# 2009/2010 Weed Control Plan for the Environmentally Superior Southern Route of the SDG&E Sunrise Powerlink Project

Prepared for
San Diego Gas & Electric
P.O. Box 129007
San Diego, CA 92112-9907
Contact: Donald Haines

Prepared by
RECON Environmental, Inc.
1927 Fifth Avenue
San Diego, CA 92101-2358
P 619.308.9333  F 619.308.9334

RECON Number 5091

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Mike Nieto, Biologist

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# 1.0 Executive Summary

This weed control plan has been prepared for the Environmentally Superior Southern Route (ESSR) and alignment right-of-way (ROW) of the San Diego Gas & Electric (SDG&E) Sunrise Powerlink Project (Project). The preparation of this plan is a requirement of Mitigation Measure B-3a, as outlined in Appendix 12 of the Project's environmental impact report/environmental impact statement (EIR/EIS) (California Public Utilities Commission and U.S. Department of the Interior, Bureau of Land Management 2008) and the associated Biological Opinion (BO) (U.S. Fish and Wildlife Service 2009).

As outlined in the EIR/EIS and BO, this document provides a comprehensive, adaptive weed control plan for preconstruction and long-term invasive weed abatement for the Sunrise Powerlink ESSR. This plan includes the results of the preconstruction weed inventory within and adjacent to the ROW and ancillary facilities (together defined in this document as the Action Area); identifies invasive weed populations that occur or have potential to occur within the Action Area; outlines appropriate preconstruction weed control measures; identifies required short- and long-term monitoring and adaptive management procedures; and identifies operation and maintenance requirements related to weed control. This plan is intended to be adaptive in order not only to control weed species that are currently known to exist on-site but also to provide a framework to control unknown weed species threats that may occur in the future.

For the purpose of this document, "weeds" are invasive, non-native plant species that have been specifically identified by the California Invasive Plant Council [Cal-IPC] in 2009 (Appendix A) or the County of San Diego as those that have negative impacts on California's wildlands.

Twenty species of invasive weeds were observed within and adjacent to the Action Area. Of these 20, one species—yellow starthistle (*Centaurea solstitialis*)—was found to be a priority for control by San Diego County as indicated under the San Diego Weed Management Area work plan. Two of the observed species, Saharan mustard (*Brassica tournefortii*) and cheatgrass (*Bromus tectorum*), are described in the EIR/EIS as wildfire-promoting species. All species on the San Diego County noxious weed list or wildfire-promoting species will be treated and controlled at all points throughout the Project alignment ROW. Of the remaining 17 weed species observed in the Action Area, four species are rated as Cal-IPC High and 13 are rated as Cal-IPC Moderate. These 17 species will be treated and controlled within designated impact areas within the Action Area.

# 2.0 Project Description

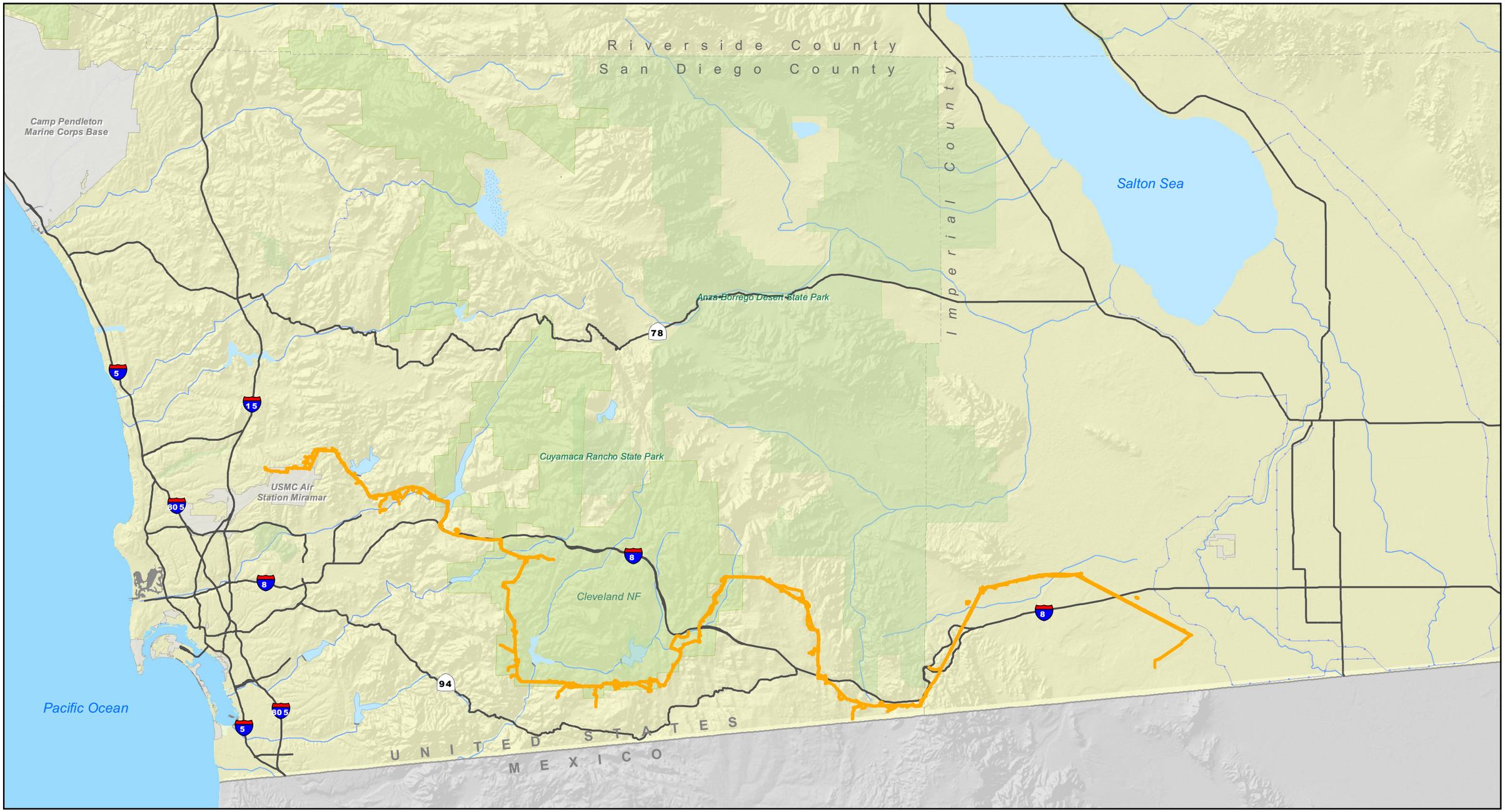
The Environmentally Superior Southern Route (ESSR) of the San Diego Gas & Electric's (SDG&E) proposed Project was approved by the California Public Utilities Commission (CPUC) in December 2008. This Project constitutes an approximately 120-mile, generally east to west-oriented transect beginning from the existing Imperial Valley Substation in southwestern Imperial County and continuing westward over the southern foot of the Peninsular Ranges and down to the middle of the coastal slope to the existing Sycamore Canyon Substation in west–central San Diego County, California (Figure 1).

## 2.1 Project Background

SDG&E proposes to construct a new electric transmission line between the existing Imperial Valley and Sycamore Canyon Substations, a proposed new substation (Suncrest Substation), and other system modifications and upgrades in order to reliably operate the new line. The entire Project would traverse approximately 120 miles between the El Centro area of Imperial County and southwestern San Diego County, in southern California. In order to provide a frame of reference, the right-of-way (ROW) has been assigned mileposts (MP), which range from MP 0 at the Imperial Valley Substation to MP 117.2 at the Sycamore Canyon Substation (Figure 2). The Project is described under five separate links according to the following approximate MPs: Link 1 (MP 0 to MP 53.5), Link 2 (MP 53.5 to MP 89.0), Link 3 (Suncrest Substation), Link 4 (MP 92.0 to MP 98.2), and Link 5 (MP 89.0 to 92.0 and MP 98.2 to MP 117.2).

The Project alignment ROW and ancillary facilities (the ROW and ancillary facilities together have been defined, for the purposes of this document, as the Action Area) occurs on land owned by the U.S. Forest Service (USFS), Bureau of Land Management (BLM), Department of Defense, State of California, counties of Imperial and San Diego, SDG&E, City of San Diego, and private landowners. One new substation, the proposed Suncrest Substation, and three system upgrades (reconductors from Sycamore Canyon Substation to the existing Pomerado, Scripps, and Elliott substations) are also part of the Project and will be required to operate the new transmission line.

The Action Area for the proposed Project includes the various segments that make up the approximately 120-mile ROW in southern San Diego County, as well as several system upgrades. The revised Action Area consists of approximately 89 miles of 200-foot-wide ROW for the 500-kilovolt (kV) overhead line, approximately 22 miles of 300-foot-wide ROW for the 230-kV overhead line, and approximately 6 miles of underground 230-kV line where the ROW would be 60 feet wide. New access roads, temporary work areas, pull and tension sites, fly yards, and staging areas that are outside of the ROW are also included in the Action Area, for a total of approximately 3,500 acres, as of




Project Alignment (ROW, Temporary and Permanent Impact Areas)

FIGURE 1

Environmentally Superior Southern Route (ESSR) of the Sunrise Powerlink

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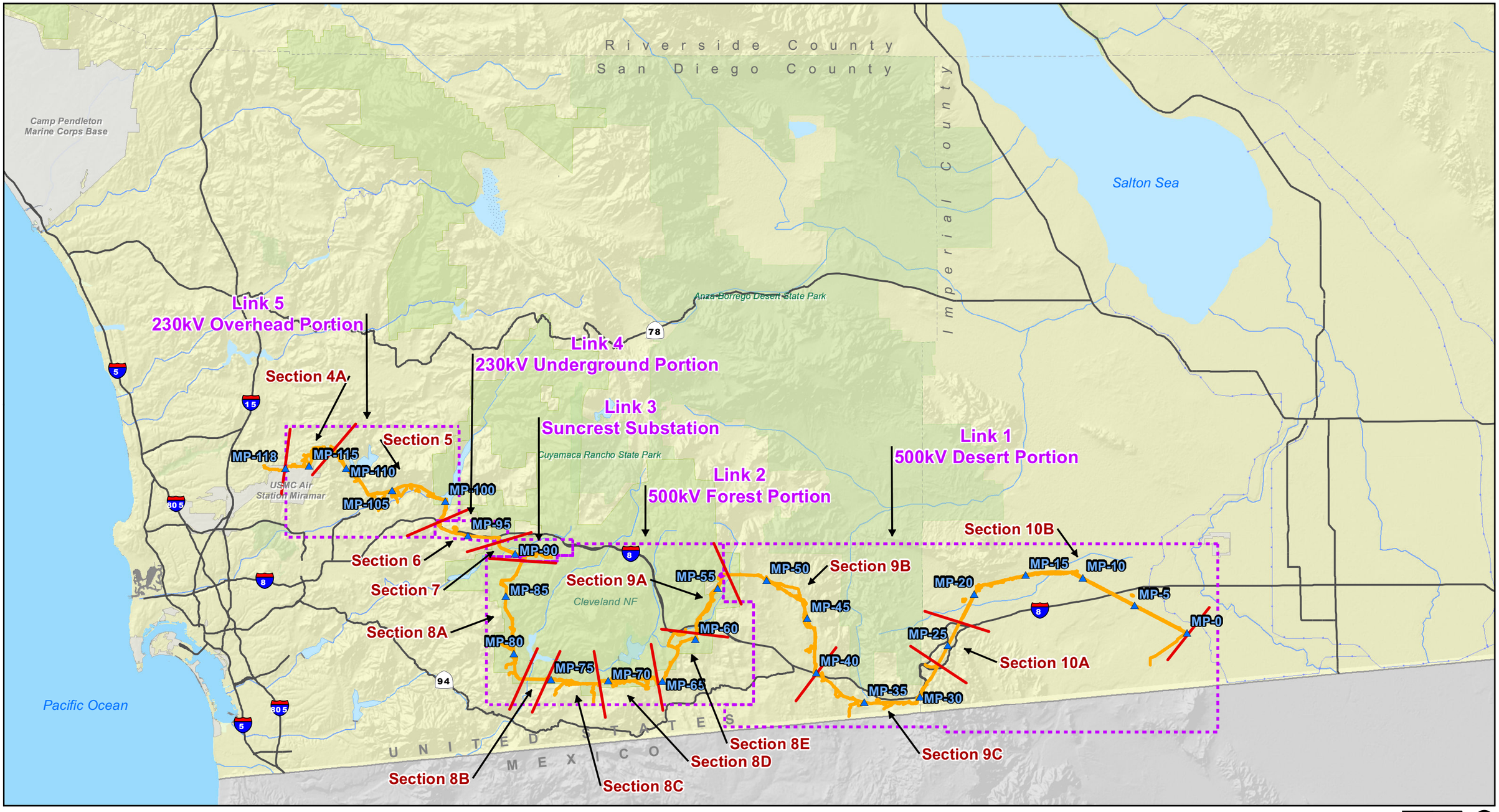


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FIGURE 2

Alignment Sections

August 2010. The species-specific maps in Appendix B contain only 2009 data, and will be updated to include construction access routes, all construction yards, and all ancillary facilities in the upcoming 2010 Weed Control Plan.

This 2009/2010 Weed Control Plan contains mapped weed densities (all species combined) found along the right-of-way, construction access routes, and staging areas (or construction yards) (Figures 3A–3U). The data included in these maps is a combination of weed inventory data from 2009 and 2010. These weed density maps will be updated to show only 2010 weed inventory data in the upcoming 2010 Weed Control Plan.

A key part of controlling the spread of weeds is to perform weed abatement prior to construction and installing wash stations along the alignment during construction. Twelve wash stations are proposed along the alignment to prevent the spread of weeds by vehicles. The location of each wash station was based on weed density, specific weed problems, access availability, probable route of travel for construction vehicles, method of construction (conventional vs. helicopter), and availability of adequately sized existing disturbed areas able to support proper ingress and egress for construction equipment (see Appendix C, Table 1).

## 2.2 Action Area

The Action Area refers to the ROW and ancillary facilities, tower pads and their associated work areas, pull sites, helipads, construction yards, wash stations, and improved (widened, bladed, etc.) existing and new access roads. The Action Area spans 19 United States Geological Survey (USGS) quadrangles (Alpine, Barrett Lake, Cameron Corners, Carrizo Mountain, Coyote Wells, El Cajon, El Cajon Mountain, In-Ko-Pah Gorge, Jacumba, Live Oak Springs, Morena Reservoir, Mount Laguna, Mount Signal, Plaster City, Poway, San Vicente Reservoir, Sombrero Peak, Viejas Mountain, and Yuha Basin) with an elevation range from 10 feet on the eastern desert section to 5,640 feet in the mountains and to 820 feet at the terminus of the Project at the Sycamore Canyon Substation.

The Project passes through several ecoregions, including southern desert lowlands, south desert slopes, southern mountains, southern foothills, central foothills, and the central valley. Vegetation communities encountered on the surveys were consistent with what would be expected from a latitudinal transect across southern California, including Sonoran desert scrubs, semi-desert chaparral, chamise chaparral, redshank chaparral, coast live oak woodland, field/pasture, nonnative grasslands, and Diegan coastal sage scrub.

Topography along the Action Area varies from relatively flat in the desert lowlands to steep rocky cliffs in montane areas and to rolling foothills and canyons in the western

portion. The large variety of topography along the Action Area likely contributes to the diversity of plant species and niche opportunities for rare plant species.

The Action Area has been divided into 14 sections from west to east (see Figure 2). Section 4A begins at the Sycamore Canyon Substation within the Marine Corps Air Station (MCAS) Miramar and continues to Highway 67 from approximately MP 117.2 to MP 112.0. Section 5 spans the foothills from Highway 67, south of Poway, through Eucalyptus Hills and Lakeside to connect to Alpine from approximately MP 112.0 to MP 98.2. Section 6 includes an underground conduit along Alpine Boulevard through Alpine from approximately MP 98.2 to MP 92.0. Section 7 extends from south of Alpine across the Sweetwater River to the Suncrest Substation site from approximately MP 92.0 to MP 89.2. Section 8A extends from the Suncrest Substation site near Bell Bluff to Echo Mountain from approximately MP 89.2 to MP 77.4. Sections 8B, 8C, and 8D extend from south of Barrett Lake to south of Lake Morena along rocky slopes from Echo Mountain to Hauser Mountain from approximately MP 77.4 to MP 65.2. Section 8E extends from Cameron Corners to Interstate 8 from approximately MP 65.2 to MP 57.8. Section 9A is adjacent to the La Posta Truck Trail north of Interstate 8 from approximately MP 57.8 to MP 53.5. Section 9B extends through McCain Valley from approximately MP 53.5 to MP 39.6. Section 9C extends from Boulevard to the start of the In-Ko-Pah Grade, from approximately MP 39.6 to MP 27.2. Section 10A includes the In-Ko-Pah Grade from Mountain Springs to the desert lowlands extending from approximately MP 27.2 to MP 23.5. Section 10B spans a portion of the Colorado Desert extending from approximately MP 23.5 to MP 0.

## 2.3 Plan Goals

As outlined in the environmental impact report/environmental impact statement (EIR/EIS) and Biological Opinion (BO), the goals of the weed control plan are to:

- Identify species within the entire ROW that the County of San Diego has identified as “targeted noxious weeds.” These are limited to perennial pepperweed (*Lepidium latifolium*), yellow starthistle, purple loosestrife (*Lythrum salicaria*), and spotted knapweed (*Centaurea maculosa*) (County of San Diego 2009) through preconstruction surveys.

- Identify species within the ROW that promote the spread of wildfires, such as cheatgrass, Saharan mustard, and medusa head (*Taeniatherum caput-medusae*) through preconstruction surveys.

- Identify species categorized by the California Invasive Plant Council (Cal-IPC) Invasive Plant Inventory as high or moderate for negative ecological impact (Appendix A) in all areas to be directly impacted by the Project (the Action Area). The Cal-IPC has categorized non-native invasive plant species that threaten

California's wildlands as High, Moderate, or Limited ecological impact based on a combination of the species documented impacts, potential for spread, and the range of habitats they are known to tolerate (Cal-IPC 2009).

> **High:** These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.
>
> **Moderate:** These species have substantial and apparent—but generally not severe—ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.

- Develop weed control treatments to control the species observed during preconstruction surveys prior to implementation of construction efforts.
- Identify methods to control the spread of weeds during construction.
- Outline methods to monitor previously mapped weed populations and identify new infestations for the lifetime of the Sunrise Powerlink.
- Develop annual weed control treatment methods for the lifetime of the Sunrise Powerlink.

## Responsible Parties

### Project proponent

SDG&E (Project proponent) will be responsible for funding and implementing this weed control plan. The Project proponent will be responsible for contracting with personnel qualified in implementation, maintenance, and monitoring of exotic and invasive plant removal practices described in this plan. When necessary, SDG&E will coordinate weed removal activities with adjacent landowners. SDG&E will coordinate with the City of San Diego, Public Utilities Department in advance of any Sunrise Powerlink Project weed control activities on City-owned land. Upon contracting with a qualified person or organization to implement this plan, the Project proponent will designate a person or group as the Weed Control Manager.

**Weed Control Manager**

A Weed Control Manager (WCM) shall be hired to implement this plan. The WCM can be either an individual or an organization as long as the person(s) actively managing the Project meets the qualifications outlined below to the satisfaction of the Project proponent. If the selected WCM is an organization, the project manager shall be licensed in State of California to perform pest control activities and capable of managing large-scale weed eradication projects. The WCM will be responsible for the day-to-day implementation of this plan and will carry out the requirements and objectives described herein. All pest control activities performed shall be under the prescription of a State of California Pest Control Advisor (PCA).

The individual or project manager identified by the organization contracted to implement this plan must meet the following criteria:

- Have a B.S. or B.A. degree in ecology, botany, biology, landscape maintenance, range management, or related field.
- Have at least two years of experience in native or horticultural landscaping including weed control in Southern California, preferably San Diego and Imperial Counties.
- Have a PCA license.
- Have demonstrated experience in similar projects or in projects including similar skills.

# 3.0 Preconstruction Survey

RECON biologists and subcontractors (Corporate Guidance Solutions, Gonzales Consulting, and Roberts Consulting) conducted preconstruction weed surveys in conjunction with sensitive plant surveys between March and August 2009 (RECON 2009). A second season of surveys was also conducted from March to September 2010. In addition, Chambers Group biologist Kris Alberts conducted biological surveys (including invasive weeds) at the White Star facility (Chambers 2010). Existing substation facility upgrades at the South Bay, San Luis Rey, Encina, and Imperial Valley substations occur on land that is actively maintained free of vegetation and subsequently were not surveyed for invasive weeds. As the 2010 survey season is ongoing, this report primarily presents invasive weed data collected in 2009. Upon the completion of the 2010 survey season, invasive weeds observations will be updated in the 2010 Weed Control Plan (see Section 3.2). The entire current action area has been surveyed at least once (2009 and/or 2010) except for the existing substations described above and the following reconductoring routes: Sycamore Canyon Substation to Elliott

Substation, Sycamore Canyon Substation to Pomerado Substation, and from Sycamore Canyon Substation to Scripps Substation. These reconductoring routes are currently being surveyed and will be presented in the 2010 Weed Control Plan.

An overview of invasive species' densities within specific sections of the Action Area is provided in Figures 3A–3U.

Surveys for invasive species will continue through the late summer of 2010 on both unsurveyed and previously surveyed portions of the Action Area. Once these surveys are finished, a 2010 version of this report will be completed discussing all species observed in 2009 and 2010.

## 3.1 Methods

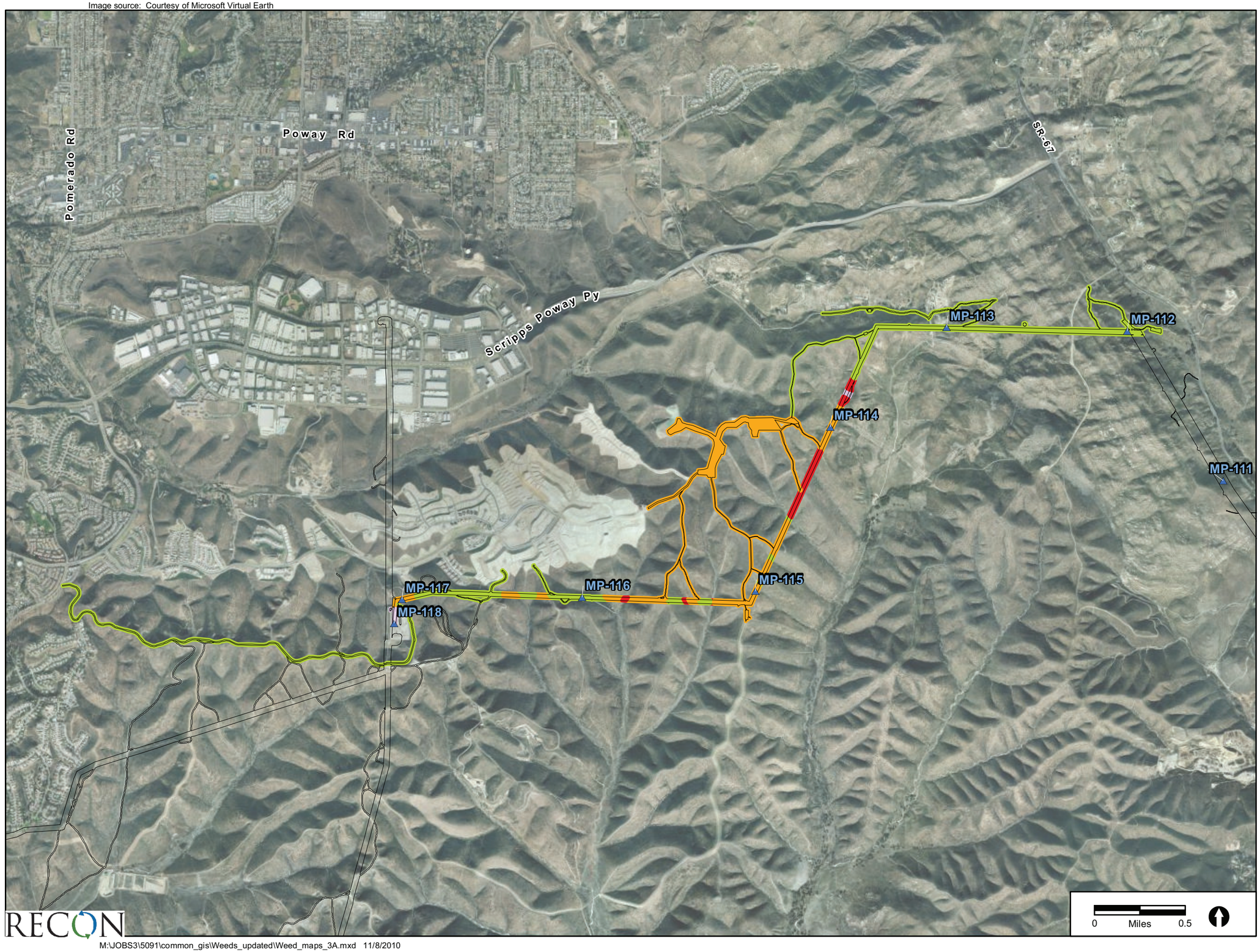
The Action Area was traversed on foot by teams of biologists walking meandering transects along the centerline of the alignment ROW as designated at the time of the survey. Additional survey time was spent at areas of proposed tower sites, associated access roads, and other potential impact areas. Biologists were separated by twice the visual range of a single individual, thereby ensuring visual coverage of 100 percent of the distance between individual biologists. In areas of dense vegetation, the distance between biologists was reduced to an appropriate distance for complete visual coverage of the Action Area.

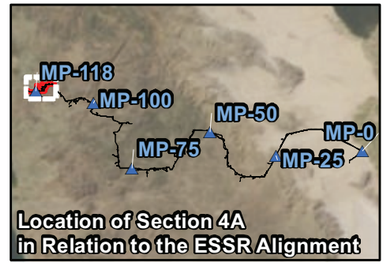
All weeds present within or adjacent to the alignment ROW were noted. As outlined in the EIR/EIS and BO, the survey focused on the following target species:

- Species that promote the spread of wildfires, such as cheatgrass, Saharan mustard, and medusa head.
- Species categorized by the Cal-IPC Invasive Plant Inventory as High or Moderate for negative ecological impact (see Appendix A).
- County of San Diego "targeted noxious weeds" including perennial pepperweed, yellow starthistle, purple loosestrife, and spotted knapweed (County of San Diego 2009).

A complete list of weed species with potential to occur in the Action Area is presented in Appendix A.

Image source: Courtesy of Microsoft Virtual Earth




2010 Action Area

Mileposts - 2010

**Weed Densities 2009 and 2010 Surveys (Species Combined)**

- None
- Low
- Medium
- High

0 Miles 0.5

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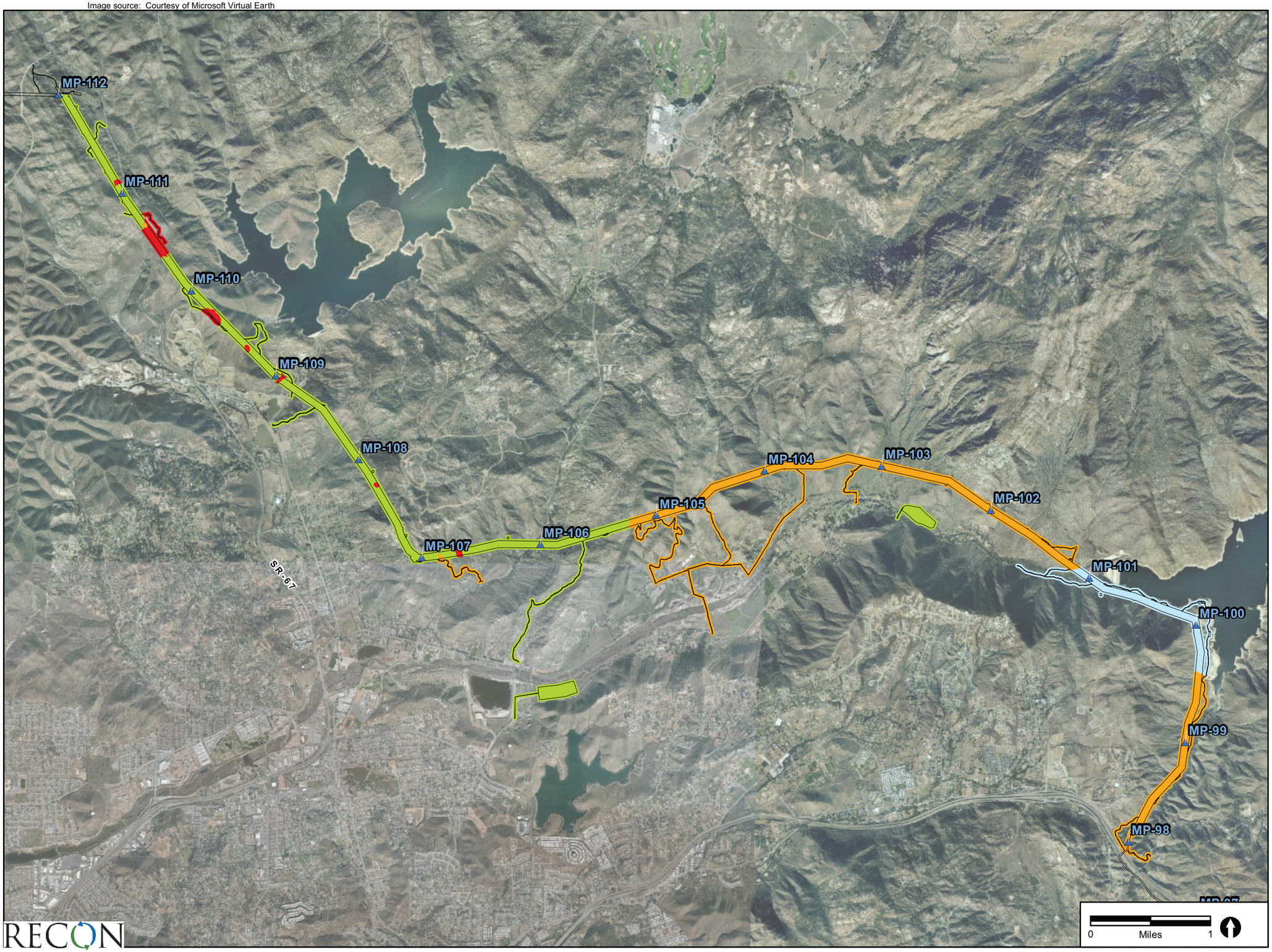
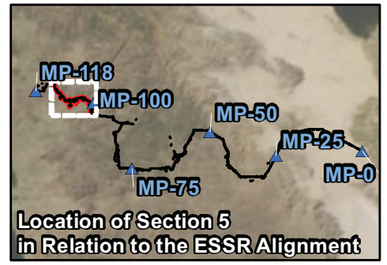
FIGURE 3A

Weed Densities within **Section 4A** of the ESSR Alignment

Image source: Courtesy of Microsoft Virtual Earth




2010 Action Area

Mileposts - 2010

**Weed Densities 2009 and 2010 Surveys (Species Combined)**

- Trace
- Low
- Medium
- High

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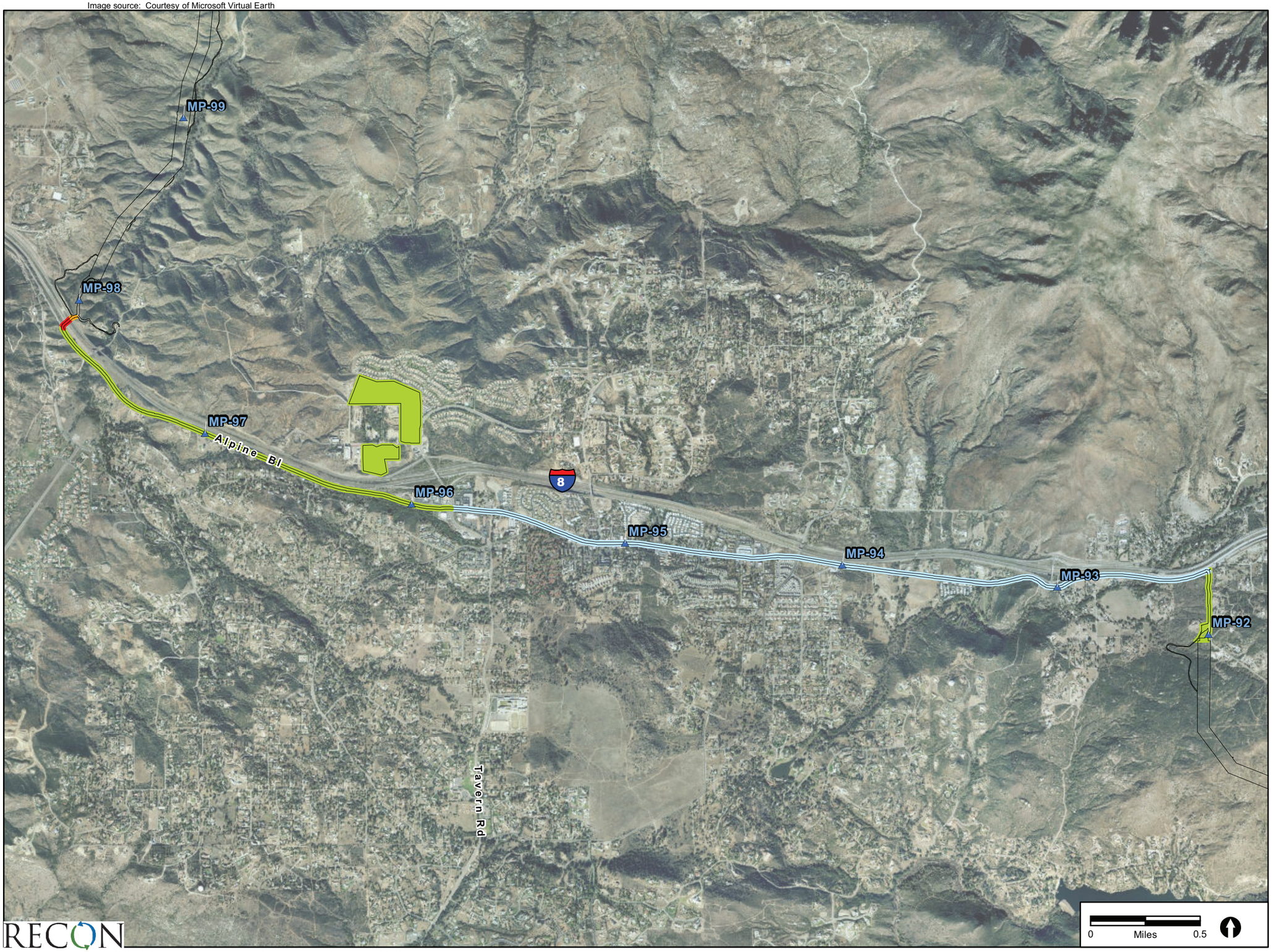
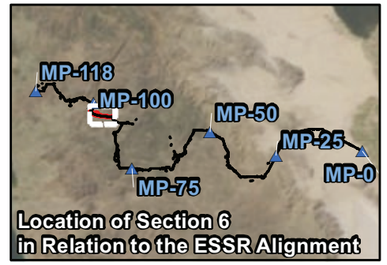
FIGURE 3B

Weed Densities within **Section 5** of the ESSR Alignment

Image source: Courtesy of Microsoft Virtual Earth




2010 Action Area

Mileposts - 2010

**Weed Densities 2009 and 2010 Surveys (Species Combined)**

- Trace
- Low
- Medium
- High

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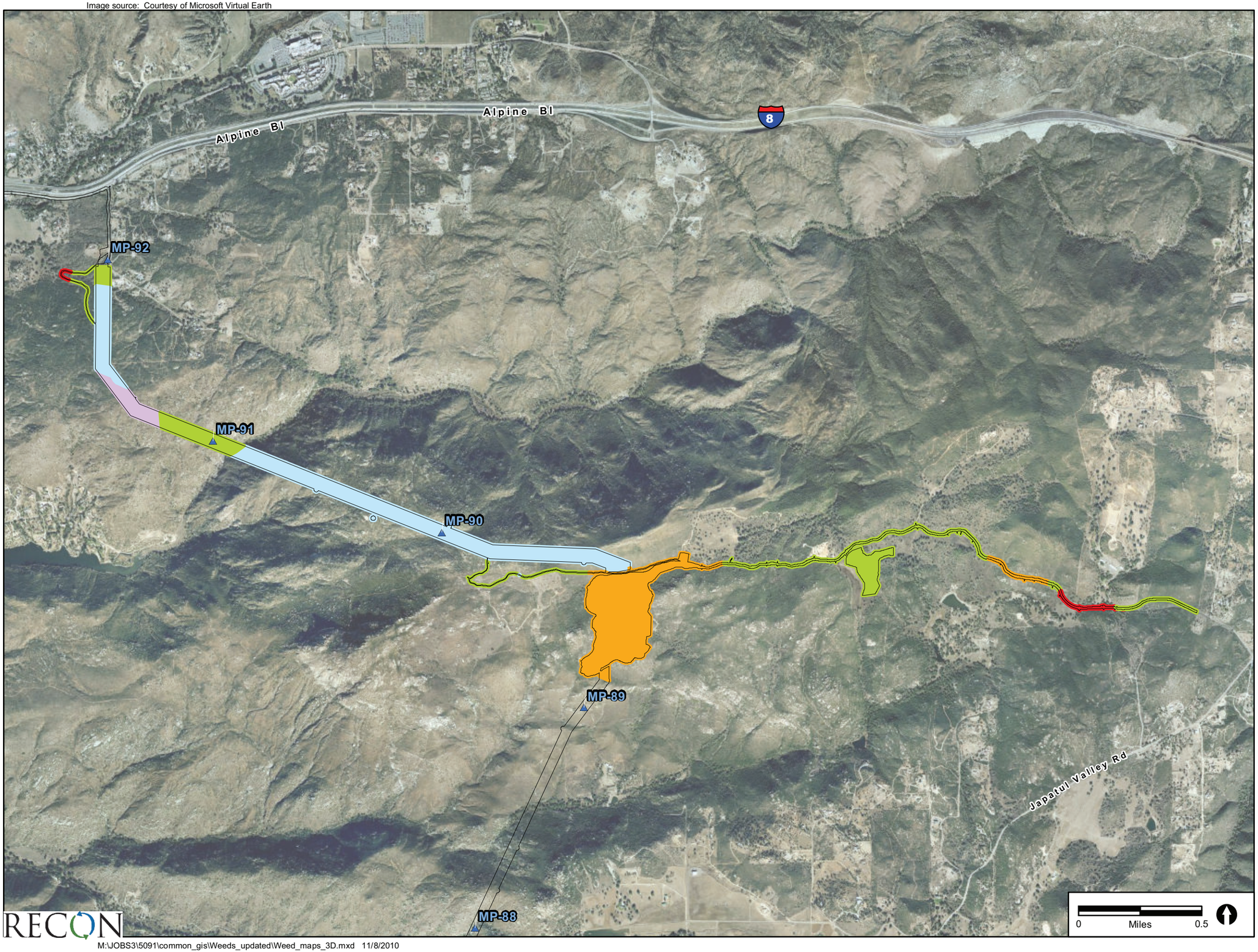
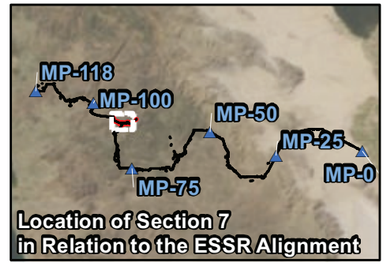
FIGURE 3C

Weed Densities within **Section 6** of the ESSR Alignment

Image source: Courtesy of Microsoft Virtual Earth




2010 Action Area

Mileposts - 2010

**Weed Densities 2009 and 2010 Surveys (Species Combined)**

- None
- Trace
- Low
- Medium
- High

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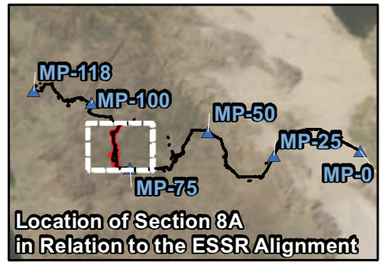
FIGURE 3D

Weed Densities within **Section 7** of the ESSR Alignment

Image source: Courtesy of Microsoft Virtual Earth




MP-89
MP-88
MP-87
MP-86
MP-85
MP-84
MP-83
MP-82
MP-81
MP-80
MP-79
MP-78
MP-77
MP-76
MP-75
MP-74
MP-73
Japatul Valley Rd
Lyons Valley Rd
Honey Springs Rd

2010 Action Area

Mileposts - 2010

**Weed Densities 2009 and 2010 Surveys (Species Combined)**

None

Trace

Low

Medium

High

0 Miles 1.5

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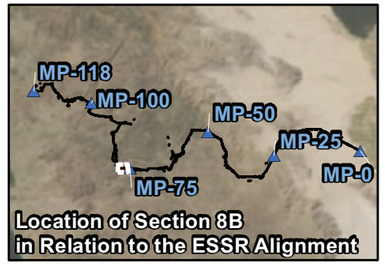
FIGURE 3E

Weed Densities within **Section 8A** of the ESSR Alignment

Image source: Courtesy of Microsoft Virtual Earth




MP-77

MP-76

2010 Action Area

Mileposts - 2010

**Weed Densities 2009 and 2010 Surveys (Species Combined)**

Low

0 Miles 0.25

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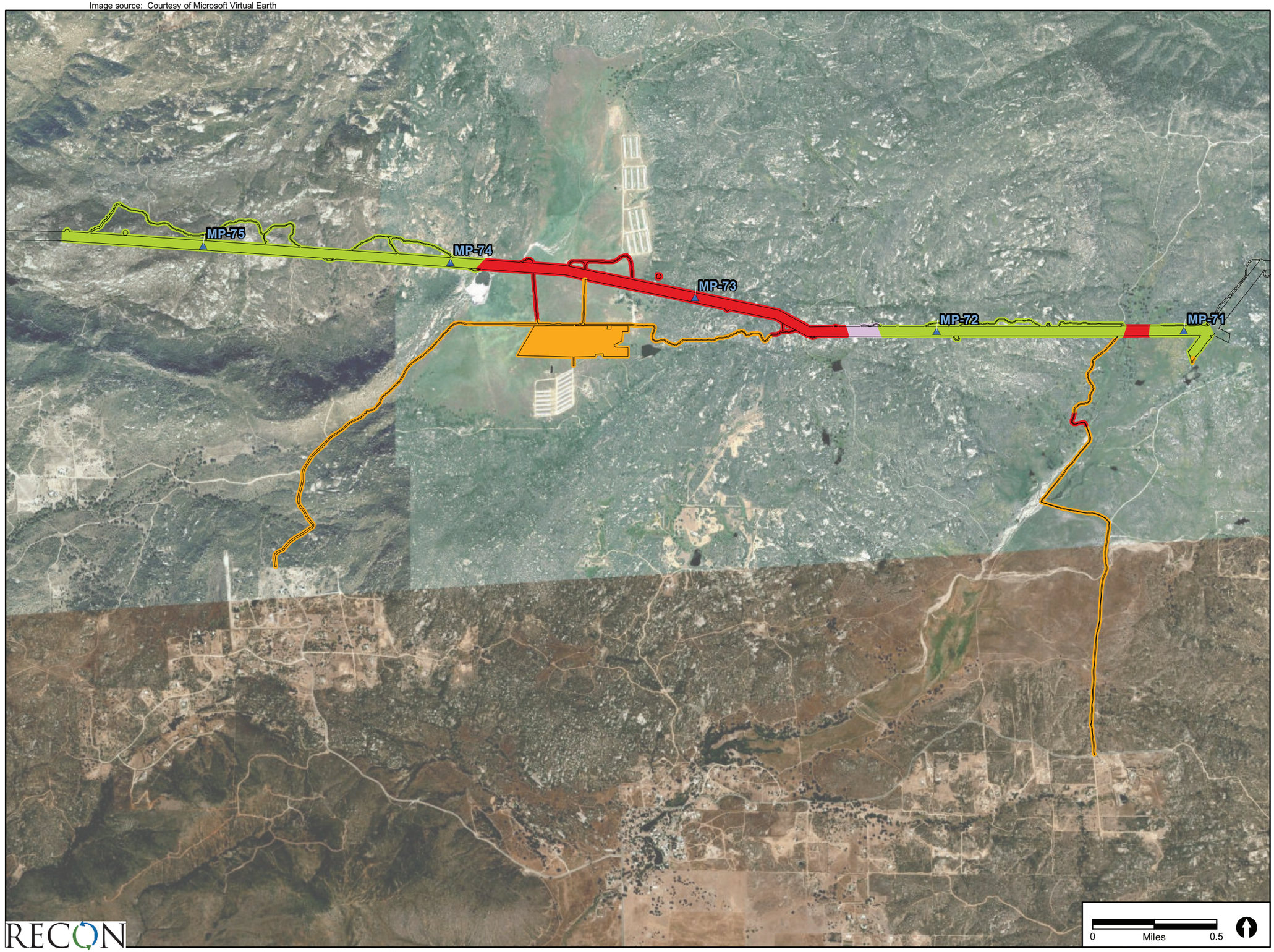
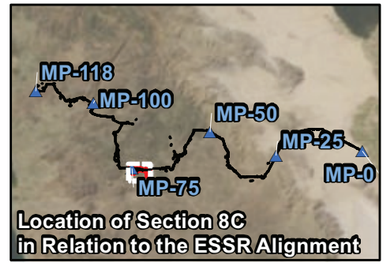
FIGURE 3F

Weed Densities within **Section 8B** of the ESSR Alignment

Image source: Courtesy of Microsoft Virtual Earth




2010 Action Area

Mileposts - 2010

**Weed Densities 2009 and 2010 Surveys (Species Combined)**

None

Low

Medium

High

0 Miles 0.5

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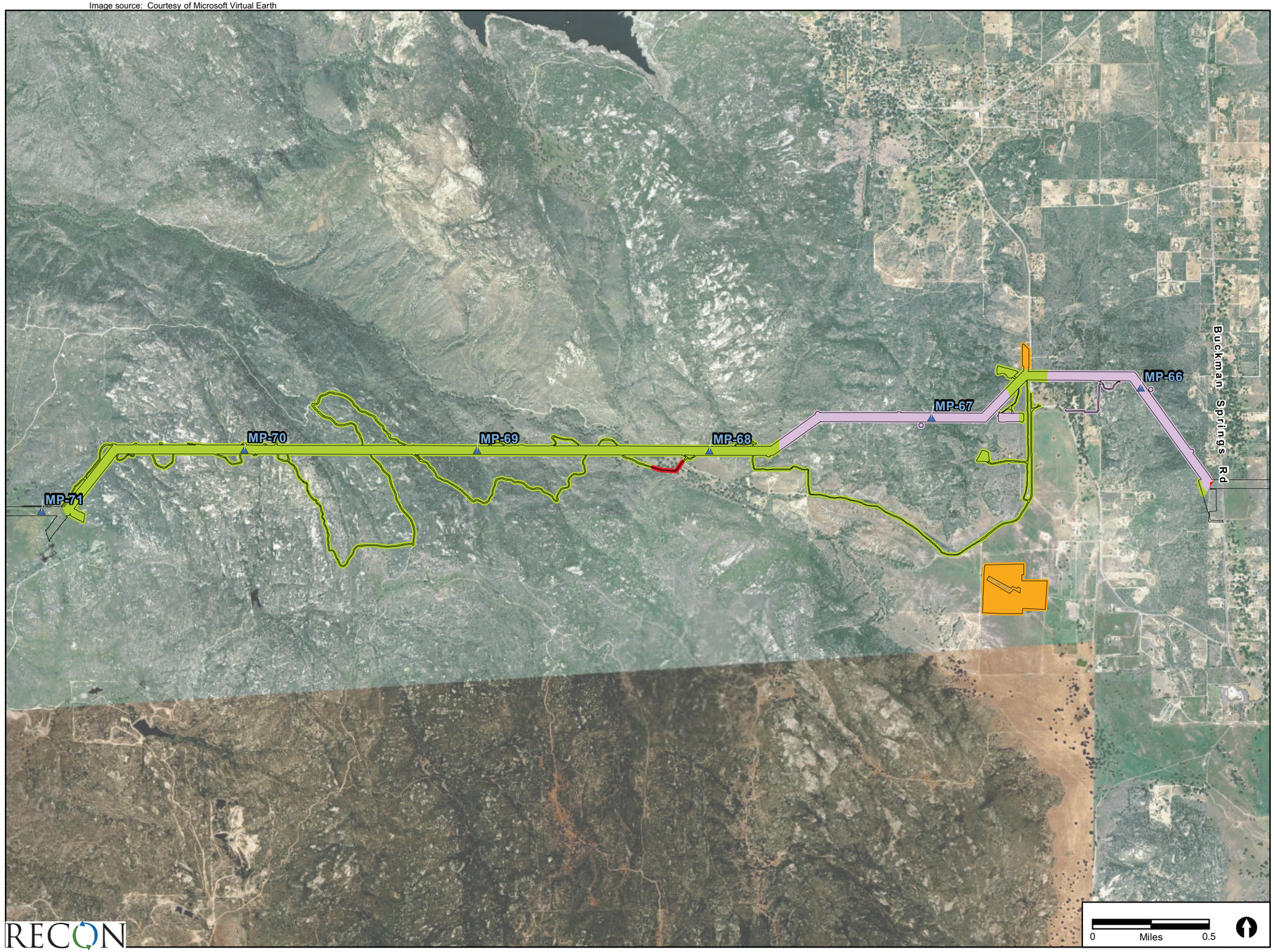
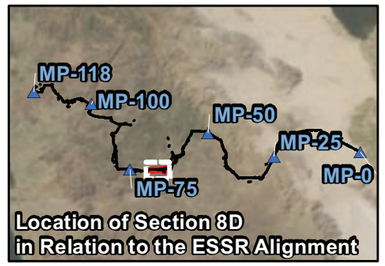
FIGURE 3G

Weed Densities within **Section 8C** of the ESSR Alignment

Image source: Courtesy of Microsoft Virtual Earth




2010 Action Area

Mileposts - 2010

**Weed Densities 2009 and 2010 Surveys (Species Combined)**

- None
- Low
- Medium
- High

0 Miles 0.5

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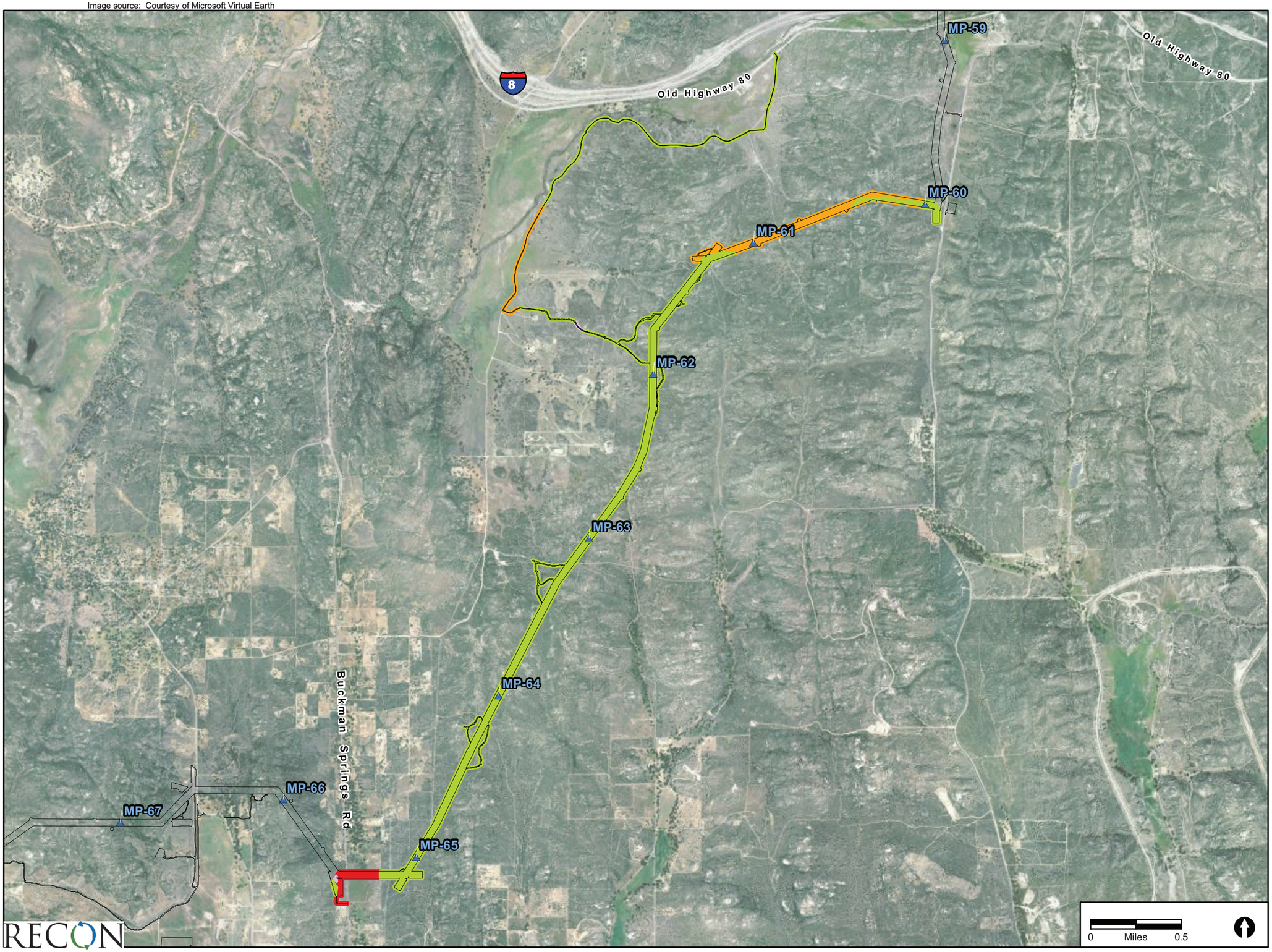
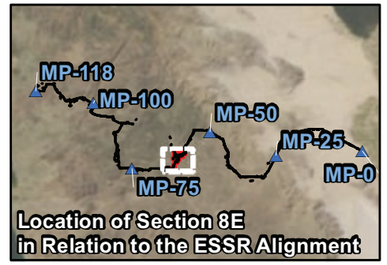
FIGURE 3H

Weed Densities within **Section 8D** of the ESSR Alignment

Image source: Courtesy of Microsoft Virtual Earth




2010 Action Area

Mileposts - 2010

**Weed Densities 2009 and 2010 Surveys (Species Combined)**

None

Low

Medium

High

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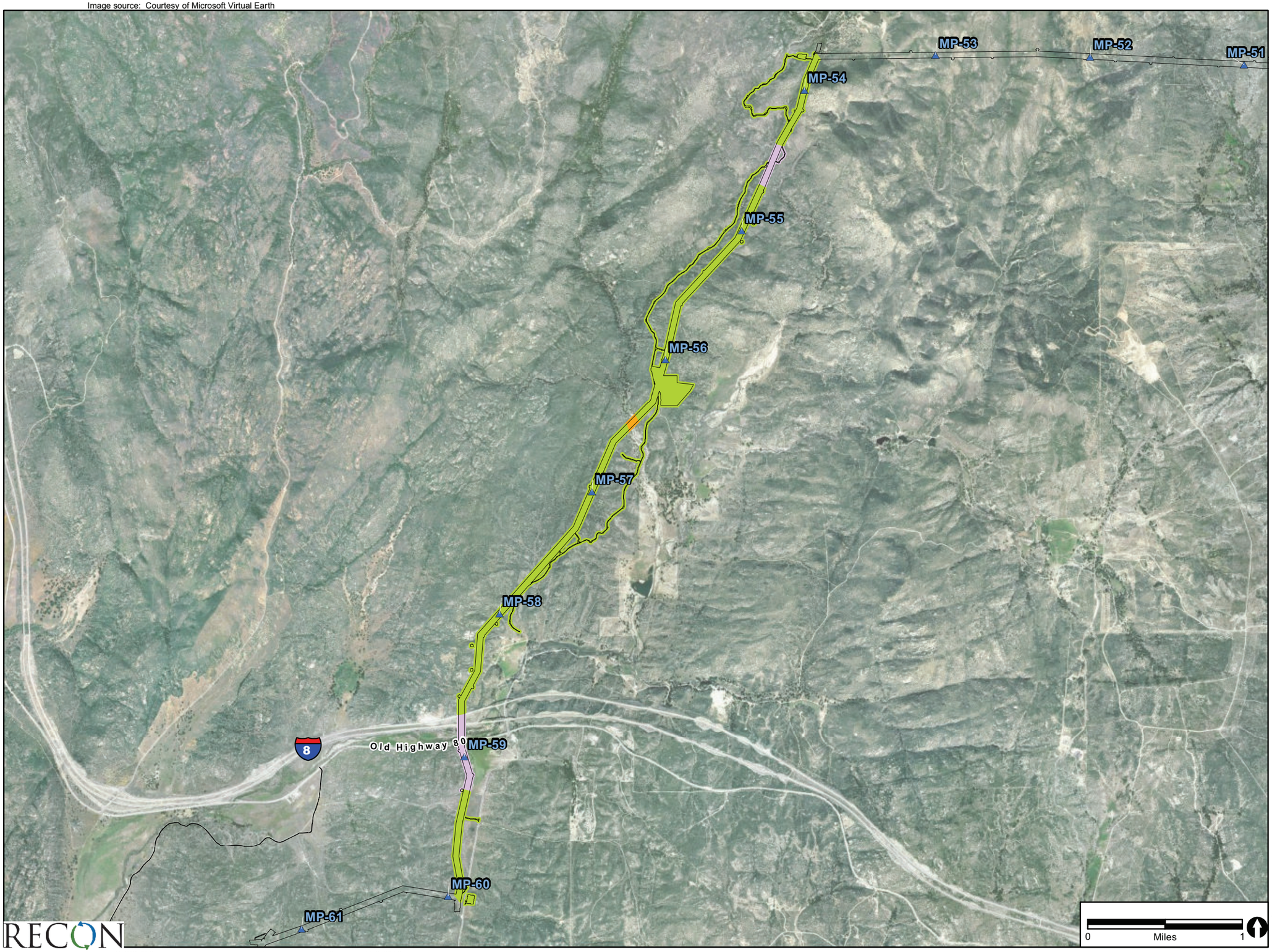
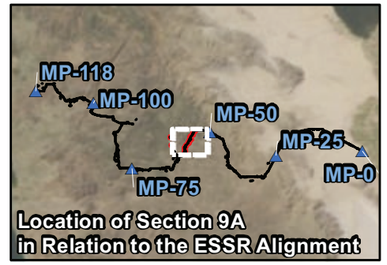
FIGURE 3I

Weed Densities within **Section 8E** of the ESSR Alignment

Image source: Courtesy of Microsoft Virtual Earth




2010 Action Area

Mileposts - 2010

**Weed Densities 2009 and 2010 Surveys (Species Combined)**

None

Low

Medium

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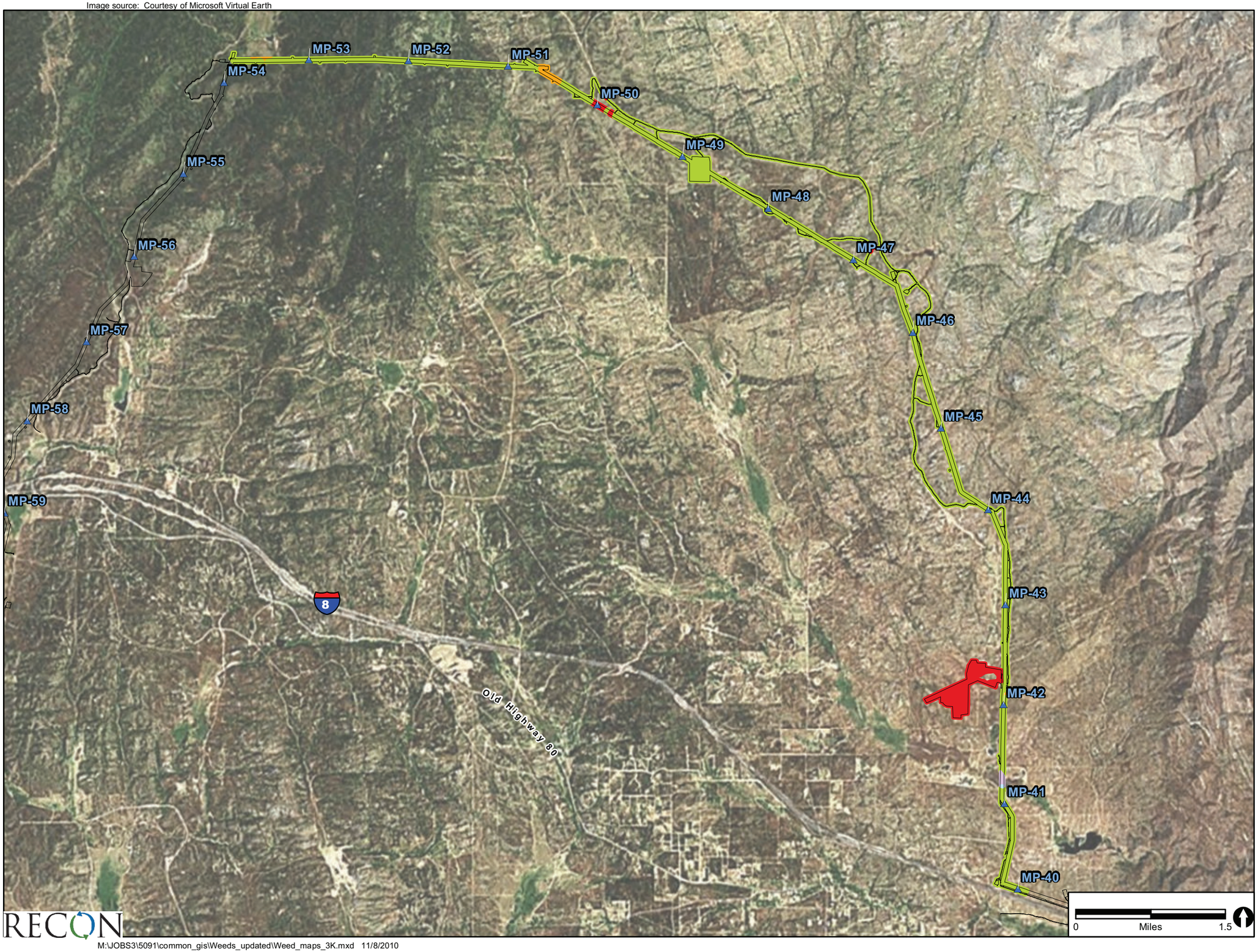
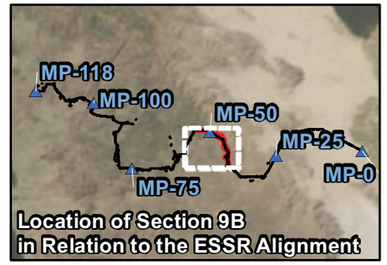
FIGURE 3J

Weed Densities within **Section 9A** of the ESSR Alignment

Image source: Courtesy of Microsoft Virtual Earth




2010 Action Area

Mileposts - 2010

**Weed Densities 2009 and 2010 Surveys (Species Combined)**

- None
- Trace
- Low
- Medium
- High

RECON

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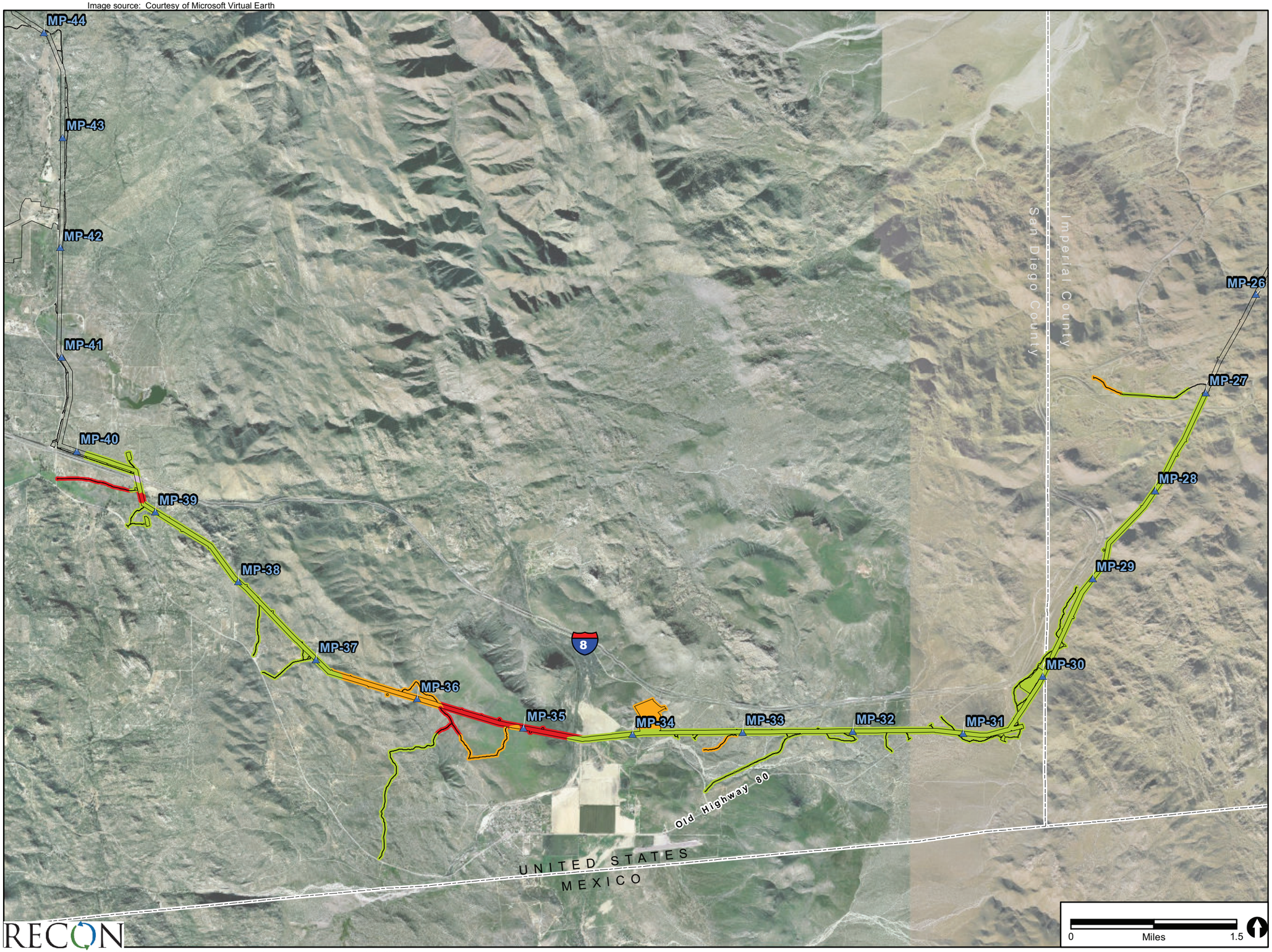
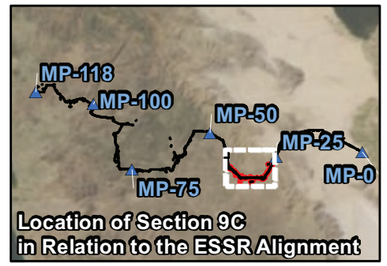
FIGURE 3K

Weed Densities within **Section 9B** of the ESSR Alignment

Image source: Courtesy of Microsoft Virtual Earth




2010 Action Area

Mileposts - 2010

**Weed Densities 2009 and 2010 Surveys (Species Combined)**

- None
- Low
- Medium
- High

RECON

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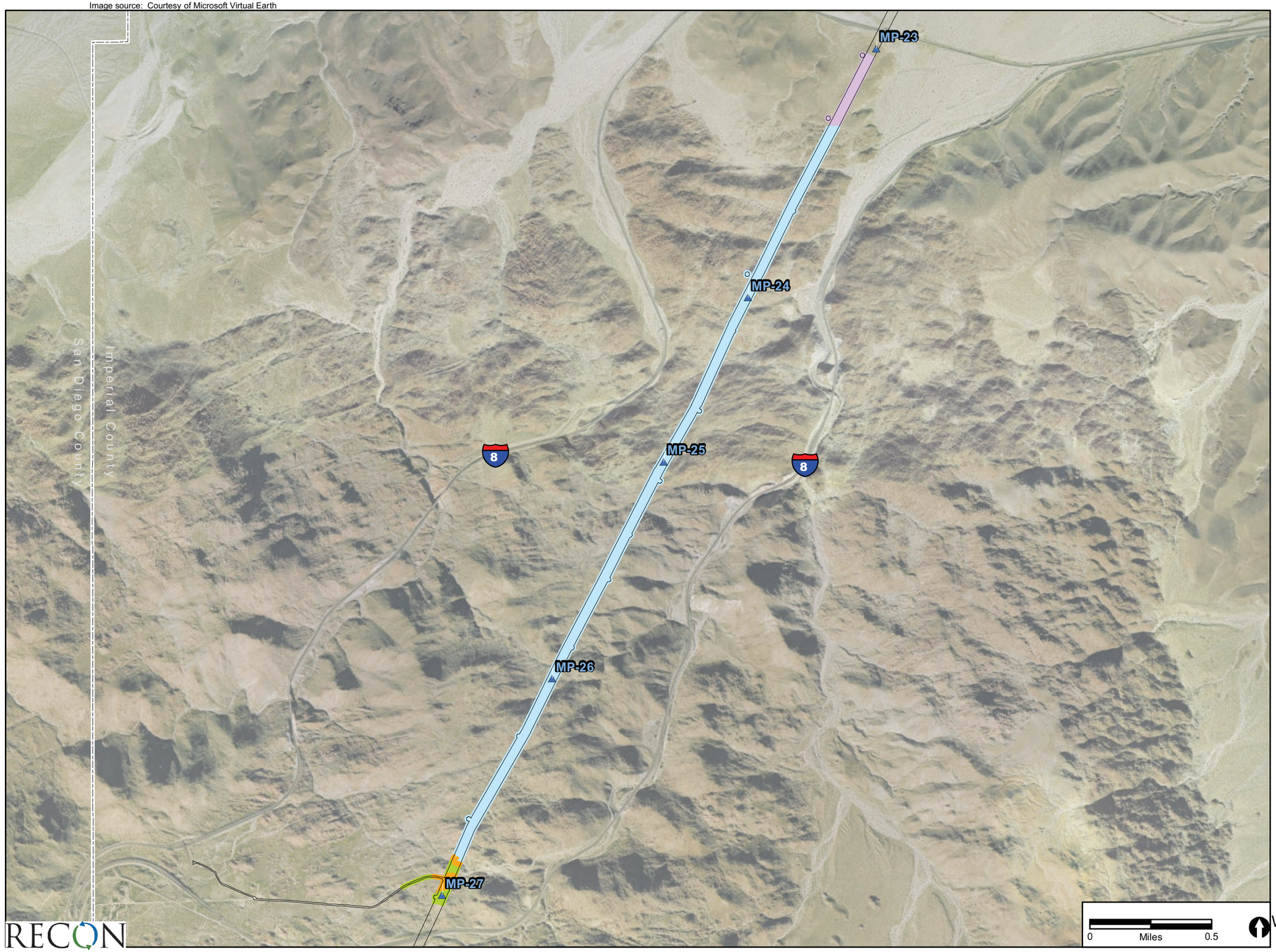
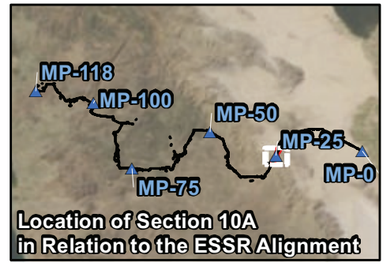
FIGURE 3L

Weed Densities within **Section 9C** of the ESSR Alignment

Image source: Courtesy of Microsoft Virtual Earth




2010 Action Area

Mileposts - 2010

**Weed Densities 2009 and 2010 Surveys (Species Combined)**

None

Trace

Low

Medium

0 Miles 0.5

RECON

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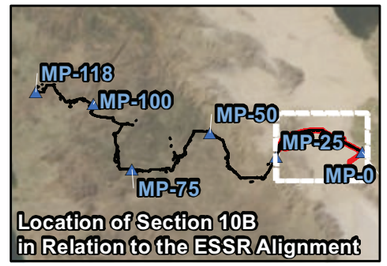
FIGURE 3M

