Appendix A: Public Scoping Report

SCOPING SUMMARY REPORT

SEARCHLIGHT WIND ENERGY PROJECT ENVIRONMENTAL IMPACT STATEMENT

(NVN-084626 Searchlight Wind Energy Project and NVN-085777 Western Area Power Administration Substation)

Prepared for:
U.S. Department of Interior
Bureau of Land Management
Las Vegas Field Office
Las Vegas, Nevada

Prepared by:
URS Corporation

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LIST OF ACRONYMS

BLM	Bureau of Land Management
CFR	Code of Federal Regulations
EIS	environmental impact statement
EPA	U.S. Environmental Protection Agency
FAA	Federal Aviation Administration
GIS	geographic information system
kV	kilovolt
MW	megawatt
NEPA	National Environmental Policy Act of 1969
NOI	Notice of Intent
O&M	operations and maintenance
ROW	right-of-way
Western	Western Area Power Administration

1.0 INTRODUCTION

1.1 OVERVIEW

The U.S. Department of the Interior, Bureau of Land Management (BLM), Las Vegas Field Office is preparing an environmental impact statement (EIS) to identify the potential effects of the construction, operation, and maintenance of the proposed Searchlight Wind Energy Project. The 370-megawatt[1] (MW) wind power generating facility and ancillary facilities would be located in an area near Searchlight, Nevada. The EIS is being prepared in compliance with the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321), as amended, and the Council on Environmental Quality regulations (Title 40 Code of Federal Regulations [CFR] parts 1500-1508). As part of the EIS process, BLM will solicit and consider the views of interested parties.

This report summarizes the scoping process and comments received on the proposed project. Scoping is the first step and an integral part of the EIS process. It is "an early and open process for determining the issues to be addressed and for identifying the significant issues related to a proposed action" (40 CFR Part 1501.7). During scoping, BLM actively seeks to engage potentially affected or interested federal, state, and local agencies; American Indian tribes; and the public. Scoping for this EIS commenced on December 16, 2008, with the publication of a Notice of Intent (NOI) in the *Federal Register* (Appendix A), and concluded on February 17, 2009.

1.2 BACKGROUND

Searchlight Wind LLC (Searchlight Wind), a wholly owned subsidiary of Duke Energy, proposes to construct a 370-MW wind energy facility near Searchlight, Nevada, on public land administered by the BLM Las Vegas Field Office.

The purpose of the proposed project is to create an economically viable source of clean renewable electricity. The proposed project is responsive to federal and state renewable energy policies. Because wind is a local resource, the proposed project would contribute to domestic energy security while reducing greenhouse gases created by generating energy through the use of fossil fuels.

The primary components, as presented at the public scoping meetings of the proposed facility, are as follows:

- Up to 161 wind turbines, including concrete foundations, tubular steel towers, nacelles, and blades;
- Access roads;
- Electrical collection system (wind turbines to Searchlight Wind Substation);
- Communication lines;

[1] Note: When the NOI was published in December 2008, Searchlight Wind proposed a 359 MW wind generating facility. In January 2009, the proposed project was revised to generate 370 MW.

- Up to 161 pad-mount transformers, one located at the base of each wind turbine;
- Two electrical substations (one would be owned and operated by Western Area Power Administration [Western], one would be owned and operated by Searchlight Wind);
- Electrical transmission line (running between Western Substation and Searchlight Wind Substation);
- Operations and maintenance (O&M) building;
- Electrical interconnection (would be owned and operated by Western);
- Two lay down areas (one temporary, one permanent); and
- Up to five permanent meteorological masts.

1.3 PROJECT LOCATION

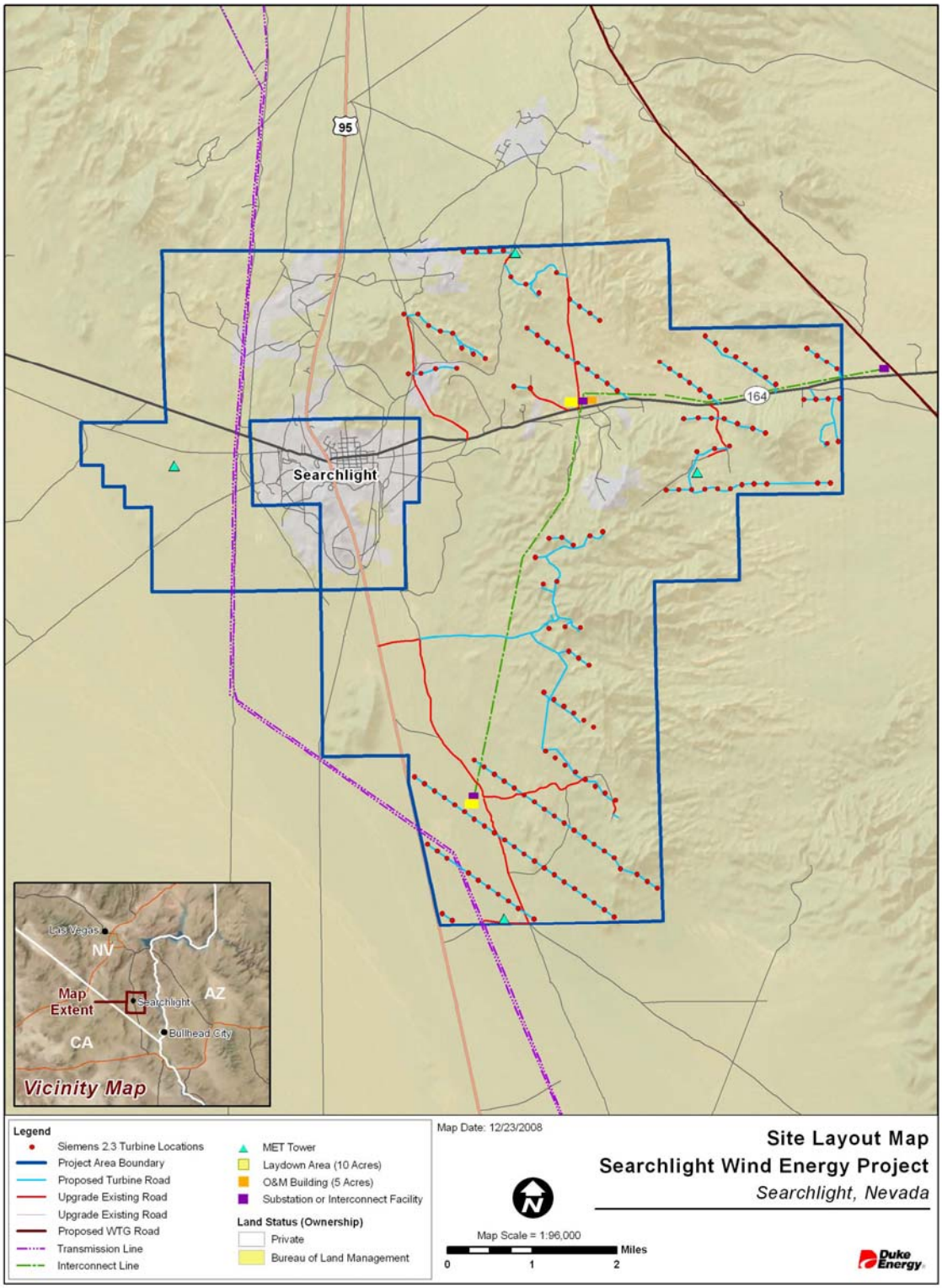
Searchlight Wind has submitted a right-of-way (ROW) application for 24,383 acres near Searchlight, Nevada, approximately 55 miles south of Las Vegas, Nevada, and 39 miles north of Laughlin, Nevada (Map 1-1). Proposed construction activities will encompass approximately 600 acres of disturbance, which includes approximately 120 acres of permanent disturbance and approximately 480 acres of temporary disturbance for construction activities. The total area estimated to be used by the project (all facilities and temporary disturbance) is approximately 2.1 percent of the total ROW. The permanent footprint of the wind energy facility will constitute 0.5 percent of the ROW.

1.4 PROJECT UPDATES

The initial Plan of Development for the proposed project was submitted in January 2008. Since then, formal and informal comments, along with engineering constraints, have resulted in the following changes to the proposed project design:

- All turbines would be located on the east side of the town of Searchlight to avoid surrounding the community.
- No turbines would be located on private property.
- All turbines would be moved back from the Searchlight airport to comply with Federal Aviation Administration (FAA) setback requirements for small airports.
- The total number of turbines proposed has been reduced from 161 (as presented in the scoping process) to 140.
- Roads and transmission lines have been adjusted for the revised design.
- Meteorological Tower Number 4 has been moved from west of the project area to southeast of the project area.
- Additional design details are provided concerning typical foundations, road design, construction methods and the potential for an on-site cement batch plan.

Map 1-1 Site Layout Map (as presented during scoping)



2.0 SCOPING PROCESS

This section provides a summary of the objectives of scoping and a description of the scoping process and agency coordination for the Searchlight Wind Energy Project.

2.1 OBJECTIVES

The objectives of the scoping process include the following:

- Invite affected federal, state, and local agencies; affected Native American tribes; and the public to:
  - Establish a process to integrate and expedite environmental reviews
  - Establish the planning and decision-making schedule
- Determine the scope of the project, including the range of actions, alternatives, and impacts to be considered in an EIS;
- Identify:
  - Issues that have been covered by prior environmental review that can be eliminated from detailed study
  - Any environmental assessments and other EISs being prepared, or that are planned for preparation, that are related to but are not part of the scope of the EIS under consideration
  - Other environmental review and consultation requirements (i.e., Endangered Species Act, Historic Preservation Act) so required analyses and studies can be prepared and integrated with the EIS

2.2 DESCRIPTION OF THE SCOPING PROCESS

The following section describes methods used to involve the public, notify them of scoping meetings, and facilitate exchange of current project information throughout the planning process.

2.2.1 Announcements

2.2.1.1 Notice of Intent

The public was notified of the project and upcoming scoping meetings through the NOI published in the *Federal Register* (http://edocket.access.gpo.gov/2008/E8-29686.htm) on December 16, 2008 (Appendix A). The NOI announced the intent to prepare an EIS and indicated that scoping meetings would be held in Boulder City, Laughlin, and Searchlight, Nevada. The NOI also stated that the specific dates, locations, and times of the scoping meetings would be announced through mail distribution on the BLM website (http://www.blm.gov/nv/st/en/fo/lvfo/blm_programs/energy.html) and in the local media. In addition, the NOI provided project information including a description of proposed facilities, the

project location, information on how to submit comments and why they are important, and BLM contact information.

2.2.1.2 Newsletters

The public and many agencies were notified of the scoping period and comment opportunities through a newsletter (Appendix A) distributed to approximately 814 people on January 16, 2009. The initial mailing list was provided by the BLM Las Vegas Field Office and included addresses of current local elected or municipal officials, federal and state agencies, potentially interested Native American tribes, and other interested parties. All post office box holders in zip codes 89046 (Searchlight, Nevada) and 89039 (Cal-Nev-Ari, Nevada) were sent a copy of the newsletter. The newsletter provided information for submitting comments via mail, fax, and e-mail, and included the direct contact information for the BLM Project Manager, Mark Chandler. The mailing list will be supplemented throughout the project to include those who provide scoping comments, attend meetings, or express to the BLM their interest in the project through the project website or direct request.

2.2.1.3 Media Contacts

The public was also notified of the scoping meetings through advertisements published in local newspapers, as listed in Table 2-1 (refer to Appendix A for a copy of the display advertisement). The table provides information on the publication, area of coverage, and print dates for the advertisements.

Initial public notice of the scoping meeting dates, times and locations were published, 15 days in advance of the first meeting, in a display advertisement in the Las Vegas Review Journal on January 12, 2008. This advertisement ran again on January 18, 2008.

Advertisements were also placed in the Boulder City News (January 15, 2008) and the Laughlin Times (January 14, 2008). Approximately 50 flyers announcing the meetings were posted in local gathering places in Searchlight and the surrounding communities. This service was provided by the Desert Flyer, a newsletter local to the Searchlight area.

Table 2-1 Display Advertisement Summary – January 2009

Publication	Area of Coverage	Print Date
Las Vegas Review Journal	Las Vegas metropolitan area, southern Nevada	January 12, 18
Boulder City News	Boulder City, Nevada	January 15
Laughlin Times	Laughlin, Nevada	January 14
Desert Flyer (posted flyers)	Laughlin to Nelson, Nevada	January 12

News releases were distributed to newspapers, radio, and television stations and to community newsletters on January 22, 2009, to assist with public notification. A copy of the news release and the media outlets to which it was distributed are included in Appendix A.

2.2.2 Public Scoping Meetings

Three public scoping meetings were held for the proposed project. At each scoping meeting, representatives from URS Corporation (the environmental consultant assisting the BLM with the EIS), the BLM, and Searchlight Wind provided a presentation on the NEPA process, the proposed project and associated facilities, and how to provide scoping comments. Display boards were provided showing information on the project purpose and need, project description, planning process, purpose of the scoping process, and public comment opportunities. Before and after the presentation, an open house atmosphere was maintained during which attendees could review the display boards and speak informally to project team members.

Meeting attendees were encouraged to ask questions and provide comments both during and after the presentation, or one-on-one during the open house portion of the public scoping meetings. Comment forms were available at each meeting for attendees to provide written comments at the time of the meeting or to return by mail. Locations, dates, and attendance of each public meeting are provided in Table 2-2. Copies of scoping meeting materials including the presentation, display boards, and the comment form are provided in Appendix B.

Table 2-2 Public Scoping Meeting Attendance

Location	Date	Attendance
Searchlight, Nevada – Searchlight Community Center	January 27, 2009	73
Laughlin, Nevada – William G. Bennett Elementary School	January 28, 2009	4
Boulder City, Nevada – Boulder City Library	January 29, 2009	36
Total Attendance at Scoping Meetings		**113**

2.2.3 Project Website

To ensure the ease of public access, the project newsletter and the draft project Plan of Development were both posted on a BLM Web page at http://www.blm.gov/nv/st/en/fo/lvfo/blm_programs/energy.html. A copy of this scoping report will be posted to the project website in April 2009.

3.0 SUMMARY OF SCOPING COMMENTS

3.1 INTRODUCTION

This section provides: (1) summaries of the method used to organize and analyze comments; (2) the number of comments received; (3) the number of issues identified within those comments; (4) summaries of issues identified during scoping; (5) BLM management concerns that were identified independent of public or agency scoping comments; and (6) a list of issues that will not be identified in the EIS with justification as to why they will not be addressed. All the scoping comments documented in this report were received or postmarked by the close of the comment period on February 17, 2009.

