Appendix B-1: Weed Management Plan

2011

Searchlight Wind Farm Weed Management Plan

Alphabiota Environmental Consulting

Alphabiota
ENVIRONMENTAL CONSULTING

Weed Management Plan
Searchlight Wind Farm
Town of Searchlight,
Clark County, Nevada

April 11, 2011
Revised November 8, 2011

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Alphabiota
ENVIRONMENTAL CONSULTING

Weed Management Plan

Searchlight, Nevada

Clark County, Nevada

Alphabiota Environmental Consulting, LLC
Project Number: 09-1034

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APPENDICES

1.0 INTRODUCTION

1.1 Plan Purpose

The purpose of this plan is to prescribe methods to help prevent and manage the spread of noxious weeds during and following construction of the Searchlight Wind Energy Project in Clark County (Project). The Project Proponent and its contractors are responsible for carrying out the methods described in this plan. This plan is applicable to the construction and operation of the Project, but may be modified, with consultation of the LVFO weed coordinator, to address circumstantial and potentially unforeseeable issues not readily predictable prior to construction or operation activities. Noxious weed control practices for the Project described in this plan have been developed utilizing the following sources and agency contacts.

Nevada:

- Nevada Revised Statutes: Chapter 555—Control of Insects, Pests and Noxious Weeds;
- The Las Vegas Field Office of the Nevada State BLM; and
- The Nevada Department of Agriculture.

1.3 Goals and Objectives

The goal of the preventative and control measures outlined in this document is to promote the containment and control weeds during the construction, operation, and maintenance of the Project. The Project Proponents objective is to assist federal, state, and local agencies' weed control efforts, to comply with requirements designed to help prevent the spread of all weeds, noxious and other, and to implement weed control measures on areas of the Project that are identified to be of special concern. In carrying out these measures, the Project Proponent will target selected areas within the Project where weed species are problematic within the current natural vegetation community in comparison to the least disturbed or naturally occurring and currently described vegetation habitat occurring at or nearby the Project. These preventative and treatment measures are described in Section 3 of the Noxious Weed Management Plan.

1.4 Project Description

Duke Energy (Project Proponent) is proposing the development of the Searchlight Wind Energy Facility (Project) that includes the erection of 87 wind turbines with supporting infrastructure, transmission lines, distribution lines, and collection lines within the proposed Project area.

The proposed Project area includes locales within the rural outskirts to the north, east, and south of the town of Searchlight within the County of Clark, Nevada (Plate 1). The site is located within the Searchlight (35114d8), Fourth of July Mountain (35114d7), Ireteba Peaks (035114e7) Nelson SW (35114e8) 7.5 Minute United States Geological Survey Quadrangle. The overall Project boundary (Plate 2) encompasses approximately 9500 acres of BLM managed lands of which approximately 2260 acres of this land was surveyed for potential ground disturbance and development. Most of the site and the surrounding vicinity is currently undeveloped, and / or is managed by the BLM, with some of the site containing off-road vehicle trails. To complete the botanical and weed survey effort with the highest degree of accuracy prior to final Project design, a 400-foot survey corridor was created by utilizing a 200-foot buffer around the proposed center line of turbine strings, roads, collector lines, and transmission lines. Additionally, other features such as the O&M building, substation, and lay-down area were buffered by 200 feet from their outer edges, leaving a survey area of greater than 400 feet for non-linear features. At the time of this report, the survey corridors are found exclusively within the Project boundary and represent the areas of potential development.

2.0 NOXIOUS WEED INVENTORY

2.1 State Listed Noxious Weeds and Relevant Regulations

The State of Nevada and US Department of Agriculture maintains an official list of weed species that are designated noxious for the State (Table 1). The Nevada Control of Insects, Pests, and Noxious Weeds Act (Nevada Revised Statutes: Chapter 555) grants the Director of the Nevada Department of Agriculture the authority to investigate and

control noxious plants. The following excerpts from the Nevada Revised Statutes (NRS) Chapter 555 and the BLM website are presented for reference in establishing relevant guidance for this plans development.

Noxious weeds as defined by the BLM

Noxious weed is a legal and regulatory designation. The BLM defines a noxious weed as: "A plant that interferes with management objectives for a given area of land at a given point in time." 'All of Nevada's noxious weeds can be found somewhere on Nevada's public land. Thus, in addition to BLM's inherent stewardship concerns about noxious weeds, legal responsibilities towards noxious weed management exist' (BLM, 2009).

The State of Nevada has officially designated 47 weed species as noxious and categorized by distribution (Table 1). For the purposes of this Weed Management Plan, all weeds on the list will be treated with equal importance for control and/or eradication.

2.1.1 Naturalized and Established Non-Native Species of Plants

The basis for weed management and the Project Proponent's objective is to prevent the spread of controllable weeds. The Project Proponent, the BLM, and other Federal, state, and local agencies recognize that there are species, such as Cheat grass (*Bromus tectorum*), Mediterranean grass (*Schismus spp.*), and other herbaceous and woody species that because of their widespread distribution are not considered feasible for general control. Therefore, only those species that are identified as controllable will be treated in the selected areas of the Project where they are problematic and form a significant portion of the local community, and / or pose a threat to the local vegetation community or nearby undisturbed areas, or could increase the probability of wildfire if left untreated.

2.2 Weed Management of the Project

The Project Proponent will maintain and control, within feasibly practicable means, weeds and weed infestations within Project boundaries, Project influence areas, and Project construction areas as prescribed by *NRS 555.150 Eradication of noxious weeds by owner or occupant of land***.**

Project influence areas are defined as those areas which may occur within or outside construction zones and their buffer areas, Project boundaries, or downstream within desert washes outside the Project boundaries but not extending more than 50 meters from the Project boundary downstream of any wash system originating on or within the Project bounds. All other reasonably discernable weed infestations occurring outside the Project bounds or within the 50 meter wash limit will need to be discernibly identified as originating from Project weed source populations prior to the Project Proponent assuming responsibility for management of any weed infestations occurring outside the boundaries of the Project.

2.3 Weed Survey and Inventory within the Project Area

Pre-construction field surveys were conducted from February, 2010 through May, 2010 to identify potential weed occupation. A reconnaissance survey was conducted on November 11, 2009, and a cursory site visit was conducted on July 7, 2010 to assess pre-survey and post-survey blooming and vegetation conditions of the site. Survey results are presented in the botanical survey report prepared for this project, (Bissonnette 2010). Weeds identified for this project are discussed in the following section.

Survey teams discovered one noxious weed species that is generally considered a major concern for the Mojave Desert. Sahara Mustard (*Brassica tournefortii*), a category 'B' weed, is an introduced species. Survey teams observed Sahara Mustard in the northeast reaches of the Project, within a contiguous wash system (Plate 3); (Bissonnette 2010).

Observations of Sahara Mustard generally occurred as widely scattered individuals, where the majority of these individuals were surviving opportunistically under larger native nurse plants, and not as populations. Most of the Sahara Mustard observed on or within the vicinity of the site occurred along the boundaries of Rte 164 (Cottonwood Cove Road) and within the bisecting and adjacent wash that covers a large portion of the northeast reaches of the site. Seeds appear to be transported and perpetuated by normal traffic, roadside maintenance, recreational ATVs, maintenance vehicles, and runoff from precipitation events (Bissonnette 2010). Additionally, seed transport may occur from rodents who carry them for caching, and downhill rolling movements based on spherical shape.

3.0 WEED MANAGEMENT

A risk assessment (BLM 2009) prepared by Alphabiota Environmental Consulting, LLC was completed for this Project and was referenced for use in establishing protocols for the implementation of this plan. Based upon the results of the risk assessment, the risk rating for this project is Moderate. Pre-construction controls, preventative measures (during construction and post-construction) and during operations of the facility will be implemented.

The following sections describe implementation measures for weed management as developed in collaboration with the BLM LVFO weed coordinator. Additional weed control measures that may be necessary following the development of this Plan will be developed and agreed upon prior to the onset of ground disturbing activities in areas of concern that may not have been readily identifiable at the time this plan was developed. Additional measures will be noted either in this Weed Management Plan or by memorandum submitted to the Project Proponent and the BLM LVFO weed coordinator for their review and endorsement.

3.1 Recognition of Problem Areas

Prior to the initiation of construction activities, all construction personnel will be instructed on the importance of controlling weeds. As part of start-up activities, the Project Proponent will provide information and training regarding weed management. The importance of preventing the spread of weeds in areas not infested, and controlling the proliferation of weeds already present will be emphasized. Prior to construction, areas of concern previously identified will be identified and clearly discernable in the field, flagging will be utilized to help identify these areas of concern. The flagging will alert project personnel and prevent access into areas until weed management control measures have been implemented.

3.2 Preventive Measures

The Project Proponent recognizes that prevention is the most cost-effective approach to weed management. The Project Proponent will collaborate with federal, state, and local agency weed control efforts; comply with preventative requirements; and implement weed control measures in areas of the Project identified with weed concerns. The following preventive measures will be implemented to help prevent the spread of existing weeds found on the site and within the previously defined influence areas:

3.2.1 General

The Project Proponent will conduct an employee environmental awareness program (EEAP) before surface disturbance to educate all Project personnel regarding environmental concerns and requirements, including weed identification, prevention, and control methods. No personnel will be allowed to enter the Project before taking part in the EEAP, at any point during the Project. Qualified biological monitors or environmental inspectors approved by BLM and / or the U.S. Fish and Wildlife Service (FWS) will be used to conduct the EEAP program and on-site biological monitoring before and during construction, and during facility operation.

3.2.2 Cleaning

All project related vehicles and equipment will undergo a cleaning regiment prior to entering or leaving the project area. Cleaning will be carried out using power or high-pressure equipment to remove seeds, roots, rhizomes, or any plant material from the equipment before transport on or off-site. Cleaning will concentrate on tracks or tires and on the undercarriage, with special emphasis on axles, frames, cross members, motor mounts, the underside of running boards, and front bumper/brush guard assemblies. If the weather and site conditions for each day of construction activities are dry, compressed air will be used to clean vehicles and equipment. If muddy conditions exist, a mat platform with containment would be set up and the vehicles and equipment will be cleaned with high pressure water. Vehicle cabs will be swept out and refuse disposed of in waste receptacles. The contractor, with oversight from an environmental inspector, will ensure that vehicles and equipment are free of soil and debris capable of transporting weed seeds, roots, rhizomes, or other plant material before vehicles and equipment are allowed use of Project access roads.

The project will develop a 'sticker' program to identify all vehicles and equipment that have successfully been cleared of weed and plant material and soil. Vehicles and equipment without the proper area-specific stickers will be barred from entering Project areas until cleaned. All vehicles and equipment will always be cleaned prior to entering the Project site or when moving to an area of the site not identified within the immediate vicinity of weed infested areas. Cleaning will be verified by a biological and / or environmental monitor. Vehicles leaving the site will have to be re-cleaned and validated prior to re-entering the Project.

Cleaning sites will be coordinated with BLM LVFO weed coordinator and then recorded on maps and / or by GPS equipment. Final maps of locations will be made available to the BLM LVFO weed coordinator or other jurisdictional authority upon request.

3.2.3 Soil

In areas where infestations were identified in the field, the contractor will salvage vegetation required while topsoil will be stripped and stockpiled to eliminate the transport of soil-borne weed seeds. Stockpiles would be marked with clearly visible signage until needed for reclamation. These soils will also not be permitted to be moved outside of the weed infested areas from which they were excavated. When needed, stockpiled materials will then be returned to the areas from which they were excavated.