Weed Densities within **Section 10A** of the ESSR Alignment

Image source: Courtesy of Microsoft Virtual Earth


2010 Action Area

Mileposts - 2010

**Weed Densities 2009 and 2010 Surveys (Species Combined)**

None

Trace

Low

RECON

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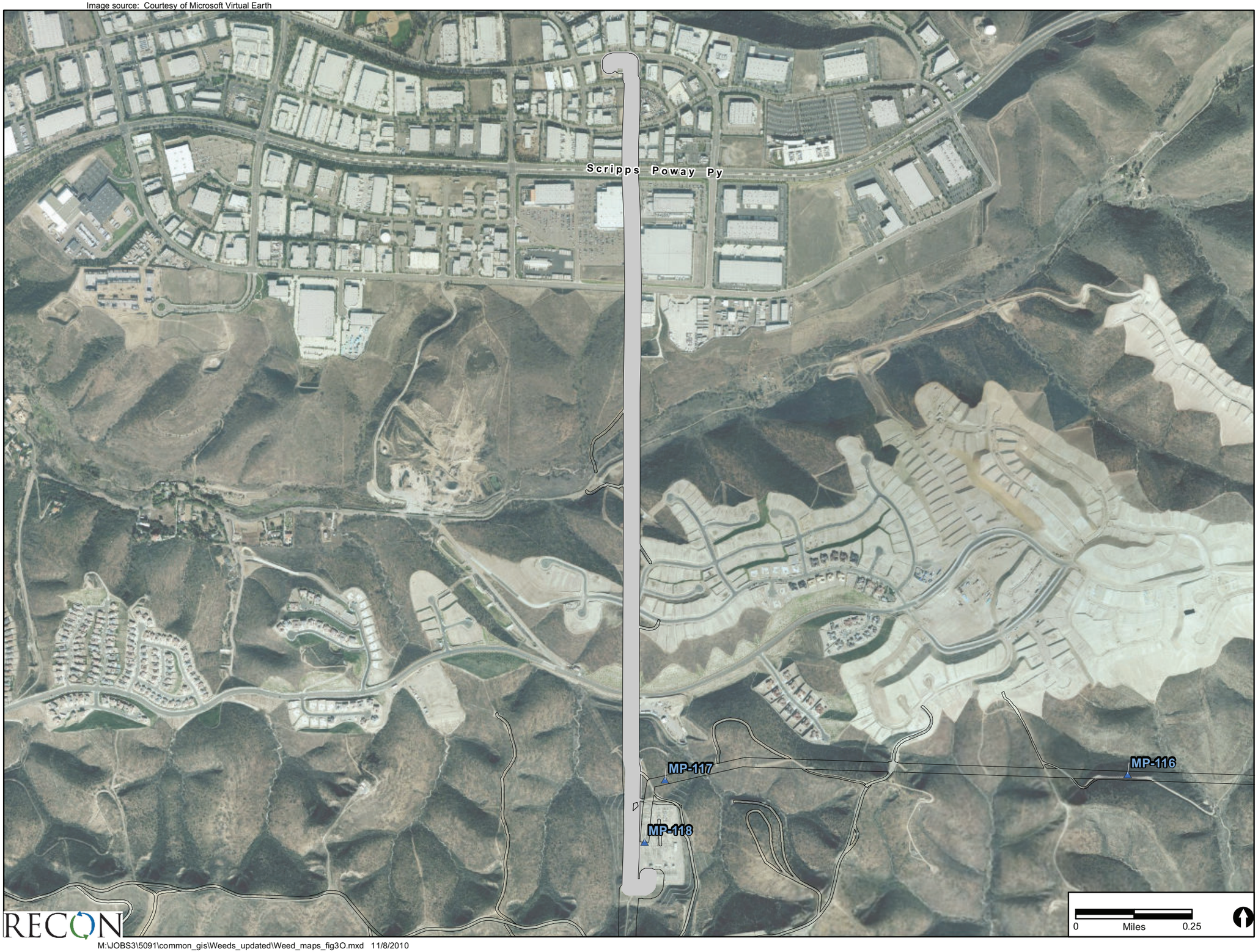
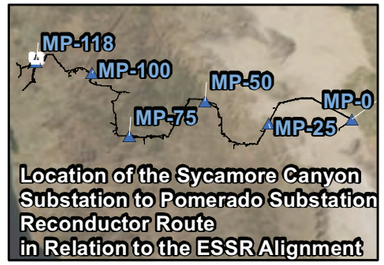
FIGURE 3N

Weed Densities within **Section 10B** of the ESSR Alignment

to be

Image source: Courtesy of Microsoft Virtual Earth




2010 Action Area

Mileposts - 2010

**Weed Densities 2009 and 2010 Surveys (Species Combined)**

Invasive Weed Data to be Updated in the 2010 Weed Control Plan

RECON

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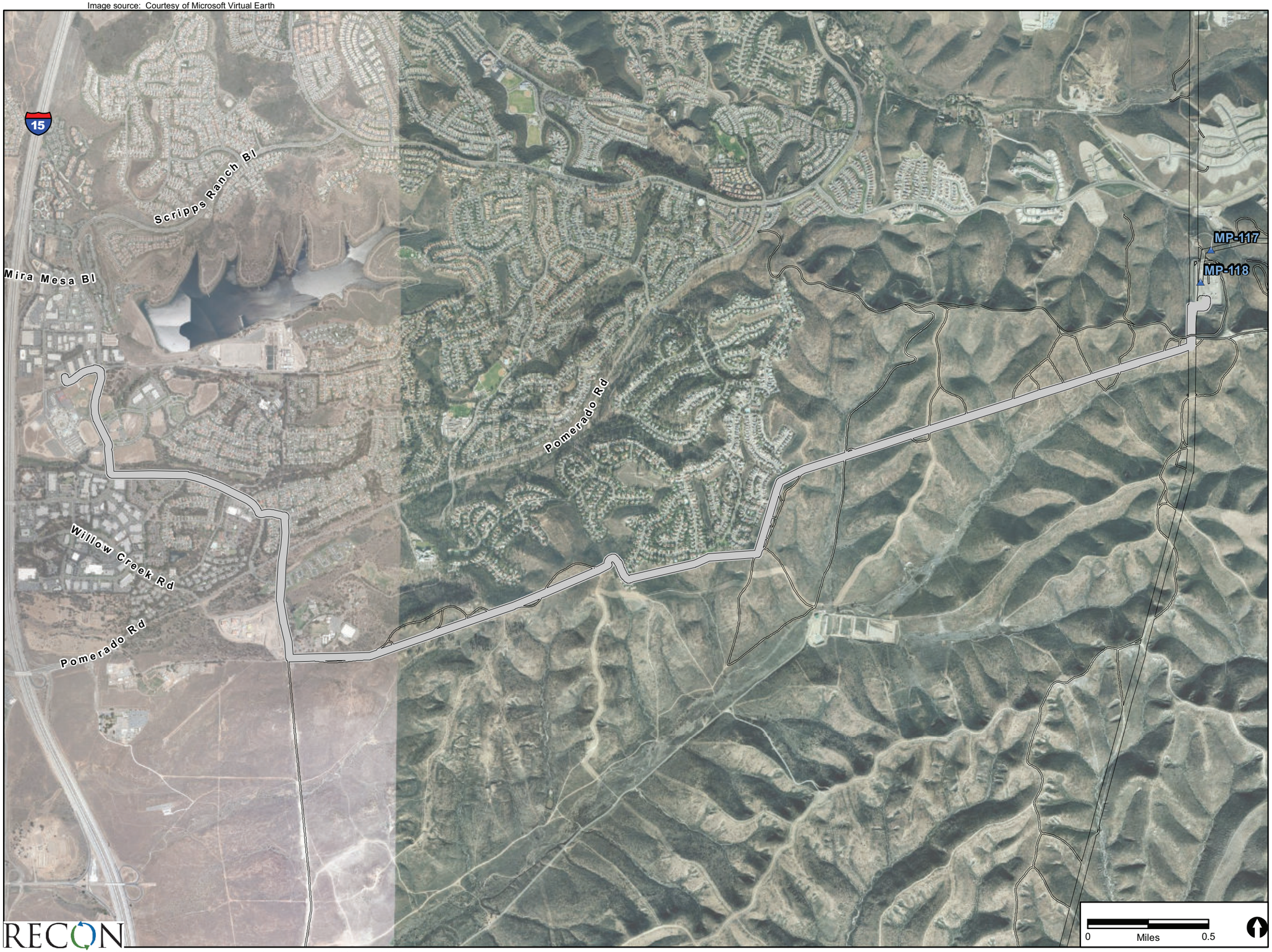
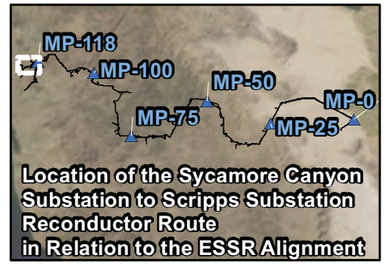
FIGURE 3O

Weed Densities within the **Sycamore Canyon Substation to Pomerado Substation Reconductor Route** of the ESSR Alignment

Image source: Courtesy of Microsoft Virtual Earth




2010 Action Area

Mileposts - 2010

**Weed Densities 2009 and 2010 Surveys (Species Combined)**

Invasive Weed Data to be Updated in the 2010 Weed Control Plan

RECON

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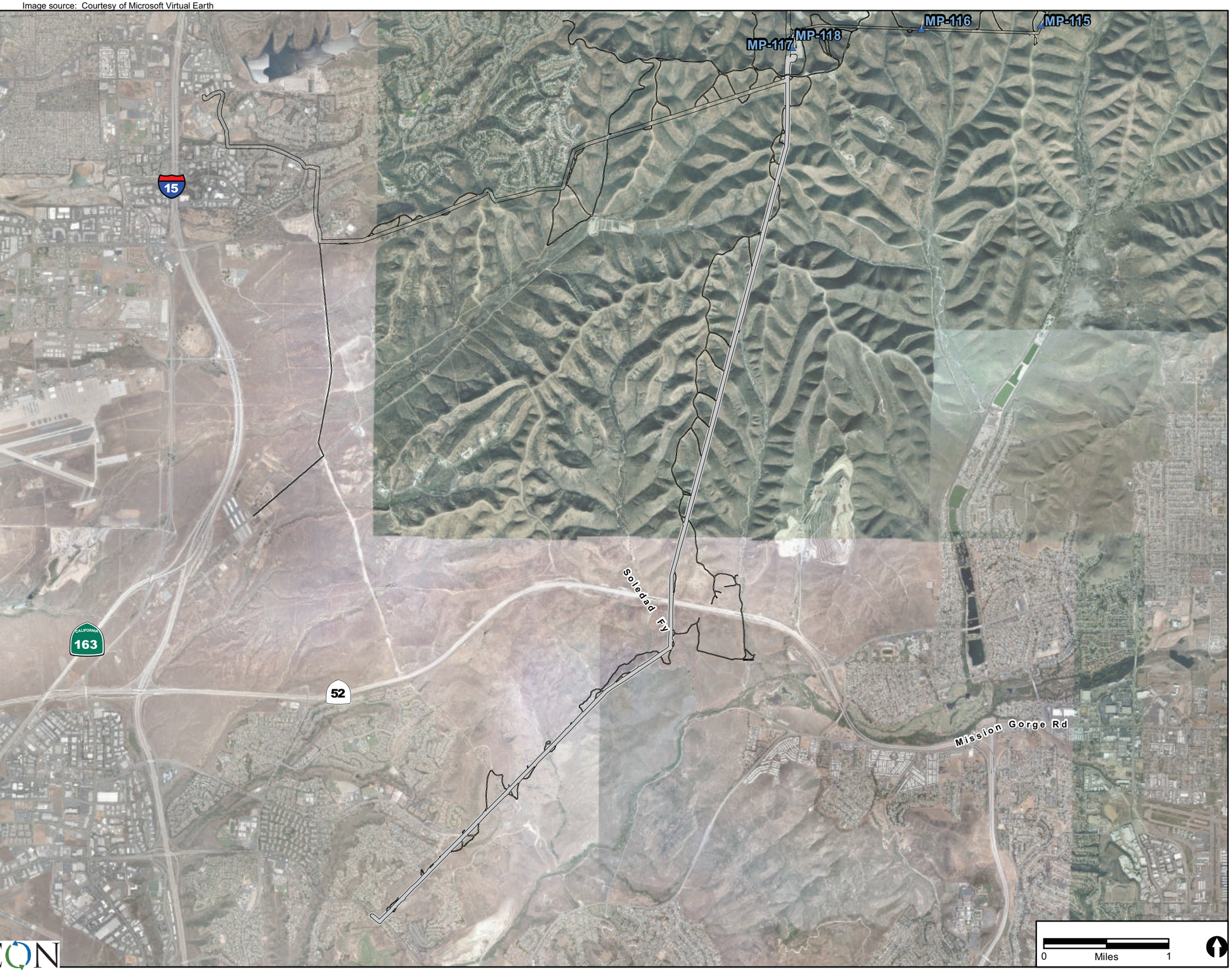
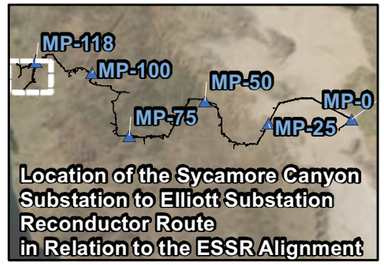
FIGURE 3P

Weed Densities within the **Sycamore Canyon Substation to Scripps Substation Reconductor Route** of the ESSR Alignment

Image source: Courtesy of Microsoft Virtual Earth




2010 Action Area

Mileposts - 2010

**Weed Densities 2009 and 2010 Surveys (Species Combined)**

Invasive Weed Data to be Updated in the 2010 Weed Control Plan

RECON

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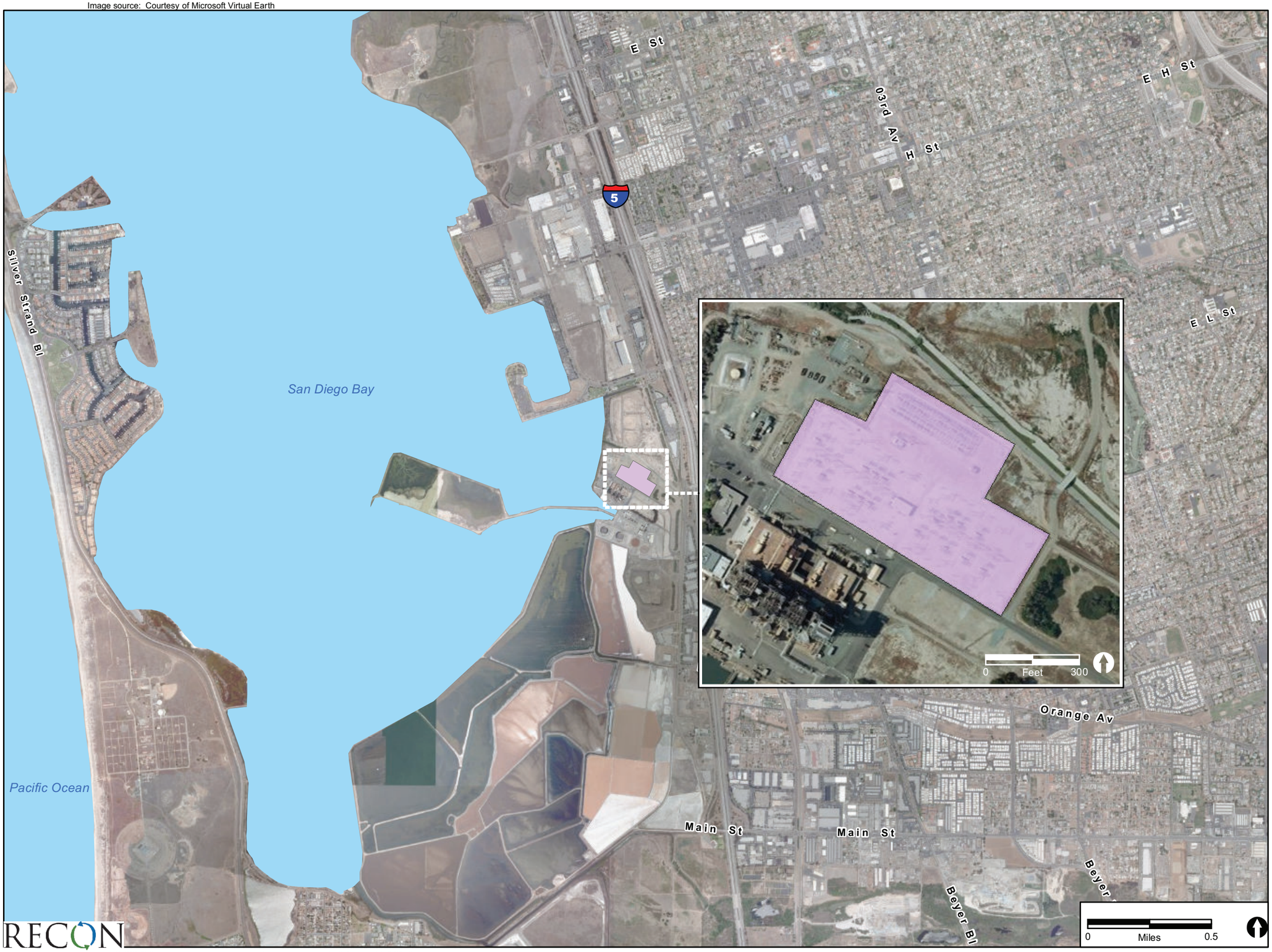
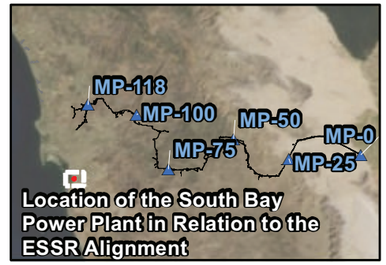
FIGURE 3Q

Weed Densities within the **Sycamore Canyon Substation to Elliott Substation Reconductor Route** of the ESSR Alignment

Image source: Courtesy of Microsoft Virtual Earth




2010 Action Area

Mileposts - 2010

**Weed Densities 2009 and 2010 Surveys (Species Combined)**

Excluded from Surveys Due to Vegetation Free Maintenance Policies

RECON

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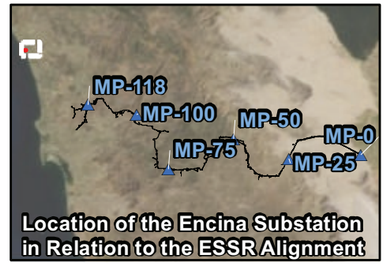
FIGURE 3R

Weed Densities within the **South Bay Power Plant** of the ESSR Alignment

Image source: Courtesy of Microsoft Virtual Earth


2010 Action Area

Mileposts - 2010

**Weed Densities 2009 and 2010 Surveys (Species Combined)**

Excluded from Surveys Due to Vegetation Free Maintenance Policies

RECON

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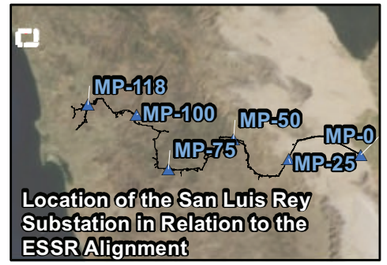
FIGURE 3S

Weed Densities within the **Encina Substation** of the ESSR Alignment

Image source: Courtesy of Microsoft Virtual Earth


2010 Action Area

Mileposts - 2010

**Weed Densities 2009 and 2010 Surveys (Species Combined)**

Excluded from Surveys Due to Vegetation Free Maintenance Policies

RECON

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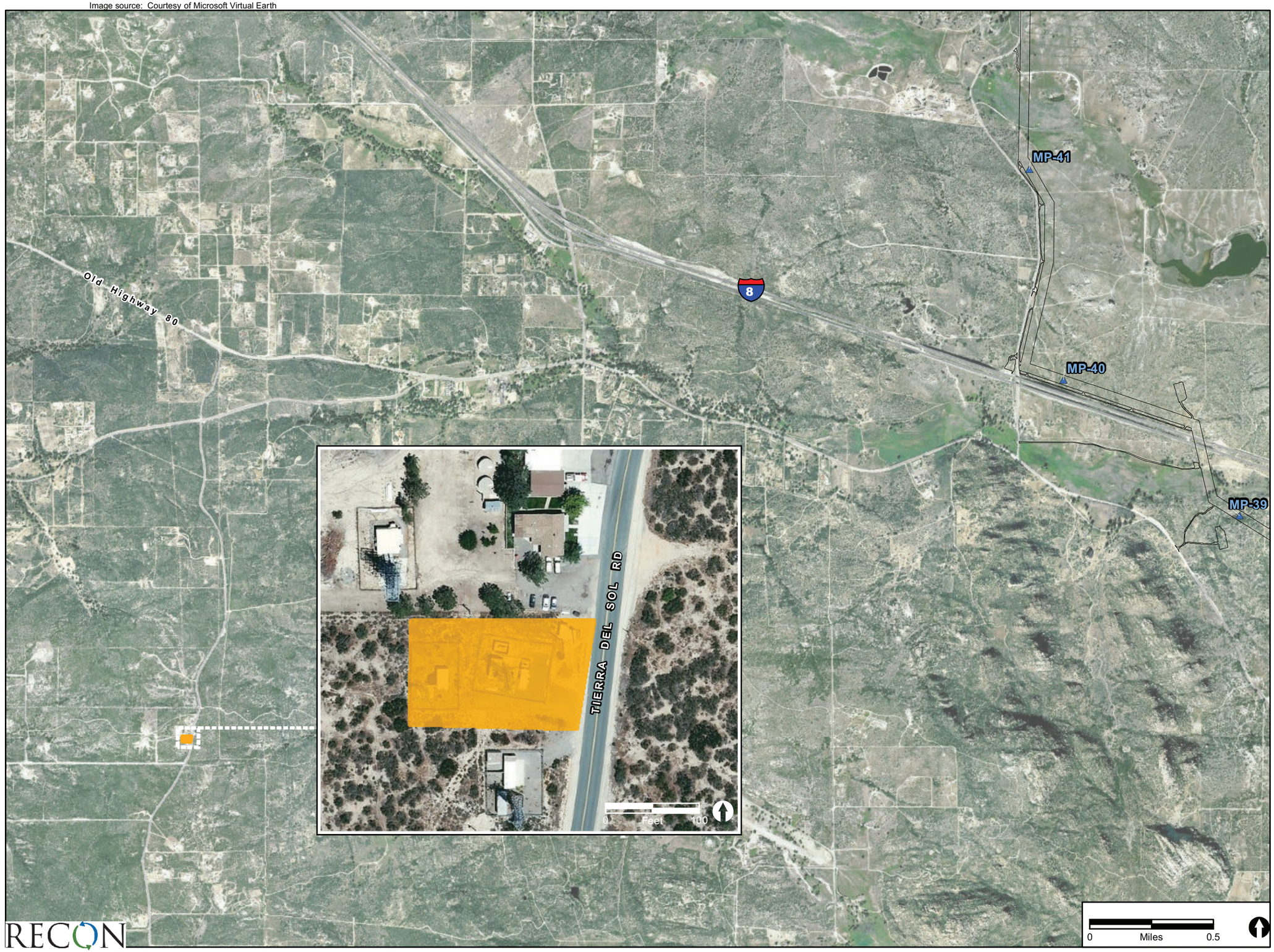
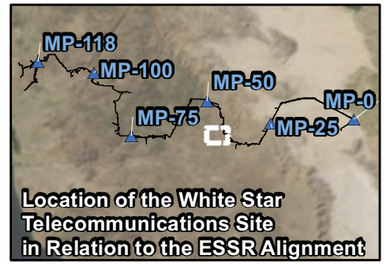
FIGURE 3T

Weed Densities within the **San Luis Rey Substation** of the ESSR Alignment

Image source: Courtesy of Microsoft Virtual Earth




2010 Action Area

Mileposts - 2010

**Weed Densities 2009 and 2010 Surveys (Species Combined)**

Medium

RECON

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FIGURE 3U
Weed Densities within the
**White Star**
**Telecommunications Site**
of the ESSR Alignment

Surveyors recorded the location of all target weed species when encountered using Global Positioning System (GPS) handheld units (Trimble GeoXT or Garmin GPS 12). Additional location information was recorded in surveyors' field notebooks. Survey data were downloaded from the GPS units into a geographic information system (GIS) database. Following the last survey, the data in the GIS database were updated and refined with the information contained in each surveyor's field notes.

Each weed species population located within the Action Area was categorized into one of four density classes. Density categorization was based on qualitatively derived ocular cover estimates of the population. The density categories assigned are presented in Table 1.

**TABLE 1**
**EXOTIC SPECIES DENSITY CATEGORIES**

| Category | Description | Density |
|---|---|---|
| T | Trace | Individual(s), less than 1% cover |
| Class 1 | Low | 1–25% cover |
| Class 2 | Medium | 26–50% cover |
| Class 3 | Dense | 51–100% cover |

## 3.2 Results

A list of weed species identified and observed during the preconstruction survey is presented in Table 2. A map of observed targeted noxious weeds and Cal-IPC High or Moderate species is included in Appendix B. This list and the maps will be updated at the conclusion of 2010 surveys and included in the 2010 report.

The Action Area passes through different landscape forms, soil types, and elevation/moisture gradients. Weed densities varied by species and habitat, although in general, in drier, transmontane areas, weeds were concentrated in drainages and within the shade and drip line of larger shrubs; while in relatively more mesic, cismontane areas, they tended to be widely distributed across the landscape. Observed acreages of targeted weed species within the ROW and within proposed impact areas (the remainder of the Action Area) can be seen in Table 3. This table will be updated to included 2010 data following completion of the 2010 survey period.

A description of the species targeted for control and control methods are presented in Section 6.2, Specific Weed Control Plans.

**TABLE 2**
**INVASIVE EXOTIC SPECIES OBSERVED IN THE ALIGNMENT ROW DURING 2009 SURVEYS***

| Species | Common Name | Cal-IPC Rating | San Diego County Targeted Noxious Weed | Wildfire Promoter |
|---|---|---|---|---|
| *Avena* spp. | wild oat | Moderate | No | No |
| *Brassica nigra* | black mustard | Moderate | No | No |
| *Brassica tournefortii* | Saharan mustard | High | No | Yes |
| *Bromus diandrus* | ripgut brome | Moderate | No | No |
| *Bromus madritensis* ssp. *rubens* | foxtail chess | High | No | No |
| *Bromus tectorum* | cheatgrass | High | No | Yes |
| *Carduus pycnocephalus* | Italian thistle | Moderate | No | No |
| *Centaurea melitensis* | tocalote | Moderate | No | No |
| *Centaurea solstitialis* | yellow starthistle | High | Yes | No |
| *Cynara cardunculus* | artichoke thistle | Moderate | No | No |
| *Cirsium vulgare* | bull thistle | Moderate | No | No |
| *Cortaderia selloana* | dwarf pampas grass | High | No | No |
| *Dittrichia graveolens* | stinkwort | Moderate | No | No |
| *Foeniculum vulgare* | sweet fennel | High | No | No |
| *Hirschfeldia incana* | short-pod mustard | Moderate | No | No |
| *Hordeum murinum* | foxtail barley | Moderate | No | No |
| *Pennisetum setaceum* | fountain grass | Moderate | No | No |
| *Sisymbrium irio* | London rocket | Moderate | No | No |
| *Tamarix ramosissima* | saltcedar | High | No | No |
| *Vulpia myuros* | foxtail fescue | Moderate | No | No |

* A complete list of significant invasive species observed in the 2010 survey season will be updated in the 2010 Weed Control Plan.

**TABLE 3**
**PRESENCE OF COUNTY TARGETED WEEDS, WILDFIRE PROMOTERS, AND CAL-IPC HIGH AND MODERATE SPECIES IN ALIGNMENT RIGHT-OF-WAY AND IMPACT AREAS IN 2009***

| Species | Density | Presence in ROW (acres) | Presence in Impact Areas (acres) |
|---|---|---|---|
| San Diego County Noxious Weeds** | | | |
| Yellow starthistle (*Centaurea solstitialis)* | Low | **0.2** | **0.2** |
| Wildfire Promoters** | | | |
| Saharan mustard (*Brassica tournefortii)* | Trace | 885.1 | 163.3 |
| | Low | 108.2 | 12.2 |
| | Medium | 18.9 | 1.9 |
| | **Total** | **1,012.2** | **117.1** |
| Cheatgrass (*Bromus tectorum)* | Trace | 25.4 | 4.0 |
| | Low | 504.1 | 136.1 |
| | Medium | 45.2 | 26.0 |
| | Dense | 25.4 | 4.0 |
| | **Total** | **600.1** | **170.1** |

**TABLE 3**
**PRESENCE OF COUNTY TARGETED WEEDS, WILDFIRE PROMOTERS, AND CAL-IPC HIGH AND MODERATE SPECIES IN ALIGNMENT RIGHT-OF-WAY AND IMPACT AREAS IN 2009* (CONT.)**

| Species | Density | Presence in ROW (acres) | Presence in Impact Areas (acres) |
|---|---|---|---|
| Cal-IPC High | | | |
| Foxtail chess (*Bromus madritensis* ssp. *rubens)* | Trace | 284.8 | 45.0 |
| | Low | 1,873.6 | 319.4 |
| | Medium | 142.1 | 10.6 |
| | Dense | 109.8 | 96.0 |
| | **Total** | **2,410.3** | **471.0** |
| Dwarf Pampas grass (*Cortaderia selloana)* | Trace | 0.1 | 0.1 |
| | Low | 2.3 | 2.3 |
| | **Total** | **2.4** | **2.4** |
| Sweet fennel (*Foeniculum vulgare)* | Trace | 0.1 | 0.1 |
| | Low | 0.3 | 0.2 |
| | **Total** | **0.4** | **0.3** |
| Saltcedar (*Tamarix ramosissima)* | Trace | 94.0 | 94.0 |
| | Low | 0.7 | 0.1 |
| | Medium | 0.3 | 0.0 |
| | **Total** | **95.0** | **94.1** |
| Cal-IPC Moderate | | | |
| Wild oat (*Avena* spp.*)* | Trace | 132.2 | 20.8 |
| | Low | 278.1 | 94.0 |
| | Medium | 330.3 | 93.5 |
| | Dense | 16.9 | 1.0 |
| | **Total** | **757.5** | **209.3** |
| Black mustard (*Brassica nigra)* | Trace | 7.7 | 0.6 |
| | Low | 215.2 | 24.9 |
| | Dense | 2.1 | 0.0 |
| | **Total** | **225.0** | **25.5** |
| Ripgut brome (*Bromus diandrus)* | Trace | 0.8 | 0.1 |
| | Low | 317.4 | 83.5 |
| | Medium | 5.9 | 0.2 |
| | Dense | 66.3 | 22.7 |
| | **Total** | **390.4** | **106.5** |
| Tocalote (*Centaurea melitensis)* | Trace | 0.9 | 0.2 |
| | Low | 488.5 | 119.0 |
| | Medium | 14.5 | 2.9 |
| | Dense | 0.01 | 0.0 |
| | **Total** | **503.9** | **122.1** |
| Bull thistle (*Cirsium vulgare)* | Low | **95.6** | **0.0** |
| Artichoke thistle (*Cynara cardunculus)* | Med | **0.03** | **0.0** |
| Stinkwort (*Dittrichia graveolens)* | Low | **0.04** | **0.04** |
| Short-pod mustard (*Hirschfeldia incana)* | Trace | 185.0 | 28.6 |
| | Low | 271.6 | 74.6 |
| | Medium | 181.8 | 138.4 |
| | Dense | 16.7 | 4.4 |
| | **Total** | **655.1** | **246.0** |
| Foxtail barley (*Hordeum murinum)* | Trace | 19.6 | 2.7 |
| | Low | 23.3 | 3.8 |
| | **Total** | **42.9** | **6.5** |

**TABLE 3**
**PRESENCE OF COUNTY TARGETED WEEDS, WILDFIRE PROMOTERS, AND CAL-IPC HIGH AND MODERATE SPECIES IN ALIGNMENT RIGHT-OF-WAY AND IMPACT AREAS IN 2009* (CONT.)**

| Species | Density | Presence in ROW (acres) | Presence in Impact Areas (acres) |
|---|---|---|---|
| Cal-IPC Moderate (cont.) | | | |
| Fountain grass (*Pennisetum setaceum)* | Trace | 298.1 | 37.2 |
| | Low | 3.6 | 2.2 |
| | Medium | 1.0 | 0.4 |
| | Dense | 0.4 | 0.1 |
| | **Total** | **303.1** | **39.9** |
| London rocket (*Sisymbrium irio)* | Low | 37.9 | 5.04 |
| | Medium | 0.9 | 0.0 |
| | **Total** | **38.8** | **5.04** |
| Foxtail fescue *(Vulpia myuros)* | Low | 17.7 | 4.1 |
| | Medium | 96.2 | 63.7 |
| | Dense | 69.7 | 5.9 |
| | **Total** | **183.6** | **73.7** |

* Acreage totals of invasive weeds presented above reflect the 2009 action area and survey season. Acreage totals for significant invasive weeds observed in the 2010 action area and survey season will be updated and presented in the 2010 Weed Control Plan.
** Species within this category will be treated wherever they occur within the ROW of the Project alignment.

# 4.0 Weed Control

Weed control and prevention procedures are required prior to initiation of construction and during active construction. These requirements are outlined below.

## 4.1 Preconstruction Weed Abatement

Seven Cal-IPC species with a High rating and thirteen Cal-IPC species with a Moderate rating were observed within and immediately adjacent to the Action Area. Of these twenty species, one County of San Diego “target noxious” species and two wildfire-promoting species were observed (see Table 2). San Diego County “target noxious” species and designated wildfire-promoting species will be controlled throughout the ROW and associated laydown areas. All other species will be treated and controlled within the Action Area, including staging areas and vehicle access routes. All species must be treated prior to construction or when treatments would be most effective based on the species phenology.

The impact areas within the Action Area refers to tower pads and their associated work areas, pull sites, helipads, construction yards, wash stations, improved existing and new dirt access roads, and all other areas that will be disturbed during the construction

process. All of these features will undergo preconstruction weed abatement, and weeds will be treated during and after construction at all of these impact areas, including improved existing dirt and new dirt access roads.

Weed control treatments shall include all legally permitted chemical, manual, and mechanical methods applied in compliance with the San Diego County Agriculture Commissioner and the ROW easement land-holding agencies' requirements, where appropriate. The application of herbicides shall be in compliance with all state and federal laws and regulations under the prescription of a PCA and implemented by a QAL. Where manual and/or mechanical methods are used, disposal of the plant debris will follow the regulations set by the San Diego County Agriculture Commissioner. The timing of the weed control treatment shall be determined for each plant species in consultation with a PCA, the San Diego County Agriculture Commissioner, and Cal-IPC, as appropriate, with the goal of controlling populations before they start producing seeds.

PCA consultation shall commence prior to any weed control activities. The PCA shall make written recommendations or a prescription that details pest control activities within the project footprint. No deviation from plan shall occur without prior written approval. It is the PCA's responsibility to address guidelines administered by regulatory agencies in the written recommendation.

In accordance with the EIR/EIS, weed control measures will incorporate all legally permitted chemical, manual, and mechanical methods applied with the authorization of the San Diego County Agriculture Commissioner and the ROW easement land-holding agencies where appropriate. The primary suggested means of control of these target species during preconstruction is through the application of herbicides. Herbicides kill or inhibit plant growth and can be very effective in controlling many weed species. Different weed species may require alternate herbicides, application rates, and time of application for effective treatment.

Using herbicides to control weeds requires careful planning and a professional staff familiar with the application areas and herbicides they are using. The use of herbicides should be under the direction of a professional pesticide applicator. Prior to application, the applicators should be aware of all safety regulations and applicable environmental regulations and familiar with target versus native plants. The WCM is responsible for meeting these requirements and approving any trained staff or certified pesticide applicators that will handle herbicides.

The method of application varies greatly from one species to the next and also with the degree of infestation. The application method ultimately chosen should minimize risks of harming non-target plants. The herbicide used should be appropriate for the given species and environmental condition. The environmental risks of using herbicides

include drift, volatilization, persistence in the environment, and groundwater contamination.

Species descriptions and management measures are included in Section 6.2, Specific Weed Control Plans.

## 4.2 Construction Measures

As part of the environmental training program, field crews will be trained to recognize the importance of invasive plant species control and informed of the measures designed to control the spread of invasive species. Deliberate introduction of invasive plants or animals into any project site is prohibited. Heavy equipment will be inspected for invasive plant seeds or other plant material prior to entering an access road or a project site. Any plant seed or other plant material discovered on heavy equipment will be manually removed. All seeds and straw materials used during operation and maintenance (O&M) activities will be weed free, as will all gravel and fill material.

During project construction, vehicles and all equipment, and tools such as chainsaws, hand clippers, pruners, etc., will be washed (including wheels, undercarriages, and bumpers) at an off-site washing facility (e.g., a car wash or temporary truck wash station) immediately before the project construction begins. Off-site washing facilities will be used throughout the project, where feasible, to re-wash vehicles, equipment, and tools prior to returning to the project site. All off-site washing will take place where rinse water can be collected and disposed of in either a sanitary sewer or landfill; an effort will be made to use wash facilities that use recycled water.

While the use of off-site car wash facilities is acceptable, the use of these will be limited for a number of portions of the construction area; therefore SDG&E will establish temporary wash stations at strategic locations throughout the Action Area. The locations and detail specifications for establishment of these temporary wash stations are included as Appendix C. Prior to project construction, all vehicle and equipment wash station sites will be surveyed for invasive weed and rare plant species. In addition, a habitat assessment will be conducted for threatened and endangered species. All wash station sites will be monitored during their installation.

Each temporary wash station will be constructed within a project-approved area that seeks to avoid impacts to undisturbed native areas. The proposed temporary wash stations were located in previously disturbed sites rather than in areas that would impact intact vegetation. Many of these disturbed sites are currently vegetated with weed species that have been mapped and will be treated as outlined in this weed control plan. A rational for selection and description of the wash stations is provided in Table 1 of Appendix C. These wash stations were also specifically located so as to eliminate the spread of weeds along the alignment and all construction vehicles and equipment will be

washed prior to construction. Appendix C calls for a total of 12 wash stations, eight of which are located within construction yards (Wash Stations #1, 2, 3, 6, 8, 9, 10, and 12). There are a total of 19 construction yards, three of which are or will soon be developed (IV Substation, Alpine HQ, and Alpine Construction Materials Yard). With the exception of the one wash station proposed for the Alpine Construction Materials Yard, the wash stations were located in those yards showing the highest density of weeds (e.g., Wash Station #8 [dense weeds], #1, #6, and #12 [medium dense weeds]) to prevent the spread of weeds from the yard or were located in yards to address nearby specific areas of dense weeds along the alignment or at structures (e.g., Wash Stations #3 and #6). The remaining four wash stations were located either in the right-of-way (Wash Stations #5, 7, and 11) or on private property (Wash Station #4). These wash stations were positioned to address nearby specific areas of dense weeds along the alignment, along roads to structures, or at structures (e.g., Wash Stations #5, #7, and #11).

A daily log will be kept for all vehicle/equipment/tool off-site and on-site washing that states the date, time, location, type of equipment washed, methods used, and staff present. The log will include the signature of a responsible staff member. Logs will be available to the CPUC, BLM, USFS (for Project sections within National Forest lands), Wildlife Agencies, and biological monitor for inspection at any time and will be submitted to the CPUC on a monthly basis during construction.

A minimal amount of weeds can be expected to be dispersed by helicopter propeller wash since helicopters will be landing and taking off from established tower staging access pads (TSAPs) along the alignment, from established construction yards, or from the tarmac at airfields. Weeds will be abated at both the TSAPs and construction yards prior to use as outlined in this plan for all sites within the Action Area. The TSAPs will consist of a 10-foot-diameter area of bare dirt situated in the middle of a 100-foot-diameter circle of vegetation trimmed to six inches, and vegetation within construction yards will be mowed and weeds treated prior to use and any landing spots for helicopters will be kept free of vegetation for safety purposes.

# 5.0 Long-term Monitoring

The entire ROW and areas immediately adjacent to the ROW (where access permission can be secured) as well as at ancillary facilities (including wash stations outside the ROW) will be surveyed for San Diego County Noxious weeds and Wildfire Promoters annually to monitor previously identified and treated populations and to identify new invasive weed populations. For Cal-IPC High or Moderate species, the surveys need only be conducted in the direct impact areas of the ESSR (including wash stations), but shall also occur during construction and annually for the life of the Project.

Based on the species observed during preconstruction surveys and the species with potential to infest the site in the future, surveys should generally be conducted in mid-

spring of each year to capture all potentially invasive species. The exact timing will be determined by the WCM based on rainfall and other environmental conditions. If evidence of late or early season weed species is noted, timing of annual surveys may be shifted to account for these species.

Surveys should focus on (1) areas where target invasive species have previously been mapped (see Appendix B); (2) areas where target species have previously been treated; (3) areas that are being actively disturbed by maintenance activities; (4) all tower and facility sites; and (5) general surveys of the alignment ROW. Prior to each survey, the target species list should be reevaluated to include new species that may be introduced to the area over time and weed species that may be classified into elevated Cal-IPC categories (such as Limited to Moderate).

Surveys should focus on the target species; however, all potentially invasive exotic species present within or adjacent to the Action Area should be noted. It is anticipated that those species listed in Table 2 will be of greatest concern. All surveys must be conducted by biologists knowledgeable of invasive exotic species to identify infestations of existing or new invasive species.

Survey areas will be traversed on foot, with teams of biologists walking meandering transects along the centerline of the alignment ROW and ancillary facilities. Biologists will survey in such a manner as to ensure visual coverage of 100 percent of the distance between individual biologists. Surveyors will record the location of all target invasive plant species when encountered using handheld GPS units and field maps. Each exotic species population located within the Action Area should be categorized into one of the four density classes (based on qualitatively derived ocular cover estimates of the population) listed in Table 1.

# 6.0 Long-term Adaptive Weed Control Measures

Long-term maintenance measures are described to keep the entire ROW and areas immediately adjacent to the ROW (where access permission can be secured) as well as at ancillary facilities free of species that were removed during preconstruction weed removal efforts and to prevent or control species that are not yet established but could potentially infest the site in the future. These long-term weed control measures are intended to be adaptive, to address new threats as they occur, and to prevent future infestations. Weed treatment and control shall occur on a minimum annual basis unless otherwise approved by the Pest Control Advisor, San Diego County Agricultural Commissioner, and Cal-IPC.

The Action Area of the Sunrise Powerlink is part of a larger ecosystem that includes neighboring undeveloped lands. Many weedy species are dispersed by wind, water, or transport by animals (including humans). For this reason, any adjacent areas occupied by invasive weeds may pose a threat to the Action Area. Long-term surveys for invasive plant species should include reconnaissance surveys on neighboring lands, with landowners' approval, for invasive species and potential sources of weed seed production. If populations of invasive species are discovered in parcels immediately adjacent to the Action Area and these species have the potential to disperse viable seed into these areas, then the Project proponent should work with the respective landowner to eradicate or manage the off-site problem.

The strategy for the control plan is to be adaptive. This strategy can be broken down into several steps:

- Identify the weeds present on the site that the Project proponent is required to control.
- Select the appropriate weed control options.
- Monitor and assess impacts from operation and maintenance activities required for Sunrise Powerlink on invasive species. Work with the Project proponent to address actions that may be detrimental to weed control where practical without interfering with required activities.
- Evaluate the effectiveness of control methods applied each year and use this information to refine control priorities, methods, and goals. These data can provide useful information for improved management practices and, in turn, may increase the overall quality of habitat within the Action Area.

## 6.1 Management Tools

The species, location, and extent of invasive species infestation will largely determine the management tools used to control populations. Consideration will also be given to the difficulty of controlling a particular invasive species. Control efforts will follow an Integrated Pest Management (IPM) approach. This approach balances cost, overall effectiveness, and environmental risk in selecting the best treatment(s) to use for any given target at any location in the Action Area.

All options of control will be considered by the WCM before action is taken. These methods may include removal by hand or machine, passive management in appropriate areas (allowing native species to become established and outcompete invasive species), and/or application of herbicides. Each of these management tools has advantages and disadvantages, and often the best approach is a combination of methods (Hoshovsky

and Randall 2000). In addition, optimum timing of invasive species management strategies can vary by the type of plant in question. For example, for many perennial species, timing of control may not be as critical as for annual species. Annual invasive species are best controlled before they set seed in order to limit costly repeat efforts.

During the lifetime of the required long-term weed control, several strategies may be implemented.

### 6.1.1 Prevention

The most effective, efficient, and low-cost invasive species control strategies prevent weed invasions from ever occurring and quickly detect invasions that do occur so that invasive species can be eradicated or contained before they spread (Hoshovsky and Randall 2000). This requires not only knowing where existing infestations occur through regular survey and mapping events, but also incorporating meaningful best management practices (BMPs) into construction activities that are aimed at containment of infestations. Management tools to prevent the establishment of weeds within a given area include annual monitoring (as outlined in Section 5.0), eradicating weeds immediately upon detection, removing seed sources from neighboring areas, and revegetating areas as soon as disturbances occur. If it is not feasible to remove a particular weed species in its entirety, preventative measures may include cutting seed heads off plants and raking and removing seeds as they fall to the ground. Many non-native invasives can be reduced with the successful establishment of native species through restoration.

Specific BMP's used in each area will be coordinated between the contractor and Weed Control Manager. The following list presents examples of BMPs that would be incorporated into construction activities to prevent the spread of weeds:

- Avoid impacts to native vegetation.
- Avoid and minimize ground disturbance. Consider impacts of different types of equipment and when possible choose equipment that will result in the least disturbance to soil and vegetation.
- Determine whether weed control efforts should be conducted before, during, and/or after maintenance activities, and incorporate into the project schedule.
- When permission has been granted by, and in coordination with, neighboring landowners (such as the City of San Diego), remove adjacent sources of invasive exotic weeds.
- Use physical boundaries to exclude infested areas from maintenance activities.

- Wash vehicles, machinery, and tools in a manner that limits the potential spread of invasive species. The wash stations have been strategically located along the alignment to ensure that vehicles and equipment moving from areas with high weed densities are cleaned before entering areas with low weed densities.

- Clean vehicles and require any contractors to clean their vehicles to prevent transport of soil and plant material before entering or leaving any construction site or site of weed infestation (see Appendix C).

- Remove seeds from clothing, footwear, vehicles, and equipment before entering non-infested areas.

- Cover material, including soil or fill, securely during transport.

- Stabilize disturbed soils as soon as possible with native seed and certified weed-free erosion control materials.

- Use only barren fill and gravel.

A worker education program is recommended to inform construction and maintenance workers how to implement the BMPs.

### 6.1.2 Manual Removal

Physical control often involves hand dethatching, pulling, cutting, or removal by mechanical means. These methods are labor intensive and may be used for smaller populations of weed infestations or around sensitive habitats. Physical methods of weed control may provide an advantage in these situations where desirable species may be left in place while surrounding weeds may be removed. Dethatching is a useful tool that removes the dead or dying plant material from the soil surface. Dethatching also removes weed seed that may still be attached to the plant and will also increase the effectiveness of subsequent herbicide applications.

When weed material is transported away from the removal area, care must be taken to confine the material and ensure that seeds or vegetative material do not escape and infest new areas. Whenever possible and for all small infestations, seed and vegetative material will be secured in appropriate bags and double bagged. For large weed removal efforts, all material will be placed in a refuse bin (dumpster). The vegetative material placed in the bin will not exceed the top, and the bin will be appropriately covered so that plant material cannot be blown out of the bin during transport to a landfill. All invasive weeds must be disposed of in a landfill located within the county from which they were removed (i.e. all weeds removed from lands within San Diego County will be disposed of in landfills located in San Diego County, and weeds removed from areas in Imperial County must be disposed of in Imperial County). Weeds from

sites in San Diego County will be disposed of at the Sycamore and/or Otay Landfills, and weeds from Imperial County will be disposed of at Imperial County Landfill Company and/or Mesquite Regional Landfill.

### 6.1.3 Competition and Restoration

Competition and restoration involves the propagation and planting of native species so they may outcompete weeds. By increasing the density and distribution of native trees, shrubs, and herbs, there is less space available for weed species to occupy. Planting or seeding will often involve a maintenance period where watering and weeding will be necessary until the plants have become established. This method of weed management should be implemented in conjunction with another form of weed control, such as dethatching or herbicide use.

### 6.1.4 Chemical Control

A *Final Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States Programmatic Environmental Impact Statement* (PEIS) was released to the public on June 29, 2007. The Record of Decision (ROD) for the PEIS includes standard operating procedures (SOPs) for applying herbicides (summarized in Appendix B, Table B-2, pages B-9 to B-14 of the ROD) and mitigation measures (summarized in Table 2, pages 2-4 to 2-6 of the ROD) that were adopted to ensure that all practicable means to avoid or minimize environmental harm are implemented in these vegetation treatment projects. The Human Health Risk Assessment (PEIS, Appendix B) and Ecological Risk Assessment (PEIS, Appendix C) include an analysis of impacts to resources and human health. This Weed Management Plan tiers to the human health and ecological risk assessments, the resource analyses related to the SOPs, and resource analyses related to the mitigation measures in the PEIS.

Only adjuvants and herbicides approved by BLM in California will be used on BLM lands (Appendix D and E, respectively). Herbicide application can only occur on BLM lands with an approved Pesticide Use Proposal. The chemical means of controlling weeds is the application of herbicides. Herbicides kill or inhibit plant growth and can be very effective in controlling many weed species. Different weed species may require alternate herbicides, application rates, and time of application.

Using herbicides to control weeds requires careful planning and a professional staff familiar with the application areas and herbicides they are using. The use of herbicides should be under the direction of a professional pesticide applicator with either a Qualified Applicator License (in Category E—Weed Control) or a Pesticide Control Advisor License in the State of California. Before applying any herbicides, the applicators should be aware of all safety regulations and applicable environmental regulations and be familiar with target versus native plants. The WCM is responsible for meeting these

requirements and approving any trained staff or certified pesticide applicators that will handle herbicides.

The method of application varies greatly from one species to the next and also with the degree of infestation, time of year, and environmental conditions. The application method ultimately chosen should minimize risks of harming non-target plants. The environmental risks of using herbicides include drift, volatilization, persistence in the environment, groundwater contamination, and harmful effects on animals.

Herbicide application should always include marker dyes to make the herbicide visible. Higher visibility is desirable, because it

- allows personnel to more effectively protect themselves against contamination;
- prevents unintended multiple application to a particular area or plant;
- ensures complete coverage of target area and plants;
- informs personnel of overspray and wind-drift issues, which protects non-target plants.

## 6.2 Specific Weed Control Plans

Appendix A identifies exotic species with the potential to occur within the Action Area. The WCM will be responsible for updating this plan with appropriate treatment measures if any additional species from this list are observed within the Action Area during annual/biannual weed surveys.

As indicated in Section 3.2 and Table 2*,* the following species were identified within the Action Area. Preconstruction removal efforts will be required as outlined in Section 4.1. Long-term monitoring for invasive species should occur on the entire ROW and, if found, removal efforts will be required as described below.

### 6.2.1 San Diego County Noxious Weeds

#### 6.2.1.1 Yellow Starthistle (*Centaurea solstitialis*)

**Other Weed Designation(s):** Cal-IPC High

**Description:** Yellow starthistle is an exotic, deep-rooted winter annual native to southern Europe. Similar to *C. melitensis,* though phyllary spines are longer and more pronounced (DiTomaso and Healy 2007). Flowering generally occurs in June through September. Individuals reproduce only by seed. Seed germination is triggered by fall

rains and plants will remain as rosettes until they bolt in late spring (DiTomaso and Gerlach 2000).

As yellow starthistle has a relatively heavy seed, it cannot be dispersed long distances by aeoliar transport (Roche 1992). Instead, the primary mechanism for long-distance dispersal in this plant is anthropogenic. It is frequently transported between sites on road maintenance equipment and on the undercarriage of vehicles (DiTomaso and Gerlach 2000) Yellow starthistle can be found, in general, on moderately warm grasslands, rangeland, pastures, and recreational areas (DiTomaso et al. 1999).

**Current Distribution in the Action Area:** Yellow starthistle was observed in the floodplain of Wilson Creek west of Barrett Lake within non-native grasslands adjacent and throughout open coast live oak woodland (see Appendix B, MP 81). This species was observed on City of San Diego-owned land at Eichenlaub Ranch, where construction areas and a Temporary Wash Station will be placed.

**Control Options:**

This species is currently being controlled by the City of San Diego on and/or adjacent to the Action Area. All control efforts on or adjacent to City of San Diego lands will be coordinated between SDG&E and the City. All efforts to control this species on USFS lands will be coordinated between SDG&E and USFS to determine appropriate control techniques and locations.

***Physical Control.*** Small infestations can be pulled or hand-dug after plants have bolted (individuals will reprout from rosettes). Care must be taken to bag seed heads and monitor site for rosette resprouts (Holloran et al. 2004).

Repeated cultivation of invested areas has been shown to control yellow starthistle, though it can expose soil to rapid recolonization if subsequent rainfall occurs (DiTomaso et al. 1998). Repeated mowing has been shown to be effective if conducted when two to five percent of the plant is flowering. Mowing too early in the plants phenology has been shown to stimulate flower production, while mowing too late would not control viable seed production (Benefield et al. 1999).

***Chemical Control.*** Broadleaf selective herbicides, such as clopyralid, have been effective in controlling yellow starthistle without harming adjacent native grass populations. Glyphosate (one percent solution) is the preferred method to treat yellow starthistle after plants have bolted, though it is also an effective control at the rosette stage if damage to surrounding plants is not an issue (DiTomaso et al. 1998).

**Treatment Extent:** Yellow starthistle will be treated and controlled at all locations within the project alignment ROW.

**Treatment Schedule:** Winter–early spring: Herbicide applications. Late spring–summer: Hand-pull bolting individuals.

## 6.2.2 Wildfire Promoters

### 6.2.2.1 Saharan Mustard (*Brassica tournefortii*)

**Other Weed Designation(s):** Cal-IPC High

**Description:** Saharan mustard is a Mediterranean species native to North Africa, the Middle East, and southern Europe. Currently, this plant is found throughout the low-elevation deserts of the southwest—southern Nevada, southern California, Arizona, New Mexico, and west Texas. It prefers sandy or gravelly soil, although it is also able to grow on alluvial fans and rocky hillsides. Unlike many invasives, this plant does not require disturbed soil to become established.


This plant is a robust, fast-growing winter annual with a basal rosette of leaves with stinging hairs. The basal rosette of leaves grows up to 3 feet in diameter in favorable environments (University of Nevada Cooperative Extension [UNCE] 2002). The erect stem can be 4–40 inches in height, and it branches extensively, forming a “tumbleweed” once the plant dries up and the stem breaks. The leaves smell like cabbage when they are crushed.

Plants flower early, as early as December or January, immediately following the first winter rains and may set seed as early as February. The flowers are small and dull yellow, making them inconspicuous compared to most other true mustards (Sanders and Minnich 2000). Fruits are long pods that contain between 750 and 9,000 tiny seeds each.

Saharan mustard forms dense stands that crowd out native wildflowers. It has a competitive edge with its early phenology, which allows it to usurp soil moisture from native species which develop later (Sanders and Minnich 2000). It appears that this plant may carry fire, especially when there are other low-growing invasive species (such as Mediterranean grass) present underneath.

**Current Distribution in the Action Area:** Saharan mustard was observed in from trace to medium densities throughout the Sonoran desert and desert transition areas of the

Action Area (Sections 10A, 10B, and the eastern portions of Section 9C; see Appendix B). Saharan mustard was found in low densities within the sparse, flat Sonoran mixed woody and succulent scrub at the top of the Mountain Springs Grade near the town of In-Ko-Pah (MP 30, elevation: 3,150 ft). Densities of Saharan mustard decreased significantly as the alignment ROW passed over the boulder-filled foothills and canyons to the east. Saharan mustard was observed in trace amounts on boulder slopes from In-Ko-Pah to Mountain Springs, outside of washes, from MP 27.6 to MP 29.3. Most washes within the Action Area, especially larger drainages such as Myers Creek, supported low densities of Saharan mustard. The Mountain Springs Grade levels out briefly near Mountain Springs Road (MP 26.5 to MP 27.6, elevation 2,000 ft.). This area contains increased areas of disturbance and weed densities due to small residential development, off-road use, and an undesignated recreational shooting area. Saharan mustard was found in medium densities along roads and adjacent to a recreational shooting area near Mountain Springs (MP 26.7). Saharan mustard was also observed in low densities on hills and slopes near Mountain Springs Road. The boulder-filled slopes from MP 26.7 to 23.2 contained trace amounts of Saharan mustard, with the majority of observations occurring within sandy drainages and swales between rocky slopes. The hill slopes of igneous cobble (MP 22.8 to MP 23.3) did not contain Saharan mustard or any other Cal-IPC invasive weed species. Saharan mustard was also observed in trace amounts throughout the Sonoran desert (MP 0 to 3.5, MP 10.7 to MP 22.8).

**Control Options:**

All efforts to control this species on USFS lands will be coordinated between SDG&E and USFS to determine appropriate control techniques and locations.

***Prevention.*** Control of Saharan mustard along roadsides will help to prevent its spread to other areas. Do not drive vehicles, move animals, or walk through infested areas once this plant has gone to seed, especially following a rain event, as the mucilaginous coating on the seeds allow them to stick onto objects and travel to new places. Repeated treatments and monitoring on small areas are preferable to diffuse treatments over wide areas which may inadvertently increase the density of this plant (Trader et al. 2006).

***Physical Control.*** If an infestation is small, it is possible to remove the plants by digging them out of the ground or hand-hoeing. This is especially effective if the invasion is new and there is not a seed bank existing in the soil. It is important to do this prior to seed set and also to bag and remove the plants from the site. A site should be revisited weekly in order to catch later-germinating plants, especially if there have been multiple rainfall events. Weed whipping is not recommended as the plants will simply regrow (UNCE 2002).

***Chemical Control.*** Saharan mustard is often the first winter annual to germinate in an area, making effective herbicide treatment possible while minimizing impacts to non-target species. Triclopyr has been effective at killing young rosette/early flowering plants at Lake Mead National Recreation Area (UNCE 2002). According to the National Park Service (NPS), Saharan mustard can also be controlled with 2, 4-D or dicamba, or glyphosate (Mau–Crimmins et al. 2005). Application of postemergent herbicides should be done prior to development of seed pods and prior to the germination of desirable native species if possible.

**Treatment Extent:** Saharan mustard will be treated and controlled at all locations within the Project alignment ROW.

**Treatment Schedule:** Late winter to very early spring: Apply treatments. All cut vegetative material should be bagged, carried off-site, and disposed of in a responsible and legal manner to prevent the spread of weeds. Care should also be taken during transport of the materials to ensure they are secure (and do not, for example, fly out of the back of a truck).

### 6.2.2.2 Cheatgrass (*Bromus tectorum*)

**Other Weed Designation(s):** Cal-IPC High

**Description:** Cheatgrass is a short annual grass native to southern Europe, northern Africa, and southwestern Asia. Its spread around the world is associated with livestock and it came to northeastern California by late in the nineteenth century (Young 2000).

It typically flowers from May to June. Seedlings are bright green with conspicuously hairy leaves. The nodding open panicles with moderately awned seeds are distinctive (Cal-IPC 2009). The seedlings are bright green with hairy leaves, and the mature plant may become reddish.

Cheatgrass's impacts on vegetation communities are well documented; it is capable of outcompeting seedlings of native species for soil moisture (Young 2000). Cheatgrass encourages fires and alters fire regimes, culminating in the conversion of native plant communities to non-native annual grassland (Young 2000).

**Current Distribution in the Action Area:** Cheatgrass was generally observed at dry, higher elevation within the desert transition portions of the alignment ROW (see Appendix B). Cheatgrass was frequently observed in low to dense densities in McCain Valley (Section 9B, MP 39 TO MP 51).

**Control Options:**

All efforts to control this species on USFS lands will be coordinated between SDG&E and USFS to determine appropriate control techniques and locations.

***Physical Control.*** Hand-pulling small populations of cheatgrass prior to seed production is an effective physical control measure. Mowing can be effective in reducing populations if performed within one week of flowering (Young 2000).

***Chemical Control.*** Apply glyphosate when most plants have reached the late bud to flower stage of growth. The U.S. Army Corps of Engineers (USACE 2006) lists glyphosate and imazapyr as herbicides that have been used to treat cheatgrass.

**Treatment Extent:** Cheatgrass will be treated and controlled at all locations within the project alignment ROW.

**Treatment Schedule:** Early spring: Locate all populations within and adjacent to the ROW. Spring: Treat all individuals. All cut vegetative material should be bagged, carried off-site, and disposed of in a responsible and legal manner to prevent the spread of weeds. Care should also be taken during transport of the materials to ensure they are secure (and do not, for example, fly out of the back of a truck).

## 6.2.3 Cal-IPC High

### 6.2.3.1 Foxtail Chess (*Bromus madritensis* ssp. *rubens*)

**Other Weed Designation(s):** None.


Carianne Funicelli

**Description:** Foxtail chess is native to southern Europe, northern Africa, and southwestern Asia; it is thought to have become established in California in the mid 1800s (Brooks 2000).

Foxtail chess is an annual grass that germinates with winter precipitation and reproduces only by seed. Its distinctive brushlike inflorescences are reddish purple at maturity. Plants growing in particularly dry conditions may be less robust and have a more open and rigid panicle. Seedlings are very similar to cheatgrass, being bright green and hairy (Brooks 2000).

Foxtail chess is implicated in a variety of detrimental ecological impacts, including competition with native species for moisture, nutrients, and light; conversion of native

plant communities to non-native grasslands; promotion of wildfires and alteration of fire regimes; and injury to native and domestic animals (Brooks 2000).

This species emerges in early winter following rainfall but remains inactive until spring when rainfall combined with higher temperatures stimulate growth (University of California Davis 2007). Directed surveys for this species should be conducted during the typical flowering period (March through May). This species may be obscured in non-native grasslands by wild oat.

It may be particularly important to survey areas burned following June or October fires. Some research has indicated that sage-covered uplands, particularly those susceptible to disturbance, can have a very large increase in foxtail chess invasion (Newman 1992).

**Current Distribution in the Action Area:** Foxtail chess was observed in various densities throughout the Action Area, excluding the Sonoran desert (see Appendix B). In drier locales, such as Jacumba (Section 9C), foxtail chess was found in trace to low amounts and tended to be clustered within the drip lines and shade of woody perennials. Most minimally disturbed chaparral areas within the alignment ROW contained trace to low densities of foxtail chess. In more mesic, disturbed locations, such as pastures and grazed floodplains (e.g., laydown area polygon south of MP 23), foxtail chess was found to be mixed with other non-native annual grass species in medium to dense densities.

**Control Options:**

***Physical Control.*** Manual removal of plants through pulling and hoeing can be effective, if done before seeds mature, but is usually feasible only with small infestations as it is labor intensive. In small infestations, covering the ground with mulch or black plastic (solarization) will reduce plant growth (Chambers and Hawkins 2002).

***Chemical Control.*** Herbicide should only be applied prior to seed set. Glyphosate is an effective herbicide for reducing populations of foxtail chess.

The NPS recommends the use of preemergent herbicides (with one or two applications before seed set as usually sufficient (Mau–Crimmins et al. 2005). Use of preemergent herbicide should be considered carefully, however, as the impacts to native vegetation can last for many years after treatment.

**Treatment Extent:** Foxtail chess will be treated and controlled within all impact areas associated with the Project alignment ROW.

**Treatment Schedule:** Early spring: Locate all populations within and adjacent to the ROW. Mid-winter to late spring: Treat all individuals. All cut vegetative material should be bagged, carried off-site, and disposed of in a responsible and legal manner to prevent

the spread of weeds. Care should also be taken during transport of the materials to ensure they are secure (and do not, for example, fly out of the back of a truck).

#### 6.2.3.2 Dwarf Pampas Grass (*Cortaderia selloana*)

**Other Weed Designation(s):** None.

**Description:** Dwarf Pampas grass is a large, showy grass, 6 to 13 feet tall, that was introduced from South America as an ornamental species; it has very attractive, large plumelike inflorescences. In its natural habitat (Argentina, Brazil, Uruguay), it grows in moist soil along river margins. In southern California, it has escaped cultivation and has spread along sandy, moist ditch banks in the coastal regions. Dwarf Pampas grass forms large clumps and grows rapidly.

Dwarf Pampas grass reproduces by seed but can also reproduce vegetatively. It competes with native vegetation and increases fire potential (DiTomaso 2000).

**Current Distribution in the Action Area:** A small population of dwarf Pampas grass was observed at the site of a former proposed construction yard (Stowe/Kirkham Yard) in Poway north of MP 116.5 (see Appendix B). Use of this area as a construction yard has been cancelled.

**Control Options:**

***Physical Control.*** Seedlings can be effectively pulled or hand-grubbed, but larger or more established plants require a Pulaski, mattock, or shovel. It is imperative to remove all plant parts, as detached parts may take root and establish (DiTomaso 2000).

***Chemical Control.*** Glyphosate at two percent solution with a nonionic or silicone-based surfactant is recommended. Effectiveness has been shown to be improved if plants are slightly wet (but not wet enough for the herbicide to run off) when the herbicide is applied. In addition, fall is the optimal time to spray, as the chemical is translocated faster as the plants enter dormancy (DiTomaso 2000).

An option for large, established clumps is to remove the top foliage (via cutting or burning) so that less chemical is required to treat the regrowth (as opposed to the amount needed to treat the full clump) (DiTomaso 2000).

**Treatment Extent:** Dwarf Pampas grass will be treated and controlled within all impact areas associated with the Project alignment ROW.

**Treatment Schedule:** Early spring: Locate all populations within and adjacent to the Action Area. Fall: Herbicide application.

### 6.2.3.3 Sweet Fennel (*Foeniculum vulgare*)

**Other Weed Designation(s):** None.

**Description:** Sweet fennel is native to Europe and the Mediterranean region, where it has been used for centuries as a spice and for medicinal purposes. Sweet fennel was presumably brought to North America for the same reasons and has escaped from cultivation.

Sweet fennel is a perennial herb 3 to 6 feet tall, with a strong anise odor. The stout stems are grayish green and have long vertical grooves; the flowers are yellow umbels (umbrellalike). The seeds can germinate at almost any time of the year, but plants generally do not flower until 18 months to two years. One plant can produce over 100,000 seeds in the first two years (Holloran et al. 2004).

Once a plant is established, flowering stems are produced from the perennial crown each spring. Sweet fennel has a stout taproot and will reproduce vegetatively from its root crown. Seeds are dispersed by water, humans, birds, and rodents.

**Current Distribution in the Action Area:** Sweet fennel was observed in two locations along the alignment ROW. A small population of sweet fennel was observed at the site of a former proposed construction yard (Stowe/Kirkham Yard) in Poway north of MP 116.5. Use of this area as a construction yard has been cancelled. Another population was observed adjacent to the alignment ROW near MP 110.8 (see Appendix B).

**Control Options:**

***Physical Control.*** Hand-pulling is only feasible when plants are in the seedling stage and the soil is soft and moist. Mature plants can be dug, but it is important to remove at least the upper portion of the root crown. Digging should only occur when the infestation is light, as disturbance will expose the seed bank to light and increase germination (Holloran et al. 2004).

Mowing can be effective in heavy infestations if conducted four times per year, beginning in March–April. This technique can be effective if implemented over the course of 4 consecutive years (Holloran et al. 2004).

***Chemical Control.*** Foliar spray of two percent glyphosate should be applied to seedlings prior to bolting. Repeat treatments are to be expected. Another option is to mow and then treat the resprouts with glyphosate (Holloran et al. 2004).

**Treatment Extent:** Sweet fennel will be treated and controlled within all impact areas associated with the Project alignment ROW.

**Treatment Schedule:** Early spring: Locate all population within and adjacent to the Action Area. Spring: Treat all individuals.

### 6.2.3.4 Saltcedar (*Tamarix ramosissima*)

**Other Weed Designation(s):** None.


**Description:** Saltcedar is a rhizomatous shrub that may occur as spotty to heavy infestations along drainages and shores of water bodies. The scale-like leaves have salt glands; flowers are small, white to deep pink and densely packed on racemes. The bark is reddish brown with smooth stems less than one inch in diameter. Saltcedar is native to Eurasia and Africa and was used in the 1800s as erosion control, windbreaks, and shade and as an ornamental. It spreads by seed and vegetative growth. Saltcedar is a prolific seeder, with as many as 50,000 seeds per plant per year, produced over a long period (April to October) (Horton et al. 1960). Seeds are easily dispersed by wind or as water moves through the watercourses that they occupy. The seeds remain viable only for a few weeks, but they germinate easily in saturated soil. Horton et al. (1960) noted that receding spring and summer flows are ideal for germination and seedling establishment. Saltcedar can also reproduce vegetatively, if stems are buried in damp soil, as in a flooding situation ("layering"). Saltcedar is drought-tolerant and withstands lowered water tables as well as flooding (Carpenter 1998).

Presence of saltcedar can have devastating effects on native habitats, and it has been a pervasive problem across the American Southwest for several decades. Some of the more profound effects include dramatic narrowing of stream channels; sediment trapping; lowering of water tables; increased soil salinity, fire frequency, altered plant community composition; and decreased native wildlife diversity. Native riparian species such as cottonwood and willow can be replaced by saltcedar, which can invade to the point of dominance (Carpenter 1998). Many researchers have pointed out, however, that the saltcedar's success has been due to changing hydrologic conditions that have become less hospitable to native riparian species—thus shifting the blame from saltcedar itself to human-altered ecosystem processes (Stromberg and Chew 2002). From this perspective, control of this species is both meaningless and futile, if it is not also accompanied by the restoration of underlying ecological processes that support native vegetation communities.

Like many other invasive species, saltcedar is easily spread and difficult to eradicate. Therefore, early detection and control are critical to the successful control of this species. Most critical, however, is the reestablishment of natural hydrologic regimes if possible.

**Current Distribution in the Action Area:** Several small populations of saltcedar were observed within and adjacent to the Project alignment ROW. A small population of saltcedar was observed at the site of a former proposed construction yard (Stowe/Kirkham Yard) in Poway north of MP 116.5. Use of this area as a construction yard has been cancelled. Saltcedar was also observed in trace amounts in a grazed laydown area polygon south of MP 73. In addition, saltcedar individuals were observed within disturbed, seasonally mesic pastures in McCain Valley (MP 41 and MP 42). Along the desert transitional Mountain Springs Grade, saltcedar was observed in higher order washes (i.e., Myers Creek) within and adjacent to the Project alignment ROW. Saltcedar was observed in low densities in Myers Creek, where the alignment ROW crosses Myers Gorge (MP 28.2) and in medium densities on an unnamed tributary of Myers Creek near Mountain Springs Road (MP 27.1) (see Appendix B).

**Control Options:**

Early detection and control are critical to the successful control of this species. Post treatment monitoring is also essential since saltcedar is capable of resprouting following treatment. Seedlings will continue to establish as long as saltcedar infestations persist upwind or upstream of the Action Area.

***Physical Control.*** Cutting alone is not an effective means of controlling saltcedar, since it tends to resprout vigorously from roots and stumps. However, cutting to the stump and then immediately applying herbicide has been effective (see below). Seedlings and small plants may be successfully uprooted by hand, if the entire root system can be removed. All cut vegetative material should be bagged, carried off-site, and disposed of in a responsible and legal manner to prevent the spread of weeds. Care should also be taken during transport of the materials to ensure they are secure (and do not, for example, fly out of the back of a truck).

***Chemical Control.*** The most frequently used and effective method in California for larger trees is to cut an individual saltcedar shrub as close to the ground as possible and immediately (in less than 30 seconds) apply a triclopyr or imazapyr herbicide to the perimeter of the cut stems. This method is most effective during fall months, when the plants are actively translocating materials to their roots (Carpenter 1998). Foliar treatment of any resprouts and any plants less than 2 feet tall, is necessary. This method allows plants to be treated selectively, which is especially important if there are also native species present

**Treatment Extent:** Saltcedar will be treated and controlled within all impact areas associated with the Project alignment ROW.

**Treatment Schedule:** Winter–early spring: Locate all saltcedar individuals within mapped areas. Spring–summer: Treat seedlings and mature trees with an appropriate control method. Avoid treatment of mature trees in spring and summer months in areas where nesting birds occur, in these cases treat mature trees with an appropriate control method in the late winter. All cut vegetative material should be bagged, carried off-site, and disposed of in a responsible and legal manner to prevent the spread of weeds. Care should also be taken during transport of the materials to ensure they are secure (and do not, for example, fly out of the back of a truck). Fall: If the cut-stump herbicide method is used, fall is the optimal time for treatment. Follow-up control should occur at least twice per year.

## 6.2.4 Cal-IPC Moderate

### 6.2.4.1 Wild Oat (*Avena* sp.)

**Other Weed Designation(s):** None.

**Description:** *Avena* sp. includes slender wild oat (*Avena barbata*) and wild oat (*Avena fatua*). Slender wild oat is very similar to wild oat but has florets that are more slender (Whitson et al. 2006). Wild oat is an annual grass that is native to Europe. It is an agricultural weed as well as a weed of roadsides, pastures, and other disturbed areas. This grass is 1 to 4 feet tall with hollow stems. Seeds can remain viable in the soil for over 10 years. They tend to outcompete native species for space, nutrients, and water (Whitson et al. 2006).