Comments regarding the proposed project and alternatives to the proposed project will be considered by the BLM in refining the project description and alternatives that will serve as the basis for assessing impacts. The Council on Environmental Quality regulations implementing NEPA requires an analysis of available alternative actions prior to selecting the preferred alternative action. Input on alternatives will be considered in the analysis and text of the EIS. Chapter 2 of the EIS will describe which alternatives were considered but were not carried forward for detailed analysis in the EIS.

The Council on Environmental Quality regulations require an analysis of the impacts of a project on the "human environment." These impacts include effects on natural, human, and cultural resources. Discussions with affected public or agencies, such as those that have occurred through this scoping effort, help to define and evaluate effects of the different alternatives on the human environment. Comments relating to environmental impacts will be considered by BLM in developing the scope of EIS technical studies. Chapters 3 (Affected Environment) and 4 (Environmental Consequences) of the EIS will address the issues incorporated into the study. Concerns about the EIS studies and decision-making processes will be considered in refining and modifying the EIS process throughout the remainder of the EIS preparation.

Some comments may be considered outside the scope of this EIS if: (1) the issue relates to facilities not included in this project; (2) the issue is not within the jurisdiction of BLM to resolve; or (3) the issue cannot be reasonably addressed within the scope of this process or is being addressed through a separate NEPA process. In addition, personal opinions of individuals or special interest groups about the proposed project, wind power, the BLM, and other topics are also considered outside the scope of the EIS and will not be addressed. Issues that will not be addressed are identified by issue or resource in Section 3.8.

3.2 COMMENT ORGANIZATION

The comment forms, e-mails, and mailed and faxed letters received through February 17, 2009, were reviewed, documented, and entered into a database to facilitate organization, sorting, analytical review, and to manage comments. The database was structured to organize comments into separate issue categories and identify the type of comment (e.g., letter, e-mail, fax, postcard, or telephone record). Using the experience and professional judgment of the study team, the comments were organized according to 14 major issue categories as they relate to the EIS. The issue categories are as follows and described in detail in Section 3.5.

Actions and Alternatives: This category includes comments about various aspects and components of the proposed project. Comments also indicate suggestions for and concerns about alternative facilities that should be considered in the EIS. Comments also identified topics relative to the planning and EIS preparation process, including public review opportunities. Identified issue categories are:

- Process (including EIS preparation and studies)
- Project Alternatives
- Project Description
- Project Need

Environmental Impacts: This category includes comments about the proposed project's potential impacts on natural resources, human resources, and cultural resources as well as comments about social and economic concerns. Topic categories include the following:

- Air Quality
- Cultural/Archaeology
- Hazardous Materials/Safety
- Land Use/Transportation
- Noise/Vibration
- Socioeconomics
- Vegetation/Wildlife
- Visual Resources
- Water Resources
- Cumulative Effects

3.3 SIGNIFICANT ISSUES AND ANTICIPATED ANALYSIS

NEPA requires federal agencies to focus their analysis and documentation on the significant issues related to a proposed action. Significant issues serve as the basis for developing and comparing alternatives. The BLM has identified significant issues associated with the proposed project; these are presented in Sections 3.5, 3.6, and 3.7. Issues include those raised externally during the public scoping process and those developed internally by the BLM. The significant issues are stated in the form of a question by resource category. These issues are analyzed in the EIS. Issues identified during scoping but not considered significant are addressed in Section 3.8 and are not carried forward in the EIS.

3.4 SUMMARY OF PUBLIC COMMENTS

Quantifying comments and issues is helpful in summarizing comments for public review and helping to guide future EIS studies. This process requires the coder to interpret comments in order to glean and categorize any substantive issues. While definitive parameters are established around each category, it must be noted that categorizing comments is a subjective process.

The level of importance of comments to BLM or to the decision-making process is not influenced by the frequency of a specific issue. The BLM takes all substantive issues into consideration regardless of the number of comments in which they occur. For instance, numerous copies of the same form letter may be submitted by unique individuals, or a person may have attended several scoping meetings or mentioned the same issue several times in their letter. In these cases, issues would be recorded several times. However, if a substantive comment appears only once, it will have the same level of importance as those mentioned more frequently.

A total of 66 comment submissions were received and entered into the project database. The individual issues within each comment were classified into the 14 main categories of issues (discussed in Section 3.2 above), and 58 categories of sub-issues. For example, if a comment stated a concern about use of land for recreation (i.e., hiking or hunting), the comment was listed under the main issue of land use, sub-issue of recreation. Similarly, if a comment questioned noise from construction equipment, noise/vibration was identified as the main issue, with construction noise as the sub-issue. This organization allowed the project team to identify, quantify, and analyze public concern during preparation of this scoping report and the EIS. It also allowed team members to identify issues at a very detailed level while maintaining the context of each comment. If a comment mentioned multiple issues, it was categorized as belonging to each of those issues. These comments and issues are summarized in Section 3.4 along with a sample of representative quotations.

Within the 66 comment submissions received, 384 issues were identified and categorized into the 14 main issue categories. In some instances, a single letter may mention the same issue multiple times through various statements. Each statement was entered into the project database and categorized as to issue and sub-issue. Table 3-1 summarizes the volume of comments received on each of the 14 main issue categories.

Table 3-1 Comment Summary

Main Issue	Total Comments	Percent Based on Total Comments Identified*
Air Quality	19	5
Cultural/Archaeology	16	4
Cumulative Effects	8	2
Hazardous Materials/Safety	31	8
Land Use/Transportation	32	8
Noise/Vibration	16	4
Process	12	3
Project Alternatives	41	11
Project Description	33	9
Project Need	2	0.5
Socioeconomics	45	12
Vegetation/Wildlife	82	21
Visual Resources	40	10
Water	7	2
Total Unique Comments	**384**	**99.5**

NOTE: *Due to rounding and comment submissions not relevant to comment categories (i.e., mailing list submissions), the total does not equal 100 percent.

As noted in the table above, concerns about vegetation/wildlife were most frequently mentioned, appearing in 21 percent of total comments received. In this category, concerns about impacts on special status species/habitat were most prevalent, appearing in 32 percent of comments within vegetation/wildlife. Section 3.5.2.8 contains representative questions illustrating these concerns.

Socioeconomic issues were present in 12 percent of total comments received. Specifically, property values and quality of life were the highest areas of concern in the socioeconomic category, occurring respectively in 33 percent and 18 percent of comments in this category. Section 3.5.2.7 contains representative questions illustrating these concerns.

Project alternative suggestions (11 percent of total comments) were also relatively high. Sixty-six percent of comments in this category included suggestions on alternative locations, while 29 percent of comments included questions about other forms of renewable energy. Section 3.5.1.2 (project alternatives) contains representative questions illustrating these concerns.

Concerns about impacts on visual resources occurred in 10 percent of total comments received. Main issues occurring within the visual resources category were direct facility impacts and impacts on the scenic quality of the project area, occurring respectively in 58 percent and 28 percent of the comments in this category. Section 3.5.2.9 (visual resources) contains representative questions illustrating these concerns.

Questions regarding plans for the proposed project made up the project description category and were expressed in 9 percent of all comments. The majority of these comments were related to land disturbance (21 percent of total comments in this category), land restoration (15 percent of total comments in this

category), and transmission/substation (15 percent of total comments in this category) concerns. Section 3.5.1.3 (project description) contains representative questions illustrating these concerns.

Hazardous materials/safety issues occurred in 8 percent of all comments; the majority of which (68 percent) concerned air safety resulting from facility height, lights, or communication/signal interference. Section 3.5.2.4 (hazardous materials/safety) contains representative questions illustrating these concerns.

Comments concerning land use/transportation, specifically, recreation concerns (34 percent of total comments in this category) and adjacent land use concerns (31 percent of total comments in this category), were also noted in 8 percent of total comments received. Section 3.5.2.5 (land use/ transportation) contains representative questions illustrating these concerns.

3.5 ISSUES IDENTIFIED DURING SCOPING

The following section provides a summary of unique comment issues identified during scoping, including a sample of representative questions. Some statements serve to summarize dozens of comments, while others summarize one comment. The method used to identify and categorize issues is discussed in Sections 3.2 and 3.3.

3.5.1 Actions and Alternatives

3.5.1.1 Process

Comments in this category primarily questioned the scoping and public involvement processes. Some questions were received on studies being done for the project or additional studies that should be completed for the EIS.

- If studies were being done, why was it nearly a year before local residents learned of the project?
- Why is the Plan of Development incomplete?
- At the scoping meeting, what was the reason the boundaries on the maps did not match?
- Why were residents of Grandpa's Road and Cottonwood Cove not contacted about this project?
- With other renewable generation projects proposed in Nevada and California, is there a study on shared access and transmission for these projects?
- Some studies appear incomplete. Will more engineering and meteorological studies be prepared before BLM makes a decision on project viability and location?

3.5.1.2 Project Alternatives

Comments in this category suggested alternative locations and actions for the project.

- Why has Searchlight Wind proposed a wind facility and not a solar generation plant?
- Wouldn't small-scale rooftop wind or solar generators be a better option?
- Why put the wind towers in plain view of the town when there is so much uninhabited land available?
- Why is the Searchlight area the chosen location for the project when other areas have much better rated wind generating capacity?
- Why not consider areas to the north of Searchlight, beyond the ridges, or along the highway?
- Why not put the turbines in an already industrial or developed area?
- Is it possible for power lines to be buried?

3.5.1.3 Project Description

Comments in this category are related to specifications of the proposed project.

- How much energy will be lost during transmission?
- Can power lines be run underground?
- After the estimated 20-year life of the project, why isn't replacement of components and facilities addressed as an option?
- What is the restoration plan for the 600 acres of land that will be disturbed?
- Why is such a large area (24,000 acres) being requested in the right-of-way application? Can a smaller area be authorized (only the area required for the project)?
- What are the permanent effects of land disturbance on the area?
- How will turbine height be adjusted to meet local regulations?
- How many miles of roads will be bulldozed and dynamited in? Where will any gravel, fill, or other materials used come from?

3.5.1.4 Project Need

Two comments were received questioning the need for the project.

- What data are being used to determine consumer need for this project?
- How could conservation efforts minimize the need for this and other new energy projects?

3.5.2 Environmental Impacts

3.5.2.1 Air Quality

- How will ambient air quality be studied? What monitoring activities will be implemented to assure compliance with state and federal air quality regulations?
- How will dust from construction and operations activities be controlled? What regulations will guide dust control measures?
- What measures will be taken to mitigate emissions from construction and maintenance vehicles?
- Is there a smoke management plan that will help reduce health impacts from burned vegetation?
- What types of permits are needed to assure local, state, and federal regulatory compliance regarding air quality standards?
- How will the project and facilities be affected by climate change?
- What will be the greenhouse gas emissions produced by project construction and operation?

3.5.2.2 Cultural/Archaeology

- How will archaeologically sensitive areas such as those present in the lower Colorado River region be affected by the project?
- How will the study address archaeologically sensitive areas that will be destroyed?
- What considerations are being made regarding the historical significance of Searchlight?
- How will Native American communities be affected by the project?
- What efforts will be made to involve Native American officials in the study?
- How will Spirit Mountain, a place of significance to Native Americans, be affected?
- Will special considerations be made for areas with petroglyphs?

3.5.2.3 Cumulative Effects

- There are numerous energy projects proposed in the area. How will these be evaluated for past, present, and future cumulative impacts?
- If this project is approved, is a precedent being set making it easier for other projects to be established using BLM land?
- With numerous alternative energy proposals being considered on BLM land in southern Nevada, what is the management document guiding BLM land use decisions for alternative energy projects?

3.5.2.4 Hazardous Materials/Safety

- Will the turbines leak oil or other fluids? What plans are in place to mitigate this?
- Will the turbines or generators catch fire due to malfunction or lightning strike?
- Will drinking water be contaminated due to project activity?
- Can debris be flung from the turbines onto nearby roads and threaten driver safety?
- How will the project affect the navigational equipment used at the airport?
- Is there an awareness that the Flight for Life helicopter may not be able to land or fly safely?
- Will the lights on the turbines be a safety hazard for flight operation by affecting or disorienting flight crews?
- Will reflective paint be placed on the blades so pilots are aware of the full structure height (not just the height of the main tower)?
- If the Searchlight airport is not available to be used as a feeder airport for Las Vegas in times of overcrowding, could this cause a safety issue from overcrowding and burdening of the FAA system?

3.5.2.5 Land Use/Transportation

- How will the project plan support or conflict with the land use plans of other governing bodies?
- Will the public be able to access any of the 25,000 acres currently under study for this project?
- How will hunting in the project area be affected? Will access to hunting areas be restricted?
- Will noise created by the turbines effect recreation areas?
- Could this project and the associated structures conflict with development of air travel facilities, including the future potential expansion of Searchlight Airport or the development of private airparks?
- Will this project jeopardize or limit the trail system that has been in the planning stages for four years?
- What effects will users of all-terrain vehicles experience?
- Since Cottonwood Cove Road will be used as a main access road, what measures will be taken to ensure it can withstand the increase in construction traffic?
- Will Cottonwood Cove Road remain open at all times for emergencies?

3.5.2.6 Noise/Vibration

- How will eight months of construction noise affect Searchlight?
- What impact will construction noise have on animals in the region?

- Will the turbines make noise? How will it affect the quality of life for Searchlight residents?
- What research is available on the effects noise has on communities with wind generation facilities?
- How will the effects of noise on the surrounding areas be studied?
- Will the turbines cause vibration?

3.5.2.7 Socioeconomics

- How will construction and operation of the wind facilities affect tourism?
- How will quality of life for Searchlight residents change as the wind facility changes the area?
- Will property values of the area be affected by the project? What effects have other wind communities experienced?
- How will Searchlight residents benefit from this project?
- Searchlight has one ambulance. Will the addition of construction crews to the area overtax available medical services?
- Will local jobs be lost due to impacts on tourism?
- Will construction and maintenance workers be hired locally?
- How will this project affect future economic growth for Searchlight?

3.5.2.8 Vegetation/Wildlife

- How will the desert tortoise be affected by construction and maintenance of the project?
- Will common black hawks and bald eagles from nearby populations be affected?
- What efforts will be made to minimize impacts on habitats of special status species of plants and animals?
- How will Joshua trees be affected by the project?
- What is the weed management plan?
- How will noise from the turbines affect animal populations?
- Will birds and bats be injured or killed? What efforts will be taken to minimize this?
- How will impacts on Gila monsters and bighorn sheep be studied?
- If herbicides will be used to remove or control vegetation, how will the area be affected?
- How will bird migration be affected?