In addition to soils and materials stockpiled from on-site resources, soils and materials transported into or onto the site from out-side sources will be inspected, assessed for weed contamination, and managed according to on-site soils treatments and / or stockpiling treatments. To minimize the probability of introducing weed non-native species to the site from imported topsoil, the following measures will be implemented:

- Inspection of the source site will be performed to assess weed species existing at and within the immediate vicinity of the source location.
- Fill material will be utilized only from source sites without weed infestation.

Straw or hay bales used for sediment barrier installations or mulch distribution will be weed-free. If weed free bales are unavailable, alternative weed free sediment barrier installations would be utilized.

The Project Proponent will implement the reclamation of disturbed lands immediately following construction that will be outlined in the Project Proponent's Reclamation Plan. Prompt and continuous re-vegetation efforts will ensure adequate vegetative cover to help control or prevent the introduction of weeds.

3.3 Treatment Methods

The Project Proponent will implement weed control measures in accordance with existing regulations and jurisdictional land management agency. The Project Proponent will focus weed control efforts only within areas of the Project or designated buffer zone

areas containing *Brassica tournefortii*. Treatment methods will focus on *Brassica tournefortii* occurring within the Project or designated buffer zones. The BLM LVFO weed coordinator will be notified prior to treatment of *Brassica tournefortii*.

The following treatment measures will be utilized to manage the control and / or spread of *Brassica tournefortii*. Implementation of weed control measures will proceed when site conditions are determined to be best suited for the type of weed control method being utilized.

- **Mechanical:**

  This treatment method will utilize either of the following strategies with the first method being the preferred choice:

  1. Manual labor personnel utilizing hand tools to remove weed species.

     Labor methods, such as hand pulling and / or use of hand tools to remove unwanted weed species, will be implemented to target small populations of *Brassica tournefortii* thus limiting or avoiding the removal of pre-existing native species. This method will be utilized prior to seed set and will be useful in controlling *Brassica tournefortii* that occur in locally small populations or occur as individuals beneath nurse type plants. Excavated *Brassica tournefortii* will be prepared for removal from the site.

  2. Heavy equipment utilizing implements to remove *Brassica tournefortii* and clear surface soils.

     Mechanical methods relying on heavy equipment (e.g. tractors, dozers, earthmoving equipment, etc.) will be implemented to mow, disc, or excavate *Brassica tournefortii* populations. This method will be utilized if it is determined that the area to be treated is too large to control sufficiently by manual labor methods alone. If such a method is used, restoration will occur to restore the affected areas. Restoration methods developed in the Restoration Plan will need to be followed after any use of this type of treatment method.

- **Chemical:**

  This treatment method would only be used if approval is gained by BLM and in conjunction with an approved Pesticide Use Proposal (PUP). Chemical treatment, if utilized, would be used to control the spread of *Brassica tournefortii* prior to seed set. Pre-emergent herbicides would be applied to the soil before the weed seed germinates. The Project proponent would utilize BLM-approved pre-emergent herbicides (Appendix C) if chemical treatment was deemed appropriate and BLM approval is confirmed. Pre-emergent herbicides would primarily be applied in early fall, prior to fall/early winter rains and weed germination. Species specific herbicides would be investigated and would be used as appropriate and available, thus targeting specific weed species rather than all plant growth.

Pre-construction treatment will consist of one or both of the mechanical methods, and when applicable, chemical methods. Treatment will occur only in areas where populations of *Brassica tournefortii* have been documented. In areas where *Brassica tournefortii* may be interspersed with native vegetation, the method of choice will be manual labor using hand tools prior to seed set for the removal of excavated *Brassica tournefortii*. During construction, control and containment preferences will be to utilize manual labor whenever feasibly or logistically possible. To help support control and containment efforts during post-construction activities mechanical applications will be utilized to help reduce infestations and fecundity of any opportunistic weed species recognized by the State as a weed. Chemical applications will be reserved for use if mechanical methods are not successful, and only with prior BLM approval.

As with other Weed species occurring in the West; *Brassica tournefortii* can be aggressive and highly adaptable while utilizing rapid germination, maturity, and fruiting strategies well before other native species begin to germinate. *Brassica tournefortii* is an annual herbaceous plant that reproduces by seed. It is self-compatible or autogamous, meaning that it can self-pollinate. Seed maturity and senescence generally occurs from April to May, however during drought conditions this can occur as early as February (Guertin 2003). Germination can occur bi-annually (generally in the spring and / or fall) if the necessary environmental conditions occur. *Brassica tournefortii* seed requires light inhibition and optimum soil temperatures ranging from 59°- 68°F (15°-20°C) for

germination to occur. Germination can occur within 4 days under optimum conditions. As little as 1.5 inches of rain can initiate germination and growth. Most growth occurs in the winter months with flowering and fruiting occurring in the late winter to early spring months. However, this can be accelerated by unseasonably warm dry weather, a short rainy season, or a rapid warming and heating of a locale. Therefore, the monitoring of environmental, climatic, and emergence conditions is necessary for preparing for implementation of weed control and restoration treatments.

To help facilitate implementation of treatments the Project Proponent will employ a biological monitor to routinely monitor and record the site conditions for indications of growth of *Brassica tournefortii*. This will include monitoring of local climate conditions for rainfall and general weather conditions. Monitoring will begin up to one year prior to the anticipated start date of ground disturbance activities for the Project. The biological monitor will record and document the conditions of the areas to be treated and convey the documented conditions to the Project Proponent and / or the contractor assigned to managing treatment measures. This will help to facilitate logistical scheduling for proceeding with treatment methods for *Brassica tournefortii*. Reporting will be submitted to the Project Proponent; and will be provided to the BLM LVFO upon request.

3.4 Reclamation Methods

Reclamation work, performed in advance of dormant seeding, will follow the progress of construction. Restoration and re-vegetation methods to be carried out by the Project will be addressed in a Reclamation Plan prepared by the Project Proponent. Disturbed ground may require BLM-approved chemical weed control before weeds go to seed. Chemical weed control would only be used with BLM approval and in conjunction with an approved PUP. Reseeding that may include mulching will be conducted on disturbed areas that have reached final grade or that will remain un-worked for 30 days. Final seedbed preparation, as required, and seeding and planting would be completed in September and October of the construction period to coincide with the optimal periods for dormant seeding for seed mixtures to be used for the Project. Weed control is an

important function for the restoration of native plant species following site disturbance. Planting and seeding will occur at the appropriate time of year for each species considered, and will be dependent upon weather conditions and construction timing. Planting methods will be developed based on site-specific factors such as slope, erosion potential, and size of the area in need of re-vegetation.

3.5 Post-reclamation Methods

Treatment methods other than herbicide application, such as mechanical measures, would be considered during the reclamation process to support weed control. Pre-construction weed management methods coupled with successful reclamation, treatment, and monitoring, should also help combat previously established weeds. During years of higher-than-average rainfall, weeds could appear in greater numbers than normal. For this reason, reclamation (through clearing, preparing seedbeds, and seeding of native species) of areas containing broadly occurring species is the preferred measure.

Treatment methods would be based on species-specific and area-specific conditions and will be coordinated with the BLM. The Project Proponent will continue to coordinate with resource agencies following construction and operation of the facility to ensure that appropriate and adequate treatment is implemented.

Post-construction control measures will include mechanical methods; utilizing manual labor, and / or equipment to extract, mow, or disc weed individuals or populations. Subsequent seeding would be conducted as soon as possible following soil disturbance to re-establish a stabilizing vegetation cover and reduce the potential for colonization of weeds. Such soil-disturbing activities would be avoided within native habitat areas.

3.6 Agency Specific Requirements

The appropriate weed control procedures, including target species, timing of control, and method of control, will be coordinated with the BLM LVFO weed coordinator. The Project Proponent will be responsible for providing the necessary personnel / contractors to implement weed control procedures.

4.0 MONITORING

Monitoring of weeds will be conducted during all phases of construction and for the life of the facility (Table 3). Monitoring will be conducted throughout the Project bounds and in any area affected by Project construction where known infestation areas have been identified to be of special concern. The Project Proponent intends to begin post-construction monitoring during the first growing season following construction. Post-construction monitoring will be conducted annually for the first three years following completion of construction activities and bi-annually for the duration of the life of the facility. Monitoring, both during construction and post-construction, will initially occur specifically during the life cycle or growing season of *Brassica tournefortii* (Most growth occurs in the winter months with flowering and fruiting generally occurring in the late winter to early spring months; see paragraph 3 section 3.3 for more information regarding *Brassica tournefortii* phenology and germination). However, if any other of the State listed weed species is observed within the project during the life of the facility, monitoring may be amended as needed. The growing season shall be defined by the germination time and documented growth cycle of each individual State listed weed species observed with the project for any given time during construction and post-construction operations and maintenance during the life of the facility. Therefore, monitoring times and conditions may change as needed and may vary from year-to-year.

If infestations of weeds are noted during monitoring activities, treatment methods will be implemented. In the event of any new infestation, the monitoring schedule may become more frequent. Small infestations are likely to be locally treated with one of the previously identified applications, with a focus on treating individual plants. In the event that a large infestation occurs or reoccurs, an assessment will be performed to determine the potential cause of the infestation, and new strategies for treatments may be developed. Any new treatment strategies will be collaborated with the BLM and other relevant local weed supervisory authorities.

The Project Proponent will maintain ongoing communication with BLM regarding weeds within the Project bounds. BLM may also contact the Project Proponent to report the presence of weeds. The Project Proponent would assess the conditions and locations for which the weeds are being reported and develop a plan to control the weeds on a case-by-case basis. The Project Proponent will maintain experienced personnel with background in the identification of weed species, who will convey information to the biological monitor for contribution into the monitoring reports.

4.1 Proposed Monitoring Methodology

The overall purpose of a monitoring program is to document whether areas that have been disturbed during construction and / or post construction are progressing toward the long-term goal of soil stability, appropriate re-growth of (weed free) vegetative cover, species diversity, and habitat restoration. Monitoring will be carried out as described below.

Targeted weed treatment areas where reclamation is implemented or have been treated will be monitored and assessed biannually for the life of the facility following construction. The Project Proponent will implement the schedule on any appropriate BLM, state-owned, and private lands where monitoring would include:

- Identifying and assessing weed conditions in the primary and secondary growing season (usually spring and sometimes fall) following the completion of construction activities, with particular attention given to any infestation occurring in previously unaffected areas;
- Identifying and assessing locations where additional remedial action or treatment may be required, and recommending treatment actions; and
- Recording any additional weed control treatments carried out in the reporting period.

In conjunction with the Project Proponent's reclamation monitoring, weed monitoring would include:

- Monitoring and assessment of the reseeding effort during the second growing season, with subsequent follow-up surveys in the third and fifth growing seasons post-restoration (note that reseeding efforts would occur in agreement with relevant agencies in any area where monitoring during the second growing season determines a re-vegetation failure); and
- Assessment of Project stability, re-vegetation progress, and percentage of vegetative cover (qualitative analysis and success criteria should be specified in the Project Proponent's Reclamation Plan).
- The Project Proponent will document the above observations for presentation in monitoring reports to be made available to the BLM, FWS, and respective local weed management boards, as required.

4.3 Monitoring of Known Infestation Areas

In addition to biannual and ongoing weed monitoring (noted previously) the Project Proponent will conduct annual site visits to monitor known infestation areas. These areas will be assessed and then treated as described in the treatment methods if needed. The Project Proponent will continue to visit these known infestation areas until weed control measures show significant improvement or eradication of weeds for these areas.

