

[FINAL]

*Eldorado – Lugo – Mohave Series Capacitor Project*

# Habitat Restoration and Revegetation Plan

Prepared for  
**Southern California Edison**

*2244 Walnut Grove Avenue  
Rosemead, CA 91770*

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Prepared By  
Environmental Planning Group, LLC

## **Applicable agencies**

*Bureau of Land Management*

*California Public Utilities Commission*

*National Park Service*

*California Department of Fish and Wildlife*

*California State Water Resources Control Board*

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# Acronyms and Abbreviations

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AMMs	Avoidance and Minimization Measures
APM	Applicant-Proposed Measure
BLM	Bureau of Land Management
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CPUC	California Public Utilities Commission
CYSRP	Cactus and Yucca Salvage and Relocation Plan
HCP	Habitat Compensation Plan
HRRP	Habitat Restoration and Revegetation Plan
IWMP	Integrated Weed Management Plan
kV	Kilovolt
MM	Mitigation Measure
MND	Mitigated Negative Declaration
MNP	Mojave National Preserve
NPS	National Park Service
OHV	Off-highway vehicle
PTC	Permit to Construct
Project	Eldorado-Lugo-Mohave Series Capacitor Project
ROW	Right-of-Way
SCE	Southern California Edison
SSPSRP	Special-status Plant Salvage and Relocation Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board

# 1 Introduction

The purpose of this Habitat Restoration and Revegetation Plan (Plan or HRRP) is to comply with the habitat restoration requirements for Southern California Edison's (SCE) Eldorado-Lugo-Mohave Series Capacitor Project (Project) as described by the final environmental documents produced by federal and state agencies. In addition, this Plan includes activities associated with compliance for applicable mitigation measures required in the Project's environmental documents, and Endangered Species Act Section 7 Biological Opinion conservation measures. Compliance with the mitigation measures and conservation measures will reduce potential impacts resulting from Project construction. The Plan describes the restoration and revegetation methods to be implemented on areas temporarily disturbed during execution of the Project.

## 1.1 Project Description

This Project will increase capacity and power flow between SCE's existing Eldorado, Lugo, and Mohave Substations to safely deliver renewable power to the Los Angeles Basin from the Eldorado and Mohave Substations. SCE's Proposed Project would:

- Construct 2 new 500 kV mid-line series capacitors (i.e., the proposed Newberry Springs Series Capacitor and Ludlow Series Capacitor) and associated equipment.
- Provide 2 communication paths between the series capacitor sites.
  - Install approximately 2 miles of overhead and 700 feet of underground telecommunications facilities as one path to connect the proposed series capacitors to SCE's existing communication system.
  - Install approximately 2 miles of underground telecommunications facilities as a second communication path to connect the series capacitors to SCE's existing communication system.
- Provide station light and power to the proposed series capacitors by extending and/or rerouting existing lines to create approximately 2 miles of overhead and 700 feet of underground 12 kV distribution circuits. (The new distribution poles would support overhead telecommunication facilities as well as the electric distribution lines.)
- Construct 3 new fiber optic repeater facilities (Barstow, Kelbaker, and Lanfair) within the Lugo-Mohave ROW.
- Install distribution lines for light and power at the 3 proposed fiber optic repeater sites.
- Install underground telecommunications facilities from existing transmission structures to the Barstow, Kelbaker, and Lanfair fiber optic repeater sites.
- Address 16 potential overhead clearance discrepancies at 14 locations by:
  - Relocating, replacing, or modifying existing transmission, subtransmission, and distribution facilities at approximately 12 locations along the Eldorado-Lugo, Eldorado-Mohave, and Lugo-Mohave 500 kV transmission lines to address 14 of the overhead clearance discrepancies. Tower modifications would include raising 9 towers up to approximately 18.5 feet by inserting new lattice-steel sections in tower bodies.

- Performing minor grading at 2 locations along the Lugo-Mohave 500 kV transmission line to address 2 of the overhead clearance discrepancies.
- Install approximately 232 miles of optical ground wire (OPGW) (approximately 59 miles on the Eldorado-Mohave transmission line and approximately 173 miles on the Lugo-Mohave transmission line and approximately 3 miles of underground telecommunications facilities in the vicinity of the Mohave Substation).
- Modify and strengthen the ground wire peak of existing suspension towers where OPGW splices would occur. (Some of these towers would also require minor modifications to the steel in the tower body.)
- Install approximately 2,000 feet of underground telecommunications facilities within the existing Lugo, Mohave, and Eldorado substations.
- Within Lugo Substation, perform modifications on the existing series capacitors and install new terminating equipment and remove 2 existing tubular steel poles (TSPs) and install 2 new TSPs on the Eldorado-Lugo and Lugo-Mohave 500 kV transmission lines.
- Within the Eldorado Substation, perform modifications on the existing series capacitors and upgrade the terminal equipment on the Eldorado-Lugo 500 kV transmission line.
- Within the Mohave Substation, replace existing series capacitors on the Lugo-Mohave 500 kV transmission line and install new terminal equipment on the Eldorado-Mohave and Lugo-Mohave 500 kV transmission lines.
- Install (if necessary) cathodic protection on approximately 60 miles of SoCalGas's natural gas pipelines parallel to SCE's Lugo-Mohave 500 kV transmission line and on other pipelines as needed.

For the purpose of this Plan, the Project area includes all areas subject to ground disturbance during the construction of the Project. Additional detail on the acreage associated with each category of Project component is presented in Section 2.

## **1.2 Project Location**

The Project is located in southern California and southern Nevada, within the Mojave Basin and Range Ecoregion. It will extend northeast from Lugo Substation (located in San Bernardino County, California) to Eldorado Substation (located in the City of Boulder City, Nevada) and Mohave Substation (located in Clark County, Nevada), and from Mohave Substation northwest to Eldorado Substation. The Project is located on land under the jurisdiction of the Bureau of Land Management (BLM), the Mojave National Preserve (MNP) administered by the National Park Service (NPS), the Bureau of Reclamation, and the Department of Defense. Portions of the Project will also cross the City of Hesperia in California, as well as the unincorporated communities of Searchlight and Laughlin in Nevada. The majority of the Project will be constructed within existing SCE easements, fee-owned properties, and public franchise areas. SCE will need to acquire a minimum of 1.9 acres of additional ROW from the BLM to construct the proposed Newberry Springs Series Capacitors and a minimum of 1.6 acres of additional private property to construct the proposed Ludlow Series Capacitor.

## **1.3 Lead, Cooperating, and Consulting Agencies**

### **1.3.1 Lead Agencies**

Lead agencies have discretionary approval over the Project and are responsible for reviewing aspects of the measures documented in this Plan. The California Public Utilities Commission (CPUC) is California's lead agency responsible for compliance with the California Environmental Quality Act (CEQA) for Project areas on non-federal lands. The CPUC issued an Initial Study/Mitigated Negative Declaration for the Project under CEQA. The BLM Desert District Office is the federal lead agency responsible for compliance with National Environmental Policy Act for the Project areas on federal lands.

### **1.3.2 Cooperating Agencies**

Because the Project also crosses the MNP, the NPS elected to participate as a cooperating agency for the environmental review of the Project. The California State Water Resources Control Board (SWRCB) is a state cooperating agency for the project.

### **1.3.3 Consulting Agencies**

Consulting agencies are public agencies, other than the lead agencies, that may provide guidance or information needed to satisfy the requirements of the measures contained in this Plan. Consulting agencies for select mitigation measures listed in Table 1 may include U.S. Fish and Wildlife Service, California Department of Fish and Wildlife (CDFW), and Nevada Department of Wildlife. The U.S. Department of Agriculture may participate in activities conducted under this Plan, but advance consultation would not be required.

## **1.4 Applicable Mitigation Requirements**

SCE is required to comply with CPUC G.O. 131-D and is seeking a Permit to Construct from the CPUC for the Project. The CPUC is the state lead agency responsible for compliance with the CEQA. Federal authorizations will also be required because a majority of the land in the vicinity of the Project is under the jurisdiction of the BLM, the NPS, the Bureau of Reclamation, and the Department of Defense. The BLM is serving as the lead federal agency for the Project under the National Environmental Policy Act because the Project will require a new ROW Grant and the majority of lands where the Project is located are BLM-administered. Mitigation related to weed control is also a component of the Project's Incidental Take Permit (ITP), to minimize the effects of weeds on habitat for the Mojave Desert Tortoise (*Gopherus agassizii*), and this HRRP will aid in meeting those mitigation objectives.

The Project will be constructed in a manner consistent with mitigation measures (MMs), Avoidance and Minimization Measures (AMM), and regulatory requirements imposed by federal and state agencies. Measures related to the development of this HRRP are listed in Table 1.

SCE has applied for and anticipates execution of permits addressing several specific resources potentially impacted by Project activities. Examples include but may not be limited to an Incidental Take Permit pursuant to Section 2081 of the California Fish and Game Code and take authorization under Programmatic Biological Opinions pursuant to Section 7 of the federal Endangered Species Act; Nationwide Permits 18 and 33 pursuant to Section 404 of the Clean Water Act and related Water Quality Certification pursuant to Section 401 (issued by the SWRCB); a Lake or Streambed Alteration Agreement

(LSAA) pursuant to Section 1600 et seq. of the California Fish and Game Code; and a Storm Water Pollution Prevention Plan (SWPPP). SCE anticipates that, in addition to the Mitigated Negative Declaration (MND) and Environmental Assessment MMs, each permit will include MMs that may be directly and indirectly related to the subject matter of this Plan. While some of those MMs are not known at this time, the implementation methods included in this Plan were derived from industry standards and tailored to comply with the MND and Environmental Assessment MMs, and the anticipated MMs from the forthcoming permits. Upon execution of the permits, this Plan will be reviewed to determine if revisions are required to comply with the new MMs. Review and approval of this Plan and any subsequent revisions will be coordinated with the agencies having jurisdiction over the applicable MMs.