**Current Distribution in the Action Area:** Wild oat was observed in mildly to heavily disturbed areas in the western portion of the Project alignment ROW. It was frequently observed as part of a suite of annual non-native grasses colonizing postburn scrub, coastal foothills, roadsides, and pasturelands. Wild oat was not observed east of MP 69.5 (see Appendix B).

**Control Options:**

***Physical Control.*** Specific information on the physical control of slender oat is not available. NPS (2004) recommends removal of wild oat with hand tools; because these species are so similar, effective treatment methodologies are likely to also be similar.

***Chemical Control.*** Specific information on the chemical control of slender oat is not available. Glyphosate (NPS 2004) has been identified as an effective herbicide for the treatment of wild oat; because these species are so similar, effective treatment methodologies are likely to also be similar.

**Treatment Extent:** Wild oat will be treated and controlled within all impact areas associated with the Project alignment ROW.

**Treatment Schedule:** Spring: Locate and treat populations.

### 6.2.4.2 Black Mustard (*Brassica nigra*)

**Other Weed Designation(s):** None.

**Description:** Black mustard is an annual that grows 2 to 8 feet tall. The plants have erect stems covered with stiff hairs on the lower sections to smooth near the top. Leaves are stalked, the lower deeply lobed and the upper toothed. This species was introduced from Europe and is widespread throughout North America (Whitson et al. 2006). This species can infest roadsides, disturbed areas, and small disturbed patches within otherwise native habitat.

**Current Distribution in the Action Area:** Black mustard was observed at various points colonizing coastal scrub and grassland within foothills in the western portion of the Project alignment ROW (see Appendix B). Extensive populations of black mustard at low densities were observed near the El Capitan Reservoir (Section 5, MP 98 to MP 105.5).

**Control Options:**

***Physical Control.*** Plants can be hand-dug prior to flowering/fruiting, bagged, and removed from the site.

***Chemical Control.*** 2,4-D, dicamba, and a combination of these two herbicides has been used to treat black mustard (USACE 2006). Glyphosate has also been observed to be effective in treating black mustard (Tomsovic 2009).

**Treatment Extent:** Black mustard will be treated and controlled within all impact areas associated with the Project alignment ROW.

**Treatment Schedule:** Early spring: Apply treatments. All cut vegetative material should be bagged, carried off-site, and disposed of in a responsible and legal manner to prevent the spread of weeds. Care should also be taken during transport of the materials to ensure they are secure (and do not, for example, fly out of the back of a truck).

### 6.2.4.3 Ripgut Brome (*Bromus diandrus*)

**Other Weed Designation(s):** None.

**Description:** Ripgut brome is native to the Mediterranean and is thought to have been widely established in California since the late 1800s (Holloran et al. 2004). It is an annual grass with slender stems up to 30 inches tall. Distinguishing characteristics include flat

leaf blades that are one-quarter inch wide and covered in fine hairs, with slightly jagged margins; drooping inflorescence with one or two spikelets of stiff red or purple-tipped awns; and fibrous roots (Holloran et al. 2004).

Ripgut brome is prone to summer fire, is known to cause injury to wildlife (hence the name ripgut), and prevents native perennial species from becoming established (Holloran et al. 2004). Reproduction is exclusively via seed, and plants can produce seeds during the winter, spring, and early summer. Ripgut brome is a very prolific seeder and seeds can remain viable in the soil for up to five years (Holloran et al. 2004).

Typically, this species emerges in early winter following rainfall but remains inactive until spring; plants continue to grow through summer.

Directed surveys for this species should be conducted during the flowering period (spring through summer).

**Current Distribution in the Action Area:** Ripgut brome was observed in mildly to heavily disturbed areas in the western portion of the Project alignment ROW. It was frequently observed as part of a suite of annual non-native grasses colonizing postburn scrub, coastal foothills, roadsides, and pasturelands (see Appendix B). Ripgut brome was not observed east of McCain Valley (Section 9B, MP 42).

**Control Options:**

***Physical Control.*** Hand-pulling small populations of ripgut brome prior to seed production is an effective physical control measure. The best time is when seeds have formed but are not completely ripe; they contain a milky substance at this time (Holloran et al. 2004).

Larger infestations can be removed by mowing or weed-whipping before seeds mature. Cut to two inches and remove the bolting crown (Holloran et al. 2004).

***Chemical Control.*** Apply glyphosate when most plants have reached the late bud to flower stage of growth.

**Treatment Extent**: Ripgut brome will be treated and controlled within all impact areas associated with the Project alignment ROW.

**Treatment Schedule**: Spring–summer: Locate all populations within impact areas. Late summer–fall: Treat populations. All cut vegetative material should be bagged, carried off-site, and disposed of in a responsible and legal manner to prevent the spread of weeds. Care should also be taken during transport of the materials to ensure they are secure (and do not, for example, fly out of the back of a truck).

### 6.2.4.4 Italian Thistle (*Carduus pycnocephalus*)

**Other Weed Designation(s):** None.

**Description:** Italian thistle is native to the Mediterranean and was introduced into California in the 1930s. It now occurs throughout much of the state at elevations below 3,000 feet (Bossard and Lichti 2000).

It is an annual or biennial thistle with a basal rosette and is more slender than many other thistle species. The stems, undersides of the spine-tipped leaves, and flower heads are covered in a cobwebby down. On the leaves, the terminal lobe spine is longer and more robust than the other spines, and the stems are slightly winged. Pink or purple inflorescences, about one-half inch across, occur in tight terminal clusters of two to five in the fall (Holloran et al. 2004; Bossard and Lichti 2000).

Reproduction is exclusively by seed. The outer (ray flower) seeds do not have bristles and remain in the flower head until it drops. Inner (disk flower) seeds are sticky with a thin gummy coating when they first develop, which allows them to attach to passing animals or machinery; they also have bristles for wind dispersal. Germination rates are very high and seeds can remain viable in the soil for up to 10 years (Holloran et al. 2004). It thrives on disturbed soil under drought conditions (Bossard and Lichti 2000).

**Current Distribution in the Action Area:** Italian thistle was observed in two locations on the Project alignment ROW. It was found growing within the ROW and within the site of a former proposed construction yard southeast of the city of Poway (Section 4A, MP 112). Use of this area as a construction yard has been cancelled. Italian thistle was also observed growing in low densities along Bell Bluff Truck Trail (a dirt road) within Engelmann oak woodland near the proposed Suncrest Substation (Section 7, MP 89).

**Control Options:**

***Physical Control.*** This plant will resprout if the entire root crown is not removed. Digging up plants is feasible only for small infestations and the disturbance may induce increased germination the following year of seeds in the soil. Repeated weed whipping prior to flowering can also be effective (Holloran et al. 2004).

***Chemical Control.*** Glyphosate can be applied prior to setting seed. Other herbicides that have been reported to be effective include clopyralid; diquat (for seedlings); and 2,4-D (Bossard and Lichti 2000)..

**Treatment Extent:** Italian thistle will be treated and controlled within all impact areas associated with the Project alignment ROW.

**Treatment Schedule**: Early spring: Locate populations within impact areas of the Project alignment ROW. Spring: Treat populations. All cut vegetative material should be bagged, carried off-site, and disposed of in a responsible and legal manner to prevent the spread of weeds. Care should also be taken during transport of the materials to ensure they are secure (and do not, for example, fly out of the back of a truck).

### 6.2.4.5 Tocalote (*Centaurea melitensis*)

**Other Weed Designation(s):** None.

**Description:** Tocalote is native to Europe. It is an erect winter annual with gray–green foliage that starts as a basal rosette, and the yellow spiny flower heads bloom in May and June. It has rigid branching, winged stems, and the basal leaves are deeply lobed. Flower heads are clustered, spiny, and yellow, and the spines are branched at the base (Whitson et al. 2006).

Early detection and treatment is critical because once the plants flower, they can produce viable seeds within eight days (Chambers and Hawkins 2002).

**Current Distribution in the Action Area:** Tocalote was observed in mildly to heavily disturbed areas in the western portion of the Project alignment ROW. It was frequently observed in trace to medium densities within coastal scrub, non-native grasslands, roadsides, and pasturelands on coastal foothills (see Appendix B).

**Control Options:**

***Physical Control.*** Small infestations can be hand-dug. This is especially effective on new introductions as disturbance of the soil will not induce germination of seeds in the seed bank. Care should be taken not to spread seeds when hand-pulling. Placing the pulled plants in a garbage bag is a good measure to prevent seed spread. For large-scale infestations, tilling so that the roots are separated below the soil surface should provide complete control of these plants as long as rainfall is not expected, which can be a recipe for rapid reinfestation (DiTomaso and Gerlach 2000).

Weed whipping or mowing can be used effectively. Mowing is best when conducted at a stage where two to five percent of the seed heads are flowering and only when the lowest branches of plants are above the height of the mower blades. Repeated treatment should be expected (DiTomaso and Gerlach 2000).

***Chemical Control.*** Mature plants are harder to control than immature plants in the rosette stage. Effective herbicides include 2,4-D, clopyralid, and glyphosate. Chemical control is an appropriate tool to use (1) on large infestations, especially when desirable plants are abundant in the understory; (2) in highly productive soils; and (3) around the perimeter of infestations to contain their spread. Preemergent herbicides may provide additional control, when applied from late fall to early spring (Chambers and Hawkins 2002).

**Treatment Extent:** Tocalote will be treated and controlled within all impact areas associated with the Project alignment ROW.

**Treatment Schedule:** Tilling or mowing should be done when soil is dry and rainfall is not expected. Early spring: Locate populations within impact areas of the Project alignment ROW. Spring: Treat populations. All cut vegetative material should be bagged, carried off-site, and disposed of in a responsible and legal manner to prevent the spread of weeds. Care should also be taken during transport of the materials to ensure they are secure (and do not, for example, fly out of the back of a truck).

### 6.2.4.6 Bull Thistle (*Cirsium vulgare*)

**Other Weed Designation(s):** None.

**Description:** Bull thistle is native to Europe, western Asia, and North Africa; it arrived in the United States as a crop contaminant. This biennial thistle produces a basal rosette

the first year and bolts the summer of the second year, reaching heights of 2 to 5 feet before setting seed and dying. Distinguishing characteristics include dark green leaves with the texture of sandpaper, winged stems, and large purple flower heads one to two inches wide with feathery bristles on the pappus (Randall 2000).

Bull thistle reproduces exclusively by seed, and each plant can produce thousands of seeds, which germinate in the spring and fall (Holloran et al. 2004). This plant thrives in disturbed areas and outcompetes native plant species.

**Current Distribution in the Action Area:** Bull thistle was observed within Engelmann oak woodland within the footprint of the proposed Suncrest Substation (Section 7, MP 89) (see Appendix B).

**Control Options:**

***Physical Control.*** If the infestation is small, clip and bag flower heads prior to seed set. Plants can be pulled, cut (at least one to two inches below the ground and follow up in case of resprouting), or mown (close to the ground after bolting but prior to flowering; repeat one month later) (Holloran et al. 2004).

***Chemical Control.*** Rosettes should be treated with herbicide in the fall or spring. Various herbicides have been recommended, including 2,4-D and dicamba; (Randall 2000). USACE (2006) lists 2,4-D, clopyralid, dicamba, and dicamba + 2,4-D, and triclopyr + 2,4-D as herbicides that have been used to treat bull thistle.

**Treatment Extent:** Bull thistle will be treated and controlled within all impact areas associated with the Project alignment ROW.

**Treatment Schedule:** Early spring: Locate populations within impact areas of the Project alignment ROW. Spring: Treat individuals. All cut flowers should be bagged, carried off-site, and disposed of in a responsible and legal manner to prevent the spread of weeds. Care should also be taken during transport of the materials to ensure they are secure (and do not, for example, fly out of the back of a truck). Stems and branches can be left to decompose on-site only if the plant has not yet gone to seed and all flower heads have been removed (Holloran et al. 2004).

### 6.2.4.7 Artichoke Thistle (*Cynara cardunculus)*

**Other Weed Designation(s):** None.

**Description:** Artichoke thistle, also called cardoon, is a perennial herb that may grow up to 6 feet high and 6 feet wide with a cluster of large, purple flower heads. The plant reproduces from seed and may colonize riparian woodlands, natural openings in chaparral and sage scrub, or native grasslands (Pepper and Kelly 1994). Artichoke

thistle is native to the Mediterranean and has become widespread over California, Australia, New Zealand, and South America. It is believed that invasive populations of this species are derived from the cultivated variety of artichoke. Artichoke thistle is found in disturbed areas and has also been observed colonizing coastal sage scrub habitat, riparian areas, and native grasslands (Pepper and Kelly 1994).

**Current Distribution in the Action Area:** A small population of artichoke thistle was observed in medium densities colonizing non-native grassland within and adjacent to the Project alignment ROW southeast of Poway (Section 5, MP 110.7) (see Appendix B).

**Control Options:**

***Physical Control.*** As artichoke thistle has a large, storage taproot, digging and grubbing can only be effective if entire rootstock is removed. In smaller populations seed heads may be removed to stop seed production in areas where plant removal is not an option (Pepper and Kelly 1994).

***Chemical Control.*** Glyphosate has been shown effective to use in cut stumps applications and as foliar spray in controlling artichoke thistle. Cut stump applications involve cutting and bagging the basal rosette of plants and applying glyphosate to the exposed root. Cut stump applications are recommended in pre-bolting plants. In cases where artichoke thistle has bolted, a glyphosate (two percent) foliar spray has been shown effective as a control (Kelly 2000).

**Treatment Extent:** Artichoke thistle will be treated and controlled within all impact areas associated with the Project alignment ROW.

**Treatment Schedule:** Spring: Remove basal rosettes and apply herbicide to cut stumps. Summer: Bag seed heads and apply foliar spray to bolted individuals.

### 6.2.4.8 Stinkwort (*Dittrichia graveolens*)

**Other Weed Designation(s):** None.

**Description:** Stinkwort is an exotic aromatic annual in the sunflower family. It can grow up to 3 feet tall and has small, light green glandular foliage. It is strongly branched with small, tarplant-like yellow flowers (Cal-IPC 2009).

Stinkwort is a recent arrival to California and appears to be expanding throughout its range (Preston 1997). It forms dense colonies on disturbed areas including roadsides, unpaved parking lots, and trail edges. The sticky character of these allows them to disperse anthropogenically via attachment to clothing, tools, and vehicles.

**Current Distribution in the Action Area:** A small population of stinkwort was observed in low densities at the site of a former proposed construction yard (Stowe/Kirkham Yard)

in Poway north of MP 116.5. Use of this area as a construction yard has been cancelled (see Appendix B).

**Control Options:**

***Physical Control.*** Stinkwort can be controlled by repeated mowing before plants begin to flower. If present, flower heads should be bagged and removed from the site.

***Chemical Control.*** Glyphosate and clopyralid have been shown to be effective in controlling stinkwort when applied before the plant flowers (June–August).

**Treatment Extent:** Stinkwort will be treated and controlled within all impact areas associated with the Project alignment ROW.

**Treatment Schedule:** Early summer: Mow emergent plant rosettes; apply herbicide. Late summer: Repeat early summer treatment; bag and remove any seed heads.

### 6.2.4.9 Short-pod Mustard (*Hirschfeldia incana*)

**Other Weed Designation(s):** None.

**Description:** Short-pod mustard is native to Europe and has been established in California since the early 1900s. Unlike many of the other common annual mustards, it does not require ground disturbance to spread. It blooms May through September. It frequently infests grasslands and coastal scrubs (Cal-IPC 2009).

**Current Distribution in the Action Area:** Short-pod mustard was observed intermittently throughout western cismontane foothills and desert transitional areas of the Project alignment ROW colonizing disturbed scrub, chaparral, and grasslands (see Appendix B). Short-pod mustard was not observed east of MP 34.

**Control Options:**

***Manual Methods of Control.*** Plants can be hand-dug prior to flowering/fruiting, bagged, and removed from the site.

***Chemical Control.*** Glyphosate should be applied to short-pod mustard as a foliar spray in the spring and early summer to plants in their rosette stage, before they bolt (Tomsovic 2009).

**Treatment Extent:** Short-pod mustard will be treated and controlled within all impact areas associated with the Project alignment ROW.

**Treatment Schedule:** Spring: Locate populations within impact areas of the Project alignment ROW. Summer: Treat populations. All cut vegetative material should be

bagged, carried off-site, and disposed of in a responsible and legal manner to prevent the spread of weeds. Care should also be taken during transport of the materials to ensure they are secure (and do not, for example, fly out of the back of a truck).

### 6.2.4.10 Foxtail Barley (*Hordeum murinum*)

**Other Weed Designation(s):** None.

**Description:** Foxtail barley is a cool season annual grass that grows up to 3 feet tall and is native to Europe. It is thought to have become naturalized in California at the time of the Spanish missionaries (1700s). Foxtail barley reproduces by seed and forms dense inflorescences between April and June. The spiky inflorescence is clustered around a central axis and easily breaks apart post-senescence. Foxtail barley is known to inhabit relatively mesic areas within habitats such as roadsides, fields, pastures, and disturbed areas (DiTomaso and Healy 2007).

**Current Distribution in the Action Area:** Foxtail barley was observed as part of a suite of annual non-native grasses colonizing postburn scrub, coastal foothills, roadsides, and pasturelands (see Appendix B).

**Control Options:**

***Physical Control.*** Hand-pulling is an effective control measure for small populations of foxtail barley, if pulled prior to seed production.

***Chemical Control.*** Glyphosate is an effective herbicide for controlling populations of foxtail barley.

**Treatment Extent:** Foxtail barley will be treated and controlled within all impact areas associated with the Project alignment ROW.

**Treatment Schedule:** Early spring: Locate populations within impact areas of the Project alignment ROW. Mid-winter to late spring: Treat individuals. All cut vegetative material should be bagged, carried off-site, and disposed of in a responsible and legal manner to prevent the spread of weeds. Care should also be taken during transport of the materials to ensure they are secure (and do not, for example, fly out of the back of a truck).

## 6.2.4.11 Fountain Grass (*Pennisetum setaceum*)

**Other Weed Designation(s):** None.


**Description:** Fountain grass is native to Africa and the Middle East; it was introduced for its ornamental value. It is a perennial bunchgrass with attractive feathery bottlebrush inflorescences that generally bloom from July through October. It has been a successful invader of wildlands throughout the world because of its ability to adapt physiologically and morphologically to different environments (Lovich 2000).

This species crowds out native vegetation and can form a dense monoculture of flammable fuel for fires. It is well adapted to and even promoted by burning (Lovich 2000).

Fountain grass has many reproductive attributes that ensure its success, including production of copious amounts of seeds; the ability to reproduce by either fertilized or unfertilized seeds; and long seed life (Lovich 2000).

**Current Distribution in the Action Area:** Fountain grass was observed in mildly to heavily disturbed areas in the western portion of the Project alignment ROW. It was frequently observed as part of a suite of annual non-native grasses colonizing postburn scrub, coastal foothills, roadsides, and pasturelands (see Appendix B). It was found in low to dense densities on canyon slopes on MCAS Miramar (Section 4A, MP 112–MP 115). Fountain grass was also observed in trace amounts near El Capitan Reservoir (Section 5, MP 98–MP 107).

**Control Options:**

***Manual Methods of Control.*** Small infestations can be hand-dug, with care to remove the entire root crown. Plant materials should be bagged, carried off-site, and disposed of in a responsible and legal manner to prevent the spread of weeds. Care should also be taken during transport of the materials to ensure they are secure (and do not, for example, fly out of the back of a truck).

***Chemical Control.*** Foliar application of glyphosate when plants are actively growing. Preemergent herbicide may also be used once an area has been treated.

**Treatment Extent:** Fountain grass will be treated and controlled within all impact areas associated with the Project alignment ROW.

**Treatment Schedule:** Mid-spring: Survey and locate all individuals in impact areas. Physical: This perennial grass may be pulled at any time of the year. Chemical: Herbicides should be applied when plants are actively growing.

### 6.2.4.12 London Rocket (*Sisymbrium irio*)

**Other Weed Designation(s):** None.

**Description:** London rocket is a highly competitive winter annual, native to Eurasia. The edges of the first true leaves of seedlings are often somewhat indented, and most or all of the early leaves are deeply indented. The stems of mature plants bear long, tubular seedpods and have a small cluster of yellow flowers at the tip. This winter annual's typical flowering period is January to April (i.e., earlier than many native and non-native species). The plants usually grow to about 2 feet tall. London rocket is found in irrigated fields, moist fallow fields, and roadsides.

**Current Distribution in the Action Area:** London rocket was observed at two locations within or adjacent to the Project alignment ROW (see Appendix B). London rocket was observed within Engelmann oak woodland along Bell Bluff Truck Trail (a dirt road) near the proposed Suncrest Substation (Section 7, MP 89). It was also observed in McCain Valley growing within washes and in chamise chaparral (Section 9B, MP 41–MP 42).

**Control Options:**

***Manual Methods of Control.*** Plants can be hand-dug prior to flowering/fruiting, bagged, and removed from the site.

***Chemical Control.*** Several herbicides have been used to control *Sisymbrium* spp., including 2,4-D (Adkins et al. 1997; Boutsalis and Powles 1995; Wolf et al. 1992; Young et al. 1992). NPS (2004) also identifies glyphosate as an appropriate herbicide.

**Treatment Extent:** London rocket will be treated and controlled within all impact areas associated with the Project alignment ROW.

**Treatment Schedule:** Early-spring: Locate populations within impact areas of the Project alignment ROW. Spring: Treat populations. All cut vegetative material should be bagged, carried off-site, and disposed of in a responsible and legal manner to prevent the spread of weeds. Care should also be taken during transport of the materials to ensure they are secure (and do not, for example, fly out of the back of a truck).

### 6.2.4.13 Foxtail Fescue (*Vulpia myuros*)

**Other Weed Designation(s):** None.

**Description:** Foxtail fescue is an annual grass up to 2 feet tall, native to Europe. Distinguishing characteristics include folded leaf blades, hairless leaf blades and leaf sheaths, and narrow panicles (Whitson et al. 2006).

**Current Distribution in the Action Area:** Foxtail fescue was observed in relatively mesic areas within mildly to heavily disturbed areas in the western portion of the Project alignment ROW. It was frequently observed as part of a suite of annual non-native grasses colonizing postburn scrub, coastal foothills, roadsides, and pasturelands (see Appendix B).

**Control Options:**

***Physical Control.*** Hand-pulling is an effective control measure for small populations of foxtail fescue, if pulled prior to seed production.

***Chemical Control.*** Glyphosate is an effective herbicide for reducing populations of foxtail fescue.

**Treatment Extent:** Foxtail fescue will be treated and controlled within all impact areas associated with the Project alignment ROW.

**Treatment Schedule:** Early spring: Locate populations within impact areas of the Project alignment ROW. Mid-winter to late spring: Treat individuals. All cut vegetative material should be bagged, carried off-site, and disposed of in a responsible and legal manner to prevent the spread of weeds. Care should also be taken during transport of the materials to ensure they are secure (and do not, for example, fly out of the back of a truck).

## 6.3 Reporting

In December of each year following initiation of project construction, an annual report will be submitted to interested agencies, including, but not limited to: County of San Diego, City of San Diego, U.S. Fish and Wildlife Service, USFS, BLM, California Department of Fish and Game, and others. The annual report will include a summary of the activities completed during the previous calendar year related to annual weed survey and control efforts. Specifically, the annual report will include:

- the results and maps of the annual weed surveys;
- a description of any new weed species identified;

- an up-to-date "targeted noxious weed" and CAL-IPC moderate/high species list as indicated by San Diego County and CAL-IPC;
- a description of methods and locations of weed control efforts for each species identified and treated;
- an analysis of the efficacy of weed control efforts performed to date and recommend changes to future control efforts, if necessary;
- identification of unforeseen issues and recommendations to address; and
- a work plan that will include a proposed survey and treatment schedule for the next year as well as specific weed control plans for any new species identified and updated control plans for species where current control methodologies can be improved.

# 7.0 Conclusion

Twenty species, including seven Cal-IPC species with a "High" rating and thirteen Cal-IPC species with a "Moderate" rating, were observed within and immediately adjacent to the alignment ROW. Of these, one County of San Diego "target noxious" species (yellow starthistle) and two wildfire-promoting species (Saharan mustard and cheatgrass) were observed. San Diego County "target noxious" species and designated wildfire-promoting species will be controlled throughout the ROW and associated laydown areas. All other species will be treated and controlled only within mapped impact areas. All species must be treated prior to construction or when treatments would be most effective based on the species phenology. Construction weed abatement measures will be implemented during project implementation and long-term invasive plant monitoring and control will be required. Long-term monitoring and adaptive control measures will be implemented to reduce the threats from future weed challenges.

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# APPENDICES

# APPENDIX A

**POTENTIAL AND OBSERVED WEEDS ALONG THE PROJECT ALIGNMENT**

| Scientific Name | Common Name | Observed | Cal-IPC Rating | Targeted Noxious Weed* | Wildfire Promoter | Habitats of Concern and Comments |
|---|---|---|---|---|---|---|
| *Acacia dealbata* | silver wattle | No | Moderate | | | Coastal prairie, riparian woodland, riparian forest, North Coast coniferous forest, closed cone coniferous forest. |
| *Acroptilon repens* | Russian knapweed | No | Moderate | | | Scrub, grasslands, riparian, pinyon-juniper woodland, forest. Severe impacts in other western states. Spreading in many areas of CA. |
| *Ageratina adenophora* | croftonweed, eupatorium | No | Moderate | | | Coastal canyons, scrub, slopes. Very invasive in Australia, limited information and distribution in CA. |
| *Ailanthus altissima* | tree-of-heaven | No | Moderate | | | Riparian areas, grasslands, oak woodland. Impacts highest in riparian areas. |
| *Alhagi maurorum* | camelthorn | No | Moderate | | | Grassland, meadows, riparian and desert scrub, Sonoran thorn woodland. Very invasive in southwestern states. Limited distribution in CA. |
| *Alternanthera philoxeroides* | alligator weed | No | High | | | Freshwater aquatic systems, including marshes. |
| *Ammophila arenaria* | European beachgrass | No | High | | | Coastal dunes. |
| *Arctotheca calendula (sterile)* | sterile capeweed | No | Moderate | | | Coastal prairie; only propagates vegetatively. More competitive than fertile form, but limited distribution. |
| *Arundo donax* | giant reed | No | High | | | Riparian areas, commercially grown for musical instrument reeds, structural material, etc. |
| *Asparagus asparagoides* | bridal creeper | No | Moderate | | | Riparian woodland. |
| *Asphodelus fistulosus* | onionweed | No | Moderate | | | Coastal dunes, prairie, grasslands. More invasive in Australia. High invasiveness, limited distribution in CA, but present throughout San Diego County. |
| *Atriplex semibaccata* | Australian saltbush | No | Moderate | | | Coastal grasslands, scrub, upper salt marsh. Limited distribution, but can be very invasive regionally. |

**POTENTIAL AND OBSERVED WEEDS ALONG THE PROJECT ALIGNMENT**
**(continued)**

| Scientific Name | Common Name | Observed | Cal-IPC Rating | Targeted Noxious Weed* | Wildfire Promoter | Habitats of Concern and Comments |
|---|---|---|---|---|---|---|
| *Avena barbata* | slender wild oat | Yes | Moderate | | | Coastal scrub, grasslands, oak woodland, forest. Very widespread, but impacts more severe in desert regions. |
| *Avena fatua* | wild oats, wild oat | Yes | Moderate | | | Coastal scrub, chaparral, grasslands, woodland, forest. Very widespread, but impacts more severe in desert regions. |
| *Brassica nigra* | black mustard | Yes | Moderate | | | Widespread. Primarily a weed of disturbed sites, but can be locally a more significant problem in wildlands. |
| *Brassica tournefortii* | Saharan mustard, African mustard | Yes | High | | Yes | Desert dunes, desert and coastal scrub. |
| *Bromus diandrus* | ripgut brome | Yes | Moderate | | | Dunes, scrub, grassland, woodland, forest. Very widespread, but monotypic stands uncommon. |
| *Bromus madritensis* ssp. *rubens* | foxtail chess, red brome | Yes | High | | | Scrub, grassland, desert washes, woodlands. |
| *Bromus tectorum* | downy brome, cheatgrass | Yes | High | | Yes | Interior scrub, woodlands, grasslands, pinyon/Joshua tree woodland, chaparral. |
| *Cardaria chalepensis* | lens-podded white-top | No | Moderate | | | Central Valley wetlands. Limited distribution in CA. May not be as invasive as *C. draba*. |
| *Carduus pycnocephalus* | Italian thistle | Yes | Moderate | | | Forest, scrub, grasslands, woodland. Very widespread. Impacts may be variable regionally. |
| *Carpobrotus chilensis* | sea-fig, iceplant | No | Moderate | | | Coastal dunes, scrub, prairie. Little information on species, most inferred from *C. edulis*. |
| *Carpobrotus edulis* | Hottentot-fig, iceplant | No | High | | | Coastal habitats, especially dunes. |
| *Centaurea calcitrapa* | purple starthistle | No | Moderate | | | Grasslands. Impacts regionally variable. Distribution relatively limited. |
| *Centaurea maculosa* | spotted knapweed | No | High | Yes | | Riparian, grasslands, wet meadows, forests. More widely distributed in other western states. |

**POTENTIAL AND OBSERVED WEEDS ALONG THE PROJECT ALIGNMENT**
**(continued)**

| Scientific Name | Common Name | Observed | Cal-IPC Rating | Targeted Noxious Weed* | Wildfire Promoter | Habitats of Concern and Comments |
|---|---|---|---|---|---|---|
| *Centaurea melitensis* | Maltese starthistle, tocolote, tocalote | Yes | Moderate | | | Grasslands, oak woodland; sometimes misidentified as *C. solstitialis*. Impacts vary regionally. |
| *Centaurea solstitialis* | yellow starthistle | Yes | High | Yes | | Grasslands, woodlands, occasionally riparian. |
| *Chrysanthemum coronarium* | crown daisy | No | Moderate | | | Coastal prairie, dunes, and scrub. Impacts generally low to moderate, but can vary regionally. |
| *Cirsium arvense* | Canada thistle | No | Moderate | | | Grasslands, riparian areas, forests. Severe impacts in other western states. Limited distribution in CA. |
| *Cirsium vulgare* | bull thistle | Yes | Moderate | | | Riparian areas, marshes, meadows. Widespread, can be very problematic regionally. |
| *Conium maculatum* | poison-hemlock | No | Moderate | | | Riparian woodland, grassland. Widespread in disturbed areas. Abiotic impacts unknown. Impacts can vary locally. |
| *Cortaderia jubata* | Jubata grass | No | High | | | Many coastal and interior habitats. |
| *Cortaderia selloana* | dwarf pampas grass | Yes | High | | | Coastal dunes, coastal scrub, Monterey pine, riparian, grasslands, wetlands, serpentine soils. Still spreading both coastal and inland. |
| *Cotoneaster lacteus* | Parney's cotoneaster | No | Moderate | | | Many coastal habitats, mainly a problem from SF Bay Area north along coast but also in San Diego County. Limited distribution. Abiotic impacts largely unknown. |
| *Cotoneaster pannosus* | silverleaf cotoneaster | No | Moderate | | | Many coastal habitats, mainly a problem from SF Bay Area north along coast. Limited distribution. Abiotic impacts largely unknown. |
| *Cynara cardunculus* | artichoke thistle | Yes | Moderate | | | Coastal grasslands. Impacts more severe in southern CA where monotypic stands are more common. |
| *Cynodon dactylon* | bermudagrass | No | Moderate | | | Riparian scrub in southern CA. Common landscape weed, but can be very invasive in desert washes. |
| *Cynosurus echinatus* | hedgehog dogtailgrass | No | Moderate | | | Oak woodland, grassland. Widespread, impacts vary regionally, but typically not in monotypic stands. |

**POTENTIAL AND OBSERVED WEEDS ALONG THE PROJECT ALIGNMENT**
**(continued)**

| Scientific Name | Common Name | Observed | Cal-IPC Rating | Targeted Noxious Weed* | Wildfire Promoter | Habitats of Concern and Comments |
|---|---|---|---|---|---|---|
| *Cytisus scoparius* | Scotch broom | No | High | | | Coastal scrub, oak woodland, horticultural varieties may also be invasive. |
| *Cytisus striatus* | Portuguese broom | No | Moderate | | | Coastal scrub, grasslands; often confused with *C. scoparius*. Limited distribution. |
| *Delairea odorata* | Cape-ivy, German-ivy | No | High | | | Coastal, occasionally other riparian areas, common discard from gardens. |
| *Dipsacus fullonum* | common teasel | No | Moderate | | | Grasslands, seep, riparian scrub. Impacts regionally variable, forms dense stands on occasion. |
| *Dipsacus sativus* | fuller's teasel | No | Moderate | | | Grasslands, seep, bogs. Impacts regionally variable, forms dense stands on occasion. |
| *Dittrichia graveolens* | stinkwort | Yes | Moderate | | | Grasslands, riparian scrub. Spreading rapidly, impacts may become more important in future. |
| *Egeria densa* | Brazilian egeria | No | High | | | Streams, ponds, sloughs, lakes, Sacramento–San Joaquin Delta. |
| *Ehrharta erecta* | erect veldtgrass | No | Moderate | | | Scrub, grasslands, woodland, forest. Spreading rapidly, impacts may become more important in future. |
| *Ehrharta longiflora* | long-flowered veldtgrass | No | Moderate | | | Coastal scrub. Limited distribution, but spreading rapidly in southern CA. Impacts largely unknown. |
| *Eichhornia crassipes* | water hyacinth | No | High | | | Aquatic systems in Sacramento–San Joaquin Delta. |
| *Elaeagnus angustifolia* | Russian-olive | No | Moderate | | | Interior riparian. Impacts more severe in other western states. Current distribution limited in CA. |
| *Emex spinosa* | spiny emex, devil's-thorn | No | Moderate | | | Edges of beaches, other coastal habitats. Invasive in other states and countries. Spreading rapidly in southern CA. Impacts not well known. |
| *Erechtites glomerata, E. minima* | Australian fireweed, Australian burnweed | No | Moderate | | | Coastal woodland, scrub, forests. Widespread on coast, but impacts low overall. May vary locally. |

**POTENTIAL AND OBSERVED WEEDS ALONG THE PROJECT ALIGNMENT**
**(continued)**

| Scientific Name | Common Name | Observed | Cal-IPC Rating | Targeted Noxious Weed* | Wildfire Promoter | Habitats of Concern and Comments |
|---|---|---|---|---|---|---|
| *Eucalyptus globulus* | Tasmanian blue gum | No | Moderate | | | Riparian areas, coastal grasslands, scrub. Impacts can be much higher in coastal areas. |
| *Euphorbia esula* | leafy spurge | No | High | | | Forests, woodlands, juniper forest. More widespread invasive in northern states. |
| *Euphorbia terracina* | carnation spurge | No | Moderate | | | Coastal scrub. Limited distribution. Spreading in southern CA. Impacts unknown. |
| *Festuca arundinacea* | tall fescue | No | Moderate | | | Coastal scrub, grasslands; common forage grass. Widespread, abiotic impacts unknown. |
| *Ficus carica* | edible fig | No | Moderate | | | Riparian woodland. Can spread rapidly. Abiotic impacts unknown. Can be locally very problematic. |
| *Foeniculum vulgare* | sweet fennel | Yes | High | | | Grasslands, scrub. |
| *Genista monspessulana* | French broom | No | High | | | Coastal scrub, oak woodland, grasslands. Horticultural selections may also be invasive. |
| *Geranium dissectum* | cutleaf geranium | No | Moderate | | | Numerous habitats but impacts appear minor. |
| *Glyceria declinata* | waxy mannagrass | No | Moderate | | | Vernal pools, moist grasslands. Often confused with native *Glyceria*. Impacts largely unknown, but may be significant in vernal pools. |
| *Halogeton glomeratus* | halogeton | No | Moderate | | | Scrub, grasslands, pinyon-juniper woodland. Larger problem in NV. Monotypic stands are rare. |
| *Hedera helix, H. canariensis* | English ivy, Algerian ivy | No | High | | | Coastal forests, riparian areas. Species combined due to genetics questions. |
| *Hirschfeldia incana* | Short-pod mustard, summer mustard | Yes | Moderate | | | Scrub, grasslands, riparian areas. Impacts not well understood, but appear to be greater in southern CA. |
| *Holcus lanatus* | common velvet grass | No | Moderate | | | Coastal grasslands, wetlands. Impacts can be more severe locally, especially in wetland areas. |

**POTENTIAL AND OBSERVED WEEDS ALONG THE PROJECT ALIGNMENT**
**(continued)**

| Scientific Name | Common Name | Observed | Cal-IPC Rating | Targeted Noxious Weed* | Wildfire Promoter | Habitats of Concern and Comments |
|---|---|---|---|---|---|---|
| *Hordeum marinum, H. murinum* | foxtail barley, Mediterranean barley, hare barley, wall barley | Yes | Moderate | | | Grasslands; *H. marinum* invades drier habitats, while *H. murinum* invades wetlands. Widespread, but generally do not form dominant stands. |
| *Hydrilla verticillata* | hydrilla | No | High | | | Freshwater aquatic systems. The most important submerged aquatic invasive in southern states. |
| *Hypericum canariense* | Canary Island hypericum | No | Moderate | | | Coastal scrub, prairie. Impacts unknown, distribution limited. Spreading rapidly on central coast. |
| *Hypericum perforatum* | common St. John's wort, klamathweed | No | Moderate | | | Many northern CA habitats. Abiotic impacts low. Biological control agents have reduced overall impact. |
| *Hypochaeris radicata* | rough catsear, hairy dandelion | No | Moderate | | | Coastal dunes, scrub, and prairie; woodland, forest. Widespread. Impacts unknown or appear to be minor. |
| *Kochia scoparia* | kochia | No | Moderate | | | Scrub, chaparral, grasslands. |
| *Lepidium latifolium* | perennial pepperweed, tall whitetop | No | High | Yes | | Coastal and inland marshes, riparian areas, wetlands, grasslands; potential to invade montane wetlands. |
| *Leucanthemum vulgare* | ox-eye daisy | No | Moderate | | | Montane meadows, coastal grasslands, coastal scrub. Expanding range, invasiveness varies locally. |
| *Linaria genistifolia* ssp. *dalmatica* | Dalmation toadflax | No | Moderate | | | Grasslands, forest clearings. Limited distribution. More severe impacts in other western states. |
| *Linaria vulgaris* | yellow toadflax, butter and eggs | No | Moderate | | | Valley and foothill grassland, Great Basin grassland, riparian woodland, lower montane coniferous forest, upper montane coniferous forest. |
| *Lolium multiflorum* | Italian ryegrass | No | Moderate | | | Grasslands, oak woodland, pinyon-juniper woodland; widely used for post-fire erosion control. Widespread. Impacts can vary with region. |
| *Ludwigia hexapetala* | Uruguay water-primrose | No | High | | | Freshwater aquatic systems. Clarification needed on taxonomic identification. |

**POTENTIAL AND OBSERVED WEEDS ALONG THE PROJECT ALIGNMENT**
**(continued)**

| Scientific Name | Common Name | Observed | Cal-IPC Rating | Targeted Noxious Weed* | Wildfire Promoter | Habitats of Concern and Comments |
|---|---|---|---|---|---|---|
| *Ludwigia peploides* ssp. *montevidensis* | creeping water-primrose | No | High | | | Freshwater aquatic systems. Clarification needed on taxonomic identification. |
| *Lythrum salicaria* | purple loosestrife | No | High | Yes | | Wetlands, marshes, riparian areas. |
| *Mentha pulegium* | pennyroyal | No | Moderate | | | Vernal pools, wetlands. Poisonous to livestock. Spreading rapidly. Impacts largely unknown. |
| *Mesembryanthemum crystallinum* | crystalline iceplant | No | Moderate | | | Coastal bluffs, dunes, scrubs, grasslands. Limited distribution. Locally problematic, especially in southern CA. |
| *Myoporum laetum* | myoporum | No | Moderate | | | Coastal habitats, riparian areas; mostly along the southern coast. Abiotic impacts unknown. |
| *Myriophyllum aquaticum* | parrotfeather | No | High | | | Freshwater aquatic systems. |
| *Nicotiana glauca* | tree tobacco | No | Moderate | | | Coastal scrub, grasslands, riparian woodland. Abiotic impacts unknown. Impacts vary locally. Rarely in dense stands. |
| *Onopordum acanthium* | Scotch thistle | No | High | | | Wet meadows, sage brush, riparian areas. |
| *Oxalis pes-caprae* | Bermuda buttercup, buttercup oxalis, yellow oxalis | No | Moderate | | | Coastal dunes, scrub, oak woodland. Impacts in coastal areas may prove more severe in time. |
| *Pennisetum setaceum* | crimson fountaingrass | Yes | Moderate | | | Coastal dunes and scrub, chaparral, grasslands. Some horticultural cultivars sterile. Very invasive in Hawaii. |
| *Phalaris aquatica* | hardinggrass | No | Moderate | | | Coastal sites, especially moist soils. Limited distribution. Can be highly invasive locally. |
| *Potamogeton crispus* | curlyleaf pondweed | No | Moderate | | | Freshwater aquatic systems. Can be very invasive locally. |
| *Retama monosperma* | bridal broom | No | Moderate | | | Coastal scrub. Can spread rapidly but largely if uncontrolled. Limited distribution in CA. |
| *Rubus armeniacus* | Himalaya blackberry | No | High | | | Riparian areas, marshes, oak woodlands. |

**POTENTIAL AND OBSERVED WEEDS ALONG THE PROJECT ALIGNMENT**
**(continued)**

| Scientific Name | Common Name | Observed | Cal-IPC Rating | Targeted Noxious Weed* | Wildfire Promoter | Habitats of Concern and Comments |
|---|---|---|---|---|---|---|
| *Rumex acetosella* | red sorrel, sheep sorrel | No | Moderate | | | Many habitats, riparian areas, forest, wetlands. Widespread. Abiotic impacts unknown. Impacts can vary locally. |
| *Saccharum ravennae* | ravennagrass | No | Moderate | | | Riparian scrub, marsh and swamp. |
| *Salvinia molesta* | giant salvinia | No | High | | | Freshwater aquatic systems. Population in San Diego River was eradicated. |
| *Sesbania punicea* | red sesbania, scarlet wisteria | No | High | | | Riparian areas. |
| *Sisymbrium irio* | London rocket | No | Moderate | | | Scrub, grasslands. Widespread. Primarily in disturbed sites. Impacts vary locally. |
| *Spartium junceum* | Spanish broom | No | High | | | Coastal scrub, grasslands, wetlands, oak woodland, forests. |
| *Stipa capensis* | Mediterranean steppegrass, twisted-awned speargrass | No | Moderate | | | Desert scrub; first recorded in CA 1995. Limited distribution, but spreading rapidly in CA deserts. |
| *Taeniatherum caput-medusae* | medusahead | No | High | | Yes | Grasslands, scrub, woodland. |
| *Tamarix parviflora* | smallflower tamarisk | No | High | | | Riparian areas, desert washes, coastal scrub. |
| *Tamarix ramosissima* | saltcedar, tamarisk | Yes | High | | | Desert washes, riparian areas, seeps and springs. |
| *Torilis arvensis* | hedgeparsley | No | Moderate | | | Expanding range. Appear to have only moderate ecological impacts. |
| *Trifolium hirtum* | rose clover | No | Moderate | | | Grasslands, oak woodland. Widely planted in CA. Impacts relatively minor in most areas. |
| *Vinca major* | big periwinkle | No | Moderate | | | Riparian, oak woodlands, coastal scrub. Distribution currently limited but spreading in riparian areas. Impacts can be higher locally. |
| *Vulpia myuros* | foxtail fescue, rattail fescue | Yes | Moderate | | | Coastal sage scrub, chaparral. Widespread. Rarely forms monotypic stands, but locally problematic. |

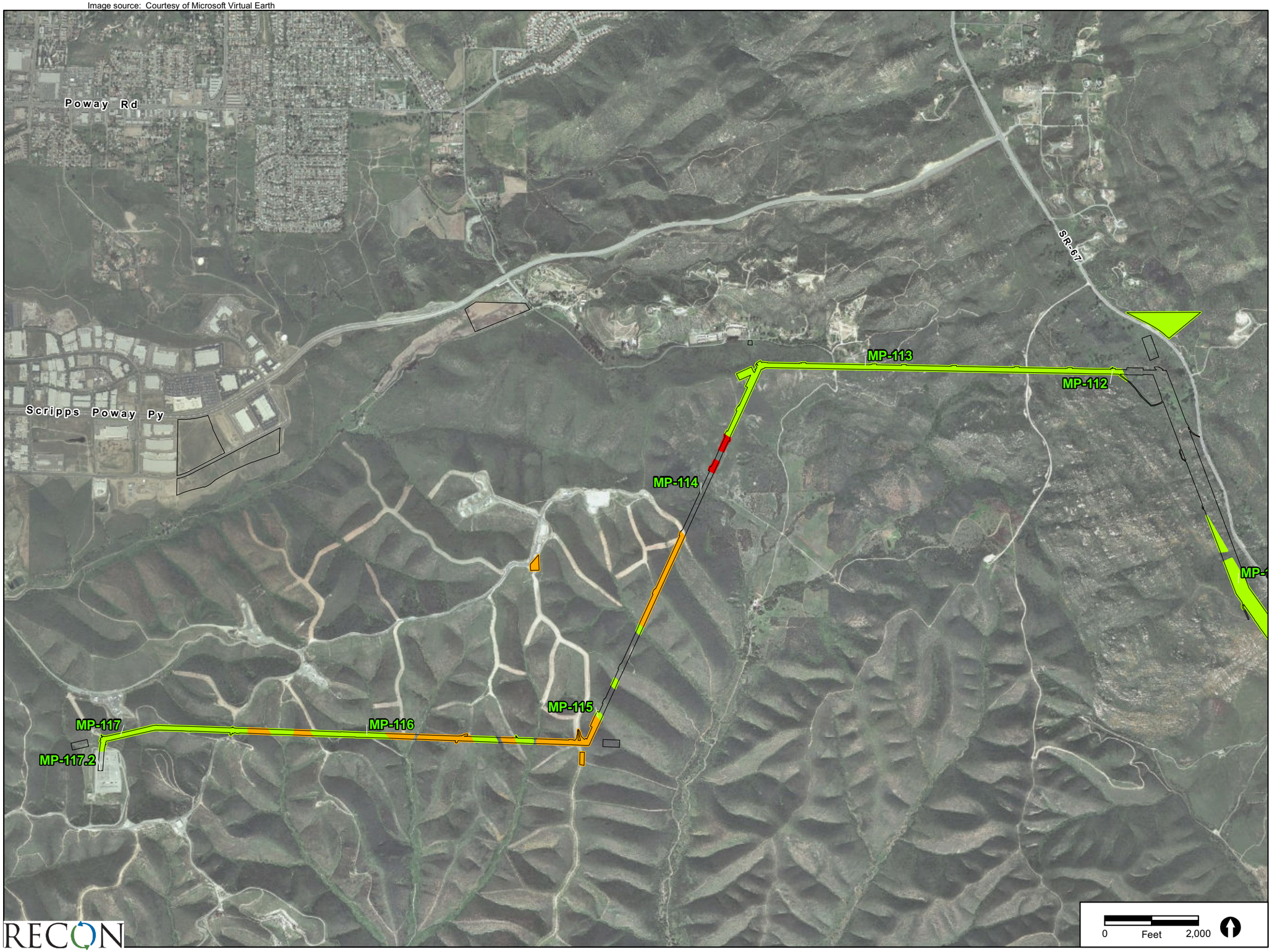
**POTENTIAL AND OBSERVED WEEDS ALONG THE PROJECT ALIGNMENT**
**(continued)**

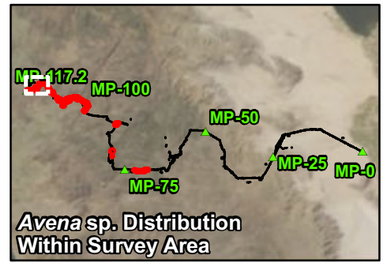
| Scientific Name | Common Name | Observed | Cal-IPC Rating | Targeted Noxious Weed* | Wildfire Promoter | Habitats of Concern and Comments |
|---|---|---|---|---|---|---|
| *Washingtonia robusta* | Mexican fan palm | No | Moderate | | | Desert washes. Limited distribution but spreading in southern CA. Impacts can be higher locally. |

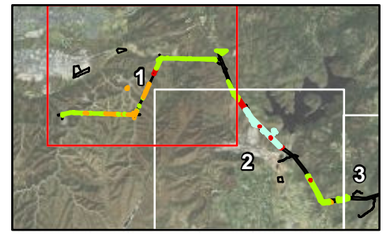
*San Diego County targeted noxious weeds

# APPENDIX B

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Wild Oat Density (*Avena* spp.)**

- Trace
- Low
- Med
- Dense

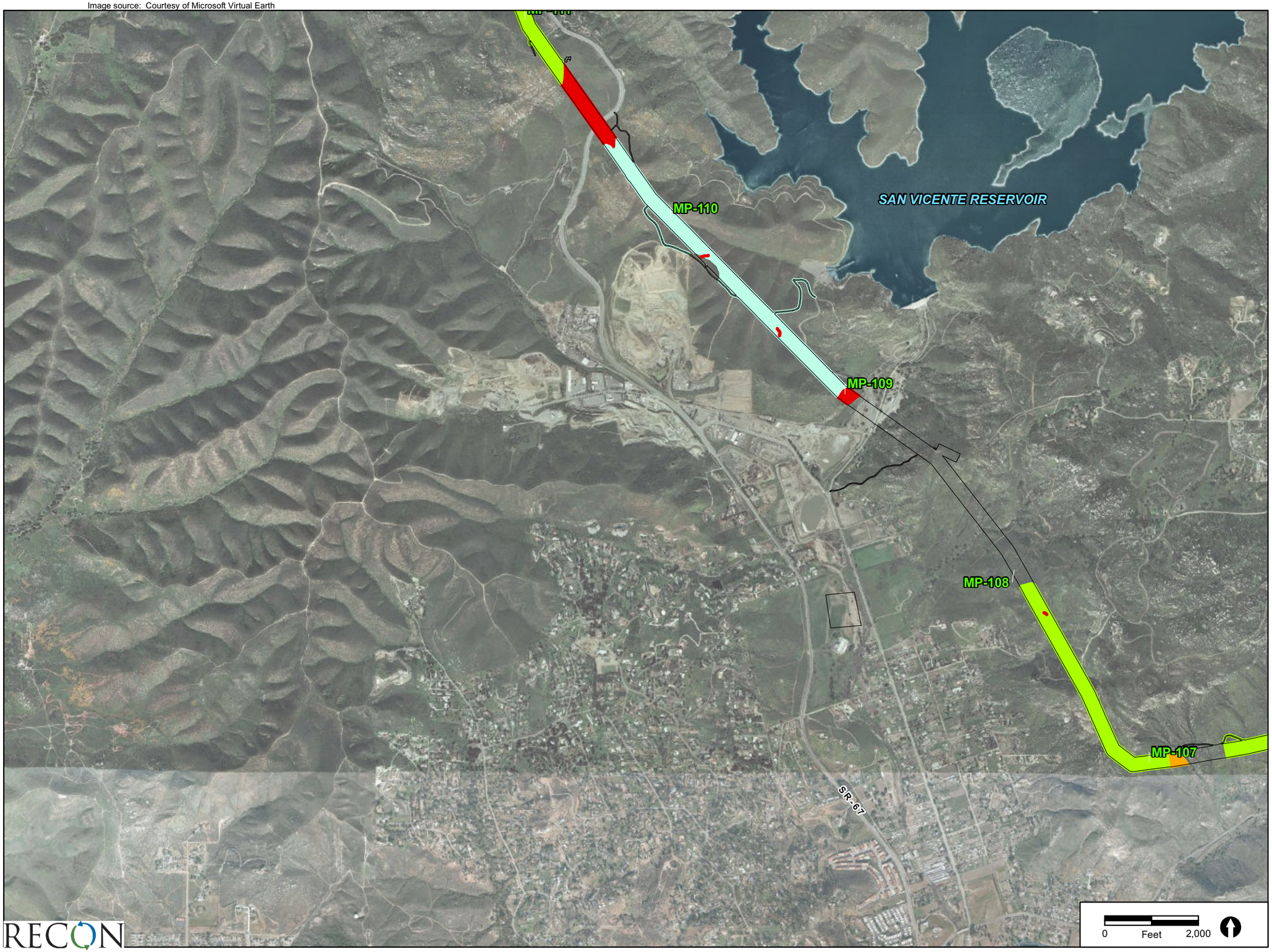
0 Feet 2,000

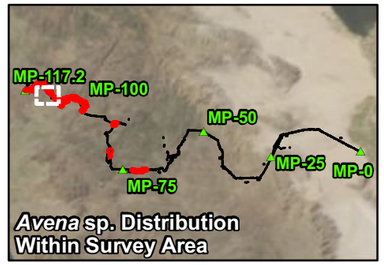
RECON

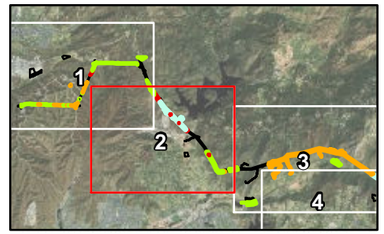
M:\JOBS3\5091\common_gis\weed\weed_maps_AVE_sp.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Wild Oat (*Avena* spp.)
Map 1 of 8

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Wild Oat Density (*Avena* spp.)**

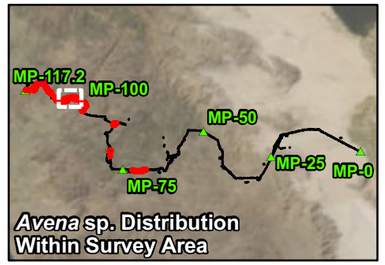
- Trace
- Low
- Med
- Dense

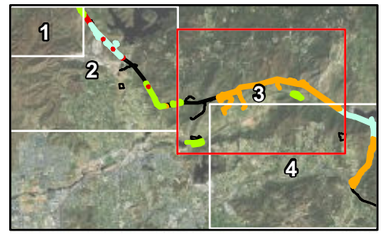
RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_AVE_sp.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Wild Oat (*Avena* spp.)

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Wild Oat Density (*Avena* spp.)**

- Trace
- Low
- Med
- Dense

MP-103
MP-104
MP-105
MP-102
MP-106
LAKE JENNINGS

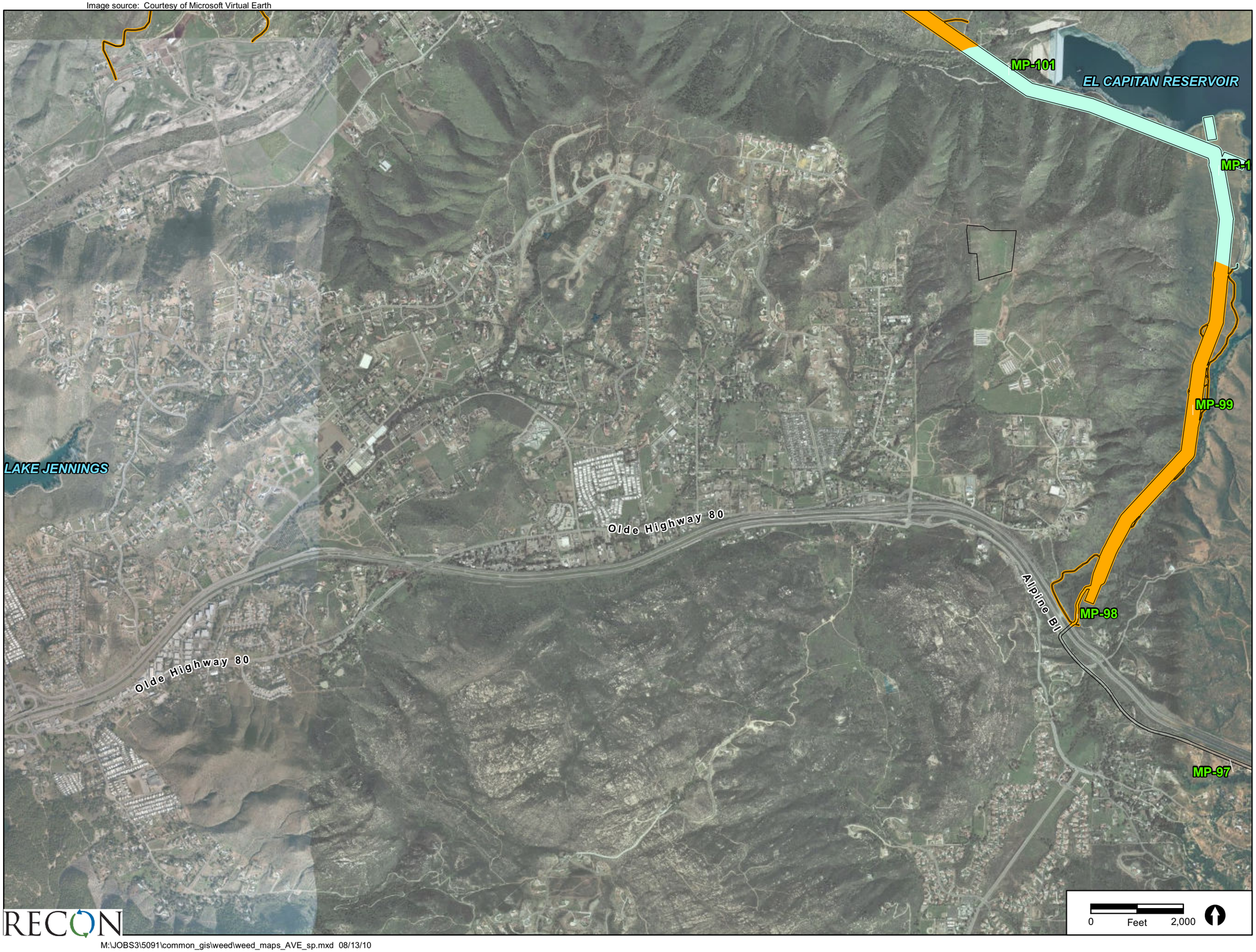
0 Feet 2,000

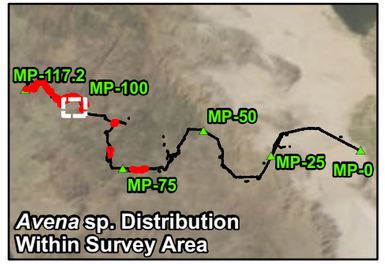
RECON

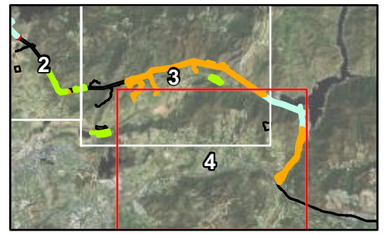
M:\JOBS3\5091\common_gis\weed\weed_maps_AVE_sp.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Wild Oat (*Avena* spp.)
Map3 of 8

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Wild Oat Density (*Avena* spp.)**

- Trace
- Low
- Med
- Dense

0 Feet 2,000

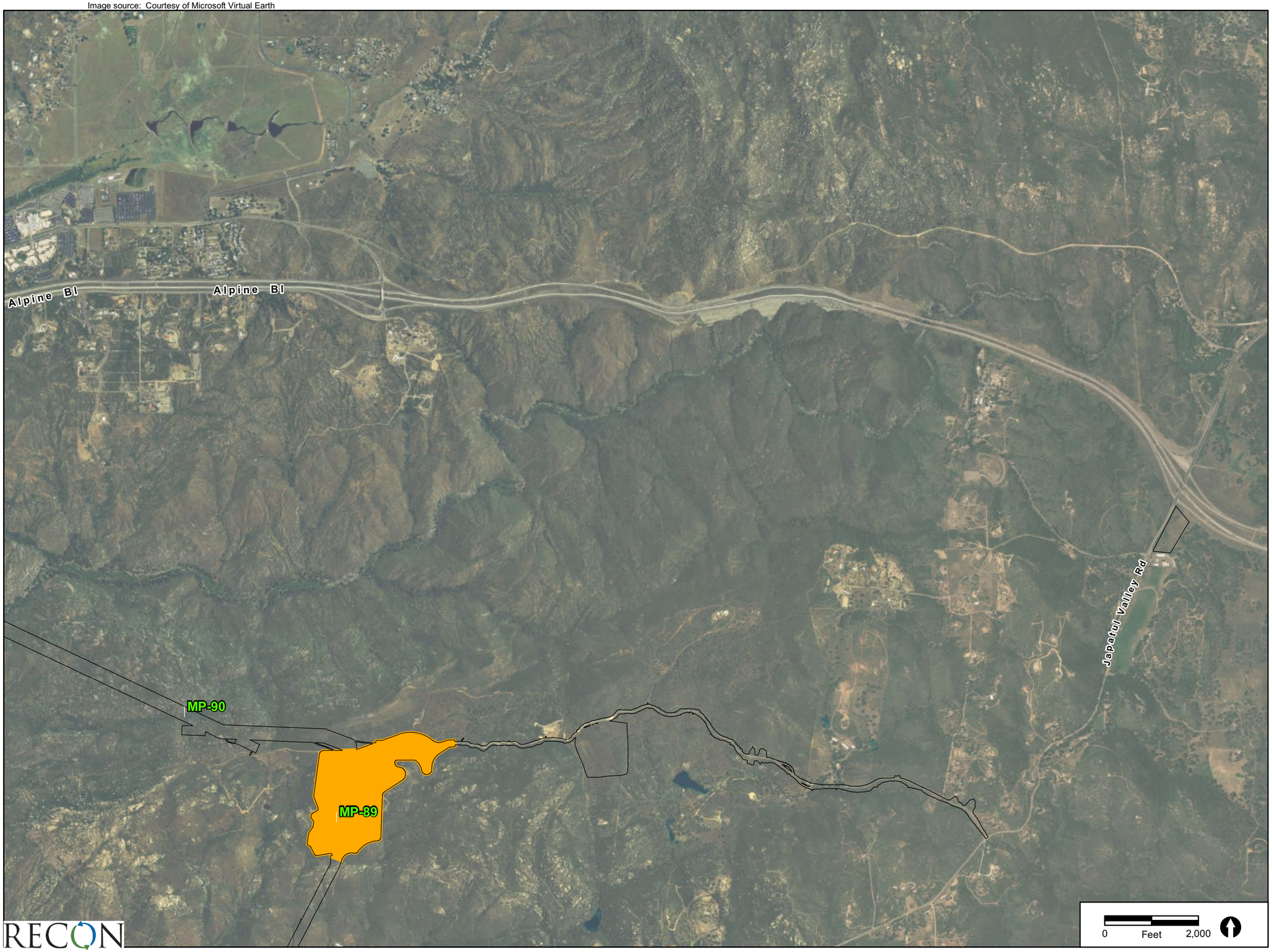
RECON

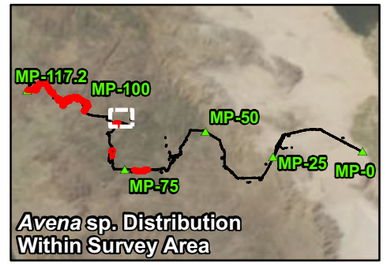
M:\JOBS3\5091\common_gis\weed\weed_maps_AVE_sp.mxd 08/13/10

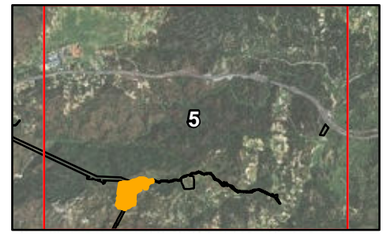
Sunrise Powerlink
Invasive Species Survey Results:
Wild Oat (*Avena* spp.)

Map4 of 8

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Wild Oat Density (*Avena* spp.)**

- Trace
- Low
- Med
- Dense

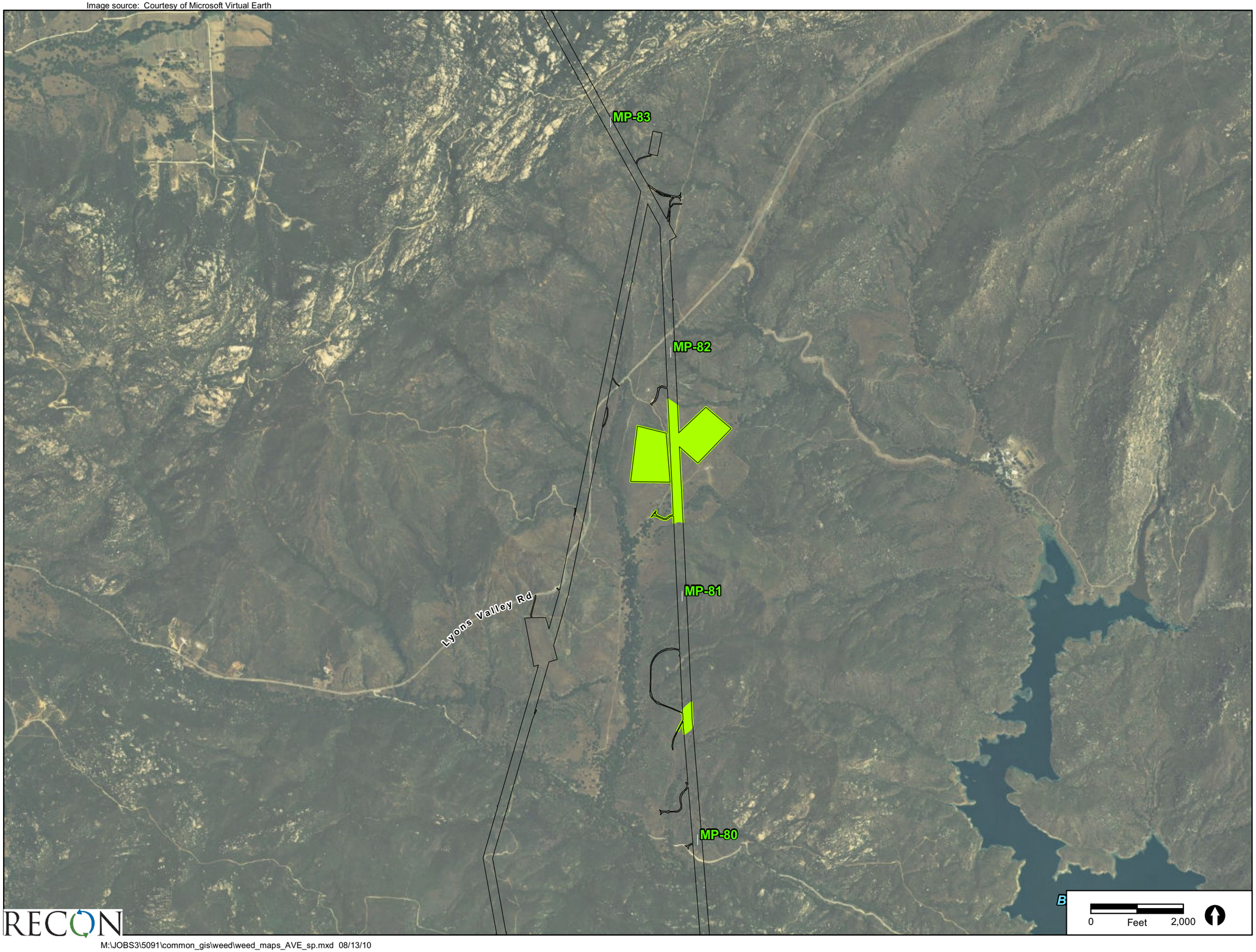
Sunrise Powerlink
Invasive Species Survey Results:
Wild Oat (*Avena* spp.)

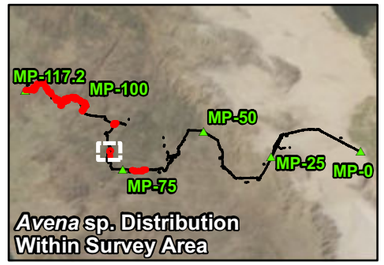
Map5 of 8

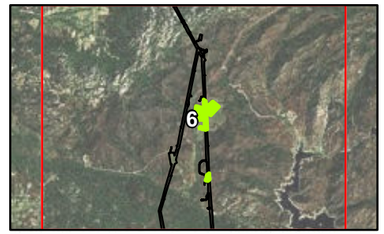
RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_AVE_sp.mxd 08/13/10

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Wild Oat Density (*Avena* spp.)**

- Trace
- Low
- Med
- Dense

0 Feet 2,000

RECON

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Sunrise Powerlink
Invasive Species Survey Results:
Wild Oat (*Avena* spp.)
Map6 of 8

Image source: Courtesy of Microsoft Virtual Earth

BARRETT LAKE

BARRETT LAKE

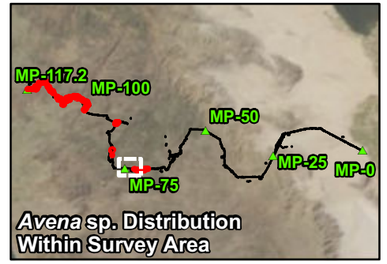
MP-76

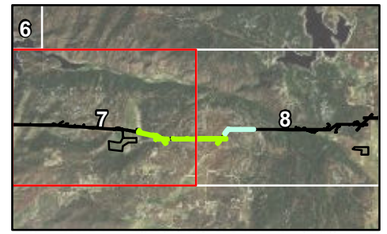
MP-75

MP-74

MP-73

MP-72




2009 Invasive Species Action Area

**Wild Oat Density (*Avena* spp.)**

- Trace
- Low
- Med
- Dense

0 Feet 2,000

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_AVE_sp.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:

# Wild Oat (*Avena* spp.)

Map7 of 8

Image source: Courtesy of Microsoft Virtual Earth

MORENA RESERVOIR

MP-71

MP-70

MP-69

MP-68

MP-67

MP-117.2

MP-100

MP-50

MP-25

MP-0

MP-75

*Avena* sp. Distribution Within Survey Area

6

7

8

2009 Invasive Species Action Area

**Wild Oat Density (*Avena* spp.)**

- Trace
- Low
- Med
- Dense

0 Feet 2,000

RECON

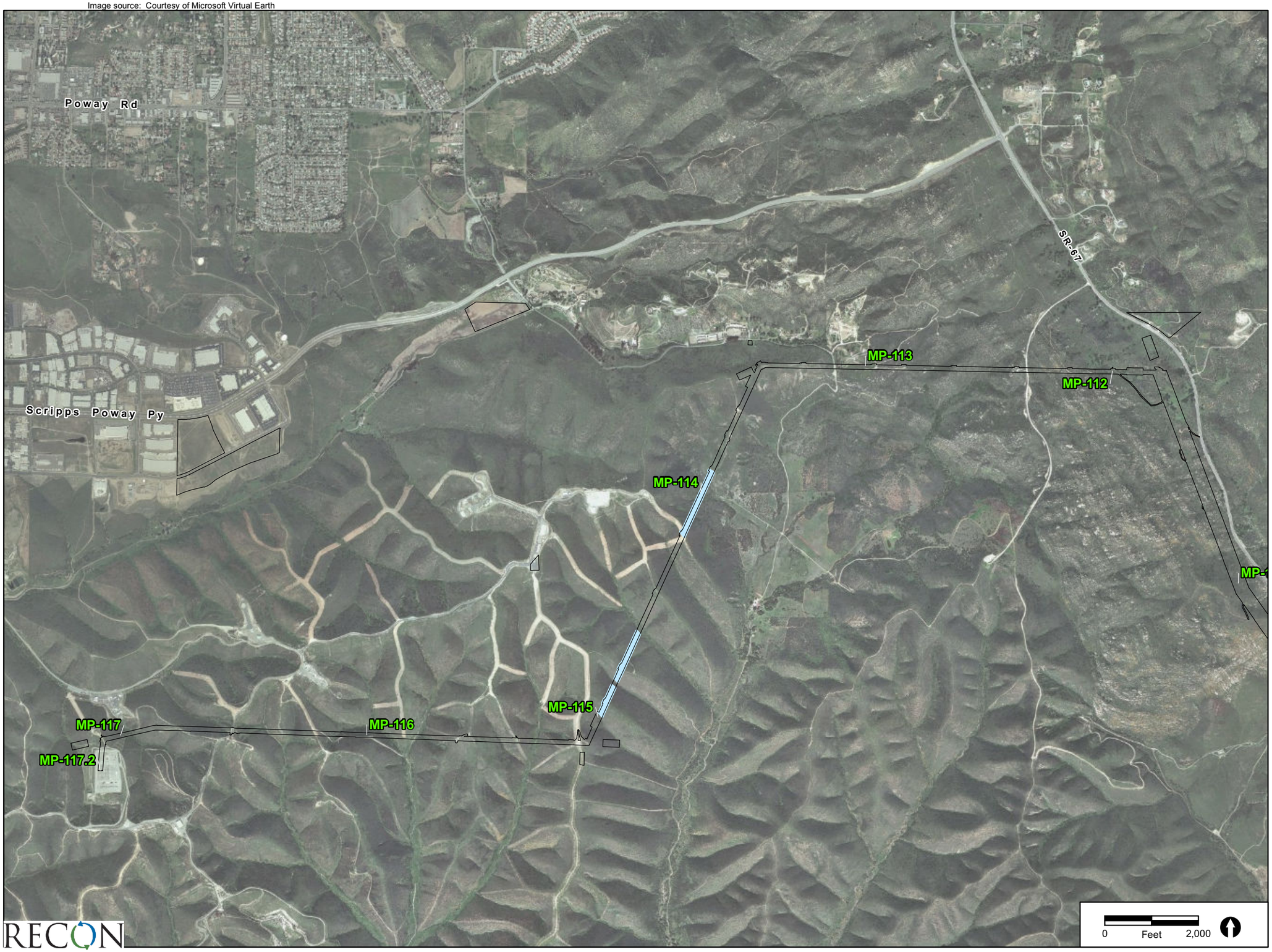
M:\JOBS3\5091\common_gis\weed\weed_maps_AVE_sp.mxd 08/13/10

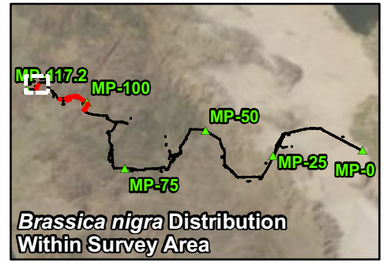
Sunrise Powerlink
Invasive Species Survey Results:

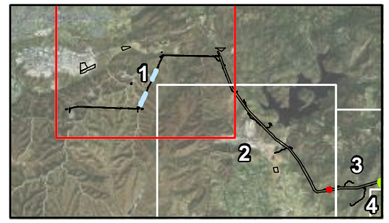
# Wild Oat (*Avena* spp.)

