



TETRA TECH EC, INC.

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California Energy Commission
Docket No. 09-AFC-8
1516 9th St.
Sacramento, CA 95814

Genesis Solar Energy Project - Docket Number 09-AFC-8

Docket Clerk:

Included with this letter is one hard copy and five electronic copies of the ***Revised Air Quality Responses to the CEC Data Requests per the Workshop on January 6, 2010 for the Genesis Solar Energy Project.***

The additional CDs have been provided for use by CEC air quality staff as needed. The CDs contain additional reference materials that are not part of this response, but may be helpful to staff when reading the responses.

Sincerely,

Tricia Bernhardt
Project Manager/Tetra Tech EC

cc: Mike Monasmith /CEC Project Manager



DRAFT
Weed Management Plan

Genesis Solar Energy Project
Eastern Riverside County, California

Prepared By:



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Prepared For:

Genesis Solar, LLC

January 2010

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1.0 Introduction

Genesis Solar, LLC (Genesis Solar), is proposing to develop a 250-megawatt (MW) solar thermal power generating facility located in Riverside County, California, between the community of Desert Center and the city of Blythe on land managed by the Bureau of Land Management (BLM) (Figure 1). Genesis Solar has applied for a 4,640-acre right-of-way (ROW) grant from the BLM for Project development; however, once constructed, the facility would occupy approximately 1,800 acres within the requested ROW (Plant Site), plus approximately 90 acres for linear facilities (collectively referred to as the Project Area). Linear facilities include a transmission line, natural gas pipeline, and main access road that would be mostly co-located for approximately 6.5 miles (Figure 2).

1.1 Plan Purpose

The goal of the Plan is to protect the biological resources surrounding the Project Area from the harmful effects of weeds that result from Project activities and avoid unintended harm from weed management techniques. The Plan will be consistent with all applicable Laws, Ordinances, Regulations, and Standards (LORS) (see Section 2.0).

Weed management objectives are consistent with existing and proposed future site conditions, biology of the identified weed species, and environmental context of the project. Weed management objectives for the Project include the following:

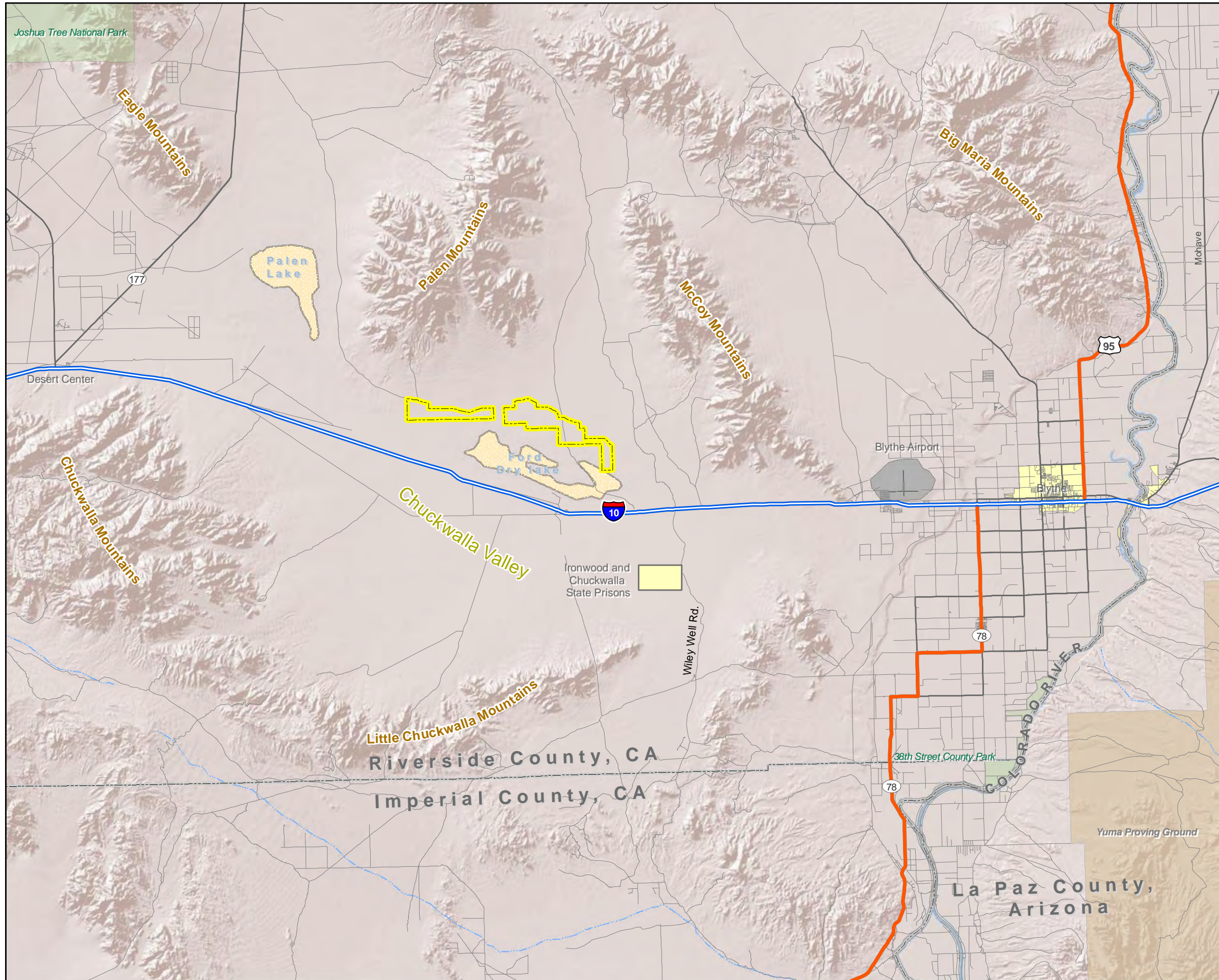
- **Identification and Risk Assessment:** This objective identifies presence, location, and abundance of weed species in the Project Area, both existing conditions and conditions over time.
- **Suppression:** This objective will ensure that populations of existing weed species do not increase due to the Project and, if possible, will be suppressed below current levels.
- **Containment:** This objective will strive to prevent the spread of existing weeds to new areas and prevent the introduction of weed species not currently present in the Project Area.