<b>Measure</b>	<b>Description</b>
CPUC BR-4	<p><b>Restore or revegetate temporary disturbance areas.</b> [Replaces APM BIO-01 to provide further specificity.] SCE will implement a restoration or revegetation plan for all temporarily disturbed sites. Given that temporary impacts to desert tortoise habitat is considered a permanent impact in this MND and under BLM’s Programmatic Biological Opinion (BO) provides federal take authorization for the Project, SCE will mitigate for all desert tortoise habitat impacts as permanent impacts through compensatory mitigation. These temporarily disturbed sites will be subject to revegetation (i.e., re-establishment of vegetation to minimize long-term erosion, dust, and weed infestation) but habitat restoration will not be required. SCE will be required to implement habitat restoration at temporarily disturbed sites not mitigated through off-site compensation. SCE will provide a Habitat Restoration and Revegetation Plan (HRRP) to cover all temporarily disturbed sites, identifying sites to be subject to revegetation alone and those to be restored. The HRRP will describe, at a minimum, which revegetation or restoration method (e.g., natural revegetation, planting, or reseeded with native seed stock in compliance with the Proposed Project’s SWPPPs) will be implemented at each temporarily disturbed site. It will include the plant species or habitats to be restored or revegetated, the restoration or revegetation methods and techniques, and the monitoring periods and success criteria.</p> <p>All temporarily disturbed areas will be subject to revegetation and site management activities and success criteria of the Proposed Project’s SWPPP/Erosion Control Plan (HWQ-1) and the Integrated Weed Management Plan (BR-5) to ensure soil stabilization, vegetation cover, and weed prevention. In addition to those requirements, for any temporarily disturbed area not subject to compensatory mitigation (BR-8), the HRRP shall include:</p> <ul style="list-style-type: none"> <li>• Restoration goals and objectives for each portion of the project area, based on vegetation type and jurisdictional status of each site.</li> <li>• Quantitative success criteria for each restoration site or category.</li> <li>• Implementation details, including but not limited to topsoil stockpiling and handling; post-construction site preparation; soil decompaction and recontouring; planting and seeding palettes to include only native, locally sourced materials with confirmed availability from suppliers; fall or other suitable season planting or seeding dates (seeding outside the fall season may increase the risk of revegetation failure and need for subsequent remedial reseeded, irrigation, or other measures).</li> <li>• Maintenance, including but not limited to irrigation or hand-watering schedule and equipment, erosion control, and weed control.</li> <li>• Monitoring and Reporting, specifying monitoring schedule and data collection methods throughout establishment of vegetation with key indicators of successful or unsuccessful progress, and quantitative criteria to objectively determine success or failure at the conclusion of the monitoring period.</li> </ul>



**Table 1 Mitigation Measures, Avoidance and Minimization Measures, and Other Regulatory Requirements**

Measure	Description
	<ul style="list-style-type: none"> <li>• Contingency measures such as reseeding, replanting, drainage repairs, adjustments to irrigation or weeding schedule, and extension of maintenance beyond the original schedule, to repair or remediate sites not on track to meet success criteria, or not meeting the criteria at the close of the originally scheduled monitoring period.</li> <li>• A Gantt Chart or similar exhibit identifying all components of the HRRP, including acquisition of plant materials, specifying seeding or planting dates identifying entity to perform each task (e.g., EPC contractor or restoration contractor) and indicating critical path activities.</li> </ul> <p>The Draft HRRP shall be submitted to CPUC and BLM review and approval prior to the beginning of ground-disturbing activities. SCE shall incorporate all requested revisions in coordination with the CPUC and BLM and finalize the HRRP within 12 months from the start of construction.</p> <p>For all restoration areas, if a fire, flood, or other disturbance beyond the control of SCE, CPUC, and BLM damages the area within the monitoring period, SCE shall be responsible for a one-time replacement. If a second event occurs, no replacement is required.</p> <p>For all revegetation (per SWPPP requirements) or restoration sites (per the HRRP), only seed or potted nursery stock of locally occurring native species will be used. Seeding and planting will be informed by Chapter 5 of <i>Rehabilitation of Disturbed Lands in California</i> (Newton and Claassen 2003). The list of plants observed during botanical surveys of the project area will be used as a guide to site-specific plant selection.</p> <p>Monitoring of the restoration sites will continue annually for up to 5 years or until the defined success criteria in the HRRP are achieved. SCE will be responsible for implementing remediation measures as needed. Following remediation work, each site will still be subject to the success criteria required for the initial restoration. The monitoring period for remediation work will be concurrent with the monitoring period required for the initial restoration.</p> <p><b>Reporting.</b> For all restoration areas, SCE will provide annual reports to the CPUC and BLM verifying the total vegetation acreage subject to temporary and permanent disturbance, identifying which items of the HRRP have been completed, and which items are still outstanding. The annual reports will also include a summary of the restoration activities for the year, a discussion of whether success criteria were met, any remedial actions conducted and recommendations for remedial action, if warranted, that are planned for the upcoming year. Each annual report will be submitted within 90 days after completion of each year of restoration work.</p>
NPS (unnumbered)	<p><b>Habitat restoration and revegetation</b></p> <p>A Habitat Restoration and Revegetation Plan shall be prepared and implemented. Within the Mojave National Preserve, biological crusts need to be carefully removed intact, stored in a safe place, and then replaced in the original location after revegetation to complete restoration. Also, within the Mojave National Preserve, vegetation restoration must follow the vegetation management guidelines set forth in the NPS Reference Manual #77: Natural Resource Management and, in particular, the preservation of diversity, preservation of genetic integrity and the prevention of genetic contamination. See LUPA-BIO7/13, LUPA-BIO-SVF-1/2/3/5, LUPA-BIOVEG-1/5, LUPA-LIVE-1, NLCS-DIST-1/2, NLCS-LANDS-1/3/5, and ACEC-DIST1/2. (BLM Mitigation BR-4)</p>
BLM BR-4	A Habitat Restoration and Revegetation Plan shall be prepared and implemented.

<b>Table 1 Mitigation Measures, Avoidance and Minimization Measures, and Other Regulatory Requirements</b>	
<b>Measure</b>	<b>Description</b>
BLM Southern Nevada District Office Programmatic BO RPM 3.a: Restoration Plan	BLM will ensure that the applicant develops and implements a restoration or reclamation plan approved by the BLM prior to surface disturbance.
Draft ITP 9.5	<u>Habitat Restoration</u> . Permittee shall prepare and implement a Habitat Restoration and Revegetation Plan (HRRP) to address the 124.54 acres of Covered Species habitat temporarily disturbed by the Project (hereinafter, collectively referred to as "Restoration Areas"). The HRRP must provide detailed information regarding the revegetation and/or restoration of the temporarily disturbed areas, including: (1) the locations of the Restoration Areas (using maps and GIS shapefile); (2) revegetation methods (e.g., natural revegetation, topsoil salvage and redistribution, reseeding, planting); (3) site preparation techniques (e.g., decompaction, recontouring); (4) application and/or installation methods for plant materials; (5) native plant and seed palette; (6) maintenance and monitoring protocol, including schedules, timelines, and data collection methods; (7) species- or community-specific habitat restoration and revegetation goals, objectives, and quantitative success criteria; (8) contingency measures to be implemented in the event the success criteria are not being met; and (9) an outline of the data/results to be reported annually to CDFW. The HRRP shall be provided to CDFW for review and approval no fewer than 30 days prior to the initiation of Covered Activities.
LSAA Measure 3.2	Permittee shall prepare and implement a Habitat Restoration and Revegetation Plan (HRRP) to address the treatment of the 10.19 acres of Restoration Areas (see Measure 3.1). The HRRP must provide detailed information regarding the revegetation and/or restoration of the temporarily disturbed areas, including: (1) the locations of the Restoration Areas (using maps and GIS shapefile); (2) revegetation methods (e.g., natural revegetation, topsoil salvage and redistribution, reseeding, planting); (3) site preparation techniques (e.g., decompaction, recontouring); (4) application and/or installation methods for plant materials; (5) native plant and seed palette; (6) maintenance and monitoring protocol, including schedules, timelines, and data collection methods; (7) species- or community-specific habitat restoration and revegetation goals, objectives, and quantitative success criteria; (8) contingency measures to be implemented in the event the success criteria are not being met; and (9) an outline of the data/results to be reported annually to CDFW. The HRRP shall be provided to CDFW for review and approval no fewer than 30 days prior to the initiation of Project activities.
Section 401 Water Quality Certification Condition H.1.	The Permittee shall restore all areas of temporary impacts to waters of the state and all Project site upland areas of temporary disturbance which could result in a discharge of waters of the state to pre Project conditions as described in a restoration plan. The restoration plan shall be submitted for written acceptance by State Water Board staff within ninety days (90) of issuance of this Order. The restoration plan shall provide the following: a schedule; plans for grading of disturbed areas to pre-project contours; planting palette with plant species native to the Project area; seed collection location; invasive species management; performance standards; and maintenance requirements (e.g. watering, weeding, and replanting). [Note: Condition H.1 also cites additional monitoring required for impacts not addressed in this Plan, which are then listed as H.2 and H.3.]

## 2 Impact Summary

Project impacts are classified as temporary or permanent. Temporary impacts will result from ground disturbance associated with the installation, construction, or use of guard structures, pull and tension sites, and work areas for transmission, telecommunications, and series capacitors. Permanent impacts will primarily result from the construction of the series capacitors. The Project will potentially affect 380.1 acres of vegetation with 373.1 acres being temporary and 7 acres being permanent impacts. The exact acreage of impacts will be recalculated once construction activities have been completed.

A summary of the estimated potential temporary and permanent disturbance is provided in Table 2.