Map8 of 8

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Black Mustard Density (*Brassica nigra*)**

- Trace
- Low
- Dense

0 Feet 2,000

RECON

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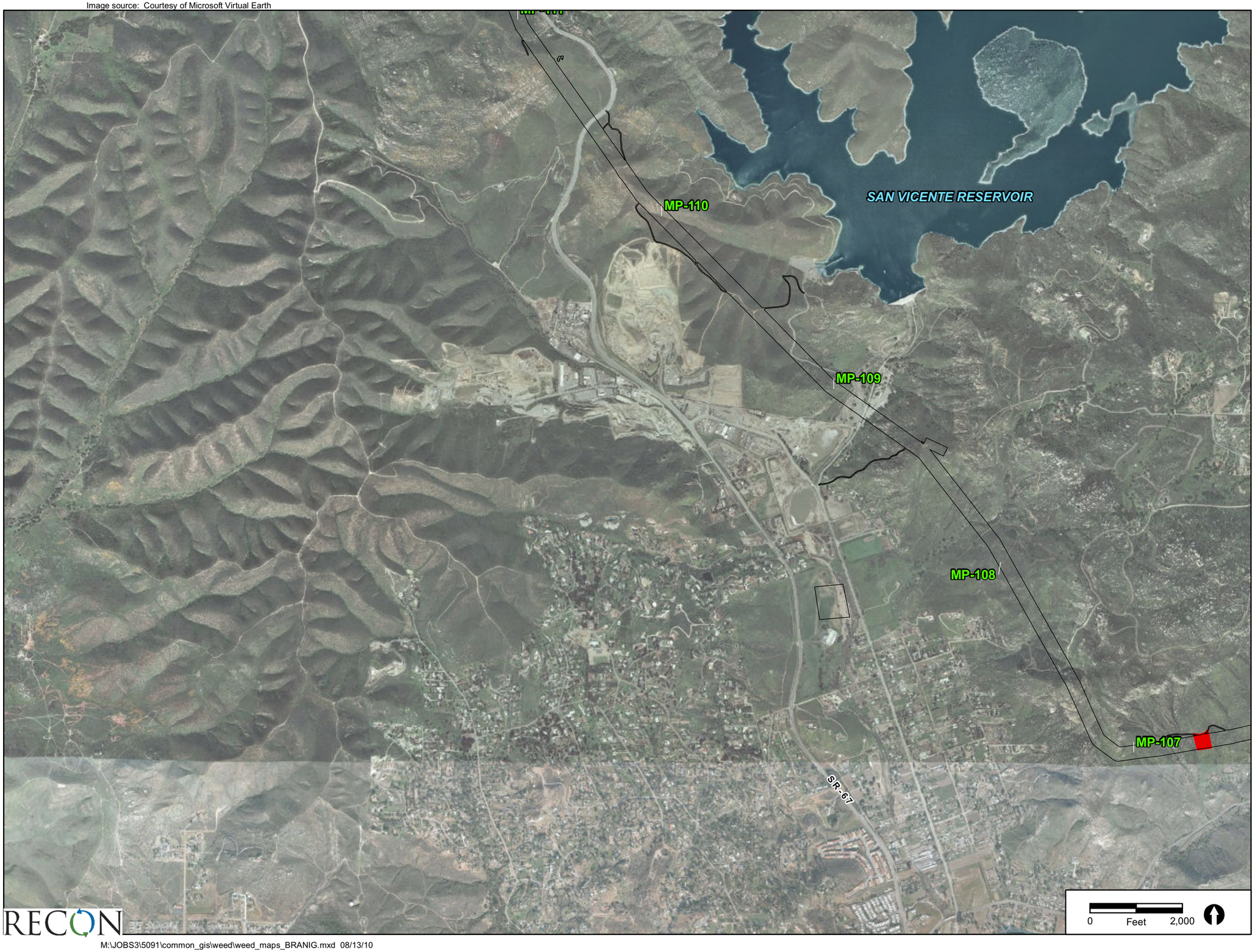
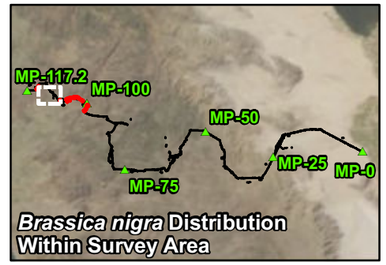
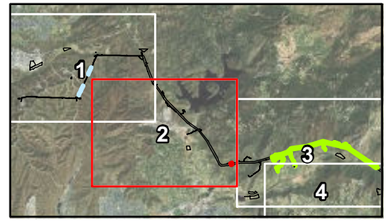
Sunrise Powerlink
Invasive Species Survey Results:
Black Mustard
(*Brassica nigra*)

Map 1 of 4

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Black Mustard Density (*Brassica nigra*)**

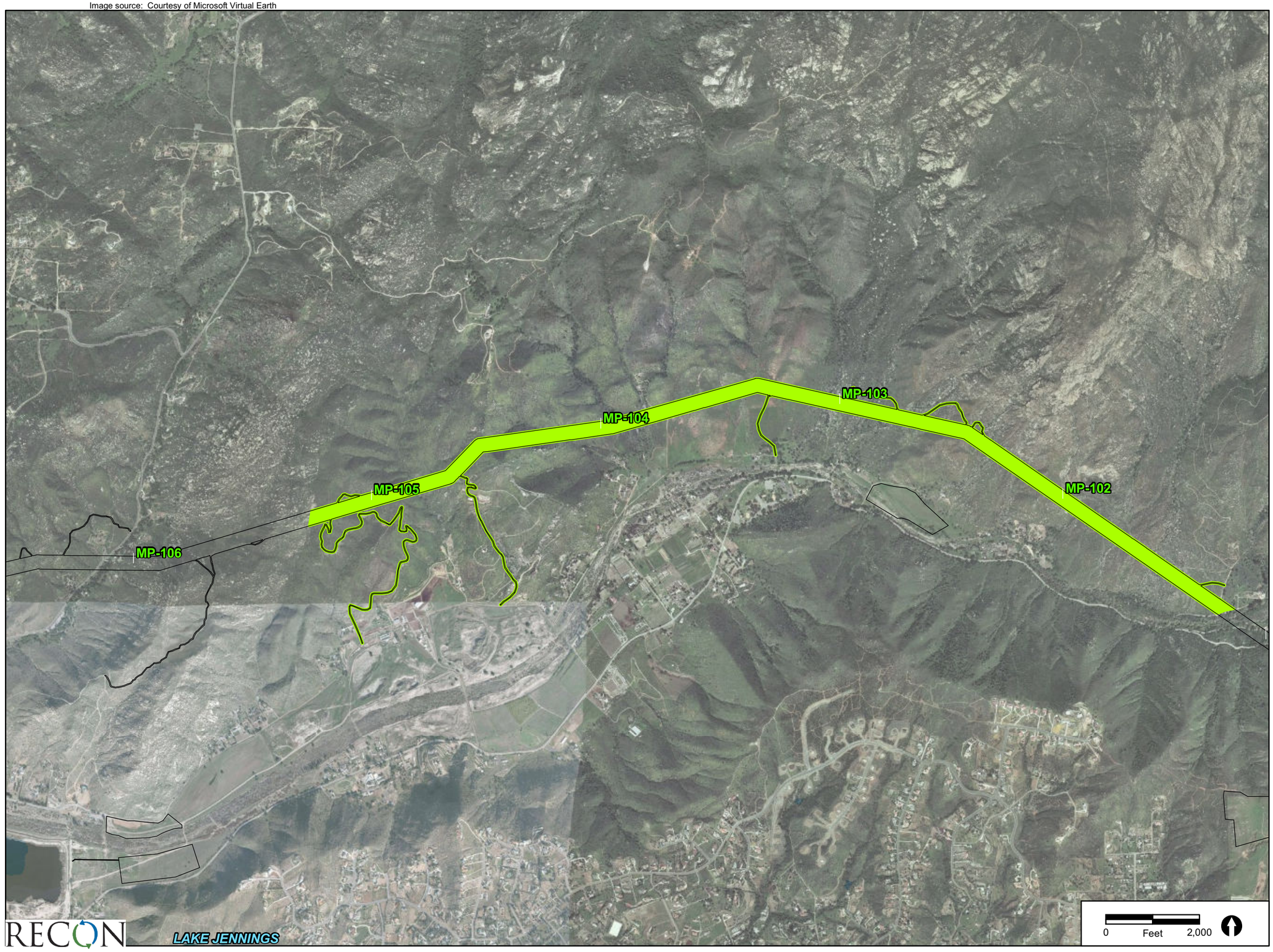
- Trace
- Low
- Dense

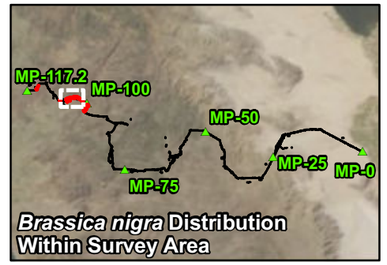
RECON

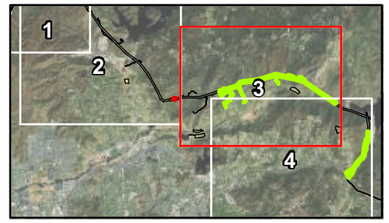
M:\JOBS3\5091\common_gis\weed\weed_maps_BRANIG.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Black Mustard
(*Brassica nigra*)

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Black Mustard Density (*Brassica nigra*)**

- Trace
- Low
- Dense

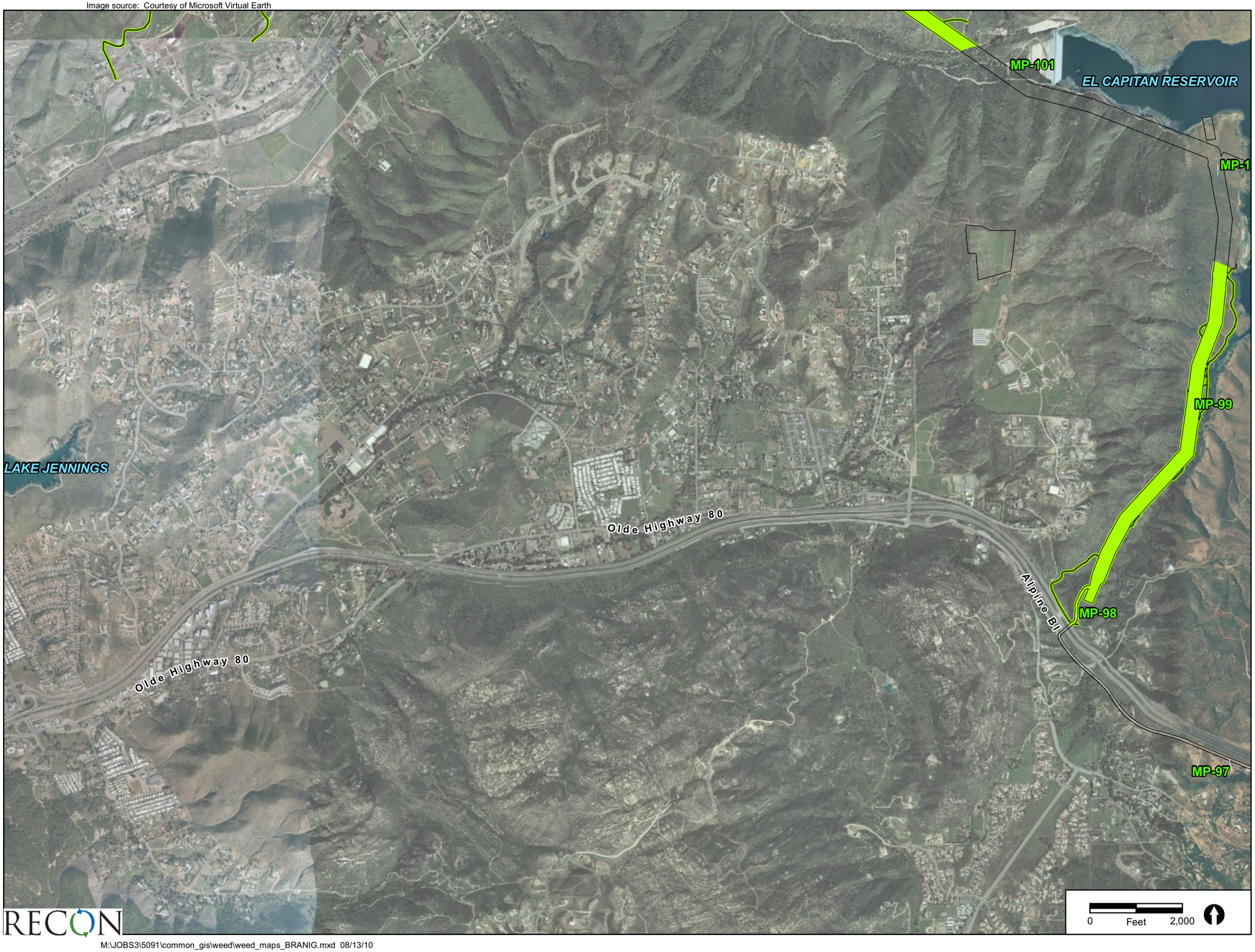
RECON

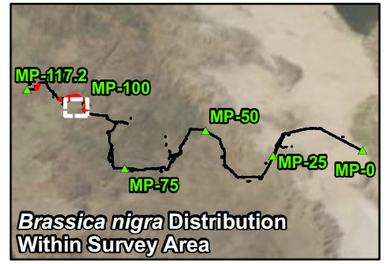
M:\JOBS3\5091\common_gis\weed\weed_maps_BRANIG.mxd 08/13/10

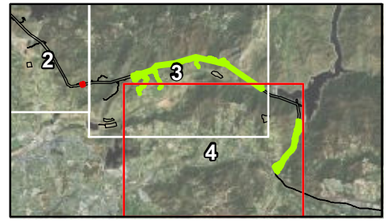
Sunrise Powerlink
Invasive Species Survey Results:
Black Mustard
(*Brassica nigra*)

Map3 of 4

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Black Mustard Density (*Brassica nigra*)**

- Trace
- Low
- Dense

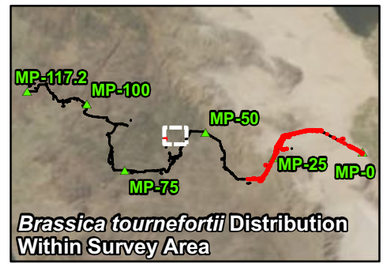
Sunrise Powerlink
Invasive Species Survey Results:
Black Mustard
(*Brassica nigra*)

Map4 of 4

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_BRANIG.mxd 08/13/10

Image source: Courtesy of Microsoft Virtual Earth



2009 Invasive Species Action Area

**Saharan Mustard Density (*Brassica tournefortii*)**

- Trace
- Low
- Medium

0 Feet 2,000

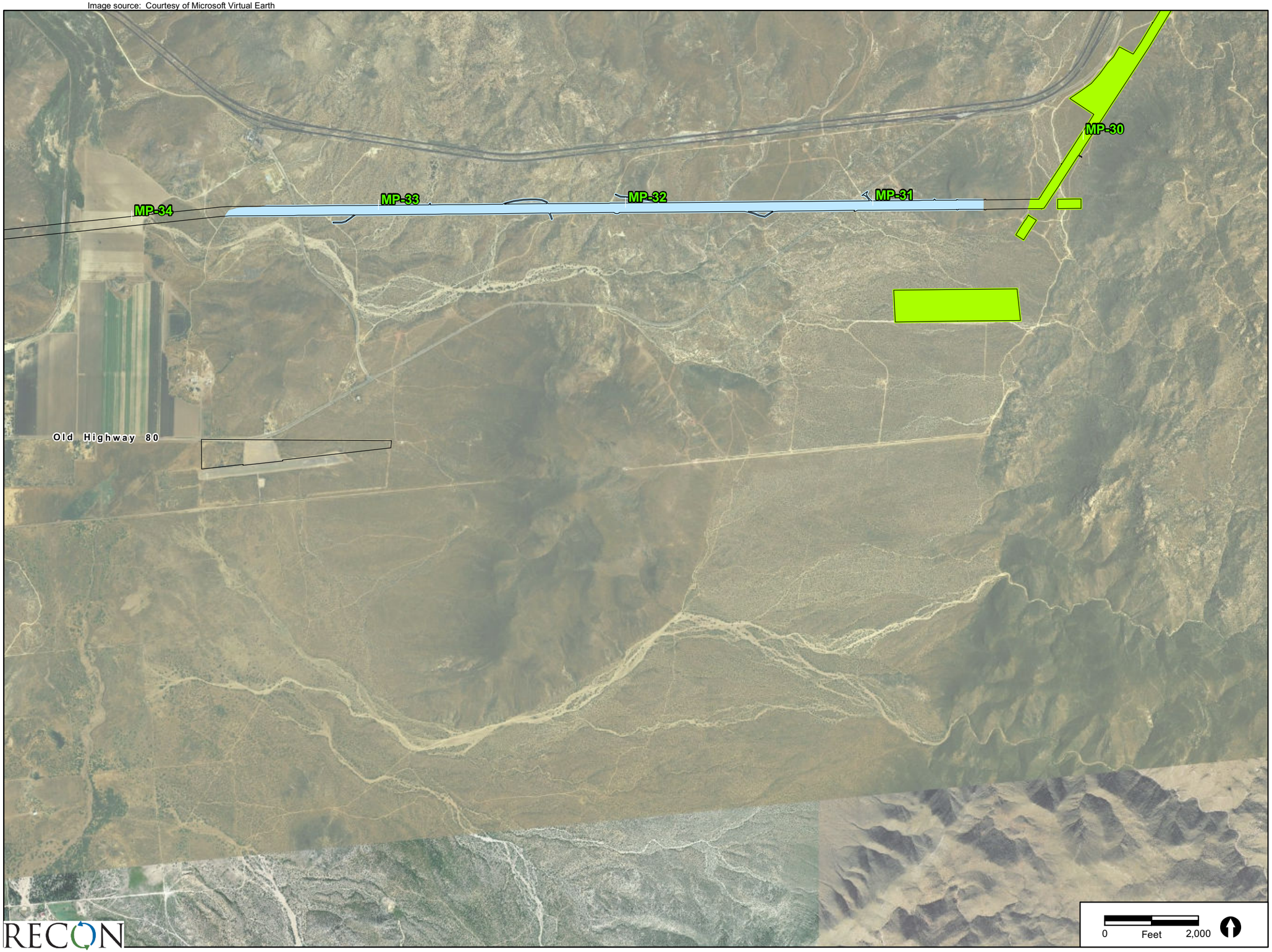
Sunrise Powerlink
Invasive Species Survey Results:
Saharan Mustard
(*Brassica tournefortii*)

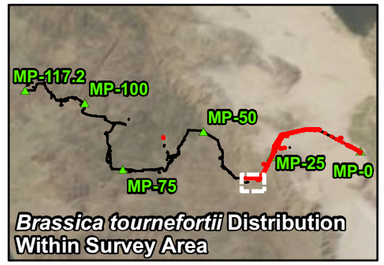
Map 1 of 8

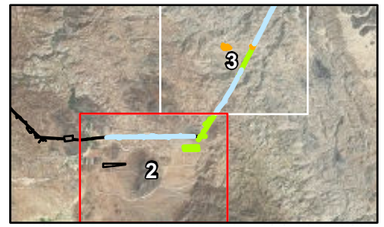
RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_BRATOU.mxd 08/13/10

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Saharan Mustard Density (*Brassica tournefortii*)**

- Trace
- Low
- Medium

0 Feet 2,000

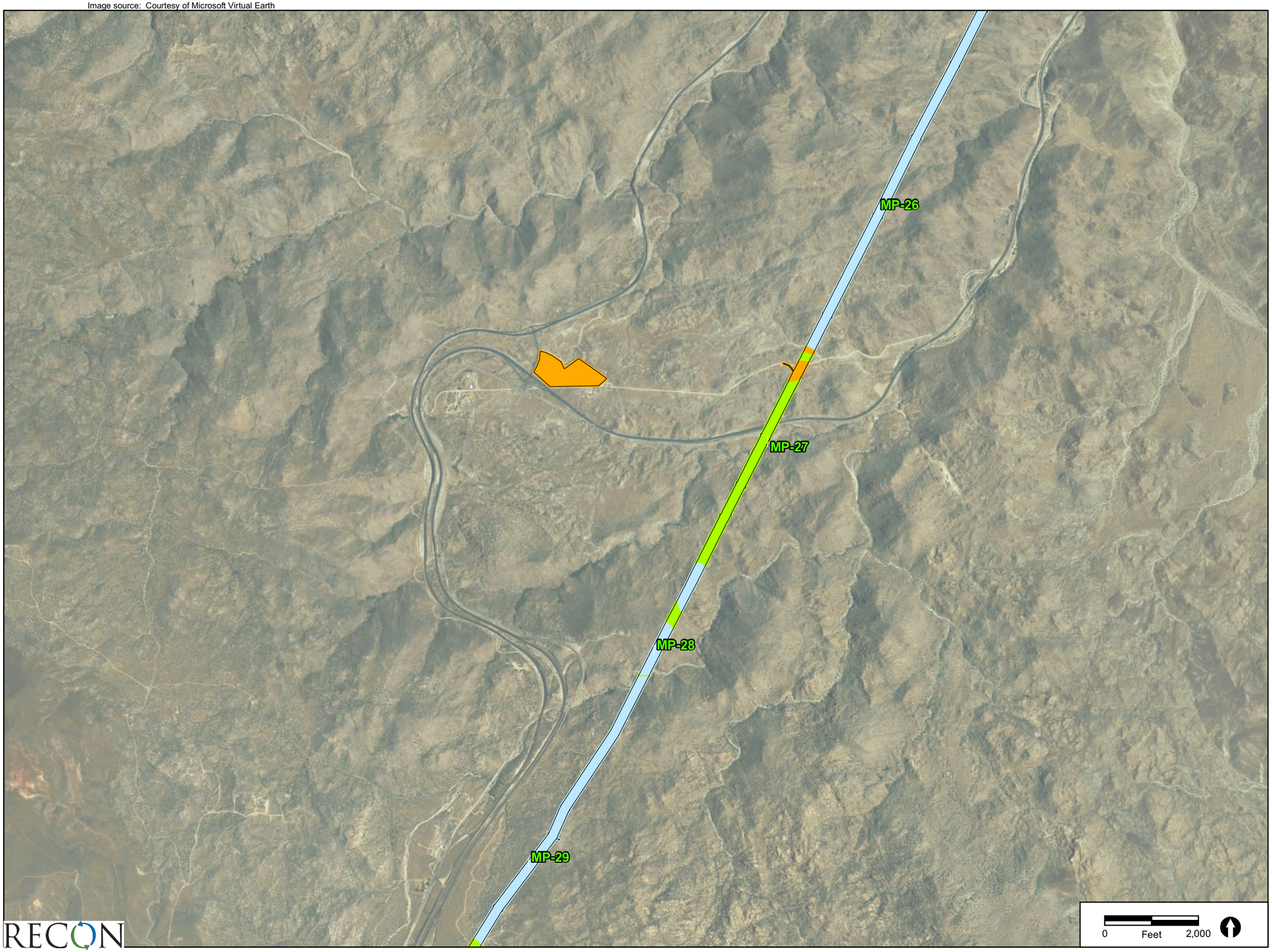
RECON

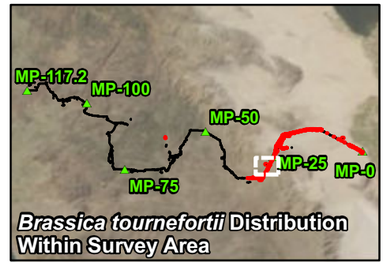
M:\JOBS3\5091\common_gis\weed\weed_maps_BRATOU.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Saharan Mustard
(*Brassica tournefortii*)

Map2 of 8

Image source: Courtesy of Microsoft Virtual Earth





2009 Invasive Species Action Area

**Saharan Mustard Density (*Brassica tournefortii*)**

- Trace
- Low
- Medium

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_BRATOU.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Saharan Mustard
(*Brassica tournefortii*)

Map3 of 8

Image source: Courtesy of Microsoft Virtual Earth

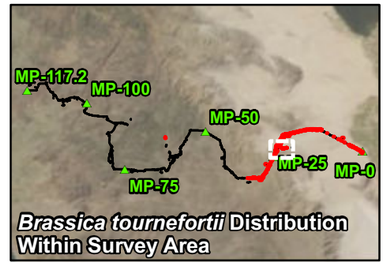
MP-21

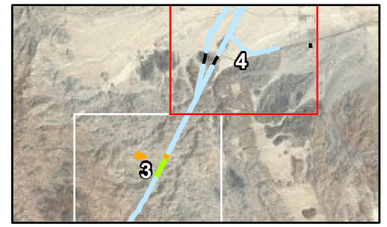
MP-22

MP-23

MP-24

MP-25




2009 Invasive Species Action Area

**Saharan Mustard Density (*Brassica tournefortii*)**

- Trace
- Low
- Medium

0 Feet 2,000

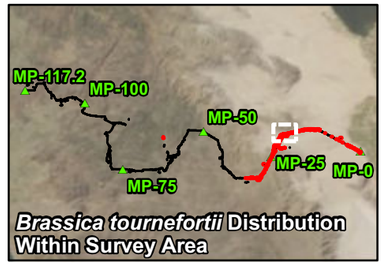
RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_BRATOU.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Saharan Mustard
(*Brassica tournefortii*)

Map4 of 8

Image source: Courtesy of Microsoft Virtual Earth





MP-17
MP-18
MP-19
MP-20

2009 Invasive Species Action Area

**Saharan Mustard Density (*Brassica tournefortii*)**

- Trace
- Low
- Medium

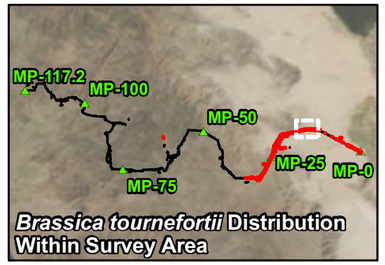
0 Feet 2,000

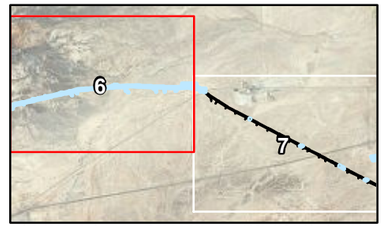
RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_BRATOU.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Saharan Mustard
(*Brassica tournefortii*)

Image source: Courtesy of Microsoft Virtual Earth




MP-13
MP-12
MP-11
MP-14
MP-15
MP-16

2009 Invasive Species Action Area

**Saharan Mustard Density (*Brassica tournefortii*)**

- Trace
- Low
- Medium

0 Feet 2,000

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_BRATOU.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Saharan Mustard
(*Brassica tournefortii*)

Map6 of 8

Image source: Courtesy of Microsoft Virtual Earth

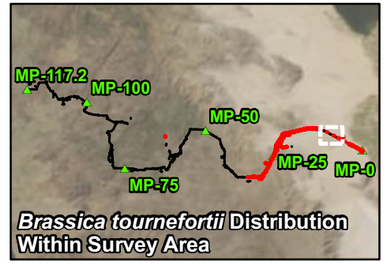
MP-10

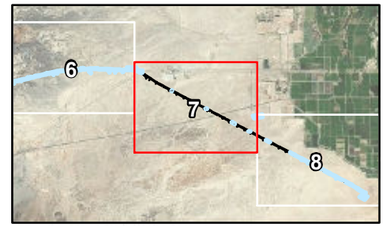
MP-9

MP-8

MP-7

MP-6




2009 Invasive Species Action Area

**Saharan Mustard Density (*Brassica tournefortii*)**

- Trace
- Low
- Medium

0 Feet 2,000

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_BRATOU.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Saharan Mustard
(*Brassica tournefortii*)

Map7 of 8

Image source: Courtesy of Microsoft Virtual Earth

MP-5

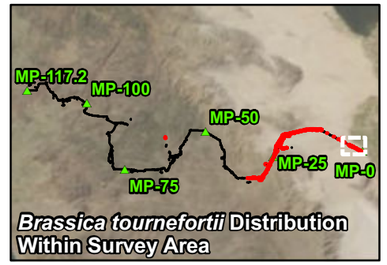
MP-4

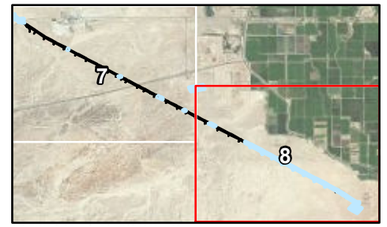
MP-3

MP-2

MP-1

MP-0




2009 Invasive Species Action Area

**Saharan Mustard Density (*Brassica tournefortii*)**

- Trace
- Low
- Medium

0 Feet 2,000

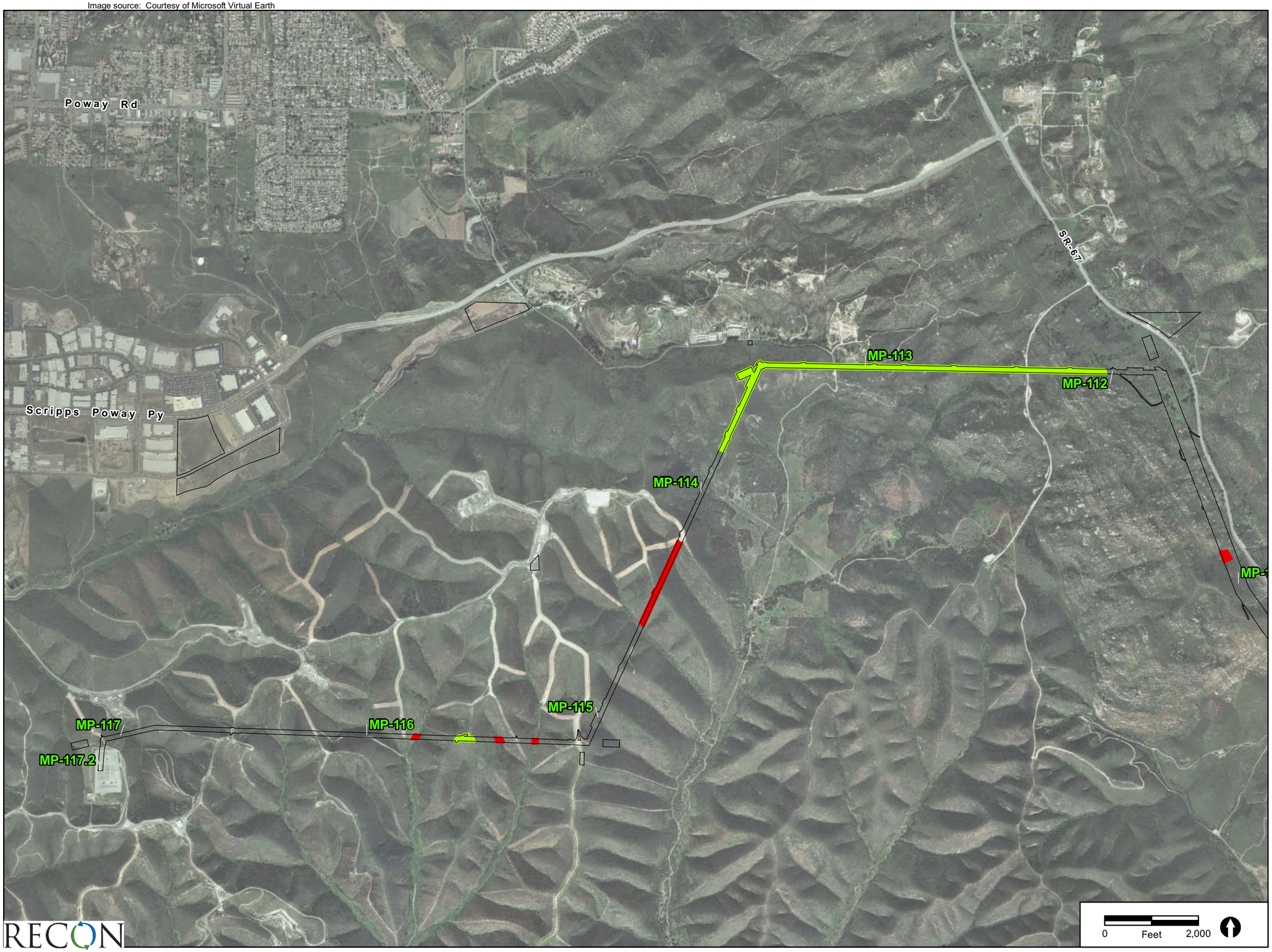
RECON

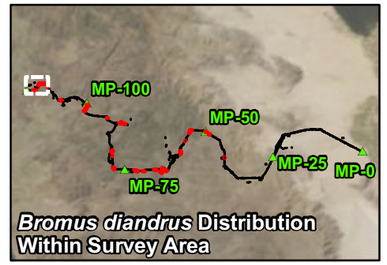
M:\JOBS3\5091\common_gis\weed\weed_maps_BRATOU.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Saharan Mustard
(*Brassica tournefortii*)

Map8 of 8

Image source: Courtesy of Microsoft Virtual Earth





2009 Invasive Species Action Area

**Ripgut Brome Density (*Bromus diandrus*)**

- Trace
- Low
- Medium
- Dense

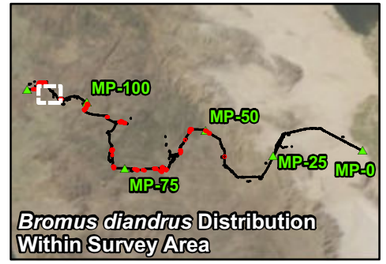
RECON

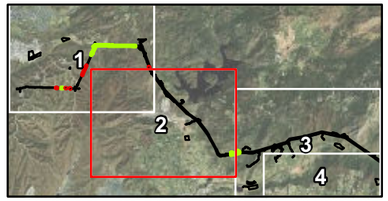
M:\JOBS3\5091\common_gis\weed\weed_maps_BRODIA.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Ripgut Brome
(*Bromus diandrus*)

Map 1 of 16

Image source: Courtesy of Microsoft Virtual Earth


2009 Invasive Species Action Area

**Ripgut Brome Density (*Bromus diandrus*)**

- Trace
- Low
- Medium
- Dense

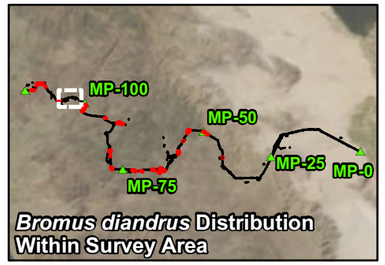
RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_BRODIA.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Ripgut Brome
(*Bromus diandrus*)

Map2 of 16

Image source: Courtesy of Microsoft Virtual Earth





MP-103
MP-104
MP-105
MP-102
MP-106
LAKE JENNINGS

2009 Invasive Species Action Area

**Ripgut Brome Density (*Bromus diandrus*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_BRODIA.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Ripgut Brome
(*Bromus diandrus*)

Map3 of 16

Image source: Courtesy of Microsoft Virtual Earth

MP-101

EL CAPITAN RESERVOIR

MP-1

MP-99

LAKE JENNINGS

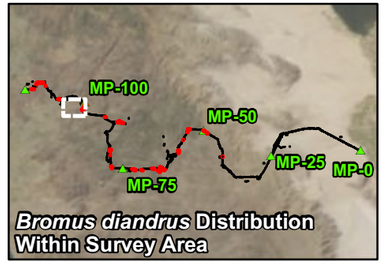
Olde Highway 80

Olde Highway 80

Alpine Bl

MP-98

MP-97





2009 Invasive Species Action Area

**Ripgut Brome Density (*Bromus diandrus*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

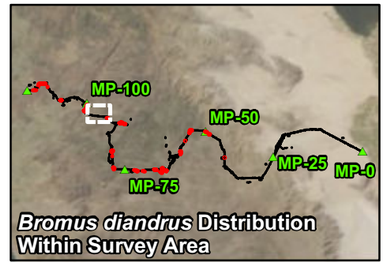
RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_BRODIA.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Ripgut Brome
(*Bromus diandrus*)

Map4 of 16

Image source: Courtesy of Microsoft Virtual Earth



2009 Invasive Species Action Area

**Ripgut Brome Density (*Bromus diandrus*)**

- Trace
- Low
- Medium
- Dense

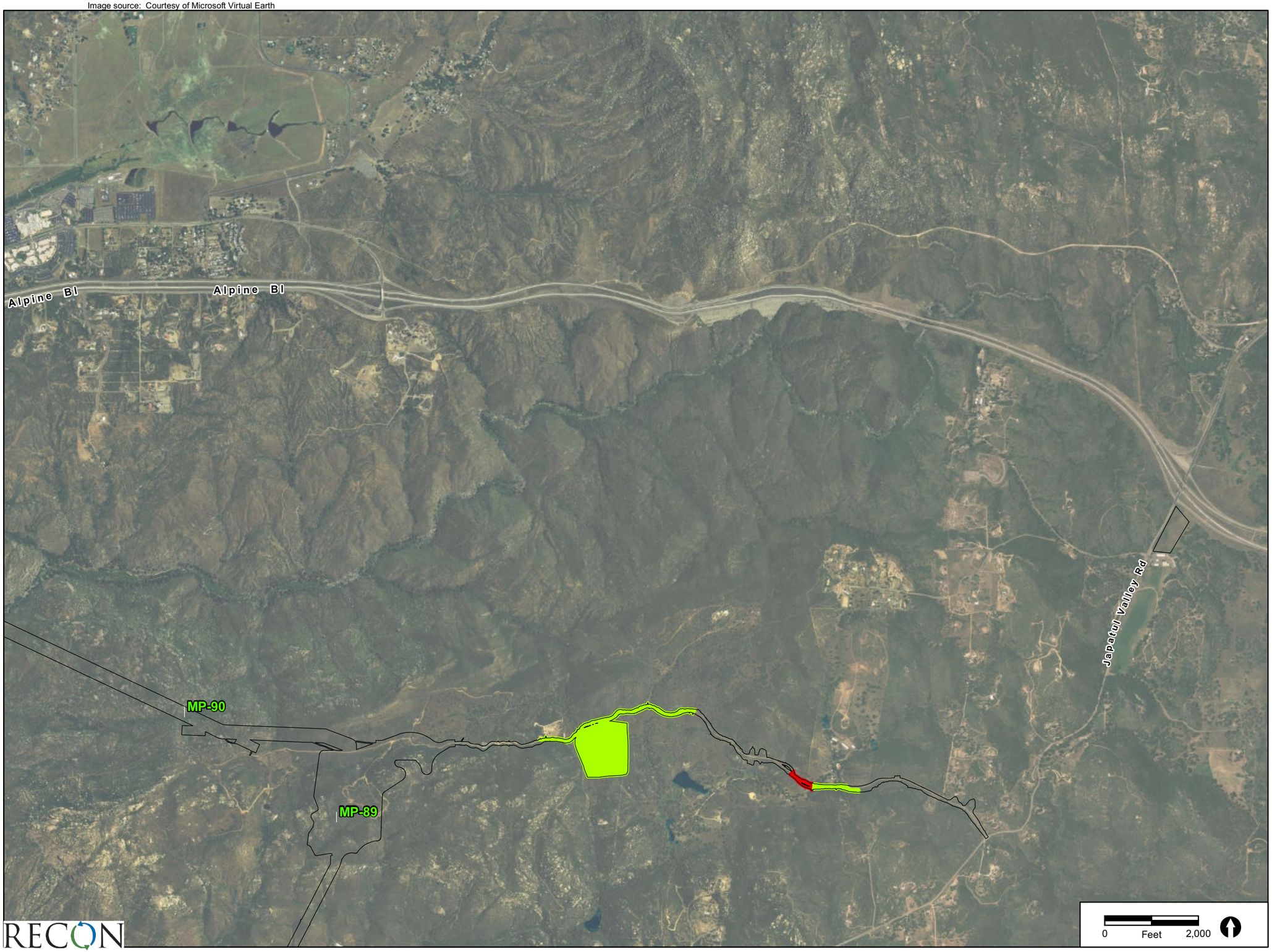
Sunrise Powerlink
Invasive Species Survey Results:
Ripgut Brome
(*Bromus diandrus*)

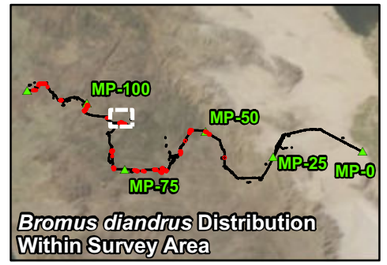
Map5 of 16

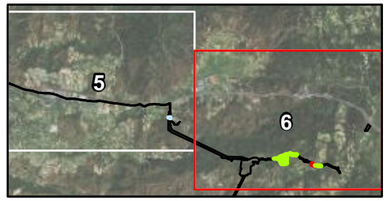
RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_BRODIA.mxd 08/13/10

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Ripgut Brome Density (*Bromus diandrus*)**

- Trace
- Low
- Medium
- Dense

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_BRODIA.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Ripgut Brome
(*Bromus diandrus*)

Map6 of 16

Image source: Courtesy of Microsoft Virtual Earth

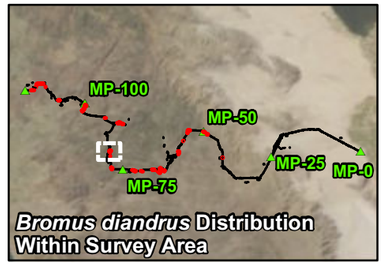
MP-83

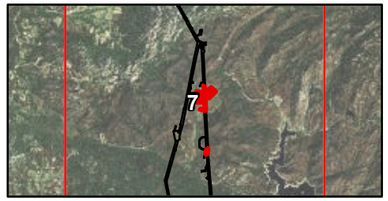
MP-82

MP-81

MP-80

Lyons Valley Rd




2009 Invasive Species Action Area

**Ripgut Brome Density (*Bromus diandrus*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

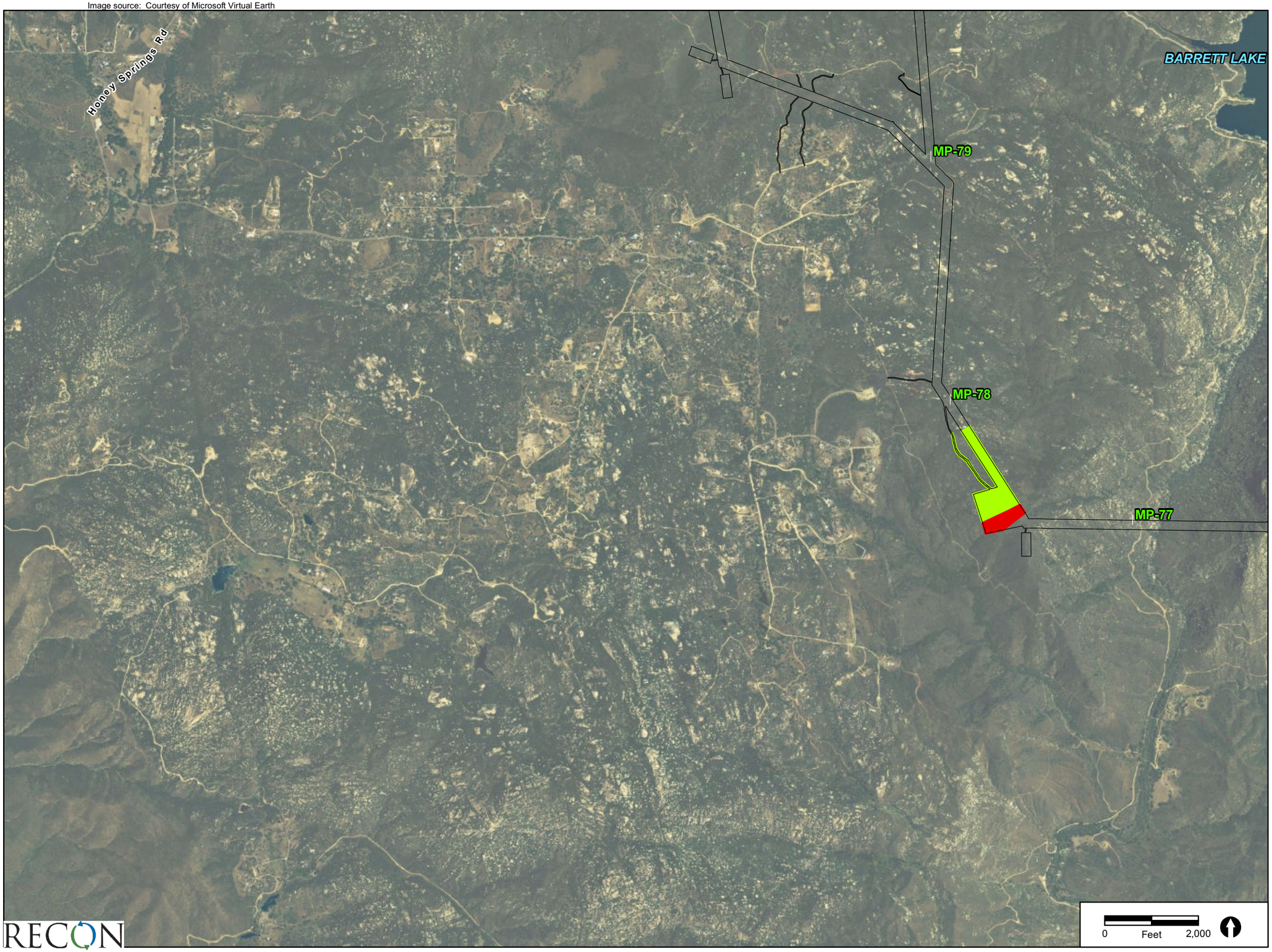
RECON

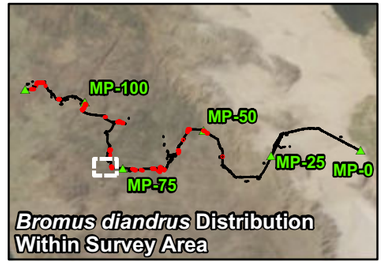
M:\JOBS3\5091\common_gis\weed\weed_maps_BRODIA.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Ripgut Brome
(*Bromus diandrus*)

Map7 of 16

Image source: Courtesy of Microsoft Virtual Earth





2009 Invasive Species Action Area

**Ripgut Brome Density (*Bromus diandrus*)**

- Trace
- Low
- Medium
- Dense

Sunrise Powerlink
Invasive Species Survey Results:
Ripgut Brome
(*Bromus diandrus*)

Map8 of 16

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_BRODIA.mxd 08/13/10

Image source: Courtesy of Microsoft Virtual Earth

BARRETT LAKE

BARRETT LAKE

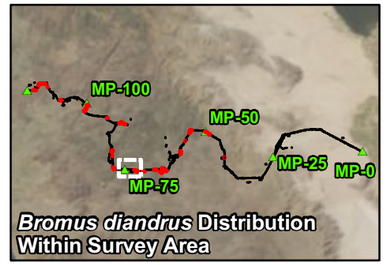
MP-76

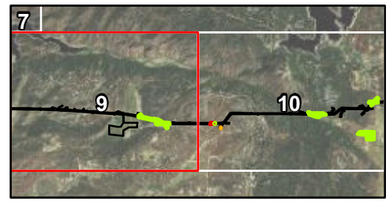
MP-75

MP-74

MP-73

MP-72




2009 Invasive Species Action Area

**Ripgut Brome Density (*Bromus diandrus*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

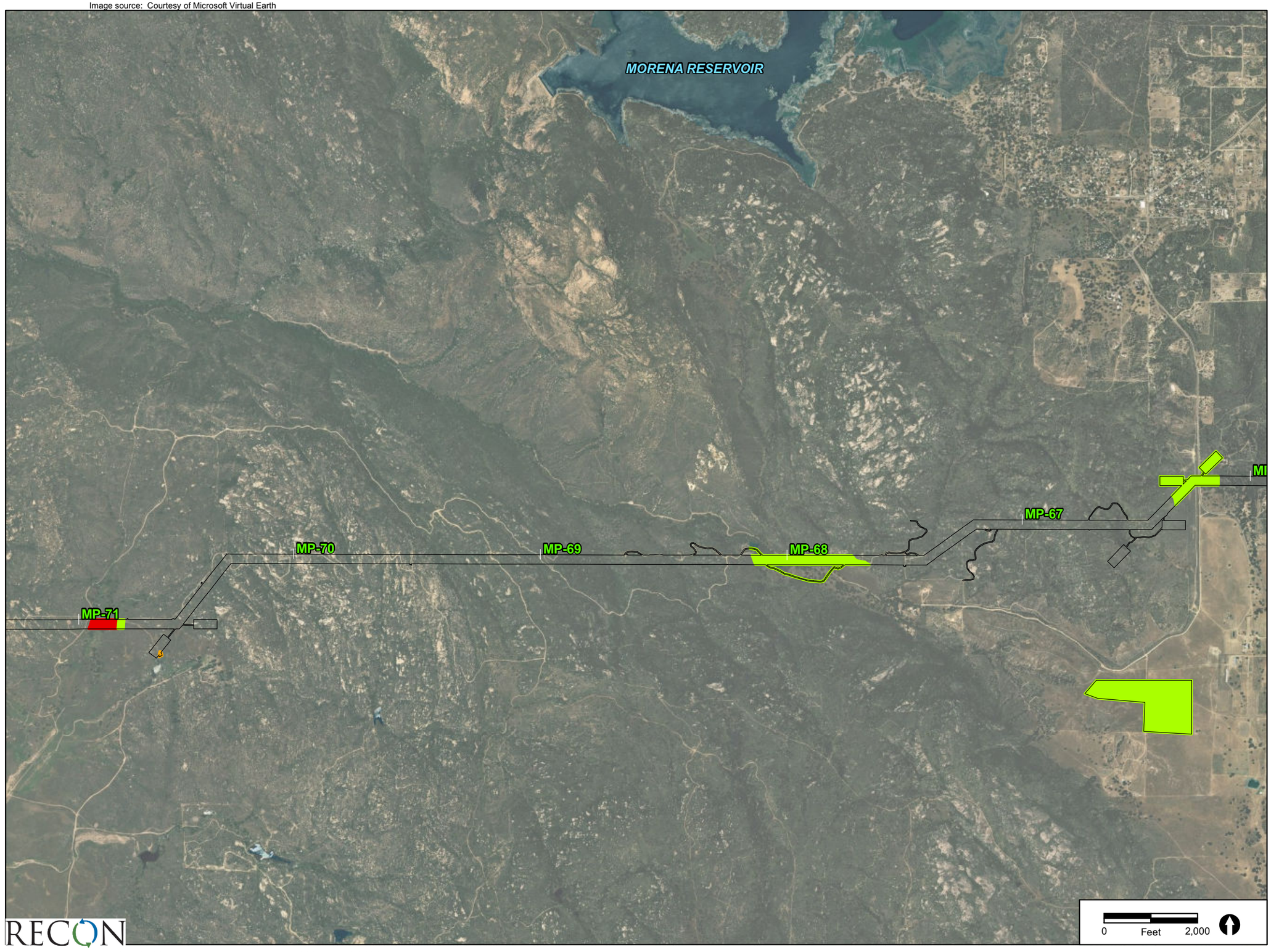
RECON

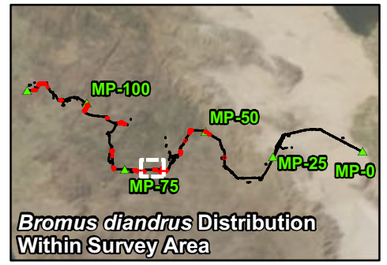
M:\JOBS3\5091\common_gis\weed\weed_maps_BRODIA.mxd 08/13/10

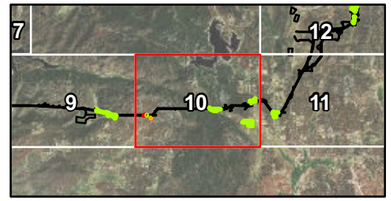
Sunrise Powerlink
Invasive Species Survey Results:
Ripgut Brome
(*Bromus diandrus*)

Map9 of 16

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Ripgut Brome Density (*Bromus diandrus*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

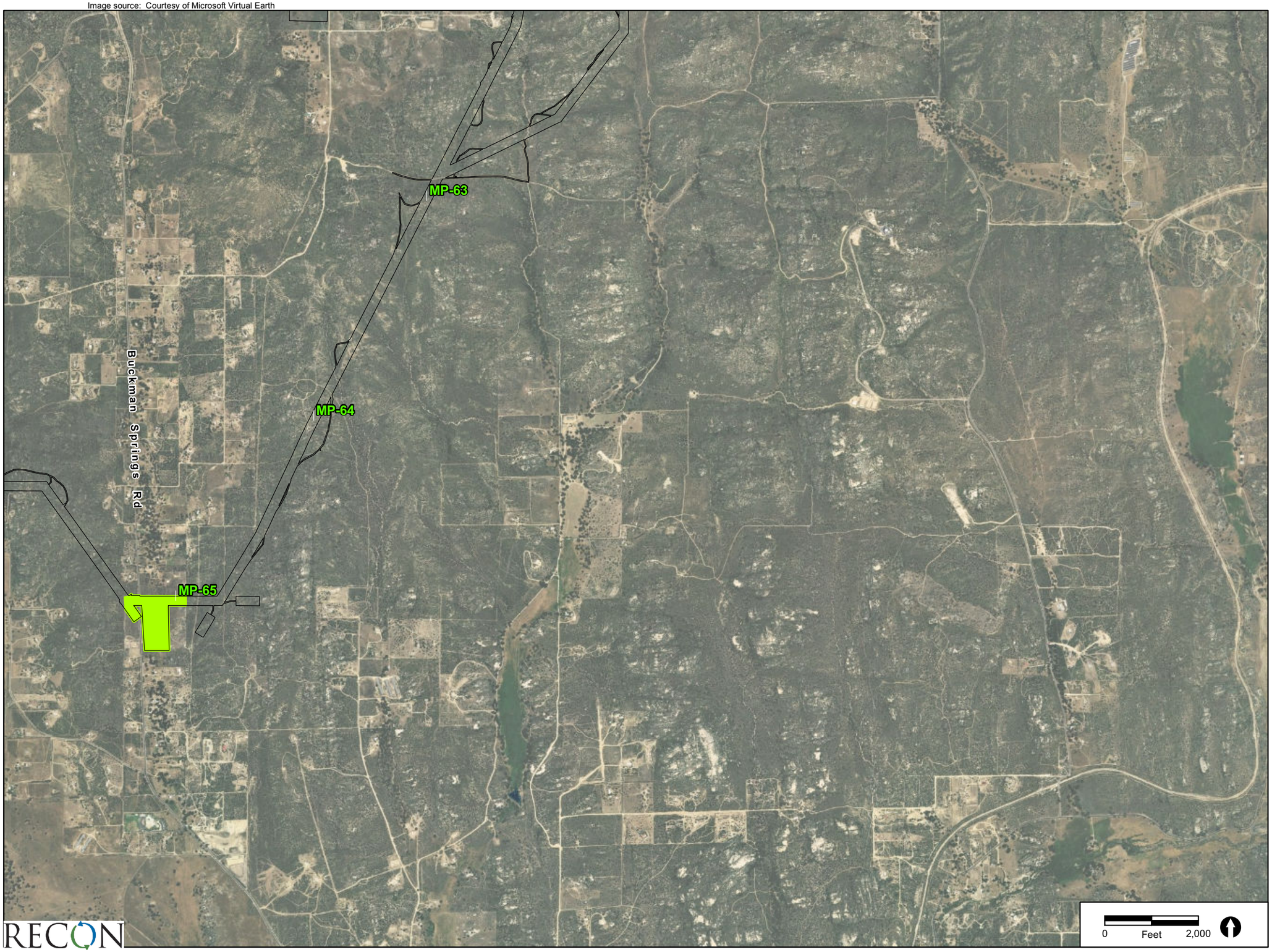
RECON

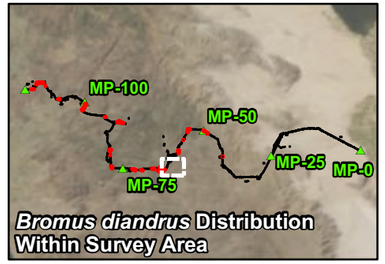
M:\JOBS3\5091\common_gis\weed\weed_maps_BRODIA.mxd 08/13/10

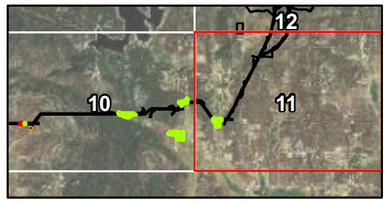
Sunrise Powerlink
Invasive Species Survey Results:
Ripgut Brome
(*Bromus diandrus*)

Map 10 of 16

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Ripgut Brome Density (*Bromus diandrus*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

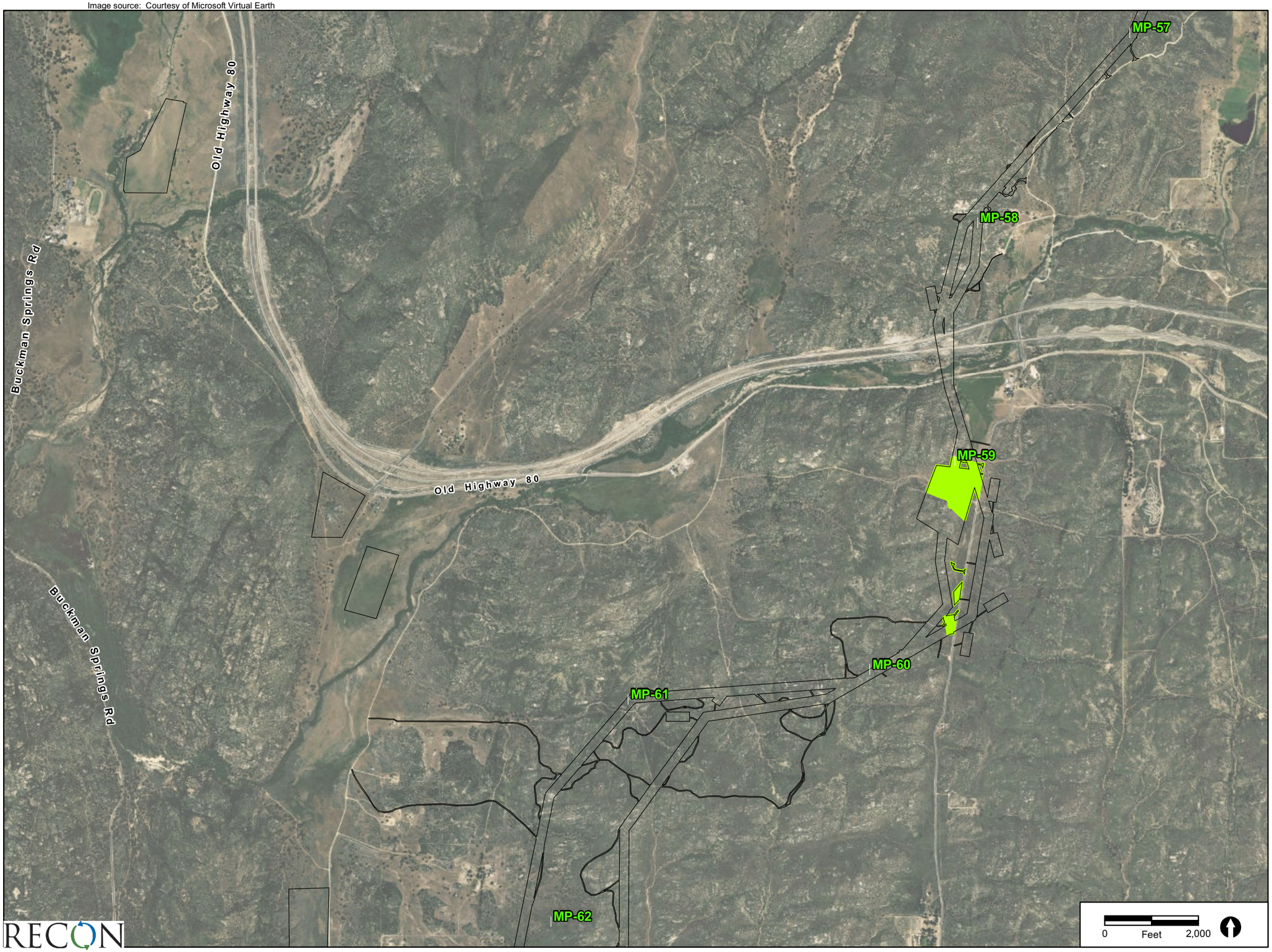
RECON

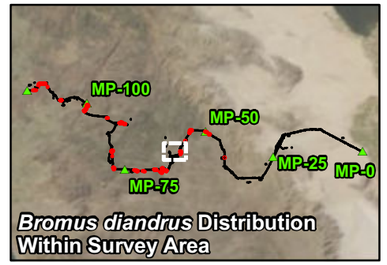
M:\JOBS3\5091\common_gis\weed\weed_maps_BRODIA.mxd 08/13/10

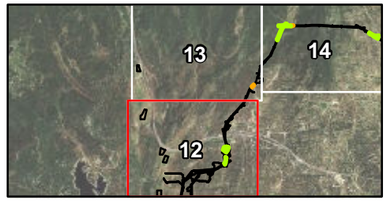
Sunrise Powerlink
Invasive Species Survey Results:
Ripgut Brome
(*Bromus diandrus*)

Map 11 of 16

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Ripgut Brome Density (*Bromus diandrus*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

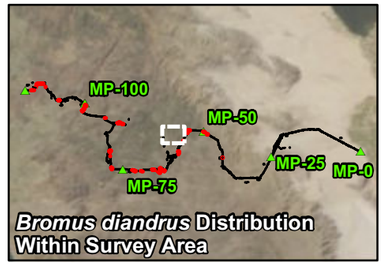
RECON

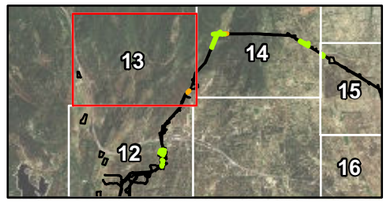
M:\JOBS3\5091\common_gis\weed\weed_maps_BRODIA.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Ripgut Brome
(*Bromus diandrus*)

Map 12 of 16

Image source: Courtesy of Microsoft Virtual Earth

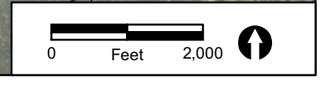



2009 Invasive Species Action Area

**Ripgut Brome Density (*Bromus diandrus*)**

- Trace
- Low
- Medium
- Dense




Old Highway 80

Hickman Springs Rd

MP-56

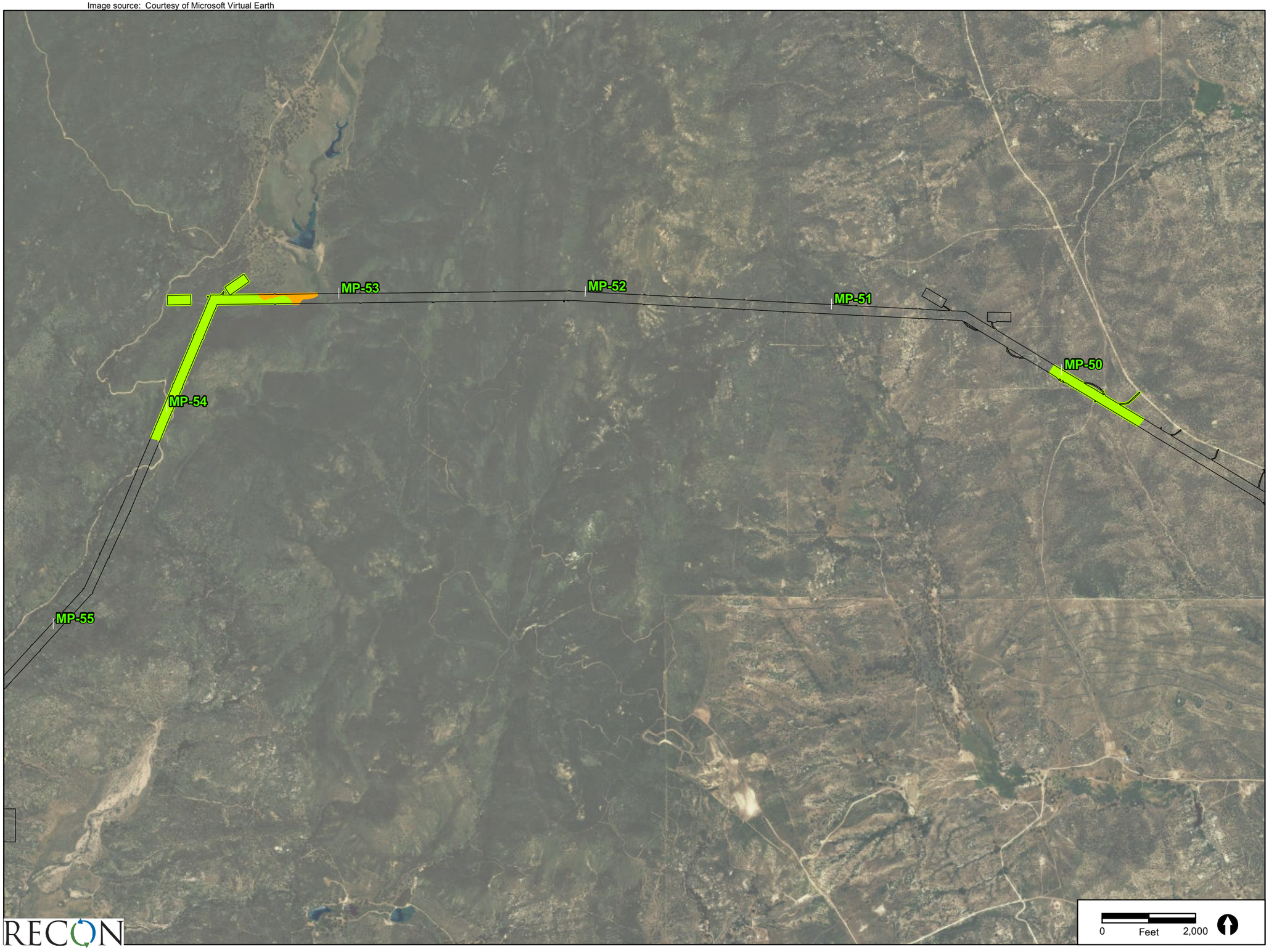
RECON

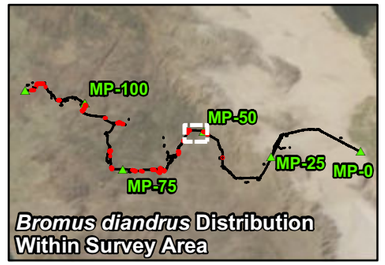
M:\JOBS3\5091\common_gis\weed\weed_maps_BRODIA.mxd 08/13/10

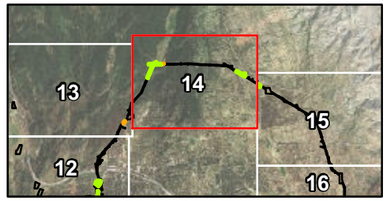
Sunrise Powerlink
Invasive Species Survey Results:
Ripgut Brome
(*Bromus diandrus*)

Map 13 of 16

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Ripgut Brome Density (*Bromus diandrus*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_BRODIA.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Ripgut Brome
(*Bromus diandrus*)

Map 14 of 16

Image source: Courtesy of Microsoft Virtual Earth

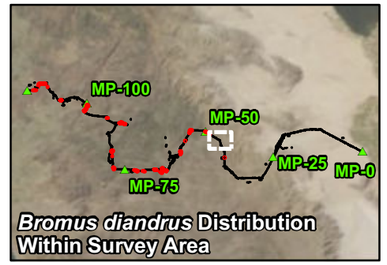
MP-49

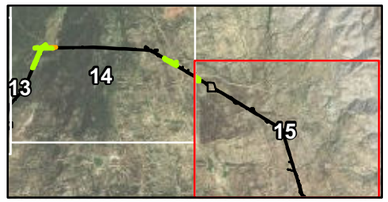
MP-48

MP-47

MP-46

MP-45




2009 Invasive Species Action Area

**Ripgut Brome Density (*Bromus diandrus*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_BRODIA.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Ripgut Brome
(*Bromus diandrus*)

Map 15 of 16

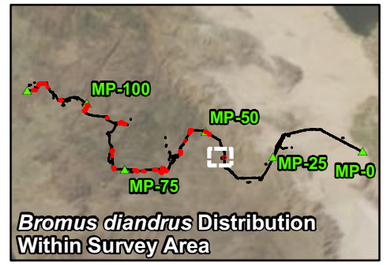
Image source: Courtesy of Microsoft Virtual Earth

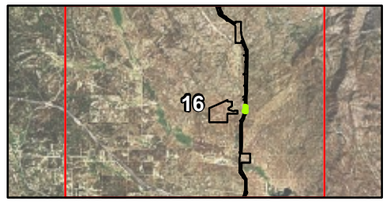
MP-44

MP-43

MP-42

MP-41




2009 Invasive Species Action Area

**Ripgut Brome Density (*Bromus diandrus*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

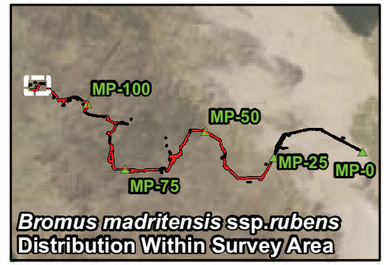
RECON

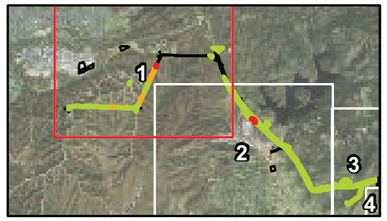
M:\JOBS3\5091\common_gis\weed\weed_maps_BRODIA.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Ripgut Brome
(*Bromus diandrus*)

Map 16 of 16

Image source: Courtesy of Microsoft Virtual Earth


2009 Invasive Species Action Area

**Foxtail Chess Density (*Bromus madritensis* ssp.*rubens*)**

**BROMAD**

- Trace
- Low
- Medium
- Dense

RECON

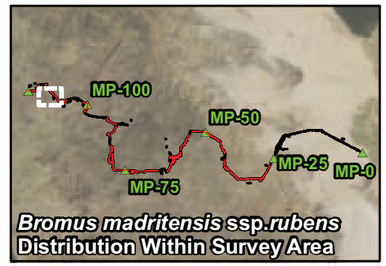
M:\JOBS3\5091\common_gis\weed\weed_maps_BROMAD.mxd 08/13/10

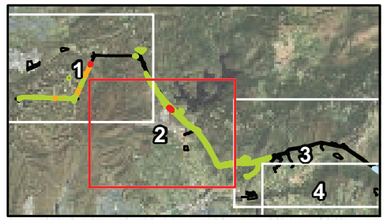
Sunrise Powerlink
Invasive Species Survey Results:

# Foxtail Chess (*Bromus madritensis* ssp.*rubens*)

Map 1 of 20

Image source: Courtesy of Microsoft Virtual Earth


2009 Invasive Species Action Area

**Foxtail Chess Density (*Bromus madritensis* ssp.*rubens*)**

**BROMAD**

- Trace
- Low
- Medium
- Dense

RECON

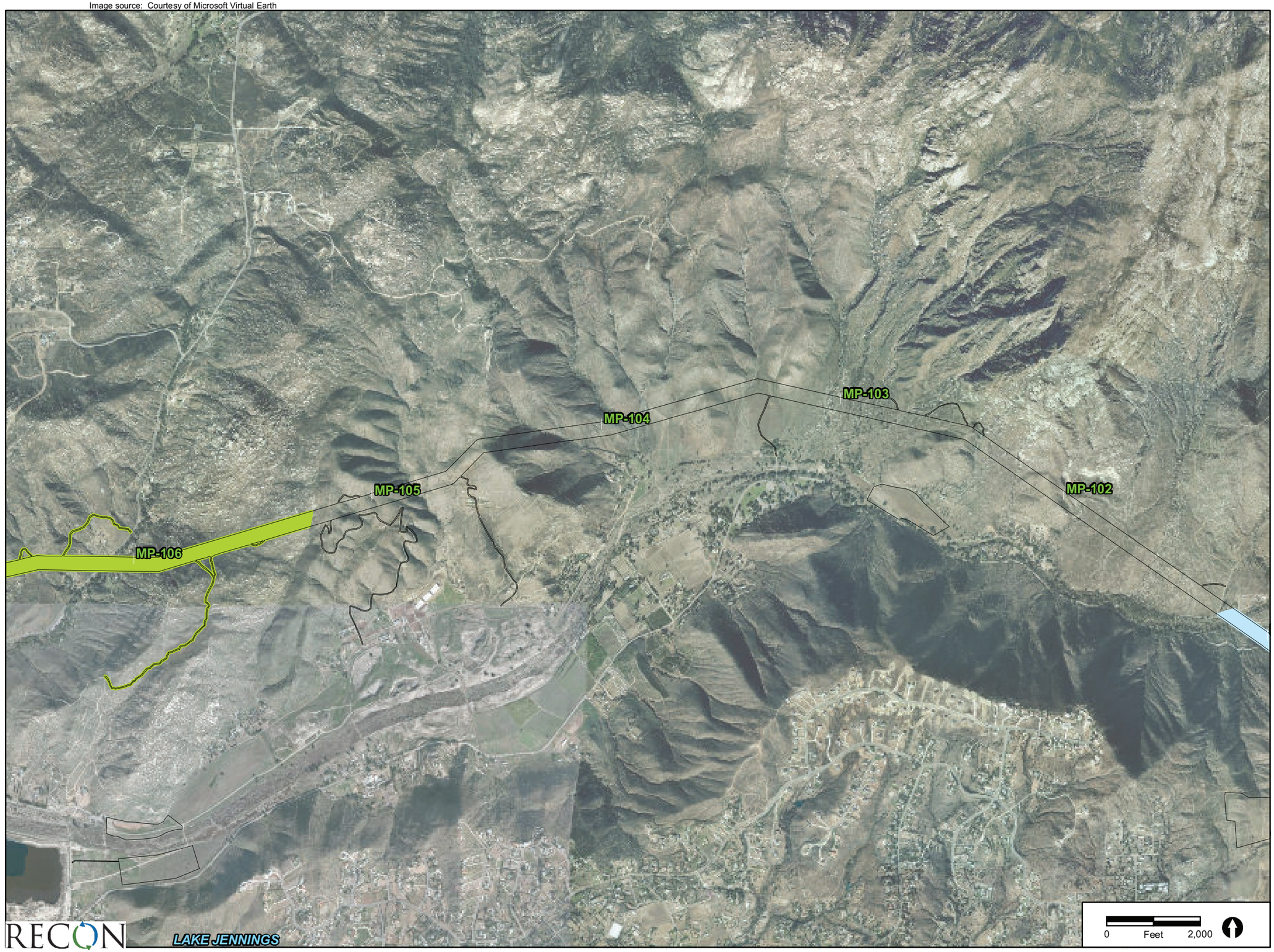
M:\JOBS3\5091\common_gis\weed\weed_maps_BROMAD.mxd 08/13/10

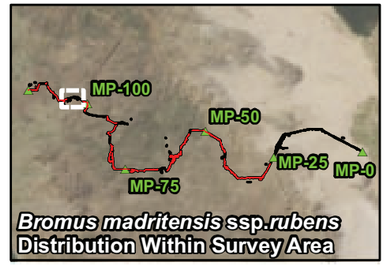
Sunrise Powerlink
Invasive Species Survey Results:

# Foxtail Chess (*Bromus madritensis* ssp.*rubens*)

Map 2 of 20

Image source: Courtesy of Microsoft Virtual Earth





2009 Invasive Species Action Area

**Foxtail Chess Density (*Bromus madritensis* ssp.*rubens*)**

**BROMAD**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

RECON

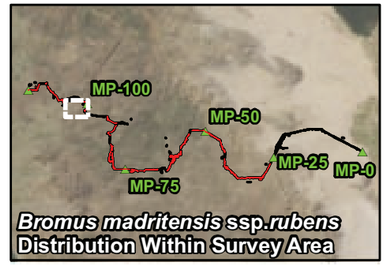
M:\JOBS3\5091\common_gis\weed\weed_maps_BROMAD.mxd 08/13/10

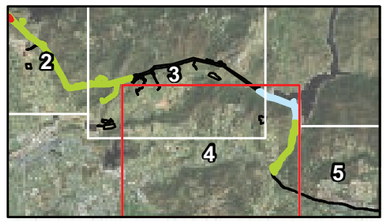
Sunrise Powerlink
Invasive Species Survey Results:

# Foxtail Chess (*Bromus madritensis* ssp.*rubens*)

Map 3 of 20

Image source: Courtesy of Microsoft Virtual Earth


2009 Invasive Species Action Area

**Foxtail Chess Density (*Bromus madritensis* ssp.*rubens*)**

**BROMAD**

- Trace
- Low
- Medium
- Dense

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_BROMAD.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:

Foxtail Chess
(*Bromus madritensis* ssp.*rubens*)

Map 4 of 20

Image source: Courtesy of Microsoft Virtual Earth

EL CAPITAN RESERVOIR

MP-96

MP-95

MP-94

MP-93

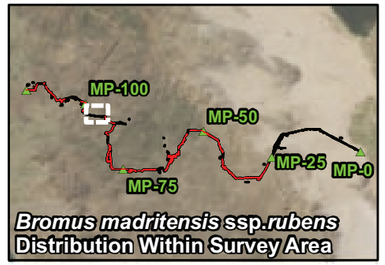
MP-92

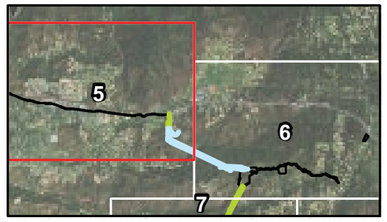
MP-91

Alpine Bl

POND 37A

Tavern Rd




2009 Invasive Species Action Area

**Foxtail Chess Density (*Bromus madritensis* ssp.*rubens*)**

**BROMAD**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

RECON

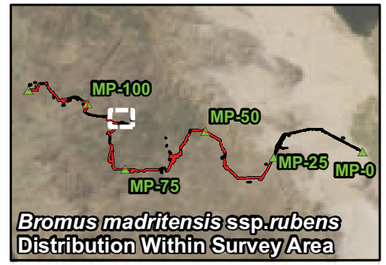
M:\JOBS3\5091\common_gis\weed\weed_maps_BROMAD.mxd 08/13/10

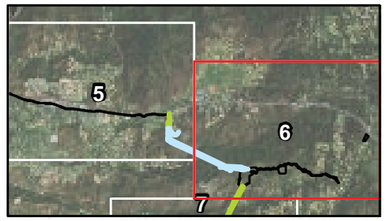
Sunrise Powerlink
Invasive Species Survey Results:

# Foxtail Chess (*Bromus madritensis* ssp.*rubens*)

Map 5 of 20

Image source: Courtesy of Microsoft Virtual Earth


2009 Invasive Species Action Area

**Foxtail Chess Density (*Bromus madritensis* ssp.*rubens*)**

**BROMAD**

- Trace
- Low
- Medium
- Dense

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_BROMAD.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:

# Foxtail Chess (*Bromus madritensis* ssp.*rubens*)

Map 6 of 20

Image source: Courtesy of Microsoft Virtual Earth

LOVELAND RESERVOIR

MP-88

MP-87

MP-86

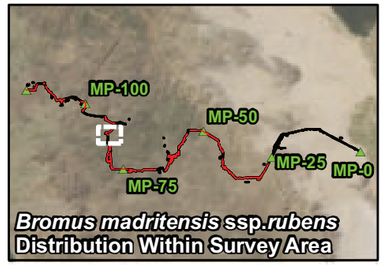
MP-85

MP-84

Japatul Rd

Japatul Valley Rd

Lyons Valley Rd





2009 Invasive Species Action Area

**Foxtail Chess Density (*Bromus madritensis* ssp.*rubens*)**

**BROMAD**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

RECON

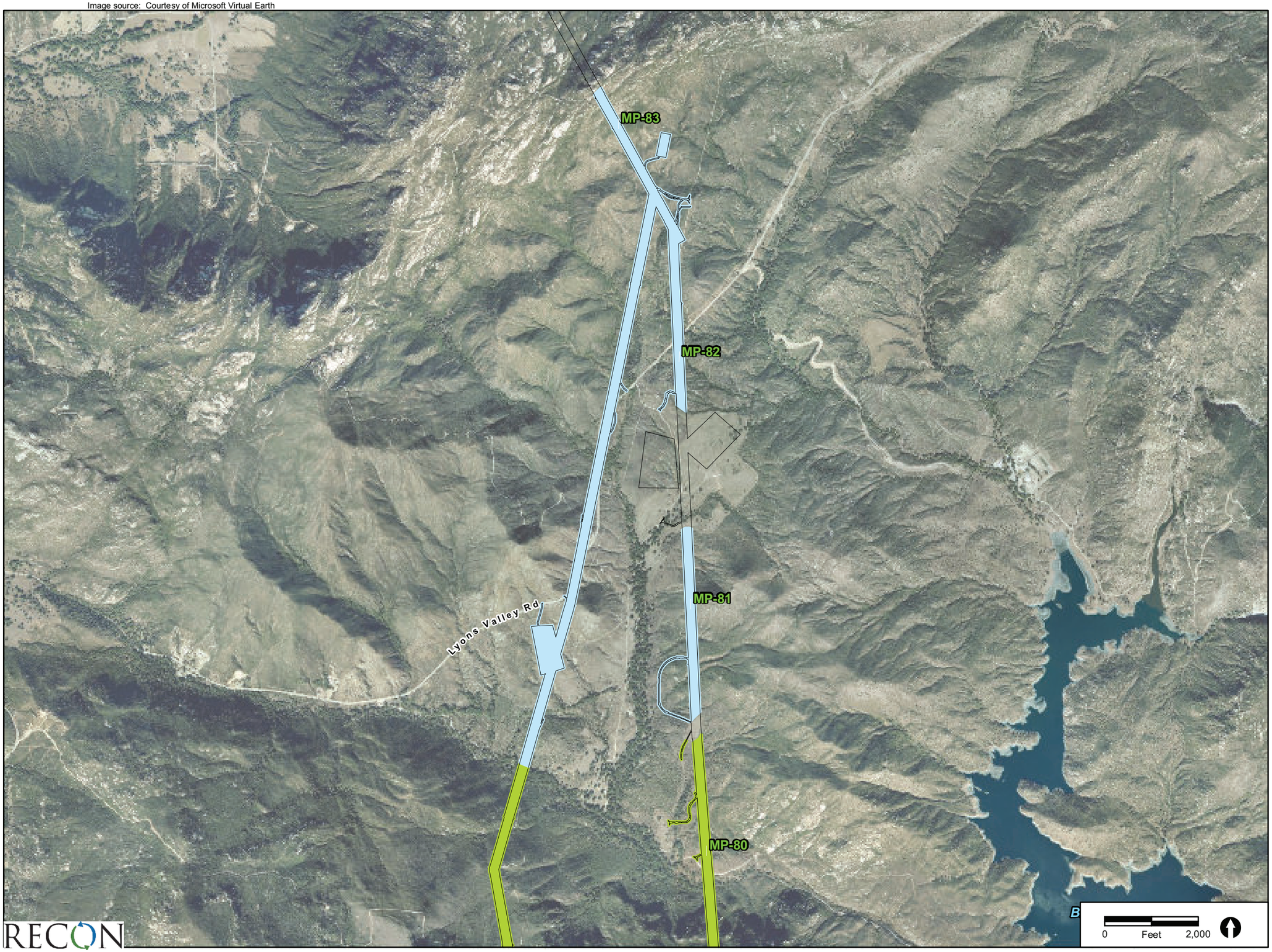
M:\JOBS3\5091\common_gis\weed\weed_maps_BROMAD.mxd 08/13/10

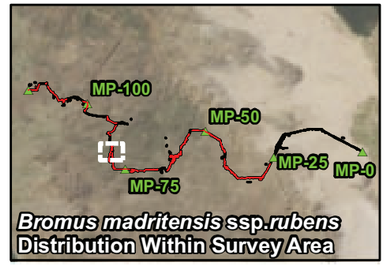
Sunrise Powerlink
Invasive Species Survey Results:

# Foxtail Chess (*Bromus madritensis* ssp.*rubens*)

Map 7 of 20

Image source: Courtesy of Microsoft Virtual Earth





2009 Invasive Species Action Area

**Foxtail Chess Density (*Bromus madritensis* ssp.*rubens*)**

**BROMAD**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

RECON

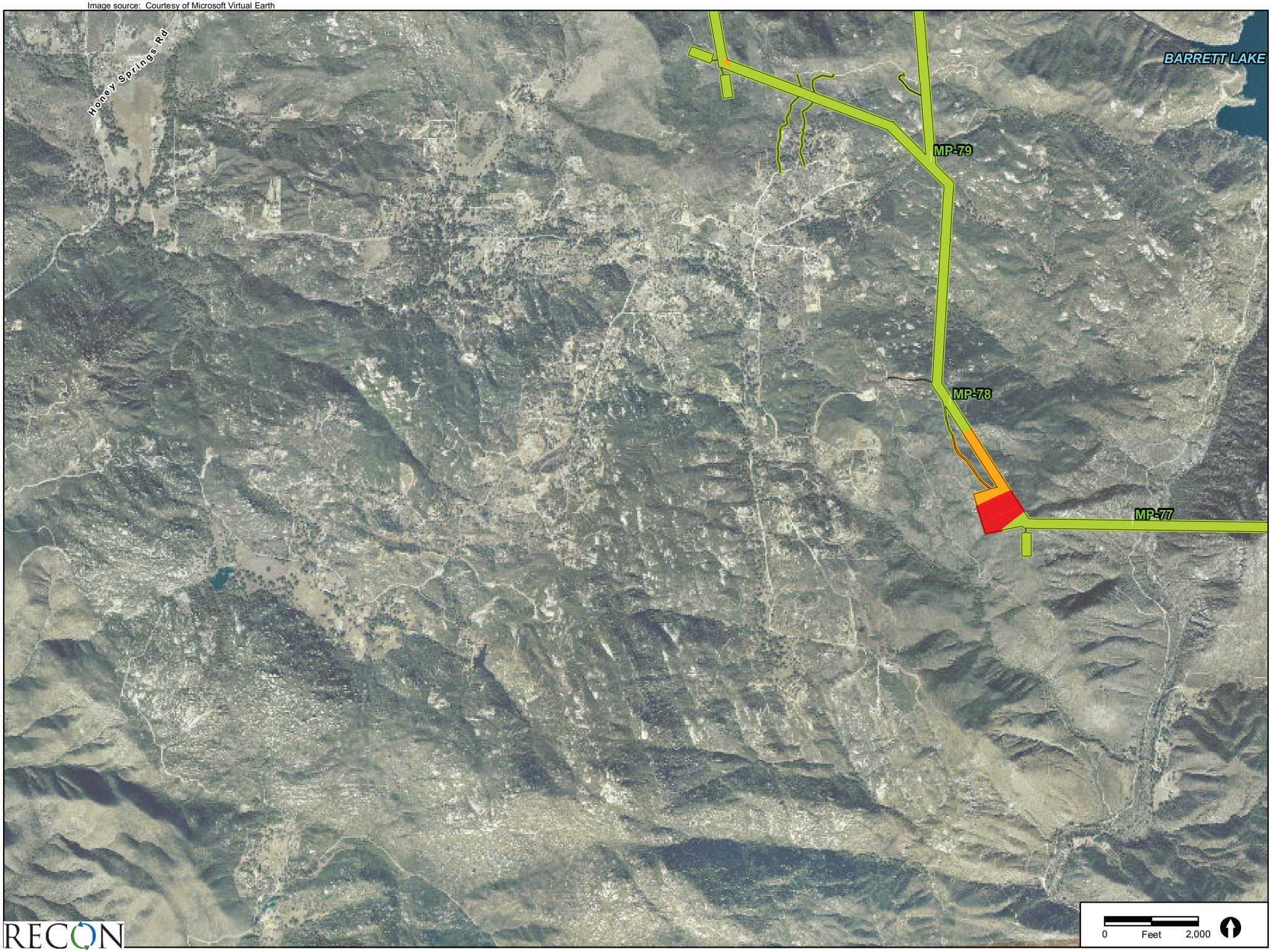
M:\JOBS3\5091\common_gis\weed\weed_maps_BROMAD.mxd 08/13/10

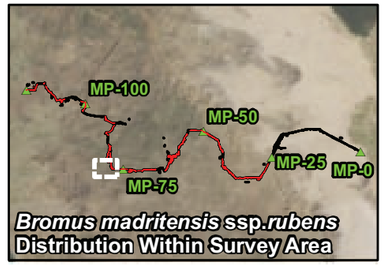
Sunrise Powerlink
Invasive Species Survey Results:

# Foxtail Chess (*Bromus madritensis* ssp.*rubens*)

Map 8 of 20

Image source: Courtesy of Microsoft Virtual Earth





2009 Invasive Species Action Area

**Foxtail Chess Density (*Bromus madritensis* ssp.*rubens*)**

**BROMAD**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_BROMAD.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:

# Foxtail Chess (*Bromus madritensis* ssp.*rubens*)

Map 9 of 20

Image source: Courtesy of Microsoft Virtual Earth

BARRETT LAKE

BARRETT LAKE

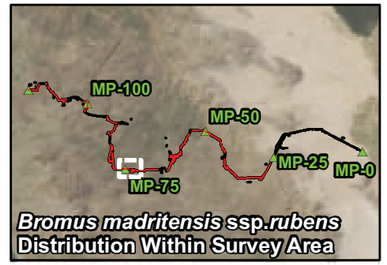
MP-76

MP-75

MP-74

MP-73

MP-72





2009 Invasive Species Action Area

**Foxtail Chess Density (*Bromus madritensis* ssp.*rubens*)**

**BROMAD**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

RECON

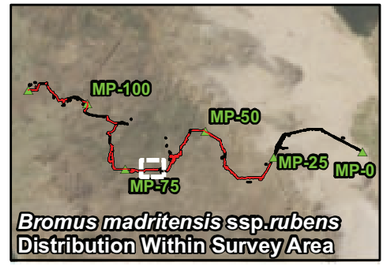
M:\JOBS3\5091\common_gis\weed\weed_maps_BROMAD.mxd 08/13/10

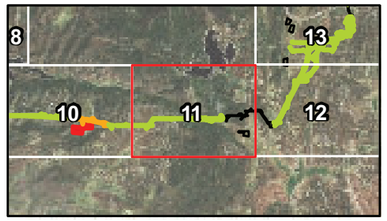
Sunrise Powerlink
Invasive Species Survey Results:

# Foxtail Chess (*Bromus madritensis* ssp.*rubens*)

Map 10 of 20

Image source: Courtesy of Microsoft Virtual Earth


2009 Invasive Species Action Area

**Foxtail Chess Density (*Bromus madritensis* ssp.*rubens*)**

**BROMAD**

- Trace
- Low
- Medium
- Dense

Sunrise Powerlink
Invasive Species Survey Results:

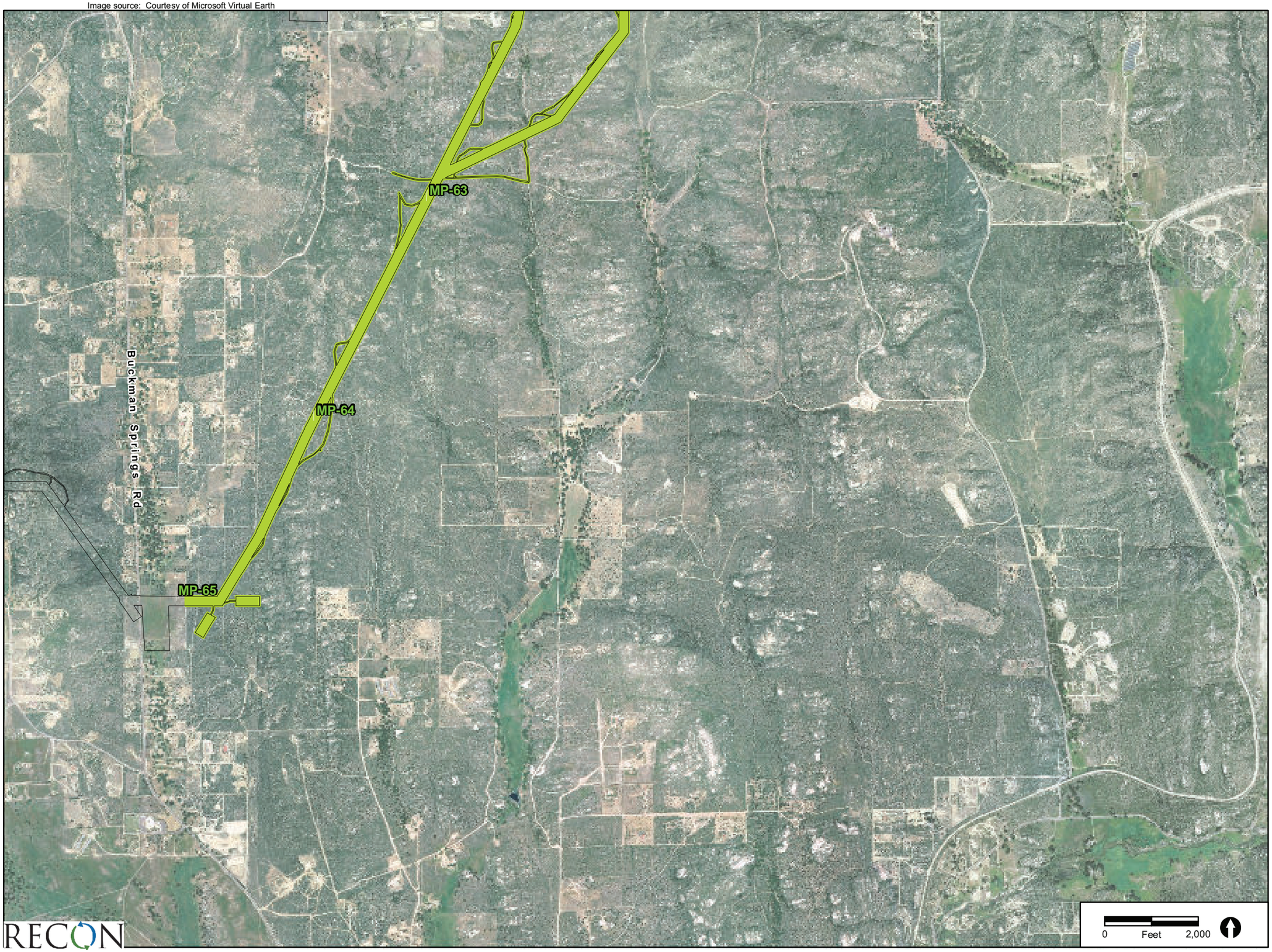
Foxtail Chess (*Bromus madritensis* ssp.*rubens*)

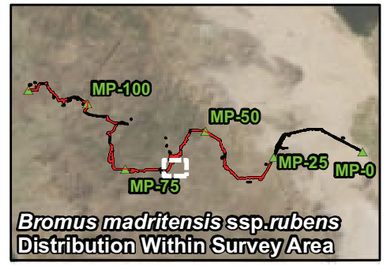
Map 11 of 20

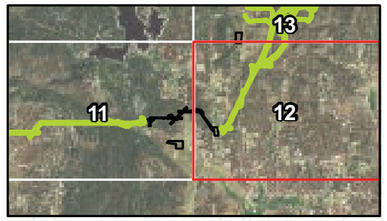
RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_BROMAD.mxd 08/13/10

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Foxtail Chess Density (*Bromus madritensis* ssp.*rubens*)**

**BROMAD**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

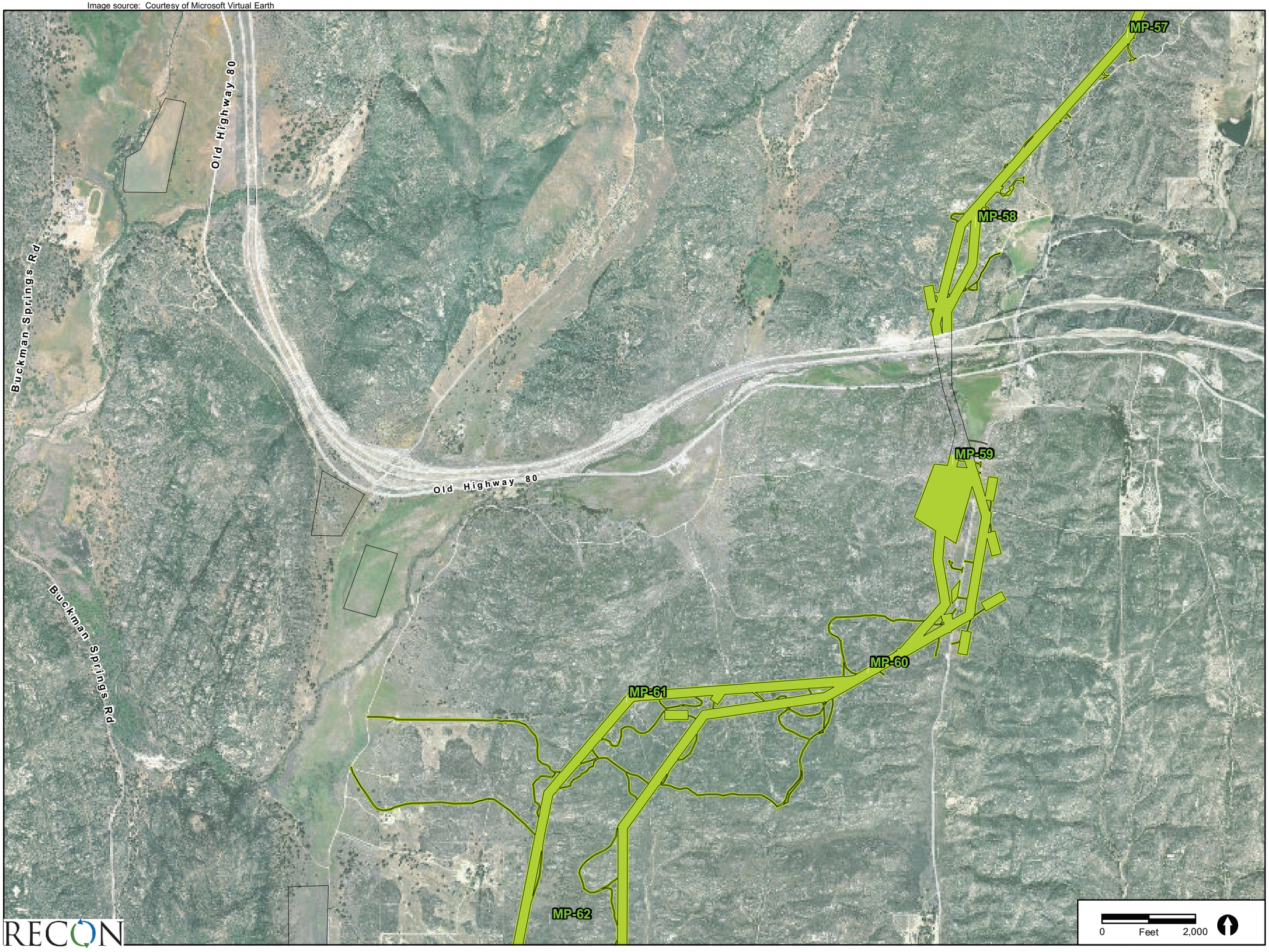
RECON

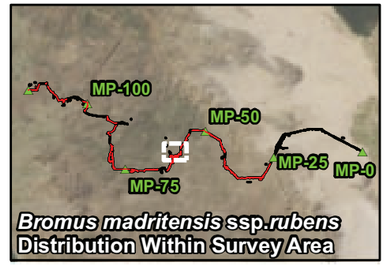
M:\JOBS3\5091\common_gis\weed\weed_maps_BROMAD.mxd 08/13/10

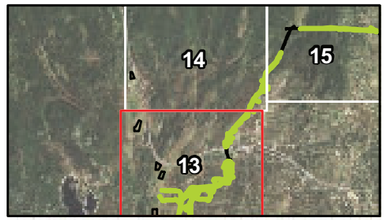
Sunrise Powerlink
Invasive Species Survey Results:

# Foxtail Chess (*Bromus madritensis* ssp.*rubens*)

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Foxtail Chess Density (*Bromus madritensis* ssp.*rubens*)**

**BROMAD**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

RECON

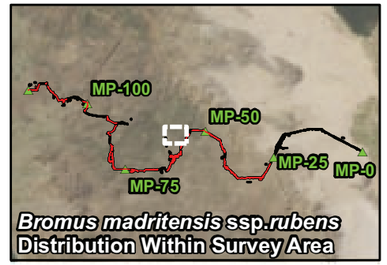
M:\JOBS3\5091\common_gis\weed\weed_maps_BROMAD.mxd 08/13/10

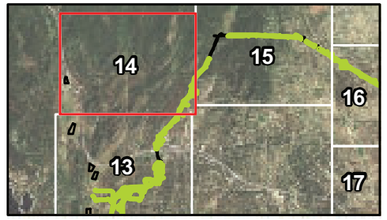
Sunrise Powerlink
Invasive Species Survey Results:

# Foxtail Chess (*Bromus madritensis* ssp.*rubens*)

Map 13 of 20

Image source: Courtesy of Microsoft Virtual Earth


2009 Invasive Species Action Area

**Foxtail Chess Density (*Bromus madritensis* ssp.*rubens*)**

**BROMAD**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

RECON

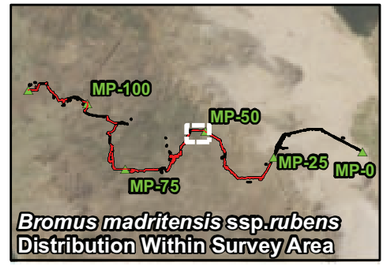
M:\JOBS3\5091\common_gis\weed\weed_maps_BROMAD.mxd 08/13/10

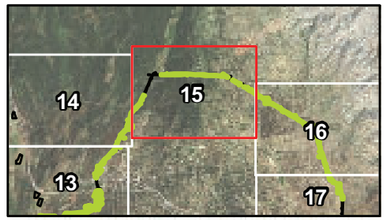
Sunrise Powerlink
Invasive Species Survey Results:

# Foxtail Chess (*Bromus madritensis* ssp.*rubens*)

Image source: Courtesy of Microsoft Virtual Earth

MP-53
MP-52
MP-51
MP-50
MP-54
MP-55




2009 Invasive Species Action Area

**Foxtail Chess Density (*Bromus madritensis* ssp.*rubens*)**

**BROMAD**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_BROMAD.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:

Foxtail Chess
(*Bromus madritensis* ssp.*rubens*)

Map 15 of 20

Image source: Courtesy of Microsoft Virtual Earth

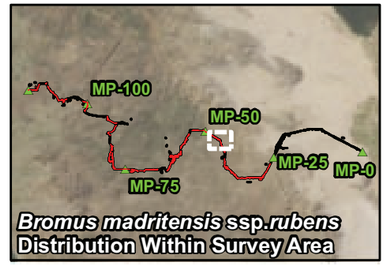
MP-49

MP-48

MP-47

MP-46

MP-45





2009 Invasive Species Action Area

**Foxtail Chess Density (*Bromus madritensis* ssp.*rubens*)**

**BROMAD**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

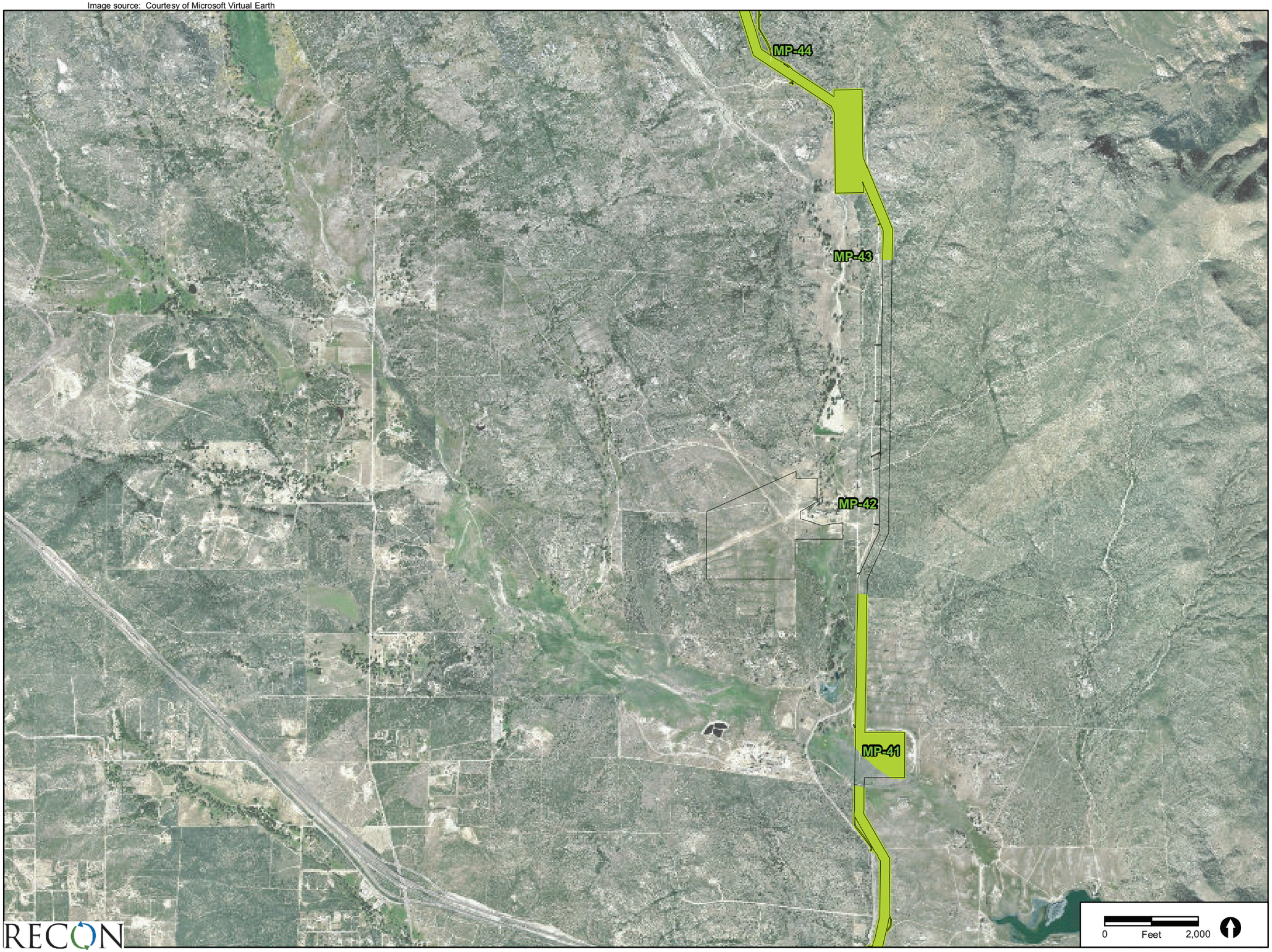
RECON

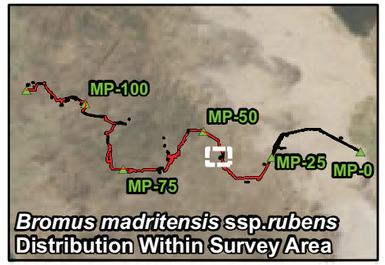
M:\JOBS3\5091\common_gis\weed\weed_maps_BROMAD.mxd 08/13/10

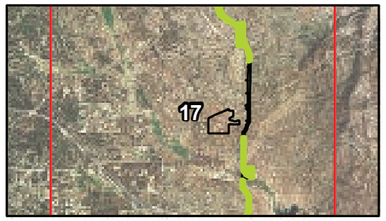
Sunrise Powerlink
Invasive Species Survey Results:

# Foxtail Chess (*Bromus madritensis* ssp.*rubens*)

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Foxtail Chess Density (*Bromus madritensis* ssp.*rubens*)**

**BROMAD**

- Trace
- Low
- Medium
- Dense

Sunrise Powerlink
Invasive Species Survey Results:

Foxtail Chess (*Bromus madritensis* ssp.*rubens*)

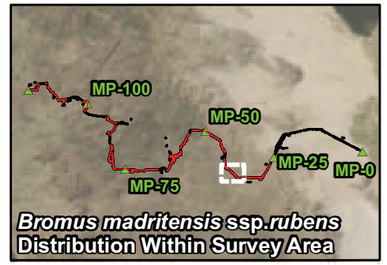
Map 17 of 20

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_BROMAD.mxd 08/13/10

Image source: Courtesy of Microsoft Virtual Earth

MP-40
MP-39
MP-38
MP-37
MP-36
MP-35
Old Highway 80





2009 Invasive Species Action Area

**Foxtail Chess Density (*Bromus madritensis* ssp.*rubens*)**

**BROMAD**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

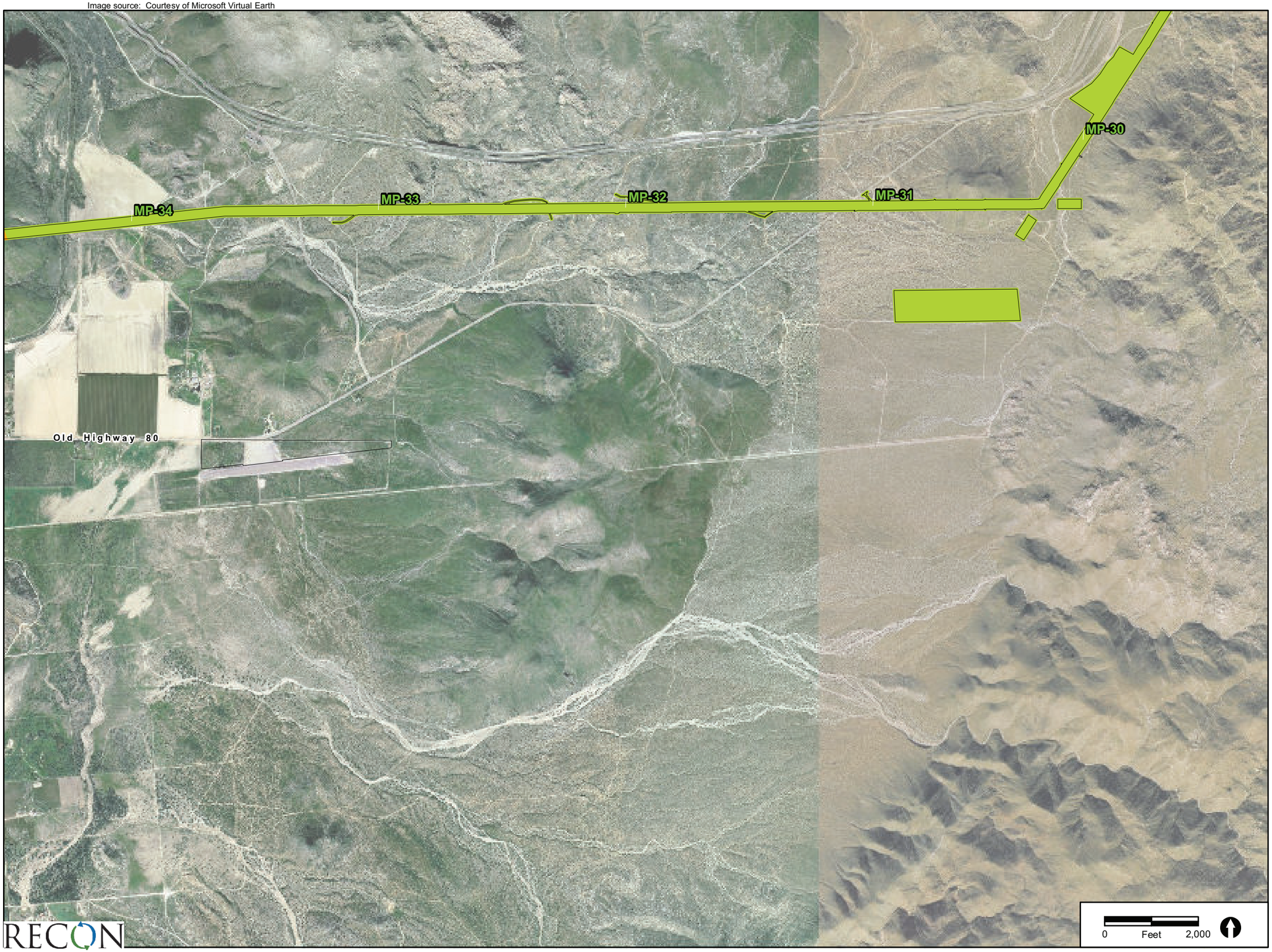
RECON

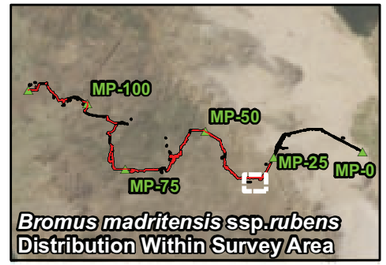
M:\JOBS3\5091\common_gis\weed\weed_maps_BROMAD.mxd 08/13/10

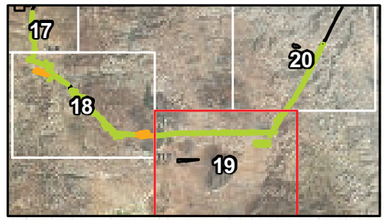
Sunrise Powerlink
Invasive Species Survey Results:

# Foxtail Chess (*Bromus madritensis* ssp.*rubens*)

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Foxtail Chess Density (*Bromus madritensis* ssp.*rubens*)**

**BROMAD**

- Trace
- Low
- Medium
- Dense

Sunrise Powerlink
Invasive Species Survey Results:

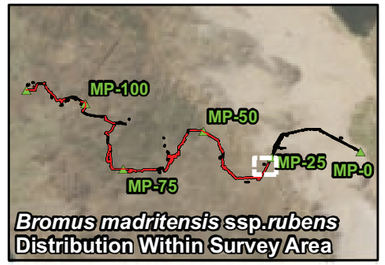
# Foxtail Chess (*Bromus madritensis* ssp.*rubens*)

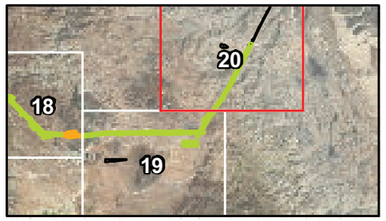
Map 19 of 20

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_BROMAD.mxd 08/13/10

Image source: Courtesy of Microsoft Virtual Earth




MP-26

MP-27

MP-28

MP-29

2009 Invasive Species Action Area

**Foxtail Chess Density (*Bromus madritensis* ssp.*rubens*)**

**BROMAD**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

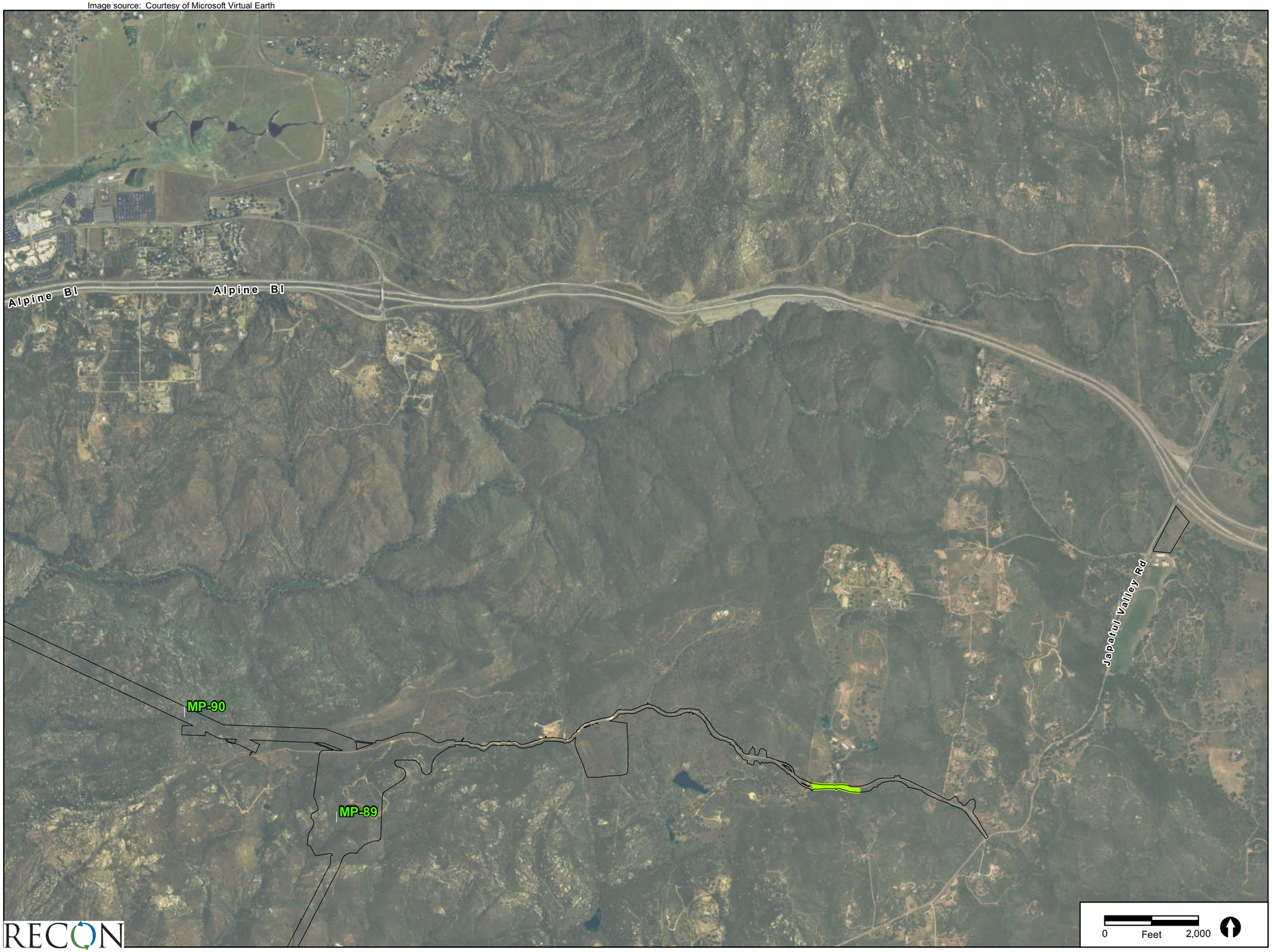
RECON

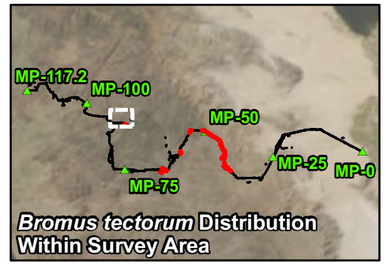
M:\JOBS3\5091\common_gis\weed\weed_maps_BROMAD.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:

Foxtail Chess
(*Bromus madritensis* ssp.*rubens*)

Image source: Courtesy of Microsoft Virtual Earth





2009 Invasive Species Action Area

**Cheatgrass Density (*Bromus tectorum*)**

- Trace
- Low
- Medium
- Dense

Sunrise Powerlink
Invasive Species Survey Results:
Cheatgrass
(*Bromus tectorum*)

Map 1 of 8

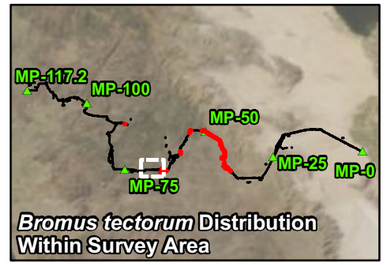
RECON

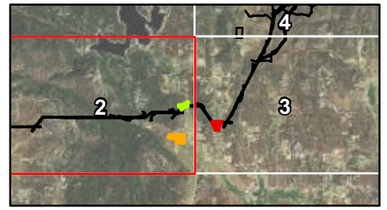
M:\JOBS3\5091\common_gis\weed\weed_maps_BROTEC.mxd 08/13/10

Image source: Courtesy of Microsoft Virtual Earth

MORENA RESERVOIR

MP-71
MP-70
MP-69
MP-68
MP-67




2009 Invasive Species Action Area

**Cheatgrass Density (*Bromus tectorum*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_BROTEC.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Cheatgrass
(*Bromus tectorum*)

Map2 of 8

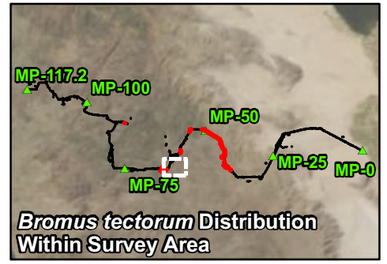
Image source: Courtesy of Microsoft Virtual Earth

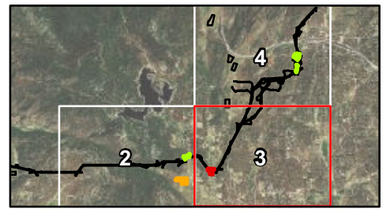
MP-63

MP-64

MP-65

Buckman Springs Rd




2009 Invasive Species Action Area

**Cheatgrass Density (*Bromus tectorum*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

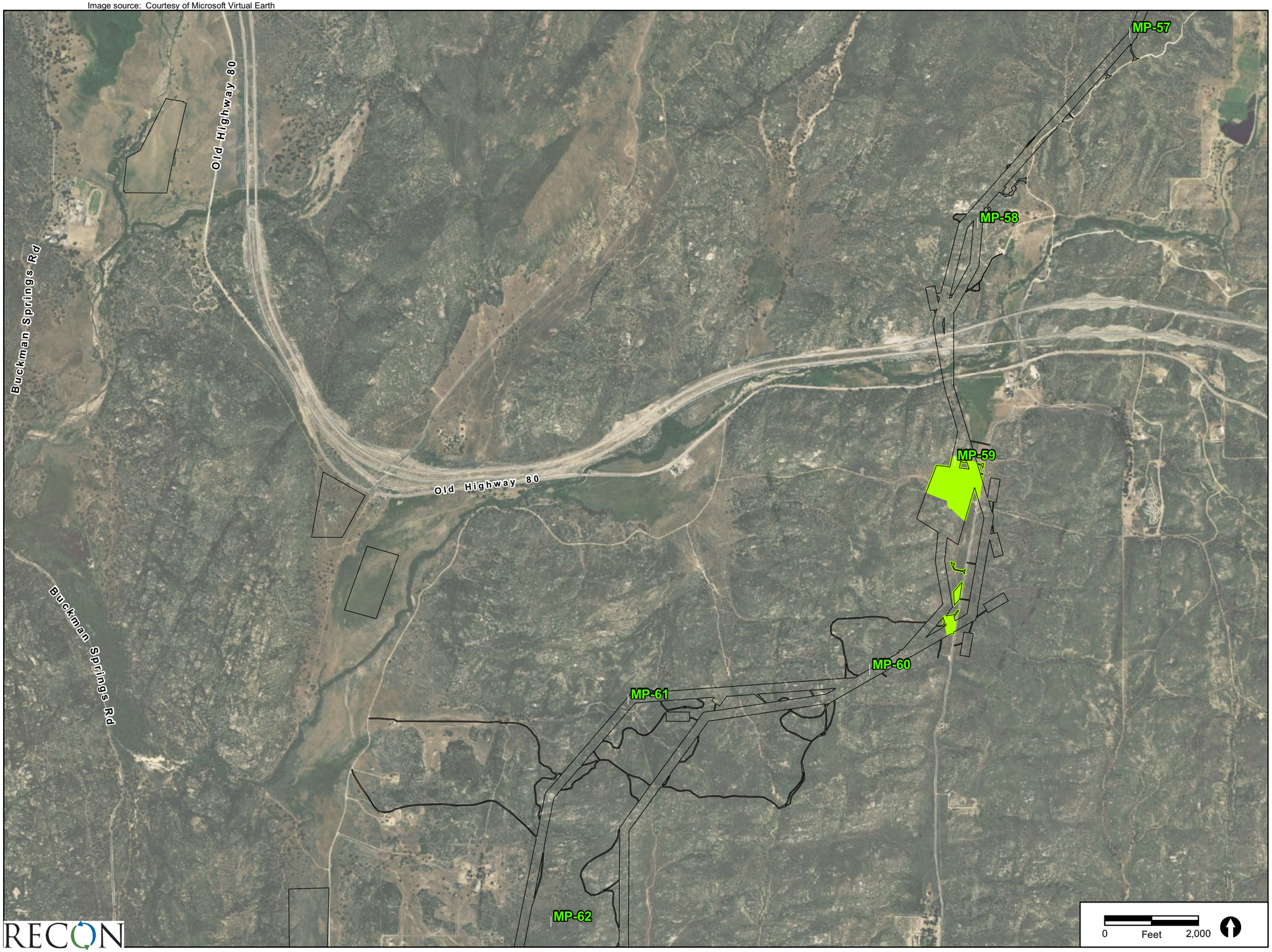
RECON

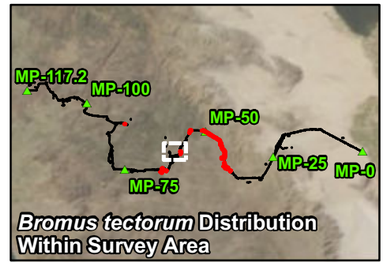
M:\JOBS3\5091\common_gis\weed\weed_maps_BROTEC.mxd 08/13/10

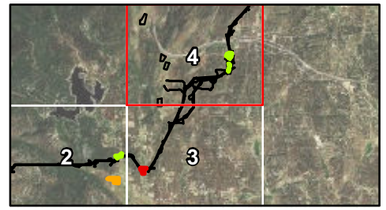
Sunrise Powerlink
Invasive Species Survey Results:
Cheatgrass
(*Bromus tectorum*)

Map3 of 8

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Cheatgrass Density (*Bromus tectorum*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

RECON

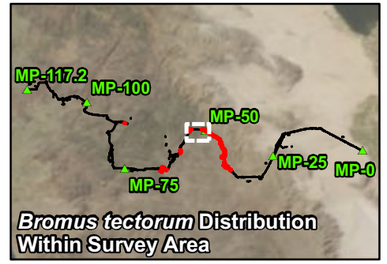
M:\JOBS3\5091\common_gis\weed\weed_maps_BROTEC.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Cheatgrass
(*Bromus tectorum*)

Map4 of 8

Image source: Courtesy of Microsoft Virtual Earth

MP-53
MP-52
MP-51
MP-50
MP-54
MP-55





2009 Invasive Species Action Area

**Cheatgrass Density (*Bromus tectorum*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_BROTEC.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Cheatgrass
(*Bromus tectorum*)

Map5 of 8

Image source: Courtesy of Microsoft Virtual Earth

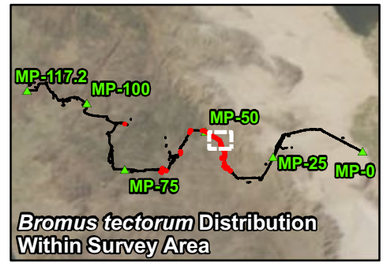
MP-49

MP-48

MP-47

MP-46

MP-45





2009 Invasive Species Action Area

**Cheatgrass Density (*Bromus tectorum*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

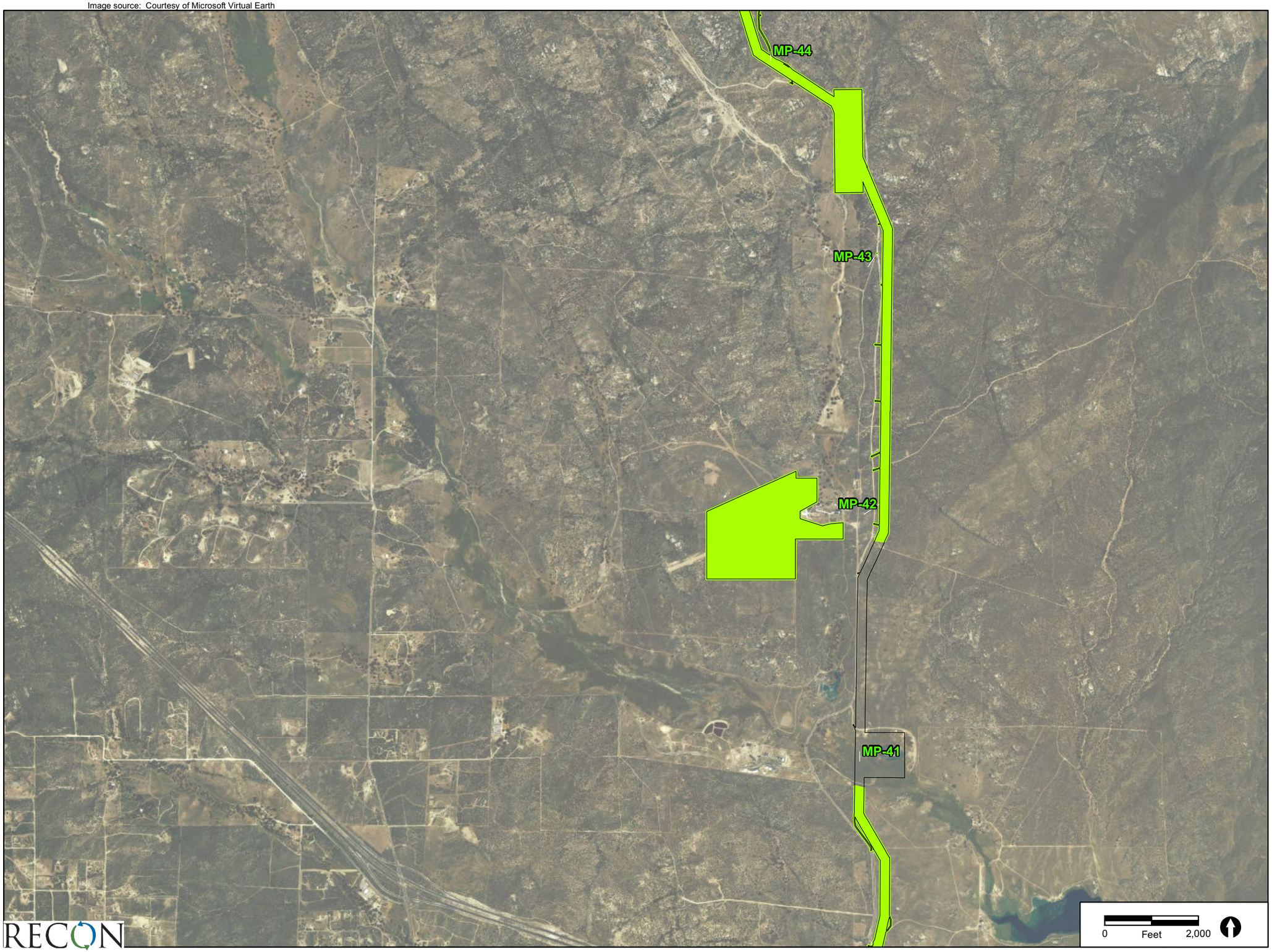
RECON

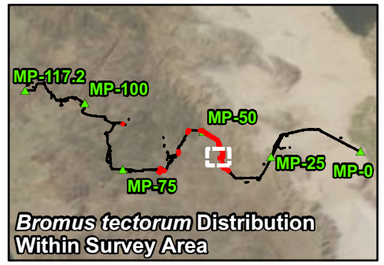
M:\JOBS3\5091\common_gis\weed\weed_maps_BROTEC.mxd 08/13/10

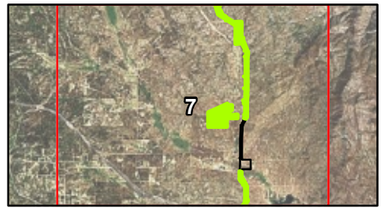
Sunrise Powerlink
Invasive Species Survey Results:
Cheatgrass
(*Bromus tectorum*)

Map6 of 8

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Cheatgrass Density (*Bromus tectorum*)**

- Trace
- Low
- Medium
- Dense

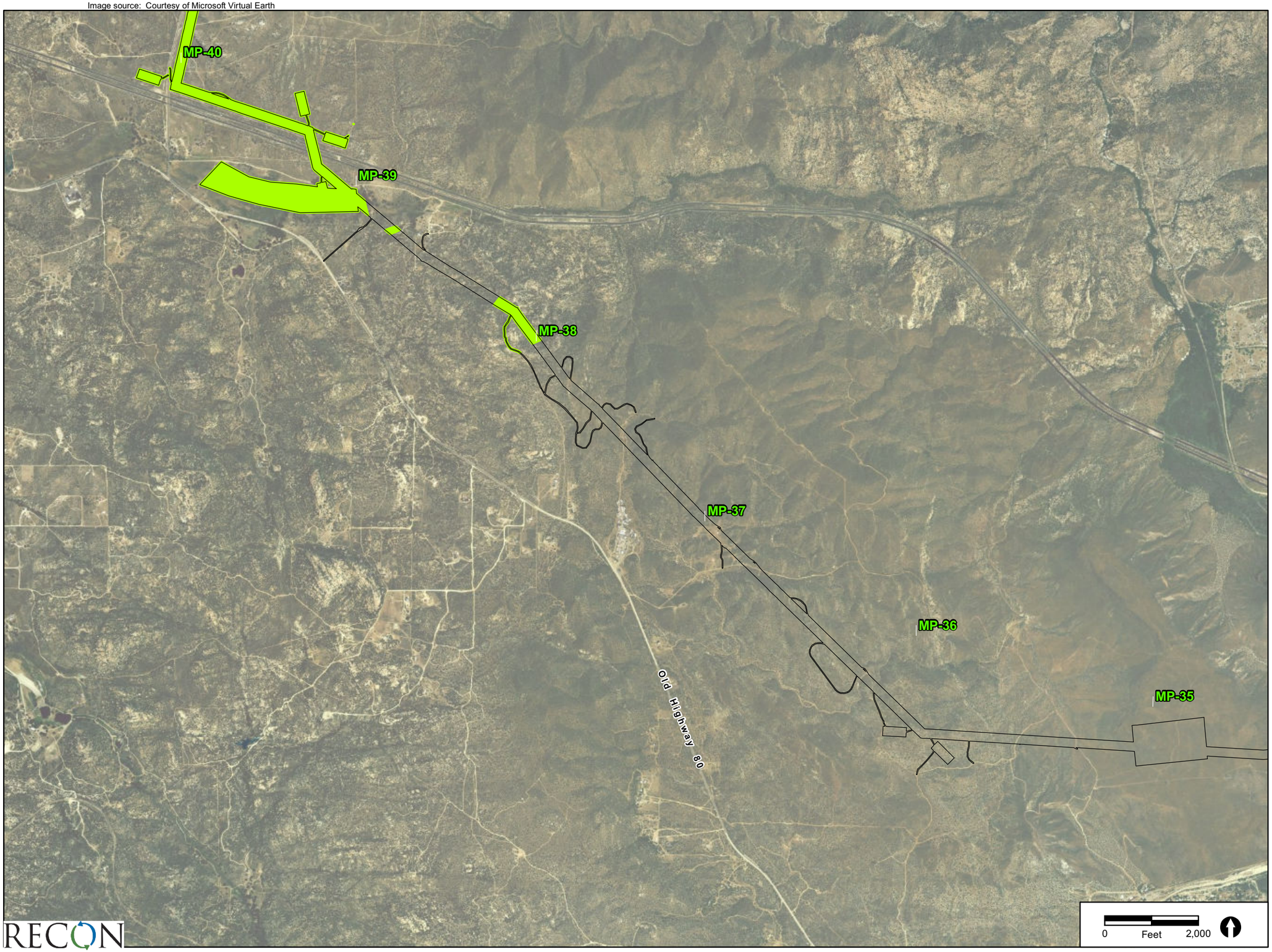
RECON

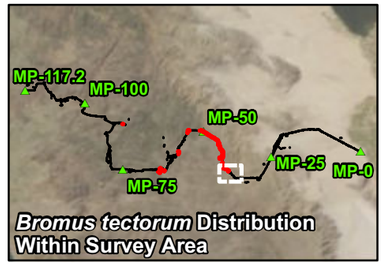
M:\JOBS3\5091\common_gis\weed\weed_maps_BROTEC.mxd 08/13/10

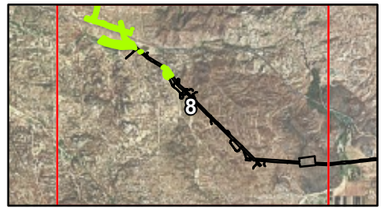
Sunrise Powerlink
Invasive Species Survey Results:
Cheatgrass
(*Bromus tectorum*)

Map7 of 8

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Cheatgrass Density (*Bromus tectorum*)**

- Trace
- Low
- Medium
- Dense

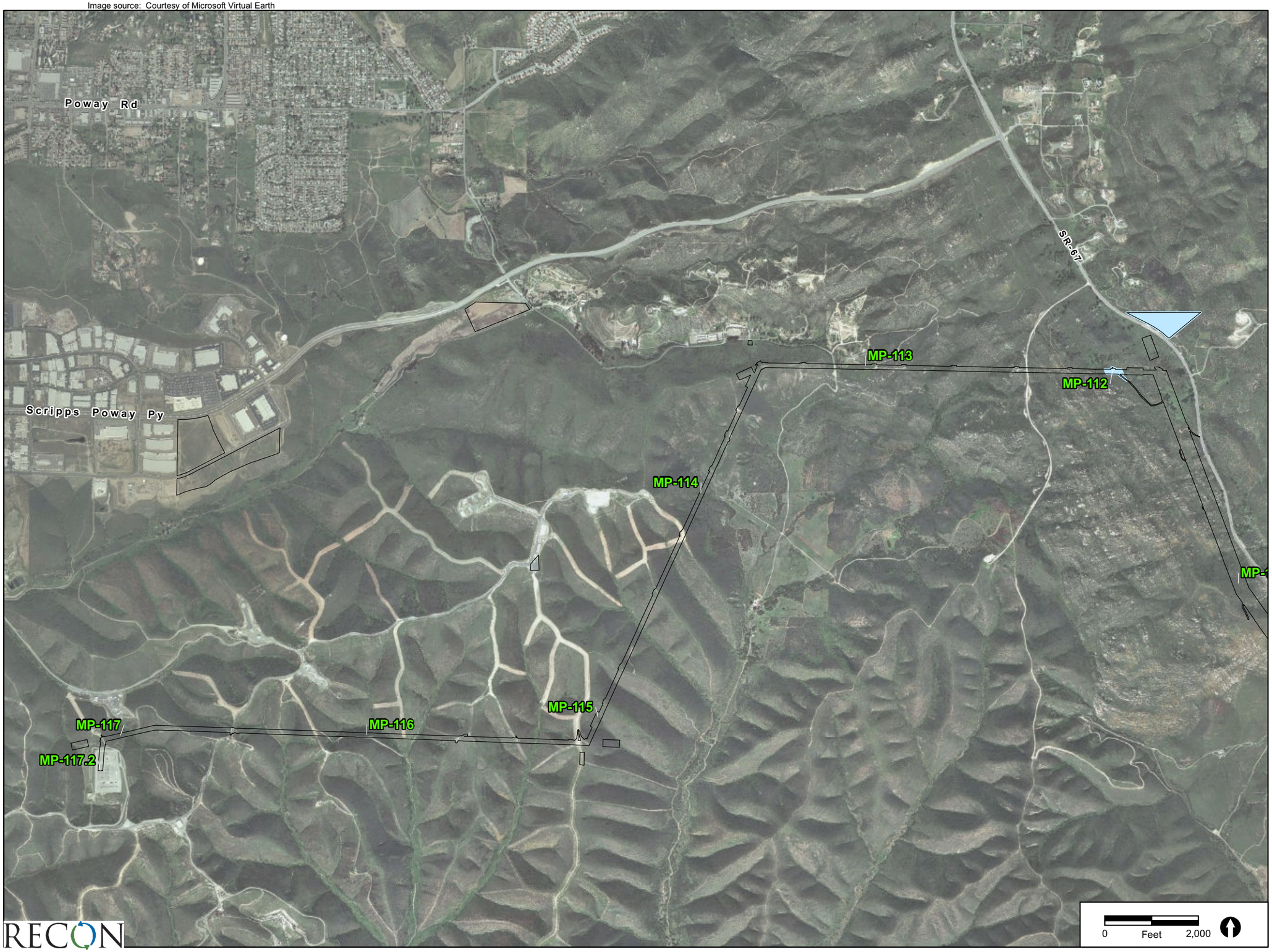
RECON

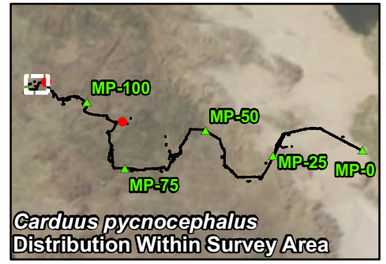
M:\JOBS3\5091\common_gis\weed\weed_maps_BROTEC.mxd 08/13/10

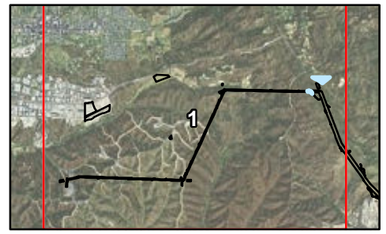
Sunrise Powerlink
Invasive Species Survey Results:
Cheatgrass
(*Bromus tectorum*)

Map8 of 8

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Italian Thistle**
**(*Carduus pycnocephalus*)**

Low

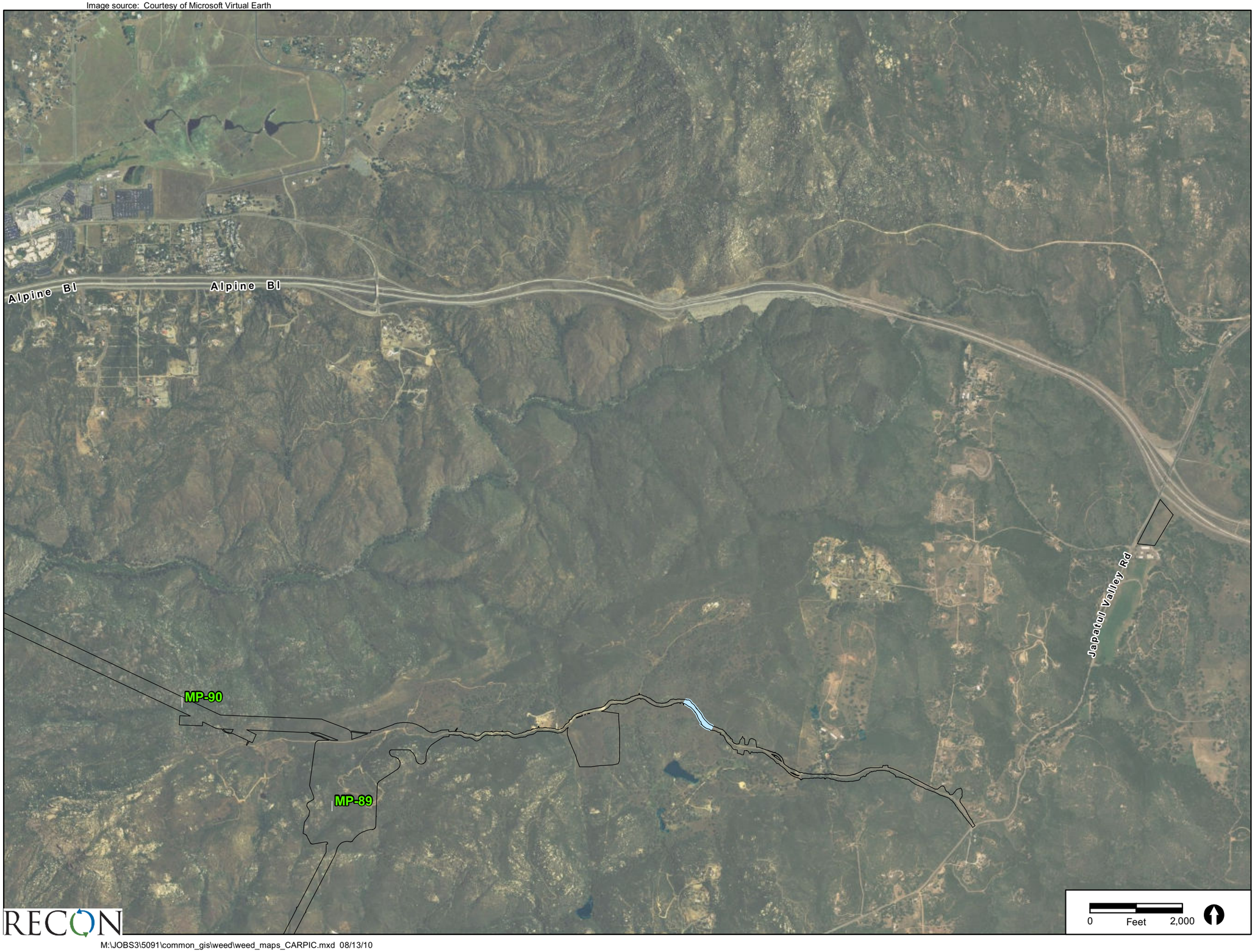
RECON

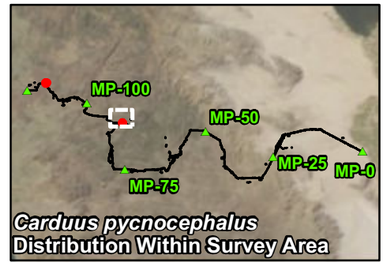
M:\JOBS3\5091\common_gis\weed\weed_maps_CARPIC.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Italian Thistle
(*Carduus pycnocephalus*)