3.5.2.9 Visual Resources

- Will the placement of wind turbines affect views of scenic areas such as Lake Mohave and the surrounding mountains?
- How will the placement of wind turbines affect views of scenic areas surrounding Lake Mead National Recreation Area?
- How will impacts to the scenic quality of the area be studied?
- What effect will turbine lighting have on air safety?
- Will flashing lights from the wind mill blades from the sun's reflection be a dangerous distraction for drivers?
- How will tourism be impacted by changes to the visual environment?
- Will the new facility give Searchlight an industrial look?
- What steps will be taken to minimize visual impacts on the area?

3.5.2.10 Water

- How will water be used during construction?
- How much water will be used?
- What regulations will ensure that any water used for the project is used wisely and for the public good?
- Will overall water quality be affected by the project and project activities?
- What regulations will ensure that all efforts are made to prevent water quality from being affected?

3.6 BLM COMMENTS

As required by BLM guidance (Handbook H-1790-1), an internal review was implemented to establish whether any areas of concern, which did not appear in public comments, existed. Such concerns were identified based on cooperation or pending cooperation with the following agencies: Nevada Department of Wildlife, Nevada Division of Environmental Protection, National Park Service, Clark County, and the United States Department of Defense. The following are questions representative of these concerns.

- Will any Waters of the United States be impacted by the project? Will a Section 401 or 404 permit be required?
- What potential conflicts with mineral issues and existing mining claims, plans, or notices exist?

3.7 WESTERN COMMENTS

Searchlight Wind has submitted an application to Western to interconnect 300 MW of the proposed wind energy generation site with Western's existing Davis-Mead 230-kilovolt (kV) Transmission Line, near its crossing of State Route 164 seven miles east of Searchlight, Nevada. Western proposes to construct a new 230-kV substation to accommodate the interconnection and provide transmission service up to 300 MW to Searchlight Wind Energy LLC based on the application. If the wind energy generation site is built out to more than 300 MW, Western would address the need for an additional transmission capacity in a separate and subsequent process.

Western is addressing the Searchlight Wind application under its Large Generator Interconnection Procedures included with its Open Access Transmission Service Tariff (http://www.wapa.gov/transmission/oatt.htm). The procedures include conducting transmission system studies to ensure that the transmission system can accommodate the proposed wind generating facility. At this time, all the transmission system studies have not been completed. Details, requirements, and environmental impacts for other system improvements are unknown at this time, since they would be dictated by the on-going transmission system studies. These studies may identify additional upgrades needed to accommodate the proposed interconnection, including modifications at existing Western substations that could include installing new control buildings, new circuit breakers and controls; adding new electrical equipment, which would include installing new concrete foundations for electrical equipment and buildings, substation bus work, cable trenches, buried cable grounding grid, and new surface grounding material; and/or replacing existing equipment and/or conductors with new equipment and/or conductors to accommodate the proposed interconnection.

If any needed transmission system modifications are identified after the completion of the EIS, Western would address the environmental impacts of these modifications in accordance with regulatory requirements.

3.8 ISSUES OUTSIDE THE SCOPE OF THE EIS

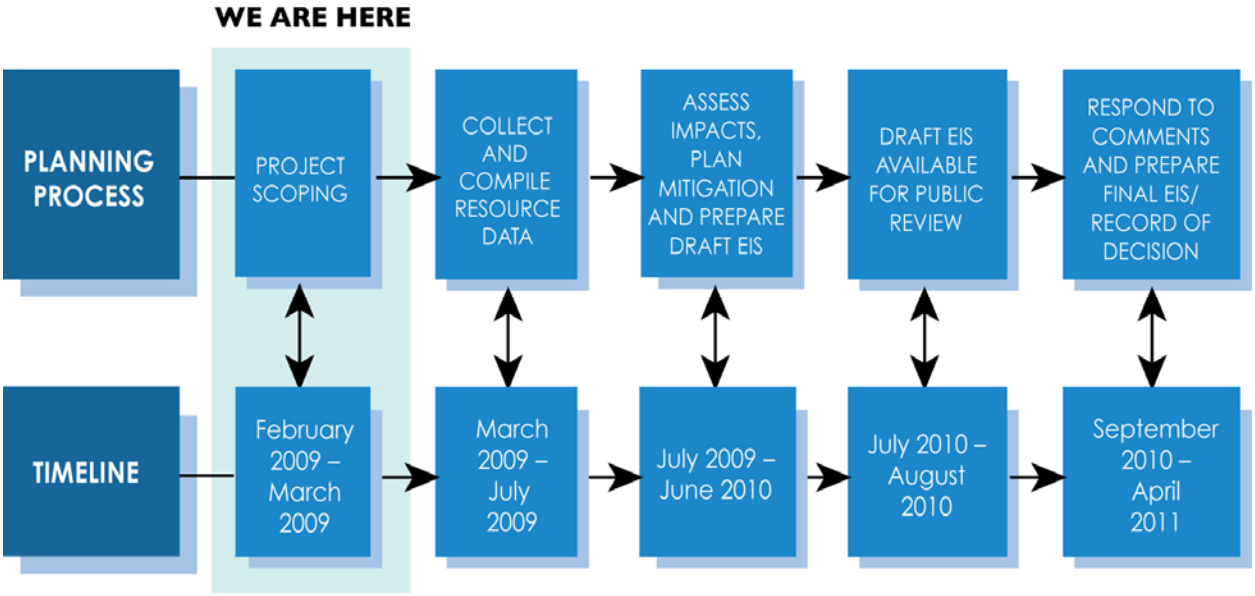
Some comments were received regarding the project proponent, Searchlight Wind. These comments in some instances requested a detailed analysis of the company and investors. It was requested that the EIS disclose who the investors are, if the company is foreign-owned, and what actions (if any) state-elected officials have taken to promote this or other renewable projects on BLM land. An EIS is intended to evaluate potential environmental impacts. It is beyond the scope of this effort to evaluate the corporate structure or financial resources of Searchlight Wind; therefore, these comments will not be addressed in the EIS.

Additional questions were received regarding the types of permits that would be required and comments were received indicating that the facility should be required to obtain appropriate permits (i.e., air or water use permits) prior to construction. Permits required by other federal, state, or local agencies are outside the jurisdiction of the BLM and subject to separate processes. While the necessary permits and authorities are disclosed in this document (see Section 4.6), the preparation and public availability of those permit applications will occur independent of the preparation of this EIS. Nevertheless, it is important to note that all federal, state or local permits pertaining to the proposed actions of the applicant are required to be in place prior to the issuance of the Notice to Proceed.

4.0 SUMMARY OF FUTURE STEPS IN THE EIS PROCESS

The process for the EIS requires a team of interdisciplinary resource specialists to complete each step. An important part of the BLM planning process is engaging the public and relevant agencies from the earliest stages of and throughout the planning process to address issues, comments, and concerns. The steps of the planning process and agency authority and decisions to be made are described below. Figure 4-1 provides a summary of the EIS process and schedule.

Figure 4-1 Planning Process Flow Chart



4.1 IDENTIFICATION OF ISSUES

Issues associated with the proposed project were identified through the scoping period, which initiated the planning process. The scoping process and the issues identified through the scoping process are documented in this scoping report, which is also available on the project website (http://www.blm.gov/nv/st/en/fo/lvfo/blm_programs/energy.html) and from the BLM Las Vegas Field Office.

4.2 DATA INFORMATION AND COLLECTION

Much of the necessary resource data and information will be compiled and used from existing data on file at BLM Las Vegas Field Office, BLM Nevada State Office, or through other local agencies and academic institutions. Additional data and information will be obtained from current studies being conducted by BLM and other sources to update and/or supplement BLM's data.

Data could be obtained from published and unpublished reports, maps, and digital information for use in a geographic information system (GIS). Generally, the resources and resource uses to be addressed include the following:

- Land Use
- Recreation and Access
- Special Management Areas (including Areas of Critical Environmental Concern, Special Recreation Management Areas, and Wilderness Study Areas)
- Groundwater and Surface-Water Resources
- Climate and Air Quality
- Biological Resources (including vegetation, wildlife, special status species, wild horses and burros, noxious weeds and invasive species)
- Geology, Soils, and Minerals
- Noise
- Archaeological Resources, Historic Properties, and Paleontological Resources
- Visual Resources
- Social and Economic Conditions
- Environmental Justice
- Public Health and Safety, Hazardous Materials and Waste

During the data collection and information collection step of the EIS process, BLM will initiate specific coordination with agencies, including the U.S. Fish and Wildlife Service for Section 7 consultation, the Nevada State Historic Preservation Office for Section 106 consultation, and the U.S. Army Corps of Engineers for Section 404 consultation, to ensure these procedures are completed in conjunction with the EIS process. In addition, a summary of all tribal coordination and consultation will be included in Chapter 5, Consultation and Coordination, of the Draft EIS.

4.3 IDENTIFYING ALTERNATIVES, ASSESSING IMPACTS, AND PLANNING MITIGATION

Based on collected data, including public comments, a description of proposed actions and alternatives (including no action) will be developed. Only alternatives that meet a standard of technical and economic feasibility will be considered in detail. Proposed alternative actions will be responsive to issues identified through the scoping process, fulfill the purpose and need (as described in the EIS), be consistent with agency planning documents, and address key social and environmental concerns. Impacts that could result from implementing the proposed action and alternatives will be analyzed and measures to mitigate those impacts will be identified where appropriate.

4.4 DRAFT EIS AND PUBLIC REVIEW

A summary of the scoping process, data collection efforts, and the findings of the impact assessment and mitigation planning will be documented in a Draft EIS. The Draft EIS is expected to be available for public review by mid-2010. To initiate the public comment period, the BLM will file the Draft EIS with the U.S. Environmental Protection Agency (EPA). Upon receipt of the document, the EPA will publish a filing notice in the *Federal Register*. The date the EPA notice appears in the *Federal Register* is the date that the public review period begins. The BLM will then inform the public that the Draft EIS is available for public comment by publishing a Notice of Availability in the *Federal Register* and advertising in local media. Public comments will be accepted for a period of either 45 or 60 days. During this time, meetings will be held to receive comments on the adequacy of the Draft EIS.

4.5 PREPARE FINAL EIS AND ISSUE RECORD OF DECISION

BLM will review and prepare responses to comments received on the Draft EIS. The EIS may or may not be modified based on public comments; however, all substantive comments and responses will be incorporated into the Final EIS.

The Final EIS also will be made available for the public to review for a period of 30 days, estimated for the fall of 2010. The availability of the Final EIS will be announced in the *Federal Register* and advertised in local media. Following the 30-day period, BLM will address any protests and/or issues in a Record of Decision, currently expected in early 2011.

In response to its need for agency action, Western will adopt the EIS and use it to support a decision on whether or not to grant the interconnection for the proposed wind generating facility. Western's decision will be addressed in a separate Record of Decision, currently expected in early 2011.

4.6 AGENCY AUTHORITIES AND DECISIONS TO BE MADE

Prior to and during the scoping process, BLM anticipated the discretionary government actions that would need to be addressed in the EIS, and decisions related to those actions. Table 4-1 represents a preliminary list of likely decisions and actions required for each component of the proposed project.

Table 4-1 Potential Agency Decisions and Actions

Agency	Permit/Approval Required
FEDERAL	
Bureau of Land Management	NEPA Implementation; Issuance of Right-of-way Grant
Department of Defense, Department of Homeland Security	Consultation Regarding Military Radar
Western Area Power Administration, an Agency of the U.S. Department of Energy	NEPA Implementation; Acquisition of Right-of-way Grant for Electrical Interconnection Facility/Substation; Decision whether or not to grant interconnection
Federal Aviation Administration	Aviation Hazard Clearance; Approval of Lighting Plan
U.S. Army Corps of Engineers	Clean Water Act, Section 404, Nationwide Permit 12
U.S. Fish and Wildlife Service	Endangered Species Act, Section 7, Consultation and Biological Opinion
STATE	
Nevada Department of Wildlife	Project Review Including Wildlife and Habitat Consultation
State Historic Preservation Office	Section 106, Consultation under National and State Historic Preservation Acts
Nevada Public Utility Commission	Utility Environmental Protection Act Compliance
Nevada Department of Transportation	State and County Right-of-way Encroachment Permits; Oversize/Overweight Permits
Nevada Division of Environmental Protection	402 National Pollutant Discharge Elimination System General Stormwater Permit for Construction Activities and 401 Water Quality Certification. O&M SWPPP and SPCCP
Nevada Division of Water Resources	Well Permit
Nevada State Fire Marshall	Hazardous Materials Storage Permit; Nevada Combined Agency Permit; Tier II Compliance
LOCAL	
Clark County Comprehensive Planning	Special use permit; Waiver of Development Standards; Building Permit
Clark County Regional Flood Control District	Federal Emergency Management Agency Map Review and Clark County Regional Flood Control District Plan Compliance
Clark County Health District Air Pollution Control Division	Dust Control Permit; Grading Permit
Clark County Health District	Septic System Permit
Clark County Fire Department	Blasting Permits (if necessary)

Notes: NEPA = National Environmental Policy Act; O&M = operations and maintenance; SPCCP = spill prevention control and countermeasures plan; SWPPP = stormwater pollution prevention plan

APPENDIX A

ANNOUCEMENTS

Notice of Intent
Newsletter
Display Advertisement
Press Release

(1) advise other Federal and State agencies and the public of our intention to conduct detailed planning on this refuge, and (2) obtain suggestions and information on the scope of topics to consider in the environmental document and during development of the CCP.

Background

The CCP Process

The National Wildlife Refuge System Improvement Act of 1997 (Improvement Act) (16 U.S.C. 668dd–668ee), which amended the National Wildlife Refuge System Administration Act of 1966, requires us to develop a CCP for each national wildlife refuge. The purpose for developing a CCP is to provide refuge managers with a 15-year plan for achieving refuge purposes and contributing toward the mission of the National Wildlife Refuge System (NWRS), consistent with sound principles of fish and wildlife management, conservation, legal mandates, and our policies. In addition to outlining broad management direction on conserving wildlife and their habitats, CCPs identify wildlife-dependent recreational opportunities available to the public, including opportunities for hunting, fishing, wildlife observation and photography, and environmental education and interpretation. We will review and update the CCP at least every 15 years in accordance with the Improvement Act and NEPA.

We establish each unit of the NWRS for specific purposes. We use these purposes as the basis to develop and prioritize management goals and objectives for the refuge within the NWRS mission, and to determine how the public can use the refuge. The planning process is a way for us and the public to evaluate management goals and objectives for the best possible conservation approach to this important wildlife habitat, while providing for wildlife-dependent recreation opportunities that are compatible with the refuge's establishing purposes and the mission of the NWRS. Our CCP process provides opportunities for Tribal, State, and local governments; agencies; organizations; and the public to participate. At this time, we encourage the public to provide input in the form of issues, concerns, ideas, and suggestions for the future management of John Hay NWR.