<b>Table 2 Acres of Ground Disturbance by Project Feature</b>					
<b>Proposed Project Feature</b>	<b>Quantity</b>	<b>Total Disturbance (acres)</b>	<b>Temporary Disturbance</b>		<b>Permanent Disturbance (acres)</b>
			<b>Previously Disturbed (acres)</b>	<b>Restoration (acres)</b>	
<b>Mid-Line Series Capacitors</b>					
Newberry Springs Series Capacitor	1	3.8	0.0	0.6	3.2
Ludlow Series Capacitor	1	4.0	0.0	1.5	2.5
<b>Total Estimate for Mid-Line Series Capacitors</b>		<b>7.7</b>	<b>0.0</b>	<b>2.1</b>	<b>5.6</b>
<b>Transmission</b>					
Guard Structures	92	7.4	0.0	7.4	0.0
Pull and Tension Sites	198	58.1	0.0	57.9	0.2
Discrepancy Work Areas	14	3.6	3.5	0.1	0.0
OPGW/Tower Work	92	20.8	20.6	0.2	0.0
<b>Total Estimated for Transmission</b>		<b>89.9</b>	<b>24.1</b>	<b>65.6</b>	<b>0.2</b>
<b>Subtransmission</b>					
Discrepancy Work Area	1	1.7	0.0	1.7	0.0
<b>Total Estimated for Subtransmission</b>		<b>1.7</b>	<b>0.0</b>	<b>1.7</b>	<b>0.0</b>
<b>Distribution</b>					
Mid-Line Series Capacitor Work Areas	4	20.8	0.0	20.8	0.0
Fiber Optic Repeater Work Areas	3	2.7	0.0	2.7	0.0
<b>Total Estimated for Distribution</b>		<b>23.6</b>	<b>0.0</b>	<b>23.6</b>	<b>0.0</b>
<b>Telecommunications</b>					
Fiber Optic Repeaters	3	0.2	0.0	0.0	0.2
Telecommunications Work Areas	38	32.0	0.9	31.1	0.0
<b>Total Estimated for Telecommunications</b>		<b>32.2</b>	<b>0.9</b>	<b>31.1</b>	<b>0.2</b>
<b>Substations</b>					
Lugo Substation	1	23.0	23.0	0.0	0.0
Mohave Substation	1	21.5	21.5	0.0	0.0
Eldorado Substation	1	11.0	11.0	0.0	0.0
<b>Total Estimated for Substations</b>		<b>55.5</b>	<b>55.5</b>	<b>0.0</b>	<b>0.0</b>
<b>Staging Areas</b>					
Staging Areas	17	99.5	34.4	65.1	0.0
Landing Zones	201	51.4	0.7	50.7	0.0
Parking Areas	4	15.5	9.8	5.6	0.0
<b>Total Estimated for Staging Areas</b>		<b>166.4</b>	<b>45.5</b>	<b>121.4</b>	<b>0.0</b>

<b>Table 2 Acres of Ground Disturbance by Project Feature</b>					
<b>Proposed Project Feature</b>	<b>Quantity</b>	<b>Total Disturbance (acres)</b>	<b>Temporary Disturbance</b>		<b>Permanent Disturbance (acres)</b>
			<b>Previously Disturbed (acres)</b>	<b>Restoration (acres)</b>	
<b>Access Roads and/or Spur Roads</b>					
Access Roads and/or Spur Roads	11	1.4	0.3	0.2	0.9
Footpaths	40	1.6	0.0	1.6	0.0
<b>Total Estimated for Access Roads, Spur Roads, and Footpaths</b>		<b>3.0</b>	<b>0.3</b>	<b>1.8</b>	<b>0.9</b>
<b>Total Estimated for Proposed Project</b>		<b>380.1</b>	<b>125.8</b>	<b>247.3</b>	<b>7.0</b>
Note: Totals may not match the sum of individual rows because of rounding.					

Table 2 summarizes all anticipated disturbance from the Project. This includes as a subset the acres of impact analyzed and addressed under the Project’s LSAA and Section 401 Certifications.

### 3 Mitigation Strategy

All temporary Project disturbance requiring treatment will be treated as restoration areas, including approximately 102 acres in California and approximately 31 acres in Nevada. Consistent with mitigation listed in Table 1, the term restoration as used in this HRRP reflects areas with objective standards or goals for measures such as vegetation cover and species diversity. In addition to qualitative monitoring such as documenting whether site stabilization has been achieved and recording the status of invasive plants in the site, quantitative monitoring will be conducted to document the progress of restoration sites in meeting those goals.

SCE’s approach to mitigate for impacts to sensitive resources due to construction of the Project is to restore temporarily impacted areas and to provide compensatory mitigation for permanent impacts, as required by the Project’s permitting documents.

SCE has prepared Habitat Compensation Plans (HCPs) that document the conditions under which compensatory mitigation will be provided for impacts to Mojave Desert Tortoise habitat. SCE will compensate for temporary and permanent impacts within habitat for the Mojave Desert Tortoise at ratios established by the HCPs within each jurisdiction. In Clark County, Nevada, compensatory impacts are managed through the Clark County Multiple Species Habitat Conservation Plan. Impacts compensated under that plan are considered permanent from the standpoint of restoration, and only site stabilization will be required on private land in Clark County.

Temporary impacts in areas dominated by non-native species will be restored with appropriate native species once initial treatments identified in the Project’s IWMP have been completed. Temporary impacts in barren areas may not be subject to restoration requirements if the site is naturally barren, but site stabilization measures will be implemented. Temporary impacts on private lands would be addressed according to landowner requirements.

#### 3.1 Objectives

The objective of this Plan is to ensure that the Project’s impacts are mitigated in a way that is consistent with the land management objectives and Project-specific requirements of the BLM, CPUC, CDFW,

SWRCB, and NPS. The mitigation measures for this Project will generally be applied Project-wide, except for requirements specific to the MNP.

The purpose of this Plan is to outline the methods for restoration of all areas temporarily disturbed by the Project. The goal of the restoration efforts is for the treated areas to exhibit evidence of increasing native vegetative cover, density, diversity, and species dominance that is similar to the pre-impact conditions or existing conditions in adjacent areas.

## 4 Baseline Conditions

Documenting baseline conditions is an important component of the restoration program, as the performance criteria for the restoration will be based on this data. Baseline condition (pre-impact) data will be collected for temporary impact areas. Pre-impact data for the Project site will consist of identifying the vegetation community (native species, non-native species, native cover, non-native cover); presence of special-status species; soils present; slope aspect(s); any observed disturbance from previous or historic activities; and photographs.

Surveys completed in 2016 and 2017 documented the following 37 vegetation alliances present throughout the Project area (Insignia Environmental 2017, 2018).

- *Juniperus californica* woodland alliance
- *Psoralea argophylla* woodland alliance
- *Salix exigua* woodland alliance
- *Yucca brevifolia* woodland alliance
- *Acacia greggii* shrubland alliance
- *Adenostoma fasciculatum* shrubland alliance
- *Ambrosia dumosa* shrubland alliance
- *Ambrosia salsola* shrubland alliance
- *Atriplex confertifolia* shrubland alliance
- *Atriplex polycarpa* shrubland alliance
- *Cercocarpus montanus* shrubland alliance
- *Coleogyne ramosissima* shrubland alliance
- *Cylindropuntia bigelovii* shrubland alliance
- *Encelia (actoni, virginensis)* shrubland alliance
- *Encelia farinosa* shrubland alliance
- *Ephedra funerea* provisional shrubland alliance
- *Ephedra nevadensis* shrubland alliance
- *Ephedra viridis* shrubland alliance
- *Ericameria cooperi* provisional shrubland alliance
- *Ericameria linearifolia* provisional shrubland alliance
- *Ericameria nauseosa* shrubland alliance
- *Ericameria paniculata* shrubland alliance
- *Eriogonum fasciculatum* shrubland alliance
- *Hyptis emoryi* shrubland alliance
- *Larrea tridentata* shrubland alliance
- *Larrea tridentata – Ambrosia dumosa* shrubland alliance
- *Larrea tridentata – Encelia farinosa* shrubland alliance
- *Prunus fasciculata* shrubland alliance
- *Purshia tridentata* shrubland alliance
- *Tamarix* spp. shrubland semi-natural alliance
- *Salazaria mexicana* shrubland alliance
- *Suaeda moquinii* shrubland alliance
- *Yucca schidigera* shrubland alliance
- *Achnatherum speciosum* herbaceous alliance
- *Pleuraphis rigida* herbaceous alliance
- Desert pavement/Barrens
- Developed land

## 5 Implementation

This section describes general methods that will be used to restore vegetation communities and habitats impacted by the Project. Restoration of temporary disturbance areas following construction will occur as soon as practical after completion of construction activities in the affected area. Plan implementation will require the following steps, to be carried out by a Restoration Contractor (Figure 1):

- Plant material salvage and procurement
- Site-specific restoration planning
- Site preparation
- Installation; and
- Maintenance

### 5.1 Plant Material Salvage and Procurement

Plant materials used for restoration will be derived from on-site sources to the extent feasible. This would include salvage of cacti and yuccas according to the Cactus and Yucca Salvage and Relocation Plan (CYSRP) and special-status plants according to the Special-status Plant Salvage and Relocation Plan (SSPSRP); salvage of material to be used for mulch; and seed collection. However, on-site collection is not anticipated to fully meet the needs of the restoration process, and supplementary materials may be used as described in this section. Generally, acquisition of supplementary materials would occur during the construction process, after initial salvage of on-site material has occurred.

Selection of on-site plant material for salvage and collection will be made by the Restoration Contractor in consultation with Project construction personnel. As described in this Plan, the SSPSRP, and the CYSRP, plant salvage will be determined in part by the plant's health and the probability of transplant success.

#### 5.1.1 Seed Source and Collection

Seed may be obtained from on-site seed collection or from commercial vendors. Seed would comply with U.S. Department of Agriculture rules and regulations under the Federal Seed Act. Purity and germination rates would be warranted by the seed supplier (e.g., all seed mixtures will be certified "weed free"). All seed would be furnished in sealed standard containers.

On-site seed collection would take place where authorized by the land management agency (BLM or MNP) in the vicinity of the Project area. Within the MNP, some local seed collection is required by NPS mitigation measures. Seed collected within the MNP may not be used for restoration outside the MNP. Excess seed from the MNP will be destroyed or returned to the NPS. Seed collection within the MNP will be limited to a radius of 0.5 miles around each area to be graded, and only seeds sourced from within 0.5 miles will be used in the restoration of each graded area.