2.0 Related and Applicable Laws, Ordinances, Regulations, and Standards

2.1 Federal Laws and Regulations

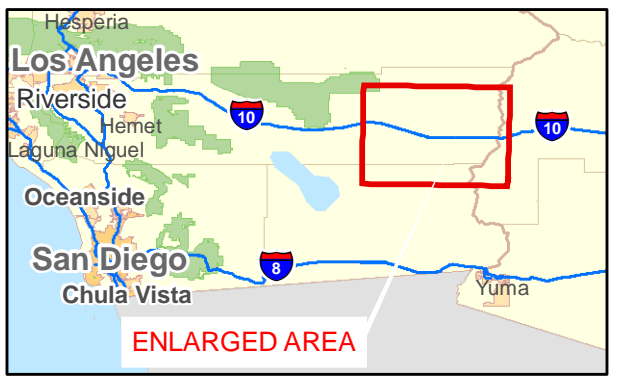
2.1.1 Federal Noxious Weed Act of 1974

The Federal Noxious Weed Act (7 U.S.C. §§ 2801-2814, January 3, 1975, as amended 1988 and 1994) provides for the control and management of non-indigenous weeds that injure, or have the potential to injure, the interests of agriculture and commerce, wildlife resources, or public health. The act gives the Secretary of Agriculture broad powers in regulating transactions in and movement of noxious weeds. It states that no person may import or move any noxious weed identified by regulations of the Secretary of Agriculture into or through the U.S. except in compliance with the regulations, which may require that permits be obtained. The act also requires each federal agency to develop a management program to control undesirable plants



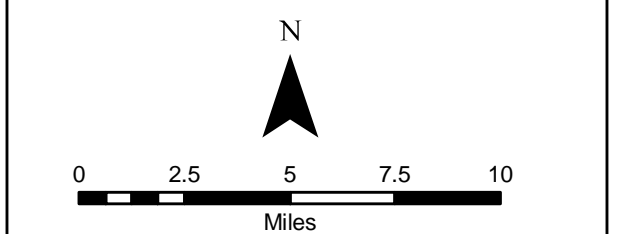
GENESIS SOLAR, LLC

GENESIS SOLAR ENERGY PROJECT
RIVERSIDE COUNTY,
CALIFORNIA



Legend

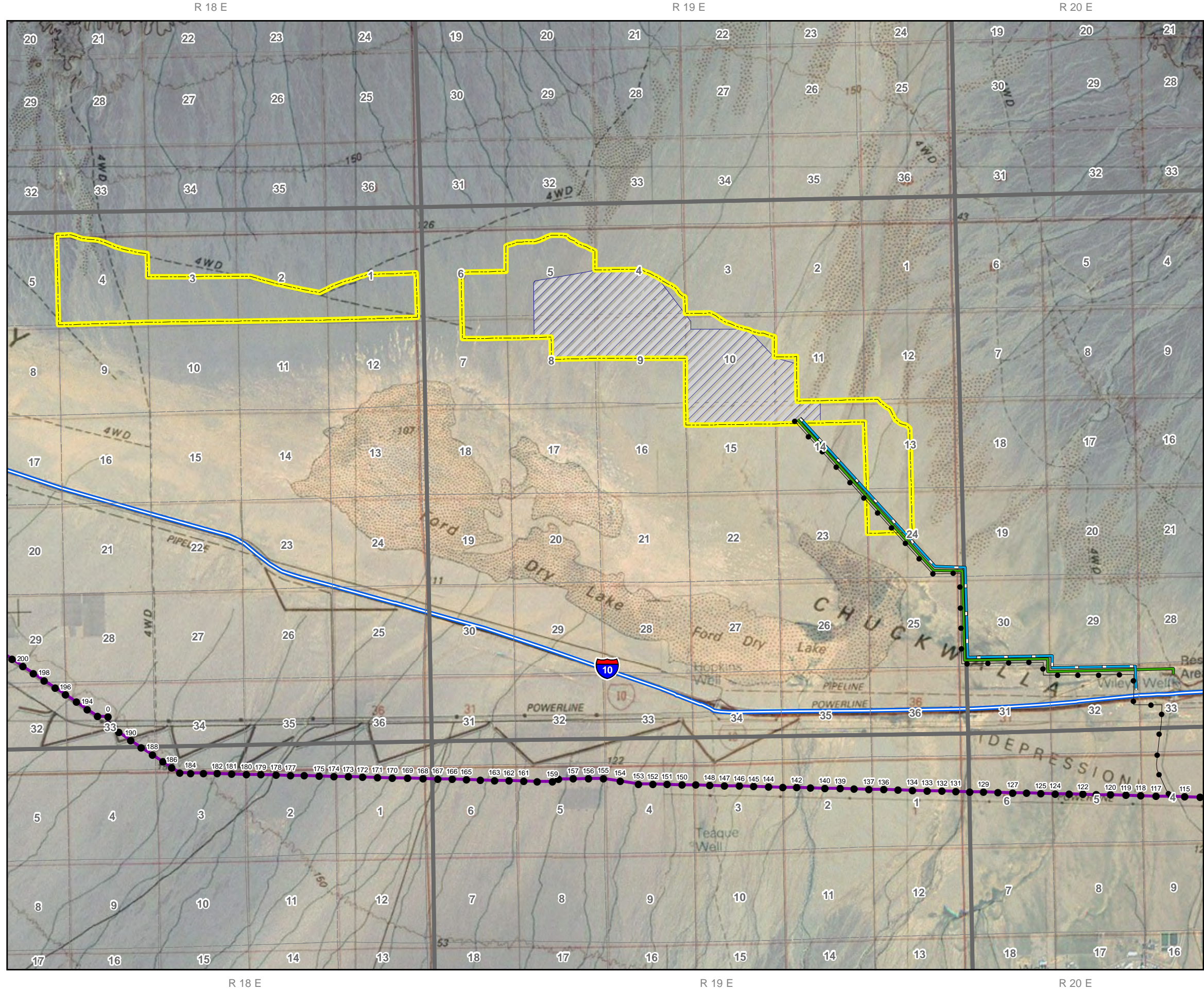
Project Requested ROW	Lake/River
Interstate	Lake Intermittent
Highway	Parks (Regional)
Major Road	Military Installation
Local Road	Urban Areas
Airport Area	
County Boundary	
State Boundary	



Notes:
 (a) UTM Zone 11, NAD 1983 Projection.
 (b) Source data: ESRI, BLM, TTEC

FIGURE 1
REGIONAL LOCATION MAP

TETRA TECH EC, INC.