We will conduct the environmental review of this environmental assessment in accordance with the requirements of NEPA, as amended (42 U.S.C. 4321 *et seq.*); NEPA regulations (40 CFR parts 1500–1508); other appropriate Federal laws and regulations; and our policies and procedures for compliance with those laws and regulations.

John Hay National Wildlife Refuge

John Hay NWR was the former summer estate of historic figure John Hay. It was donated to the Service in 1972 by Alice Hay to be used as a migratory bird and wildlife reservation. Currently, the refuge consists of approximately 80 acres on the shores of Lake Sunapee in Newbury, New Hampshire, and consists of upland northern forests, and undeveloped shoreline. These areas serve the habitat needs of waterfowl, wading birds, and raptors.

Scoping: Preliminary Issues, Concerns, and Opportunities

We have identified preliminary issues, concerns, and opportunities that we may address in the CCP. We have briefly summarized these issues below. During public scoping, we may identify additional issues.

Public use throughout the refuge will be reevaluated in relation to wildlife-dependent recreation and other mission compatible uses. These include an ADA-compliant interpretive nature trail, overlooks, and a trailhead at the Fells parking area. We will also explore different visitor use options for the refuge.

Access to the refuge from the adjacent Fells property needs to be coordinated in terms of the use of their parking area or the creation of a second parking area, and the establishment of a trailhead or other interpretive information on their property.

We need to address how the Service can create a more visible presence at the refuge and the adjacent Fells property. Potential avenues are through signs, kiosks, and seasonal staff.

Public Meetings

We will involve the public through open houses, informational and technical meetings, and written comments. We will release mailings, news releases, and announcements to provide information about opportunities for public involvement in the planning process. You can obtain the schedule from the planning team leader or project leader (see **ADDRESSES**). You may also submit comments anytime during the planning process by mail, electronic mail, or fax (see **ADDRESSES**). There will be additional opportunities to provide public input once we have prepared a draft CCP.

We anticipate that public meetings will be held in Newbury, New Hampshire. For specific information including dates, times, and locations, contact the project leader (see **ADDRESSES**) or visit our Web site at *http://www.fws.gov/northeast/johnhay.*

Public Availability of Comments

Our practice is to make comments, including names, home addresses, home phone numbers, and electronic mail addresses of respondents available for public review. Individual respondents may request that we withhold their names and/or home addresses, etc., but if you wish us to consider withholding this information, you must state this prominently at the beginning of your comments. In addition, you must present a rationale for withholding this information. This rationale must demonstrate that disclosure would constitute a clearly unwarranted invasion of privacy. Unsupported assertions will not meet this burden. In the absence of exceptional, documentable circumstances, this information will be released. We will always make submissions from organizations or businesses, and from individuals identifying themselves as representatives of or officials of organizations or businesses, available for public inspection in their entirety.

Dated: October 1, 2008.

Wendi Weber,

Acting Regional Director, Northeast Region, U.S. Fish and Wildlife Service, Hadley, Massachusetts.

[FR Doc. E8–28914 Filed 12–15–08; 8:45 am]

BILLING CODE 4310–55–P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[LLNV050000–L51010000.ER0000.F8740000; NVN–084626; 09–08807; TAS: 14X5017]

Proposed Wind Energy Project, Searchlight, NV

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of intent to prepare an environmental impact statement (EIS).

SUMMARY: In compliance with the National Environmental Policy Act (NEPA) of 1969, 42 U.S.C. 4321 *et seq.*, the Bureau of Land Management (BLM), Las Vegas Field Office will prepare an EIS for a wind energy project located on public lands in Clark County, Nevada.

DATES: This notice initiates the public scoping process. Comments on issues may be submitted in writing until February 17, 2009. Any scoping meetings will be announced 15 days in advance through local news media and

the BLM Web site at: *http://www.nv.blm.gov/vegas/default.html.*

ADDRESSES: Submit comments related to the project by any of the following methods:

- *E-mail: mchandle@nv.blm.gov*
- *Fax:* (702) 515–5064 (attention Mark Chandler)
- *Mail:* BLM Las Vegas Field Office, 4701 North Torrey Pines Drive, Las Vegas, NV 89130–2301

Documents pertinent to this project may be examined at the Las Vegas Field Office. Additional opportunities for public participation will be provided on publication of the draft EIS.

FOR FURTHER INFORMATION CONTACT: For further information and/or to have your name added to the mailing list, call Mark Chandler, (702) 515–5064; or e-mail *mchandle@nv.blm.gov.*

SUPPLEMENTARY INFORMATION: Searchlight Wind Energy, LLC, has submitted an application for the construction, operation, maintenence, and termination of a wind energy generation site. The proposed project would consist of 156 wind turbine generators and related rights-of-way appurtenances, including a substation administered by the Western Area Power Administration east of Searchlight, Nevada. The proposed wind energy project would produce approximately 359 megawatts of electricity. The proposed project site will be located on approximately 24,383 acres of public lands surrounding the town of Searchlight, Nevada.

Issues that are anticipated to be addressed in this EIS include visual impacts, avian impacts, socioeconomic impacts, electrical transmission capacity, and cumulative impacts.

Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Federal, State, and local agencies, as well as individuals or organizations that may be interested in or affected by the BLM's decision on this project are invited to participate in the scoping process and, if eligible, may request or be requested by the BLM to participate as a cooperating agency.

Authority: 43 CFR 2800.

Dated: December 4, 2008.

Kimber Liebhauser,

Assistant Field Manager, Lands Division, Las Vegas Field Office.

[FR Doc. E8–29686 Filed 12–15–08; 8:45 am]

BILLING CODE 4310–HC–P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[LLID100000–L10200000–PH0000]

Notice of Public Meeting, Idaho Falls District Resource Advisory Council Meeting

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of public meetings.

SUMMARY: In accordance with the Federal Land Policy and Management Act (FLPMA) and the Federal Advisory Committee Act of 1972 (FACA), the U.S. Department of the Interior, Bureau of Land Management (BLM) Idaho Falls District Resource Advisory Council (RAC), will meet as indicated below.

DATES: The RAC will next meet in Idaho Falls, Idaho on January 20–21, 2009 for a two-day meeting. The first day will be new member orientation in the afternoon starting at 2 p.m. at the Idaho Falls BLM Office, 1405 Hollipark Drive, Idaho Falls, Idaho. The second day will be at the same location starting at 8 a.m. with electing a new chairman, vice chairman and secretary. Other meeting topics include noxious weeds, power line corridors, Snake River Activity Operations Plan, Upper Snake RMP and Recreation RAC items. Other topics will be scheduled as appropriate. All meetings are open to the public.

SUPPLEMENTARY INFORMATION: The 15-member Council advises the Secretary of the Interior, through the Bureau of Land Management, on a variety of planning and management issues associated with public land management in the BLM Idaho Falls District (IFD), which covers eastern Idaho.

All meetings are open to the public. The public may present written comments to the Council. Each formal Council meeting will also have time allocated for hearing public comments. Depending on the number of persons wishing to comment and time available, the time for individual oral comments may be limited. Individuals who plan to attend and need special assistance, such as sign language interpretation, tour transportation or other reasonable accommodations, should contact the BLM as provided below.

FOR FURTHER INFORMATION CONTACT: Joanna Wilson, RAC Coordinator, Idaho Falls District, 1405 Hollipark Dr., Idaho Falls, ID 83401. Telephone: (208) 524–7550. E-mail: *Joanna_Wilson@blm.gov.*

Dated: December 8, 2008.

Joanna Wilson,

RAC Coordinator, Public Affairs Specialist.

[FR Doc. E8–29709 Filed 12–15–08; 8:45 am]

BILLING CODE 4310–GG–P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[WY–923–1310–FI; WYW172444]

Wyoming: Notice of Proposed Reinstatement of Terminated Oil and Gas Lease

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of proposed reinstatement of terminated oil and gas lease.

SUMMARY: Under the provisions of 30 U.S.C. 188(d) and (e), and 43 CFR 3108.2–3(a) and (b)(1), the Bureau of Land Management (BLM) received a petition for reinstatement from Chesapeake Exploration, L.L.C. for competitive oil and gas lease WYW172444 for land in Converse County, Wyoming. The petition was filed on time and was accompanied by all the rentals due since the date the lease terminated under the law.

FOR FURTHER INFORMATION CONTACT: Bureau of Land Management, Pamela J. Lewis, Chief, Branch of Fluid Minerals Adjudication, at (307) 775–6176.

SUPPLEMENTARY INFORMATION: The lessee has agreed to the amended lease terms for rentals and royalties at rates of $10.00 per acre, or fraction thereof, per year, and 16⅔ percent, respectively. The lessee has paid the required $500 administrative fee and $163 to reimburse the Department for the cost of this **Federal Register** notice. The lessee has met all the requirements for reinstatement of the lease as set out in Sections 31(d) and (e) of the Mineral Lands Leasing Act of 1920 (30 U.S.C. 188), and the Bureau of Land Management is proposing to reinstate lease WYW172444 effective June 1, 2008, under the original terms and conditions of the lease and the increased rental and royalty rates cited

Bureau of Land Management
Las Vegas Field Office
4701 N. Torrey Pines Drive
Las Vegas, NV 89130-2301

Public Meeting Announcement

Please attend one of the following scoping meetings to help identify the range, or scope, of issues related to the Searchlight Wind Energy Project. The issues identified during the scoping process will be considered and addressed during preparation of the Environmental Impact Statement. All meetings will be held in an open house format with a brief presentation.

SEARCHLIGHT
Tuesday, January 27, 2009
4 pm – 7 pm;
presentation at 4:30 pm
Searchlight Community Center
200 Michael Wendell Way
Searchlight, NV 89046

LAUGHLIN
Wednesday, January 28, 2009
6 pm – 9 pm;
presentation at 6:30 pm
William G. Bennett
Elementary School
2750 South Needles Hwy
Laughlin, NV 89029

BOULDER CITY
Thursday, January 29, 2009
5 pm – 8 pm;
presentation at 5:30 pm
Boulder City Library
701 Adams Blvd
Boulder City, NV 89005

Participants will have the opportunity to submit verbal or written comments at all meetings.

Bureau of Land Management Draft EIS

SEARCHLIGHT
WIND ENERGY PROJECT

January 2009

Introduction

The Bureau of Land Management (BLM) is preparing an Environmental Impact Statement (EIS) for the proposed Searchlight Wind Energy project. Searchlight Wind Energy, LLC has submitted an application for the construction, operation, and maintenance of a wind energy generation site on public lands adjacent to the town of Searchlight, Nevada. The first step in the EIS process is public scoping to identify issues and concerns that should be addressed in the EIS. The 60-day public scoping period for the Searchlight Wind Energy Project was initiated on December 16, 2008. This newsletter is being provided to potentially interested parties to describe the project, announce public scoping meetings, and provide opportunities to comment on the project.

Project Description

Searchlight Wind, LLC is proposing to develop an approximately 370 megawatt (MW) wind energy facility consisting of up to 161 wind turbine generators. The project is located on 24,383 acres of public lands east of Searchlight, Nevada (see attached map on page 3). The facility, depending upon the wind, would have the capacity to generate enough electricity to power over 100,000 households. This assumes an average household use of approximately 9,000 kilo watt hours per year.

The proposed wind turbine towers would be up to 262 feet tall from the ground to the hub with blades extending up to an additional 153 feet. The total height of each turbine would be up to 415 feet.

In addition to the wind turbines, the proposed project would require the construction of new access roads, an overhead transmission line, two electrical substations, an electrical interconnection facility/switchyard, an operations and maintenance building, and temporary and permanent laydown areas. Five permanent meteorological masts would be installed on the site to measure the wind speed and direction across the site over the life of the project. The exact areas of each component are subject to change as the project design develops and the EIS process proceeds.

The EIS Process

The proposed facilities would be on public land managed by the BLM; therefore, the project is considered a Federal action requiring review under and compliance with the National Environmental Policy Act of 1969 (NEPA). Under NEPA, actions such as the Searchlight Wind Energy Project must consider the potential effects on the environment including human, natural, and cultural resources.

Human Environment – land use, social and economic conditions, environmental justice, visual characteristics, noise

Natural Environment – air, geology, soils, water, vegetation, wildlife, special status and avian species

Cultural Environment – prehistoric and historic archaeological sites, and traditional cultural lifeways and resources

BLM

Las Vegas Field Office / Nevada

The NEPA process for the proposed project is anticipated to occur within a 24-28 month timeframe and consist of several steps depicted in the flow chart below.

At this early stage in the process, BLM (the lead Federal agency) will identify the range or scope of public and agency issues through comments received in meetings and discussions with relevant agencies and the public.

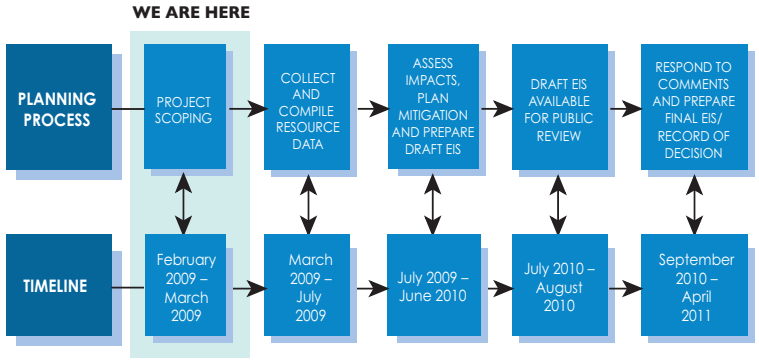
Once the BLM has an understanding of the issues, the study team will begin to gather data on resources within the study area. Based on the description of the proposed project and any alternatives to be evaluated; issues identified; and resource data, the EIS team will assess potential impacts that could result from the project and identify measures to mitigate, or reduce those impacts.

Public Scoping

BLM understands the importance of involving the public and agencies in the planning process. During public scoping, BLM encourages comments to identify issues and concerns that are important in the region and that need to be addressed in the EIS.

The first opportunity for you to participate will be the upcoming public scoping meetings. These public meetings are planned for **Boulder City, Searchlight, and Laughlin, Nevada** in January of 2009 as noted on the back of this newsletter. These meetings also will be announced in local newspapers and at www.nv.blm.gov/vegas/default.html. Comments can be submitted orally or in writing at the public meetings, as well as by mail, fax or e-mail. Comments will be most helpful in the preparation of the Draft EIS if they are submitted by February 17, 2009.

The scoping meetings will be held in an open house format, with a brief presentation to provide an overview of the project and EIS process. Project team members will be available at display stations to answer questions and take note of your comments.