The timing of seed collection is anticipated to occur during the year prior to and the year of installation of restoration treatments and may vary across the Project area. Native seed collections will be weed-free and stored in cool dry conditions until ready to use. Collection efforts will follow characterization of potential restoration sites and determination of seed mixes. Collection will target as many native annual and perennial species as are available during each collection phase.

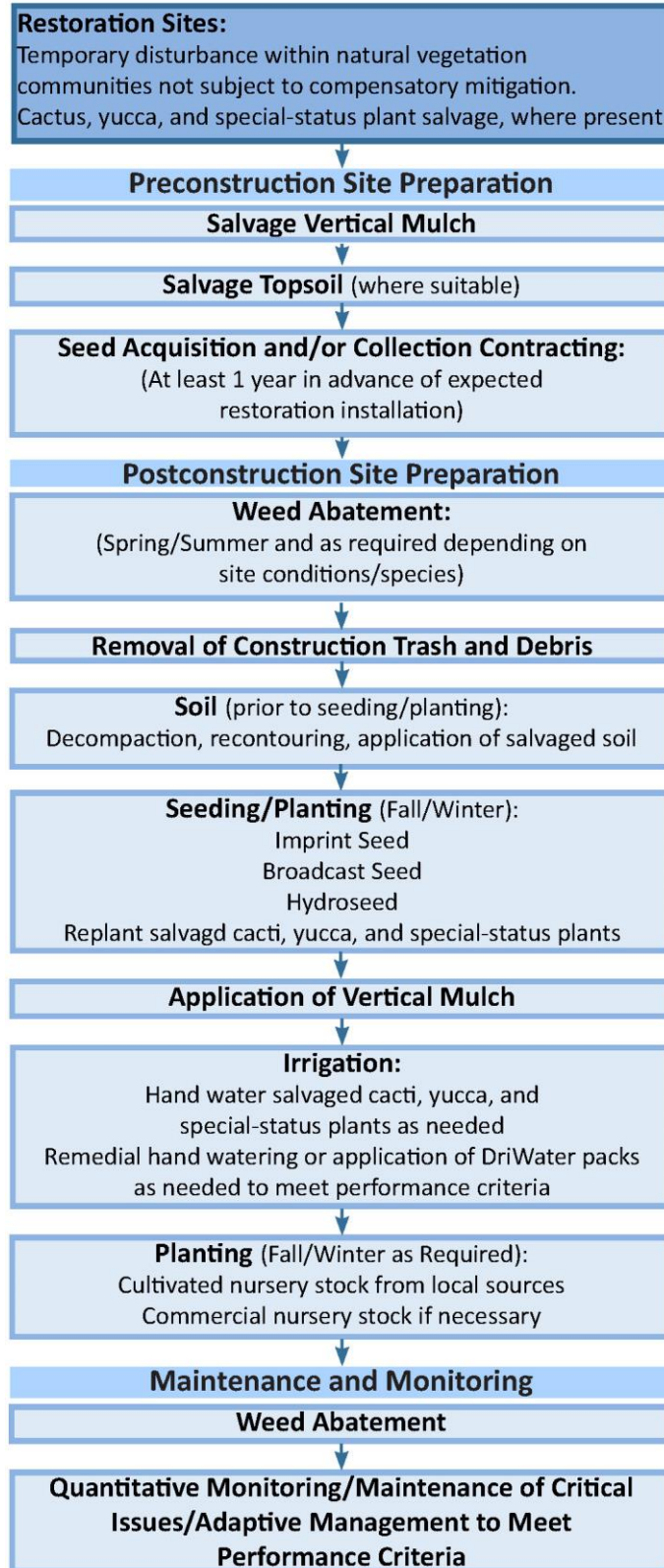


Figure 1 Restoration Plan Activity Summary

Seed that has become wet, moldy, or otherwise damaged in transit or in storage would not be used and would be rejected and removed from site. If sufficient seed cannot be collected/obtained for a particular species or vegetation community, seed will be substituted with seed of a native species with a comparable function. Changes to seed or plant lists will be submitted to the corresponding land management agency (BLM or MNP) for approval.

Five seed mixes have been proposed for use across the Project area (see Tables 3 through 7) to be applied to temporary disturbance areas. These include Mojave-Sonoran Desert Scrub; Great Basin-Intermountain Dry Shrubland and Grassland; Great Basin Saltbush Scrub; North American Warm Semi-Desert Cliff, Scree and Rock Vegetation; and Chaparral/Semi-desert Grassland Transition. The Restoration Contractor will work with the agencies and the Biological Compliance Lead in the field to determine the transition point for use of each seed mix to support site-specific restoration planning. Site-specific seed mixes will be developed for the MNP based on available seed within 0.5 miles of each area to be graded and restored.

#### 5.1.1.1 Seed Mix A: Mojave-Sonoran Desert Scrub

The majority of the Project is located in Mojave-Sonoran Desert Scrub, which is dominated by creosote bush (*Larrea tridentata*), with Payne burrobush (*Ambrosia dumosa*) often as a codominant species. Joshua tree (*Yucca brevifolia*) is the most recognizable plant species that distinguishes the Mojave Desert and occurs in parts of this macrogroup within the Project area. Other plants commonly associated with the Mojave Desert biome include Gray water jacket (*Lycium andersonii*), Nevada jointfir (*Ephedra nevadensis*), Eastern Mojave buckwheat (*Eriogonum fasciculatum*), and Mojave yucca (*Yucca schidigera*).

<b>Scientific Name</b>	<b>Common Name</b>	<b>Type</b>	<b>Rate: PLS Pounds/Acre (Broadcast)</b>
<i>Ambrosia dumosa</i>	Payne Burrobush	Shrub	3.00
<i>Ephedra californica</i>	California Jointfir	Shrub	1.00
<i>Ericameria linearifolia</i>	Narrowleaf Goldenbush	Shrub	0.50
<i>Eriogonum fasciculatum</i>	Eastern Mojave Buckwheat	Shrub	1.40
<i>Larrea tridentata</i>	Creosote Bush	Shrub	9.00
<i>Lycium andersonii</i>	Water Jacket	Shrub	0.60
<i>Pleurocoronis pluriseta</i>	Bush Arrowleaf	Shrub	0.04
<i>Amsinckia tessellata</i>	Bristly Fiddleneck	Forb	1.20
<i>Sphaeralcea ambigua</i>	Desert Globemallow	Forb	1.60
<i>Bouteloua gracilis</i>	Blue Grama	Grass	1.00
<i>Hilaria rigida</i>	Big Galleta	Grass	4.00
<i>Oryzopsis hymenoides</i>	Indian Ricegrass	Grass	5.00
<b>Total</b>			<b>28.34</b>
*Rates are for use in broadcast or hydroseed seeding.			

#### 5.1.1.2 Seed Mix B: Great Basin-Intermountain Dry Shrubland and Grassland

Portions of the southern extents of the Project are located within the Great Basin-Intermountain Dry Shrubland and Grassland macrogroup. Plants that predominately represent this macrogroup are yellow rabbitbrush (*Chrysothamnus viscidiflorus*), blackbrush (*Coleogyne ramosissima*), Parry's rabbitbrush (*Ericameria parryi*), brittle pricklypear (*Opuntia fragilis*), and plains pricklypear (*Opuntia polyacantha*). Joshua tree and other Mojave Desert plants such as Eastern Mojave buckwheat, California jointfir



(*Ephedra californica*), and Nevada jointfir may be present, but less common. Rock outcroppings or shale dominant lands are typically sparse with vegetation in these areas.

Scientific Name	Common Name	Type	Rate: PLS Pounds/Acre (Broadcast)
<i>Prunus fasciculata</i>	Desert Almond	Tree	2.00
<i>Atriplex canescens</i>	Fourwing Saltbush	Shrub	1.00
<i>Atriplex polycarpa</i>	Cattle Saltbush	Shrub	0.40
<i>Lycium andersonii</i>	Water Jacket	Shrub	0.60
<i>Senegalia greggii</i>	Catclaw Acacia	Shrub	1.00
<i>Sphaeralcea ambigua</i>	Desert Globemallow	Forb	1.60
<i>Sporobolus airoides</i>	Alkali Sacaton	Grass	0.32
<i>Bouteloua gracilis</i>	Blue Grama	Grass	1.00
<i>Pleuraphis rigida</i>	Big Galleta	Grass	4.00
<i>Achnatherum hymenoides</i>	Indian Ricegrass	Grass	5.00
<b>Total</b>			<b>18.52</b>

#### 5.1.1.3 Seed Mix C: Great Basin Dry Saltbush Scrub

This semi-desert macrogroup is characterized by open to moderately dense cover of short shrubs with a sparse herbaceous layer composed of perennial bunchgrasses. Dominant shrubs may include saltbush species such as fourwing saltbush (*Atriplex canescens*), shadscale saltbush (*Atriplex confertifolia*), valley saltbush (*Atriplex cuneata*), big saltbush (*Atriplex lentiformis*), mound saltbush (*Atriplex obovata*), cattle saltbush (*Atriplex polycarpa*), and spinescale saltbush (*Atriplex spinifera*). The macrogroup occasionally includes associated species such as catclaw acacia (*Acacia greggii*) and gray water jacket.