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Appendix A

Table 1
State Listed Noxious Weeds of Nevada
Searchlight Wind Farm
Clark County, Nevada

NAC 555.010 Designation and categorization of noxious weeds. (NRS 555.130**)**

Category A Weeds[1]:	
(1) African rue.	(Peganum harmala)
(2) Austrian fieldcress.	(Rorippa austriaca)
(3) Austrian peaweed.	(Sphaerophysa salsula)
(4) Black henbane.	(Hysocyamus niger)
(5) Camelthorn.	(Alhagi pseudalhagi)
(6) Common crupina.	(Crupina vulgaris)
(7) Dalmatian toadflax.	(Linaria dalmatica)
(8) Dyer's woad.	(Isatis tinctoria)
(9) Eurasian water-milfoil.	(Myriophyllum spicatum)
(10) Giant reed.	(Arundo donax)
(11) Giant salvinia.	(Salvinia molesta)
(12) Goats rue.	(Galega officinalis)
(13) Green fountain grass.	(Pennisetum setaceum)
(14) Houndstongue.	(Cynoglossum officinale)
(15) Hydrilla.	(Hydrilla verticillata)
(16) Iberian starthistle.	(Centaurea iberica)
(17) Klamath weed.	(Hypericum perforatum)
(18) Malta starthistle.	(Centaurea melitensis)
(19) Mayweed chamomile.	(Anthemis cotula)
(20) Mediterranean sage.	(Salvia aethiopis)

(21) Purple loosestrife.	(Lythrum salicaria, Lythrum virgatum and their cultivars)
(22) Purple starthistle.	(Centaurea calcitrapa)
(23) Rush skeletonweed.	(Chondrilla juncea)
(24) Sow thistle.	(Sonchus arvensis)
(25) Spotted knapweed.	(Centaurea maculosa)
(26) Squarrose knapweed.	(Centaurea virgata)
(27) Sulfur cinquefoil.	(Potentilla recta)
(28) Syrian bean caper.	(Zygophyllum fabago)
(29) Yellow starthistle.	(Centaurea solstitialis)
(30) Yellow toadflax.	(Linaria vulgaris)
Category B Weeds[2]:	
(1) Carolina horse nettle.	(Solanum carolinense)
(2) Diffuse knapweed.	(Centaurea diffusa)
(3) Leafy spurge.	(Euphorbia esula)
(4) Medusahead.	(Taeniatherum caput-medusae)
(5) Musk thistle.	(Carduus nutans)
(6) Russian knapweed.	(Acroptilon repens)
(7) Sahara mustard.	(Brassica tournefortii)
(8) Scotch thistle.	(Onopordum acanthium)
(9) White horse nettle.	(Solanum elaeagnifolium)
Category C Weeds[3]:	
(1) Canada thistle.	(Cirsium arvense)

(2) Hoary cress.	(Cardaria draba)
(3) Johnson grass.	(Sorghum halepense)
(4) Perennial pepperweed.	(Lepidium latifolium)
(5) Poison Hemlock.	(Conium maculatum)
(6) Puncture vine.	(Tribulus terrestris)
(7) Salt cedar (tamarisk).	(Tamarix spp.)
(8) Water Hemlock.	(Cicuta maculata)

[1]Category "A"

- Weeds not found or limited in distribution throughout the state
- Actively excluded from the state and actively eradicated wherever found
- Actively eradicated from nursery premises
- Control required by the state in all infestations

[2]Category "B"

- Weeds established in scattered populations in some counties of the state
- Actively excluded where possible
- Actively eradicated from nursery premises
- Control required by the state in areas where populations are not well-established or previously unknown to occur

[3]Category "C"

- Weeds currently established and generally widespread in many counties of the state
- Actively eradicated from nursery premises
- Abatement at the discretion of the State Quarantine Officer

[Dep't of Agriculture, No. 55.11, eff. 5-25-62; A 5-1-68]—(NAC A by St. Quarantine Officer, 8-9-94; R191-99, 8-7-2000; R097-01, 5-1-2002; R003-03, 9-24-2003; R109-04, 10-5-2004; R028-05, 10-31-2005; R020-06, 6-28-2006; R156-08, 2-11-2009)

Table 2
Observed Flora
Searchlight Wind Farm Project
Clark County, Nevada

FAMILY	SCIENTIFIC NAME	COMMON NAME	HABITAT TYPE	LIFE CYCLE TYPE	Proposed Jepson 2nd Ed. Changes
APIACEAE - Carrot Family					
Apiaceae	*Cymopterus multinervatus*	Purplenerve Springparsley	Sandy and rocky slopes	per	
APOCYNACEAE - Milkweed Family					
Apocynaceae	*Amsonia tomentosa*	woolly bluestar/amsonia	desert plains, canyons	subshrub	
ASCLEPIADACEAE - Milkweed Family					
Asclepiadaceae	*Asclepias nyctaginifolia*	Mojave milkweed	arroyos, dry slopes	per	Apocynaceae
Asclepiadaceae	*Asclepias subulata*	rush milkweed, ajamete	arroyos, washes	ann	Apocynaceae
ASTERACEAE - Sunflower Family					
Asteraceae	*Acamptopappus sphaerocephalus var. sphaerocephalus*	rayless goldenhead	gravelly/rocky slopes, flats, desert to juniper woodland	shrub	
Asteraceae	*Adenophyllum cooperi*	Cooper's dogweed/dyssodia	dry sandy slopes and washes	subshrb	
Asteraceae	*Adenophyllum porophylloides*	San Felipe dogweed/dyssodia	dry rocky hillsides, washes	subshrb	
Asteraceae	*Ambrosia dumosa*	burro-weed	creosote bush scrub	shrub	
Asteraceae	*Ambrosia eriocentra*	woolly bur-sage	dry washes and slopes	shrub	
Asteraceae	*Baccharis sergiloides*	desert baccharis	gravelly or sandy stream beds	shrub	
Asteraceae	*Baileya multiradiata*	desert marigold	desert roadsides, flats washes hillsides	ann/per	
Asteraceae	*Bebbia juncea var. aspera*	sweetbush	dry rocky slopes, desert plains, washes	shrub	
Asteraceae	*Brickellia atrctyloides var. arguta*	pungent brickellbush, spearleaf brickellia	rocky places	shrub	
Asteraceae	*Brickellia incana*	woolly brickellbush	sandy washes, flats	shrub	*Brickellia atrctyloides var. arguta*

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FAMILY	SCIENTIFIC NAME	COMMON NAME	HABITAT TYPE	LIFE CYCLE TYPE	Proposed Jepson 2nd Ed. Changes
Asteraceae	*Calycoseris parryi*	yellow tackstem	sandy to gravelly slopes, washes	ann	
Asteraceae	*Chaenactis carphoclinia var. carphoclinia*	pebble pincushion	open rocks or gravel	ann	
Asteraceae	*Chaenactis fremontii*	Fremont pincushion	open sand or gravel	ann	
Asteraceae	*Chaenactis macrantha*	Mojave pincushion	open (often calcareous) san or gravel	ann	
Asteraceae	*Chaenactis stevioides*	desert pincushion	open flats, slopes	ann	
Asteraceae	*Chrysothamnus paniculatus*	black-stem	gravelly washes	shrub	*Ericameria paniculata*
Asteraceae	*Encelia farinosa*	brittlebush, incienso	slopes, washes, flats	shrub	
Asteraceae	*Encelia frutescens*	button brittlebush	desert washes, flats, slopes, roadsides	shrub	
Asteraceae	*Encelia virginensis*	Virgin River brittlebush	desert flats, rocky slopes, roadsides	shrub	
Asteraceae	*Ericameria cooperi*	Cooper's goldenbush	rocky slopes/valleys, creosote-bush scrub, Joshua-tree wdland	shrub	
Asteraceae	*Ericameria laricifolia*	turpentine bush	rocky canyons, creosote bush scrub, pinyon/juniper woodlnd	shrub	
Asteraceae	*Ericameria paniculata*	black-stem	gravelly washes	shrub	
Asteraceae	*Erigeron concinnus var. concinnus*	Navajo fleabane, shaggy daisy	sandy to rocky slopes, crevices	per	
Asteraceae	*Eriophyllum wallacei*	wooly Easterbonnets	chaparral, sagebrush, desert scrub or woodland	ann	
Asteraceae	*Gutierrezia sarothrae*	broom snakeweed	grasslands, deserts, montane areas	subshrub	
Asteraceae	*Hymenoclea salsola*	cheesebush	dry flats, washes, fans	subshrub	*Ambrosia salsola*
Asteraceae	*Malacothrix coulteri*	snake's head	sandy open areas,coastal sage, grassland, deserts	ann	
Asteraceae	*Malacothrix glabrata*	desert dandelion	coarse soils in open areas or amoung shrubs	ann	

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Asteraceae	*Monoptilon bellidiforme*	daisy desertstar	sandy deserts, washes	ann	
Asteraceae	*Monoptilon bellioides*	Mojave desertstar	sandy deserts, washes	ann	
Asteraceae	*Perityle emoryi*	Emory rock-daisy	desert plains, slopes, washes	ann	
Asteraceae	*Peucephyllum schottii*	pygmy cedar	rocky slopes, often amoung boulders	shrub	
Asteraceae	*Porophyllum gracile*	odora	rocky slopes	subshrub	
Asteraceae	*Prenanthella exigua*	prenanthella	desert canyons & valleys, juniper woodland	ann	
Asteraceae	*Psilostrophe cooperi*	whitestem paperflower	dry plains, hillsides, washes	subshrub	
Asteraceae	*Rafinesquia neomexicana*	desert chicory	sandy or gravelly desert soils	ann	
Asteraceae	*Stephanomeria exigua*	wire lettuce	desert scrub, dry disturbed ground	ann/shrub	
Asteraceae	*Stephanomeria pauciflora*	wire lettuce	dry flats, deserts	per/subshrb	
Asteraceae	*Stylocline micropoides*	desert nest straw	stable rocky or sandy often calcareous soils	ann	
Asteraceae	*Tetradymia stenolepis*	Mojave cottonthorn/horsebrush	Joshua-tree woodland, creosote-bush scrub	shrub	
Asteraceae	*Trichoptilium incisum*	yellowdome	dry slopes, plains	ann/per	
Asteraceae	*Uropappus lindleyi*	Lindley's silverpuffs	rocky soils chaparral or grassy slopes	ann	
Asteraceae	*Viguiera parishii*	Parish's goldeneye	washes, dry, rocky slopes	shrub	*Bahiopsis parishii*
Asteraceae	*Xylorhiza tortifolia var. tortifolia*	Mojave aster	desert slopes, canyons	per/subshrb	