GENESIS SOLAR, LLC
GENESIS SOLAR ENERGY PROJECT
RIVERSIDE COUNTY,
CALIFORNIA



Legend

- Blythe Transmission Line
- Blythe Transmission Line Structures
- Project Requested ROW
- Plant Site
- Township and Range Lines
- Section Lines

Project Linear Facilities

- Proposed Transmission Interconnect (7.5 Miles)
- Proposed Gas Line (5.9 Miles)
- Proposed Access Road (6.1 Miles)

Notes:
 (a) UTM Zone 11, NAD 1983 Projection.
 (b) Source data: ESRI, BLM, TTEC

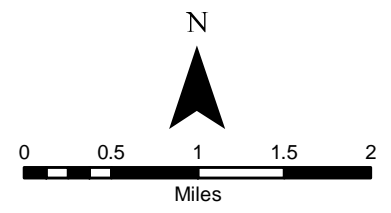


FIGURE 2
FEATURES AND LOCATION MAP

on federal lands under the agency's jurisdiction and to establish and adequately fund the program. Some of the provisions of this act were repealed by the Plant Protection Act of 2000 (PPA), including U.S.C. 2802 through 2813. However, Section 1 (findings and policy) and Section 15 (requirements of federal land management agencies to develop management plans) were not repealed (7 U.S.C. 2801 note; 7 U.S.C. 2814).

2.1.2 Plant Protection Act of 2000

The Plant Protection Act (PPA), as amended (7 U.S.C. 7701-7786) states that the detection, control, eradication, suppression, prevention, or retardation of the spread of plant pests or noxious weeds is necessary for the protection of the agriculture, environment, and economy of the U.S. This act defines the term "noxious weed" (7 U.S.C. 7702 § 403) to mean any plant or plant product that can directly or indirectly injure or cause damage to crops (including nursery stock or plant products), livestock, poultry, or other interests of agriculture, irrigation, navigation, the natural resources of the U.S., the public health, or the environment. This act specifies that the Secretary of Agriculture may prohibit or restrict the importation, entry, exportation, or movement in interstate commerce of any noxious weed if it is determined "that the prohibition or restriction is necessary to prevent the introduction into the [U.S.] or the dissemination of a plant pest or noxious weed within the [U.S.]," and authorizes the issuance of implementing regulations. Subsequent regulations implemented by the Noxious Weed Control and Eradication Act of 2004 amended the PPA.

2.2 State and Local Laws and Regulations

2.2.1 California Food and Agricultural Code

The California Food and Agricultural Code contains some detail on noxious weed management. Specifically, Food and Agricultural Code Section 403 states that the Department of Food and Agriculture should prevent the introduction and spread of injurious insect or animal pests, plant diseases, and noxious weeds. Under Sections 7270 through 7224, the California Commissioner of Agriculture is granted the authority to investigate and control noxious weeds, and specifically to provide funding, research, and assistance to weed management entities, including eligible weed management areas or county agricultural commissioners, for the control and abatement of noxious weeds according to an approved integrated weed management plan.

California Food and Agriculture Code Section 5101 and 5205 provide for the certification of weed-free forage, such as hay, straw, and mulch. This portion of the code recognizes that many noxious weeds are spread through forage and ground covers. The code allows for in-field inspection and certification of crops to ensure that live roots, rhizomes, stolons, seeds, or other propagative plant parts of noxious weeds are not present in the crop to be harvested. Certified weed-free forage is required on BLM land, and any mulch or hay bale materials used for erosion control at Genesis Solar will be required to meet this certification.

2.3 Conservation and Management Plans

2.3.1 Bureau of Land Management

To address the use of chemical treatments in noxious weed control, BLM prepared the Programmatic Environmental Impact Statement (PEIS) entitled *Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States* (BLM 2007). This document was the result of extensive public involvement and outlined the specific decisions, standard operating procedures, and mitigation measures for use of herbicides on BLM administered lands. The selected alternative of the PEIS identifies the active herbicidal ingredients approved for use on BLM land, and the herbicidal ingredients that are no longer approved for use. The Record of Decision for the PEIS defers the determination of areas that are to be treated through BLM's integrated pest management program to approved land use plans, and makes no land use or resource allocations in this regard. Appendix B of the PEIS, *Herbicide Treatment Standard Operating Procedures*, specifies management of noxious weeds through prevention and application of pesticides on BLM administered land. The procedures listed in this appendix are incorporated as requirements of this plan.

2.3.2 Northern and Eastern Colorado Desert Coordinated Management Plan (NECO Plan)

The NECO Plan (BLM and CDFG 2002) is a landscape-scale, multi-agency planning effort that protects and conserves natural resources while simultaneously balancing human uses of the California portion of the Sonoran Desert ecosystem, in which the Project lies. The 25-million-acre California Desert Conservation Area (CDCA) was designated in 1976 by the Federal Land Policy and Management Act to allow BLM to manage the resources of the California deserts. BLM developed a management plan for the CDCA in 1980 (BLM 1980), but the plan has since been amended and subdivided into four bioregion planning areas. The BLM has completed a regional plan amendment for each bioregion, among them the NECO Plan, which encompasses 5.5 million acres in the southeastern California Desert and the entire Project area.

3.0 Noxious Weed Inventory and Baseline Conditions

3.1 Noxious Weed Definitions

The term "weed" has many different definitions. In the broadest sense, it is any plant growing where it is not wanted. Weeds can be native or non-native, invasive or non invasive, and noxious or not noxious. A noxious weed is any plant designated by a federal, state or county government as injurious to public health, agriculture, recreation, wildlife, or property (Sheley et al. 1999). A noxious weed is "competitive, persistent, and pernicious" (James et al. 1991). Invasive weeds are any non-native plant species that are injurious to the public health, agriculture, recreation, wildlife habitat, or the biodiversity of native habitats.

Many invasive plant species share the trait of being adapted to disturbance and also out-compete some native species in these environments. The California Invasive Plant Council (Cal-IPC) categorizes invasive plants as high, moderate, or limited according to the severity of their ecological impact (Cal-IPC 2006):

High – Invasive plants classified as high consist of species that have severe ecological impacts on physical processes, plant and animal communities and vegetation structure, and have a moderate to high rate of dispersal and establishment.

Moderate – These species consist of species that have substantial and apparent (but not severe) ecological impacts and have a moderate to high rate of dispersal and establishment, although establishment is generally dependent upon a disturbance regime such as soil disruption or fire.

Limited – These consist of species that are invasive, but their ecological impacts are minor on a state-wide level. Dispersal and establishment of species classified as limited are generally low to moderate.