Scientific Name	Common Name	Type	Rate: PLS Pounds/Acre (Broadcast)
<i>Prosopis glandulosa</i>	Honey Mesquite	Tree	0.80
<i>Atriplex canescens</i>	Fourwing Saltbush	Shrub	1.00
<i>Atriplex confertifolia</i>	Shadscale Saltbush	Shrub	0.40
<i>Atriplex polycarpa</i>	Cattle Saltbush	Shrub	0.40
<i>Encelia actoni</i>	Acton's Brittlebush	Shrub	1.40
<i>Lupinus odoratus</i>	Mojave Lupine	Forb	1.00
<i>Lycium andersonii</i>	Water Jacket	Shrub	0.60
<i>Senegalia greggii</i>	Catclaw Acacia	Shrub	0.04
<i>Sphaeralcea ambigua</i>	Desert Globemallow	Forb	1.60
<i>Pleuraphis rigida</i>	Big Galleta	Grass	4.00
<b>Total</b>			<b>11.24</b>

#### 5.1.1.4 Seed Mix D: North American Warm Semi-Desert Cliff, Scree and Rock Vegetation

This macrogroup consists of near-barren to sparsely vegetated landscapes on a variety of substrates. Shrubs typical to the macrogroup include desertholly (*Atriplex hymenelytra*) and shadscale saltbush (basic to alkali substrate), Bigelow's nolina (*Nolina bigelovii*), Schott's pygmycedar (*Peucephyllum schottii*), and bush arrowleaf (*Pleurocoronis pluriseta*). Creosote bush and brittlebush (*Encelia farinosa*) are also often

present in rocky areas, and Eastern Mojave buckwheat as well as creosote bush are often present on rocky slopes.

Scientific Name	Common Name	Type	Rate: PLS Pounds/Acre (Broadcast)
<i>Nolina bigelovii</i>	Bigelow's Nolina	Shrub	3.00
<i>Atriplex confertifolia</i>	Shadscale Saltbush	Shrub	1.00
<i>Atriplex hymenelytra</i>	Desertholly	Shrub	0.50
<i>Encelia farinosa</i>	Brittlebush	Shrub	1.20
<i>Eriogonum fasciculatum</i>	Eastern Mojave Buckwheat	Shrub	1.40
<i>Larrea tridentata</i>	Creosote Bush	Shrub	9.00
<i>Pleurocoronis pluriseta</i>	Bush Arrowleaf	Shrub	0.04
<i>Sphaeralcea ambigua</i>	Desert Globemallow	Forb	1.60
<b>Total</b>			<b>17.74</b>

#### 5.1.1.5 Seed Mix E: Chaparral/Semi-desert Grassland Transition

Chaparral/Semi-desert grassland transition is a narrow transitional area through which the Project crosses that consists of shrublands found on steep, exposed slopes with rocky, shallow and well-drained soils. This unclassified group is found as an intermediary community between desert communities and higher Juniper-Pinyon woodlands with some characteristics of both communities. Vegetation includes California juniper (*Juniperus californica*), burrobush (*Hymenoclea salsola* var. *salsola*), Nevada jointfir, narrowleaf goldenbush (*Ericameria linearifolia*), pointleaf manzanita (*Arctostaphylos pungens*), chaparral whitethorn (*Ceanothus leucodermis*), and occurrences of Joshua tree.

Scientific Name	Common Name	Type	Rate: PLS Pounds/Acre (Broadcast)
<i>Juniperus californica</i>	California Juniper	Tree	1.02
<i>Ambrosia dumosa</i>	Bursage	Shrub	3.00
<i>Hymenoclea salsola</i>	Burrobush	Shrub	3.00
<i>Atriplex canescens</i>	Fourwing Saltbush	Shrub	1.00
<i>Ericameria nauseosus</i>	Rubber Rabbitbrush	Shrub	0.50
<i>Encelia actoni</i>	Acton's brittlebush	Shrub	1.40
<i>Ephedra nevadensis</i>	Nevada Jointfir	Shrub	1.00
<i>Lupinus odoratus</i>	Mojave Lupine	Forb	1.00
<i>Pectocarya</i> spp.	Combseed	Forb	1.00
<i>Bouteloua gracilis</i>	Blue Grama	Grass	1.00
<i>Pleuraphis rigida</i>	Big Galleta	Grass	4.00
<i>Oryzopsis hymenoides</i>	Indian Ricegrass	Grass	5.00
<b>Total</b>			<b>22.92</b>

#### 5.1.1.6 Vegetation Alliances and Macrogroups

Final determinations on the appropriate seed mix in a given location will be made during the site-specific restoration planning process (Section 5.3). However, initial planning for the purposes of seed acquisition will be based on the vegetation alliance data collected for the Project (Insignia Environmental 2017, 2018)

as it corresponds to vegetation macrogroups created for the purpose of developing seed mixes. Table 8 provides a matrix of potentially appropriate seed mixes for each vegetation alliance. In some cases, multiple seed mixes may be appropriate for a given alliance, and the determination would be made by site-specific conditions such as adjacent vegetation alliances.

Vegetation Alliance	Seed Mix				
	A	B	C	D	E
<i>Juniperus californica</i> woodland alliance					X
<i>Psoralea argophylla</i> woodland alliance	NA	NA	NA	NA	NA
<i>Salix exigua</i> woodland alliance	NA	NA	NA	NA	NA
<i>Yucca brevifolia</i> woodland alliance	X				X
<i>Acacia greggii</i> shrubland alliance	X	X	X		
<i>Adenostoma fasciculatum</i> shrubland alliance	NA	NA	NA	NA	NA
<i>Ambrosia dumosa</i> shrubland alliance	X				
<i>Ambrosia salsola</i> shrubland alliance	X		X		
<i>Atriplex confertifolia</i> shrubland alliance	NA	NA	NA	NA	NA
<i>Atriplex polycarpa</i> shrubland alliance	X		X		
<i>Cercocarpus montanus</i> shrubland alliance	NA	NA	NA	NA	NA
<i>Coleogyne ramosissima</i> shrubland alliance	X			X	
<i>Cylindropuntia bigelovii</i> shrubland alliance	X			X	
<i>Encelia (actoni, virginensis)</i> shrubland alliance	NA	NA	NA	NA	NA
<i>Encelia farinosa</i> shrubland alliance	X			X	
<i>Ephedra funerea</i> provisional shrubland alliance	NA	NA	NA	NA	NA
<i>Ephedra nevadensis</i> shrubland alliance	NA	NA	NA	NA	NA
<i>Ephedra viridis</i> shrubland alliance					X
<i>Ericameria cooperi</i> provisional shrubland alliance					X
<i>Ericameria linearifolia</i> provisional shrubland alliance	X				X
<i>Ericameria nauseosa</i> shrubland alliance					X
<i>Ericameria paniculata</i> shrubland alliance	X	X			
<i>Eriogonum fasciculatum</i> shrubland alliance	X				X
<i>Hyptis emoryi</i> shrubland alliance	X	X			
<i>Larrea tridentata</i> shrubland alliance	X	X		X	
<i>Larrea tridentata</i> – <i>Ambrosia dumosa</i> shrubland alliance	X	X			
<i>Larrea tridentata</i> – <i>Encelia farinosa</i> shrubland alliance	X			X	
<i>Prunus fasciculata</i> shrubland alliance					X
<i>Purshia tridentata</i> shrubland alliance	NA	NA	NA	NA	NA
<i>Tamarix</i> spp. shrubland semi-natural alliance	X				
<i>Salazaria mexicana</i> shrubland alliance	X				X
<i>Suaeda moquinii</i> shrubland alliance	X				
<i>Yucca schidigera</i> shrubland alliance	X				
<i>Achnatherum speciosum</i> herbaceous alliance					X
<i>Pleuraphis rigida</i> herbaceous alliance	NA	NA	NA	NA	NA
Desert pavement/Barrens	NA	NA	NA	NA	NA
Developed land	NA	NA	NA	NA	NA

Note: "NA" indicates that the vegetation alliance is not affected by ground disturbance, or no seeding will be required. Other site-specific treatments may still be applied to any ground disturbance.

### **5.1.2 Salvaged and Container Plants**

Use of container plants is anticipated to address MMs for special-status plants, if needed, but would not otherwise be a preferred method used Project-wide on BLM and private lands to meet restoration goals. The NPS has provided MMs to be implemented within the MNP, including the use of nursery-grown plants from local seed stock to replace perennial plants destroyed as a result of ground disturbance.

Based on the methods presented in the CYSRP and SSPSRP, and the requirements of the NPS within the MNP, two general categories of established plants (i.e., not from seed) would be used for restoration: (1) existing plants salvaged from the Project area, and (2) plants grown in nurseries from locally collected seeds and used to supplement on-site vegetative restoration material.

Salvage, maintenance, and replanting of plants addressed in the CYSRP and SSPSRP is required by other MMs but is anticipated to contribute to meeting the restoration objectives in this Plan. The CYSRP states that cacti and yuccas under 6 feet tall, in good health, and without physical barriers (e.g., growth in or around bedrock, trees, or other large plant), will be considered candidates for salvage.

The CYSRP provides additional detail on standards and methods for salvaging cacti and yuccas. In summary, the methods used will depend on the duration of activity taking place in each work area. After the initial excavation, cacti and yuccas can be held for several days before replanting, allowing any root injuries to heal and minimizing the risk of root infections. In work areas with a short duration of project activities (less than 7 days), cacti and yuccas may be excavated, held onsite in a safe, shaded location, and replanted after the conclusion of work in that location. In areas with either permanent disturbance or a long work duration, salvaged plants will be transplanted into the adjacent surrounding area and maintained to ensure survival and to avoid the stress of multiple transplantations. Some plants may be placed in temporary nurseries, maintained during construction, and replanted in temporarily disturbed areas during restoration activities, depending on the health of the salvaged plants. The CYSRP also addresses requirements specific to individual agency jurisdictions across the Project area, including the standards used to identify cacti and yuccas for salvage and the identification of transplant locations.

The SSPSRP provides specific salvage, nursery care, and replanting methods to be used for special-status plant species. Container plants raised from seeds will be grown for a minimum period of four months in a greenhouse or under shadecloth and then conditioned in full sun for at least four months prior to planting. SCE will inspect all container plants prior to or upon delivery to verify that the plants are of the correct species and quantities, are visually free of weeds, pests and disease, and showing signs of healthy growth (e.g., no evidence of coiled roots), as determined by a visual field inspection upon delivery. Any plants that are not within these standards will be rejected.