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BORAGINACEAE - Borage Family					
Boraginaceae	*Amsinckia menziesii var. intermedia*	common fiddleneck	open disturbed areas	ann	
Boraginaceae	*Amsinckia tessellata var. tessellata*	bristly fiddleneck	sandy or gravelly areas, inland	ann	
Boraginaceae	*Cryptantha barbigera*		open, sandy to rocky soils	ann	
Boraginaceae	*Cryptantha circumscissa*	cushion cryptantha/catseye	sandy soils	ann	
Boraginaceae	*Cryptantha micrantha*	redroot cryptantha/catseye	sandy soils	ann	
Boraginaceae	*Cryptantha nevadensis*	Nevada cryptantha/catseye	sandy to gravelly soils	ann	
Boraginaceae	*Cryptantha petrocarya*	wingnut cryptantha	sandy to gravelly soils	ann	
Boraginaceae	*Pectocarya heterocarpa*		washes, roadsides, openings in creosote-bush shrub	ann	
Boraginaceae	*Pectocarya platycarpa*	broadfruit combseed	washes, roadsds creosote-bush scrub, joshua-tree woodlnd	ann	
Boraginaceae	*Pectocarya recurvata*	curvenut combseed	creosote-bush scrub, Joshua-tree woodland	ann	
Boraginaceae	*Plagiobothrys arizonicus*	Arizona popcornflower, blood weed	dry coarse soils in scrub or woodland	ann	
BRASSICACEAE - Mustard Family					
Brassicaceae	*Arabis pulchra var. gracilis*	beautiful/prince's rockcress	canyons, slopes, washes, limestone soils	per	
Brassicaceae	*Brassica tournefortii**	Asian/African mustard	roadsides, washes, open areas	ann	
Brassicaceae	*Caulanthus cooperi*	Cooper's wild cabbage/jewelflower	sandy or gravelly soils amonug shrubs	ann	
Brassicaceae	*Descurainia pinnata*	western/pinnate tansymustard	washes, slopes, often saline soils	ann	
Brassicaceae	*Draba cuneifolia*	wedgeleaf draba	open or disturbed areas	ann	
Brassicaceae	*Guillenia lasiophylla*	California mustard	dry open slopes, serpentine, burns	ann	

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Brassicaceae	*Lepidium fremontii*	desert allysum/pepperweed	sandy washes, gravelly soils, rocky slopes & ridges	per	
Brassicaceae	*Lepidium lasiocarpum var lasiocarpum*	hairypod pepperweed	dry flats, washes, roadsides, sagebrush	ann	*Lepidium lasiocarpum ssp. lasiocarpum*
Brassicaceae	*Lesquerella tenella*	moapa bladderpod	sandy soils, washes slopes	ann	*Physaria tenella*
Brassicaceae	*Sisymbrium irio**	London rocket	disturbed areas, roadsides, orchards	ann	
Brassicaceae	*Sisymbrium orientale**	oriental mustard	disturbed areas	ann	
Brassicaceae	*Thysanocarpus curvipes*	lacepod/fringe pod, ribbed fringepod	grassy or brushy slopes, moist meadows	ann	
Brassicaceae	*Thysanocarpus laciniatus*	crenate/ narrow-leaved fringe pod	dry rocky slopes and ridges	ann	
CACTACEAE - Cactus Family					
Cactaceae	*Echinocactus polycephalus var. polycephalus*	cottontop,clustered barrel cactus	rocky hills, silty valleys		
Cactaceae	*Echinocereus engelmannii*	hedgehog cactus, Engelmann's hedgehog	dry habitats	shrub	
Cactaceae	*Ferocactus cylindraceus*	California barrel cactus	gravelly, rocky or sandy areas		
Cactaceae	*Mammillaria tetrancistra*	common fishhook cactus	creosote-bush scrub	per	
Cactaceae	*Cylindropuntia acanthocarpa var. coloradensis*	buckhorn cholla	creosote-bush scrub, joshua-tree woodland	shrub	*Cylindropuntia acanthocarpa var.*
Cactaceae	*Opuntia basilaris var. basilaris*	beavertail cactus/pricklypear	desert, chaparral, pinyon-juniper woodland	shrub	
Cactaceae	*Cylindropuntia bigelovii*	teddy-bear cholla	creosote-bush scrub	shrub	*Cylindropuntia bigelovii*
Cactaceae	*Cylindropuntia echinocarpa*	silver/golden cholla	dry habitats	shrub	*Cylindropuntia echinocarpa*
Cactaceae	*Opuntia erinacea*	old man cactus, hairy prickly-pear	creosote-bush shrub to pine srub	shrub	*Opuntia polyacantha var.*
Cactaceae	*Opuntia parishii*	club/ mat cholla	sandy flats	shrub	*Grusonia parishii*
Cactaceae	*Cylindropuntia ramosissima*	pencil cactus, diamond cholla	desert flats	shrub	*Cylindropuntia ramosissima*
Cactaceae	*Sclerocactus johnsonii*	Johnson pineapple cactus, pygmy barrel cactus	granitic areas, creosote-bush scrub		*Echinomastus johnsonii*

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CAMPANULACEAE - Bellflower Family					
Campanulaceae	*Nemacladus glanduliferus var. orientalis*	glandular threadplant	rocky slopes, sandy soils, washes	ann	*Nemacladus orientalis*
Campanulaceae	*Nemacladus rubescens*		dry, sandy or gravelly soils	ann	
CARYOPHYLLACEAE - Pink Family					
Caryophyllaceae	*Arenaria macradenia v macradenia*	desert sandwort	dry rocky slopes, alluvial deposits, often on carbonates	per	*Eremogone macrodenia var. macrodenia*
CHENOPODIACEAE - Goosefoot Family					
Chenopodiaceae	*Grayia spinosa*	spiny hop-sage	sandy to gravelly soils, shrubland, pinyon/juniper woodlnd	shrub	
Chenopodiaceae	*Krascheninnikovia lanata*	winter fat	rocky to clay soils, flats to gentle slopes	shrub	
Chenopodiaceae	*Salsola tragus**	Russian thistle, tumbleweed	disturbed areas	ann	
CUCURBITACEAE - Gourd Family					
Cucurbitaceae	*Cucurbita palmata*	coyote melon/gourd	sandy areas	vine	
CUSCUTACEAE - Dodder Family					
Cuscutaceae	*Cuscuta denticulata*	desert dodder	on herbs or shrubs, creosote bush scrub, joshua-tree wdlnd	ann	
EPHEDRACEAE - Ephedra Family					
Ephedraceae	*Ephedra nevadensis*	Nevada ephedra/Morman tea	creosote-bush scrub, Joshua-tree woodland	shrub	
Ephedraceae	*Ephedra viridis*	green ephedra	sagebrush, creosote-bush scrub, joshua tree woodland	shrub	

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EUPHORBIACEAE - Spurge Family					
Euphorbiaceae	*Chamaesyce albomarginata*	rattlesnake weed	dry slopes	per	
Euphorbiaceae	*Chamaesyce micromera*		sandy places	ann/per	
Euphorbiaceae	*Chamaesyce polycarpa*	smallseed sandmat	dry sandy slopes & flats	per	
Euphorbiaceae	*Ditaxis neomexicana*	common ditaxis	creosote-bush scrub	ann/per	
FABACEAE - Legume Family					
Fabaceae	*Acacia greggii*	catclaw	flats, washes	shrub/tree	*Senegalia greggii*
Fabaceae	*Astragalus acutirostris*		sandy or gravelly areas	ann	
Fabaceae	*Astragalus didymocarpus var. dispermus*	two-seeded/dwarf white milkvetch	sandy or gravelly areas	ann	
Fabaceae	*Astragalus layneae*	widow's milkvetch	sandy flats, washes	per	
Fabaceae	*Astragalus lentiginosus var. fremontii*	Fremont's milkvetch	open sand, gravel	ann/per	
Fabaceae	*Astragalus nuttallianus var. imperfectus*	turkey peas	sandy or gravelly flats or washes	ann	
Fabaceae	*Dalea mollis*	hairy prairieclover	creosote bush flats, washes, roadsides	ann	
Fabaceae	*Lotus humistratus*	hill lotus, foothill deervetch, maresfat	dry gravely or sandy slopes & ridges	ann	
Fabaceae	*Lotus strigosus*	strigose trefoil, bishop lotus	dry sandy or gravelly slopes or flats	ann	
Fabaceae	*Lupinus concinnus*	bajada lupine	open or disturbed areas, burns	ann	
Fabaceae	*Lupinus sparsiflorus*	Coulter's lupine	washes, sandy areas	ann	
Fabaceae	*Psorothamnus fremontii var. fremontii*	Fremont's indigo-bush/false dalea	granite and volcanic slopes, flats, canyons	shrub	

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GERANIACEAE - Geranium Family					
Geraniaceae	*Erodium cicutarium**	red-stemmed filaree	disturbed grassy slopes, pastures	ann	
Geraniaceae	*Erodium texanum*	Texas storksbill	dry open sites, shrubland	ann/bien	
HYDROPHYLLACEAE - Waterleaf Family					
Hydrophyllaceae	*Eucrypta chrysanthemifolia var. bipinnatifida*	spotted hideseed	cliffs, rocky slopes, crevices, washes	ann	Boraginaceae
Hydrophyllaceae	*Eucrypta micrantha*	desert hideseed/eucrypta	rocky crevices, washes, slopes	ann	Boraginaceae
Hydrophyllaceae	*Nama demissum var. demissum*	desert purple mat	sandy or gravelly flats	ann	Boraginaceae
Hydrophyllaceae	*Phacelia crenulata var.*	caterpillarweed, purple stem phacelia	sandy to gravelly washes, slopes	ann	Boraginaceae
Hydrophyllaceae	*Phacelia cryptantha*	hiddenflower/limestone phacelia	gravelly or rocky slopes, canyons	ann	Boraginaceae
Hydrophyllaceae	*Phacelia distans*	distant/common phacelia	clay or rocky soils, slopes	ann	Boraginaceae
Hydrophyllaceae	*Phacelia fremontii*	Fremont's phacelia	sandy or gravelly soils, shrubland, grassland	ann	Boraginaceae
Hydrophyllaceae	*Phacelia perityloides*	Rock phacelia	crevices on cliffs, rocky, often calcareous slopes	ann/per	Boraginaceae
Hydrophyllaceae	*Phacelia rotundifolia*	roundleaf phacelia	rocky slopes, cervices, ledges creosote scrub, pinyon/Juniper	ann	Boraginaceae

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KRAMERIACEAE - Rhatany Family					
Krameriaceae	*Krameria erecta*	pima rhatany, purple heather	dry rocky ridges, slopes	shrub	
Krameriaceae	*Krameria grayi*	white rhatany	dry rocky or sandy areas, esp. lime soils	shrub	
LAMIACEAE - Mint Family					
Lamiaceae	*Hyptis emoryi*	desert Lavender	gravelly, sandy washes, canyons, desert shrubland	shrub	
Lamiaceae	*Salazaria mexicana*	Mexican bladder sage	sandy to gravelly slopes, washes, shrubland, woodland	shrub	
Lamiaceae	*Salvia columbariae*	chia	dry disturbed areas	ann	
Lamiaceae	*Salvia dorii var. piilosa*	hairy/purple sage	desert slopes, washes	shrub	
LILIACEAE - Lily Family					
Liliaceae	*Calochortus kennedyi var. kennedyi*	desert mariposa	heavy or rocky soils, creosote-bush scrub, pinyon/juniper	per	
Liliaceae	*Dichelostemma capitatum ssp. capitatum*	blue dicks	grassy slopes	per corm	
Liliaceae	*Yucca baccata*	banana yucca	dry joshua tree woodland	shrub	
Liliaceae	*Yucca brevifolia*	Joshua tree	desert flats & slopes	tree	
Liliaceae	*Yucca schidigera*	Mojave yucca	chaparral, creosote-bush scrub	shrub	