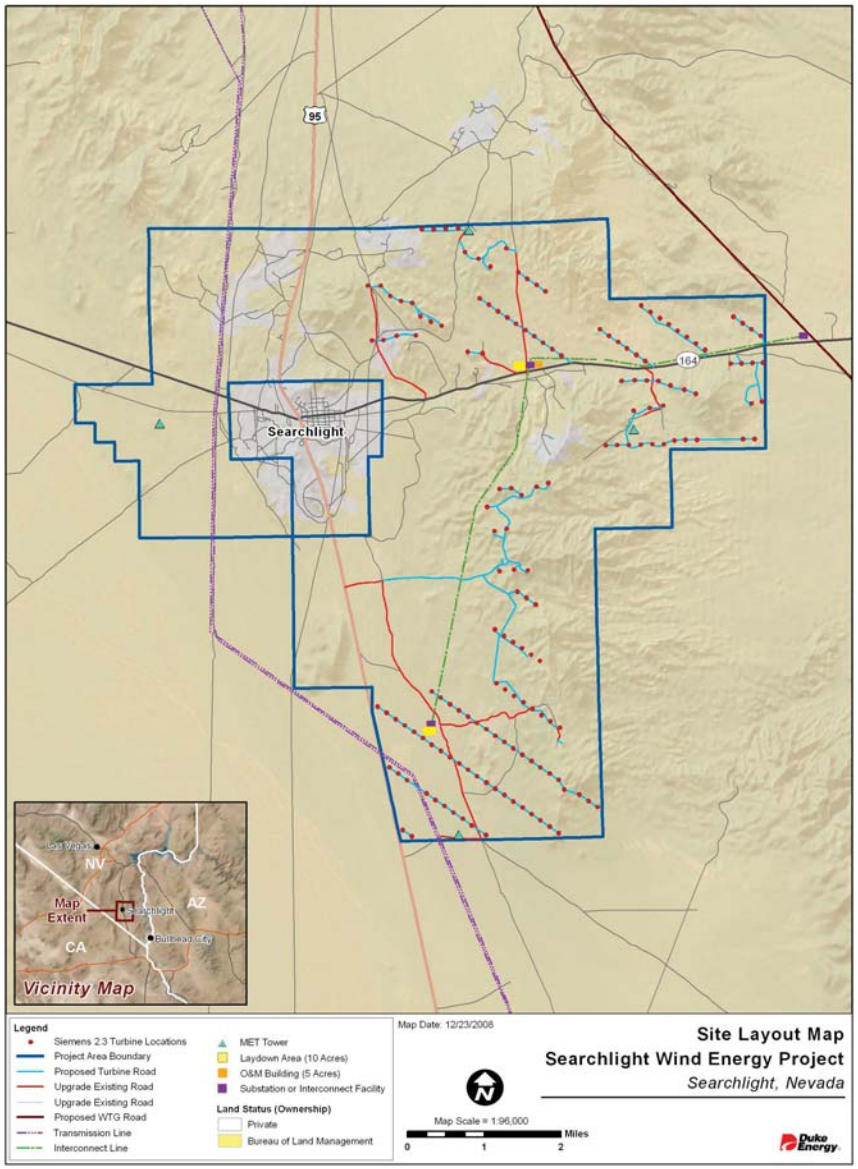
BLM will provide opportunities to comment on the status of the project throughout the EIS process. Preliminary work on the Draft EIS has already started; the scoping process will help BLM identify issues not already considered in the Draft and help in the formulation of the alternatives to be presented in the Draft. A Notice Of Availability (NOA) will be published by the BLM and the Environmental Protections Agency (EPA) in the Federal Register when the Draft EIS is published. The EPA-NOA starts the 45-day public review and comment period where BLM will conduct public meetings to accept comments on the draft document. Written comments will be accepted during that time.

If you have questions, would like to be on the mailing list, or would like to speak to a project representative, please use the contact information below.

How to Submit Written Comments

Remember, comments will be most helpful if submitted in writing by February 17, 2009.

E-mail: Searchlight_Wind_Energy_EIS@blm.gov
Fax: 702-515-5010
Mail: BLM Las Vegas Field Office,
4701 North Torrey Pines Drive,
Las Vegas, NV 89130-2301
Phone: 702-515-5000



SEARCHLIGHT WIND ENERGY PROJECT
PUBLIC MEETING ANNOUNCEMENT

The Bureau of Land Management (BLM) is holding public scoping meetings to receive comments on a proposed wind energy project near the town of Searchlight, Nevada. Please plan to attend one of the following open house meetings:

SEARCHLIGHT
Tuesday,
January 27, 2009
4 pm – 7 pm;
brief presentation
at 4:30 pm
Searchlight Community
Center
200 Michael
Wendell Way
Searchlight, NV 89046

LAUGHLIN
Wednesday,
January 28, 2009
6 pm – 9 pm;
brief presentation
at 6:30 pm
William G. Bennett
Elementary School
2750 South
Needles Hwy
Laughlin, NV 89029

BOULDER CITY
Thursday,
January 29, 2009
5 pm – 8 pm;
brief presentation
at 5:30 pm
Boulder City Library
701 Adams Blvd.
Boulder City, NV 89005

For questions on this project please contact Mark Chandler, BLM Project Manager, at 702-515-5000.

PRESS RELEASE DISTRIBUTION LIST

General Media

Television Stations

KVBC TV 3
KVVU TV 5
KLAS TV 8
KLVX TV 10
KTNV TV 13
KVWB TV 21
KVMP 41
Telemundo 39

Newspapers

(Daily)
Las Vegas Review-Journal
Las Vegas Sun

(Weekly)
City Life
Boulder City News
LV Asian Journal
The Spectrum

(Other)
Associated Press
Henderson Home News
Jewish Reporter
High Country News
The Business Voice (Las Vegas Chamber of Commerce)
View Neighborhood Newspapers
Associated General Contractors
Pahrump Valley Times
Mesquite Local News

Radio

KNPR 89.5 FM
KNEWS 970, 1140, 1250 AM
KUNV 91.5 FM
KDWN 720 AM
KLAV 1230 AM
KNYE 95.1 FM
KXNT 840 AM
Metro Networks/Shadow Broadcasting
Highway Radio

Spanish Language

Entravision Communications
El Mundo Newspaper

Elected Officials

Senators

Harry Reid
John Ensign

Congressman

Shelly Berkley

State Senate

John Porter

Other

Public Affairs Office – City of Las Vegas
Public Communications Department – Clark County
Public Affairs Office – Humboldt-Toiyabe National Forest

BLM Nevada News

FOR IMMEDIATE RELEASE January 22, 2009
Contact: Hillerie Patton, 702-515-5046

BLM to hold Public Meetings on Wind Energy Proposal near Searchlight

LAS VEGAS – The Bureau of Land Management (BLM) Las Vegas Field Office is seeking public input on issues to address the development of a draft Environmental Impact Statement (EIS) on a wind-powered electric generating facility proposed near Searchlight. The meetings will be held Tuesday, January 27 at the Searchlight Community Center from 4 p.m. – 7 p.m.; Wednesday, January 28 at the William G. Bennett Elementary School in Laughlin from 6 p.m. – 9 p.m., and Thursday, January 29 at the Boulder City Library from 5 p.m. – 8 p.m. The meetings will be held in an open house format with a brief presentation.

The BLM published Notice of Intent (NOI) in the *Federal Register* on December 16, 2008. A notice of intent advises the public of the preparation of an EIS to evaluate any potential impacts, which could occur from the construction and operation of the project. These public meetings are the first step in the EIS study process. The wind generation facility would be located on approximately 24,383 acres near Searchlight, and could generate enough electricity for more than 90,000 homes. In addition to the 161 wind turbines that would be constructed, the project would require new access roads, an overhead transmission line, two electrical substations, and other facilities. The wind turbines could be up to 415 feet tall depending on final design.

The public is encouraged to submit written comments before February 17, 2009. Comments may be submitted in writing to: Searchlight_Wind_Energy_EIS@blm.gov, or to the BLM Las Vegas Field Office, 4701 North Torrey Pines Drive, Las Vegas, NV 89130-2301, 702.515.5010 (fax). For more information, please contact: Mark Chandler at 702-515-5064.

-BLM-

The BLM manages more land – 258 million acres – than any other Federal agency. This land, known as the National System of Public Lands, is primarily located in 12 Western States, including Alaska. The Bureau, with a budget of about $1 billion, also administers 700 million acres of sub-surface mineral estate throughout the nation. The BLM's multiple-use mission is to sustain the health and productivity of the public lands for the use and enjoyment of present and future generations. The Bureau accomplishes this by managing such activities as outdoor recreation, livestock grazing, mineral development, and energy production, and by conserving natural, historical, cultural, and other resources on public lands.

APPENDIX B

PUBLIC SCOPING MEETINGS

Boards
Presentation
Sign-in sheet
Comment form

Bureau of Land Management Draft EIS

SEARCHLIGHT

WIND ENERGY PROJECT

BLM

Las Vegas Field Office / Nevada

PUBLIC SCOPING MEETING

The BLM wants your input on the scope or range of issues related to the Searchlight Wind Energy Project. The issues identified during scoping will be considered and addressed during preparation of the Environmental Impact Statement (EIS).

Roles and Responsibilities

- **Duke Energy –**
  As the project proponent, Duke will develop, construct, and operate the Project.
- **BLM –**
  BLM manages the land on which the project is proposed. As the Responsible Lead Agency, BLM is responsible for preparing the EIS to comply with the National Environmental Policy Act (NEPA).
- **WAPA –**
  Participating as Cooperating Agency under NEPA, WAPA owns and operates the 230kV transmission line to which the Project will connect and deliver power into the electrical grid.
- **URS –**
  Third-party contractor assisting BLM with preparation of the EIS.

What is Scoping?

The National Environmental Policy Act requires that there shall be an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action. This process is termed Scoping. Scoping is a continual process that ensures the content of the environmental analysis is focused properly. Scoping is an opportunity for persons who would be affected or interested to provide input and to express their environmental concerns regarding the proposed project.

Overall scoping helps to:

- Identify the relevant issues related to the resources and values in the project area
- Identify feasible alternatives

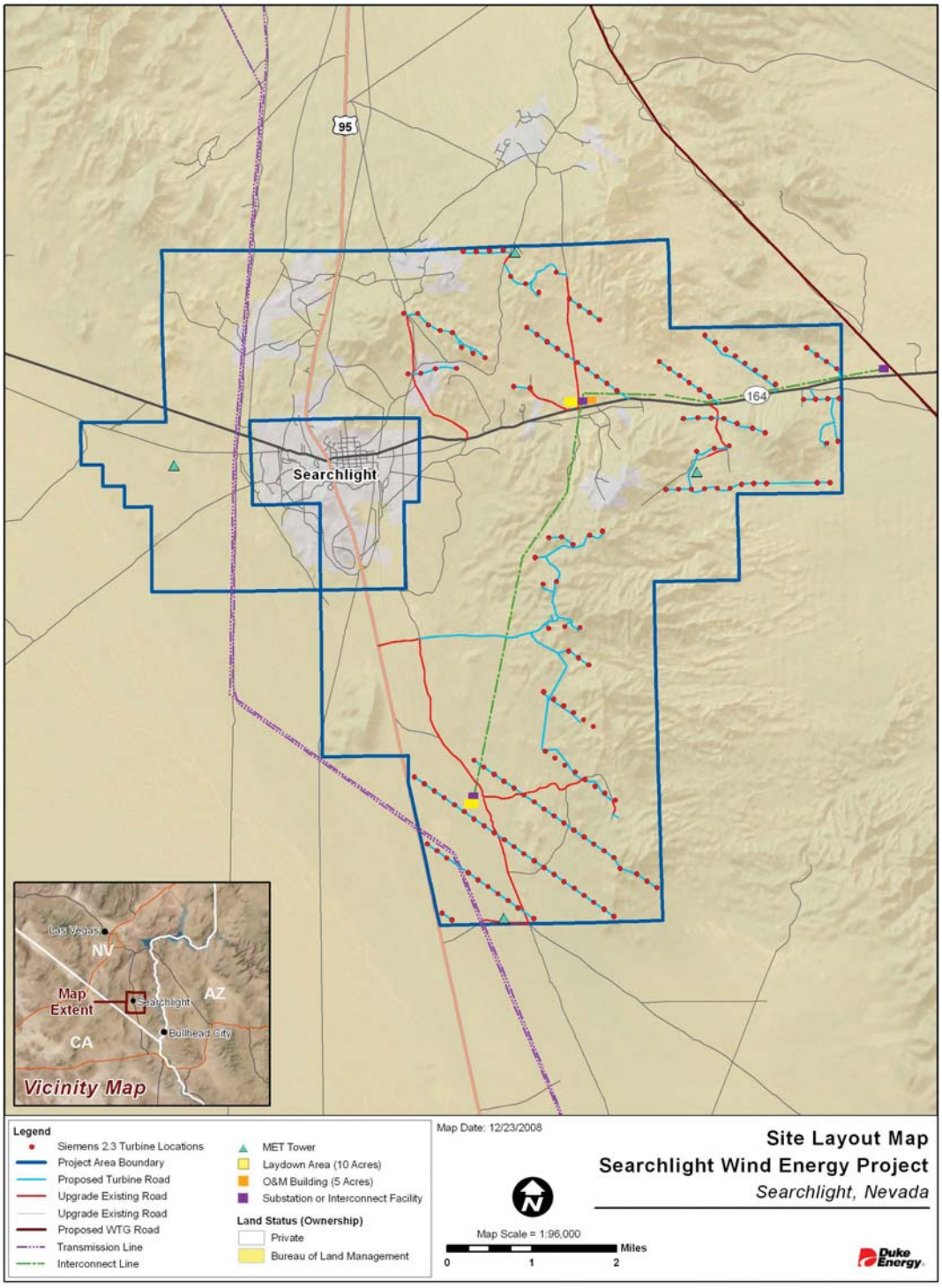
Purpose and Need

- To provide a local, domestic energy source
- To reduce greenhouse gas emissions that result from fossil fuel energy generation
- To fulfill many state and national renewable energy policies, including the Nevada Renewable Portfolio Standard (NRPS) (Assembly Bill 366, Senate Bill 372) which requires that 15 percent of all electricity generated in Nevada be renewable by the year 2013
- To serve existing and future needs for power in Nevada