These classifications are based on cumulative state-wide trends and can vary at local scales. As a result, a species classified as limited may be more invasive on a local scale than a species classified as high, depending on local conditions (Cal-IPC 2006). For this reason, all plants Cal-IPC classified invasive, even those classified as limited, can potentially impact a local ecosystem.

3.2 Weed Species of Concern

All invasive plant species were inventoried during the Spring 2009 biological field surveys and concentrations of invasive species were mapped and described. During March and April 2009, biologists conducted comprehensive botanical surveys of the 4,640-acre requested right-of-way (ROW) (Figure 2), plus zones-of-influence (ZOI) surveys up to 1 mile surrounding the project area; two proposed linear facility routes with ZOIs were also surveyed out to 2400 ft. from the route edges (in total, these comprise the Survey Area). The linear facility routes proposed at the time of surveys have since changed and will be surveyed in spring 2010. Lengths of the access road, transmission line, and gas pipeline are those of the currently proposed linear routes, portions of which have not yet been surveyed for biological resources. The 4,640-acre ROW, linear facility routes, and ZOIs comprise what is hereafter referred to as the Survey Area. Because of the intensity of the desert tortoise surveys (100 percent coverage at 30-foot intervals), botanical surveys were conducted concurrently with desert tortoise surveys.

Four non-native species were detected during surveys, including Saharan mustard (*Brassica tournefortii*), tamarisk (*Tamarix ramosissima*), Russian thistle (*Salsola tragus*), and Mediterranean grass (*Schismus* sp.):

- Saharan mustard (*Brassica tournefortii*) was widespread throughout the project Survey Area in Sonoran Creosote Bush Scrub and Stabilized and Partially Stabilized Sand Dunes. There were patches of higher concentrations occurring within runnels, along the existing two-track road on the western side of the ROW, and along the linear facility routes. Cal-IPC considers this plant highly invasive (Cal-IPC 2006). Due to its early flowering and aggressive exploitation of available soil moisture, this plant tends to out-compete native species.

- Tamarisk or saltcedar (*Tamarix* spp.) is rare in the Survey Area – only a single individual was detected in the southern portion of the Project Area near the edge of the dry lake bed. This species tends to be associated with riparian habitats. Cal-IPC has declared this plant highly invasive (Cal-IPC 2006). This species should be eradicated wherever observed on the Project Area.
- Russian thistle (*Salsola tragus*) is common within the Stabilized and Partially Stabilized Sand Dunes, both where they intersect the eastern portion of the Survey Area and along the linear facility route. Cal-IPC has determined that this plant has a limited invasiveness rating in California (Cal-IPC 2006).
- Mediterranean grass (*Schismus* spp.) was observed distributed throughout the project site. Cal-IPC has determined that this plant has a limited invasiveness rating in California (Cal-IPC 2006). BLM and other agencies recognize that because of the widespread distribution and dominance of Mediterranean grass, this species is not considered feasible to control; therefore, weed abatement efforts for Mediterranean grass will not be required.

3.3 Noxious Weed Risk Assessment

Consistent with BLM guidelines for weed management, a weed risk assessment was conducted for each component of the Genesis Solar Energy Project—construction, operation, and closure—that involve soil disturbance activities and/or alteration of site vegetation. The risk assessment format performed for each weed species observed during spring 2009 biological field surveys and was obtained online (<http://www.blm.gov/ca/st/en/prog/weeds/9015.html>) (Table1).

Table 1. Risk Assessment Factors and Rating Risk Assessment Factors

Factor 1: Likelihood of Noxious Weed Species Spreading to Project Area	
None	Noxious weed species not located within or adjacent to the project area. Project activity is not likely to result in the establishment of noxious weed species in the project area.
Low (1)	Noxious weed species present in areas adjacent to but not within the project area. Project activities can be implemented and prevent the spread of noxious Weeds into the project area.
Moderate (5)	Noxious weed species located immediately adjacent to or within the project area. Project activities are likely to result in some areas becoming infested with noxious weed species even when preventative management actions are followed. Control measures are essential to prevent the spread of Noxious weeds within the project area.
High(10)	Heavy infestations of Noxious weeds are located within or immediately adjacent to the project area. Project activities, even with preventative management actions are likely to results in the establishment and spread of noxious weeds on disturbed sites throughout much of the project area.

Table 1. Risk Assessment Factors and Rating Risk Assessment Factors (Cont'd)		
Factor 2: Consequence of Noxious Weed Establishment in Project Area		
Low to Nonexistent (1)	None. No cumulative effects expected.	
Moderate (5)	Possible adverse effects on site and possible expansion of infestation within project area. Cumulative effects on native plant community are likely but limited.	
High (10)	Obvious adverse effects within the project area and probable expansion of noxious weed infestations to areas outside the project area. Adverse cumulative effects on native plant community are probable.	
Risk Rating		
Step 1: Identify level of likelihood and consequence of adverse effects and assign values according to the following: None—0, Low—1, Moderate—5, High—10.		
Step 2 Multiply level of likelihood by consequence.		
Step 3 Use the value resulting in Step 2 to determine Risk Rating and Action as follows:		
Value	Risk Rating	Action
0	None	Proceed as planned.
1–10	Low	Proceed as planned. Initiate control treatment on noxious weed populations that get established in the area.
25	Moderate	Develop preventative management measures for the proposed project to reduce the risk of introduction or spread of noxious weeds into the area. Preventative management measures should include modifying the project to include seeding the area to occupy disturbed sites with desirable species. Monitor area for at least 3 consecutive years and provide for control of newly established populations of noxious weeds and follow-up treatment for previously treated infestations.
50–100	High	Project must be modified to reduce risk level through preventative management measures including seeding with desirable species to occupy disturbed sites and controlling existing infestations of noxious weeds prior to project activity. Project must provide at least 5 consecutive years of monitoring. Projects must also provide for control of newly established populations of noxious weeds and follow-up treatment for previously treated infestations.

Saharan Mustard

Saharan mustard is widespread over the Project Area (moderate). The rating for consequence of spread for Saharan mustard is moderate. The spread of this species may result in a possible expansion of infestation and limited cumulative effects on native plant communities. The overall risk rating for Saharan mustard is moderate (25 pts).

Tamarisk

Tamarisk observations were limited to a single plant located within the Survey Area, but not the Project Area. This yields a likelihood of spread rating of moderate and a consequence of spread rating of low. The overall risk rating for tamarisk is low (5 pts).

Russian Thistle

Russian thistle is common in the dune areas on the east side of the project area and along the linear facilities. It is rated moderate for likelihood of spread and moderate for consequence of spread. The overall risk rating of moderate (25 pts) for Russian thistle.

