

## **5.0 MONITORING AND SURVEY METHODS**

---

### **5.1 Weed Identification**

The Designated Biologist will assure that weed identifications are conducted by qualified botanists. Unknown species will be collected, pressed and dried, and delivered to the UC Riverside Herbarium or the California Department of Agriculture Weed Herbarium in Davis, with a specimen label, as a permanent scientific specimen. Upon identification by qualified botanists, the Designated Biologist will determine a course of action. Monitoring and removal of weeds requires skill and training in plant identification. Training in plant identification and field manuals with photographs of native desert plants and of common weeds will be provided to all field staff including biological monitors, weed abatement contractors, plant operators and staff, and construction workers.

### **5.2 Surveys and Monitoring**

#### **5.2.1 Monitoring Methods**

Surveys and monitoring will ensure timely detection and prompt eradication of weed infestations, which are essential to a long-term strategy for weed management.

#### Construction Areas

The ECM and DB will oversee biological monitors who will be on-site during site clearing and construction activities. Biological monitors will be responsible for inspecting all construction areas, identifying the presence of noxious weeds, and inspecting equipment cleaning facilities for weed seed removal. The ECM will be responsible for prescribing management activities consistent with this plan when weeds become established. Monitoring of all construction areas, including access routes, will be conducted every other week for four weeks following storms of any intensity (including summer monsoons) and also every third week during March, April, and May if there has been any winter rain. This monitoring will consist of walking or driving slowly over construction areas and observing for seedlings of exotic species. This will continue until ground-disturbing construction activities are completed.

#### Revegetation Areas

As part of monitoring for revegetation, the density and/or frequency of non-native species will be quantitatively measured in selected sampling sites throughout the revegetation area and compared to control areas. At a minimum, additional monitoring also will occur every third week during each March, April, and May when there has been no revegetation monitoring and similarly in the fall after summer/fall monsoons; this will occur every year during construction and for a minimum of six years following the completion of construction. Monitoring schedules will be sufficiently flexible to take advantage of the variable precipitation regime of the eastern Mojave Desert. Surveys will identify areas of significant weed invasion or establishment and the weed species involved.

As part of monitoring for revegetation, the density and/or frequency of non-native species will be quantitatively measured and compared to control areas.

#### General Operations Monitoring

Monitoring of all potential weed enhancement areas will be conducted every other week for four weeks following storms of any intensity (including summer monsoons) and also every third week during March, April, and May if there has been any winter rain. This monitoring will consist of walking or driving slowly over construction areas and observing for seedlings of exotic species. This will continue for the life of the Project or until success criteria (as set forth in the separate Revegetation and Rehabilitation Plan) are met.

#### Treatment Areas

Where weed treatments are implemented, the treated areas will be monitored to ensure that treatments are effective. Monitoring will continue at pre-treatment frequencies until noxious weeds in the area are eliminated or satisfactorily controlled. Monitoring will occur at the same frequency as defined above.

#### Offsite Areas

Because potential exists for weed infestations on the PSEGS site to spread to adjacent areas or enhance existing populations outside the project ROW, weed monitoring will include monitoring adjacent BLM lands for a minimum of 100 feet outside of the Project Disturbance Area, and an extended area in downstream and downwind areas, until the infestation is fully eradicated or populations do not exceed baseline or control populations. Monitoring will occur at the same frequency as defined above.

### **5.2.2 Database and Mapping**

Locations of noxious weed occurrences, with data on species, detection date, growth stage, infestation extent, treatments implemented, results of treatment, and current status, will be maintained during the construction and operation phases. A geographic information system (GIS) will be used to map and store data.

A priority system of areas populated by noxious weeds will be established based on species, vulnerability of the site to invasion, growth stage, and effectiveness of treatment. Vulnerability will be assessed on the following: (1) availability of weed propagule sources, such as along roadsides, near soil stockpiles; (2) areas with enhanced microsite suitability; (3) areas outside the WMA that have existing weed populations or, prior or treated weed.