Map 1 of 2

Image source: Courtesy of Microsoft Virtual Earth





2009 Invasive Species Action Area

**Italian Thistle**
**(*Carduus pycnocephalus*)**

Low

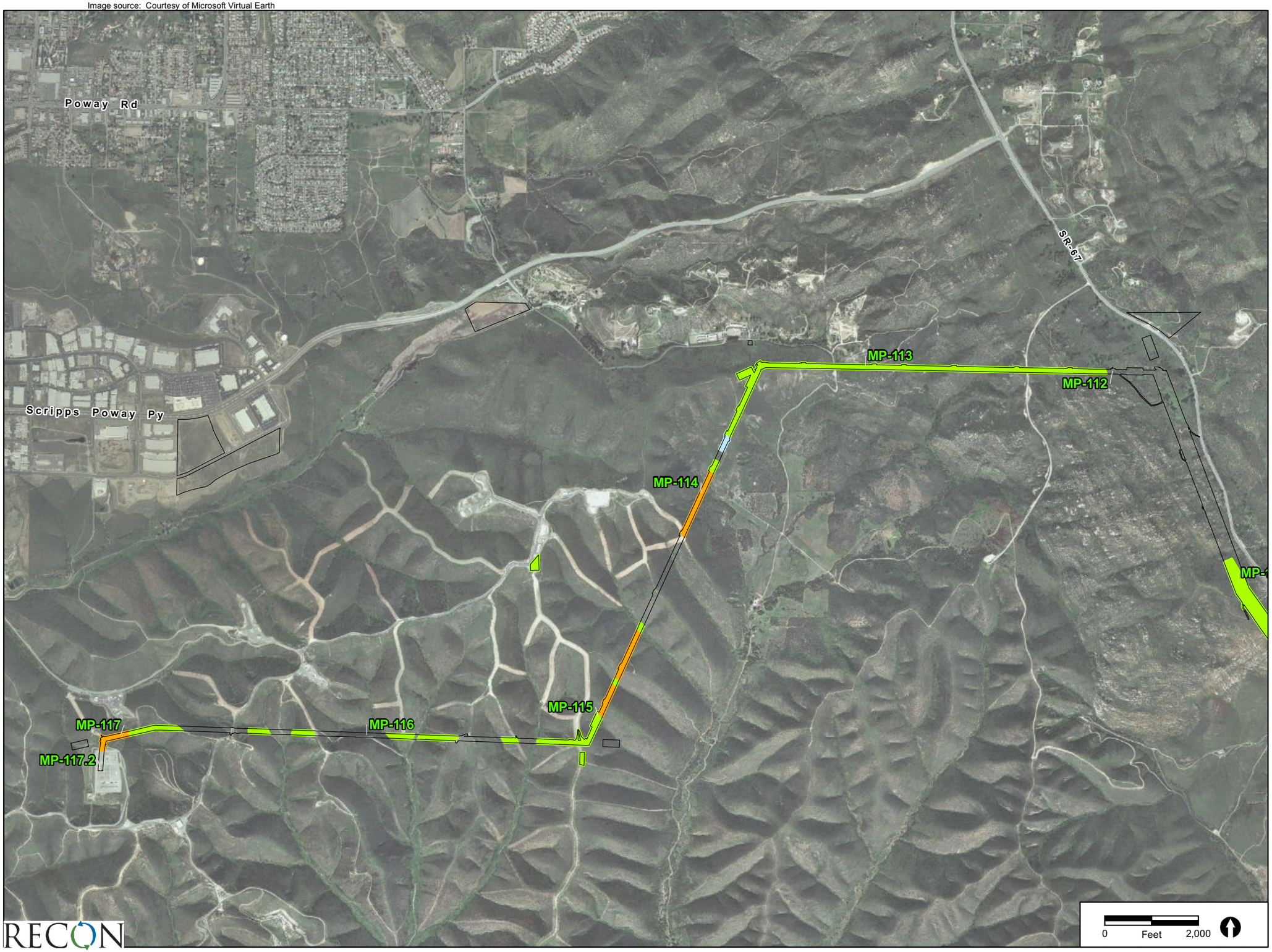
RECON

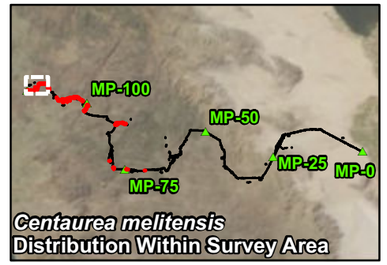
M:\JOBS3\5091\common_gis\weed\weed_maps_CARPIC.mxd 08/13/10

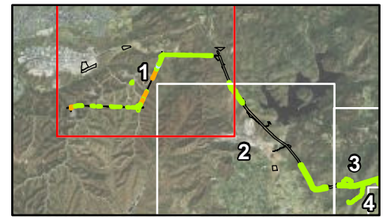
Sunrise Powerlink
Invasive Species Survey Results:
Italian Thistle
(*Carduus pycnocephalus*)

Map2 of 2

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Tocalote**
**(*Centaurea melitensis*)**

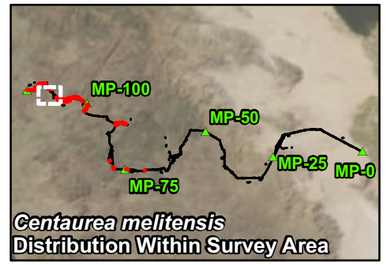
- Trace
- Low
- Medium
- Dense

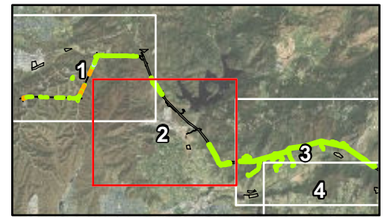
RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_CENMEL.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Tocalote
(*Centaurea melitensis*)

Image source: Courtesy of Microsoft Virtual Earth


2009 Invasive Species Action Area

**Tocalote**
**(*Centaurea melitensis*)**

- Trace
- Low
- Medium
- Dense

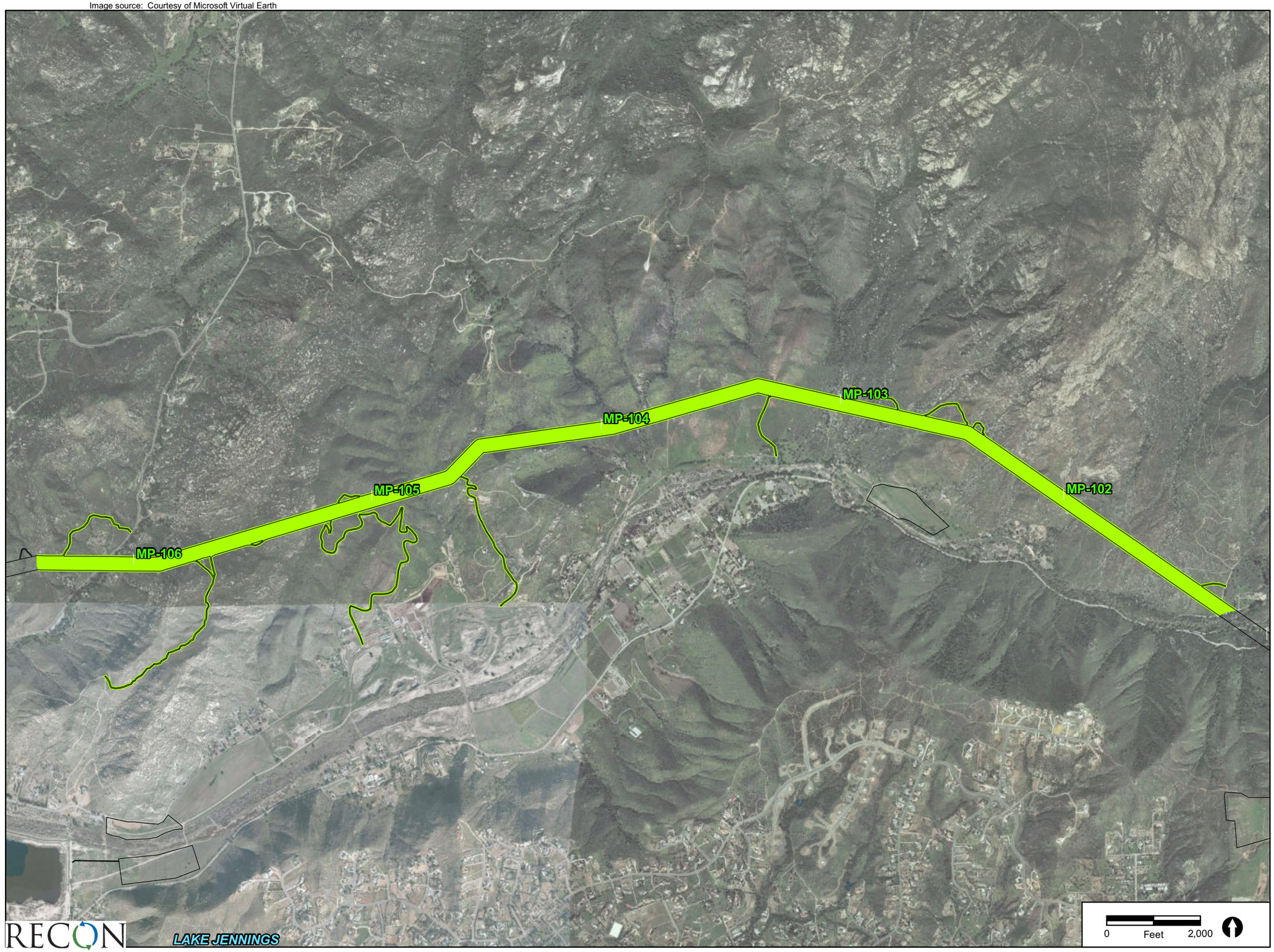
RECON

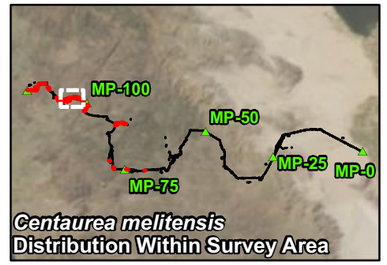
M:\JOBS3\5091\common_gis\weed\weed_maps_CENMEL.mxd 08/13/10

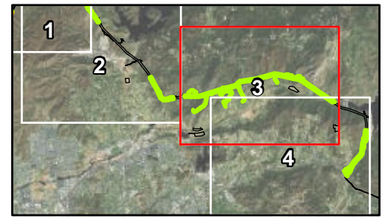
Sunrise Powerlink
Invasive Species Survey Results:
Tocalote
(*Centaurea melitensis*)

Map2 of 8

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Tocalote**
**(*Centaurea melitensis*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_CENMEL.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Tocalote
(*Centaurea melitensis*)

Map3 of 8

Image source: Courtesy of Microsoft Virtual Earth

MP-101

EL CAPITAN RESERVOIR

MP-1

MP-99

LAKE JENNINGS

Olde Highway 80

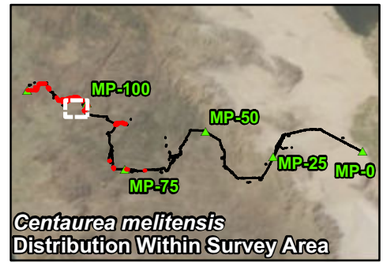
Olde Highway 80

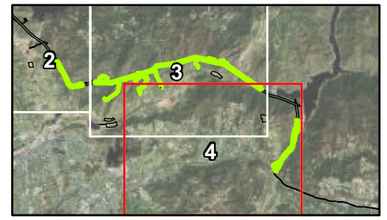
Alpine Bl

MP-98

MP-97

0 Feet 2,000




2009 Invasive Species Action Area

**Tocalote**
**(*Centaurea melitensis*)**

- Trace
- Low
- Medium
- Dense

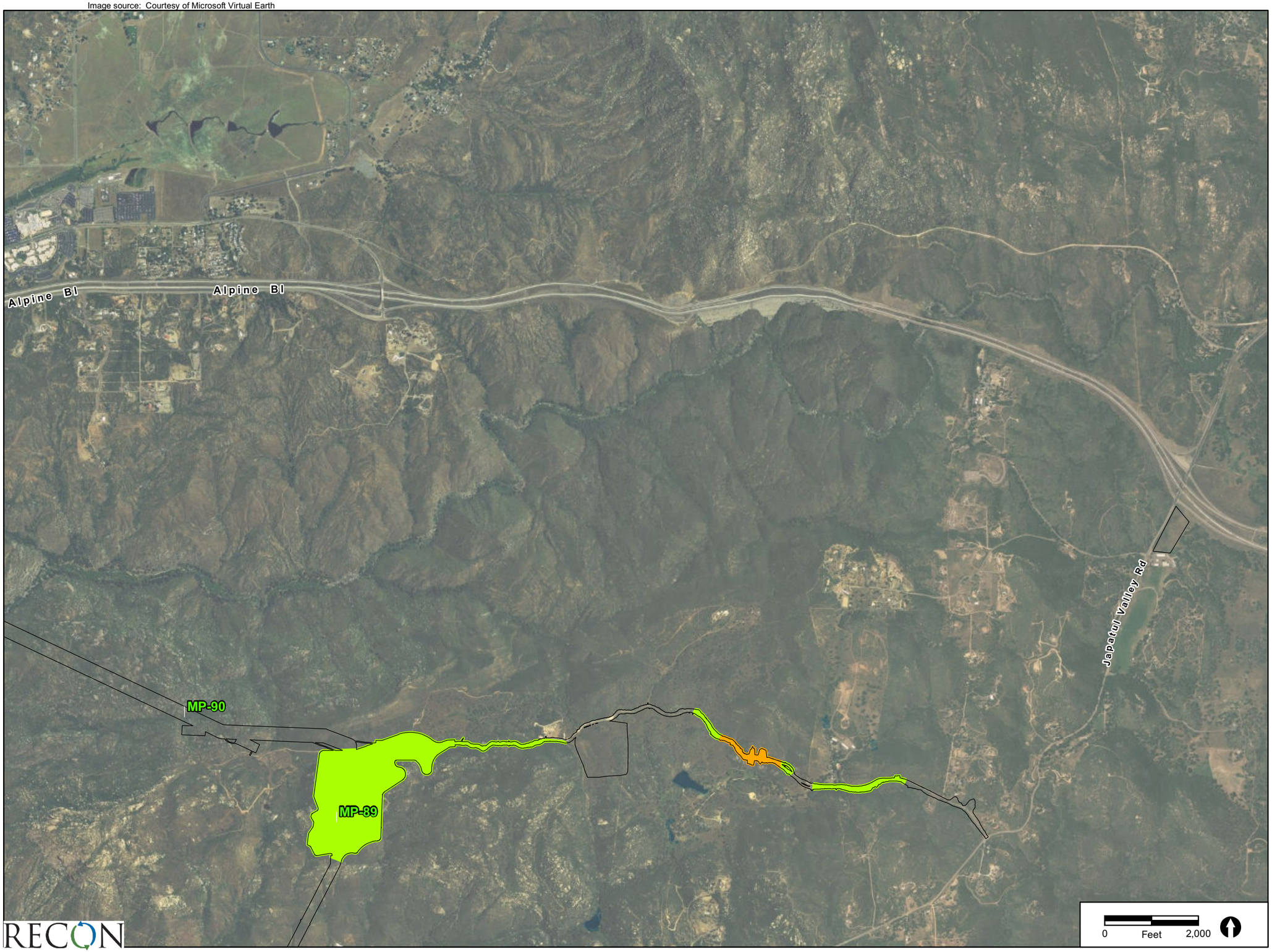
RECON

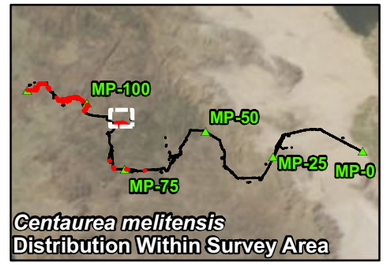
M:\JOBS3\5091\common_gis\weed\weed_maps_CENMEL.mxd 08/13/10

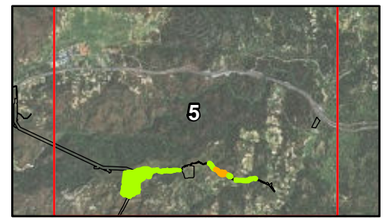
Sunrise Powerlink
Invasive Species Survey Results:
Tocalote
(*Centaurea melitensis*)

Map4 of 8

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Tocalote**
**(*Centaurea melitensis*)**

- Trace
- Low
- Medium
- Dense

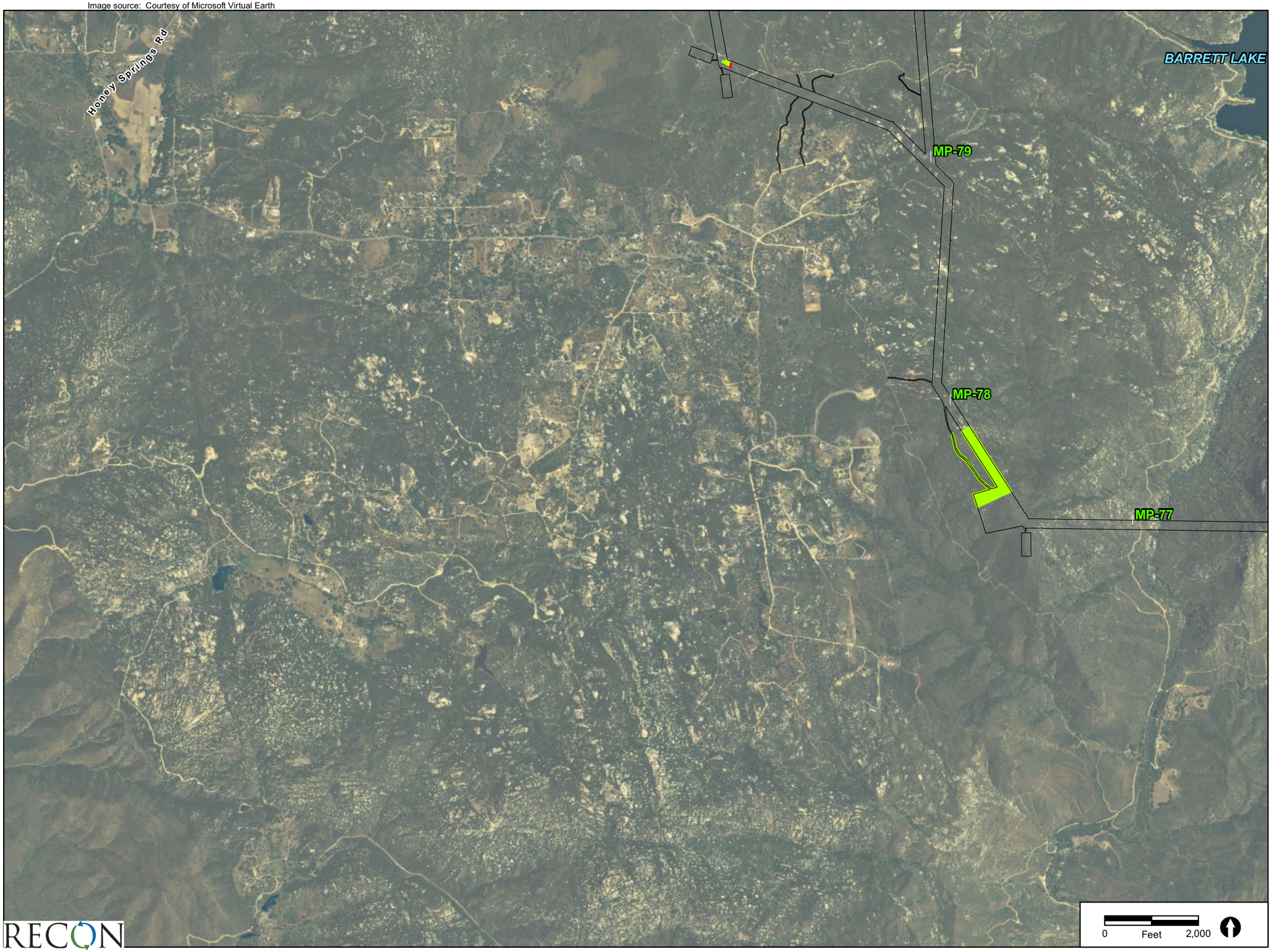
Sunrise Powerlink
Invasive Species Survey Results:
Tocalote
(*Centaurea melitensis*)

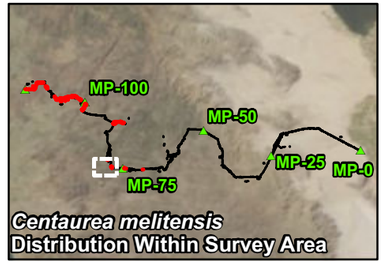
Map5 of 8

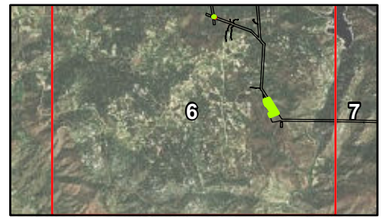
RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_CENMEL.mxd 08/13/10

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Tocalote (*Centaurea melitensis*)**

- Trace
- Low
- Medium
- Dense

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_CENMEL.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Tocalote
(*Centaurea melitensis*)

Map6 of 8

Image source: Courtesy of Microsoft Virtual Earth

BARRETT LAKE

BARRETT LAKE

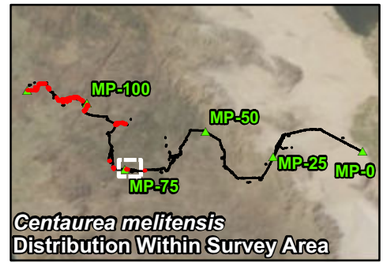
MP-76

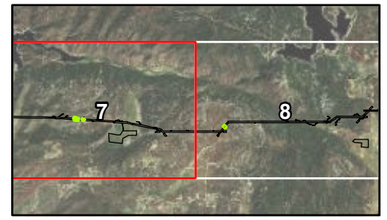
MP-75

MP-74

MP-73

MP-72




2009 Invasive Species Action Area

**Tocalote**
**(*Centaurea melitensis*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_CENMEL.mxd 08/13/10

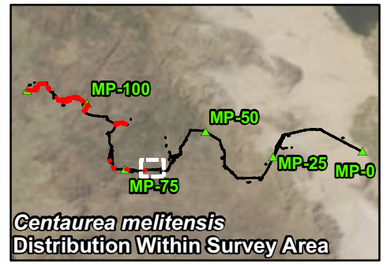
Sunrise Powerlink
Invasive Species Survey Results:
Tocalote
(*Centaurea melitensis*)

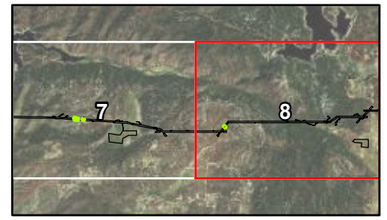
Map7 of 8

Image source: Courtesy of Microsoft Virtual Earth

MORENA RESERVOIR

MP-71
MP-70
MP-69
MP-68
MP-67
MP-75
MP-50
MP-25
MP-0
MP-100




2009 Invasive Species Action Area

**Tocalote**
**(*Centaurea melitensis*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_CENMEL.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Tocalote
(*Centaurea melitensis*)

Map8 of 8

Image source: Courtesy of Microsoft Virtual Earth

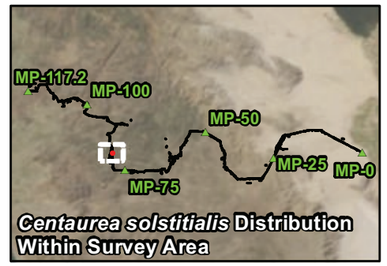
MP-83

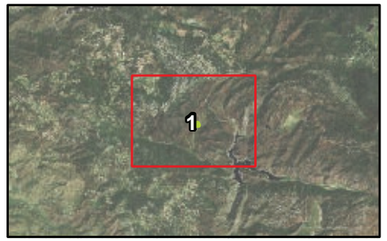
MP-82

MP-81

MP-80

Lyons Valley Rd




2009 Invasive Species Action Area

**Yellow Starthistle Density (*Centaurea solstitialis*)**

Low

0 Feet 2,000

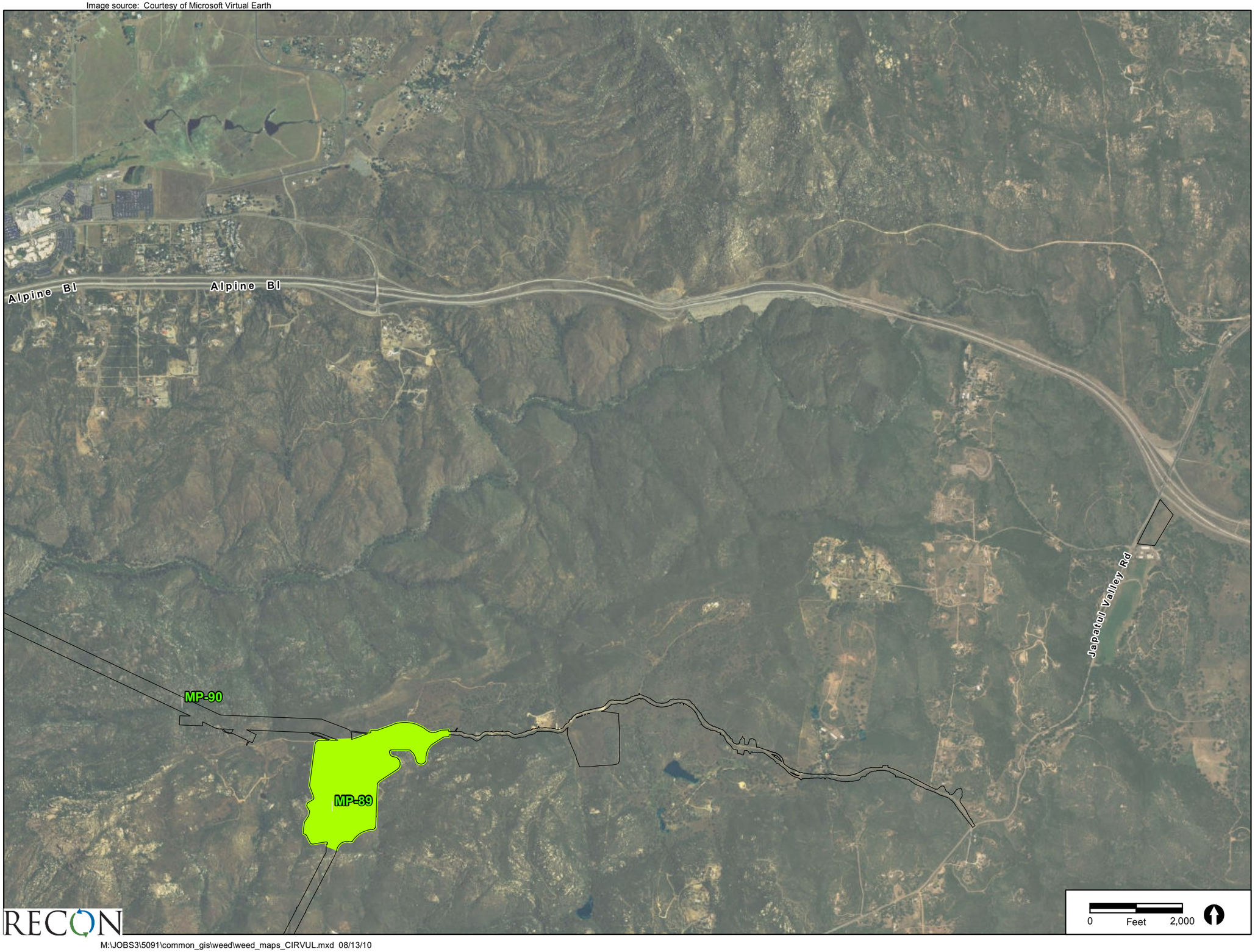
RECON

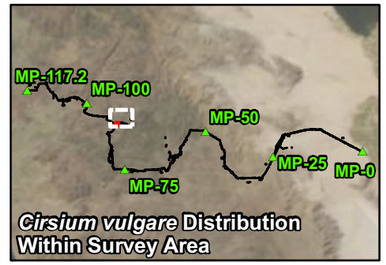
M:\JOBS3\5091\common_gis\weed\weed_maps_CENSOL.mxd 08/13/10

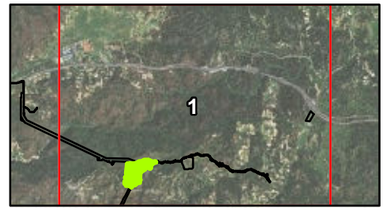
Sunrise Powerlink
Invasive Species Survey Results:
Yellow Starthistle
(*Centaurea solstitialis*)

Map 1 of 1

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Bull Thistle Density (*Cirsium vulgare*)**

Low

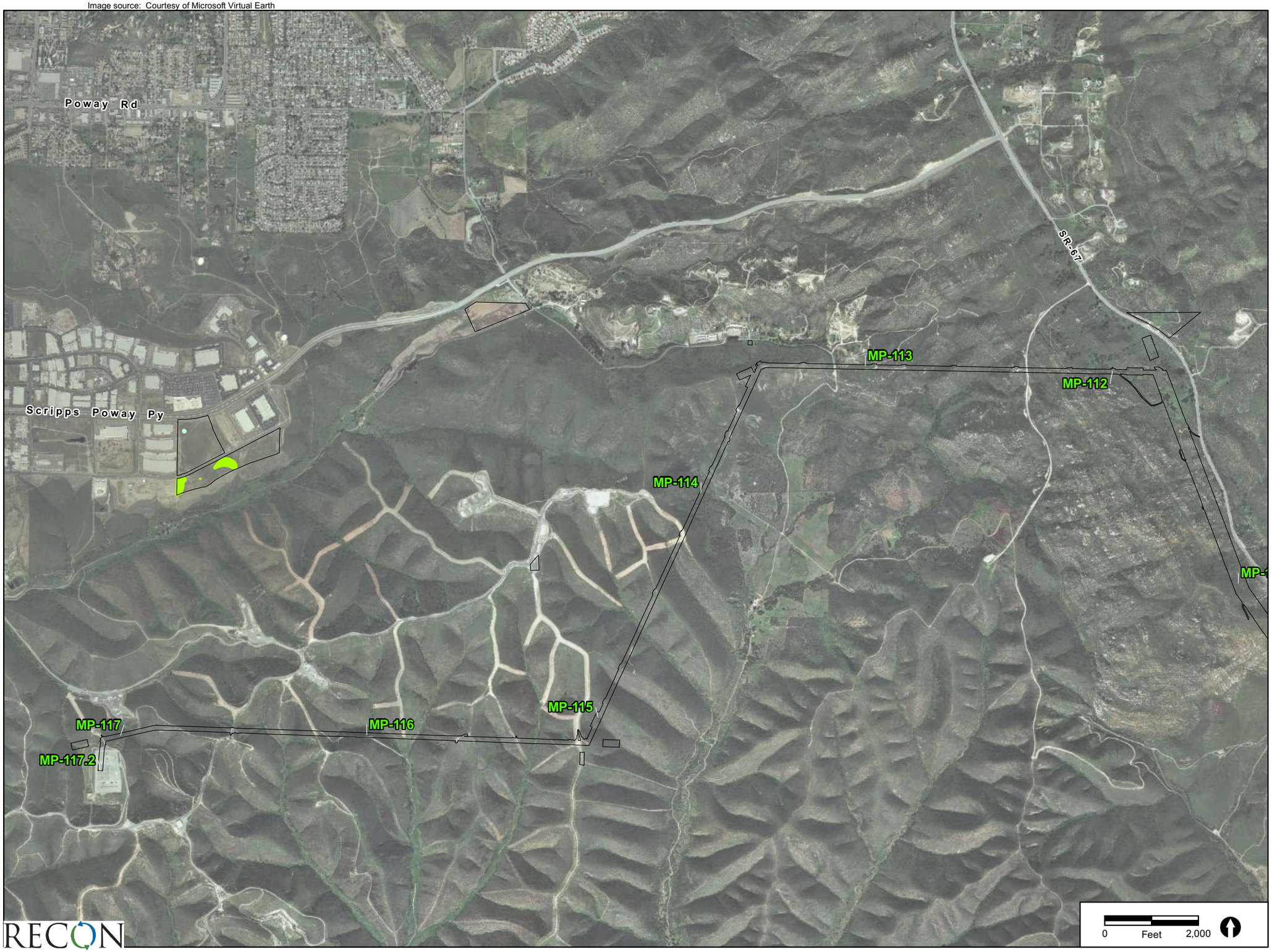
RECON

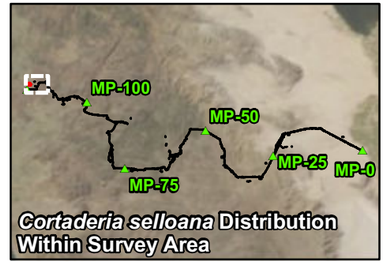
M:\JOBS3\5091\common_gis\weed\weed_maps_CIRVUL.mxd 08/13/10

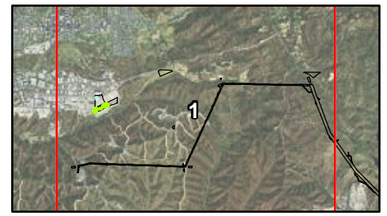
Sunrise Powerlink
Invasive Species Survey Results:
Bull Thistle
(*Cirsium vulgare*)

Map 1 of 1

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Dwarf Pampas Grass Density (*Cortaderia selloana*)**

Trace

Low

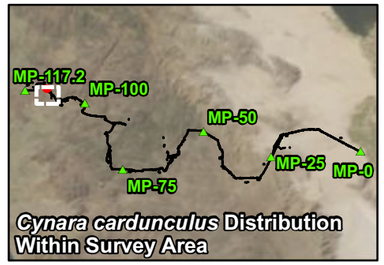
RECON

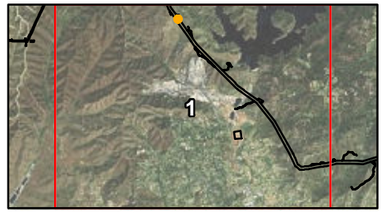
M:\JOBS3\5091\common_gis\weed\weed_maps_CORSEL.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Dwarf Pampas Grass
(*Cortaderia selloana*)

Map 1 of 1

Image source: Courtesy of Microsoft Virtual Earth


2009 Invasive Species Action Area

**Artichoke Thistle (*Cynara cardunculus*)**

Medium

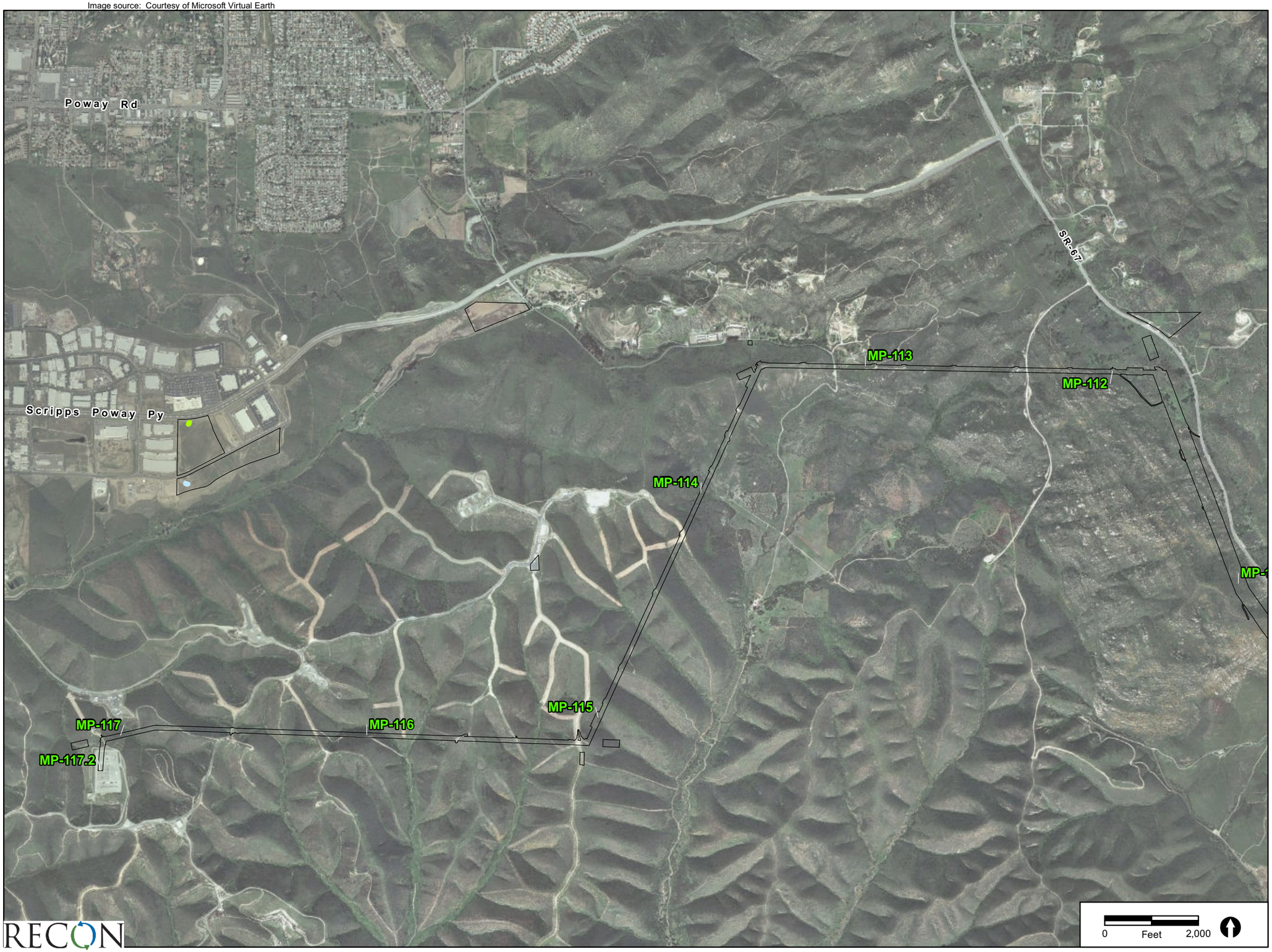
RECON

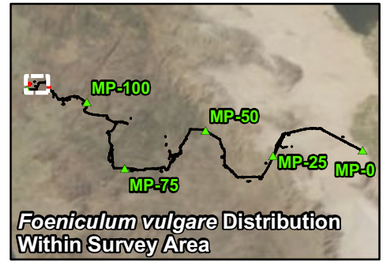
M:\JOBS3\5091\common_gis\weed\weed_maps_CYNCAR.mxd 08/13/10

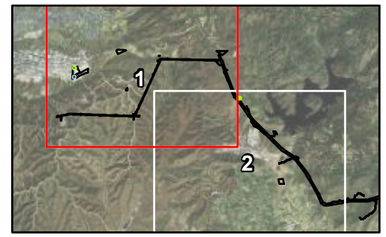
Sunrise Powerlink
Invasive Species Survey Results:
Artichoke Thistle
(*Cynara cardunculus*)

Map1 of 1

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Sweet Fennel (*Foeniculum vulgare*)**

- Trace
- Low

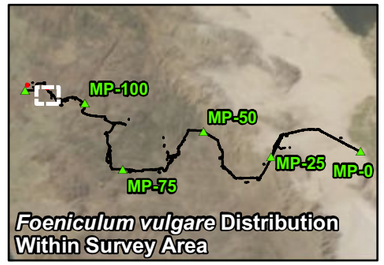
RECON

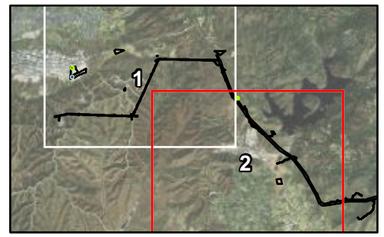
M:\JOBS3\5091\common_gis\weed\weed_maps_FORVUL.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Sweet Fennel
(*Foeniculum vulgare*)

Map 1 of 2

Image source: Courtesy of Microsoft Virtual Earth


2009 Invasive Species Action Area

**Sweet Fennel (*Foeniculum vulgare*)**

Trace

Low

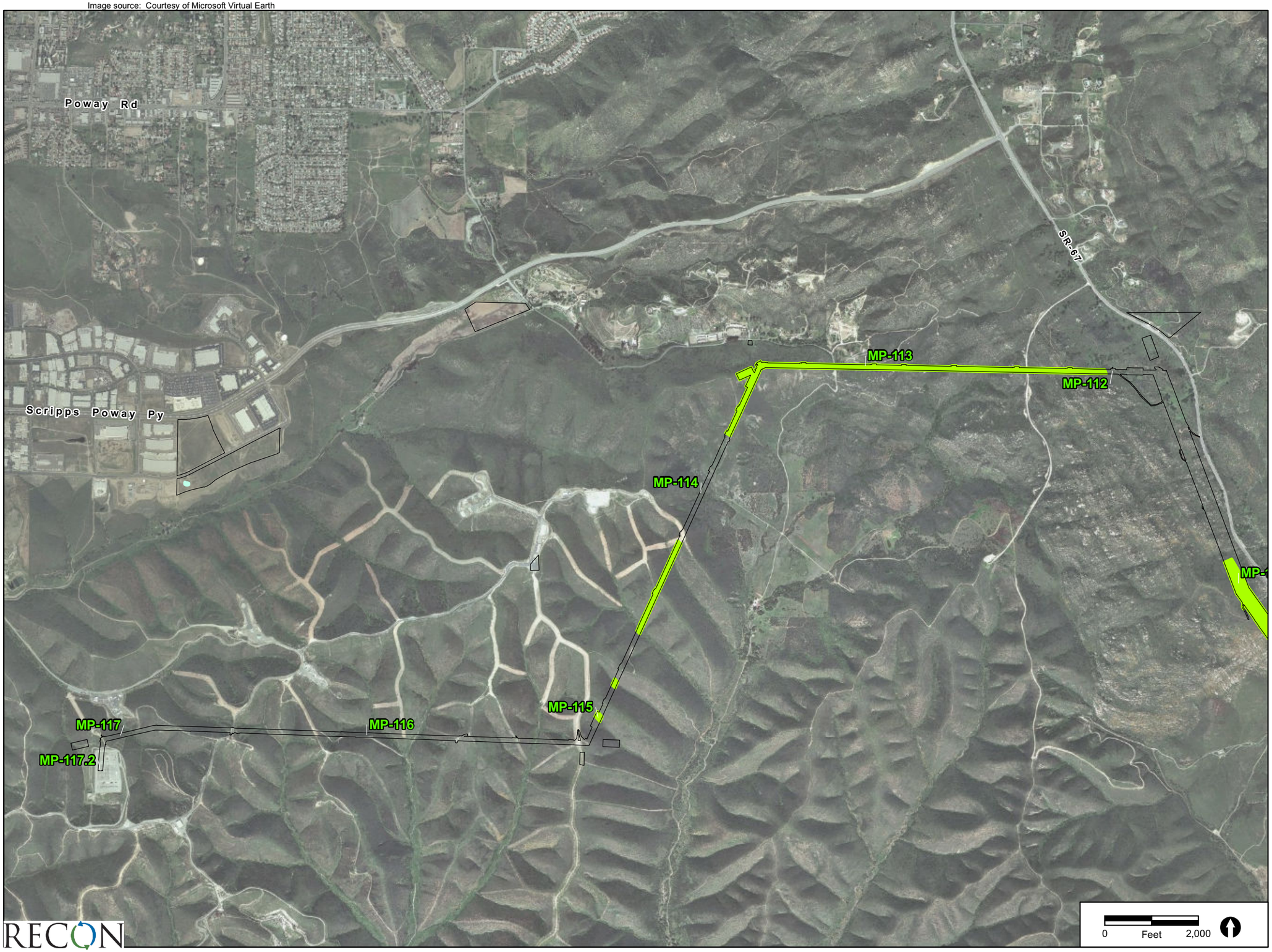
RECON

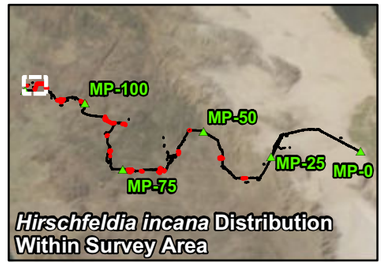
M:\JOBS3\5091\common_gis\weed\weed_maps_FORVUL.mxd 08/13/10

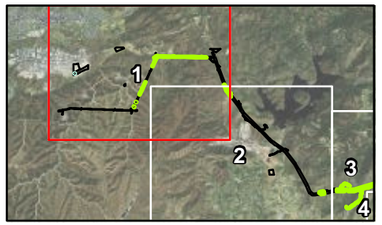
Sunrise Powerlink
Invasive Species Survey Results:
Sweet Fennel
(*Foeniculum vulgare*)

Map2 of 2

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Short-pod Mustard Density (*Hirschfeldia incana*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

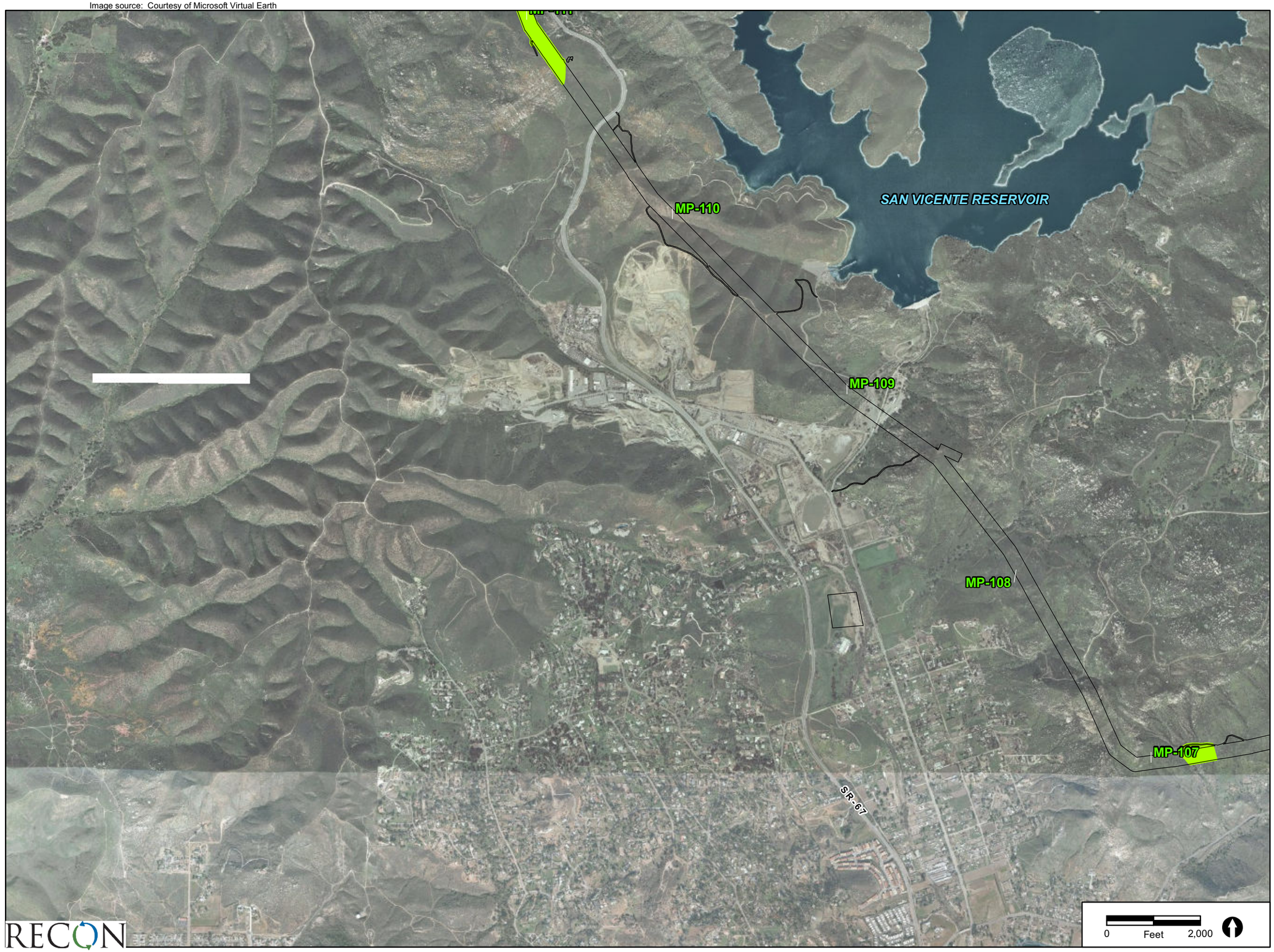
RECON

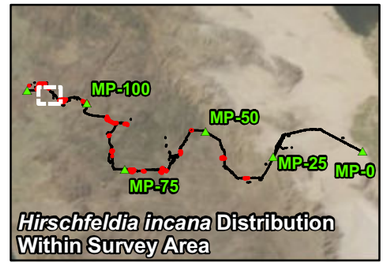
M:\JOBS3\5091\common_gis\weed\weed_maps_HIRINC.mxd 08/13/10

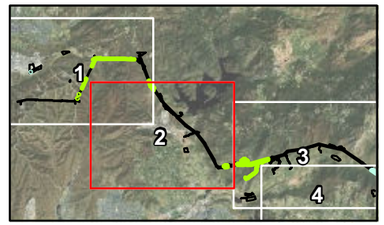
Sunrise Powerlink
Invasive Species Survey Results:
Short-pod Mustard
(*Hirschfeldia incana*)

Map 1 of 15

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Short-pod Mustard Density (*Hirschfeldia incana*)**

- Trace
- Low
- Medium
- Dense

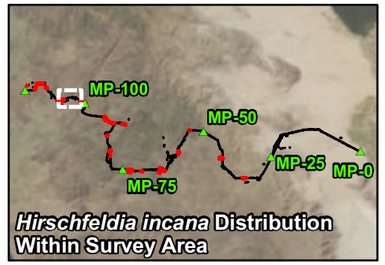
RECON

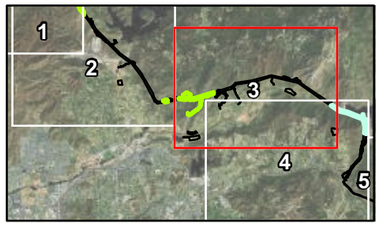
M:\JOBS3\5091\common_gis\weed\weed_maps_HIRINC.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Short-pod Mustard
(*Hirschfeldia incana*)

Map2 of 15

Image source: Courtesy of Microsoft Virtual Earth




MP-103
MP-104
MP-105
MP-102
MP-106
LAKE JENNINGS

2009 Invasive Species Action Area

**Short-pod Mustard Density (*Hirschfeldia incana*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

RECON

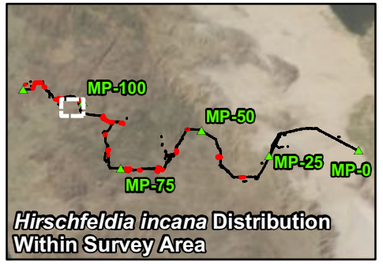
M:\JOBS3\5091\common_gis\weed\weed_maps_HIRINC.mxd 08/13/10

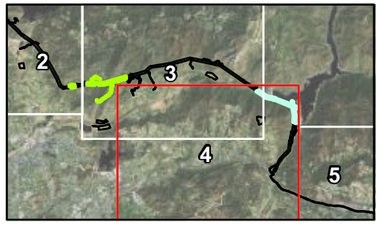
Sunrise Powerlink
Invasive Species Survey Results:
Short-pod Mustard
(*Hirschfeldia incana*)

Map3 of 15

Image source: Courtesy of Microsoft Virtual Earth

MP-101
EL CAPITAN RESERVOIR
MP-1
MP-99
LAKE JENNINGS
Olde Highway 80
Olde Highway 80
Alpine Bl
MP-98
MP-97




2009 Invasive Species Action Area

**Short-pod Mustard Density (*Hirschfeldia incana*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_HIRINC.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Short-pod Mustard
(*Hirschfeldia incana*)

Map4 of 15

Image source: Courtesy of Microsoft Virtual Earth

EL CAPITAN RESERVOIR

MP-96

MP-95

MP-94

MP-93

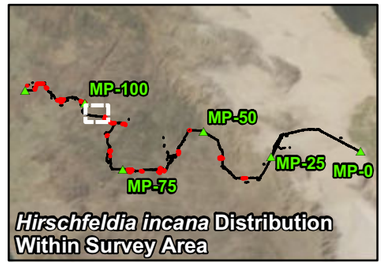
MP-92

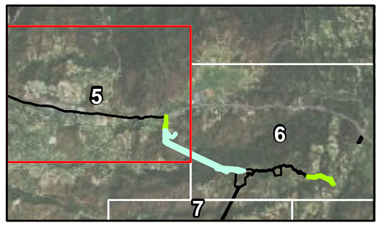
MP-91

Alpine Bl

POND 37A

Tavern Rd




2009 Invasive Species Action Area

**Short-pod Mustard Density (*Hirschfeldia incana*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

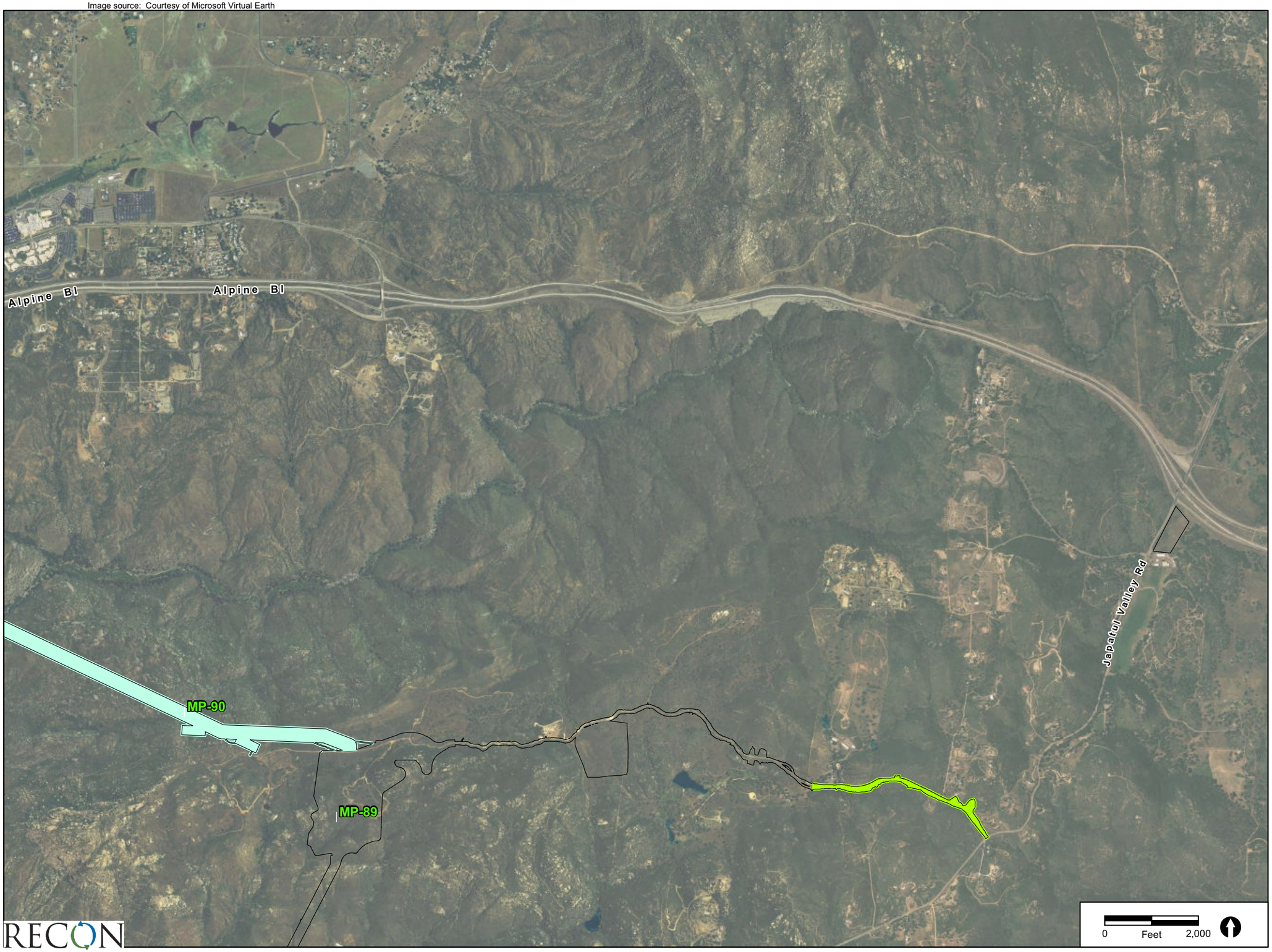
RECON

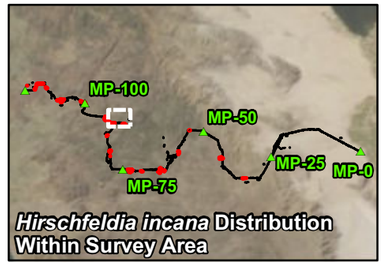
M:\JOBS3\5091\common_gis\weed\weed_maps_HIRINC.mxd 08/13/10

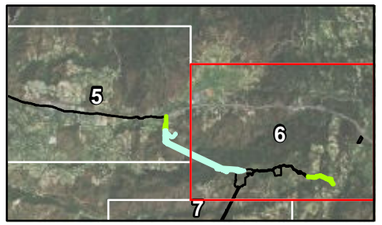
Sunrise Powerlink
Invasive Species Survey Results:
Short-pod Mustard
(*Hirschfeldia incana*)

Map5 of 15

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Short-pod Mustard Density (*Hirschfeldia incana*)**

- Trace
- Low
- Medium
- Dense

Sunrise Powerlink
Invasive Species Survey Results:
Short-pod Mustard
(*Hirschfeldia incana*)

Map6 of 15

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_HIRINC.mxd 08/13/10

Image source: Courtesy of Microsoft Virtual Earth

LOVELAND RESERVOIR

MP-88

MP-87

MP-86

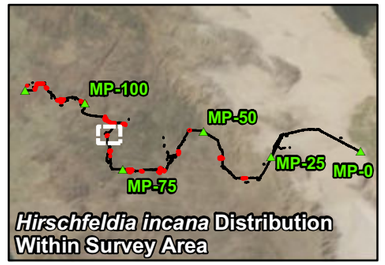
MP-85

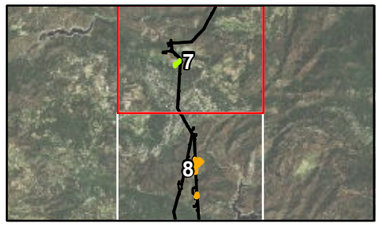
MP-84

Japatul Rd

Japatul Valley Rd

Lyons Valley Rd




2009 Invasive Species Action Area

**Short-pod Mustard Density (*Hirschfeldia incana*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_HIRINC.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Short-pod Mustard
(*Hirschfeldia incana*)

Map7 of 15

Image source: Courtesy of Microsoft Virtual Earth

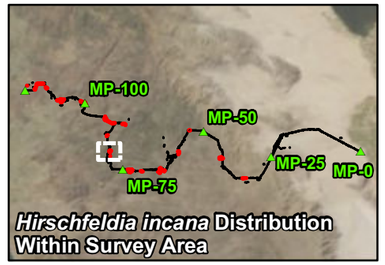
MP-83

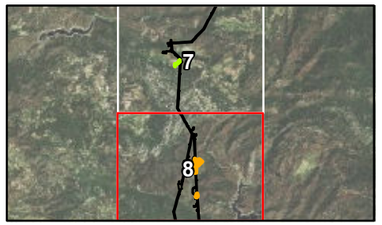
MP-82

MP-81

MP-80

Lyons Valley Rd




2009 Invasive Species Action Area

**Short-pod Mustard Density (*Hirschfeldia incana*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_HIRINC.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Short-pod Mustard
(*Hirschfeldia incana*)

Map8 of 15

Image source: Courtesy of Microsoft Virtual Earth

BARRETT LAKE

BARRETT LAKE

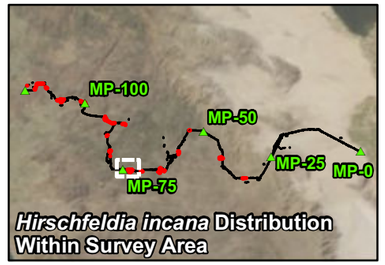
MP-76

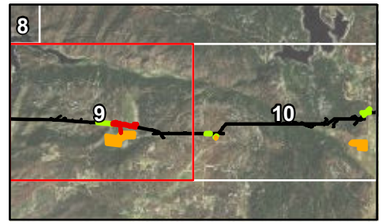
MP-75

MP-74

MP-73

MP-72




2009 Invasive Species Action Area

**Short-pod Mustard Density (*Hirschfeldia incana*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_HIRINC.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Short-pod Mustard
(*Hirschfeldia incana*)

Map9 of 15

Image source: Courtesy of Microsoft Virtual Earth

MORENA RESERVOIR

MP-71

MP-70

MP-69

MP-68

MP-67

MP-100

MP-50

MP-25

MP-0

MP-75

*Hirschfeldia incana* Distribution Within Survey Area

8

12

9

10

11

2009 Invasive Species Action Area

**Short-pod Mustard Density (*Hirschfeldia incana*)**

Trace

Low

Medium

Dense

0 Feet 2,000

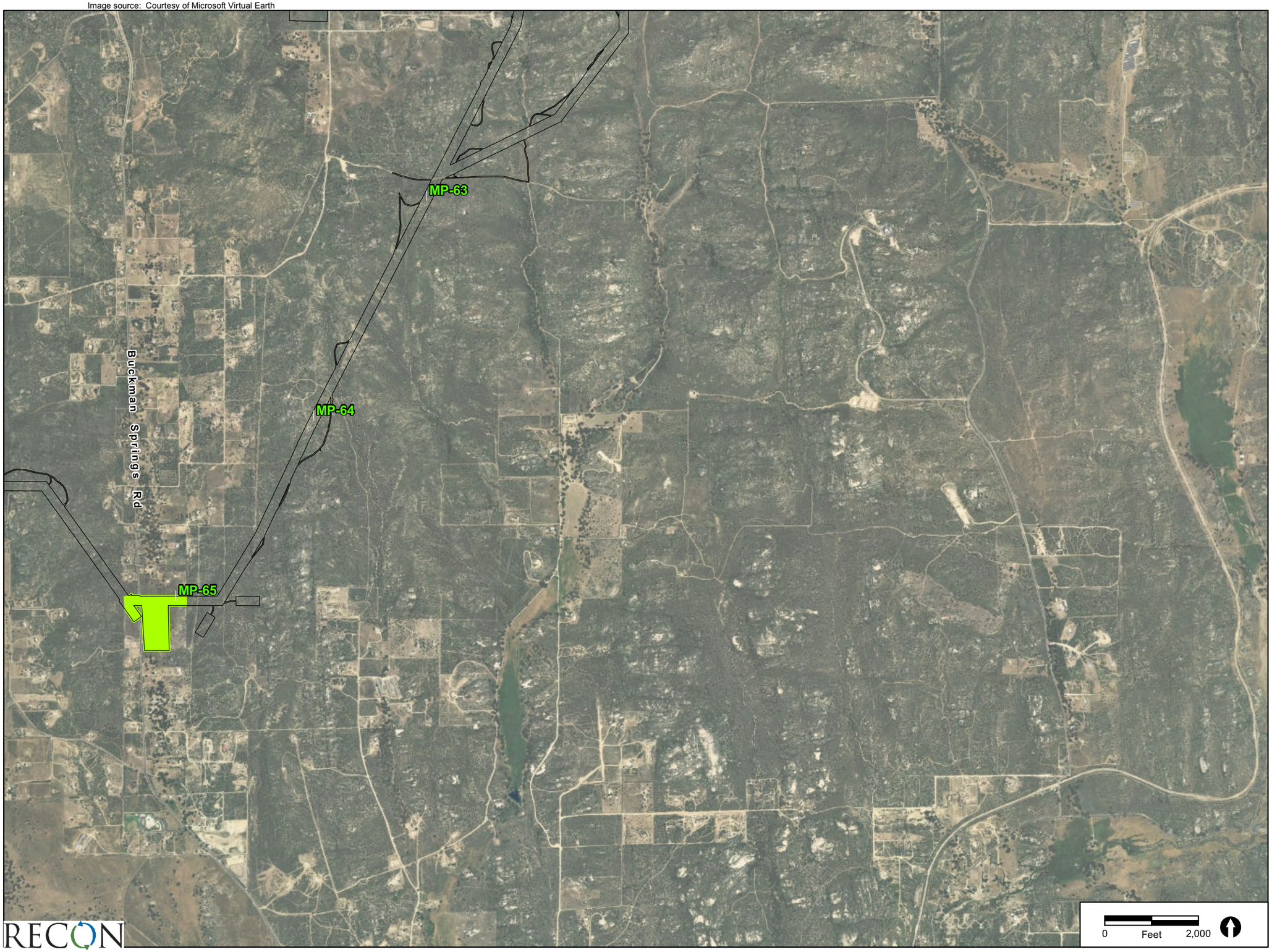
RECON

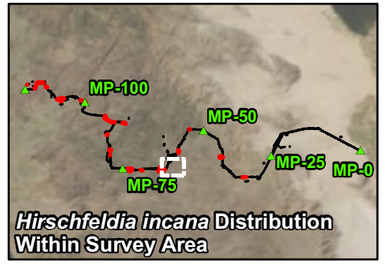
M:\JOBS3\5091\common_gis\weed\weed_maps_HIRINC.mxd 08/13/10

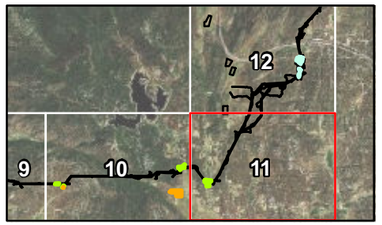
Sunrise Powerlink
Invasive Species Survey Results:
Short-pod Mustard
(*Hirschfeldia incana*)

Map 10 of 15

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Short-pod Mustard Density (*Hirschfeldia incana*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

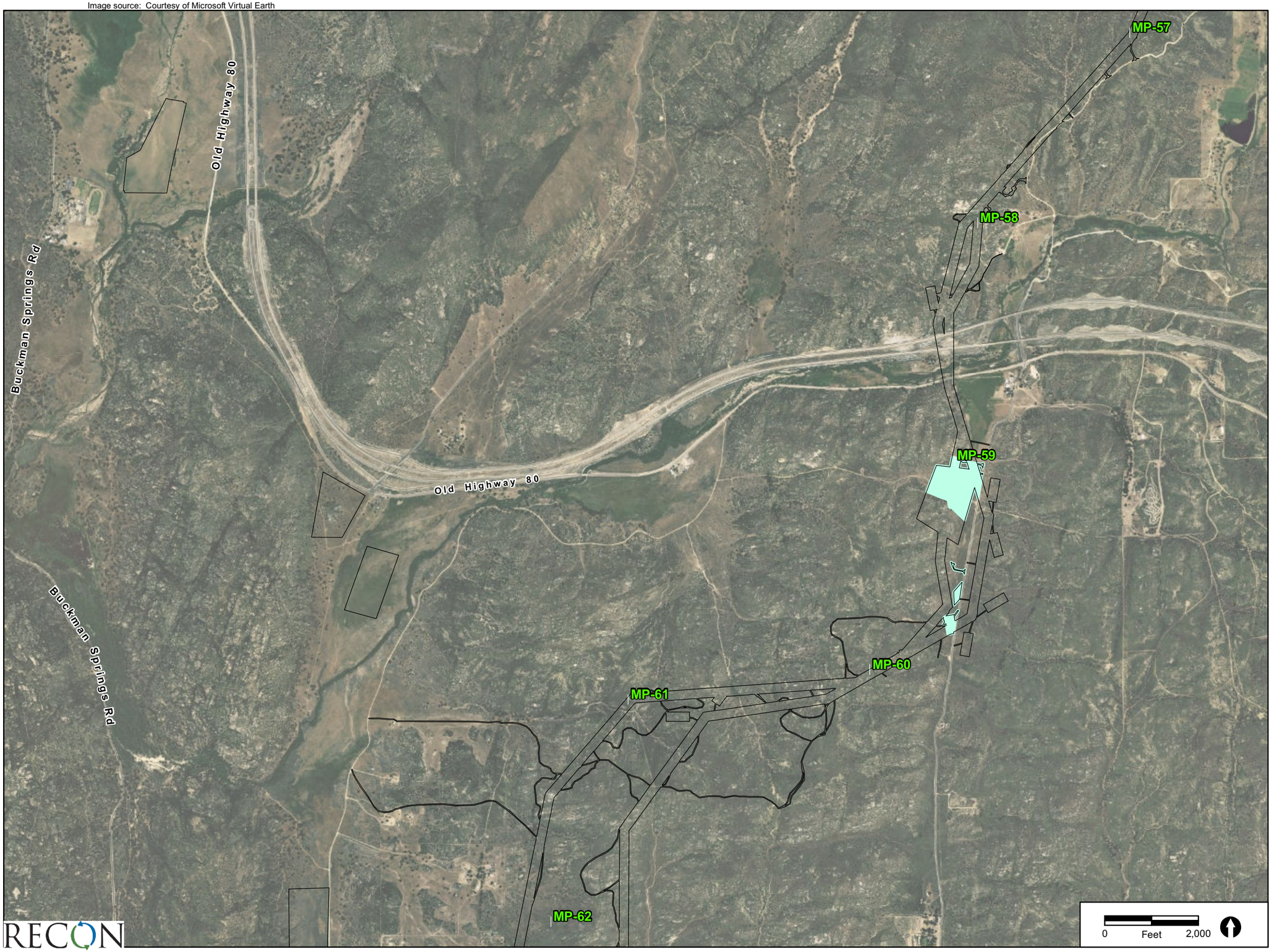
RECON

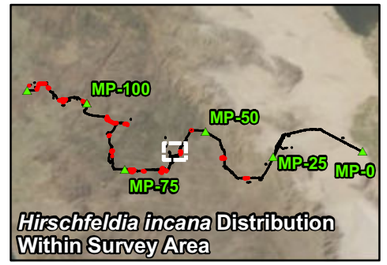
M:\JOBS3\5091\common_gis\weed\weed_maps_HIRINC.mxd 08/13/10

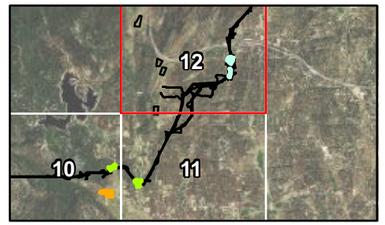
Sunrise Powerlink
Invasive Species Survey Results:
Short-pod Mustard
(*Hirschfeldia incana*)

Map 11 of 15

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Short-pod Mustard Density (*Hirschfeldia incana*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

RECON

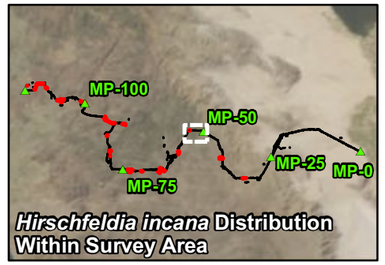
M:\JOBS3\5091\common_gis\weed\weed_maps_HIRINC.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Short-pod Mustard
(*Hirschfeldia incana*)