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LOASACEAE - Loasa Family					
Loasaceae	*Eucnide urens*	desert rock nettle/stingbush	cliffs, rocky slopes, washes	subshrb	
Loasaceae	*Mentzelia albicaulis*	whitestem blazingstar	shrubland to pinyon/juniper, gravel fans, washes	ann	
Loasaceae	*Mentzelia tricuspis*	spinyhair stickleaf, desert blazingstar	sandy or gravelly slopes in creosote-bush scrub	ann	
Loasaceae	*Mentzelia veatchiana*	Veatch's blazingstar, whitestem stickleaf	sandy grassland, shrubland, oak/pine woodland	ann	
MALVACEAE - Mallow Family					
Malvaceae	*Eremalche rotundifolia*	desert five-spot	dry desert scrub	ann	
Malvaceae	*Sphaeralcea ambigua*	desert globemallow, apricot mallow	desert scrub	ann	
NYCTAGINACEAE - Four O'Clock Family					
Nyctaginaceae	*Allionia incarnata*	trailing four-o-clock, windmills	creosote bush scrub	ann/per	
Nyctaginaceae	*Mirabilis bigelovii var. bigelovii*	Bigelow's four o'clock, desert wishbone bush	rocky places	per/subshrb	
Nyctaginaceae	*Mirabilis multiflora*	desert four o'clock	dry rocky or sandy areas	per	
OLEACEAE - Olive Family					
Oleaceae	*Menodora scoparia*	desert olive, broom twinberry	rocky slopes, canyons	per/shrub	
Oleaceae	*Menodora spinescens*	spiny menodora/desert olive	rocky slopes, canyons	shrub	
ONAGRACEAE - Evening primrose Family					
Onagraceae	*Camissonia boothii ssp.*			ann	
Onagraceae	*Camissonia brevipes ssp.*	golden suncup	sandy slopes, washes, alluvial fans	ann	
Onagraceae	*Camissonia chamaenerioides*	longcapsule/willow herb suncup	sandy slopes, flats, desert scrub	ann	
Onagraceae	*Camissonia claviformis ssp. claviformis*	browneyes	alluvial slopes, flats, ceosote-bush scrub	ann	
Onagraceae	*Camissonia refracta*	narrowleaf suncup	sandy slopes, flats, desert scrub	ann	

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OROBANCHACEAE - Broom-Rape Family					
Orobanchaceae	*Orobanche cooperi*	Broom-Rape	sandy flats, washes, on Asteraceae	ann/per	
PAPAVERACEAE - Poppy Family					
Papaveraceae	*Eschscholzia glyptosperma*	desert golden poppy	desert washes, flats, slopes	ann	
Papaveraceae	*Eschscholzia minutiflora*	pygmy golden poppy	desert washes, flats, slopes	ann	
PLANTAGINACEAE - Plantain Family					
Plantaginaceae	*Plantago ovata*	desert indianwheat	gravelly soils, desert, sagebrush, coastal strand	ann	
POACEAE - Grass Family					
Poaceae	*Achnatherum hymenoides*	indian ricegrass	dry well drained soils, desert shrubland, pinyon/juniper	per	
Poaceae	*Achnatherum speciosum*	desert needlegras	rocky slopes, canyons, washes	per	
Poaceae	*Aristida purpurea var. nealleyi*	Nealley three-awn	dry slopes, plains, shrubland	per	
Poaceae	*Cynodon dactylon**	bermuda grass	waste places	per	
Poaceae	*Bromus madritensis ssp. rubens**	foxtail chess, red brome	disturbed areas	ann	
Poaceae	*Erioneuron pulchellum*	fluff grass	sandy to rocky desert shrubland, woodland	per	
Poaceae	*Muhlenbergia porteri*	bush muhly	amoung boulders or shrubs, rocky slopes, cliffs	per	
Poaceae	*Pleuraphis rigida*	big galleta	dry open flats, washes, sandunes, scrub, woodland	per	
Poaceae	*Triden muticus*	slim tridens	dry, rocky, gen limestone soils, creosote-bush shrubland, pinyon/juniper woodland	per	
Poaceae	*Schismus barbatus**	old han schismus	dry, open, generally disturbed areas	ann	

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POLEMONIACEAE - Phlox Family					
Polemoniaceae	*Eriastrum eremicum ssp. eremicum*	desert woollystar/eriastrum	open areas in sandy soils	ann	
Polemoniaceae	*Gilia brecciarum ssp. brecciarum*	Nevada gilia	sandy flats in open shrubland, woodland	ann	
Polemoniaceae	*Gilia scopulorum*		semi-shaded rocky ravines	ann	
Polemoniaceae	*Langloisia setosissima ssp. setosissima*	Great Basin/bristly langloisia	desert washes, flats, slopes gravelly to sandy soil	ann	
Polemoniaceae	*Leptosiphon aureus ssp. aureus*	golden desert trumpets	desert flats	ann	*Leptosiphon aureus ssp. aureus*
Polemoniaceae	*Leptosiphon aureus ssp. decorus*	white desert trumpets	desert flats	ann	*Leptosiphon aureus ssp. decorus*
Polemoniaceae	*Linanthus demissus*	desertsnow, desert linanthus	limestone soils, desert pavement, sandy areas	ann	
Polemoniaceae	*Linanthus dichotomus*	evening snow	drying open areas, esp serpentine	ann	
Polemoniaceae	*Loeseliastrum schottii*	Schott's calico	desert washes, flats, slopes, sandy to gravelly	ann	
POLYGONACEAE - Buckwheat Family					
Polygonaceae	*Chorizanthe brevicornu*	brittle spineflower	desert scrub, sagebrush, juniper woodland	ann	
Polygonaceae	*Chorizanthe rigida*	spiny-herb, devil's spineflower, spiny chorizanthe	desert scrub, pavement	ann	
Polygonaceae	*Eriogonum angulosum*	anglestem buckwheat	dry open places, sand or clay	ann	
Polygonaceae	*Eriogonum deflexum var. deflexum*	flat-topped/flatcrown buckwheat	sand	ann	

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Polygonaceae	*Eriogonum deflexum var. rectum*	flat-topped buckwheat	sand	ann/shrub	
Polygonaceae	*Eriogonum fasciculatum var. polifolium*	California buckwheat		shrub	
Polygonaceae	*Eriogonum gracillimum*	rose & white buckwheat	clay to gravel	ann	
Polygonaceae	*Eriogonum inflatum*	desert trumpet	dry sand or gravel	ann/per	
Polygonaceae	*Eriogonum maculatum*	spotted buckwheat	gravel to clay soils	ann	
Polygonaceae	*Eriogonum nidularium*	birdnest buckwheat	sand or gravel flats, washes	ann	
Polygonaceae	*Eriogonum palmerianum*	Palmer's buckwheat	sand or gravel	ann	
Polygonaceae	*Eriogonum plumatella*	yucca/flattop buckwheat	dry sloopes & washes	shrub	
Polygonaceae	*Eriogonum pusillum*	yellow-turbans	sand or gravel	ann	
Polygonaceae	*Eriogonum thomasii*	Thomas buckwheat	sand or gravel	ann	
Polygonaceae	*Oxytheca perfoliata*	roundleaf puncturebract	sandy to rocky creosote-bush or pinyon scrub	ann	
RANUNCULACEAE - Buttercup Family					
Ranunculaceae	*Delphinium parishii ssp. parishii*	Parish's/desert larkspur	desert scrub, juniper woodland	per	
ROSACEAE - Rose Family					
Rosaceae	*Coleogyne ramosissima*	blackbush	dry open slopes, creosote bush scrub, pinyon/ juniper	shrub	
Rosaceae	*Prunus fasciculata var. fasciculata*	desert almond	slopes canyons, washes. Shrubland, woodland	shrub	

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RUBIACEAE - Madder Family					
Rubiaceae	*Galium stellatum var. eremicum*	Munz's/starry bedstraw	rocky slopes	shrub	
SCROPHULARIACEAE - Figwort Family					
Scrophulariaceae	*Antirrhinum filipes*	twining snapdragon	on shrubs & debris, gen in washes	ann	Plantaginaceae
Scrophulariaceae	*Mimulus bigelovii*	monkey flower	rocky desert slopes, margins of washes	ann/shrub	
SOLANACEAE - Nightshade Family					
Solanaceae	*Datura sp.*	Jimson weed		ann-per	
Solanaceae	*Lycium andersonii*	Anderson's wolfberry	gravelly or rocky slopes, washes	shrub	
Solanaceae	*Lycium cooperi*	Cooper's box thorn/wolfberry/peach thorn	sandy to rocky flats, washes	shrub	
Solanaceae	*Nicotiana obtusifolia*	desert tobacco	gravelly or rocky washes, slopes	ann/small tree	
Solanaceae	*Physalis crassifolia*	yellow nightshade groundcherry	gravelly to rocky flats, washes, slopes	per/subshrb	
VISCACEAE - Mistletoe Family					
Viscaceae	*Phoradendron californicum*	desert mistletoe	deserts on Acacia, Cercidium, Larrea(rare), Olneya, Prosopis	shrub	
ZYGOPHYLLACEAE - Caltrop Family					
Zygophyllaceae	*Larrea tridentata*	creosote bush	desert scrub	shrub	

* indicates species considered to be a weed (non-native, introduced, or naturalized)

Table 3
Construction and Post-construction Weed Monitoring Timeline*
Searchlight Wind Farm
Clark County, Nevada

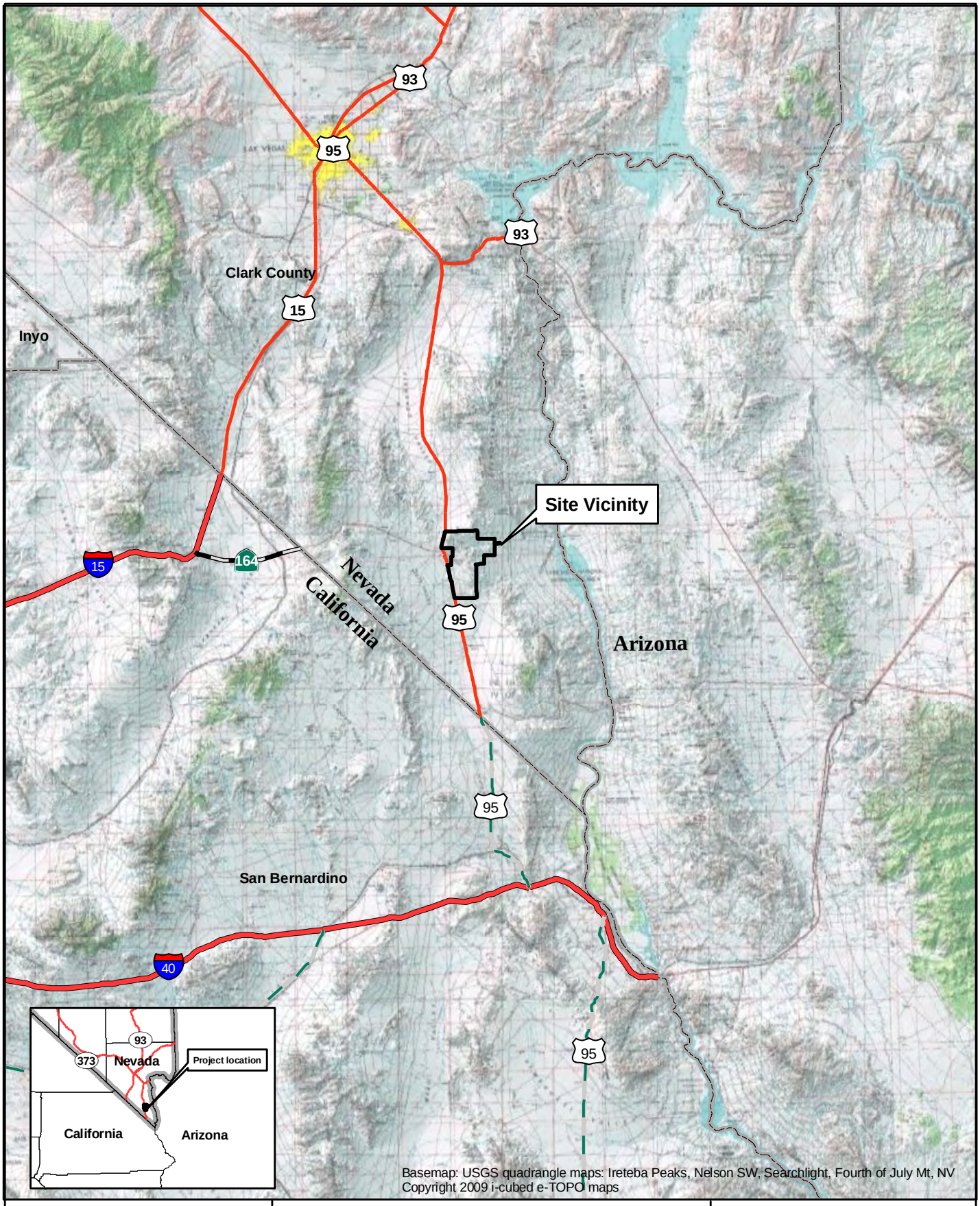
Monitoring Effort	**Construction[1]**	**Post-construction[1]**					**Comments**
		Year 1	Year 2	Year 3	Year 5	Continues bi-annually for life of project	
Known infestations	x	x	x	x	x	x	Annual site visits to monitor known infestations until weed control measures show significant improvement or control of weeds
Reclaimed areas (includes monitoring of re-seeding effort)	Re-seed	Primary and secondary growing season		x	x	x	Monitoring effort includes Identifying and assessing weed conditions
Identify new areas for treatment or control[2]	x	x		x	x	x	
Re-vegetation assessment		x		x		x	

*Monitoring times and conditions may change as needed and may vary from year-to-year.