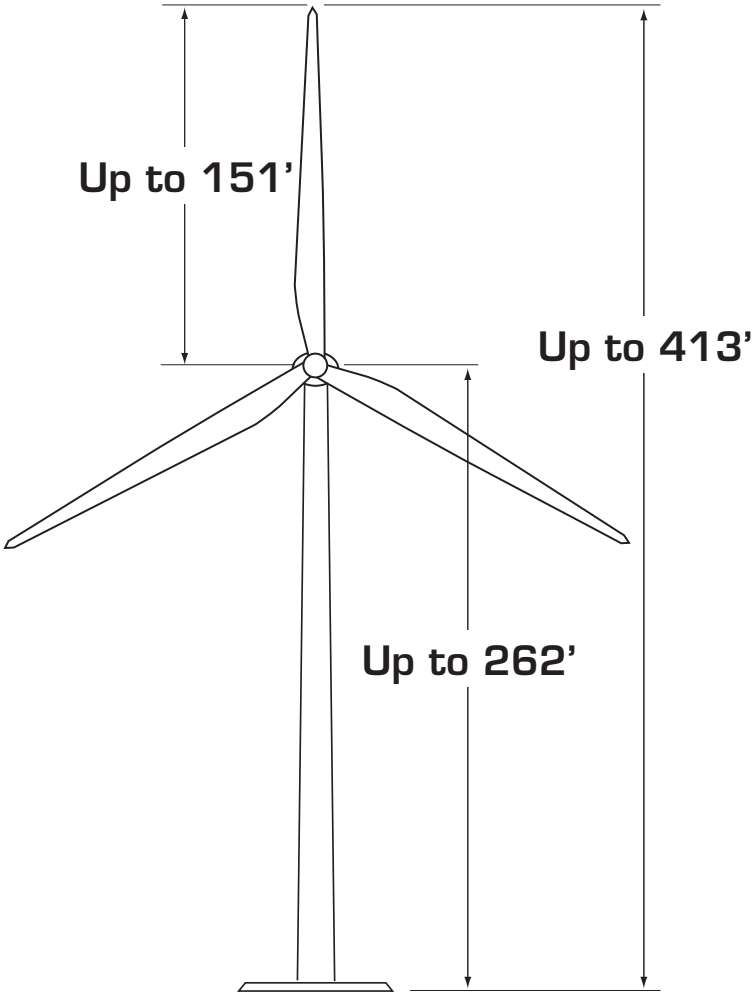
Project Description

- Facility will provide approximately 370 megawatts (MW) of electricity – power to more than 100,000 homes
- Facility components include:
  - 161 wind turbines
  - New and upgraded access roads
  - Overhead transmission lines
  - Operations and Maintenance (O&M) building
  - Electrical interconnection / switchyard
  - Two electrical substations
  - Two lay down areas (one temporary, one permanent)
  - Five permanent meteorological masts

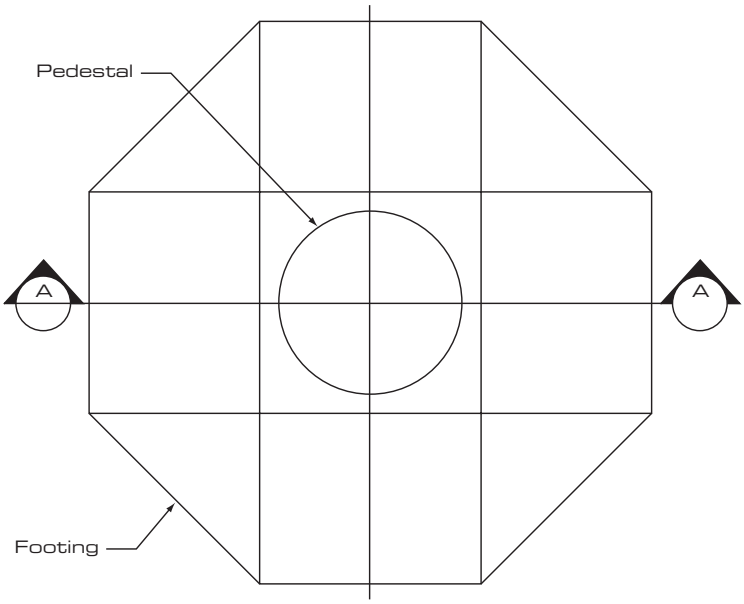
PROJECT LOCATION



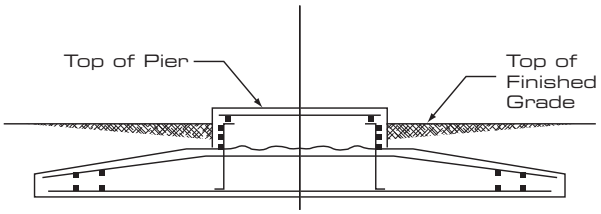
Typical Structure Example



Typical Wind Turbine Construction



WTG Foundation Plan



Section A-A

EIS Studies

The EIS will analyze the existing local environment and potential impacts that could occur as a result of the proposed project. Ways to mitigate, or reduce impacts on the environment will also be identified. Topics to be addressed in the EIS include:

Human Environment - land use, social and economic conditions, environmental justice, visual characteristics and noise

Natural Environment - air, geology, soils, water, vegetation, wildlife, special status and avian species

Cultural Environment – prehistoric and historic archaeological sites, and traditional cultural lifeways and resources

Bureau of Land Management Draft EIS

SEARCHLIGHT

WIND ENERGY PROJECT

BLM

How to Make Your Comments Most Effective

One comment can make a difference.

- Identify specific information that should be considered during the EIS process
- Offer a specific idea of how to address a particular concern
- Provide specific information about how a particular element of the project would affect you
- Speak to a project team member if you have any questions on project information

Las Vegas Field Office / Nevada

Bureau of Land Management Draft EIS

SEARCHLIGHT
WIND ENERGY PROJECT

BLM

Public Information and Feedback Opportunities

- 60-day scoping period to identify initial project issues
- Scoping meetings

SEARCHLIGHT
Tuesday, January 27, 2009
4 pm – 7 pm;
presentation at 4:30 pm
Searchlight Community Center
200 Michael Wendell Way
Searchlight, NV 89046

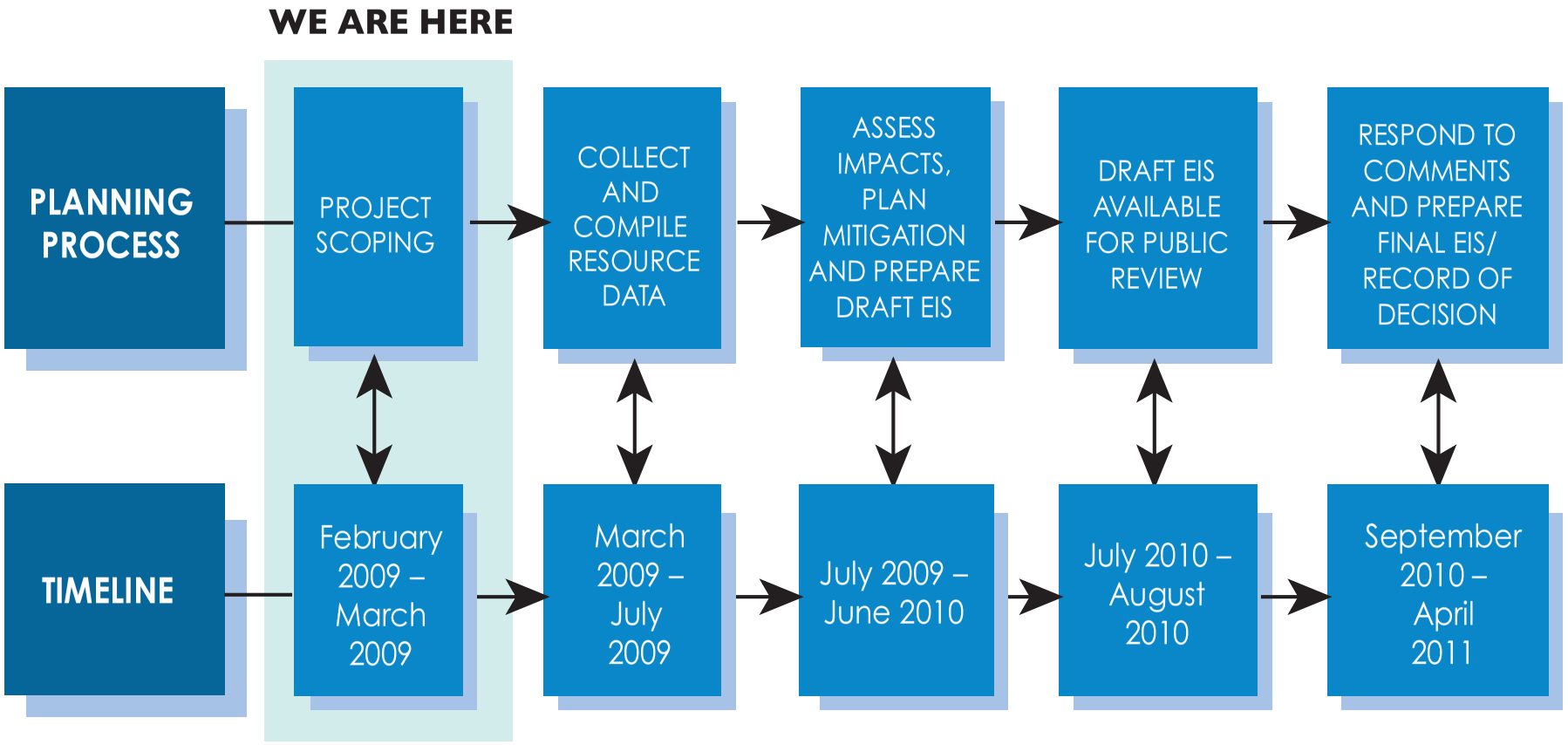
LAUGHLIN
Wednesday, January 28, 2009
6 pm – 9 pm;
presentation at 6:30 pm
William G. Bennett
Elementary School
2750 South Needles Hwy
Laughlin, NV 89029

BOULDER CITY
Thursday, January 29, 2009
5 pm – 8 pm;
presentation at 5:30 pm
Boulder City Library
701 Adams Blvd.
Boulder City, NV 89005

- Public meetings and 45-day public review period on Draft EIS in fall 2010
- Mailing list and newsletter updates throughout the project
- Contact BLM Project Manager Mark Chandler, 702.515.5000

Las Vegas Field Office / Nevada

Planning Process



Bureau of Land Management Draft EIS

SEARCHLIGHT
WIND ENERGY PROJECT

PUBLIC SCOPING MEETINGS

January 2009

BLM

Las Vegas Field Office / Nevada

Project Team

- Duke Energy
  (Searchlight Wind Energy, LLC)
- Bureau of Land Management (BLM)
- Western Area Power Administration (Western)
- URS (NEPA consultant)

Need for Agency Action

- BLM is responding to an application from Searchlight Wind Energy, LLC for land use permits.
- Western is responding to an application to interconnect the proposed wind energy facility with Western' electrical transmission system.

Purpose of Meeting

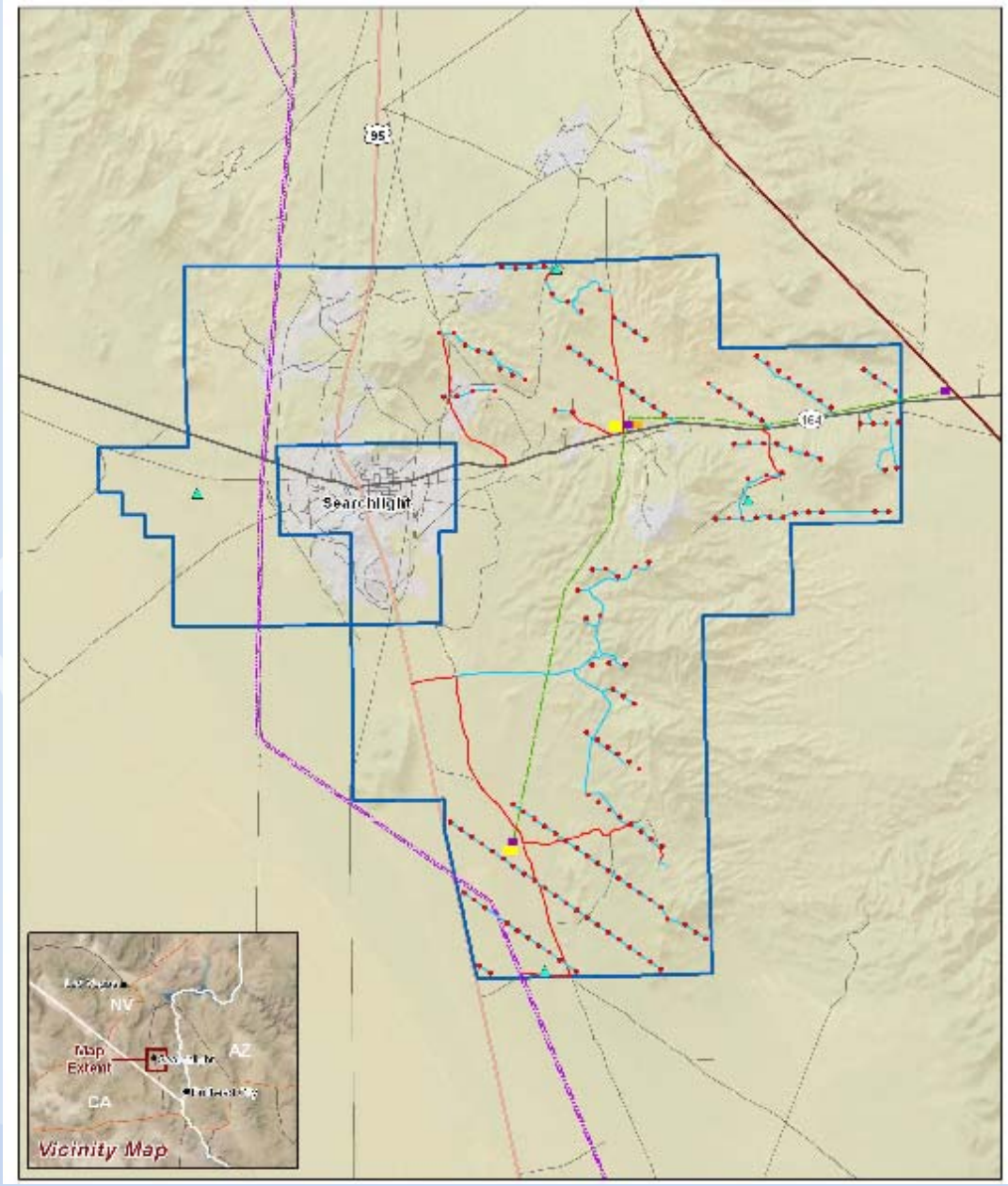
- To provide information to you regarding the proposed project.
- To hear your issues and concerns related to the proposed project.

What is Scoping?

- Helps to identify issues that should be addressed in the EIS.
- Helps to identify feasible alternatives that should be evaluated in the EIS.
- Provides the public and other interested parties the opportunity to express comments and concerns.