Map 12 of 15

Image source: Courtesy of Microsoft Virtual Earth

MP-53
MP-52
MP-51
MP-50
MP-54
MP-55





2009 Invasive Species Action Area

**Short-pod Mustard Density (*Hirschfeldia incana*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

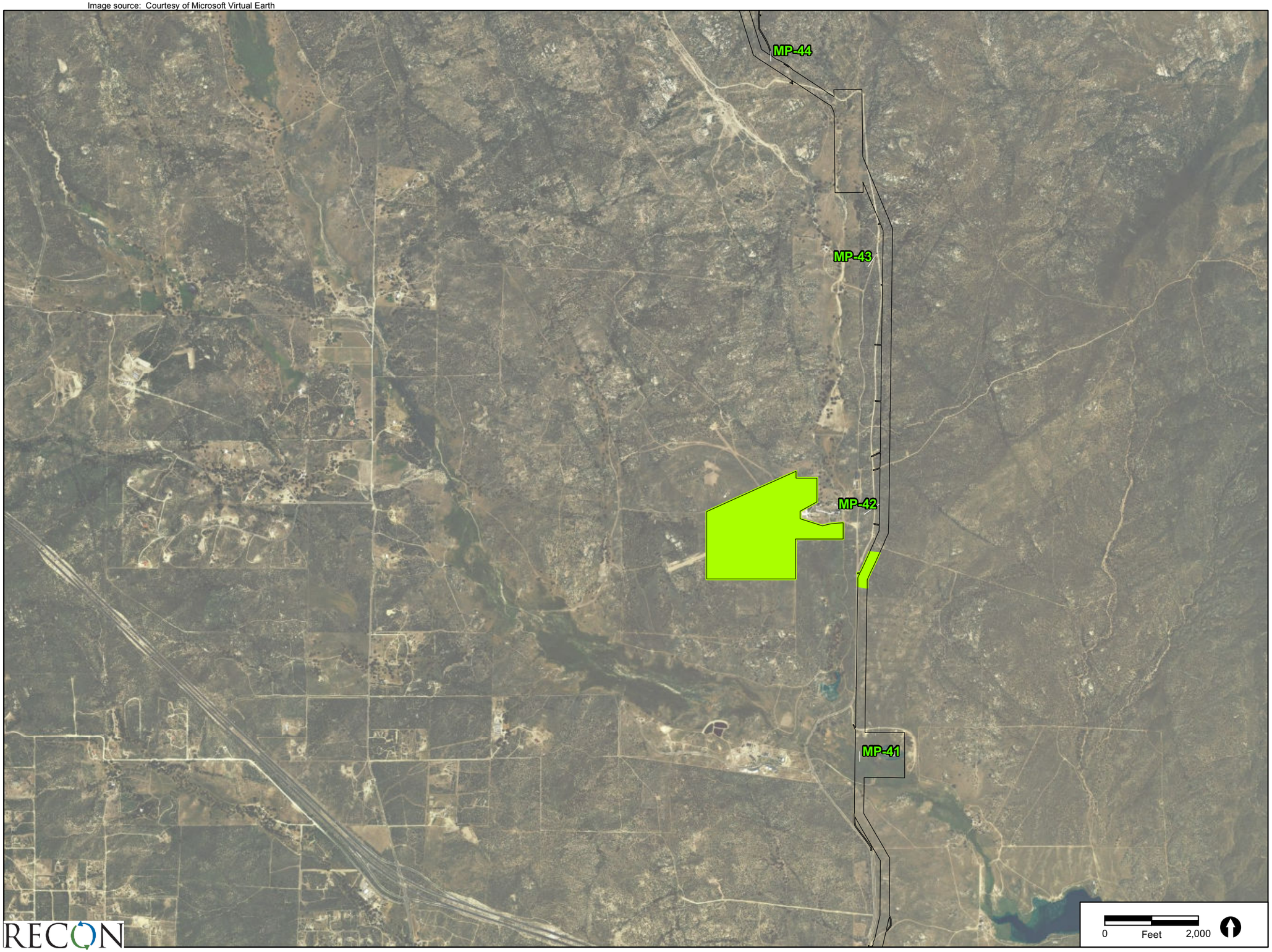
RECON

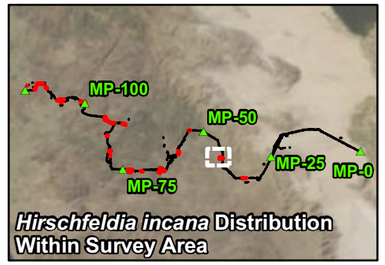
M:\JOBS3\5091\common_gis\weed\weed_maps_HIRINC.mxd 08/13/10

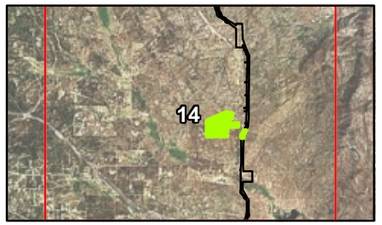
Sunrise Powerlink
Invasive Species Survey Results:
Short-pod Mustard
(*Hirschfeldia incana*)

Map 13 of 15

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Short-pod Mustard Density (*Hirschfeldia incana*)**

- Trace
- Low
- Medium
- Dense

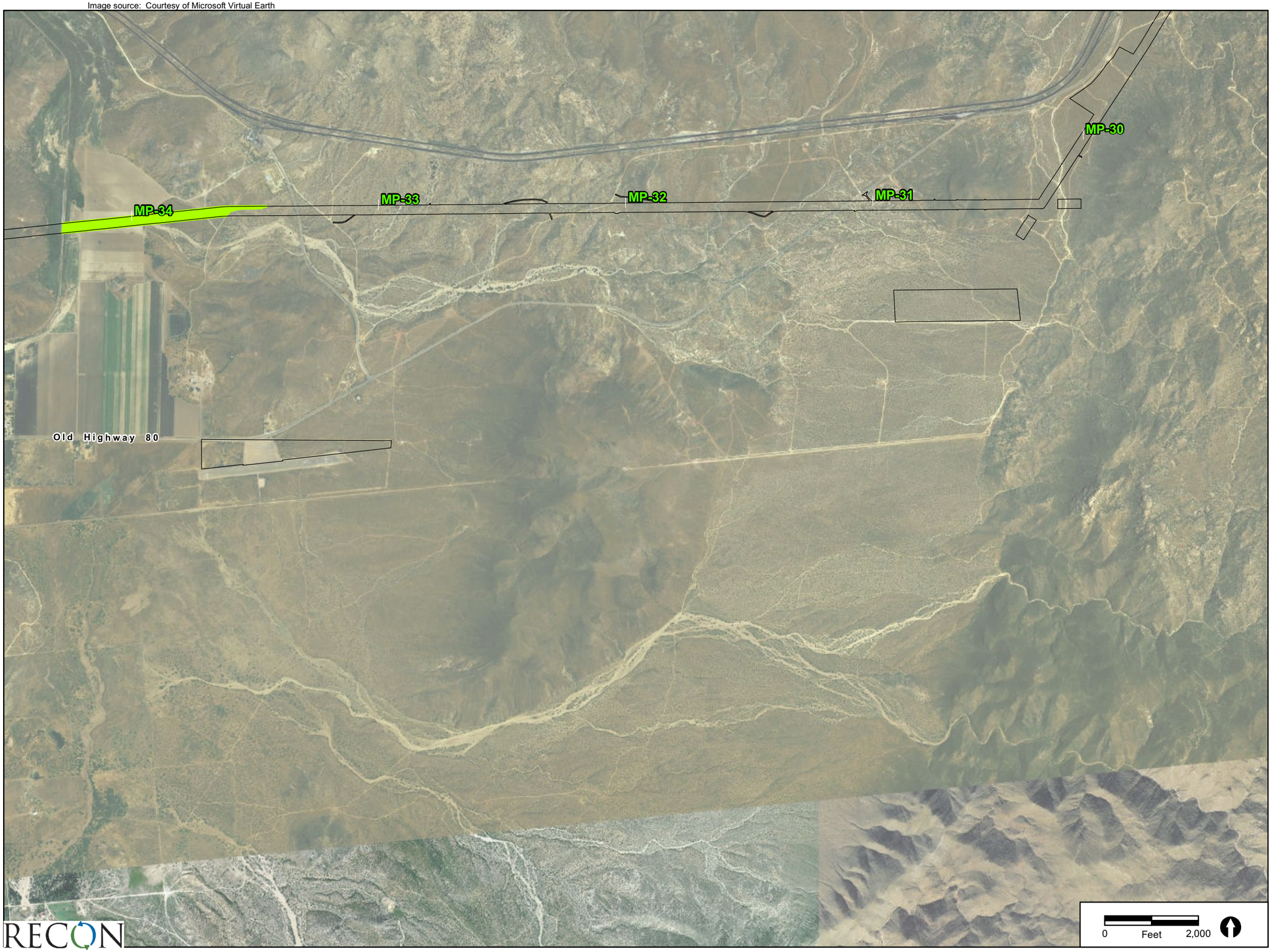
RECON

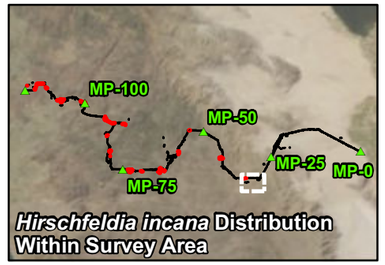
M:\JOBS3\5091\common_gis\weed\weed_maps_HIRINC.mxd 08/13/10

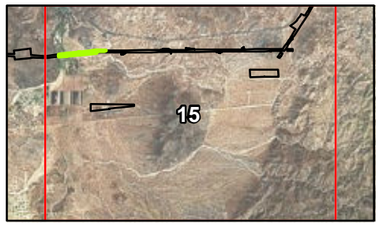
Sunrise Powerlink
Invasive Species Survey Results:
Short-pod Mustard
(*Hirschfeldia incana*)

Map 14 of 15

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Short-pod Mustard Density (*Hirschfeldia incana*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_HIRINC.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Short-pod Mustard
(*Hirschfeldia incana*)

Map 15 of 15

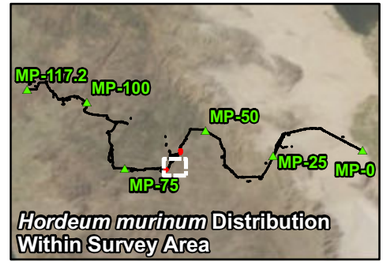
Image source: Courtesy of Microsoft Virtual Earth

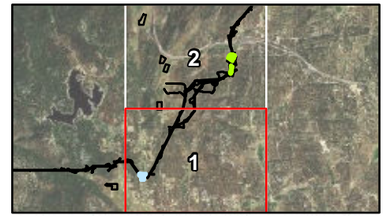
MP-63

MP-64

MP-65

Buckman Springs Rd




2009 Invasive Species Action Area

**Foxtail Barley Density (*Hordeum murinum*)**

Trace

Low

0 Feet 2,000

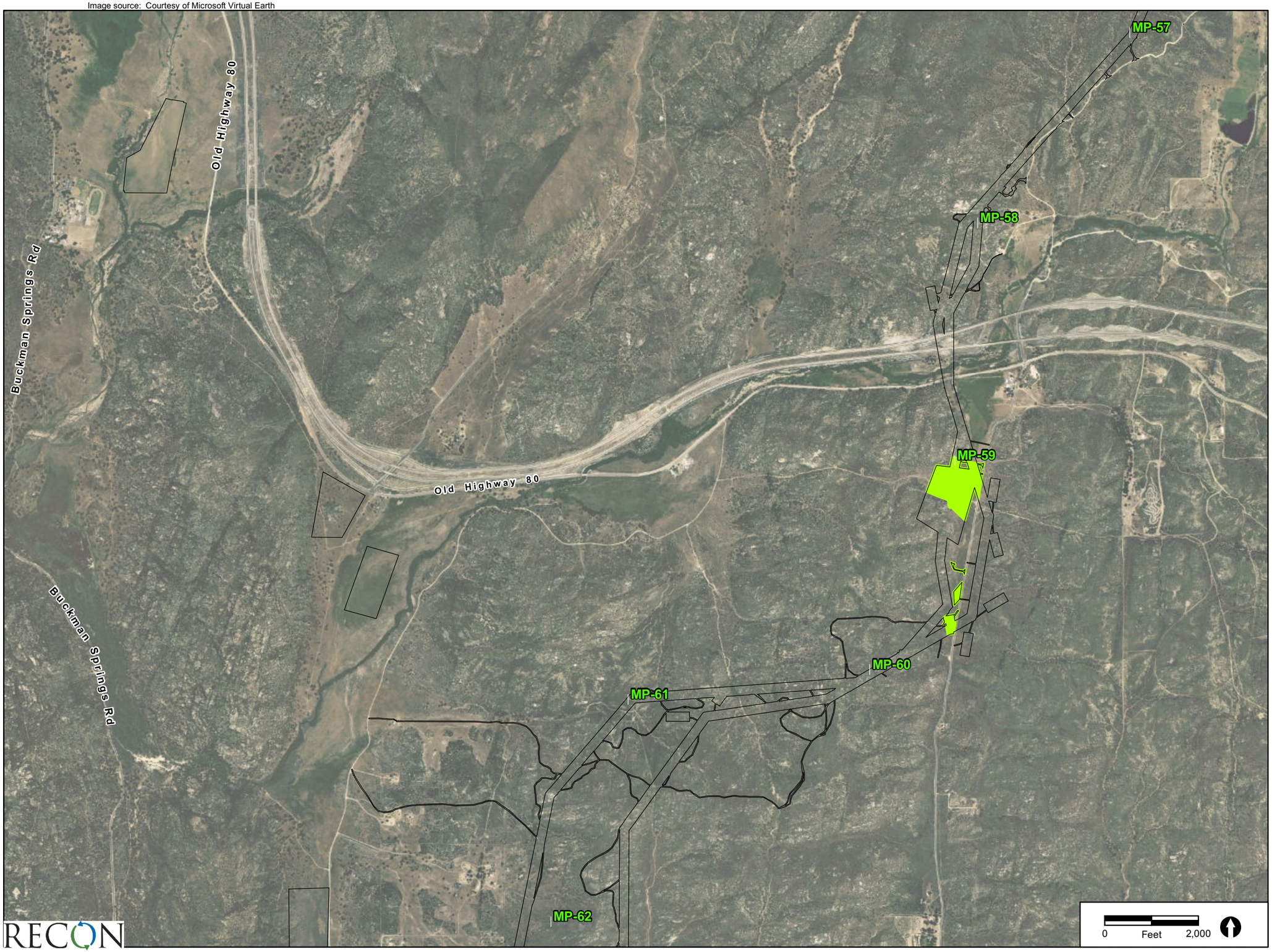
RECON

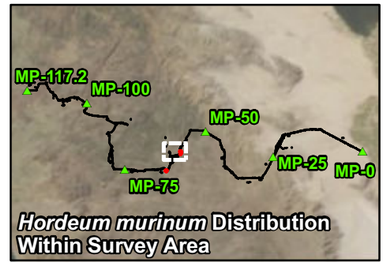
M:\JOBS3\5091\common_gis\weed\weed_maps_HORMUR.mxd 08/13/10

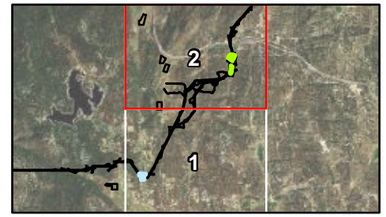
Sunrise Powerlink
Invasive Species Survey Results:
Foxtail Barley
(*Hordeum murinum*)

Map 1 of 2

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Foxtail Barley Density (*Hordeum murinum*)**

Trace

Low

0 Feet 2,000

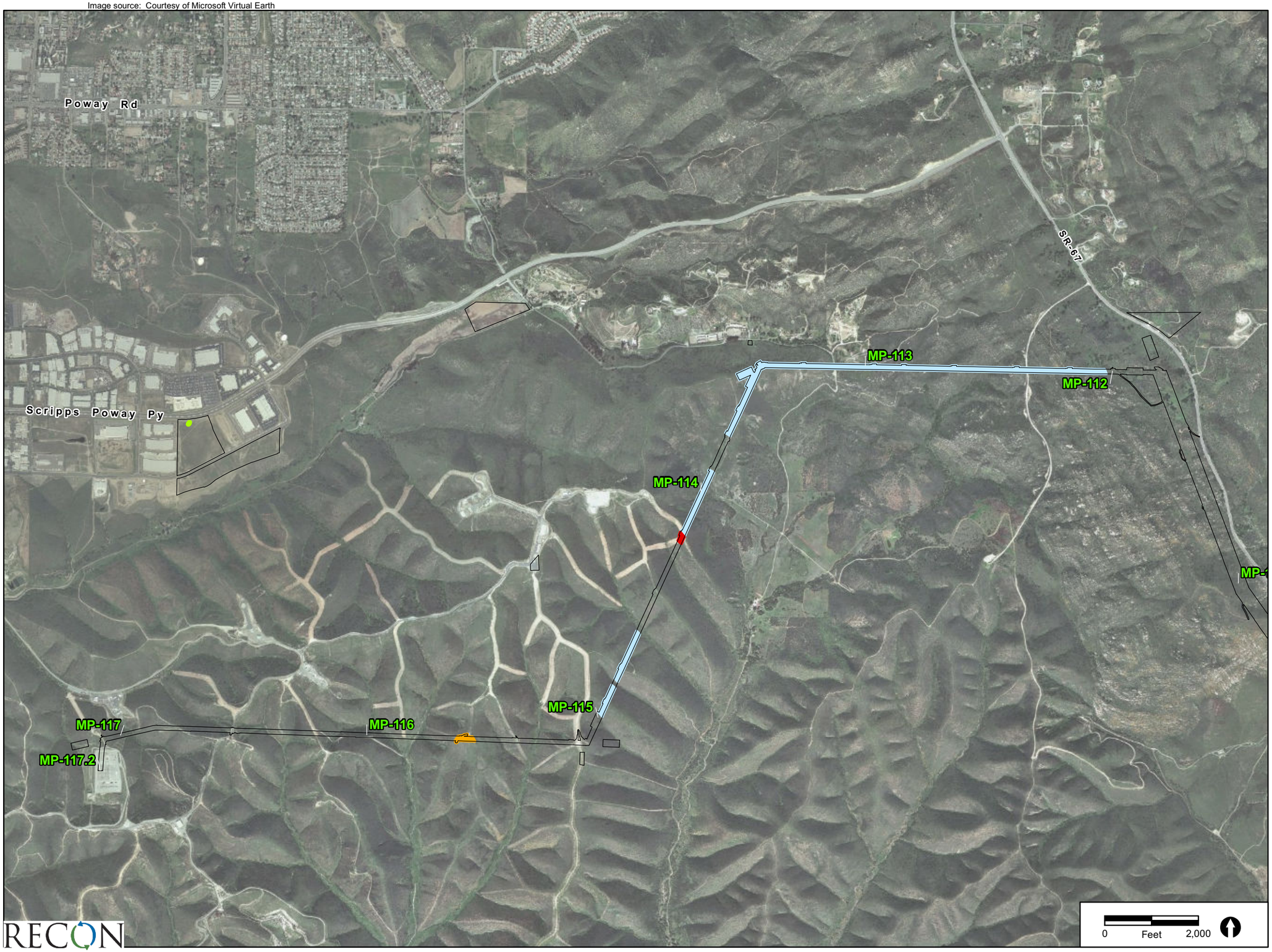
RECON

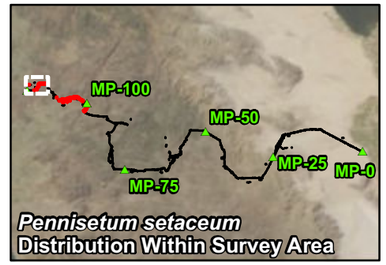
M:\JOBS3\5091\common_gis\weed\weed_maps_HORMUR.mxd 08/13/10

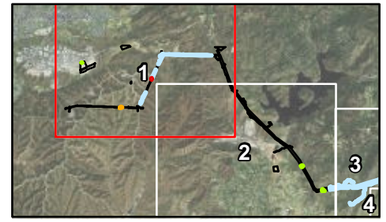
Sunrise Powerlink
Invasive Species Survey Results:
Foxtail Barley
(*Hordeum murinum*)

Map2 of 2

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Fountain Grass Density (*Pennisetum setaceum*)**

- Trace
- Low
- Medium
- Dense

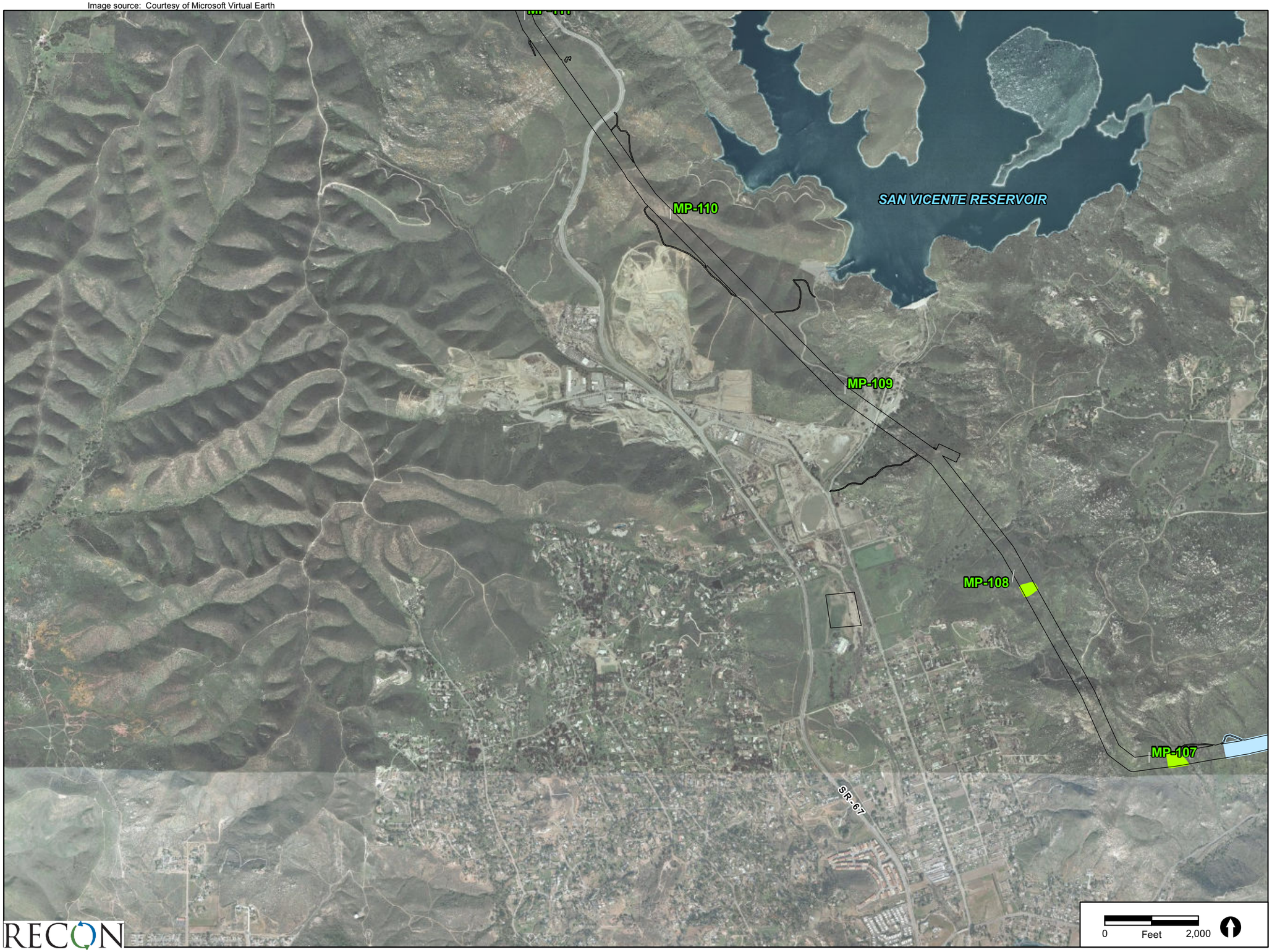
RECON

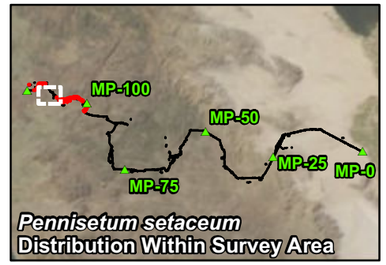
M:\JOBS3\5091\common_gis\weed\weed_maps_HORMUR.mxd 08/13/10

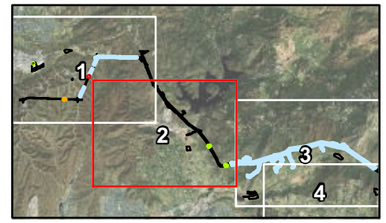
Sunrise Powerlink
Invasive Species Survey Results:
Fountain Grass
(*Pennisetum setaceum*)

Map 1 of 4

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Fountain Grass Density (*Pennisetum setaceum*)**

- Trace
- Low
- Medium
- Dense

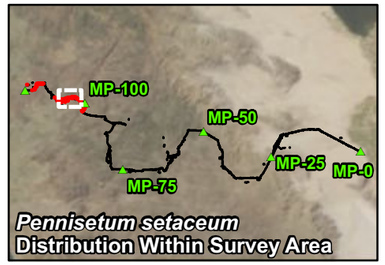
RECON

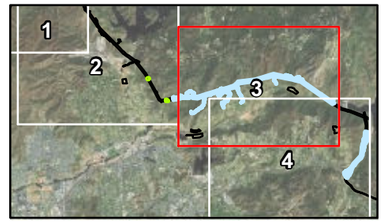
M:\JOBS3\5091\common_gis\weed\weed_maps_HORMUR.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Fountain Grass
(*Pennisetum setaceum*)

Map2 of 4

Image source: Courtesy of Microsoft Virtual Earth




MP-104
MP-103
MP-105
MP-102
MP-106
LAKE JENNINGS

2009 Invasive Species Action Area

**Fountain Grass Density (*Pennisetum setaceum*)**

- Trace
- Low
- Medium
- Dense

0 Feet 2,000

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_HORMUR.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Fountain Grass
(*Pennisetum setaceum*)

Map3 of 4

Image source: Courtesy of Microsoft Virtual Earth

MP-101

EL CAPITAN RESERVOIR

MP-1

MP-99

LAKE JENNINGS

Olde Highway 80

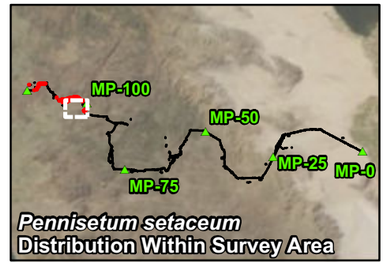
Olde Highway 80

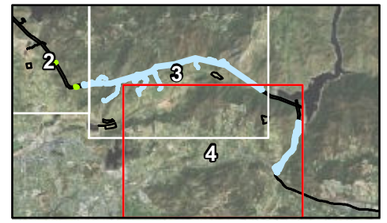
Alpine Bl

MP-98

MP-97

0 Feet 2,000




2009 Invasive Species Action Area

**Fountain Grass Density (*Pennisetum setaceum*)**

- Trace
- Low
- Medium
- Dense

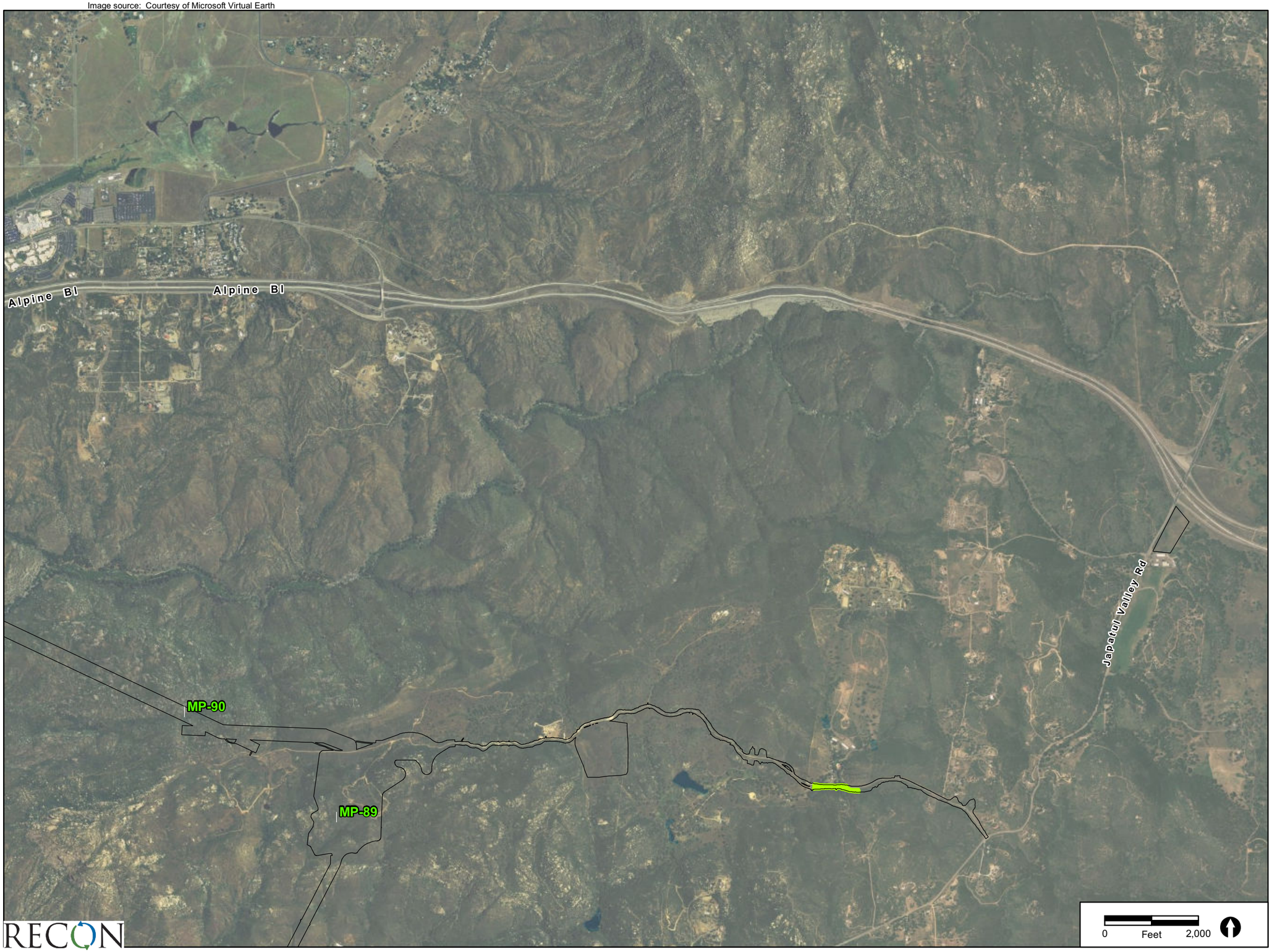
RECON

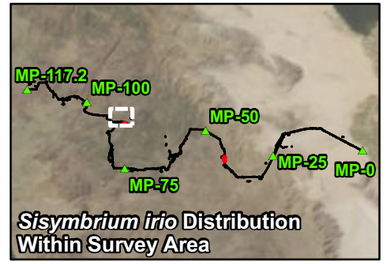
M:\JOBS3\5091\common_gis\weed\weed_maps_HORMUR.mxd 08/13/10

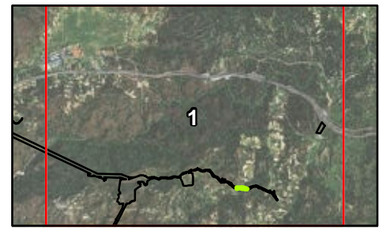
Sunrise Powerlink
Invasive Species Survey Results:
Fountain Grass
(*Pennisetum setaceum*)

Map4 of 4

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**London Rocket (*Sisymbrium irio*)**

Low

Medium

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_SISIRI.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
London Rocket
(*Sisymbrium irio*)

Map 1 of 2

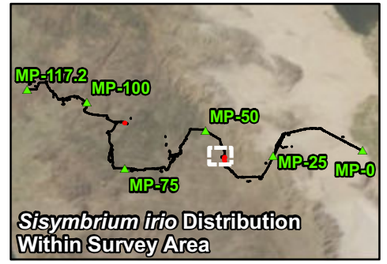
Image source: Courtesy of Microsoft Virtual Earth

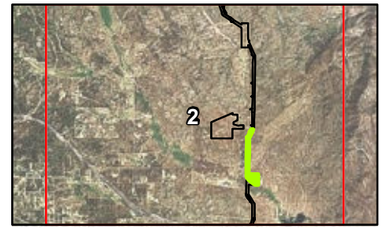
MP-44

MP-43

MP-42

MP-41




2009 Invasive Species Action Area

**London Rocket (*Sisymbrium irio*)**

Low

Medium

0 Feet 2,000

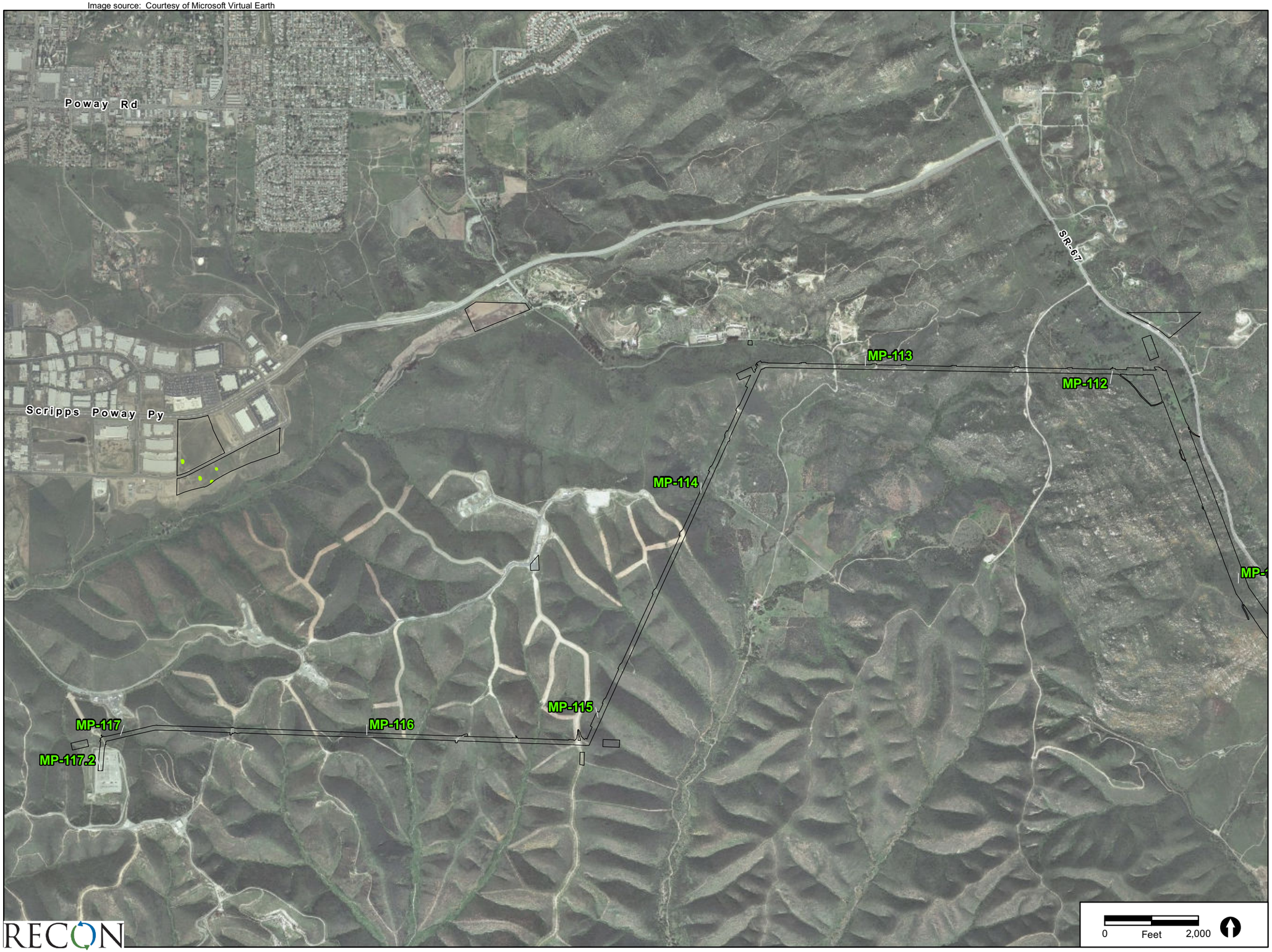
RECON

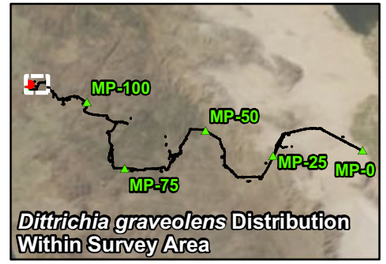
M:\JOBS3\5091\common_gis\weed\weed_maps_SISIRI.mxd 08/13/10

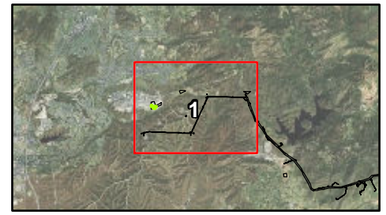
Sunrise Powerlink
Invasive Species Survey Results:
London Rocket
(*Sisymbrium irio*)

Map2 of 2

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Stinkwort Density (*Dittrichia graveolens*)**

Low

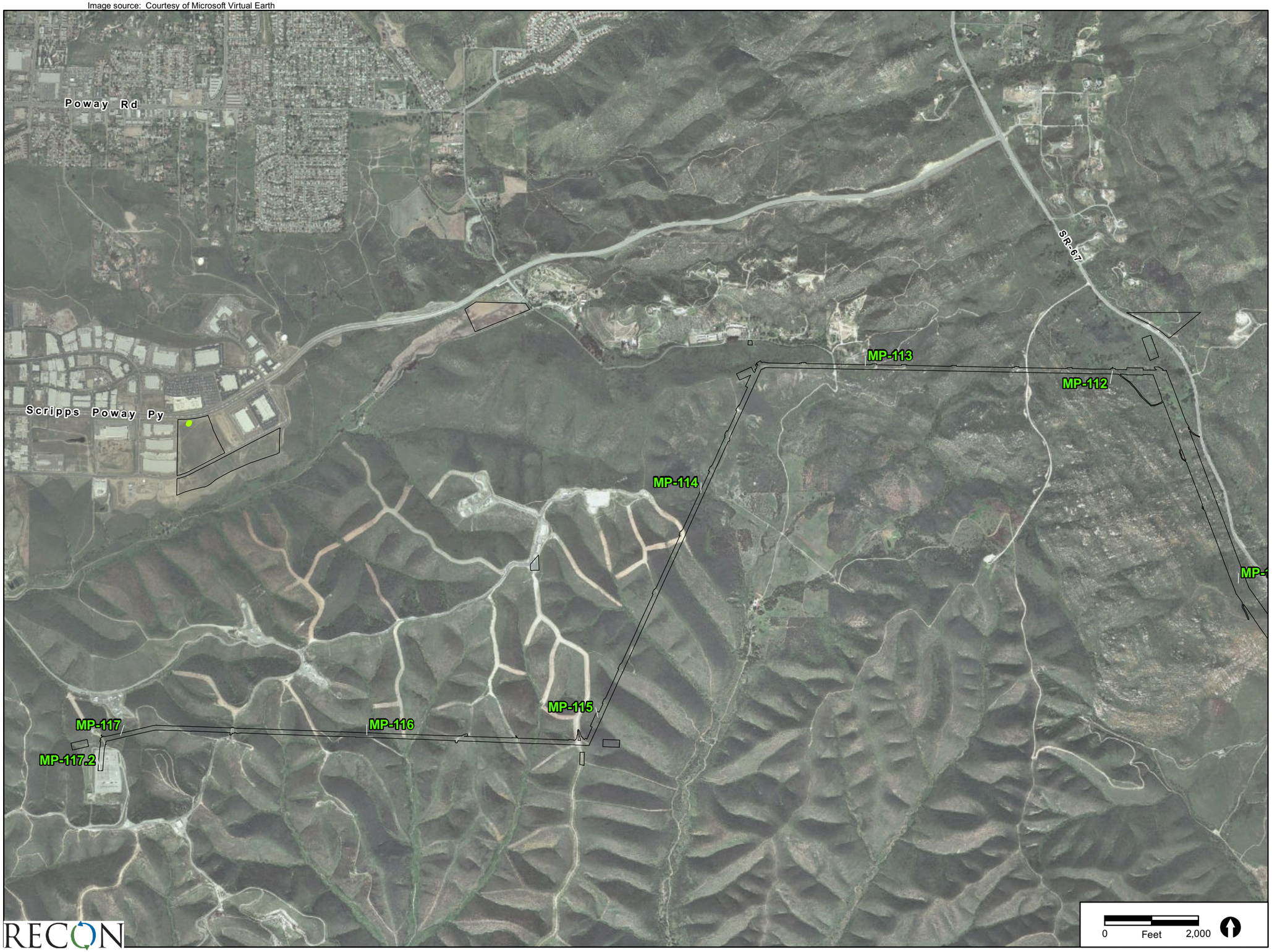
RECON

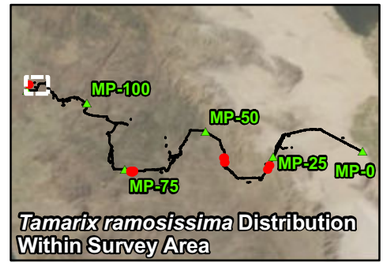
M:\JOBS3\5091\common_gis\weed\weed_maps_STINKWORT.mxd 08/13/10

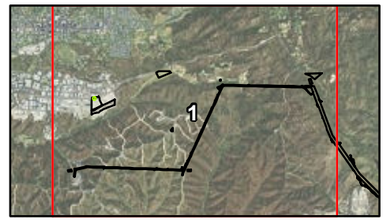
Sunrise Powerlink
Invasive Species Survey Results:
Stinkwort
(*Dittrichia graveolens*)

Map1 of 1

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Saltcedar**
**(*Tamarix ramosissima*)**

- Trace
- Low
- Medium

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_TAMRAM.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Saltcedar
(*Tamarix ramosissima*)

Image source: Courtesy of Microsoft Virtual Earth

BARRETT LAKE

BARRETT LAKE

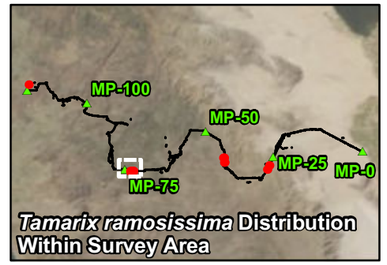
MP-76

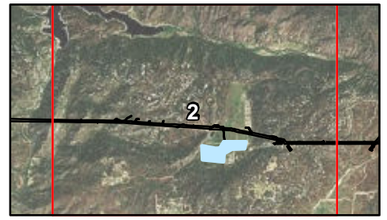
MP-75

MP-74

MP-73

MP-72




2009 Invasive Species Action Area

**Saltcedar (*Tamarix ramosissima*)**

- Trace
- Low
- Medium

0 Feet 2,000

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_TAMRAM.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Saltcedar
(*Tamarix ramosissima*)

Map2 of 4

Image source: Courtesy of Microsoft Virtual Earth

MP-44

MP-43

MP-42

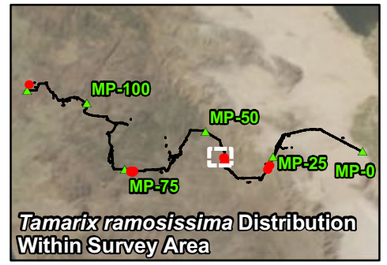
20 Individuals

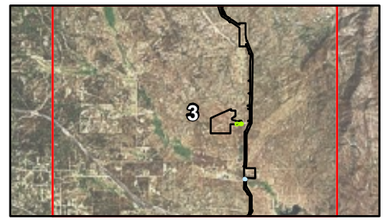
4 Individuals

MP-41

2 Individuals

0 Feet 2,000




2009 Invasive Species Action Area

**Saltcedar (*Tamarix ramosissima*)**

- Trace
- Low
- Medium

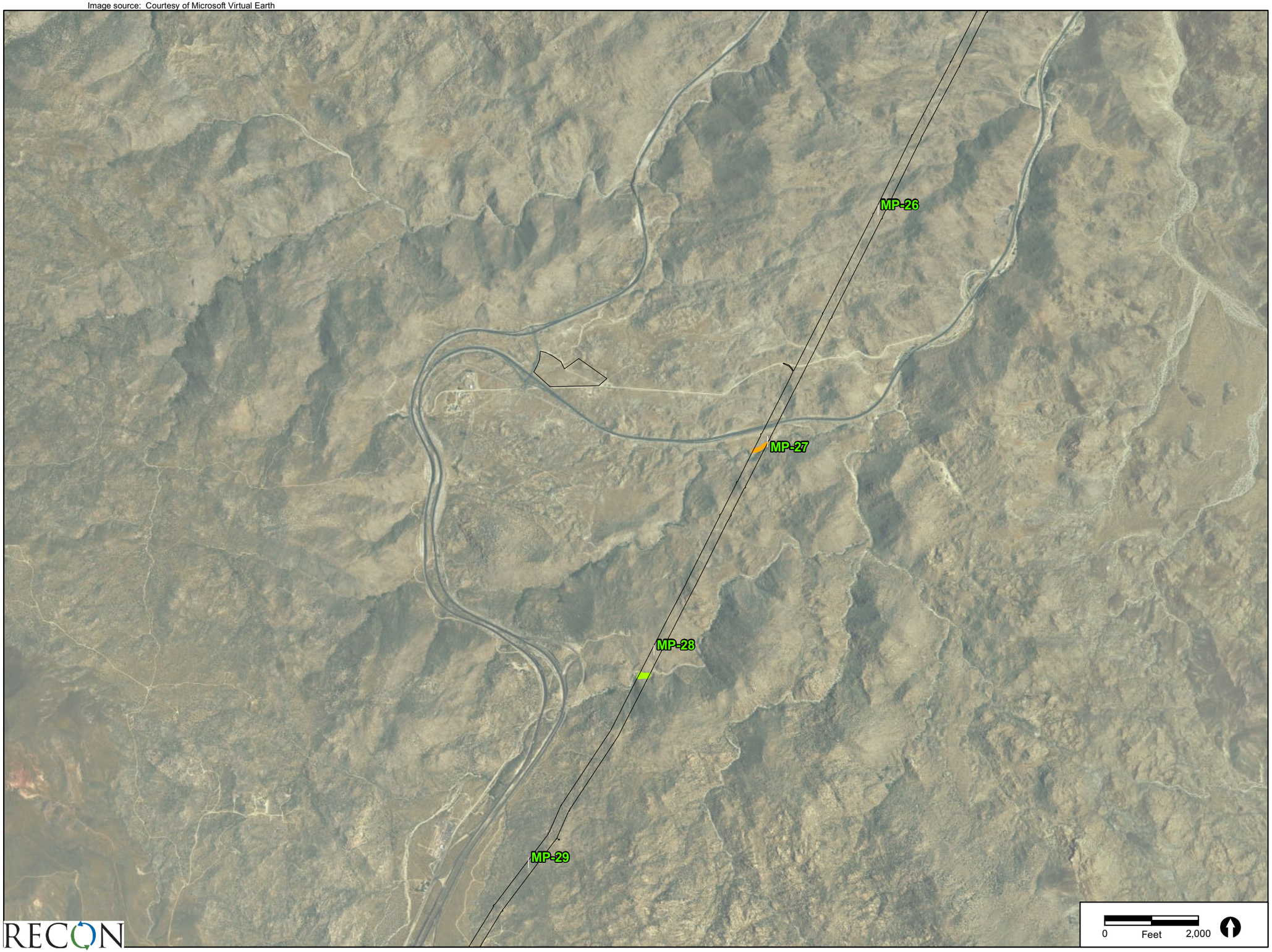
RECON

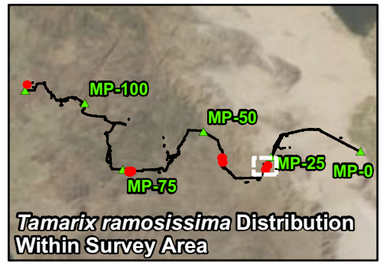
M:\JOBS3\5091\common_gis\weed\weed_maps_TAMRAM.mxd 08/13/10

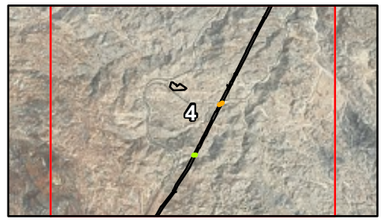
Sunrise Powerlink
Invasive Species Survey Results:
Saltcedar
(*Tamarix ramosissima*)

Map3 of 4

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Saltcedar**
**(*Tamarix ramosissima*)**

- Trace
- Low
- Medium

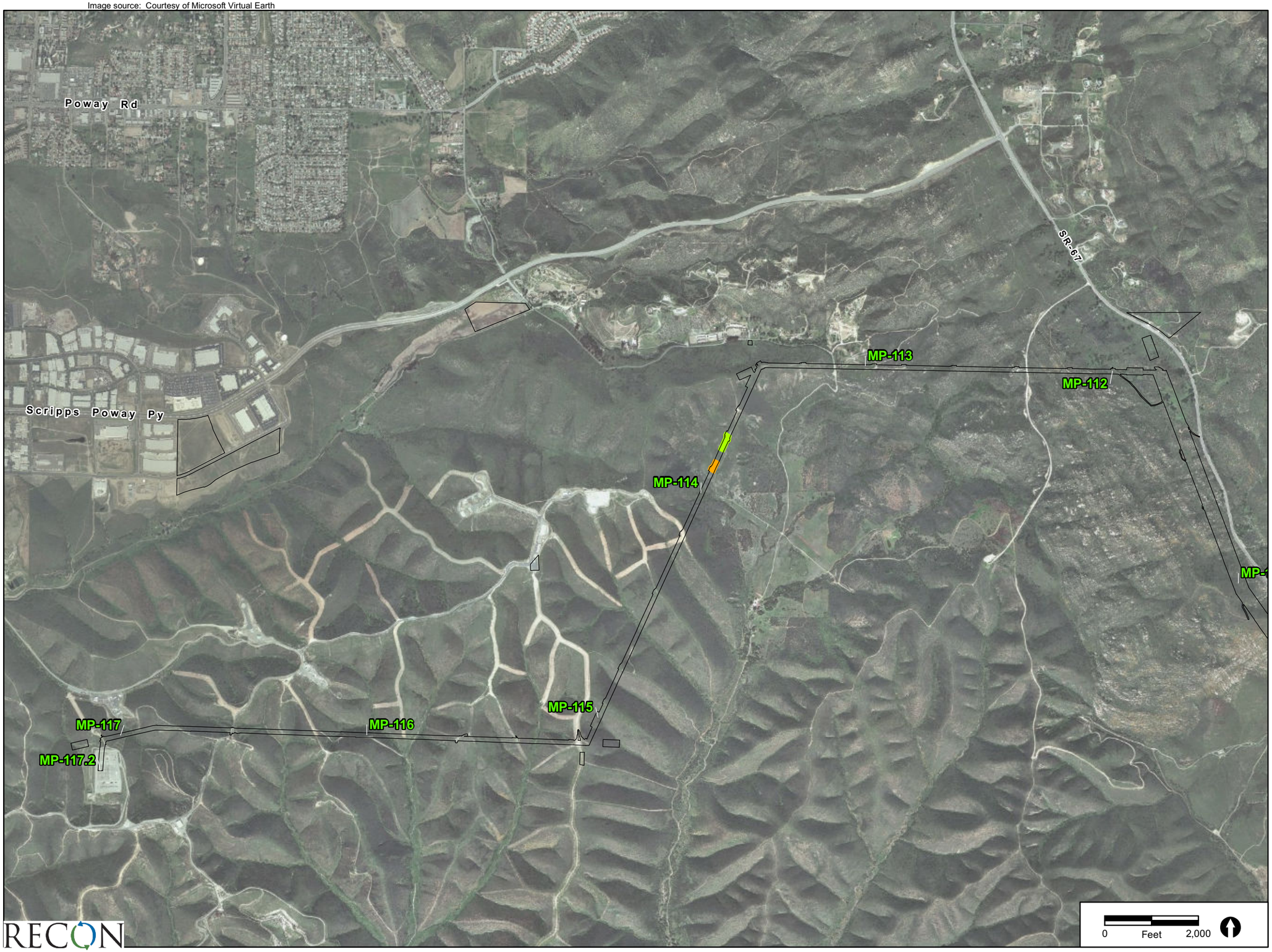
Sunrise Powerlink
Invasive Species Survey Results:
Saltcedar
(*Tamarix ramosissima*)

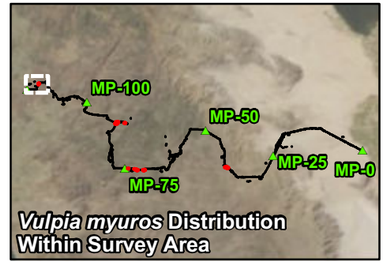
Map4 of 4

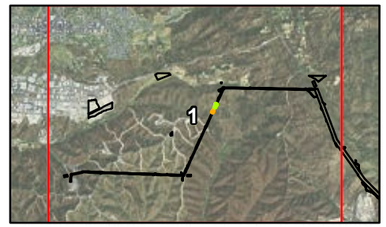
RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_TAMRAM.mxd 08/13/10

Image source: Courtesy of Microsoft Virtual Earth




2009 Invasive Species Action Area

**Foxtail Fescue (*Vulpia myuros*)**

- Low
- Medium
- Dense

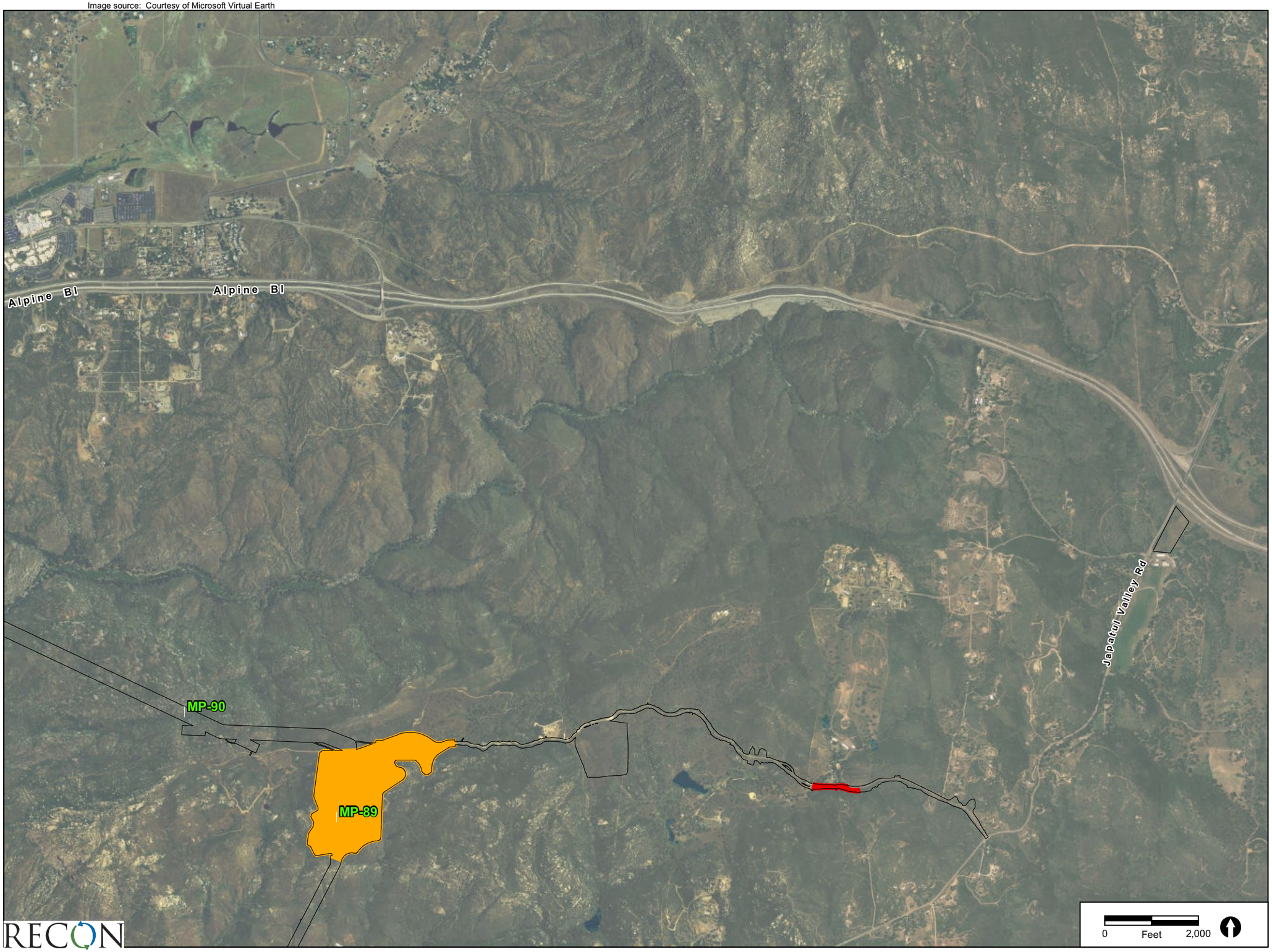
RECON

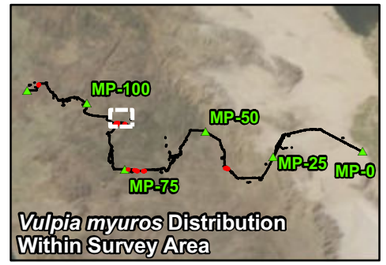
M:\JOBS3\5091\common_gis\weed\weed_maps_VULMYU.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Foxtail Fescue
(*Vulpia myuros*)

Map 1 of 5

Image source: Courtesy of Microsoft Virtual Earth





2009 Invasive Species Action Area

**Foxtail Fescue (*Vulpia myuros*)**

- Low
- Medium
- Dense

RECON

M:\JOBS3\5091\common_gis\weed\weed_maps_VULMYU.mxd 08/13/10

Sunrise Powerlink
Invasive Species Survey Results:
Foxtail Fescue
(*Vulpia myuros*)

Map2 of 5

Image source: Courtesy of Microsoft Virtual Earth

BARRETT LAKE

BARRETT LAKE

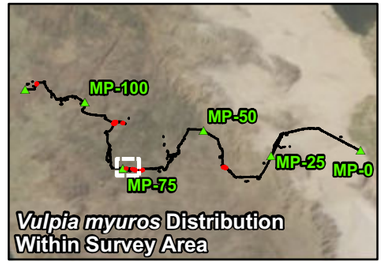
MP-76

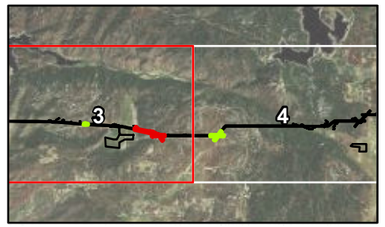
MP-75

MP-74

MP-73

MP-72




2009 Invasive Species Action Area

**Foxtail Fescue (*Vulpia myuros*)**

Low

Medium

Dense

0 Feet 2,000

RECON

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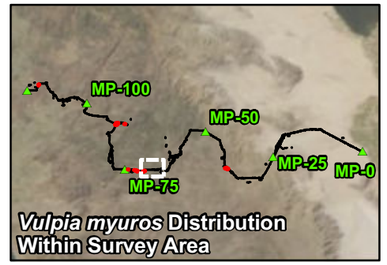
Sunrise Powerlink
Invasive Species Survey Results:
Foxtail Fescue
(*Vulpia myuros*)

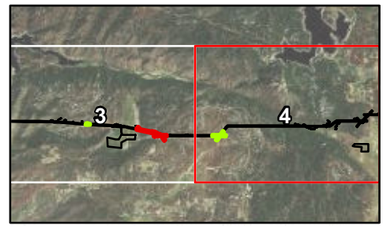
Map3 of 5

Image source: Courtesy of Microsoft Virtual Earth

MORENA RESERVOIR

MP-71 MP-70 MP-69 MP-68 MP-67 MP-




2009 Invasive Species Action Area

**Foxtail Fescue**
**(*Vulpia myuros*)**

- Low
- Medium
- Dense

0 Feet 2,000

RECON

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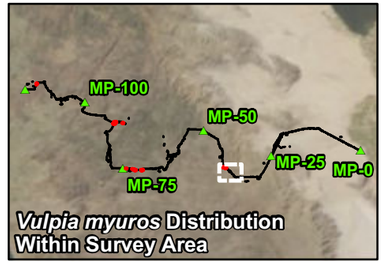
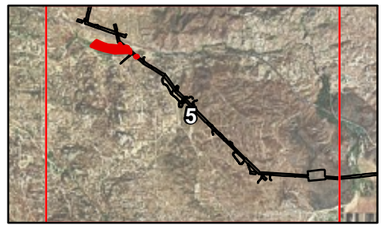
Sunrise Powerlink
Invasive Species Survey Results:
Foxtail Fescue
(*Vulpia myuros*)

Map4 of 5

Image source: Courtesy of Microsoft Virtual Earth

MP-40
MP-39
MP-38
MP-37
MP-36
MP-35
Old Highway 80




2009 Invasive Species Action Area

**Foxtail Fescue (*Vulpia myuros*)**

- Low
- Medium
- Dense

0 Feet 2,000

RECON

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Sunrise Powerlink
Invasive Species Survey Results:
Foxtail Fescue
(*Vulpia myuros*)

Map5 of 5

# APPENDIX C

# Proposed Temporary Wash Stations

## 1.0 Background

The following plan outlines the proposed temporary wash stations that are to be installed along the Environmentally Superior Southern Route (ESSR) of the San Diego Gas & Electric (SDG&E) Sunrise Powerlink Project (Project). The use of wash stations for vehicles and equipment (either temporarily installed stations or existing commercial vehicle washing facilities) is included as a requirement of Mitigation Measure B-3a, as outlined in Appendix 12 of the Project's environmental impact report/environmental impact statement EIR/EIS (California Public Utilities Commission and U.S. Department of the Interior, Bureau of Land Management 2008) and the associated Biological Opinion (BO) (U.S. Fish and Wildlife Service 2009).

## 2.0 Objective

Vehicle cleaning procedures and practices are used to minimize or eliminate the dispersal of non-native vegetation in newly constructed areas, mitigation sites, or existing native habitat. The procedures outlined below are to be applied to all wash station sites where vehicle cleaning is performed.

## 3.0 Location of Temporary Wash Stations

Temporary wash stations will be installed in twelve (12) locations throughout the entire length of the Project. The locations for the temporary wash stations are based on weed density, project design, lack of native vegetation, and access to the ROW (Table 1). Eight of the wash stations will be installed within Project-approved construction yards, three within the Project ROW, and one on private property. The stations will be located in the following locations:

- Jacumba Valley Ranch Yard
- Rough Acres Yard
- McCain Valley Yard
- South of I-8 at La Posta Road
- East of Buckman Springs Road
- Kreutzcamp Yard
- Structure EP30-2 Pull Site
- SWAT Training Facility Yard
- Alpine Construction Materials Yard

**TABLE 1**
**PROPOSED TEMPORARY WASH STATIONS**

| Station No. | Map Page | Location (MP) | Description of Location or Facility | Service Range MPs | Reasons for Location and Areas Served |
|---|---|---|---|---|---|
| 1 | 1 | 34 | Jacumba Valley Ranch Yard | 0 - 40 | Accessible from Interstate 8 (I-8) at the Jacumba Exit and Carrizo Gorge Road. All project traffic from the west will stop here and then continue on paved roads to access roads. This station will service areas overlapping with Wash Station #2. |
| 2 | 2 | 42 | Rough Acres Yard | 35 - 48 | Accessible from McCain Valley Road. Wash all vehicles going to access roads south of I-8 before MP 34 and Jacumba Valley Ranch Yard and all vehicles going north to Rough Acres Yard and points north to MP50. This station will service areas overlapping with Station #1. |
| 3 | 3 | 49 | McCain Valley Yard | 48 - 51 | To isolate high weed areas around EP-174. |
| 4 | 4 | 59 | South of I-8 at La Posta Road. | 53.5 - 63 | To wash all traffic accessing the ROW from I-8 going north as far as EP141 or south as far as EP103-2. Place on disturbed private property on either side of La Posta Road. |
| 5 | 5 | 65.5 | East of Buckman Springs Road | 63 - 70.2 | High weed area. Install wash station within the ROW. Suggest putting gravel on the road in the high weed area. Wash vehicles going east as far as EP99-2. Wash vehicles going to points west as far as MP 71. Traffic going to points west can use Wash Station #5, and then drive south on paved Buckman Springs Road and then west and north on paved Lake Morena Drive, entering and leaving. |
| 6 | 6 | 73.5 | Kreutzcamp Yard | 70.2 - 75.5 | To address high weed areas near Kreutzcamp Yard. |
| 7 | 7 | 80.7 | Structure EP30-2 Pull Site | 80 - 81 | Install wash station within the ROW. To address high weed area around EP30-2 (City of San Diego property). This station will also wash traffic to EP32-1. |
| 8 | 7 | 82 | SWAT Training Facility Yard | 81.5 - 98 | High weed area. Also serves to wash vehicles for access road immediately north. Coverage form EP27-1 to EP22-1. |

**TABLE 1**
**PROPOSED TEMPORARY WASH STATIONS**

| Station No. | Map Page | Location (MP) | Description of Location or Facility | Service Range MPs | Reasons for Location and Areas Served |
|---|---|---|---|---|---|
| 9 | 8 | NA | Alpine Construction Materials Yard | NA | Will serve as central station to wash all vehicles and equipment prior to start of construction. During construction, will be used to prevent weed species from spreading to natural areas outside of the Alpine Construction Materials Yard and the Alpine Regional Office Yard. |
| 10 | 9 | 106 | Helix Yard | 98 - 107 | To wash all traffic for the dirt access roads and Hartung Yard off of El Monte Road. |
| 11 | 10 | 108 | Near CP43-1, off Moreno Avenue | 108.5 - 111 | Install wash station within the ROW. High weed areas and there is access from Highway 67. Also to wash traffic for access roads from CP44-1 to CP28-1. |
| 12 | 10 | 114 | Sycamore Yard | 113 - 117 | Accessible from Stonebridge development paved roads. To wash all traffic accessing Sycamore Canyon Substation to the west and traffic accessing CP26 to the east. |

- Helix Yard
- Near CP43-1, off Moreno Avenue
- Sycamore Yard

A map depicting the locations of the temporary wash stations is provided as Attachment A.

# 4.0 Construction and Use of Temporary Wash Stations

The temporary wash stations will be constructed using geotextile material with underlying plastic sheeting. Plastic sheeting will be laid on the ground in overlapping segments to facilitate the drainage of water. Each segment will overlap the previous segment moving opposite the gradient (i.e., sheets are overlapping down slope). A roll of woven geotextile fabric will be placed and secured over the plastic sheeting to protect it. Only rubber-tired vehicles and equipment are required for this work, and the geotextile material should be of sufficient strength to resist this type of use. If required, clean coarse crushed rock can be placed over the geotextile fabric for additional protection and/or a wash rack may be placed on top.

The temporary wash stations will be no less than 25 feet wide by 40 feet long. Straw bales and/or dirt berms will be used to contain wash water within the wash station boundaries. The design should allow the water to flow down slope on the plastic sheeting toward an outlet drainpipe, which will direct the water into a containment unit for recycling. An effort shall be made to use recycled water to the fullest extent. Water deemed unusable for washing activities, per standard inspection, shall be disposed of at an off-site facility or a sanitary sewer. Grading of the wash stations area may be required to facilitate drainage.

The vehicle and/or equipment will drive onto the open cleaning pad covered by geotextile fabric or gravel, and the operator will then use a high-pressure washer to clean all debris from the vehicle undercarriage and tires. The contractor's staff will ensure that all debris and mud are washed from the vehicles and stay within the boundaries of the wash station. In addition, tools will be washed within the boundaries of the basin.

The equipment and tooling will then exit from the cleaning pad and proceed to the work location within the construction ROW. The cleaning pad shall be inspected on a regular basis dependent on use. Worn or damaged geotextile fabric and plastic sheeting shall be replaced on an as-needed basis. Upon replacement and/or removal of wash station geotextile fabric, plastic sheeting, and gravel will be disposed of at an approved disposal

location. Attachment B is a design drawing of the proposed wash station, and Attachment C provides representative photographs of a wash station setup.

Once equipment and tools are adequately cleaned, the equipment number or tool type and date of washing will be entered into the wash station log. A written daily log shall be kept for all vehicle/equipment/tool washing that states the date, time, location, type of equipment washed, methods used, and staff present. The log shall include the signature of a responsible staff member. Logs shall be available for inspection to the CPUC, BLM, USFS (for Project sections within National Forest lands), wildlife agencies, and biological monitor at any time and shall be submitted to the CPUC on a monthly basis during construction and annually during operation/maintenance. A sample log is provided as Attachment D.

# 5.0 Standards and Specifications

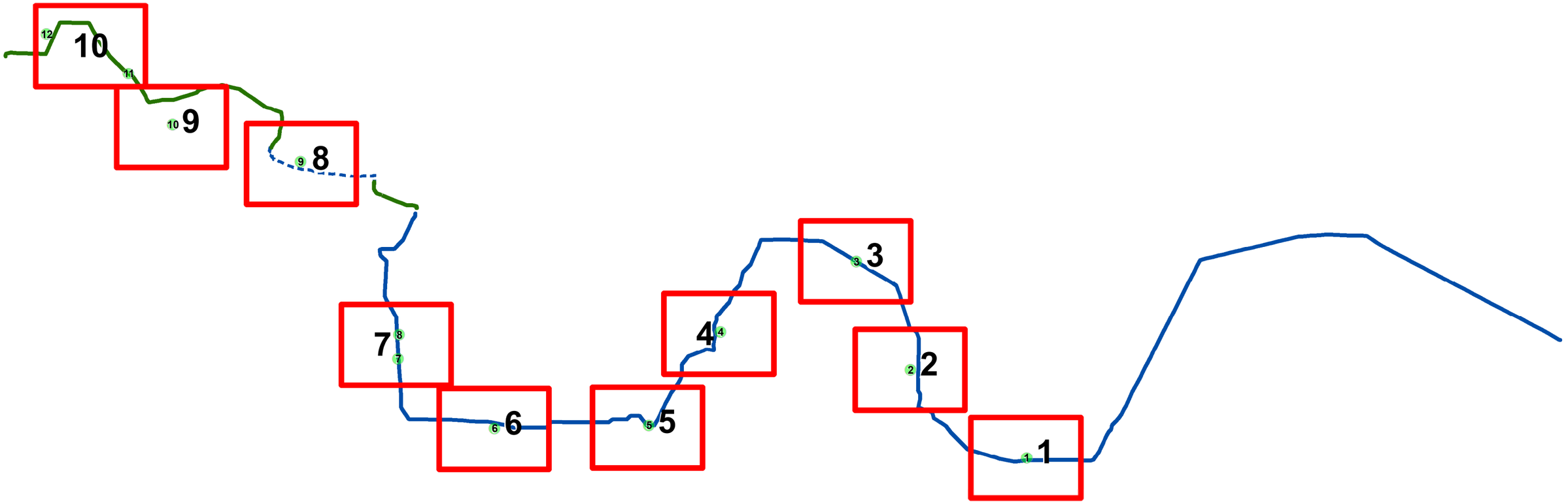
- All washing facilities are to be located away from storm drain outlets, drainage facilities, or water courses.
- Washing facilities are to be configured with a drain outlet attached to a containment unit for collection, recycling, and disposal of wash water.
- Wash waters are not to be discharged to water courses.
- Control measures are inspected at a minimum of once a week.
- Monitor employees and subcontractors throughout the duration of the project to ensure that appropriate practices are being employed.
- Inspect containment unit regularly and remove liquids and sediment as needed.
- Inspect cleaning pad regularly and remove/replace geotextile fabric and plastic sheeting as needed.
- Used wash station materials (geotextile fabric, straw bales, gravel) from San Diego County will be disposed of and buried at the Sycamore and/or Otay Landfills, and wash station materials from Imperial County will be disposed of and buried at Imperial County Landfill Company and/or Mesquite Regional Landfill. To prevent the spread of invasive weed seed during transport to the landfill, the wash station materials will be securely covered prior to leaving the wash station.

# 6.0 Weed Mitigation Measures

Prior to entering the project alignment, vehicles and/or equipment and tools will be taken to an approved wash station. Vehicle, equipment, and tool washing will proceed in the manner listed above in Section 4.0, and copies of all wash logs will be maintained at the wash station.