The size and shape of the containers should match the plant's rooting strategy (i.e., deep-rooted plants should be grown in tall pots to encourage more root development, while fibrous-rooted plants can be grown in shorter pots or as plugs).

## **5.2 Preconstruction Site Preparation**

Some actions taken at the onset of construction-related ground disturbance are intended to facilitate the post-construction restoration process. These treatments will occur during initial site preparation.

### **5.2.1 Preservation in Place and Selective Clearing**

Some individual plants, including cacti and yuccas that would otherwise be subject to a salvage requirement, may be too large to feasibly salvage. Additionally, some cacti, yuccas, or other special-status plants around the margins of Project features as currently defined may be avoidable. Where feasible, these plants will be preserved in place if the remaining portion of the site can accommodate the required Project activities. Selective clearing may be used to preserve the roots and some or all of the main stem of a plant, while removing a portion of the plant's above-ground growth if it cannot be salvaged whole.

### **5.2.2 Salvage of Special-Status Plants for Replanting**

Prior to conducting activities that could damage cacti, yuccas and other special-status plants, suitable individuals of those plants that could not be preserved in place will be salvaged according to the CYSRP and SSPSRP. Salvaged plants will either be transplanted one time to a final location outside a work area or stored in temporary nurseries established within the boundaries of Project disturbance areas, maintained as appropriate, and replanted during restoration activities. Within the MNP, seeds will also be collected to support nursery cultivation of locally sourced plants for use in restoration.

### **5.2.3 Non-native Plant Treatment and Containment**

The HRRP will focus on native species restoration to meet the restoration success standards detailed in Section 7.2. Weed control with corresponding success standards will be detailed in the IWMP independent of the HRRP. SCE will be responsible for control of non-native species per the Project's IWMP.

The Project's IWMP will identify site-specific treatments or containment measures for invasive plant infestations that are present at the time of construction. Required measures will be implemented prior to and during construction, as appropriate. In cases where full eradication is not feasible or successful, additional treatments would occur at the time of restoration (Section 5.4.2).

### **5.2.4 Brush and Mulch Salvage**

Materials that result from grubbing, clearing, and trimming efforts will be gathered and stockpiled within the Project area. This includes materials such as brush, shrubs, bunch-grasses, dead woody materials, and vegetative mulch. These materials will be used as mulch for disturbed areas during restoration efforts. Using these materials as mulch can facilitate revegetation and site functioning at restoration sites by (1) capturing and stabilizing windblown soil and seed; (2) providing shade, cover, and increased moisture for seedlings and seed germination; (3) providing perching and burrowing sites for animals and insects, and (4) discouraging recreational use.

Optionally, some shrubs and other perennial plants may be salvaged live to be used during the restoration process. Shrubs may be salvaged as live root balls, even if the above-ground growth is not fully salvaged. Salvage of live plants other than special-status plants, cacti, and yuccas will be at SCE's discretion to supplement other restoration actions presented in this HRRP.

### **5.2.5 Topsoil Segregation**

The practice of salvaging and stockpiling topsoil is intended to preserve the microbial network within the soil and retain the native seed bank and organic material important to nutrient cycles within the soil. Most seeds, nutrients, organic matter, and soil crust microbes are located within the top 2 to 4 inches of soil.

This treatment is most appropriate at sites with native vegetation in which severe disturbance to the soil will occur, such as grading or excavating, and the protection of existing soil is not feasible.

SCE proposes to salvage, stockpile, and reuse soil in temporary impact areas where blading will occur and where it is feasible to do so, and where topsoil salvage will clearly contribute to the successful establishment of the target vegetation communities or to support special-status species. Where blading will occur, the Restoration Contractor and construction personnel will consult to determine whether soil salvage is feasible and beneficial.

By the nature of this Project, many temporary disturbance sites will not be fully bladed, and topsoil salvage will not occur. The Project has been designed to incorporate existing disturbed areas (e.g., access roads, operations and maintenance work areas) to the extent feasible. The series capacitors and repeaters are primarily permanent disturbances. The majority of the work sites associated with overhead groundwire/OPGW installation will use “drive and crush” methods—no soil salvage or grading will occur. However, grading may be required for some wire pulling sites. To the extent feasible, soil salvage will be conducted to preserve the existing seed bank at those wire pulling sites that qualify based on the following criteria. However, topsoil salvage may not be feasible at some sites.

Where blading will occur within the MNP, attention will be given to areas with biological soil crusts. Topsoil salvage in those areas will focus on segregating the uppermost layer (1 to 2 inches) with concentrated biological soil crust components for replacement after construction.

Criteria for potentially suitable sites for topsoil salvage include the following:

- Location is a previously undisturbed area.
- Construction activities such as underground trenching, heavy grading, or other excavation activities where natural soil horizons are substantially disrupted.
- No post-construction activities planned that would cause future disturbance to the site.
- Salvaging can be implemented safely and feasibly (topographic limitations).
- Stockpile locations would be identified in safe locations and restricted to existing approved disturbance areas and in compliance with other environmental and visual restrictions.

Limiting factors for topsoil salvage include:

- Areas with slopes greater than 25 percent, or other topographic or safety constraints
- Sites with cultural resources where ground-disturbing activities will be limited
- Areas infested with high densities of weeds
- Sparsely vegetated areas where little native seed bank exists
- Locations with minimal suitable topsoil (thin or rocky soils)

Generally, topsoil segregation would be accomplished through the following process:

- Where gravels and surface rock occur, they will be scraped and stored in piles for later use as mulch.
- In locations where gravels are too small or sparse to be collected separately from topsoil, they will be collected during topsoil salvage.
- Care should be taken to prevent disturbing or damaging natural patinas or desert varnishes on salvaged larger rocks.
- Gravel and rock stockpiles will be stored within the boundaries of a Project work area.

- Following removal of aboveground vegetation and rock material, the top 4 inches of soil will be scraped from the surface and stored within the Project area.
- Small plant materials may be included in the salvaged topsoil to provide organic matter and carbon that could assist in maintaining microbial and fungal functions and other soil organisms during stockpile storage.
- Topsoil will be stockpiled in shallow, uncompacted piles less than 2 feet tall along the edges of the staging and construction areas.
- If covering is required for dust control, silt fencing or other breathable material will be used.

### **5.3 Site-Specific Restoration Planning**

Prior to initiating restoration activities, the Restoration Contractor will prepare an Execution Plan(s) designating the specific techniques that will be used to restore the temporary impact areas. An example Execution Plan form is provided as Appendix A. The Execution Plan(s) will specify the site preparation, seeding, planting, irrigation, monitoring, and maintenance techniques that will be implemented at each restoration site identified by SCE and will include revised seed mixes and container plant palette (if applicable), as well as an implementation schedule. The Execution Plan(s) will describe the activities to be implemented for those sites. All methods will be consistent with those presented in this HRRP. Due to the anticipated Project phasing, site-specific evaluation and restoration activities will also be conducted in phases. The Execution Plan(s) will be reviewed and approved by SCE. The approved Execution Plan(s) will be distributed to the agencies (CPUC, BLM, MNP, CDFW, and SWRCB as appropriate).

### **5.4 Post-Construction Site Preparation**

#### **5.4.1 Removal of Debris**

All restoration sites will be free from trash and debris. SCE will make all reasonable efforts to remove trash and debris from every restoration site prior to installation and throughout the maintenance and monitoring period.

#### **5.4.2 Non-native Plant Removal**

Non-native plant removal prior to restoration will be completed consistent with site-specific and species-specific determinations made in the Project's IWMP. This section provides a general summary of non-native plant management as it relates to restoration.

Prior to seeding and plant installation, SCE will remove any non-native plants from the restoration site by hand-pulling, mechanical removal, or herbicide application as described in the IWMP. Plant materials containing viable seed will be immediately bagged, removed from the site and disposed of at an approved location. Rhizomatous species will be treated with herbicide to ensure that plants cannot re-sprout. All herbicides will be applied in a manner to minimize or avoid drift or transport of chemical away from target plants and in accordance with all state and federal regulations and manufacturer's instructions by a Licensed Qualified Applicator under the direction of a Pest Control Advisor (PCA). In riparian areas, only water-safe herbicides approved for use near water will be used unless otherwise approved.

### **5.4.3 Recontouring**

If necessary, temporary impact areas that are disturbed by Project construction activities will be recontoured to restore the original land contour and slope grade of the adjacent areas to the extent feasible to restore a natural appearance. Recontouring will take place at the cessation of construction activities. Compaction will not exceed 85 percent relative density, to the extent feasible, to facilitate revegetation of the recontoured slopes. Where topsoil segregation has been implemented, initial recontouring will be accomplished with subsoil.

### **5.4.4 Replacement of Salvaged Topsoil**

After initial recontouring has been completed with subsoil materials; salvaged topsoil, small rocks, and gravel will be spread over the restoration site. Larger rocks may be replaced to provide vertical structure, and the previously exposed faces of larger rocks with desert varnish or patina would be oriented upward to maintain a natural appearance. In areas within the MNP where biological soil crust material is salvaged, the salvaged soil crust will be applied after all other recontouring and soil replacement has occurred.

### **5.4.5 Soil Decompaction**

Soils in restoration areas that are compacted or become compacted as a result of Project construction activities will be loosened prior to seeding or planting. Appropriate locations for soil decompaction will be identified by SCE. Decompaction is only anticipated in locations subject to grading and would not occur in areas where vehicle use was limited to drive-and-crush.

Decompaction will occur prior to the restoration installation activities. Decompaction can be achieved by loosening the soil using a backhoe, equipment with ripping teeth, a disk harrow, or manually using shovels. The soil at rooting depth will be loosened generally to a depth of up to 6 inches unless otherwise specified, but loosening may need to occur at a greater depth depending on the existing soil conditions. The surface will be left rough-textured with no clods or rocks greater than 3 inches in diameter. Following loosening, the soil will be track-walked or texturized to create a surface suitable for hydroseeding and planting. For some sites, decompaction may be limited by the SWPPP requirements.