1. All monitor times will occur in winter before fruiting occurs should treatment need to be applied, unless noted otherwise

2. In the event of any new infestation, the monitoring schedule may become more frequent

Appendix B



Legend

Project Boundary

Searchlight Wind Farm

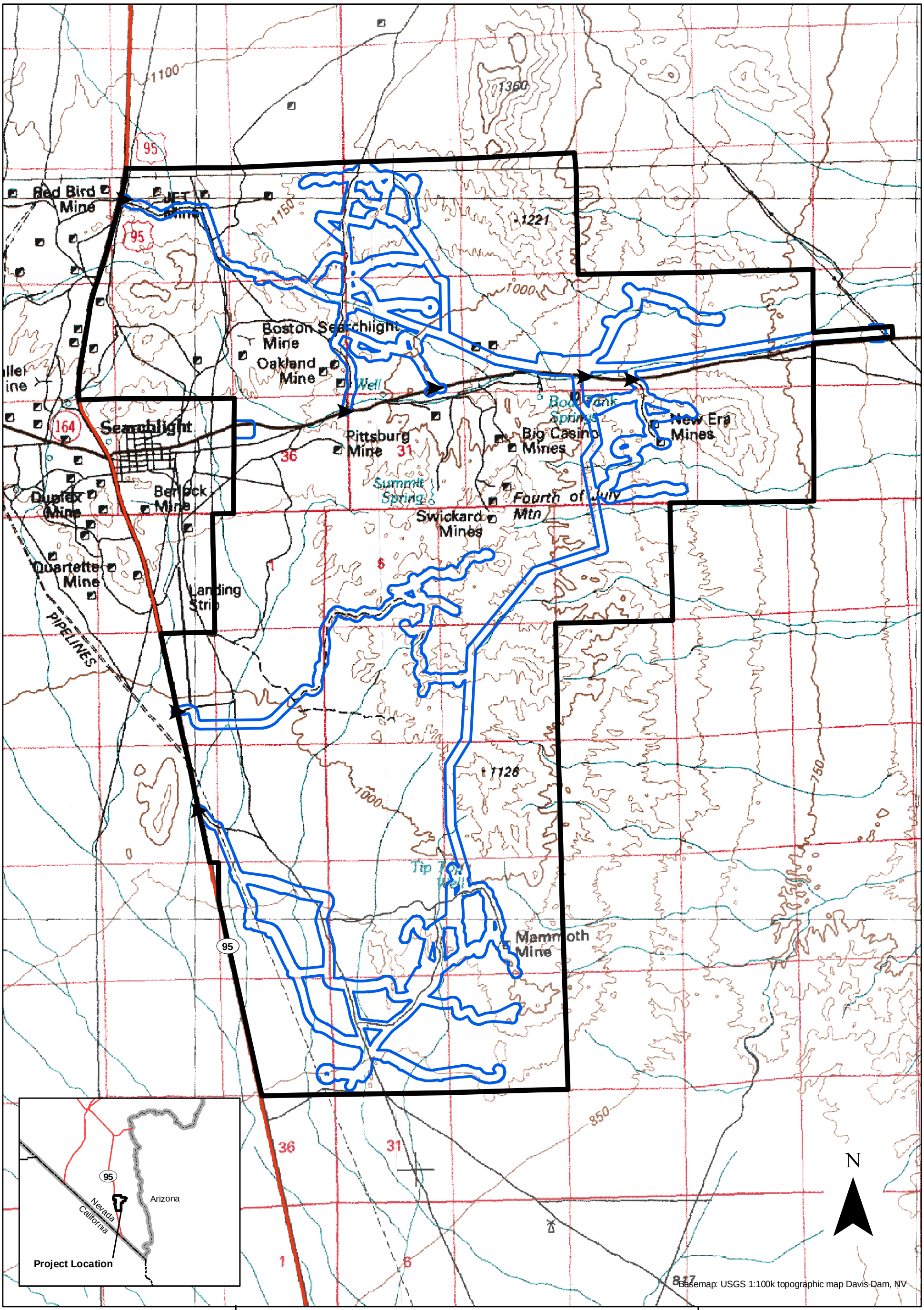
0 10 20 30 Miles

Project Number: 09-1034

Date: 11/17/2010

Plate 1
Site Location

Alphabiota



Legend

- Access Points
- Survey Corridor (200 ft from centerline)
- Project Boundary

Searchlight Wind Farm

0 0.5 1 2 Miles

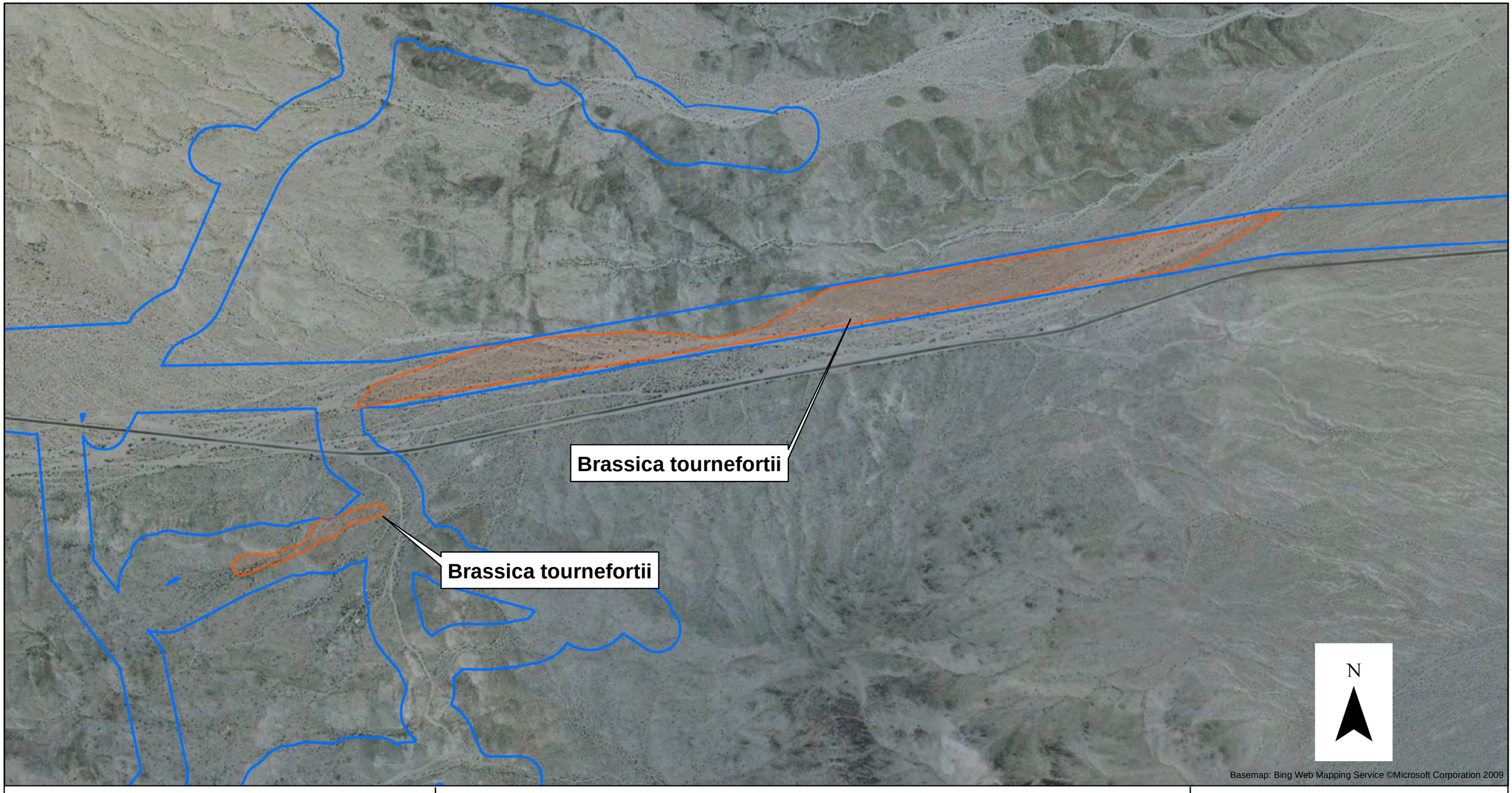
Scale 1:50,000

Project Number: 09-1034

Date: 11/17/2010

Plate 2
Project Boundary

Alphabiota



Legend

Brassica tournefortii
(species observed in these areas)

Survey Corridor
(200 ft. from centerline)