# ATTACHMENTS

# ATTACHMENT A




# Weed Washing Stations - Index Map

SUNRISE POWERLINK℠

SDGE
A Sempra Energy utility

0 3 6 9 12
Miles

**Legend**

- Weed Washing Stations
- Weed Washing Station Map Grid
- Sunrise 500kV Overhead
- Sunrise 230kV Overhead
- Sunrise 230kV Underground

11-03-10

SUNRISE POWERLINK℠

EP230-1
EP231-1
EP231A
EP232-1
MP-36
EP233-1
EP234-1
EP235-1
EP236-1
EP237-1
MP-35
EP238-1
EP239-1
EP240
MP-34
EP242
EP243
EP244
EP245-1
MP-33
EP246
EP247
EP248
EP249
MP-32
EP250
EP251
EP252-1
1

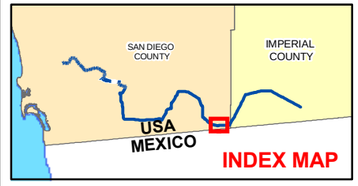
## Weed Washing Station

4 Weed Washing Stations

- Trace 0 to 1 percent
- Low 1 to 25 percent
- Med 26 to 50 percent
- Dense 51 to 100 percent
- No CALIPC
- No Survey
- MP-51 Mile Marker
- EP1-S Structure
- TSAP (Tower Staging Access Pad)
- Construction Yard or Staging Area
- Road - Existing - No Improvements
- Road - Existing - Improvements Required
- Road - New Construction - Permanent
- Road - New Construction - Temporary
- Suncrest Substation
- Substation Impact Area
- Right of Way
- Federal Wilderness Area
- Cleveland National Forest Congressional Boundary
- Indian Reservation Boundary
- State Park Boundary
- BLM Land
- U. S. Forest Service Land
- Military Land
- Indian Land
- State Land

0 2,000 4,000

SCALE IN FEET




**WEED WASHING STATIONS**



SDGE
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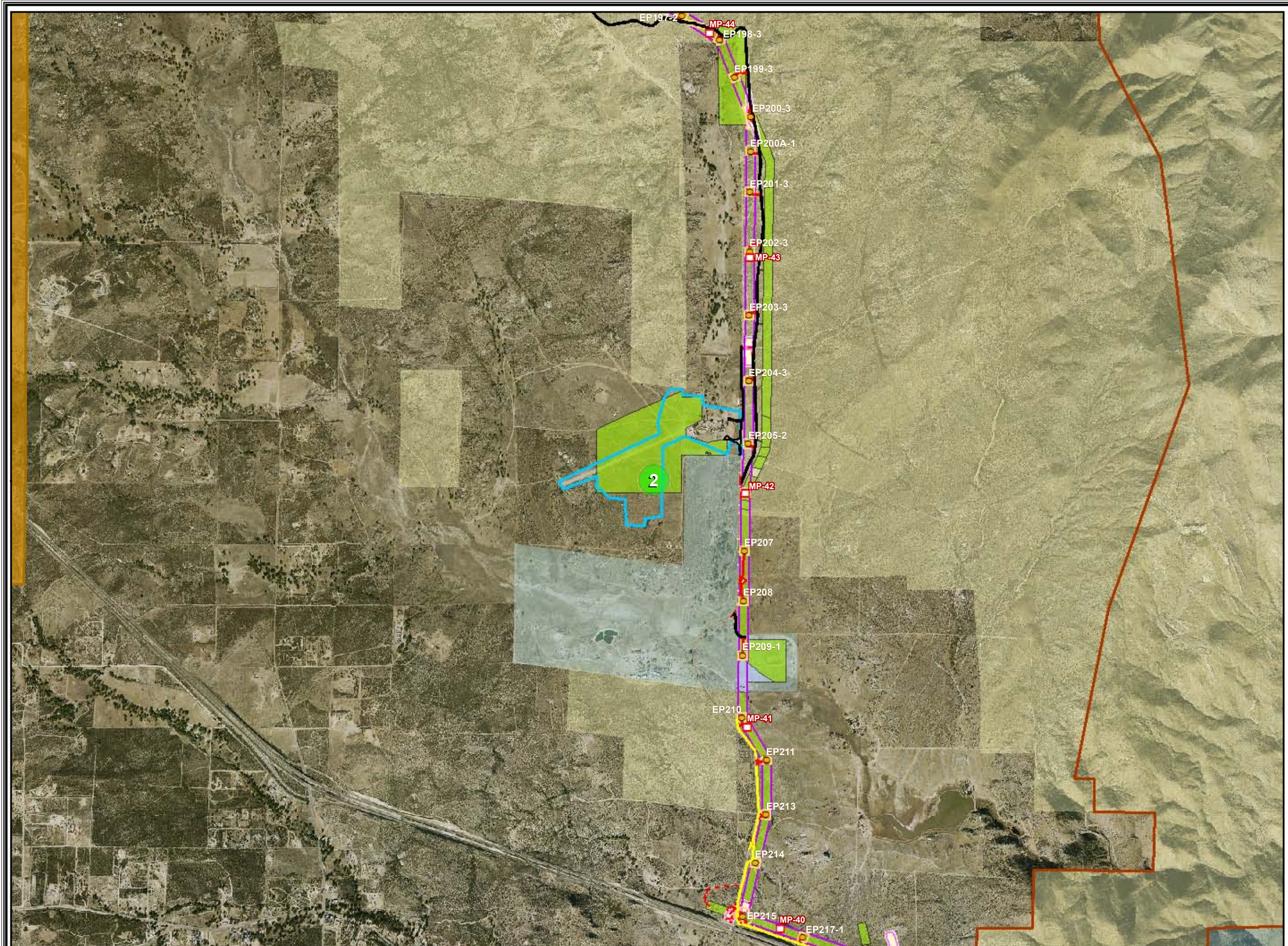


SUNRISE POWERLINK℠

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0 2,000 4,000

SCALE IN FEET


**WEED WASHING STATIONS**



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SUNRISE POWERLINK℠

EP149-1 EP150 EP151 MP-51 EP152-2 EP170 EP171 EP172 EP173-1 MP-50 EP174 EP175 EP176 EP177 MP-49 EP179 EP180 EP181 MP-48 EP182 EP183 EP184-1 EP185-1 MP-47 EP186-1 EP187-2 EP188-1 MP-46 EP189-3 EP190-2

3

Manzanita Reservation

## Weed Washing Station

4 Weed Washing Stations

- Trace 0 to 1 percent
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- Med 26 to 50 percent
- Dense 51 to 100 percent
- No CALIPC
- No Survey
- Mile Marker (MP-51)
- Structure (EP1-3)
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SCALE IN FEET


**WEED WASHING STATIONS**



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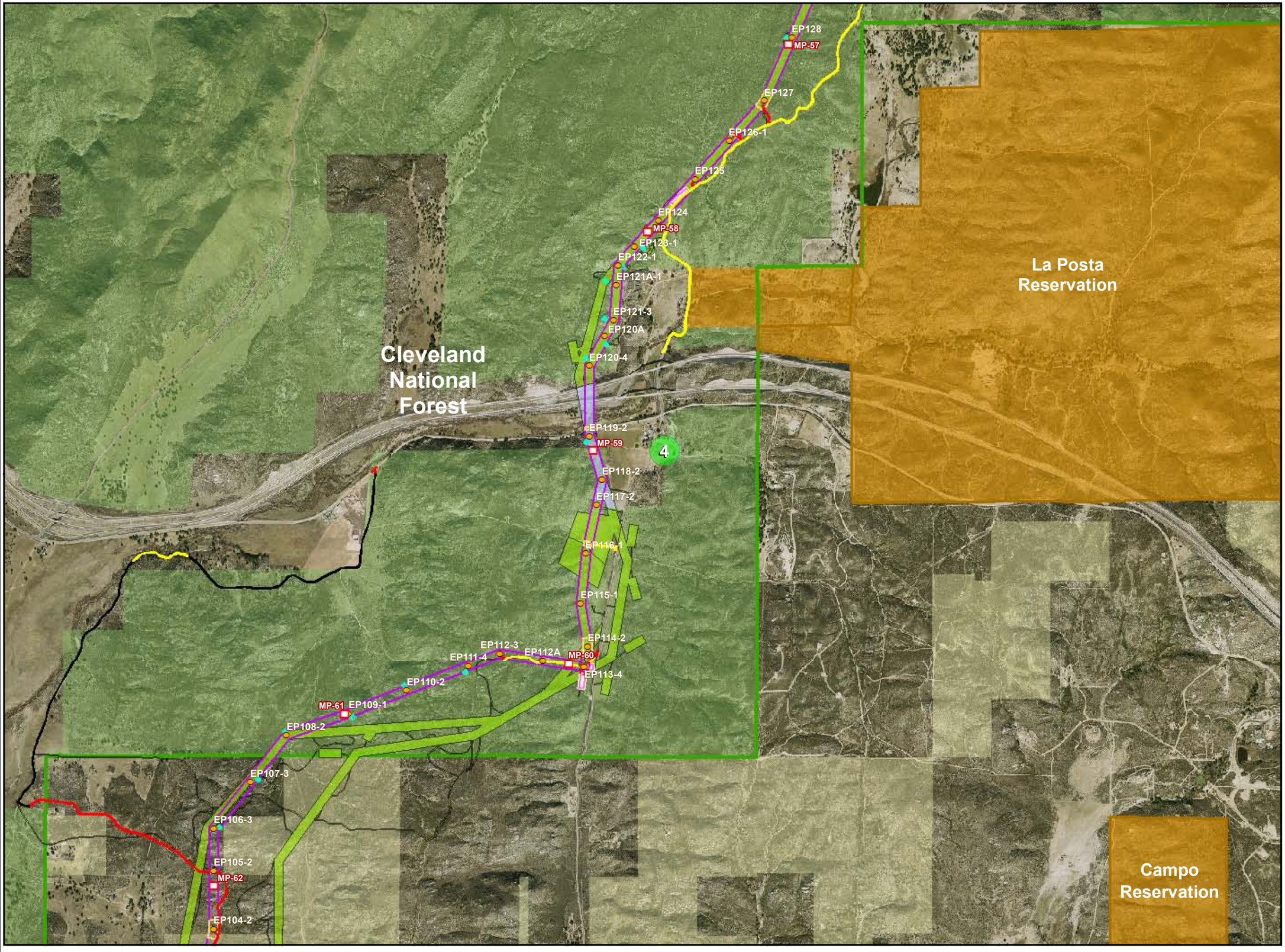


SUNRISE POWERLINK℠

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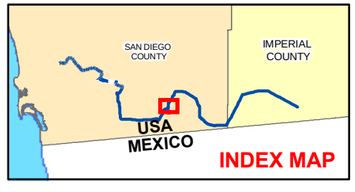


**WEED WASHING STATIONS**



SDGE A Sempra Energy utility

SUNRISE POWERLINK℠

Cleveland National Forest

Campo Reservation

MP-63
EP99-2
EP98-1
EP97
MP-64
EP96
EP95
EP94
EP93
EP92
MP-65
EP91
EP90-1
EP89-1
EP88-2
MP-66
EP87-1
EP86-1
EP85-2
EP84
EP83
MP-67
EP82
EP81
EP80
EP79
MP-68
EP78A
EP78

5

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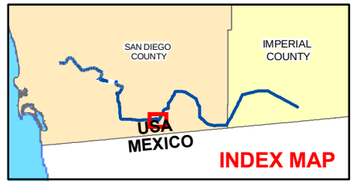


**WEED WASHING STATIONS**



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SUNRISE POWERLINK℠

Cleveland National Forest

MP-76 EP45-1 EP47-2 EP48 EP49 MP-75 EP50 EP51-1 EP52-1 MP-74 EP53-2 EP54-1 EP56-4 MP-73 EP57-2 EP58-2 EP62A-1 EP63 MP-72 EP64 EP65-1 EP66 MP-71 EP67 EP68

6

## Weed Washing Station

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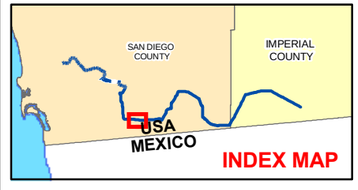


**WEED WASHING STATIONS**



SDGE A Sempra Energy utility

SUNRISE POWERLINK℠

EP19-1
EP20-2
EP21-1
MP-83
EP22-1
EP23-2
EP24-1
EP25-2
MP-82
EP26-1
8
EP27-1
Cleveland National Forest
EP28-3
EP29-2
MP-81
7
EP31-1
EP32-1
MP-80
EP33-1
EP34-1
EP35-1

## Weed Washing Station

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0 2,000 4,000
SCALE IN FEET

SAN DIEGO COUNTY
IMPERIAL COUNTY
USA
MEXICO
INDEX MAP

**WEED WASHING STATIONS**



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SUNRISE POWERLINK℠

CP79-1
CP80-2
CP81-1
CP82-1
MP-99
CP83
CP84
CP85-1
CP86
CP88-1
CP87-1
MP-98
MP-97
MP-96
MP-95
MP-94
9

Cleveland National Forest

## Weed Washing Station

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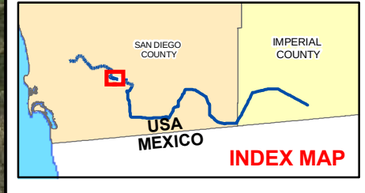
- Trace 0 to 1 percent
- Low 1 to 25 percent
- Med 26 to 50 percent
- Dense 51 to 100 percent
- No CALIPC
- No Survey
- MP-51 Mile Marker
- EP1-3 Structure
- TSAP (Tower Staging Access Pad)
- Construction Yard or Staging Area
- Road - Existing - No Improvements
- Road - Existing - Improvements Required
- Road - New Construction - Permanent
- Road - New Construction - Temporary
- Suncrest Substation
- Substation Impact Area
- Right of Way
- Federal Wilderness Area
- Cleveland National Forest Congressional Boundary
- Indian Reservation Boundary
- State Park Boundary
- BLM Land
- U. S. Forest Service Land
- Military Land
- Indian Land
- State Land

0 2,000 4,000

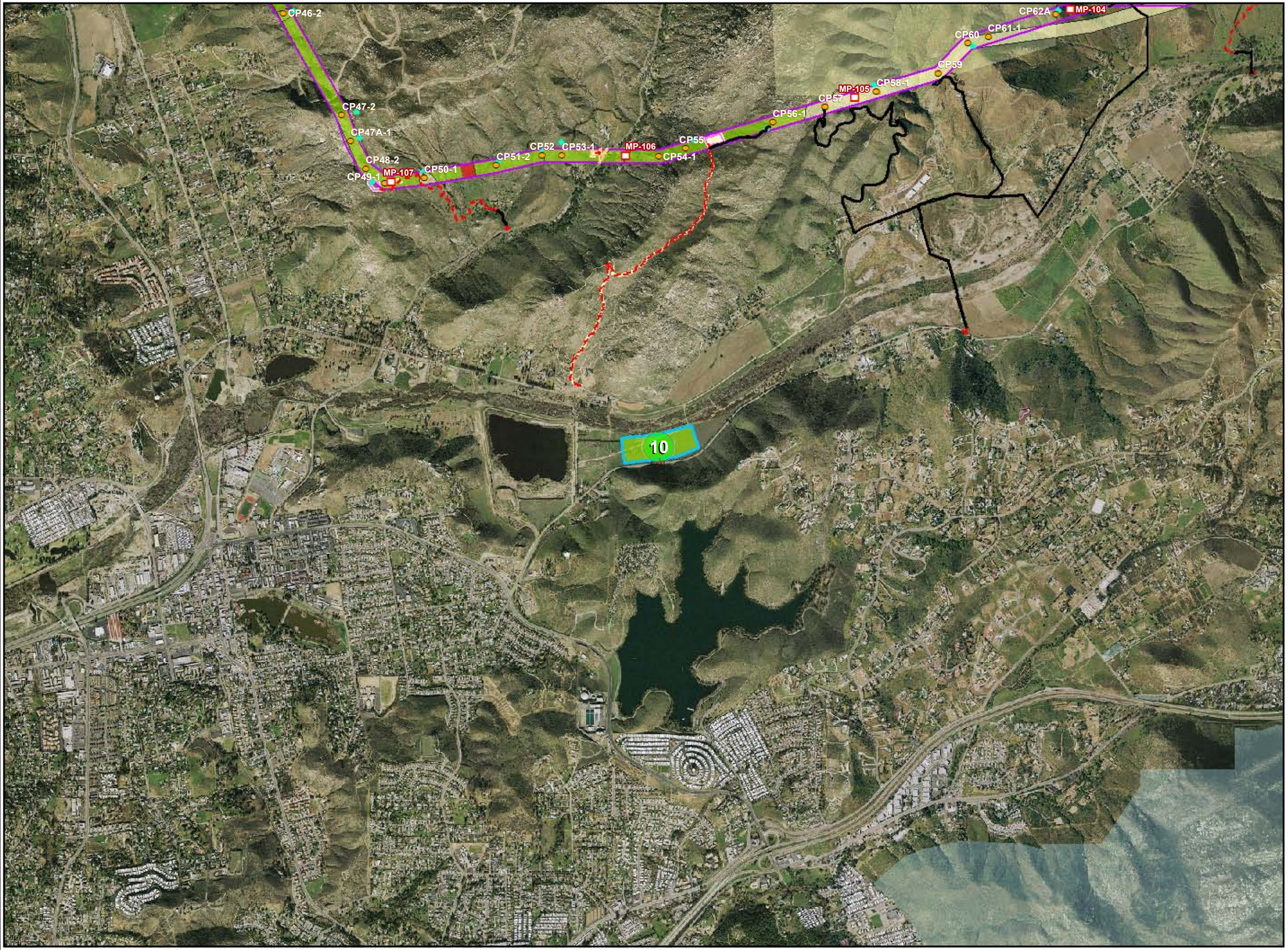
SCALE IN FEET




**WEED WASHING STATIONS**



SDGE
A Sempra Energy utility



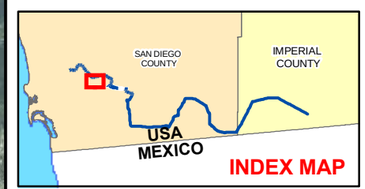

SUNRISE POWERLINK℠

## Weed Washing Station

- 4 Weed Washing Stations
- Trace 0 to 1 percent
- Low 1 to 25 percent
- Med 26 to 50 percent
- Dense 51 to 100 percent
- No CALIPC
- No Survey
- MP-51 Mile Marker
- EP1-S Structure
- TSAP (Tower Staging Access Pad)
- Construction Yard or Staging Area
- Road - Existing - No Improvements
- Road - Existing - Improvements Required
- Road - New Construction - Permanent
- Road - New Construction - Temporary
- Suncrest Substation
- Substation Impact Area
- Right of Way
- Federal Wilderness Area
- Cleveland National Forest Congressional Boundary
- Indian Reservation Boundary
- State Park Boundary
- BLM Land
- U. S. Forest Service Land
- Military Land
- Indian Land
- State Land

0 2,000 4,000

SCALE IN FEET




**WEED WASHING STATIONS**



SDGE A Sempra Energy utility

SUNRISE POWERLINK℠

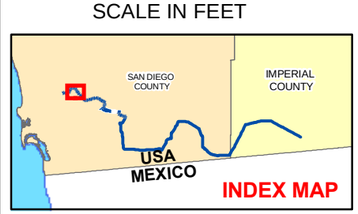
## Weed Washing Station

4 Weed Washing Stations

- Trace 0 to 1 percent
- Low 1 to 25 percent
- Med 26 to 50 percent
- Dense 51 to 100 percent
- No CALIPC
- No Survey
- Mile Marker (MP-51)
- Structure (EPL-5)
- TSAP (Tower Staging Access Pad)
- Construction Yard or Staging Area
- Road - Existing - No Improvements
- Road - Existing - Improvements Required
- Road - New Construction - Permanent
- Road - New Construction - Temporary
- Suncrest Substation
- Substation Impact Area
- Right of Way
- Federal Wilderness Area
- Cleveland National Forest Congressional Boundary
- Indian Reservation Boundary
- State Park Boundary
- BLM Land
- U. S. Forest Service Land
- Military Land
- Indian Land
- State Land

0 2,000 4,000

SCALE IN FEET

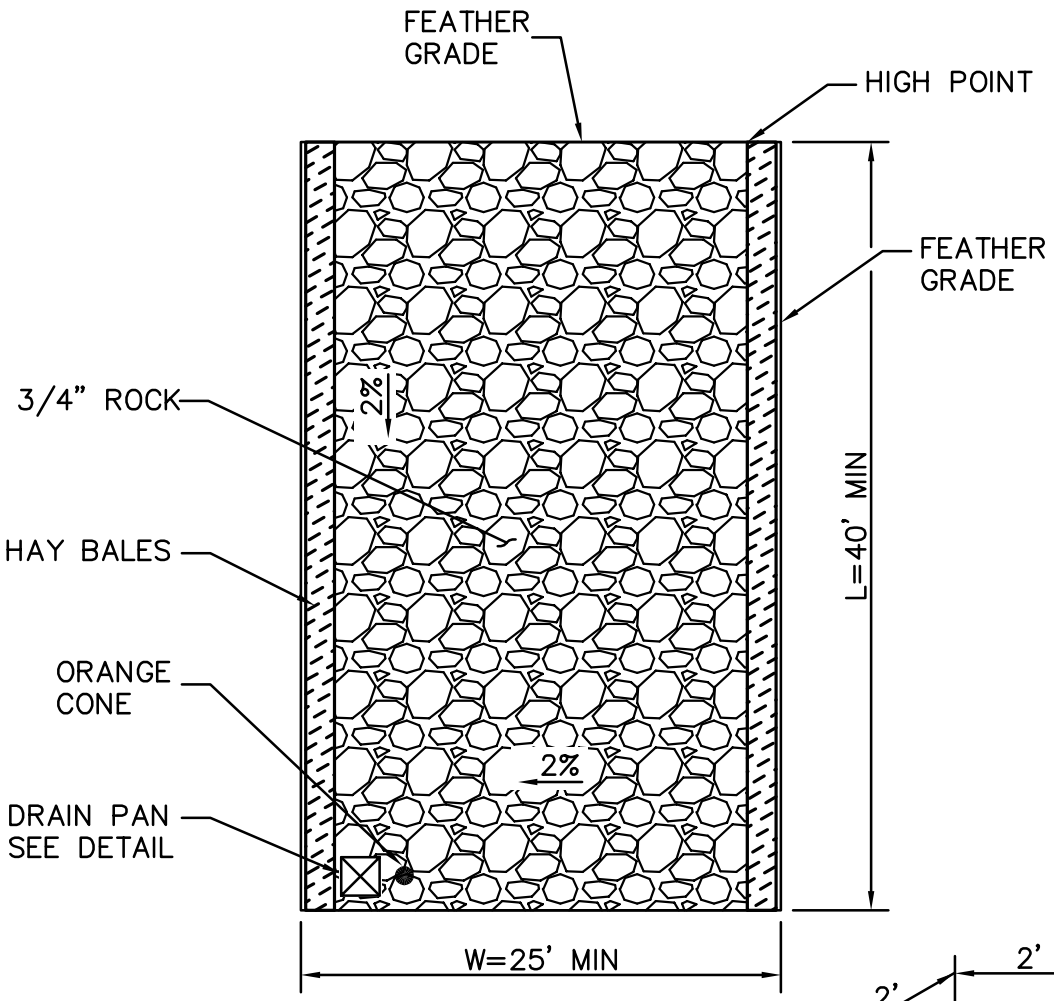


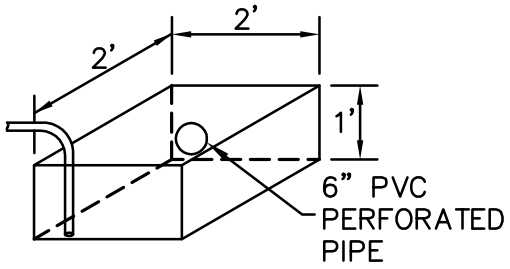

**WEED WASHING STATIONS**



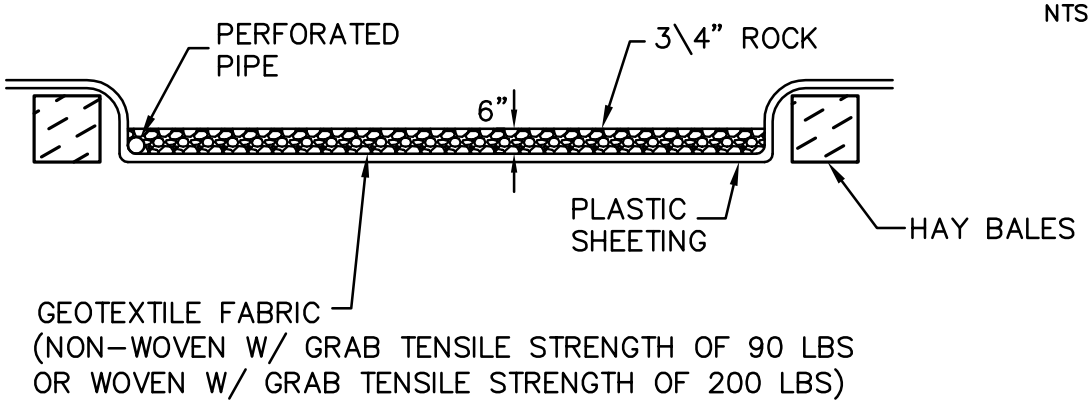
SDGE
A Sempra Energy utility

# ATTACHMENT B




**PLASTIC DRAIN PAN DETAIL**
NTS




(NON-WOVEN W/ GRAB TENSILE STRENGTH OF 90 LBS
OR WOVEN W/ GRAB TENSILE STRENGTH OF 200 LBS)


Bureau Veritas North America, Inc.

11590 West Bernardo Court Suite 100
San Diego, CA 92127-1624
Tel: (858) 451-6100 Fax: (858) 451-2846
www.us.bureauveritas.com


# SUNRISE POWERLINK PROJECT
## TEMPORARY WASH STATION DETAIL

SCALE: NTS

DRAWN BY: AB

DATE: 10/27/10 SHEET 1 OF 1

# ATTACHMENT C

# Example Wash Station Photographs

# ATTACHMENT D

# WASH STATION LOG

**Wash Station No.**

| Date | Time | Vehicles/Equipment /Tools Washed | Wash Method | Staff Present |
|---|---|---|---|---|
| | | | | |
| | | | | |
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**Signature of Responsible Party:**

_____

# APPENDIX D

# *Adjuvants Approved for Use on BLM Administered Lands*

**Update: September 30, 2010**

| Adjuvant Class | Adjuvant Type | Trade Name | Manufacturer | Comments |
|---|---|---|---|---|
| Surfactant | Non-ionic | Agrisolutions Preference | Agriliance, LLC. | WA Reg. No. 1381-50011 |
| | | Aqufact | Aqumix, Inc. | |
| | | Brewer 90-10 | Brewer International | |
| | | Baron | Crown (Estes Incorporated) | |
| | | N.I.S. 80 | Estes Incorporated | |
| | | Spec 90/10 | Helena | |
| | | Optima | Helena | CA Reg. No. 5905-50075-AA |
| | | Induce | Setre (Helena) | CA Reg. No. 5905-50066-AA |
| | | Activator 90 | Loveland Products Inc. | CA Reg. No. 34704-50034-AA |
| | | LI-700 | Loveland Products Inc. | CA Reg. No. 34704-50035 |
| | | | | WA Reg. No. AW36208-70004 |
| | | Spreader 90 | Loveland Products Inc. | WA Reg. No. 34704-05002-AA |
| | | UAP Surfactant 80/20 | Loveland Products Inc. | |
| | | X-77 | Loveland Products Inc. | CA Reg. No. 34704-50044 |
| | | Red River 90 | Red River Specialties, Inc. | |
| | | Cornbelt Premier 90 | Van Diest Supply Co. | |
| | | Cornbelt Trophy Gold | Van Diest Supply Co. | |
| | | Spray Activator 85 | Van Diest Supply Co. | |
| | | R-900 | Wilbur-Ellis | |
| | | Super Spread 90 | Wilbur-Ellis | WA Reg. No. AW-2935-70016 |
| | | Super Spread 7000 | Wilbur-Ellis | CA Reg. No. 2935-50170 |
| | | | | WA Reg. No. AW-2935-0002 |
| | | Agrisolutions Activate Plus | Winfield Solutions, LLC | CA Reg. No. 9779-50004-AA |
| | | | | WA Reg. No. 1381-09001 |
| | | Agrisolutions Preference | Winfield Solutions, LLC | WA Reg. No. 1381-50011 |

| Adjuvant Class | Adjuvant Type | Trade Name | Munufacturer | Comments |
|---|---|---|---|---|
| Surfactant (cont.) | Spreader/Sticker | Agri-Trend Spreader | Agri-Trend | |
| | | TopFilm | Biosorb, Inc. | |
| | | Bind-It | Estes Incorporated | |
| | | Surf-King PLUS | Crown (Estes Incorporated) | |
| | | CWC 90 | CWC Chemical, Inc. | |
| | | Cohere | Helena | CA Reg. No. 5905-50083-A |
| | | Attach | Loveland Products Inc. | CA Reg. No. 34704-50026 |
| | | Bond | Loveland Products Inc. | CA Reg. No. 36208-50005 |
| | | Tactic | Loveland Products Inc. | CA Reg. No. 34704-50041-AA |
| | | Nu-Film-IR | Miller Chem. & Fert. Corp. | |
| | | Nu Film 17 | Miller Chem. & Fert. Corp. | CA Reg. No. 72-50021-AA |
| | | Nu Film P | Miller Chem. & Fert. Corp. | CA Reg. No. 72-50022-AA |
| | | Lastick | Setre (Helena) | |
| | | Insist 90 | Wilbur-Ellis | |
| | | R-56 | Wilbur-Ellis | CA Reg. No. 2935-50144 |
| | | | | |
| | Silicone-based | SilEnergy | Brewer International | |
| | | Silnet 200 | Brewer International | |
| | | Bind-It MAX | Estes Incorporated | |
| | | Thoroughbred | Estes Incorporated | |
| | | Aero Dyne-Amic | Helena | CA Reg. No. 5905-50080-AA |
| | | Dyne-Amic | Helena | CA Reg. No. 5095-50071-AA |
| | | Kinetic | Setre (Helena) | CA Reg. No. 5905-50087-AA |
| | | Freeway | Loveland Products Inc. | CA Reg. No. 34704-50031 |
| | | | | WA Reg. No. 34704-04005 |
| | | Phase | Loveland Products Inc. | CA Reg. No. 34704-50037-AA |
| | | Phase II | Loveland Products Inc. | |
| | | Silwet L-77 | Loveland Products Inc. | CA Reg. No. 34704-50043 |
| | | Sun Spreader | Red River Specialties, Inc. | |
| | | Sylgard 309 | Wilbur-Ellis | CA Reg. No. 2935-50161 |
| | | Syl-Tac | Wilbur-Ellis | CA Reg. No. 2935-50167 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| Adjuvant Class | Adjuvant Type | Trade Name | Munufacturer | Comments |
|---|---|---|---|---|
| Oil-based | Crop Oil Concentrate | Brewer 83-17 | Brewer International | |
| | | Majestic | Crown (Estes Incorporated) | |
| | | Agri-Dex | Helena | CA # 5905-50094-AA |
| | | Crop Oil Concentrate | Helena | CA Reg. No. 5905-50085-AA |
| | | Power-Line Crop Oil | Land View Inc. | |
| | | Crop Oil Concentrate | Loveland Products Inc. | |
| | | Maximizer Crop Oil Conc. | Loveland Products Inc. | CA Reg. No. 34704-50059 |
| | | | | WA Reg. No. 34704-08002 |
| | | Herbimax | Loveland Products Inc. | CA Reg. No. 34704-50032-AA |
| | | | | WA Reg. No. 34704-04006 |
| | | Red River Forestry Oil | Red River Specialties, Inc. | |
| | | Cornbelt Crop Oil Concentrate | Van Diest Supply Co. | |
| | | Cornbelt Premium Crop Oil Concentrate | Van Diest Supply Co. | |
| | | R.O.C. Rigo Oil Conc. | Wilbur-Ellis | |
| | | Mor-Act | Wilbur-Ellis | CA Reg. No. 2935-50098 |
| | | Agrisolutions Prime Oil | Winfield Solutions, LLC | CA Reg. No. 979-50002-AA |
| | | Agrisolutions Superb HC | Winfield Solutions, LLC | WA Reg. No. 1381-06003 |
| | | | | |
| | Methylated Seed Oil | SunEnergy | Brewer International | |
| | | Sun Wet | Brewer International | |
| | | Methylated Spray Oil Conc. | Helena | |
| | | MSO Concentrate | Loveland Products Inc. | CA Reg. No. 34704-50029-AA |
| | | Red River Supreme | Red River Specialties, Inc. | |
| | | Sunburn | Red River Specialties, Inc. | |
| | | Sunset | Red River Specialties, Inc. | |
| | | Cornbelt Base | Van Diest Supply Co. | |
| | | Cornbelt Methylates Soy-Stik | Van Diest Supply Co. | |
| | | Hasten | Wilbur-Ellis | CA Reg. No. 2935-50160 |
| | | | | WA Reg. No. 2935-02004 |
| | | Super Spread MSO | Wilbur-Ellis | |
| | | Agrisolutions Destiny HC | Winfield Solutions, LLC | WA Reg. No. 1381-09002 |
| | | | | |
| | Methylated Seed Oil + Organosilicone | Inergy | Crown (Estes Incorporated) | |
| | | | | |
| | | | | |

| Adjuvant Class | Adjuvant Type | Trade Name | Munufacturer | Comments |
|---|---|---|---|---|
| Oil-Based (cont.) | Vegetable Oil | Noble | Estes Incorporated | |
| | | Amigo | Loveland Products Inc. | CA Reg. No. 34704-50028-AA |
| | | | | WA Reg. No. 34704-04002 |
| | | Competitor | Wilbur-Ellis | CA Reg. No. 2935-50173 |
| | | | | WA Reg. No. AW-2935-04001 |
| | | | | |
| Fertilizer-based | Nitrogen-based | Quest | Setre (Helena) | CA Reg. No. 5905-50076-AA |
| | | Actamaster Spray Adjuvant | Loveland Products Inc. | WA Reg. No. 34704-50006 |
| | | Actamaster Soluble Spray Adjuvant | Loveland Products Inc. | WA Reg. No. 34704-50001 |
| | | Dispatch | Loveland Products Inc. | |
| | | Dispatch 111 | Loveland Products Inc. | |
| | | Dispatch 2N | Loveland Products Inc. | |
| | | Dispatch AMS | Loveland Products Inc. | |
| | | Flame | Loveland Products Inc. | |
| | | Cornbelt Gardian | Van Diest Supply Co. | |
| | | Cornbelt Gardian Plus | Van Diest Supply Co. | |
| | | Bronc | Wilbur-Ellis | |
| | | Bronc Max | Wilbur-Ellis | |
| | | Bronc Max EDT | Wilbur-Ellis | |
| | | Bronc Plus Dry EDT | Wilbur-Ellis | WA Reg. No.2935-03002 |
| | | Agrisolutions Alliance | Winfield Solutions, LLC | CA Reg. No. 1381-50002-AA |
| | | | | WA Reg. No.1381-05005 |
| | | Agrisolutions Class Act NG | Winfield Solutions, LLC | WA Reg. No. 1381-01004 |
| | | Agrisolutions Corral AMS Liquid | Winfield Solutions, LLC | WA Reg. No. 1381-01006 |
| | | Bronc Total | Wilbur-Ellis | |
| | | Cayuse Plus | Wilbur-Ellis | CA Reg. No. 2935-50171 |
| | | | | |
| Special Purpose | Buffering Agent | Buffers P.S. | Helena | CA Reg. No. 5905-50062-ZA |
| or Utility | | Spray-Aide | Miller Chem. & Fert. Corp. | CA Reg. No. 72-50006-AA |
| | | Oblique | Red River Specialties, Inc. | |
| | | Tri-Fol | Wilbur-Ellis | CA Reg. No. 2935-50152 |
| | | | | |
| | Colorants | Hi-Light | Becker-Underwood | |
| | | Hi-Light WSP | Becker-Underwood | |
| | | Marker Dye | Loveland Products Inc. | |
| | | TurfTrax | Loveland Products Inc. | |

| Adjuvant Class | Adjuvant Type | Trade Name | Munufacturer | Comments |
|---|---|---|---|---|
| Special Purpose | Colorants (cont.) | BullsEye | Milliken Chemical | |
| or Utility - cont. | | Signal | Precision | |
| | | | | |
| | Compatibility/ | E Z MIX | Loveland Products Inc. | CA Reg. No. 36208-50006 |
| | Suspension | Support | Loveland Products Inc. | WA Reg. No. 34704-04011 |
| | Agent | Blendex VHC | Setre (Helena) | |
| | | | | |
| | Deposition Aid | Cygnet Plus | Brewer International | CA Reg. No. 1051114-50001 |
| | | Poly Control 2 | Brewer International | |
| | | CWC Sharpshooter | CWC Chemical, Inc. | |
| | | ProMate Impel | Helena | |
| | | Pointblank | Helena | CA Reg. No. 52467-50008-AA-5905 |
| | | Strike Zone DF | Helena | CA Reg. No. 5905-50084-AA |
| | | Compadre | Loveland Products Inc. | CA Reg. No. 34704-50050 |
| | | | | WA Reg. No. 34704-06004 |
| | | Intac Plus | Loveland Products Inc. | |
| | | Liberate | Loveland Products Inc. | CA Reg. No. 34704-50030-AA |
| | | | | WA Reg. No. 34704-04008 |
| | | Reign | Loveland Products Inc. | CA Reg. No. 34704-50045 |
| | | | | WA Reg. No. 34704-05010 |
| | | Weather Gard | Loveland Products Inc. | CA Reg. No. 34704-50042-AA |
| | | Mist-Control | Miller Chem. & Fert. Corp. | CA Reg. No. 72-50011-AA |
| | | Sustain | Miller Chem. & Fert. Corp. | CA Reg. No. 72-50015-AA |
| | | Exit | Miller Chem. & Fert. Corp. | CA Reg. No. 72-50014-AA |
| | | Secure Ultra | Red River Specialties, Inc. | |
| | | Sta Put | Setre (Helena) | CA Reg. No. 5905-50068-AA |
| | | Agripharm Drift Control | Walco International | |
| | | Bivert | Wilbur-Ellis | CA Reg. No. 2935-50163 |
| | | Coverage G-20 | Wilbur-Ellis | |
| | | EDT Concentrate | Wilbur-Ellis | |
| | | Agrisolutions Interlock | Winfield Solutions, LLC | |
| | | | | |
| | Defoaming Agent | Defoamer | Brewer International | |
| | | Fighter-F 10 | Loveland Products Inc. | |
| | | Fighter-F Dry | Loveland Products Inc. | |
| | | Foam Fighter | Miller Chem. & Fert. Corp. | CA Reg. No. 72-50005-AA |

| Adjuvant Class | Adjuvant Type | Trade Name | Munufacturer | Comments |
|---|---|---|---|---|
| Special Purpose | Diluent/Deposition | Foam Buster | Setre (Helena) | CA Reg. No. 5905-50072-AA |
| or Utility - cont. | Agent | Cornbelt Defoamer | Van Diest Supply Co | |
| | | No Foam | Wilbur-Ellis | CA Reg. No. 2935-50136 |
| | | Improved JLB Oil Plus | Brewer International | |
| | | JLB Oil Plus | Brewer International | |
| | | Hy-Grade I | CWC Chemical, Inc | |
| | | Hy-Grade EC | CWC Chemical, Inc | |
| | | Red River Basal Oil | Red River Specialties, Inc. | |
| | | In-Place | Wilbur-Ellis | CA Reg. No. 2935-50169 |
| | | | | |
| | Foam Marker | Align | Helena | |
| | | R-160 | Wilbur-Ellis | |
| | | | | |
| | Invert Emulsion Agent | Redi-vert II | Wilbur-Ellis | CA Reg. No. 2935-50168 |
| | | | | |
| | Tank Cleaner | Wipe Out | Helena | |
| | | All Clear | Loveland Products Inc. | |
| | | Tank and Equipment Cleaner | Loveland Products Inc. | |
| | | Kutter | Wilbur-Ellis | |
| | | Neutral-Clean | Wilbur-Ellis | |
| | | Cornbelt Tank-Aid | Van Diest Supply Co. | |
| | | | | |
| | Water Conditioning | Rush | Crown (Estes Incorporated) | |
| | | Blendmaster | Loveland Products Inc. | |
| | | Choice | Loveland Products Inc. | CA Reg. No. 34704-50027-AA |
| | | | | WA Reg. No. 34704-04004 |
| | | Choice Xtra | Loveland Products Inc. | |
| | | Choice Weather Master | Loveland Products Inc. | CA Reg. No. 34704-50038-AA |
| | | Cornbelt N-Tense | Van Diest Supply Co. | |
| | | Climb | Wilbur-Ellis | CA Reg. No. 2935-50181 |
| | | | | WA Reg. No. 2935-09001 |
| | | Cut-Rate | Wilbur-Ellis | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

# APPENDIX E

# *Herbicides Approved for Use on BLM Lands**

**Update September 30, 2010**

| ACTIVE INGREDIENT | STATES WITH APPROVAL BASED UPON CURRENT EIS/ROD & COURT INJUNCTIONS | TRADE NAME | MANUFACTURER | EPA REG. NUMBER | CA REG. ** |
|---|---|---|---|---|---|
| **Bromacil** | AK, AZ, CA, CO, ID, MT, ND, | Bromacil 80DF | Alligare, LLC | 81927-4 | Y |
| | NE, NM, NV, OK, SD, TX, UT, | Hyvar X | DuPont Crop Protection | 352-287 | Y |
| | WA, WY | Hyvar XL | DuPont Crop Protection | 352-346 | Y |
| **Bromacil +** | AK, AZ, CA, CO, ID, MT, ND, | Bromacil/Diuron 40/40 | Alligare, LLC | 81927-3 | Y |
| **Diuron** | NE, NM, NV, OK, SD, TX, UT, | Krovar I DF | DuPont Crop Protection | 352-505 | Y |
| | WA, WY | Weed Blast Res. Weed Cont. | Loveland Products Inc. | 34704-576 | N |
| | | DiBro 2+2 | Nufarm Americas Inc. | 228-227 | Y |
| | | DiBro 4+4 | Nufarm Americas Inc. | 228-235 | N |
| | | DiBro 4+2 | Nufarm Americas Inc. | 228-386 | N |
| | | Weed Blast 4G | SSI Maxim | 34913-19 | N |
| **Chlorsulfuron** | AK, AZ, CA, CO, ID, MT, ND, | Alligare Chlorsulfuron | Alligare, LLC | 81927-43 | N |
| | NE, NM, NV, OK, SD, TX, UT, | Telar DF | DuPont Crop Protection | 352-522 | Y |
| | WA, WY | Telar XP | DuPont Crop Protection | 352-654 | Y |
| | | NuFarm Chlorsulf SPC 75 WDG Herbicide | Nufarm Americas Inc. | 228-672 | N |
| | | Chlorsulfuron E-Pro 75 WDG | Nufarm Americas Inc. | 79676-72 | N |
| **Clopyralid** | AK, AZ, CA, CO, ID, MT, ND, | Spur | Albaugh, Inc. | 42750-89 | N |
| | NE, NM, NV, OK, SD, TX, UT, | Pyramid R&P | Albaugh, Inc. | 42750-94 | N |
| | WA, WY | Clopyralid 3 | Alligare, LLC | 42750-94-81927 | Y |
| | | Cody Herbicide | Alligare, LLC | 81927-28 | Y |
| | | Reclaim | Dow AgroSciences | 62719-83 | N |
| | | Stinger | Dow AgroSciences | 62719-73 | Y |
| | | Transline | Dow AgroSciences | 62719-259 | Y |
| | | CleanSlate | Nufarm Americas Inc. | 228-491 | Y |

**STATES WITH APPROVAL**

| | BASED UPON CURRENT | | | | |
|---|---|---|---|---|---|
| **ACTIVE** | **EIS/ROD & COURT** | | | **EPA REG.** | **CA** |
| **INGREDIENT** | **INJUNCTIONS** | **TRADE NAME** | **MANUFACTURER** | **NUMBER** | **REG. **** |
| | | | | | |
| **Clopyralid +** | AK, AZ, CA, CO, ID, MT, ND, | Commando | Albaugh, Inc. | 42750-92 | N |
| **2,4-D** | NE, NM, NV, OK, SD, TX, UT, | Curtail | Dow AgroSciences | 62719-48 | N |
| | WA, WY | Cutback | Nufarm Americas Inc. | 71368-72 | N |
| | | | | | |
| | | | | | |
| | NE, NM, NV, OK, OR, SD, TX, | Agrisolution 2,4-D Amine 4 | Agriliance, L.L.C. | 1381-103 | N |
| | UT, WA, WY | Agrisolution 2,4-D LV4 | Agriliance, L.L.C. | 1381-102 | N |
| | | 2,4-D Amine 4 | Albaugh, Inc./Agri Star | 42750-19 | Y |
| | | 2,4-D LV 4 | Albaugh, Inc./Agri Star | 42750-15 | Y |
| | | Solve 2,4-D | Albaugh, Inc./Agri Star | 42750-22 | Y |
| | | 2,4-D LV 6 | Albaugh, Inc./Agri Star | 42750-20 | N |
| | | Five Star | Albaugh, Inc./Agri Star | 42750-49 | N |
| | | D-638 | Albaugh, Inc./Agri Star | 42750-36 | N |
| | | Alligare 2,4-D Amine | Alligare, LLC | 81927-38 | N |
| | | 2,4-D LV6 | Helena Chemical Company | 4275-20-5905 | N |
| | | 2,4-D Amine | Helena Chemical Company | 5905-72 | N |
| | | 2,4-D Amine 4 | Helena Chemical Company | 42750-19-5905 | N |
| | | Opti-Amine | Helena Chemical Company | 5905-501 | N |
| | | Barrage HF | Helena Chemical Company | 5905-529 | N |
| | | HardBall | Helena Chemical Company | 5905-549 | N |
| | | Unison | Helena Chemical Company | 5905-542 | N |
| | | Clean Amine | Loveland Products Inc. | 34704-120 | N |
| | | Low Vol 4 Ester Weed Killer | Loveland Products Inc. | 34704-124 | N |
| | | Low Vol 6 Ester Weed Killer | Loveland Products Inc. | 34704-125 | N |
| | | Saber | Loveland Products Inc. | 34704-803 | N |
| | | Salvo | Loveland Products Inc. | 34704-609 | N |
| | | Savage DS | Loveland Products Inc. | 34704-606 | Y |
| | | Aqua-Kleen | Nufarm Americas Inc. | 71368-4 | N |
| | | Aqua-Kleen | Nufarm Americas Inc. | 228-378 | N |
| | | Esteron 99C | Nufarm Americas Inc. | 62719-9-71368 | N |
| | | Weedar 64 | Nufarm Americas Inc. | 71368-1 | Y |
| | | Weedone LV-4 | Nufarm Americas Inc. | 228-139-71368 | Y |
| | | Weedone LV-4 Solventless | Nufarm Americas Inc. | 71368-14 | Y |

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| | **STATES WITH APPROVAL** | | | | |
| | **BASED UPON CURRENT** | | | | |
| **ACTIVE** | **EIS/ROD & COURT** | | | **EPA REG.** | **CA** |
| **INGREDIENT** | **INJUNCTIONS** | **TRADE NAME** | **MANUFACTURER** | **NUMBER** | **REG. **** |
| [redacted] | | | | | |
| | NE, NM, NV, OK, OR, SD, TX, | Formula 40 | Nufarm Americas Inc. | 228-357 | Y |
| | UT, WA, WY | 2,4-D LV 6 Ester | Nufarm Americas Inc. | 228-95 | Y |
| | | Platoon | Nufarm Americas Inc. | 228-145 | N |
| | | WEEDstroy AM-40 | Nufarm Americas Inc. | 228-145 | Y |
| | | Hi-Dep | PBI Gordon Corp. | 2217-703 | N |
| | | 2,4-D Amine | Setre (Helena) | 5905-72 | N |
| | | Barrage LV Ester | Setre (Helena) | 5905-504 | N |
| | | 2,4-D LV4 | Setre (Helena) | 5905-90 | N |
| | | 2,4-D LV6 | Setre (Helena) | 5905-93 | N |
| | | Clean Crop Amine 4 | UAP-Platte Chem. Co. | 34704-5 CA | Y |
| | | Clean Crop Low Vol 6 Ester | UAP-Platte Chem. Co. | 34704-125 | N |
| | | Salvo LV Ester | UAP-Platte Chem. Co. | 34704-609 | N |
| | | 2,4-D 4# Amine Weed Killer | UAP-Platte Chem. Co. | 34704-120 | N |
| | | Clean Crop LV-4 ES | UAP-Platte Chem. Co. | 34704-124 | N |
| | | Savage DS | UAP-Platte Chem. Co. | 34704-606 | Y |
| | | Cornbelt 4 lb. Amine | Van Diest Supply Co. | 11773-2 | N |
| | | Cornbelt 4# LoVol Ester | Van Diest Supply Co. | 11773-3 | N |
| | | Cornbelt 6# LoVol Ester | Van Diest Supply Co. | 11773-4 | N |
| | | Amine 4 | Wilbur-Ellis Co. | 2935-512 | N |
| | | Lo Vol-4 | Wilbur-Ellis Co. | 228-139-2935 | N |
| | | Lo Vol-6 Ester | Wilbur-Ellis Co. | 228-95-2935 | N |
| | | Base Camp Amine 4 | Wilbur-Ellis Co. | 71368-1-2935 | N |
| | | Broadrange 55 | Wilbur-Ellis Co. | 2217-813-2935 | N |
| | | Agrisolution 2,4-D LV6 | Winflied Solutions, LLC | 1381-101 | N |
| | | Agrisolution 2,4-D Amine 4 | Winfield Solutions, LLC | 1381-103 | N |
| | | Agrisolution 2,4-D LV4 | Winfield Solutions, LLC | 1381-102 | N |
| | | | | | |
| [redacted] | | | | | |
| | NE, NM, NV, OK, OR, SD, TX, | Vision | Albaugh, Inc. | 42750-98 | N |
| | UT, WA, WY | Cruise Control | Alligare, LLC | 42750-40-81927 | N |
| | | Banvel | Arysta LifeScience N.A. Corp. | 66330-276 | Y |

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|---|---|---|---|---|---|
| | | Clarity | BASF Corporation | 7969-137 | Y |
| | **STATES WITH APPROVAL** | | | | |
| | **BASED UPON CURRENT** | | | | |
| **ACTIVE** | **EIS/ROD & COURT** | | | **EPA REG.** | **CA** |
| **INGREDIENT** | **INJUNCTIONS** | **TRADE NAME** | **MANUFACTURER** | **NUMBER** | **REG. **** |
| | | | | | |
| | NE, NM, NV, OK, OR, SD, TX, | Banvel | Micro Flo Company | 51036-289 | Y |
| | UT, WA, WY | Diablo | Nufarm Americas Inc. | 228-379 | Y |
| | | Vanquish Herbicide | Nufarm Americas Inc. | 228-397 | Y |
| | | Vanquish | Syngenta | 100-884 | N |
| | | Sterling Blue | Winfield Solutions, LLC | 7969-137-1381 | Y |
| | | | | | |
| | | | | | |
| **2,4-D** | NE, NM, NV, OK, OR, SD, TX, | Weedmaster | BASF Ag. Products | 7969-133 | Y |
| | UT, WA, WY | Outlaw | Helena Chemical Company | 5905-574 | N |
| | | Rifle-D | Loveland Products Inc. | 34704-869 | N |
| | | KambaMaster | Nufarm Americas Inc. | 71368-34 | N |
| | | Veteran 720 | Nufarm Americas Inc. | 228-295 | Y |
| | | Weedmaster | Nufarm Americas Inc. | 71368-34 | N |
| | | Brash | Winfield Solutions, LLC | 1381-202 | N |
| | | | | | |
| | | | | | |
| **Diflufenzopyr** | NV, OK, SD, TX, UT, WA, WY | Overdrive | BASF Corporation | 7969-150 | N |
| | | | | | |
| **NOTE: In accordance with the Record of Decision for the *Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States Programmatic Environmental Impact Statement* (PEIS), the aerial application of this herbicide is prohibited.** | | | | | |
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| | NM, NV, OK, SD, TX, UT, WA, WY | NuFarm Diquat SPC 2 L Herbicide | Nufarm Americas Inc. | 228-675 | N |
| | | Diquat SPC 2 L Herbicide | Nufarm Americas Inc. | 79676-75 | Y |
| | | Diquat E-Ag 2L | Nufarm Americas Inc. | 79676-75 | Y |
| | | Reward | Syngena Professional Products | 100-1091 | Y |
| | | | | | |
| | | | | | |
| | NE, NM, NV, OK, SD, TX, UT, | Diuron 80DF | Alligare, LLC | 81927-12 | Y |
| | WA, WY | Karmex DF | DuPont Crop Protection | 352-692 | Y |
| | | Karmex XP | DuPont Crop Protection | 352-692 | Y |

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|---|---|---|---|---|---|
| | | Karmex IWC | DuPont Crop Protection | 352-692 | Y |
| | **STATES WITH APPROVAL** | | | | |
| | **BASED UPON CURRENT** | | | | |
| **ACTIVE** | **EIS/ROD & COURT** | | | **EPA REG.** | **CA** |
| **INGREDIENT** | **INJUNCTIONS** | **TRADE NAME** | **MANUFACTURER** | **NUMBER** | **REG. **** |
| [redacted] | | | | | |
| | NE, NM, NV, OK, SD, TX, UT, | Direx 80DF | Griffin Company | 1812-362 | Y |
| | WA, WY | Direx 4L | Griffin Company | 1812-257 | Y |
| | | Diuron 4L | Loveland Products Inc. | 34704-854 | Y |
| | | Diuron 80 WDG | Loveland Products Inc. | 34704-648 | N |
| | | Diuron 4L | Makteshim Agan of N.A. | 66222-54 | N |
| | | Diuron 80WDG | UAP-Platte Chem. Co. | 34704-648 | N |
| | | Vegetation Man. Diuron 80 DF | Vegetation Man., LLC | 66222-51-74477 | N |
| | | Diuron-DF | Wilbur-Ellis | 00352-00-508-02935 | N |
| | | Diuron 80DF | Winfield Solutions, LLC | 9779-318 | N |
| | | | | | |
| [redacted] | | | | | |
| | NE, NM, NV, OK, SD, TX, UT, | Sonar AS | SePRO | 67690-4 | Y |
| | WA, WY | Sonar Precision Release | SePRO | 67690-12 | Y |
| | | Sonar Q | SePRO | 67690-3 | Y |
| | | Sonar SRP | SePRO | 67690-3 | Y |
| | | | | | |
| [redacted] | | | | | |
| **Glyphosate** | AK, AZ, CA, CO, ID, MT, ND, | Aqua Star | Albaugh, Inc./Agri Star | 42750-59 | Y |
| | NE, NM, NV, OK, OR, SD, TX, | Forest Star | Albaugh, Inc./Agri Star | 42570-61 | Y |
| | UT, WA, WY | GlyStar Gold | Albaugh, Inc./Agri Star | 42750-61 | Y |
| | | Gly Star Original | Albaugh, Inc./Agri Star | 42750-60 | Y |
| | | Gly Star Plus | Albaugh, Inc./Agri Star | 42750-61 | Y |
| | | Gly Star Pro | Albaugh, Inc./Agri Star | 42750-61 | Y |
| | | Glyphosate 4 PLUS | Alligare, LLC | 81927-9 | Y |
| | | Glyphosate 5.4 | Alligare, LLC | 81927-8 | Y |
| | | Glyfos | Cheminova | 4787-31 | Y |
| | | Glyfos PRO | Cheminova | 67760-57 | Y |
| | | Glyfos Aquatic | Cheminova | 4787-34 | Y |
| | | ClearOut 41 Plus | Chem. Prod. Tech., LLC | 70829-3 | N |
| | | Accord Concentrate | Dow AgroSciences | 62719-324 | Y |
| | | Accord SP | Dow AgroSciences | 62719-322 | Y |

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|---|---|---|---|---|---|
| | | Accord XRT | Dow AgroSciences | 62719-517 | Y |
| | | Accord XRT II | Dow AgroSciences | 62719-556 | Y |
| | **STATES WITH APPROVAL** | | | | |
| | **BASED UPON CURRENT** | | | | |
| **ACTIVE** | **EIS/ROD & COURT** | | | **EPA REG.** | **CA** |
| **INGREDIENT** | **INJUNCTIONS** | **TRADE NAME** | **MANUFACTURER** | **NUMBER** | **REG. **** |
| | NE, NM, NV, OK, OR, SD, TX, | Glypro Plus | Dow AgroSciences | 62719-322 | Y |
| | UT, WA, WY | Rodeo | Dow AgroSciences | 62719-324 | Y |
| | | Mirage | Loveland Products Inc. | 34704-889 | Y |
| | | Mirage Plus | Loveland Products Inc. | 34704-890 | Y |
| | | Aquamaster | Monsanto | 524-343 | Y |
| | | Roundup Original | Monsanto | 524-445 | Y |
| | | Roundup Original II | Monsanto | 524-454 | Y |
| | | Roundup Original II CA | Monsanto | 524-475 | Y |
| | | Honcho | Monsanto | 524-445 | Y |
| | | Honcho Plus | Monsanto | 524-454 | Y |
| | | Roundup PRO | Monsanto | 524-475 | Y |
| | | Roundup PRO Concentrate | Monsanto | 524-529 | Y |
| | | Roundup PRO Dry | Monsanto | 524-505 | Y |
| | | Roundup PROMAX | Monsanto | 524-579 | Y |
| | | Aqua Neat | Nufarm Americas Inc. | 228-365 | Y |
| | | Credit Xtreme | Nufarm Americas Inc. | 71368-81 | Y |
| | | Foresters | Nufarm Americas Inc. | 228-381 | Y |
| | | Razor | Nufarm Americas Inc. | 228-366 | Y |
| | | Razor Pro | Nufarm Americas Inc. | 228-366 | Y |
| | | GlyphoMate 41 | PBI/Gordon Corporation | 2217-847 | Y |
| | | AquaPro Aquatic Herbicide | SePRO Corporation | 62719-324-67690 | Y |
| | | Rattler | Setre (Helena) | 524-445-5905 | Y |
| | | Buccaneer | Tenkoz | 55467-10 | Y |
| | | Buccaneer Plus | Tenkoz | 55467-9 | Y |
| | | Mirage Herbicide | UAP-Platte Chem. Co. | 524-445-34704 | Y |
| | | Mirage Plus Herbicide | UAP-Platte Chem. Co. | 524-454-34704 | Y |
| | | Glyphosate 4 | Vegetation Man., LLC | 73220-6-74477 | Y |
| | | Agrisolutions Cornerstone | Winfield Solutions, LLC | 1381-191 | Y |
| | | Agrisolutions Cornerstone Plus | Winfield Solutions, LLC | 1381-192 | Y |
| | | Agrisolutions Rascal | Winfield Solutions, LLC | 1381-191 | N |

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| | | Agrisolutions Rascal Plus | Winfield Solutions, LLC | 1381-192 | N |
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| | **BASED UPON CURRENT** | | | | |
| **ACTIVE** | **EIS/ROD & COURT** | | | **EPA REG.** | **CA** |
| **INGREDIENT** | **INJUNCTIONS** | **TRADE NAME** | **MANUFACTURER** | **NUMBER** | **REG. **** |
| | | | | | |
| **2,4-D** | NE, NM, NV, OK, OR, SD, TX, | Campaign | Monsanto | 524-351 | N |
| | UT, WA, WY | Landmaster BW | Monsanto | 524-351 | N |
| | | | | | |
| | | | | | |
| | NE, NM, NV, OK, SD, TX, UT, | Velpar L | DuPont Crop Protection | 352-392 | Y |
| | WA, WY | Velpar DF | DuPont Crop Protection | 352-581 | Y |
| | | Pronone MG | Pro-Serve | 33560-21 | N |
| | | Pronone 10G | Pro-Serve | 33560-21 | Y |
| | | Pronone 25G | Pro-Serve | 33560-45 | N |
| | | | | | |
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| **Sulfometuron methyl** | NM, NV, OK, SD, TX, UT, WA, WY | Oustar | DuPont Crop Protection | 352-603 | Y |
| | | | | | |
| **NOTE: In accordance with the Record of Decision for the *Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States Programmatic Environmental Impact Statement* (PEIS), the aerial application of these herbicides is prohibited.** | | | | | |
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| | NV, OK, SD, TX, UT, WA, WY | Plateau | BASF | 241-365 | N |
| | | | | | |
| | | | | | |
| **Glyphosate** | NV, OK, SD, TX, UT, WA, WY | | | | |
| | | | | | |
| | | | | | |
| | NE, NM, NV, OK, SD, TX, UT, | Imazapyr 4SL | Alligare, LLC | 81927-24 | N |
| | WA, WY | Ecomazapyr 2SL | Alligare, LLC | 81927-22 | N |
| | | Arsenal Railroad Herbicide | BASF | 241-273 | N |
| | | Chopper | BASF | 241-296 | Y |
| | | Arsenal Applicators Conc. | BASF | 241-299 | N |
| | | Arsenal | BASF | 241-346 | N |

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|---|---|---|---|---|---|
| | | Arsenal PowerLine | BASF | 241-431 | N |
| | | Stalker | BASF | 241-398 | N |
| | | Habitat | BASF | 241-426 | Y |
| | **STATES WITH APPROVAL** | | | | |
| | **BASED UPON CURRENT** | | | | |
| **ACTIVE** | **EIS/ROD & COURT** | | | **EPA REG.** | **CA** |
| **INGREDIENT** | **INJUNCTIONS** | **TRADE NAME** | **MANUFACTURER** | **NUMBER** | **REG. **** |
| | | | | | |
| | NE, NM, NV, OK, SD, TX, UT, | Polaris AC | Nufarm Americas Inc. | 241-299-228 | Y |
| | WA, WY | Polaris AC | Nufarm Americas Inc. | 228-480 | Y |
| | | Polaris AQ | Nufarm Americas Inc. | 241-426-228 | Y |
| | | Polaris RR | Nufarm Americas Inc. | 241-273-228 | N |
| | | Polaris SP | Nufarm Americas Inc. | 228-536 | Y |
| | | Polaris SP | Nufarm Americas Inc. | 241-296-228 | Y |
| | | Polaris Herbicide | Nufarm Americas Inc. | 241-346-228 | N |
| | | SSI Maxim Arsenal 0.5G | SSI Maxim Co., Inc. | 34913-23 | N |
| | | Ecomazapyr 2 SL | Vegetation Man., LLC | 74477-6 | N |
| | | Imazapyr 2 SL | Vegetation Man., LLC | 74477-4 | N |
| | | Imazapyr 4 SL | Vegetation Man., LLC | 74477-5 | N |
| | | | | | |
| | | | | | |
| **Diuron** | NM, NV, OK, SD, TX, UT, WA, WY | Sahara DG | BASF | 241-372 | N |
| | | Imazuron E-Pro | Etigra, LLC | 79676-54 | N |
| | | SSI Maxim Topsite 2.5G | SSI Maxim Co., Inc. | 34913-22 | N |
| | | | | | |
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| **Metsulfuron methyl** | NE, NM, NV, OK, SD, TX, UT, | | | | |
| | WA, WY | | | | |
| | | | | | |
| | | | | | |
| **Sulfometuron methyl +** | NE, NM, NV, OK, SD, TX, UT, | Lineage Prep | DuPont Crop Protection | 352-767 | N |
| **Metsulfuron methyl** | WA, WY | | | | |
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| **NOTE: In accordance with the Record of Decision for the *Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States Programmatic Environmental Impact Statement* (PEIS), the aerial application of these herbicides is prohibited.** | | | | | |
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| | NM, NV, OK, SD, TX, UT, WA, | Escort DF | DuPont Crop Protection | 352-439 | N |
| | WY | Escort XP | DuPont Crop Protection | 352-439 | N |
| | | Patriot | Nufarm Americas Inc. | 228-391 | N |
| | **STATES WITH APPROVAL** | | | | |
| | **BASED UPON CURRENT** | | | | |
| **ACTIVE** | **EIS/ROD & COURT** | | | **EPA REG.** | **CA** |
| **INGREDIENT** | **INJUNCTIONS** | **TRADE NAME** | **MANUFACTURER** | **NUMBER** | **REG. **** |
| [redacted] | | | | | |
| | NM, NV, OK, SD, TX, UT, WA, | Metsulfuron Methyl DF | Vegetation Man., L.L.C. | 74477-2 | N |
| | WY | | | | |
| | | | | | |
| [redacted] | | | | | |
| **Chlorsulfuron** | NM, NV, OK, SD, TX, UT, WA, | Cimarron Plus | DuPont Crop Protection | 352-670 | N |
| | WY | | | | |
| | | | | | |
| [redacted] | | | | | |
| **Dicamba + 2,4-D** | NV, OK, SD, TX, UT, WA, WY | | | | |
| | | | | | |
| [redacted] | | | | | |
| | NV, OK, OR, SD, TX, UT, WA, | Triumph 22K | Albaugh, Inc. | 42750-79 | N |
| | WY | Picloram K | Alligare, LLC | 42750-81-81927 | N |
| | | Picloram K | Alligare, LLC | 81927-17 | N |
| | | Picloram 22K | Alligare, LLC | 42750-79-81927 | N |
| | | Picloram 22K | Alligare, LLC | 81927-18 | N |
| | | Grazon PC | Dow AgroSciences | 62719-181 | N |
| | | OutPost 22K | Dow AgroSciences | 62719-6 | N |
| | | Tordon K | Dow AgroSciences | 62719-17 | N |
| | | Tordon 22K | Dow AgroSciences | 62719-6 | N |
| | | Trooper 22K | Nufarm Americas Inc. | 228-535 | N |
| | | | | | |
| [redacted] | | | | | |
| **2,4-D** | NV, OK, OR, SD, TX, UT, WA, | Picloram + D | Alligare, LLC | 42750-80-81927 | N |
| | WY | Picloram + D | Alligare, LLC | 81927-16 | N |
| | | Tordon 101M | Dow AgroSciences | 62719-5 | N |
| | | Tordon 101 R Forestry | Dow AgroSciences | 62719-31 | N |
| | | Tordon RTU | Dow AgroSciences | 62719-31 | N |
| | | Grazon P+D | Dow AgroSciences | 62719-182 | N |

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|---|---|---|---|---|---|
| | | HiredHand P+D | Dow AgroSciences | 62719-182 | N |
| | | Pathway | Dow AgroSciences | 62719-31 | N |
| | | Trooper 101 | Nufarm Americas Inc. | 228-561 | N |
| | **STATES WITH APPROVAL** | | | | |
| | **BASED UPON CURRENT** | | | | |
| **ACTIVE** | **EIS/ROD & COURT** | | | **EPA REG.** | **CA** |
| **INGREDIENT** | **INJUNCTIONS** | **TRADE NAME** | **MANUFACTURER** | **NUMBER** | **REG. **** |
| [redacted] | | | | | |
| **2,4-D - cont.** | NV, OK, OR, SD, TX, UT, WA, | | | | |
| | WY | | | | |
| | | | | | |
| [redacted] | | | | | |
| **2,4-D +** | NV, OK, OR, SD, TX, UT, WA, | | | | |
| **Dicamba** | WY | | | | |
| | | | | | |
| [redacted] | | | | | |
| | NE, NM, NV, OK, SD, TX, UT | Oust DF | DuPont Crop Protection | 352-401 | N |
| | WA, WY | Oust XP | DuPont Crop Protection | 352-601 | Y |
| | | SFM E-Pro 75EG | Etigra, LLC | 79676-16 | Y |
| | | Spyder | Nufarm Americas Inc. | 228-408 | Y |
| | | SFM 75 | Vegetation Man., L.L.C. | 72167-11-74477 | Y |
| | | | | | |
| **NOTE: In accordance with the Record of Decision for the *Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States Programmatic Environmental Impact Statement* (PEIS), the aerial application of these herbicides is prohibited.** | | | | | |
| | | | | | |
| [redacted] | | | | | |
| **Chlorsulfuron** | NE, NM, NV, OK, SD, TX, UT | | | | |
| | WA, WY | | | | |
| | | | | | |
| **NOTE: In accordance with the Record of Decision for the *Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States Programmatic Environmental Impact Statement* (PEIS), the aerial application of this herbicide is prohibited.** | | | | | |
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| [redacted] | | | | | |
| **Metsulfuron methyl** | NE, NM, NV, OK, SD, TX, UT | | | | |
| | WA, WY | | | | |
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| **NOTE: In accordance with the Record of Decision for the *Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western*** | | | | | |

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| *States Programmatic Environmental Impact Statement* **(PEIS), the aerial application of this herbicide is prohibited.** | | | | | |
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| | **STATES WITH APPROVAL** | | | | |
| | **BASED UPON CURRENT** | | | | |
| **ACTIVE** | **EIS/ROD & COURT** | | | **EPA REG.** | **CA** |
| **INGREDIENT** | **INJUNCTIONS** | **TRADE NAME** | **MANUFACTURER** | **NUMBER** | **REG. **** |
| | | | | | |
| | NM, NV, OK, SD, TX, UT, WA, | Alligare Tebuthiuron 20 P | Alligare, LLC | 81927-41 | Y |
| | WY | Spike 20P | Dow AgroSciences | 62719-121 | Y |
| | | Spike 80DF | Dow AgroSciences | 62719-107 | Y |
| | | SpraKil S-5 Granules | SSI Maxim Co., Inc. | 34913-10 | Y |
| | | | | | |
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| **Diuron** | NM, NV, OK, SD, TX, UT, WA, | SpraKil SK-26 Granular | SSI Maxim Co., Inc. | 34913-16 | Y |
| | WY | | | | |
| | | | | | |
| | | | | | |
| | NE, NM, NV, OK, SD, TX, UT | Triclopyr 3 | Alligare, LLC | 81927-13 | Y |
| | WA, WY | Triclopry 4 | Alligare, LLC | 81927-11 | Y |
| | | Element 3A | Dow AgroSciences | 62719-37 | Y |
| | | Element 4 | Dow AgroSciences | 62719-40 | Y |
| | | Forestry Garlon XRT | Dow AgroSciences | 62719-553 | Y |
| | | Garlon 3A | Dow AgroSciences | 62719-37 | Y |
| | | Garlon 4 | Dow AgroSciences | 62719-40 | Y |
| | | Garlon 4 Ultra | Dow AgroSciences | 62719-527 | Y |
| | | Remedy | Dow AgroSciences | 62719-70 | Y |
| | | Remedy Ultra | Dow AgroSciences | 62719-552 | Y |
| | | Pathfinder II | Dow AgroSciences | 62719-176 | Y |
| | | Relegate | Nufarm Americas Inc. | 228-521 | Y |
| | | Relegate RTU | Nufarm Americas Inc. | 228-522 | Y |
| | | Tahoe 3A | Nufarm Americas Inc. | 228-384 | Y |
| | | Tahoe 3A | Nufarm Americas Inc. | 228-518 | Y |
| | | Tahoe 3A | Nufarm Americas Inc. | 228-520 | Y |
| | | Tahoe 4E | Nufarm Americas Inc. | 228-385 | Y |
| | | Tahoe 4E Herbicide | Nufarm Americas Inc. | 228-517 | Y |
| | | Renovate 3 | SePRO Corporation | 62719-37-67690 | Y |

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|---|---|---|---|---|---|
| | | Renovate OTF | SePRO Corporation | 67690-42 | Y |
| | | Ecotriclopyr 3 SL | Vegetation Man., LLC | 72167-49-74477 | N |
| | | Triclopyr 3 SL | Vegetation Man., LLC | 72167-53-74477 | N |
| | **STATES WITH APPROVAL** | | | | |
| | **BASED UPON CURRENT** | | | | |
| **ACTIVE** | **EIS/ROD & COURT** | | | **EPA REG.** | **CA** |
| **INGREDIENT** | **INJUNCTIONS** | **TRADE NAME** | **MANUFACTURER** | **NUMBER** | **REG. **** |
| [redacted] | | | | | |
| **2,4-D** | NE, NM, NV, OK, SD, TX, UT, | Crossbow | Dow AgroSciences | 62719-260 | Y |
| | WA, WY | Candor | Nufarm Americas Inc. | 228-565 | Y |
| | | | | | |
| [redacted] | | | | | |
| **Clopyralid** | NE, NM, NV, OK, SD, TX, UT, | Redeem R&P | Dow AgroSciences | 62719-337 | Y |
| | WA, WY | Brazen | Nufarm Americas Inc. | 228-564 | Y |
| | | | | | |
| [redacted] | | | | | |
| | | | | | |
| *** Refer to the complete label prior to considering the use of any herbicide formulation. Label changes can impact the intended use through, such things as,** | | | | | |
| **creation or elimination of Special Local Need (SLN) or 24 (c) registrations, changes in application sites, rates and timing of application, county restrictions, etc.** | | | | | |
| | | | | | |
| **** Just because a herbicide has a Federal registration, and is approved under the current EIS, it may or may not be registered for use in California. This** | | | | | |
| **column identifies those formulations for which there is a California registration.** | | | | | |
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