Mediterranean Grass

Mediterranean grass is found throughout the Project Area. It is rated high for likelihood of spread and moderate for consequence of spread, for an overall risk rating of moderate (50 pts).

Control measures will be essential to prevent the spread of these weed species within the Project Area. BLM Guideline 9015 states that projects with weeds that have a moderate risk rating - on the Project Area this is Saharan mustard and Russian thistle - should develop preventative management measures as listed in the table above. Monitoring should be undertaken for at least three consecutive years and should include weed control and follow-up treatments. Mediterranean grass, while receiving a high rating, is a dominant and widespread annual throughout the Mojave and Colorado Deserts and unlikely to be controlled easily because of its high germination potential, high density of highly mobile seeds, and growth pattern. The latter includes growth of a few to many individuals in close proximity to other species, including perennial grasses, which makes elimination by mechanical or chemical means difficult. Nonetheless, control techniques will be employed, as possible, but monitoring will take place for three, not five years. Sites with weeds that have a low risk rating on the Project Area – tamarisk - may proceed as planned, but would initiate control treatment on relevant noxious weed populations that get established in the area.

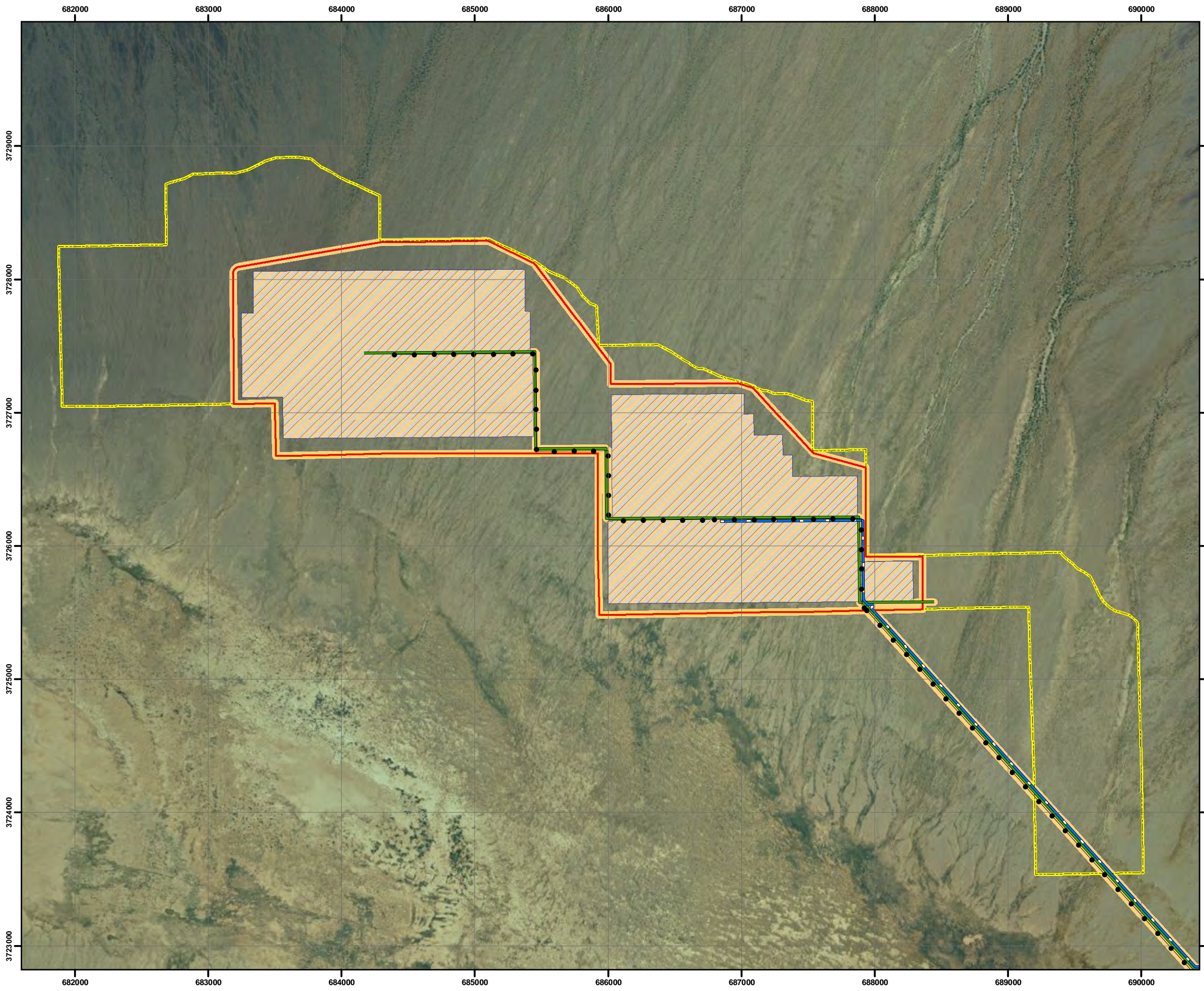
4.0 Weed Management Areas

The weed management area includes the Plant Site (fence line and solar fields), linear facilities, and a buffer area 100 ft out from the boundary of these features; including where the access road is not co-located with the gas and transmission line (Figure 3A and Figure 3B). In actuality, 100 ft may be more or less than the area of effect for some weeds. This Plan includes baseline surveys and monitoring within 100 ft as well as at greater distances to determine if management should extend beyond 100 ft. or be decreased.

Weed management areas were selected based on the presence of weed populations, and the likelihood of spread or increase. The 1,800 acre Plant Site will initially be cleared of all vegetation for construction and the solar fields will be kept clear of all vegetation during operation to reduce the risk of fire. Weed management will focus on areas of temporary surface disturbance, which will be along the edges of the Project Site, along the linear routes, and within the re-routed channels around the Project Site. Areas that will be paved, graveled, or otherwise covered with a non-growing surface are excluded from the weed management area.

