continuous days. Additionally, written permission from the County PDS must be obtained before production may be resumed.
- If there is evidence of deteriorating oak tree health by the Arborist or Forester, there may be a temporary or permanent cessation of pumping at Well 6a/6b. If the evidence of deterioration persists after the 5 year period, mitigation will consist of off-site wetland/oak woodland credits at a 3:1 ratio.
- If there is evidence of deteriorating oak tree health by the Arborist or Forester, there may be a temporary or permanent cessation of pumping at Well 8. If the evidence of deterioration persists after the 5 year period, mitigation will consist of off-site wetland/oak woodland credits at a 3:1 ratio.
- If an impact to the oak woodland habitat is observed by the monitoring ISA Certified Arborist or Registered Professional Forester during Project operation, routine monitoring of the oak woodland will continue for a maximum up to 5 years following initiation of Project-related groundwater extraction. The monitoring Certified Arborist or Registered Professional Forester will base mitigation recommendations on the type and extent of tree issues observed. If groundwater drawdown is determined to be the cause of tree stress, resulting in the presence of secondary pests (insects and/or disease), halting groundwater extraction may be recommended.

4.0 REPORTING REQUIREMENTS

A groundwater monitoring report will be completed by a Certified Hydrogeologist registered in the State of California and submitted to the County PDS. The report will include the following information:

- Water level hydrographs and tabulated water level data for each monitoring well.
- Tabulated groundwater production volumes from each production well.
- Documentation of groundwater drawdown at PZ-1, and Well 8a.
- Documentation of any threshold-included curtailment of groundwater production.

If the water level thresholds at PZ-1, Well 8a, or any of the private well owners on adjacent properties that have requested monitoring are exceeded, the County PDS will be notified via letter and electronic mail within five working days of documentation of an exceedance.

Annual reports will be submitted to the county PDS during the first five years of project operation summarizing groundwater monitoring efforts and any mitigation recommendations implemented in the field during the monitoring year. The monitoring year will coincide with the calendar year. If biological monitoring is triggered, annual reports will document tree health and mortality, and tensiometer readings. The annual reports will document groundwater level readings, well production and success of mitigation efforts (if any were necessary). Annual reports will be completed prior to the end of January in the next calendar year.

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6.0 LIST OF PREPARERS

This Updated GMMP was prepared by Dudek Hydrogeologist, Trey Driscoll, PG, CHG. Dudek Arborist; Michael S. Huff prepared the monitoring program for the groundwater dependent habitat.

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