Project Description

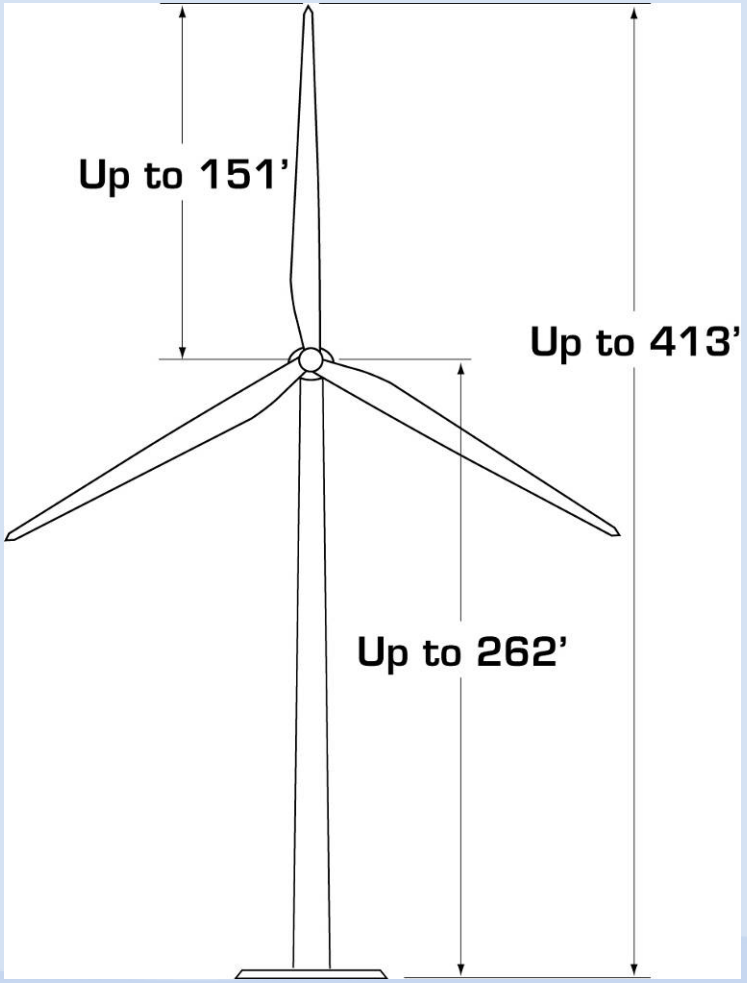
- Located on 24,383 acres of public land in the vicinity of Searchlight, Nevada



Project Description

- Would generate up to 370 megawatts of electricity
- Up to 161 wind turbines
- Power delivery over Western's Mead-Davis 230-kV transmission line
- Associated facilities
  - Access roads
  - Transmission lines
  - Switchyard/substations
  - Meteorological masts
  - Operations and maintenance facility

Project Description



National Environmental Policy Act (NEPA)

- "The National Environmental Policy Act is our basic national charter for protection of the environment." [40 CFR Part 1500.1(a)]
- An Environmental Impact Statement (EIS) will be prepared in compliance with NEPA.

Resources to be Analyzed

- Land uses
- Visual resources
- Noise
- Biological resources
- Cultural resources
- Air quality
- Geology and soils
- Water resources
- Socioeconomic conditions
- Environmental justice
- Public health and safety
- Environmental regulatory compliance
- Other resources as directed by BLM

Studies Proposed and Underway

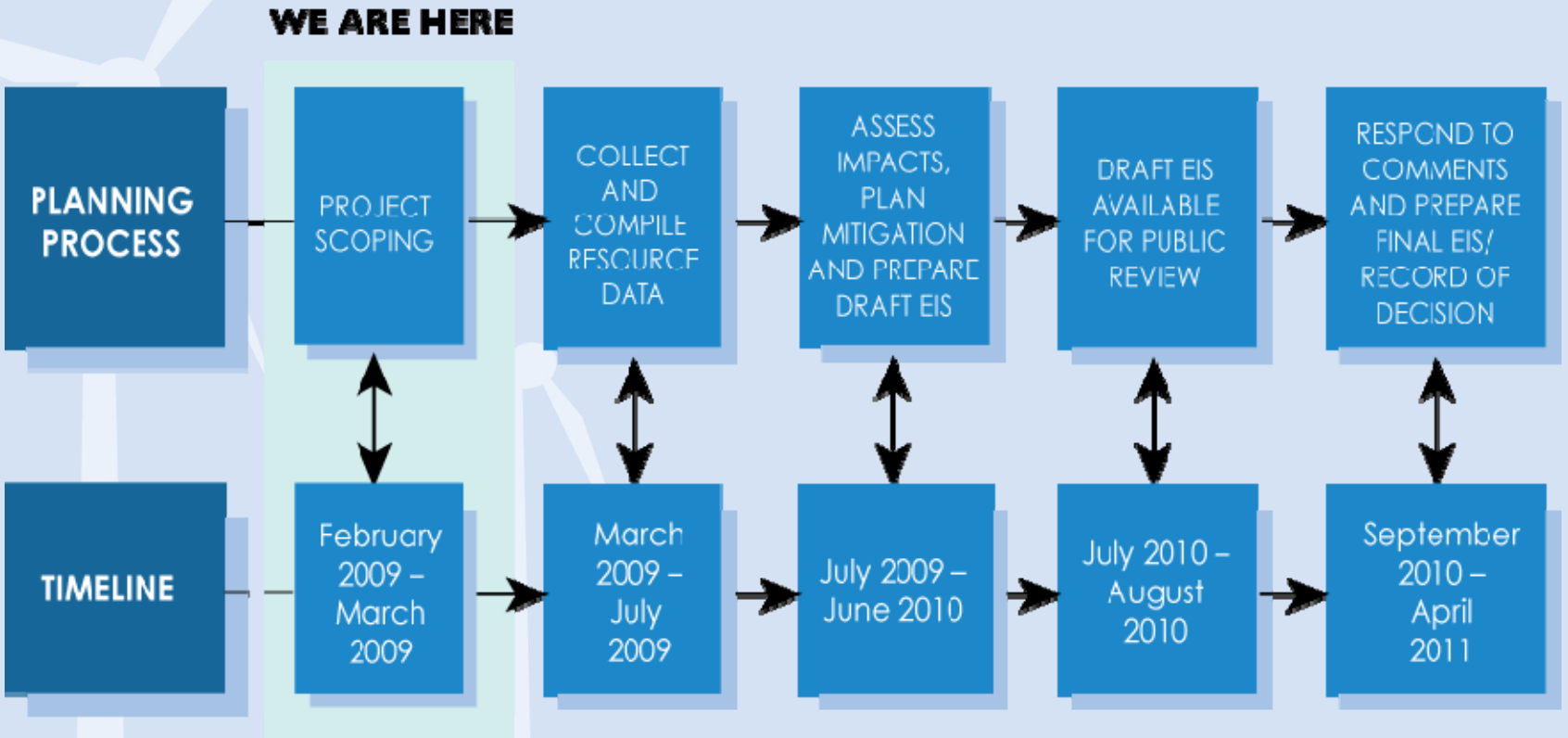
Studies Underway

- Avian and bat surveys
- Aerial photographs
- Refined topography mapping

Proposed Studies

- Sociological and economic study
- Visual studies and simulations of the proposed project
- Noise studies

NEPA Process



How You Can Participate

- Complete a comment form with your name and address.
- Submit written comments to:
  - Searchlight_Wind_Energy_EIS@blm.gov
  - Fax: 702-515-5010
  - BLM Las Vegas Field Office
    4701 N. Torrey Pines Drive
    Las Vegas, NV 89130-2301

How You Can Participate

- Public meetings and 45-day review period on Draft EIS
- Mailing list and newsletter updates throughout the project
- www.nv.blm.gov/vegas/default.html
- Contact BLM Project Manager Mark Chandler, 702-515-5000

How to Make Your Comments Most Effective

One comment can make a difference.

- Identify specific information that should be considered during the EIS process.
- Offer a specific idea of how to address a particular concern.
- Provide specific information about how a particular element of the project would affect you.

Scoping Meeting Sign In Form

January 2009

BLM

Las Vegas Field Office / Nevada

PLEASE SIGN IN

Date: _____

Name	Mailing Address	Phone Number	Do you wish to be added to the mailing list for this project?
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No

Copies of this sign-in form may become part of the public record associated with this proposed project. Individuals requesting that their name and address be withheld from public review or from disclosure under the Freedom of Information Act must check "Yes" in the personal information column. Such requests will be honored to the extent allowed by law.

SCOPING COMMENT FORM

Bureau of Land Management, Las Vegas Field Office/Nevada

At this early stage in the planning process, the Bureau of Land Management (BLM) is holding scoping meetings to help identify the range, or scope, of issues related to the Searchlight Wind Energy Project. The issues identified by the public during the scoping process will be considered and addressed during preparation of the environmental impact statement. Please take a few minutes to answer the questions below and return this sheet as addressed on the other side. Comments would be most helpful if received on or before the scoping period closing date of **February 17, 2009.**

Please provide your current mailing address and/or any additional names and addresses you think should be included on our mailing list.

Meeting Location: _____

Your Name: _____
Address: _____
City/State/Zip: _____

Name: _____
Address: _____
City/State/Zip: _____

Please check all that apply:

__ Add my name to the mailing list for this project
__ Do not include my name on the mailing list
__ Withhold my name/address to extent allowed by law (only for persons not representing organizations)*

*All comments received by BLM become part of the public record associated with this proposed project. Accordingly, your comments (including name and address) will be available for review by any person that wishes to review the record. At your request, we will withhold your name and address to the extent allowed by the Freedom of Information Act or any other law.

1. Please describe any issues or concerns that should be addressed in the environmental impact statement. _____

2. Please provide any other comments you may have on the overall project. _____

Fold, tape top of form, and mail your comments to the address below:

Mark Chandler
BLM Project Manager
BLM Las Vegas Field Office
4701 N. Torrey Pines Dr.
Las Vegas, Nevada 89130

Place stamp here

Appendix B: Biological Resources

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

Prepared for:
Tetra Tech EC Inc. on Behalf of Duke Energy
Attn: Dr. Karl Kosciuch
1750 SW Harbor Way
Portland, OR 97201

Alphabiota
ENVIRONMENTAL CONSULTING

Weed Management Plan

Searchlight, Nevada

Clark County, Nevada

Alphabiota Environmental Consulting, LLC
Project Number: 09-1034

Report Prepared By:

_____

Yancey Bissonnette
Botanist / Biologist

Alphabiota Environmental Consulting, LLC
38361 Roundtree Lane
Squaw Valley, California 93675
(559) 338-0929
April 11, 2011

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3. Weed Locations – Sahara Mustard

C. Approved Herbicides for use on BLM Lands

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.

5.0 BIBLIOGRAPHY

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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)

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

(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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FAMILY	SCIENTIFIC NAME	COMMON NAME	HABITAT TYPE	LIFE CYCLE TYPE	Proposed Jepson 2nd Ed. Changes
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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Searchlight Wind Farm Project
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FAMILY	SCIENTIFIC NAME	COMMON NAME	HABITAT TYPE	LIFE CYCLE TYPE	Proposed Jepson 2nd Ed. Changes
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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FAMILY	SCIENTIFIC NAME	COMMON NAME	HABITAT TYPE	LIFE CYCLE TYPE	Proposed Jepson 2nd Ed. Changes
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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FAMILY	SCIENTIFIC NAME	COMMON NAME	HABITAT TYPE	LIFE CYCLE TYPE	Proposed Jepson 2nd Ed. Changes
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	

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
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	

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
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

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
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	

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
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	

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
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	

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
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	

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
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	

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
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

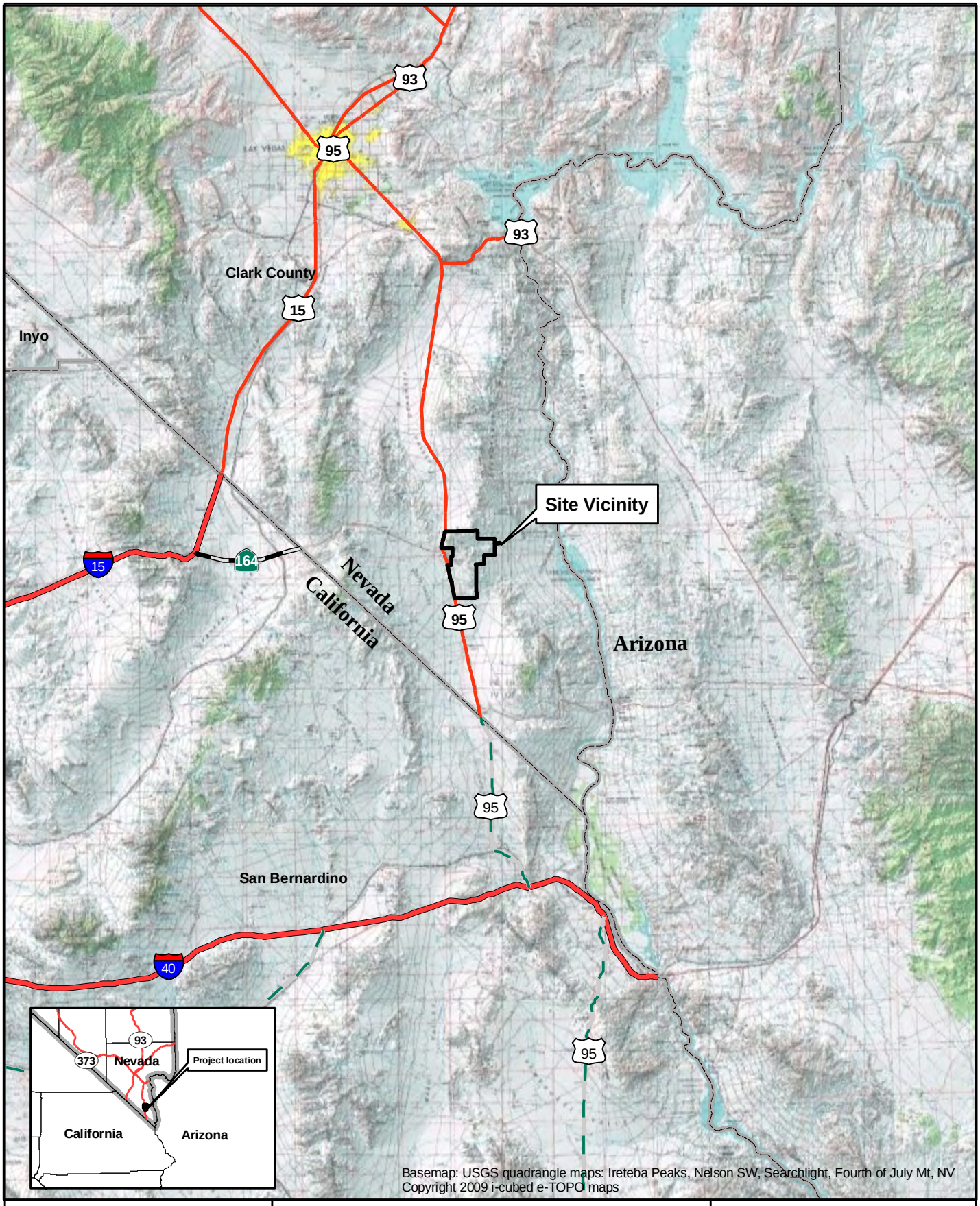
Monitoring Effort	**Construction[1]**	**Post-construction[1]**					**Comments**
		Year 1	Year 2	Year 3	Year 5	Continues bi-annually for life of project	
Known infestations	x	x	x	x	x	x	Annual site visits to monitor known infestations until weed control measures show significant improvement or control 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