Searchlight Wind Farm

0 1,000 2,000 3,000 Feet

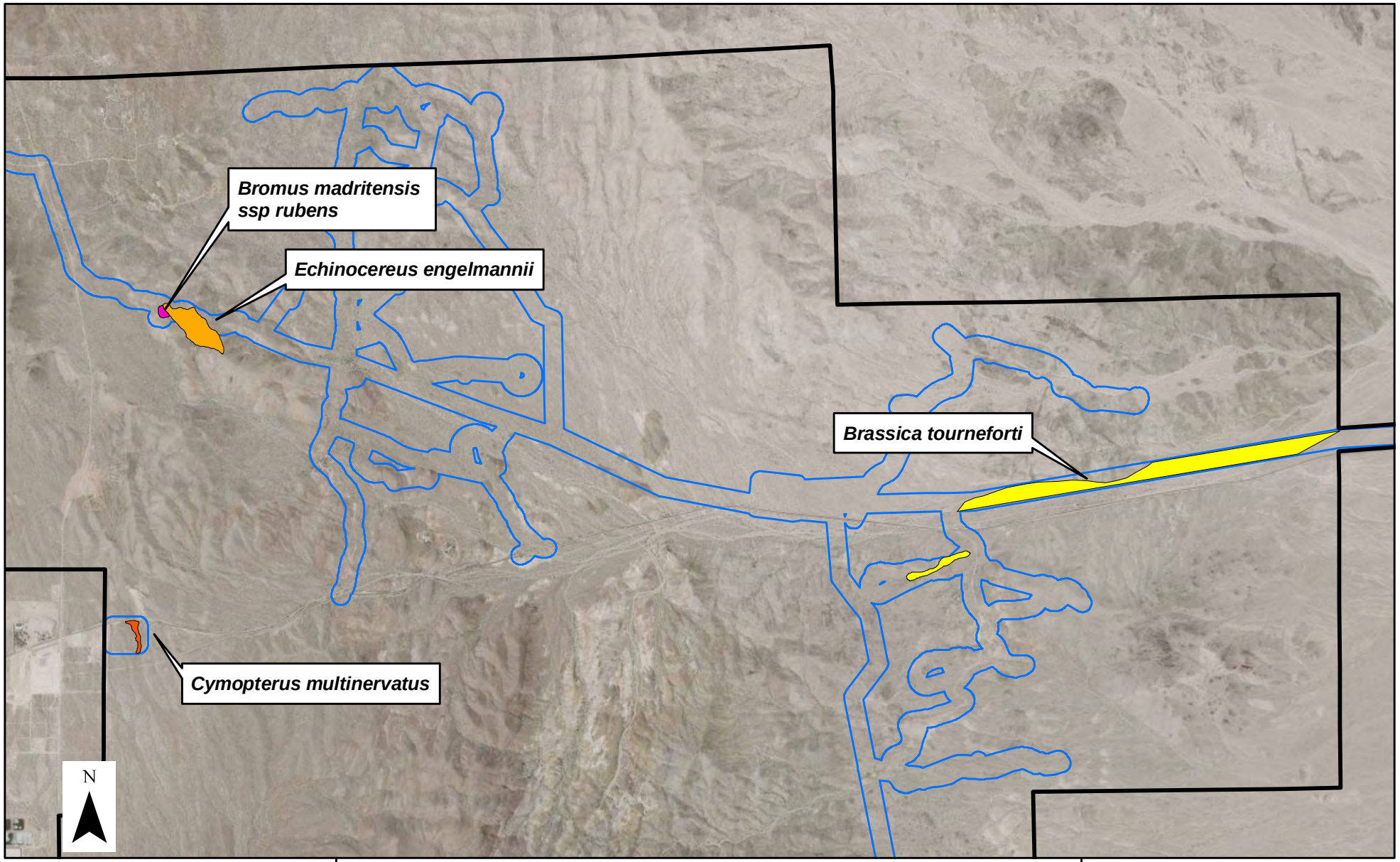
Scale 1:10,000

Project Number: 09-1034

Date: 11/17/2010

Plate 3
Brassica tournefortii

Alphabiota
ENVIRONMENTAL CONSULTING



Legend

Plant location

Species observed in these areas

- Brassica tourneforti
- Cymopterus multinervatus
- Echinocereus engelmannii
- Bromus madritensis ssp rubens
- Project Boundary
- Survey Corridor (200 ft from centerline)

Searchlight Wind Farm

0 0.5 1 2 Miles

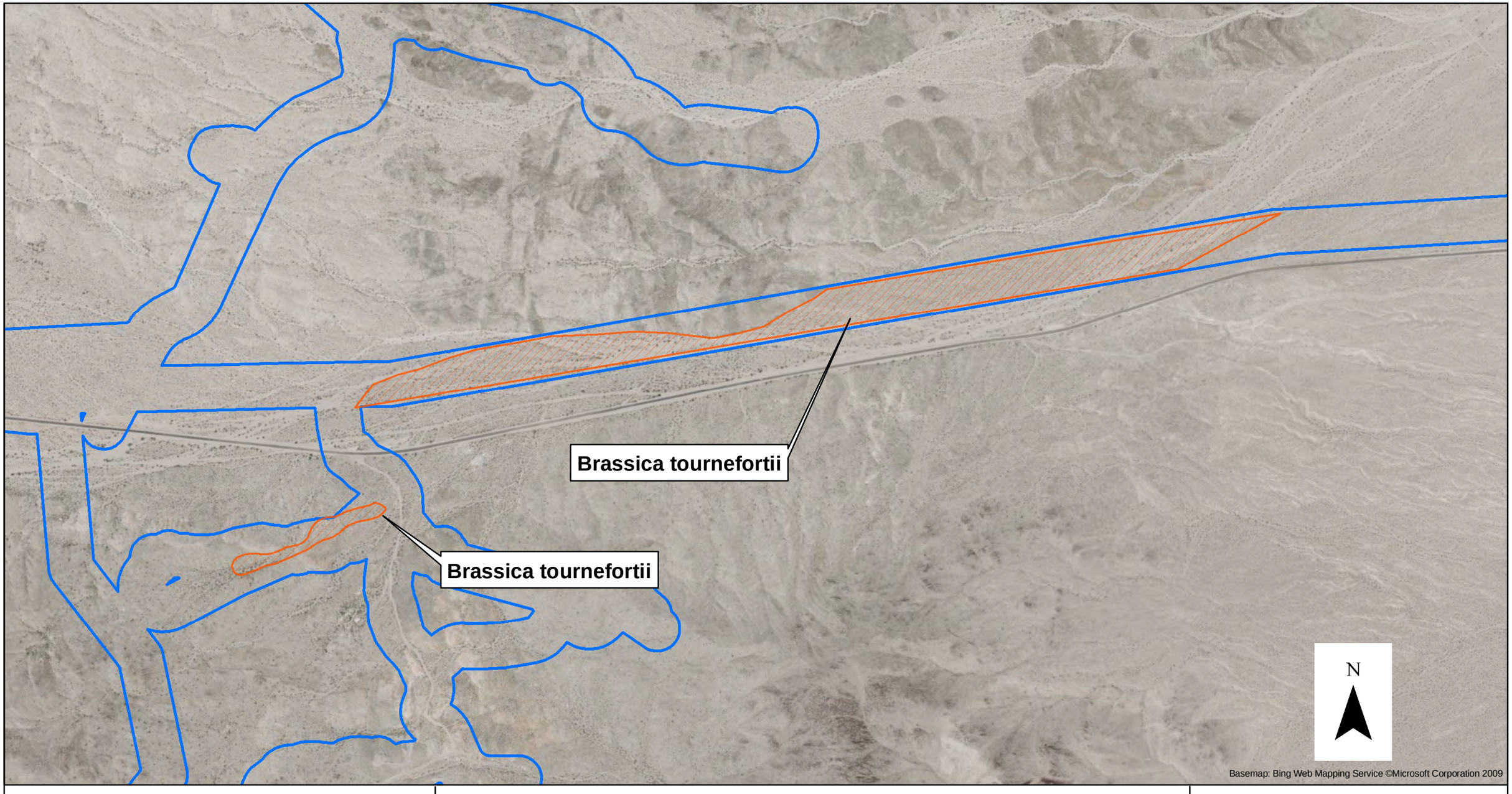
Scale 1:35,000

Project Number: 09-1034

Date: 11/17/2010

Plate 6
Plant Locations

Alphabiota



Legend

Brassica tournefortii
(species observed in these areas)

Survey Corridor
(200 ft. from centerline)

Searchlight Wind Farm

0 1,000 2,000 3,000 Feet

Scale 1:10,000

Project Number: 09-1034

Date: 11/17/2010

Plate 8
Brassica tournefortii

Alphabiota
ENVIRONMENTAL CONSULTING

Appendix C

APPENDIX C

APPROVED HERBICIDES FOR USE ON BLM LANDS*

				Update November 13, 2009	
	STATES WITH APPROVAL				
	BASED UPON CURRENT				
ACTIVE	**EIS/ROD & COURT**			**EPA REG.**	**CA**
INGREDIENT	**INJUNCTIONS**	**TRADE NAME**	**MANUFACTURER**	**NUMBER**	**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	352-287	Y
	WA, WY	Hyvar XL	DuPont	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	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,	Telar DF	DuPont	352-522	Y
	NE, NM, NV, OK, SD, TX, UT,	Telar XP	DuPont	352-654	Y
	WA, WY	NuFarm Chlorsulf Pro 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

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APPROVED HERBICIDES FOR USE ON BLM LANDS*

ACTIVE INGREDIENT	STATES WITH APPROVAL BASED UPON CURRENT EIS/ROD & COURT INJUNCTIONS	TRADE NAME	MANUFACTURER	EPA REG. NUMBER	CA 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
2,4-D	AK, AZ, CA, CO, ID, MT, ND,	Agrisolution 2,4-D LV6	Agriliance, L.L.C.	1381-101	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
		2,4-D LV6	Helena Chem. Co.	4275-20-5905	N
		2,4-D Amine	Helena Chem. Co.	5905-72	N
		Opti-Amine	Helena Chem. Co.	5905-501	N
		Barrage HF	Helena	5905-529	N
		HardBall	Helena	5905-549	N
		Unison	Helena	5905-542	N
		Amine 4CA 2,4-D Weed Killer	Loveland Products Inc.	34704-5	Y
		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
		LV-6 Ester Weed Killer	Loveland Products Inc.	34704-6	Y
		Saber	Loveland Products Inc.	34704-803	N
		Saber CA	Loveland Products Inc.	34704-803	Y
		Salvo	Loveland Products Inc.	34704-609	N
		Savage DF	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

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APPROVED HERBICIDES FOR USE ON BLM LANDS*

ACTIVE INGREDIENT	STATES WITH APPROVAL BASED UPON CURRENT EIS/ROD & COURT INJUNCTIONS	TRADE NAME	MANUFACTURER	EPA REG. NUMBER	CA REG. **
2,4-D - cont.	AK, AZ, CA, CO, ID, MT, ND,	Weedone LV-4 Solventless	Nufarm Americas Inc.	71368-14	Y
	NE, NM, NV, OK, OR, SD, TX,	Weedone LV-6	Nufarm Americas Inc.	71368-11	Y
	UT, WA, WY	Formula 40	Nufarm Americas Inc.	228-357	Y
		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 DF	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
		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
Dicamba	AK, AZ, CA, CO, ID, MT, ND,	Dicamba DMA	Albaugh, Inc./Agri Star	42750-40	N
	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
		Clarity	BASF Ag. Products	7969-137	Y
		Rifle	Loveland Products Inc.	34704-861	Y

APPENDIX C

APPROVED HERBICIDES FOR USE ON BLM LANDS*

ACTIVE INGREDIENT	STATES WITH APPROVAL BASED UPON CURRENT EIS/ROD & COURT INJUNCTIONS	TRADE NAME	MANUFACTURER	EPA REG. NUMBER	CA REG. **
Dicamba - cont.	AK, AZ, CA, CO, ID, MT, ND,	Banvel	Micro Flo Company	51036-289	Y
	NE, NM, NV, OK, OR, SD, TX,	Diablo	Nufarm Americas Inc.	228-379	Y
	UT, WA, WY	Vanquish Herbicide	Nufarm Americas Inc.	228-397	Y
		Vanquish	Syngenta	100-884	N
		Sterling Blue	Winfield Solutions, LLC	7969-137-1381	Y
Dicamba +	AK, AZ, CA, CO, ID, MT, ND,	Outlaw	Albaugh, Inc./Agri Star	42750-68	N
2,4-D	NE, NM, NV, OK, OR, SD, TX,	Range Star	Albaugh, Inc./Agri Star	42750-55	N
	UT, WA, WY	Weedmaster	BASF Ag. Products	7969-133	Y
		Rifle-D	Loveland Products Inc.	34704-869	N
		KambaMaster	Nufarm Americas Inc.	71368-34	N
		Veteran 720	Nufarm Americas Inc.	228-295	Y
		Brash	Winfield Solutions, LLC	1381-202	N
Dicamba +	AZ, CO, ID, MT, ND, NE, NM,	Distinct	BASF Ag. Products	7969-150	N
Diflufenzopyr	NV, OK, SD, TX, UT, WA, WY	Overdrive	BASF Ag. Products	7969-150	N
Diquat	AK, AZ, CA, CO, ID, MT, ND, NE,	Reward	Syngenta Crop Prot., Inc.	100-1091	Y
	NM, NV, OK, SD, TX, UT, WA, WY	NuFarm Diquat Pro 2L Herbicide	Nufarm Americas Inc.	228-675	N
		Nufarm Diquat 2L Herbicide	Nufarm Americas Inc.	228-675	N
		Diquat E-Pro 2L	Nufarm Americas Inc.	79676-75	Y
Diuron	AK, AZ, CA, CO, ID, MT, ND,	Diuron 80DF	Agriliance, L.L.C.	9779-318	N
	NE, NM, NV, OK, SD, TX, UT,	Diuron 80DF	Alligare, LLC	81927-12	Y
	WA, WY	Karmex DF	DuPont	352-692	Y
		Karmex XP	DuPont	352-692	Y
		Karmex IWC	DuPont	352-692	Y
		Direx 4L	DuPont	352-678	Y
		Direx 80DF	Griffin Company	1812-362	Y
		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