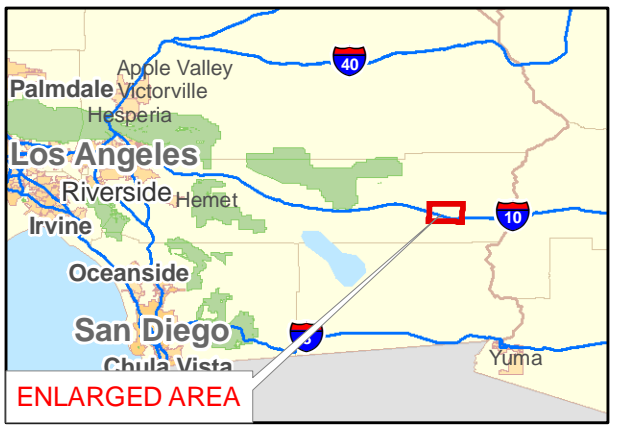
4.1 Surface Disturbance Areas

Soil that will be disturbed during construction will create habitat well suited to disturbance-adapted invasive species. This will occur along the linear facilities and Plant Site fence line. Other areas will be paved, graveled, or covered with a dust palliative (e.g., solar fields) that will not provide substrates suitable to vegetation growth. Hardening materials will also be applied to the re-routed channels but accumulated sediment and temporary water will provide attractive sites for weed establishment. Restored areas also will be prone to weed invasion and establishment. Accordingly, measures to minimize the introduction of new weed species and the



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CALIFORNIA**



Legend

- Requested Project ROW
- Facility Fence Line
- Proposed Solar Field
- Blythe Energy Project Transmission Line

Project Linear Facilities

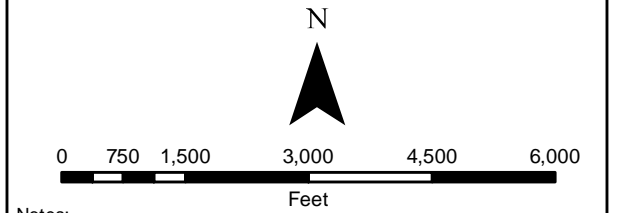
- Proposed Transmission Interconnect (7.5 Miles)
- Proposed Access Road (6.1 Miles)
- Proposed Gas Line (5.9 Miles)

Weed Management Area (1,821 ac.)

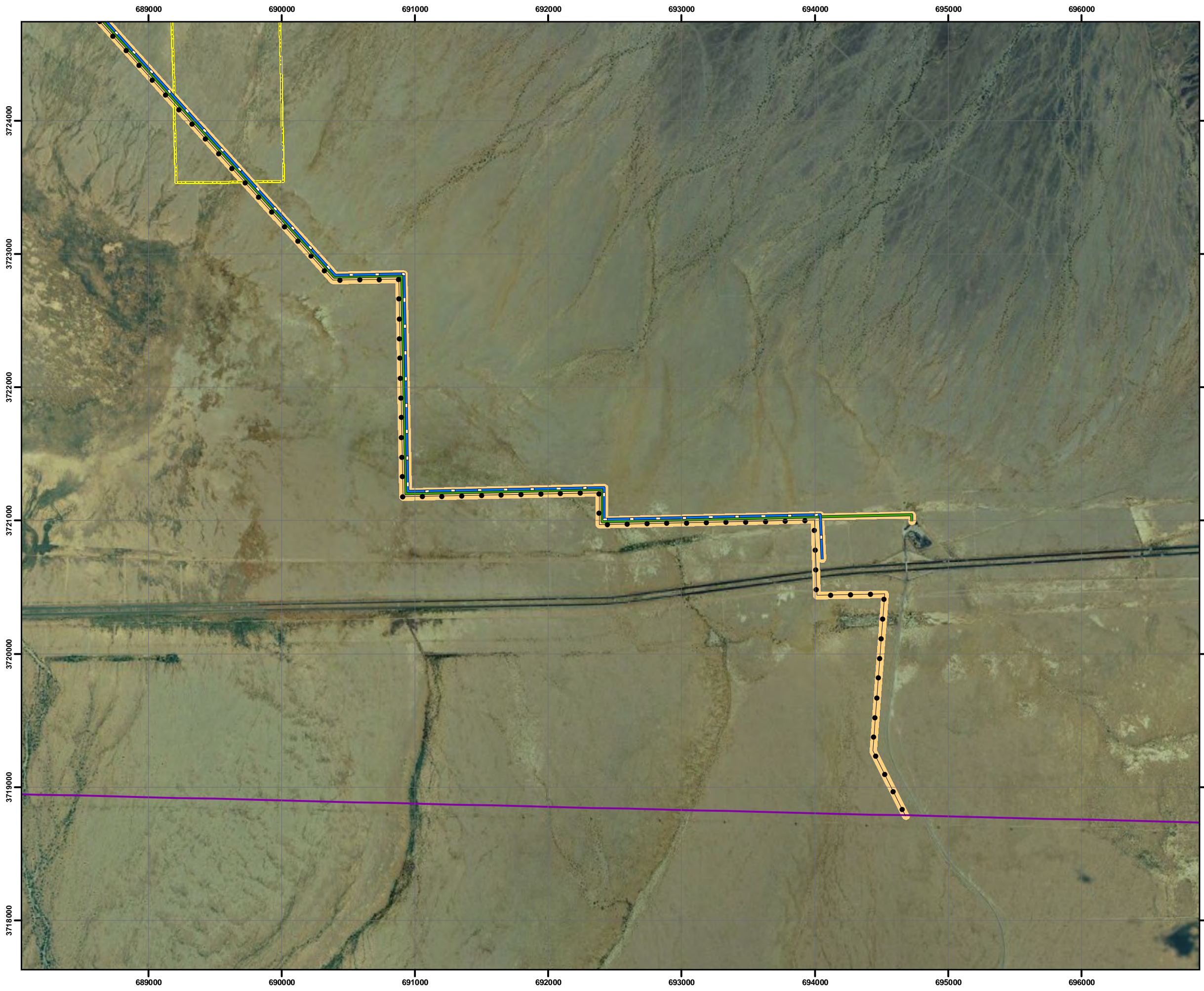
- 100 ft Buffer on Linear/Fence Line

Notes:

(a) UTM Zone 11, NAD 1983 Projection.
(b) Source data: ESRI, USDA, TTEC, WP

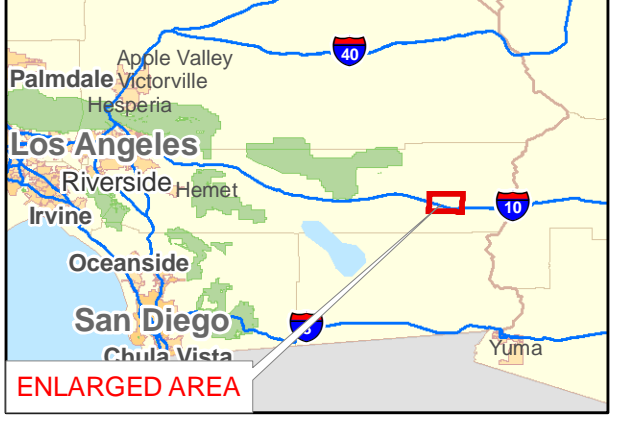


**FIGURE 3A
WEED MANAGEMENT AREA**

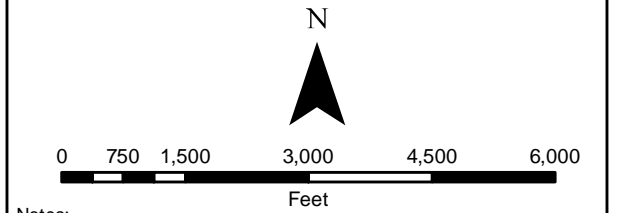


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- Legend**
- Requested Project ROW
 - Facility Fence Line
 - Proposed Solar Field
 - Blythe Energy Project Transmission Line
- Project Linear Facilities**
- Proposed Transmission Interconnect (7.5 Miles)
 - Proposed Access Road (6.1 Miles)
 - Proposed Gas Line (5.9 Miles)
- Weed Management Area (1,821 ac.)**
- 100 ft Buffer on Linear/Fence Line



Notes:
 (a) UTM Zone 11, NAD 1983 Projection.
 (b) Source data: ESRI, USDA, TTEC, WP

FIGURE 3B
WEED MANAGEMENT AREA

spread of existing weed populations by Project personnel and equipment will be implemented on all of these areas that may host weed populations.

5.0 Baseline Weed Surveys

Baseline surveys to identify existing weed populations and density will be completed prior to construction when weeds are present and easily identifiable; most likely Spring 2010. Surveys will be conducted of the boundary of the Plant Site and along the linear routes. Each weed will be identified and counted using a stratified random sampling technique. Survey transects will be conducted along 1000 feet of each mile of Project (i.e., total miles of fenceline and linear features, combined). Fifty (50) ft-wide transects will be walked at 100, 200, 300, and 1000 ft from the boundary of the Project facilities. Transect spacing may be modified to keep surveys within the same habitat.

6.0 Noxious Weed Management

6.1 Prevention

General measures to prevent the spread of weed propagules and inhibit their germination include the following:

- Limiting disturbance areas during construction to the minimum required to perform work
- Limiting ingress and egress to defined routes
- Maintaining vehicle wash and inspection stations and closely monitoring the types of materials brought on site to minimize the potential for weed introduction

6.1.1 Construction

6.1.1.1 Equipment Cleaning

To prevent the spread of weed species into new habitats, construction equipment will be cleaned of dirt and mud that could contain weed seeds, roots, or rhizomes. Prior to entering the Project work areas, equipment will be inspected to ensure they are free of any dirt or mud that could contain weed seeds. The tracks, feet, tires, and undercarriage will be carefully washed, and special attention will be paid to axles, frame, cross members, motor mounts, underneath steps, running boards, and front bumper/brush guard assemblies. Other construction vehicles (e.g. pick-up trucks) that will be frequently entering and exiting the site will be inspected and washed on an as-needed basis.

All vehicles will be washed off-site because the work area will be located directly off of I-10 and vehicles will not need to travel off-pavement to reach the work area. However, if necessary, an on-site cleaning station will be set up to clean equipment before they enter the work area. Cleaning stations would use either high pressure water or air to remove dirt and mud from equipment and vehicles and would be located away from any sensitive biological resources.

6.1.1.2 Site Soil Management

Soil will be managed by limiting ground disturbance to the minimum feasible and implementing dust suppressants to minimize the spread of seeds. Cleared vegetation and salvaged topsoil will be stockpiled adjacent to the area from which they are stripped to eliminate the transport of soil-borne noxious weed seeds, roots, or rhizomes. During reclamation of the temporarily cleared areas (excludes Plant Site), the contractor will return topsoil and vegetative material to the areas from which they were stripped. Dust palliatives (e.g. water) will be used during construction to minimize the spread of airborne weed seeds, especially during very windy days, a characteristic of the Project vicinity. As appropriate, temporary drift fences may be installed to help control sand movement during construction. Because sand accumulating along these fences will provide a hospitable microsite for weed seed germination as well as capture higher densities of seeds, concentrated control measures will be implemented along such structures (and any others that trap sand and seeds) to minimize weed population increases.

6.1.1.3 Weed-free Products

The contractor will ensure that any straw or hay bales used for sediment barrier installations are obtained from sources that are certified free of primary noxious weeds. Other products such as gravel, mulch, and soil, may also carry weeds. Such products will be obtained from suppliers who can provide certified weed-free materials. Where feasible, mulch will be generated from native vegetation cleared from the Project Area. Soil will not be imported onto the Project.

6.1.2 Operations

6.1.2.1 Facility Staff Training

Noxious and invasive weed management will be incorporated as a part of mandatory site training for groundskeepers and maintenance personnel. Training will include weed identification and the impacts on agriculture, livestock, wildlife, and fire frequencies. Training will also cover the importance of preventing the spread of noxious weeds and of controlling the proliferation of existing weeds.

6.2 Infestation Containment and Control

Project development may increase the density of existing weed species in areas of soil disturbance. Because Saharan mustard, Russian thistle occur onsite, and tamarisk within the Project vicinity, measures will be implemented to control and suppress current weed populations from spreading and increasing in density.

6.2.1 Mechanical Removal and Herbicides

Genesis Solar LLC will use herbicides or mechanical weed removal techniques depending on the most appropriate method for the weed species and location. Where practical, and based on the effectiveness of weed removal while minimizing effects on native vegetation, mechanical removal will be implemented to control weed populations. Herbicide will be used in the solar field to kill weeds to minimize the fire potential. On disturbance areas (see Section 4.1), mechanical removal and/or herbicides will be used to suppress populations of Saharan mustard and Russian thistle where they have or are expected to have increased density as a result of

the Project. In general, monitoring during construction and operation (see section 7.0) will determine if these species have increased in density or spread as a result of the Project, and thus determine the necessity of the control measures. However, all bladed areas that have received final contouring (e.g., pipeline ROW, road shoulders, transmission tower pads, stub roads) can be expected to support new populations of weeds and pro-active measures (e.g., pre-emergent herbicides) will be implemented to control weed populations there.