### **5.4.6 Erosion Control**

SCE will maintain erosion control best management practices within restoration sites in compliance with SWPPP requirements. To prevent sediment from leaving the restoration areas or rills from forming, SCE will ensure the proper remedial measures are in place. This may include hydroseeding and/or installation of erosion control measures such as silt fencing, straw or coir wattles, hay bales, and jute netting. SCE will make every effort to integrate SWPPP treatments with restoration site preparation.

### **5.4.7 Soil Amendments**

The use of soil amendments is not anticipated. However, if topsoil replacement is not possible, SCE may add organic soil amendments such as mycorrhizal inoculants, greenwaste compost, or slow-release fertilizers to improve nutrient holding capacity, soil structure, and root development if consistent with the licensing and permitting documents. In addition, native plants with tolerance for specific conditions may be substituted for species in the current palette.



## **5.5 Installation**

Installation of restoration treatments will be conducted after the completion of work activities at each site, in accordance with the Project's SWPPP. The SWPPP requires prompt stabilization of the site. In some cases, seasonal considerations may result in the delay of a particular treatment until favorable conditions. Specific Project installation methods will be developed based on final mitigation requirements. The following methods may be used depending on site conditions (e.g., not all of these methods are appropriate for drive-and-crush areas, very small sites, or steep slopes).

### **5.5.1 Placement of Native Vegetation for Mulching**

Following construction, SCE will determine the best locations to place previously salvaged plant material on the restoration sites. Prior to use, windrowed vegetation may be chipped or shredded to a large particle size (1 to 3 inches). Any non-special-status plants optionally selected for salvage beyond those required by mitigation requirements will also be planted using methods described in Section 5.5.3 – Planting of Salvaged and Container Plants. To prevent possible spread of non-native invasive species, only native material will be salvaged and reapplied to the restoration sites.

### **5.5.2 Seeding Methods**

Seeding will be completed following site preparation activities and non-native plant removal, and prior to installation of container plants. To the extent possible, seeding will be conducted when atmospheric moisture levels are high (generally between the months of October and February). Revegetation at restoration sites will be accomplished through application of an appropriate seed mix via one of three techniques: imprint seeding, hydroseeding, or broadcast seeding. The seeding method implemented at each restoration site will depend upon accessibility and size of the area to be seeded, as well as factors such as soil conditions that may affect seeding success. Easily accessible areas will be seeded with the imprint seeding method and/or hydroseeding method. Smaller, more remote, or inaccessible areas will be broadcast seeded. These methods are described below.

#### **5.5.2.1 Imprint Seeding**

Imprint seeding may be used in mitigation sites that are large enough and accessible for the imprinting equipment and where the soils are neither too loose nor heavily compacted. Imprint seeding provides high soil-to-seed contact and provides a pocket for water infiltration that protects and encourages germination. Many of the Project features are too small to accommodate mechanical seeding equipment.

Imprinting is accomplished via a mechanical imprinter that is pulled behind a tractor or tracked vehicle and simultaneously spreads and buries pre-developed seed mixes in V-shaped depressions. In appropriate soils, imprinting facilitates successful establishment of seed into the soil and eliminates the need for mulch, soil irrigation, and soil binding. Imprinting also increases rainwater infiltration, improves gas exchange between the soil and atmosphere, reduces erosion, and improves contact between seeds and soil water. Hard soils should be loosened using ripping shanks, or similar equipment, prior to imprinting to ensure that the troughs are deep enough to retain water. Wheat bran or similar binder should be mixed with seed to assist with uniformity of application rate. Where container planting is also planned, imprint seeding should take place prior to container planting. In lieu of an imprinting machine, dozer track walking perpendicular to the site contours may also be used to create seed "safe sites" prior to hand-broadcasting or hydroseeding.

### **5.5.2.2 Hydroseeding**

Hydroseeding can occur in areas where imprint seeding is impractical, such as on smaller sites, steeper slopes, and areas where rocky soils limit the use of imprint seeding equipment. Hydroseed application is an alternative method to imprint seeding. The seed mix (quantity will vary based on habitat type and site-specific conditions) will be mixed with approximately 2,000 pounds per acre of long-strand wood fiber, a colorant, 150 pounds per acre of binder (adjusted accordingly for slope), and sufficient water to allow the mix to be applied evenly over the restoration area. All hydroseeding mixing will be performed in a clean tank, rinsed a minimum of three times (to ensure the removal of any residual seed) in a wash-out area, such as a designated vehicle cleaning station at one of the Project's temporary yards. The hydroseeder would be equipped with a continuous agitation and recirculation system to produce a uniform slurry and have the capacity to apply this slurry at a uniform and continuous rate.

Application of hydrosurry would comply with product specifications. The designated areas would be sprayed with the slurry in a sweeping motion and in an arced stream until a uniform coat is achieved, with no slumping or shadowing as the material is spread at the required rate. Any excessive mulch coating on plants would be removed. The seed slurry would be applied within 1 hour of preparation as the viability of the seed could otherwise be compromised. A typical rate of application in arid California is 500 pounds per acre of wood fiber mulch for hydroseed-only sites and 1,500 to 2,000 pounds per acre of wood fiber mulch and a tackifier for the hydromulch method (Newton and Claassen, 2003). However, the Restoration Contractor will determine the specific rate of application on a site-by-site basis in consultation with the SWPPP consultant.

### **5.5.2.3 Broadcast Seeding**

Broadcast seeding will generally be used where mechanical seeding is deemed infeasible because of substrate, location, or disturbance area size. In general, application of hand-broadcasted seed will be reserved for areas approximately 0.5 acre or less or where small amounts of seed are needed. Hand-seeded sites will be raked or harrowed before seeding to break up the surface and after to allow seeds to fall into crevices. Raking or other post-seeding treatment to lightly cover seed will also be completed to enhance the likelihood of germination, provide even distribution of seed, and reduce losses to granivores. This will also help retain moisture for germination. The seed material may be broadcast by hand or using a seed spreader. Hand seeding will be timed to occur in the late fall prior to rains.

### **5.5.3 Planting of Salvaged and Container Plants**

Planting of salvaged and container plants may occur prior to or after broadcast seeding but would occur after imprint seeding or hydroseeding when feasible to avoid damage to the container plants. If planting must occur before hydroseeding, plants would be covered if possible to avoid coating the plants with the slurry.

The majority of salvaged plants are cacti and yuccas within areas subject to short-term, temporary disturbance. As described in the CYSRP, these plants will be excavated, held onsite for several days allowing any root injuries to heal, and replanted in or near their original location once work has ceased in that work area.

Outside the MNP, container plants will be limited to special-status plants that require offsite cultivation (i.e., onsite mitigation is determined to be insufficient). Within the MNP, container plants will also include nursery-grown perennial woody plants from locally sourced seeds, planted at a one-to-one replacement

rate by each species of woody plant. Other perennial plants such as bunch grasses, forbs, and sub-shrubs will be seeded with locally sourced seed collected within 0.5 miles of the graded areas rather than being grown as container plants.

All container plants brought from offsite will be inspected prior to planting to ensure they are healthy; free of weeds, pests, and disease; and the proper size. Container plants will be installed in areas determined to be feasible and appropriate by SCE. During transport from the nursery or storage facility to the planting site, the plant material will be handled carefully (i.e., the plants will not be dropped, tossed, or otherwise roughly handled). Upon plant delivery, container plants will be stored in a designated temporary storage location that is within a developed or disturbed area approved by SCE. Plants will be protected from herbivory, vandalism, or theft, as well as maintained (watered) while they are in temporary storage for planting.

Plants will typically be installed on 5-foot centers for shrub species, with closer spacing for herbaceous perennials and wider spacing for larger shrubs or trees, (although final spacing may vary upon container size used and species to be planted). All container plants and trees will be planted in accordance with the following specifications:

- Plants will be planted with the roots untangled and sides scarified to promote new root development; roots will be protected from weather exposure during planting.
- Planting holes will be augured and be no more than 1.5 times the diameter and 2 times the depth of the container species to be planted.
- Planting holes will be backfilled 25 percent with excavated native soil, filled with water, and allowed to drain completely prior to planting. Container plants must never be installed in planting holes with standing water; all water will be allowed to settle and infiltrate through the soil prior to plant installation.
- Plantings will be set in well-drained planting holes with the crown of the root ball approximately 0.5 inches above the backfilled soil. The soil around the planting will be tamped down sufficiently to eliminate any air pockets in the soil.
- A basin around the planting will be constructed by creating a berm above the existing grade, approximately 24 inches in diameter around the planting.
- Each planting will be sufficiently watered after installation so that water reaches the lower roots.

Some planted container stock may require protection against herbivory. Herbivore barriers will be made of chicken wire or a similar material that will prevent herbivores from chewing through the barrier. Barriers will be a minimum of 2 feet above ground. The herbivory cages will be inspected during each maintenance visit (Section 6) and be removed when herbivory will no longer compromise the health and establishment of the plantings. Herbivory caging will also be removed before it hinders plant development and growth. If determined there is a potential threat of subterranean root damage by small mammals, wire cages constructed of chicken wire may be installed into planting holes prior to planting.

## **6 Maintenance**

Maintenance will begin with implementation of the restoration work at each of the Project's temporary disturbance areas and will continue for the required time period. Maintenance tasks may include supplemental watering, erosion control, and abatement of weeds. Environmental conditions will be monitored, and adaptive measures may be applied as necessary. Adaptive management can include modifications in methods already in use, such as providing supplemental plantings and altering the frequency of irrigation.

### **6.1 Irrigation**

Germination at seeded areas will rely on natural precipitation. Supplemental watering is not proposed for the seeded restoration areas. However, if the applied seed does not successfully germinate due to low seasonal precipitation, supplemental watering may be considered as a remedial action to promote plant establishment and growth.

The appropriate supplemental watering method would be decided on a case-by-case basis. Watering would be gradually reduced as the plants become established.