APPENDIX C

APPROVED HERBICIDES FOR USE ON BLM LANDS*

ACTIVE INGREDIENT	STATES WITH APPROVAL BASED UPON CURRENT EIS/ROD & COURT INJUNCTIONS	TRADE NAME	MANUFACTURER	EPA REG. NUMBER	CA REG. **
Diuron - cont.	AK, AZ, CA, CO, ID, MT, ND,	Diuron 80WDG	UAP-Platte Chem. Co.	34704-648	N
	NE, NM, NV, OK, SD, TX, UT,	Vegetation Man. Diuron 80 DF	Vegetation Man., LLC	66222-51-74477	N
	WA, WY	Diuron-DF	Wilbur-Ellis	00352-00-508-02935	N
		Diuron 80DF	Winfield Solutions, LLC	9779-318	N
Fluridone	AK, AZ, CA, CO, ID, MT, ND,	Avast!	SePRO	67690-30	Y
	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
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	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	Chem. Prod. Tech., LLC	70829-2	N
		ClearOut 41 Plus	Chem. Prod. Tech., LLC	70829-3	N
		Accord Concentrate	Dow AgroSciences	62719-324	Y
		Accord SP	Dow AgroSciences	62719-322	Y
		Accord XRT	Dow AgroSciences	62719-517	Y
		Accord XRT II	Dow AgroSciences	62719-556	Y
		Glypro	Dow AgroSciences	62719-324	Y
		Glypro Plus	Dow AgroSciences	62719-322	Y
		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

APPENDIX C

APPROVED HERBICIDES FOR USE ON BLM LANDS*

ACTIVE INGREDIENT	STATES WITH APPROVAL BASED UPON CURRENT EIS/ROD & COURT INJUNCTIONS	TRADE NAME	MANUFACTURER	EPA REG. NUMBER	CA REG. **
Glyphosate - cont.	AK, AZ, CA, CO, ID, MT, ND,	Roundup Original	Monsanto	524-445	Y
	NE, NM, NV, OK, OR, SD, TX,	Roundup Original II	Monsanto	524-454	Y
	UT, WA, WY	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 Corp.	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
		Cornerstone	Winfield Solutions, LLC	1381-191	Y
		Cornerstone Plus	Winfield Solutions, LLC	1381-192	Y
		Rascal	Winfield Solutions, LLC	1381-191	N
		Rascal Plus	Winfield Solutions, LLC	1381-192	N
Glyphosate +	AK, AZ, CA, CO, ID, MT, ND,	Landmaster BW	Albaugh, Inc./Agri Star	42570-62	N
2,4-D	NE, NM, NV, OK, OR, SD, TX,	Campaign	Monsanto	524-351	N
	UT, WA, WY	Landmaster BW	Monsanto	524-351	N

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APPROVED HERBICIDES FOR USE ON BLM LANDS*

ACTIVE INGREDIENT	STATES WITH APPROVAL BASED UPON CURRENT EIS/ROD & COURT INJUNCTIONS	TRADE NAME	MANUFACTURER	EPA REG. NUMBER	CA REG. **
Glyphosate +	AK, AZ, CA, CO, ID, MT, ND,	Fallowmaster	Monsanto	524-507	N
Dicamba	NE, NM, NV, OK, OR, SD, TX,	GlyKamba	Nufarm Americas Inc.	71368-30	N
	UT, WA, WY				
Hexazinone	AK, AZ, CA, CO, ID, MT, ND,	Velpar ULW	DuPont	352-450	N
	NE, NM, NV, OK, SD, TX, UT,	Velpar L	DuPont	352-392	Y
	WA, WY	Velpar DF	DuPont	352-581	Y
		Pronone MG	Pro-Serve	33560-21	N
		Pronone 10G	Pro-Serve	33560-21	Y
		Pronone 25G	Pro-Serve	33560-45	N
Hexazinone +	AK, AZ, CO, ID, MT, ND, NE,	Westar	DuPont Crop Protection	352-626	Y
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.					
Imazapic	AZ, CO, ID, MT,ND, NE, NM,	Panoramic 2SL	Alligare, LLC	66222-141-81927	N
	NV, OK, SD, TX, UT, WA, WY	Plateau	BASF	241-365	N
		Imazapic E 2 SL	Etigra, LLC	79676-65	N
Imazapic +	AZ, CO, ID, MT,ND, NE, NM,	Journey	BASF	241-417	N
Glyphosate	NV, OK, SD, TX, UT, WA, WY				
Imazapyr	AK, AZ, CA, CO, ID, MT, ND,	Imazapyr 2SL	Alligare, LLC	81927-23	N
	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
		Arsenal PowerLine	BASF	241-431	N
		Stalker	BASF	241-398	N

APPENDIX C

APPROVED HERBICIDES FOR USE ON BLM LANDS*

ACTIVE INGREDIENT	STATES WITH APPROVAL BASED UPON CURRENT EIS/ROD & COURT INJUNCTIONS	TRADE NAME	MANUFACTURER	EPA REG. NUMBER	CA REG. **
Imazapyr - cont.	AK, AZ, CA, CO, ID, MT, ND,	Habitat	BASF	241-426	Y
	NE, NM, NV, OK, SD, TX, UT,	Imazapyr E-Pro 2 - VM &	Etigra, LLC	81959-8	Y
	WA, WY	Aquatic Herbicide			
		Imazapyr E-Pro 4 - Forestry	Etigra, LLC	81959-9	N
		Imazapyr E-Pro 2E - Site Prep & Basal	Etigra, LLC	81959-7	N
		Polaris	Nufarm Americas Inc.	228-534	Y
		Polaris AC	Nufarm Americas Inc.	241-299-228	Y
		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.	228-534	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
Imazapyr +	AK, AZ, CA, CO, ID, MT, ND, NE,	Mojave 70 EG	Alligare, LLC	74477-9-81927	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
Imazapyr +	AK, AZ, CA, CO, ID, MT, ND,	Lineage Clearstand	DuPont	352-766	N
Metsulfuron methyl	NE, NM, NV, OK, SD, TX, UT,				
	WA, WY				

APPENDIX C

APPROVED HERBICIDES FOR USE ON BLM LANDS*

ACTIVE INGREDIENT	STATES WITH APPROVAL BASED UPON CURRENT EIS/ROD & COURT INJUNCTIONS	TRADE NAME	MANUFACTURER	EPA REG. NUMBER	CA REG. **
Imazapyr +	AK, AZ, CA, CO, ID, MT, ND,	Lineage HWC	DuPont	352-765	N
Sulfometuron methyl +	NE, NM, NV, OK, SD, TX, UT,	Lineage Prep	DuPont	352-767	N
Metsulfuron methyl	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 these herbicides is prohibited.					
Metsulfuron methyl	AK, AZ, CO, ID, MT, ND, NE,	MSM 60	Alligare, LLC	81927-7	N
	NM, NV, OK, SD, TX, UT, WA,	Escort DF	DuPont	352-439	N
	WY	Escort XP	DuPont	352-439	N
		MSM E-AG 60 EG Herbicide	Etigra, LLC	81959-14	N
		MSM E-Pro 60 EG Herbicide	Etigra, LLC	81959-14	N
		Patriot	Nufarm Americas Inc.	228-391	N
		PureStand	Nufarm Americas Inc.	71368-38	N
		Metsulfuron Methyl DF	Vegetation Man., L.L.C.	74477-2	N
Metsulfuron methyl +	AK, AZ, CO, ID, MT, ND, NE,	Cimarron Extra	DuPont	352-669	N
Chlorsulfuron	NM, NV, OK, SD, TX, UT, WA,	Cimarron Plus	DuPont	352-670	N
	WY				
Metsulfuron methyl +	AK, AZ, CO, ID, MT, ND, NE, NM	Cimarron MAX	DuPont	352-615	N
Dicamba + 2,4-D	NV, OK, SD, TX, UT, WA, WY				
Picloram	AZ, CO, ID, MT, ND, NE, NM,	Triumph K	Albaugh, Inc.	42750-81	N
	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

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Picloram +	AZ, CO, ID, MT, ND, NE, NM,	GunSlinger	Albaugh, Inc.	42750-80	N
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
		HiredHand P+D	Dow AgroSciences	62719-182	N
		Pathway	Dow AgroSciences	62719-31	N
		Trooper 101	Nufarm Americas Inc.	228-561	N
		Trooper P + D	Nufarm Americas Inc.	228-530	N
Picloram +	AZ, CO, ID, MT, ND, NE, NM,	Trooper Extra	Nufarm Americas Inc.	228-586	N
2,4-D +	NV, OK, OR, SD, TX, UT, WA,				
Dicamba	WY				
Sulfometuron methyl	AK, AZ, CA, CO, ID, MT, ND,	SFM 75	Alligare, LLC	81927-26	Y
	NE, NM, NV, OK, SD, TX, UT	Oust DF	DuPont	352-401	N
	WA, WY	Oust XP	DuPont	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.					
Sulfometuron methyl +	AK, AZ, CA, CO, ID, MT, ND,	Landmark XP	DuPont	352-645	Y
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.					

APPENDIX C

APPROVED HERBICIDES FOR USE ON BLM LANDS*

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Sulfometuron methyl +	AK, AZ, CA, CO, ID, MT, ND, NE,	Oust Extra	DuPont	352-622	N
Metsulfuron methyl	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.					
Tebuthiuron	AZ, CA, CO, ID, MT, ND, NE,	Spike 20P	Dow AgroSciences	62719-121	Y
	NM, NV, OK, SD, TX, UT, WA,	Spike 80DF	Dow AgroSciences	62719-107	Y
	WY	SpraKil S-5 Granules	SSI Maxim Co., Inc.	34913-10	Y
Tebuthiuron +	AZ, CA, CO, ID, MT, ND, NE, NM,	SpraKil SK-13 Granular	SSI Maxim Co., Inc.	34913-15	Y
Diuron	NV, OK, SD, TX, UT, WA, WY	SpraKil SK-26 Granular	SSI Maxim Co., Inc.	34913-16	Y
Triclopyr	AK, AZ, CA, CO, ID, MT, ND,	Triclopyr 4EC	Alligare, LLC	72167-53-74477	Y
	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
		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
		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

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Triclopyr +	AK, AZ, CA, CO, ID, MT, ND,	Everett	Alligare, LLC	81927-29	Y
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
Triclopyr +	AK, AZ, CA, CO, ID, MT, ND,	Prescott Herbicide	Alligare, LLC	81927-30	Y
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

* 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.