Genesis Solar, LLC will utilize BLM-approved pre- and/or post-emergent herbicides. Pre-emergent herbicides are applied to the soil before the weed seed germinates and usually incorporated into the soil with irrigation or rainfall. Post-emergent herbicides are applied directly to plants. Timing is critical for both pre-emergent and post-emergent herbicide application. In the Project vicinity, pre-emergent herbicides would primarily be applied in early fall, prior to fall/early winter rains. Post-emergent herbicides must be applied while the weed is actively growing, most effectively in the early seedling stage, but always prior to seed set. Therefore, all post-emergent treatments will occur between February and early April. Species-specific herbicides are currently being investigated and will be used as appropriate and available, along with other mechanical and chemical means for post-emergent elimination. When possible, selective herbicides will be used to target specific weed species, rather than all plant growth.

6.2.2 Woody Vegetation

The only documented woody noxious weed species on the project site is tamarisk. Based on very low numbers, individuals of this species would be treated by mechanical methods (i.e., pulling). If future surveys document larger individuals of this species on-site (tree-size), then those individuals would be controlled using a cut-and-paint method of removal. If the cut and paint method is necessary, the following procedures should be followed:

- Cut sprouts or woody stems to a height of 12 inches or less above ground and remove all aboveground debris for disposal at a suitable landfill.
- Apply Round-Up™ or Rodeo™ at a 100 percent rate to the cut sprout within 2 minutes of cutting the stem.
- Cover all loads to be trucked off-site using a tarpaulin.
- Continue monitoring cut stems for as long as necessary.

7.0 Monitoring

After baseline surveys are complete, monitoring will take place each year during construction, and annually for 3 years following the completion of construction. The purpose of annual monitoring will be to determine if weed populations identified during baseline surveys have increased in density or spread as a result of Project development. The period of three years following construction is consistent with BLM guidelines (see Table 1, above) and is very likely to span the annual variation in plant growth due to variation in rainfall and temperatures. Methods will be consistent with those of baseline weed surveys (Section 5.0).

7.1 Success Standard Thresholds

Eradication of the existing weed species is not possible due to their current prevalence in the Project Area. However, the Project is committed to ensuring that their activities do not exacerbate the existing condition. Both spatial and temporal controls, as well as replicates for each type of Project feature, have been incorporated into the monitoring program to qualitatively and quantitatively monitor weed densities associated with the Project.

Control methods will be implemented both pro-actively (see Section 6.2.1) and when monitoring identifies the necessity. Statistical weed increases, as well as visually verified increases, will require weed control. This will include even small patches of unusually high density (e.g., concentrations in swales) that are growing as a result of Project activities.

Whereas weed control will be ongoing on the Project Site for the life of the Project, Plan success will be determined after the three years of Operations monitoring. If no weed patches or statistically significant elevated weed densities are detected in the Project Area that can be attributed to Project activities, then the Plan will be considered successful. Continued monitoring and control, with modified techniques as necessary, will be implemented through an adaptive management process if the Plan is not successful after three years.

7.2 General Operations Monitoring

After the three years of operations monitoring is complete, general monitoring of the Project Area will be conducted by designated site personnel monthly during the germinating and early growing season (November through April) to eliminate new weed individuals prior to seed set.. Personnel will be trained to identify weedy and native species and work with the ECM to determine where pre- and post-emergent elimination is necessary.

7.3 New Weeds

Whereas unlikely, weeds not identified by field survey or previously reported for the area could colonize the site or invade site facilities, both during construction as well during operation. During construction, the ECM will be required to regularly update the list of potential noxious and invasive weeds and identify any new potential threats, including developing a management strategy and management methods appropriate to the plant species and the nature of any potential invasion. Similarly, the facility plant manager or appropriate designee during operations will be required to continually update the potential noxious and invasive weed list and provide monitoring and management appropriate to any new species.

8.0 Reporting Requirements

Long-term monitoring reports are required to evaluate monitoring results to determine if success standards are being met, and if not, what control measures should be implemented and why.

8.1 Annual Reports

A report will be prepared for each annual survey as outlined in Section 7.1. Reports will include, at a minimum, the following:

- Survey findings on location, type, spatial extent, and density of noxious weeds. These data will include mapping and photographs, as appropriate, as well as textual and tabular data content to fully describe conditions on the project site.
- Management efforts, including date, location, type of treatment implemented, and results within the Weed Management Area.
- Ongoing evaluation of success of prevention and control measures.
- Which, if any, additional control measures were implemented and rationale for implementation.
- Summary of restoration efforts and status.

8.1.1 Construction Reporting

Daily monitoring records will be kept by the ECM and the monitoring team which will include information relevant to noxious weeds. A single post-construction report will be produced after each phase of construction is completed, with a section summarizing the overall results of noxious weed management and weed status at the site.

8.1.2 Final Monitoring Report

After three years of post-construction monitoring is complete a final monitoring report will be produced to describe the outcome of weed management on the Project. The results of this report will be used to determine if additional monitoring or control measures are necessary.

9.0 References

Bureau of Land Management (BLM). 1980 (amended 1999). *California Desert Conservation Area Plan*. U.S. Department of the Interior, Bureau of Land Management, California Desert District, Riverside.

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California Invasive Plant Council (Cal-IPC). 2006. *California Invasive Plant Inventory*. Cal-IPC Publication 2006-02. California Invasive Plant Council, Berkeley. Available at: www.cal-ipc.org.

Sheley, R., J. Petroff, M. Borman, 1999. *Introduction to Biology and Management of Noxious Rangeland Weeds*, Corvallis, OR.



BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
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**APPLICATION FOR CERTIFICATION FOR THE
*GENESIS SOLAR ENERGY PROJECT***

Docket No. 09-AFC-8

**PROOF OF SERVICE
(Revised 1/26/10)**

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DECLARATION OF SERVICE

I, Tricia Bernhardt, declare that on February 1, 2010, I served and filed **Revised Air Quality Responses to the CEC Data Requests per the Workshop on January 6, 2010 for the Genesis Solar Energy Project** dated February 1, 2010. The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at: [http://www.energy.ca.gov/sitingcases/genesis_solar].

The documents have been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

(Check all that Apply)

FOR SERVICE TO ALL OTHER PARTIES:

sent electronically to all email addresses on the Proof of Service list;

by personal delivery or by depositing in the United States mail at Sacramento, California with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service list above to those addresses NOT marked "email preferred."

AND

FOR FILING WITH THE ENERGY COMMISSION:

sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (*preferred method*);

OR

depositing in the mail an original and 12 paper copies, as follows:

CALIFORNIA ENERGY COMMISSION

Attn: Docket No. 09-AFC-8
1516 Ninth Street, MS-4
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I declare under penalty of perjury that the foregoing is true and correct.

Original Signed By:



Tricia Bernhardt