The goal of irrigation is to supplement or mimic natural rainfall patterns to promote root systems to maximize survival and vigor. Irrigation may be used on sites where container plants or cuttings are installed. The CYSRP and SSPSRP provide guidance on the level of supplemental water potentially needed by cacti, yuccas, and special-status plants, which are the primary category of container plants anticipated to be used for the Project. Supplemental watering of container plants may be needed to account for transplant shock to help the plants establish. Irrigation can be conducted near sites with a permanent water source, and near permanent access roads, through the installation of a temporary system that can be fed by a water truck. Direct watering with a hose fed by a water truck may also be appropriate near access roads, if the process can be accomplished without damaging restored vegetation. In cases of very small or remote planting sites, DRiWATER or equivalent gel water product or hand watering using buckets may be used to irrigate container plants.

### **6.2 Weed Control**

Weed control measures will be implemented during post-construction restoration where necessary in accordance with the IWMP. Control measures are anticipated to include physical (hand-pulling, mechanical removal) and chemical (herbicide application) treatment methods. These control methods will be dependent on the weed species, location of weeds, and the time of year that weed control operations occur.

### **6.3 Erosion Control**

Erosion control measures installed during construction will be maintained in accordance with the SWPPP until the SWPPP requirements have been met and a Notice of Termination has been filed, documenting that site stabilization measures have been installed and long-term maintenance (including ongoing erosion control) will be conducted through this HRRP. The intent of the SWPPP as it relates to post-construction maintenance is a final site condition that is stabilized with all temporary erosion control

measures removed. During the post-construction restoration monitoring phase, erosion control will be conducted as needed based on conditions observed during maintenance monitoring (Section 7.1.1).

Because the intent of post-construction restoration is a final site condition that is permanently stabilized and demonstrates a trend towards restoration objectives, any erosion control implemented as a result of monitoring under this HRRP will be installed consistent with that intent. No temporary erosion control materials are anticipated to be used. Erosion control under this HRRP will focus on recontouring on-site sediments within the area affected by erosion and, if possible, directing and slowing the flow of water to minimize further erosion problems. If needed, supplemental seeding and planting will be used to provide further stabilization of the affected area.

## **6.4 Signage and Vehicle Control**

To help minimize damage to the restoration sites, installation of signage or other barriers may be beneficial. Barriers (e.g., signage, staking, silt fence, bollards) may be installed where appropriate to ensure that vehicle operators are aware of the boundaries of restoration sites.

# **7 Monitoring and Reporting**

## **7.1 Monitoring**

SCE will perform periodic monitoring to assess site stabilization and restoration progress at each site. Assessments during monitoring may include observing seed germination, evaluating restoration progress including volunteer recruitment of native species, determining percent cover and percent site stabilization, and determining whether any erosion problems require correction. SCE may also evaluate other performance indicators, including the presence of non-native plant species, the presence of significant disease or pest problems, and the need for remedial measures, depending on the final Project mitigation measures and requirements.

The monitoring period will commence after installation and will continue annually for up to 5 years or until the defined success criteria in this HRRP are achieved. Monitoring may consist of maintenance and performance monitoring. Monitoring will be performed to assess maintenance activities, evaluate the need for remedial measures, and track performance of the site.

Performance monitoring will be conducted by qualified botanists with experience identifying native and non-native plants present in the Mojave Desert. Maintenance monitoring will often be conducted concurrently with performance monitoring, but additional maintenance monitoring may be performed at any time and could be conducted by other personnel (e.g., SCE's maintenance or vegetation management staff). Performance monitoring surveys will be conducted during the spring growing season, but maintenance monitoring may be required at any time, such as in response to heavy rainfall, fire, or other similar events.

### **7.1.1 Maintenance Monitoring**

Maintenance monitoring will be conducted as needed to ensure that conditions on each site are not preventing success standards from being achieved. Maintenance monitoring will be focused on the potential need for remedial actions to address problems that could influence plant growth and not on the success standards themselves. Maintenance monitoring will be conducted Project-wide in restoration

areas, as well as representative areas where drive-and-crush was implemented. Remedial actions may be implemented in drive-and-crush areas if maintenance monitoring indicates that the level of disturbance from the Project precludes successful natural recovery.

SCE will perform maintenance monitoring as needed. The frequency of visits may be adjusted based on the season (e.g., more weed growth occurs in spring), restoration activity (e.g., container plant installation), and the needs of the site. Assessments may include evaluation of soil moisture, container plant health, container plant growth, seed germination, irrigation system function or the need for supplemental watering, volunteer recruitment of native species, presence/absence of non-native plant species, presence of significant disease or pest problems, general site maintenance, and any erosion problems.

### **7.1.2 Performance Monitoring**

Performance monitoring will include qualitative and quantitative monitoring of the trend towards success standards of vegetation growth on each site selected for monitoring. Performance monitoring will be conducted at representative restoration areas.

SCE will conduct performance monitoring during the spring growing season with the goal of evaluating the progress of the restoration site towards achieving success standards. Data collection may include the general site conditions, native and non-native plant percent cover, bare ground cover, plant density, container plant survival, species richness, and photo documentation and/or aerial surveys. In addition, photographs of the site will be taken from permanent photo monitoring stations facing the restoration area. The locations of the photo monitoring stations will be recorded using GPS.

#### **7.1.2.1 Monitoring Schedule**

Performance monitoring will occur annually. The specific timing will be intended to provide the most useful information on progress towards meeting restoration objectives. Generally, the monitoring survey will occur in late spring, after annual plants would have reached maturity but before senescence and high summer temperatures. This timing allows estimates of the maximum level of annual and perennial ground cover and allows identification of most plant species. Monitoring for special-status species would occur in the appropriate season to identify and determine success.

## **7.2 Success Standards**

The following performance standards will be used for restoration areas on the Project:

- At least 60 percent of native cover, not including cacti and yuccas, relative to pre-disturbance (baseline) or adjacent reference site native cover
- At least 50 percent of the total number of native species observed in pre-disturbance (baseline) or adjacent reference site
- Perennial species richness of at least 50 percent of pre-disturbance (baseline) or adjacent reference site
- Recruitment of native plant seedlings documented within restoration areas
- Evidence of wildlife use

## **7.3 Reporting**

### **7.3.1 Annual Monitoring Report**

SCE will prepare and submit annual reports during the post-construction restoration monitoring period of up to 5 years or until the defined success standards in this Plan are achieved. The annual report will include a summary of site conditions, restoration treatments, maintenance activities, and the results of the qualitative and quantitative monitoring. It will also include a general discussion of the previous year's changes at the restoration sites, special-status plant establishment, effectiveness of OHV deterrents and signs of OHV encroachment, trash removal, and remedial actions.

The annual report will also outline the activities for the following year and may include a discussion of adaptive management and contingency measures. Adaptive management is necessary when there are significant changes to the restoration site(s) or if a site demonstrates a flat or declining trend. Sites where current conditions do not reflect desired trends or are not stabilized may require remedial actions such as reseeding, supplemental watering, control of invasive plant species, additional stabilization measures (e.g., erosion control blankets), and regulation of human and wildlife access to the site. Replacement or supplemental seeding will be representative of native plant species for the associated habitat area provided in the restoration seed palette.

If an unforeseen catastrophic event (e.g., flood, fire, or other event beyond SCE control) damages a restoration site within the monitoring period and damages the majority (more than 50 percent) of the site, SCE will assess adjacent sites and adjust success standards accordingly in coordination with the agencies.

Annual reports will be submitted by SCE to CPUC, BLM, MNP, CDFW, and SWRCB as appropriate.

### **7.3.2 Notification of Completion**

SCE will notify CPUC, BLM, MNP, SWRCB, and CDFW as appropriate when the restoration effort is complete and success standards have been met. The notification would be submitted electronically and may be accompanied by a brief letter report summarizing key work performed, seeding efforts, maintenance activities and remedial actions (if applicable), and representative photographs. In Nevada, SCE must request sign-off from the BLM. Quantitative data are to be included in the request for sign-off, and the BLM in Nevada will not sign-off until the HRRP success standards have been met at restoration sites.

For sites that are unable to meet success criteria, SCE may request sign-off. For sites with disturbance outside SCE's control (e.g., vehicle use, livestock grazing, or land use conversion for non-Project purposes), it may not be possible to reestablish native vegetation. Some sites that have received all appropriate treatments and multiple years of adaptive management measures may not meet success standards. In both these situations, the agencies (CPUC, BLM, MNP, CDFW, and SWRCB as appropriate) may concur that additional efforts are not warranted and sign-off on these sites.

## 8 References

- Insignia Environmental. 2018. Revised Biological Resources Technical Report for the Eldorado-Lugo-Mohave Series Capacitor Project. 89 pp. + attachments.
- \_\_\_\_\_. 2017. Special-Status Plant Species Survey Report for the Eldorado-Lugo-Mohave Series Capacitor Project. 33 pp. + attachments.
- Newton, G.A., and V.P. Claassen. 2003. Rehabilitation of Disturbed Lands in California: A Manual for Decision-making. California Department of Conservation and California Geological Survey Special Publication 123. 112 pp. + appendices.



## **Appendix A. Executive Plan**

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**Site-Specific Execution Plan Template**

Site ID	Vegetation Community (MCV)	Acres	Plant Salvage (Y/N)	Topsoil Salvage (Y/N)	Recontour (Y/N)	Decompaction (Y/N)	Seed Mix <sup>1</sup>	Seeding Methods <sup>2</sup>	Plant Palette <sup>3</sup>	Irrigation Type <sup>4</sup>	SWPPP Open (Y/N) <sup>5</sup>

NOTES:  
<sup>1</sup>Seed Mix: Provide seed mix name.  
<sup>2</sup>Seed Method: Hydroseeding, imprinting, broadcast, raking, etc.  
<sup>3</sup>Plant Palette: "N/A" if no container plants are used. When container plants are used, provide plant palette name.  
<sup>4</sup>Irrigation Type: "N/A" if no irrigation used. Water truck, sprinkler/drip, hand-water, etc.  
<sup>5</sup>SWPPP Open: Y implies best management practices on site require maintenance.