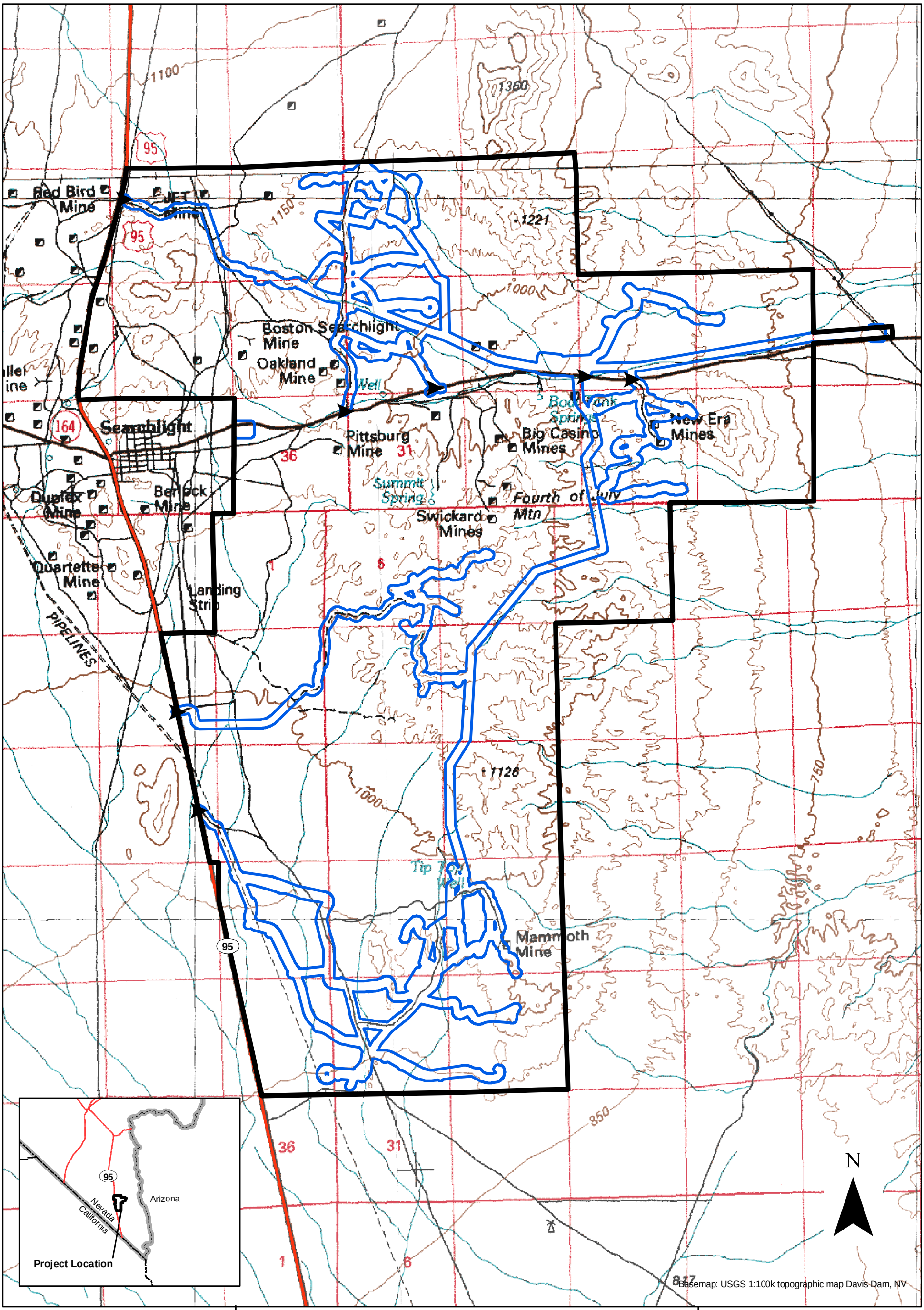
0 10 20 30 Miles

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

Brassica tournefortii

Brassica tournefortii

N

Basemap: Bing Web Mapping Service ©Microsoft Corporation 2009

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

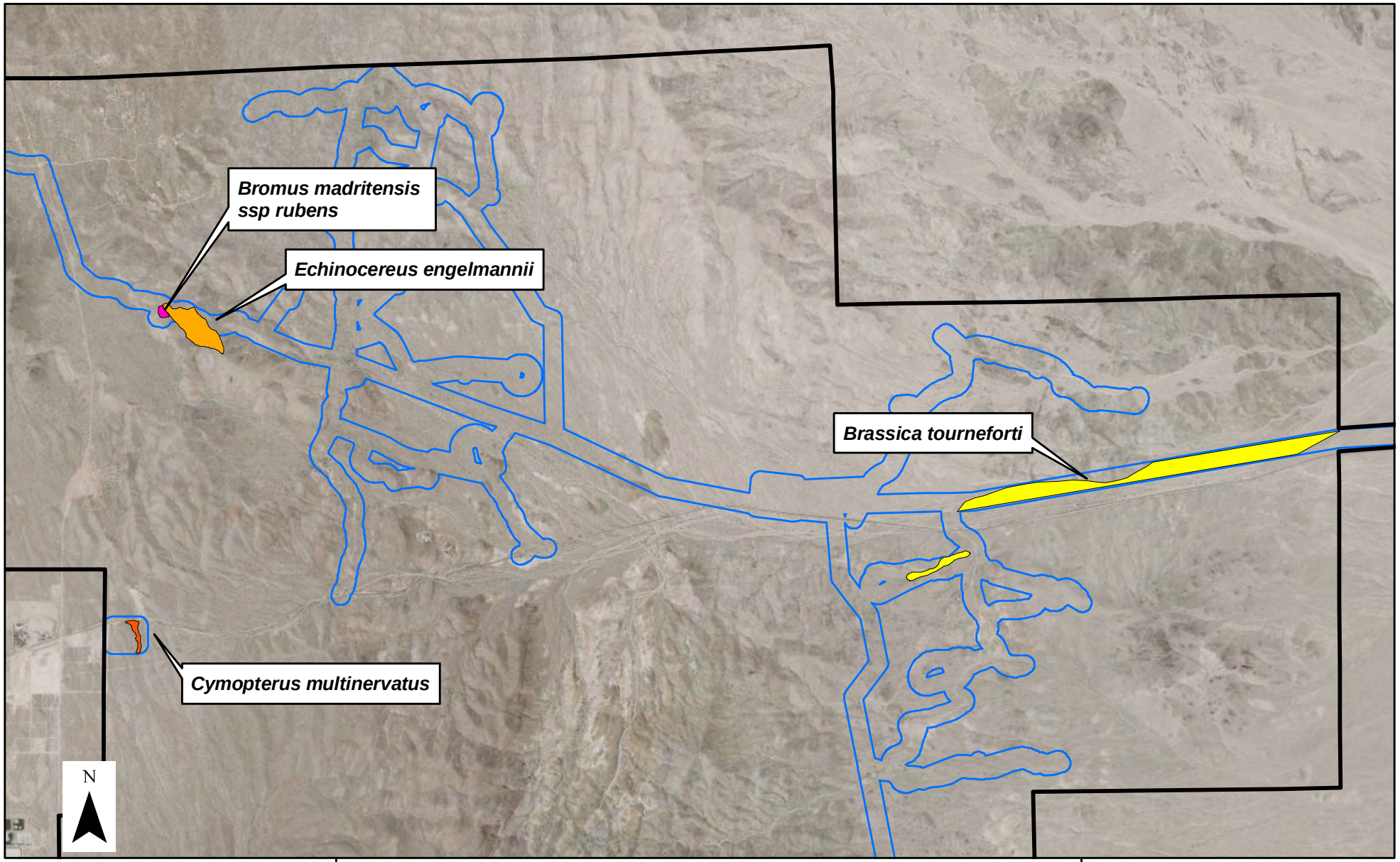
Scale 1:10,000

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

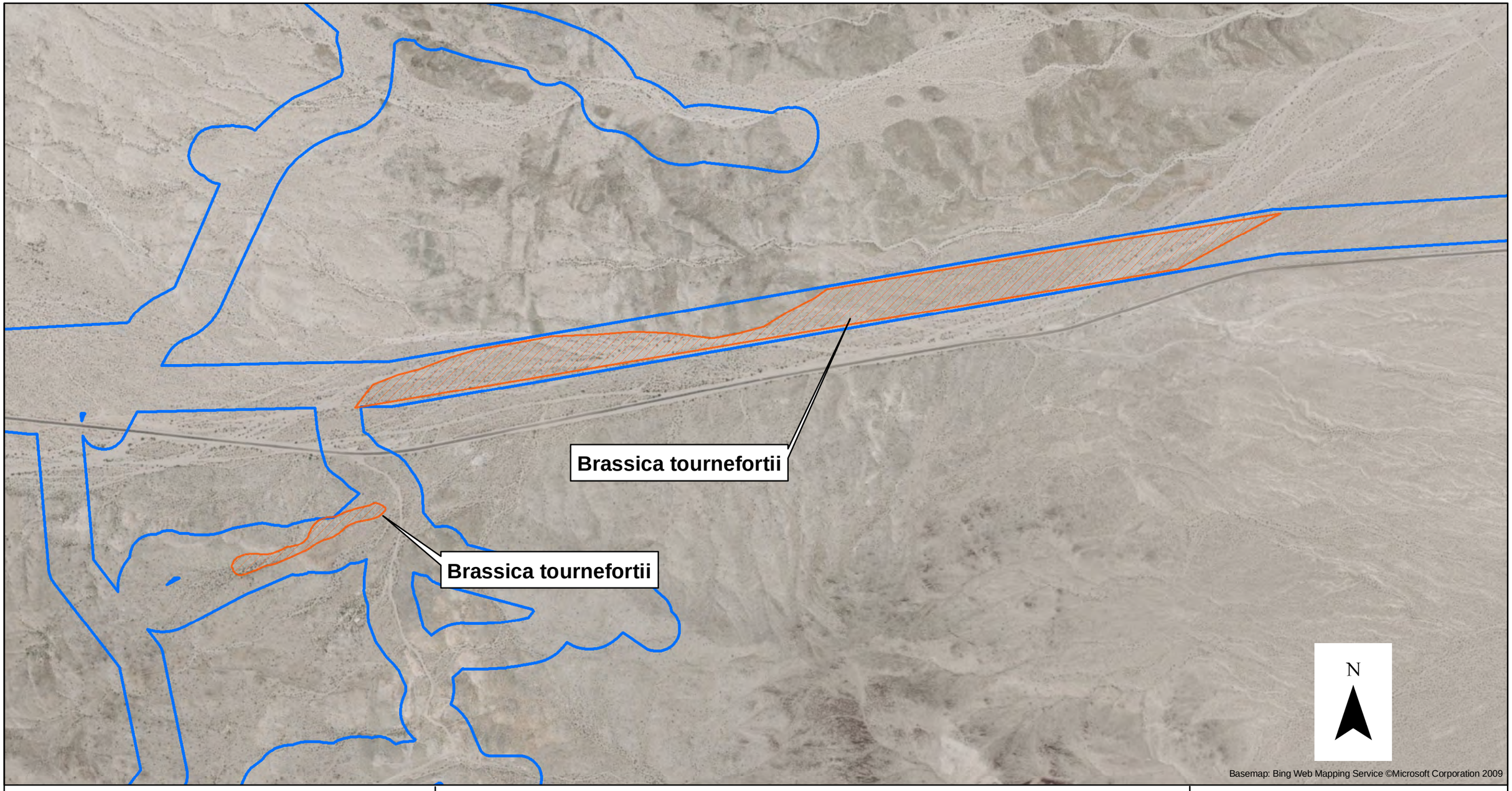
Scale 1:35,000

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

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. **
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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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

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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

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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

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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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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

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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				

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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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ACTIVE INGREDIENT	STATES WITH APPROVAL BASED UPON CURRENT EIS/ROD & COURT INJUNCTIONS	TRADE NAME	MANUFACTURER	EPA REG. NUMBER	CA REG. **
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.					

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ACTIVE INGREDIENT	STATES WITH APPROVAL BASED UPON CURRENT EIS/ROD & COURT INJUNCTIONS	TRADE NAME	MANUFACTURER	EPA REG. NUMBER	CA REG. **
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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ACTIVE INGREDIENT	STATES WITH APPROVAL BASED UPON CURRENT EIS/ROD & COURT INJUNCTIONS	TRADE NAME	MANUFACTURER	EPA REG. NUMBER	CA REG. **
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.

Appendix C: BLM Wind Energy Development Program Policies and BMPs

ATTACHMENT A

BLM WIND ENERGY DEVELOPMENT PROGRAM POLICIES AND BEST MANAGEMENT PRACTICES (BMPS)

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The BLM's Wind Energy Development Program will establish a number of policies and BMPs, provided below, regarding the development of wind energy resources on BLM-administered public lands. The policies and BMPs will be applicable to all wind energy development projects on BLM-administered public lands. The policies address the administration of wind energy development activities, and the BMPs identify required mitigation measures that would need to be incorporated into project-specific Plans of Development (PODs) and right-of-way (ROW) authorization stipulations. Additional mitigation measures will be applied to individual projects, in the form of stipulations in the ROW authorization as appropriate, to address site-specific and species-specific issues.

These policies and BMPs were formulated through preparation of the Final Wind Energy PEIS (BLM 2005). The PEIS included detailed, comprehensive analysis of the potential impacts of wind energy development and relevant mitigation measures; reviews of existing, relevant mitigation guidance; and reviews of comments received during scoping and public review of the Draft PEIS.

A.1 Policies

- The BLM will not issue ROW authorizations for wind energy development on lands on which wind energy development is incompatible with specific resource values. Lands that will be excluded from wind energy site monitoring and testing and development include designated areas that are part of the National Landscape Conservation System (NLCS) (e.g., Wilderness Areas, Wilderness Study Areas, National Monuments, NCAs,[1] Wild and Scenic Rivers, and National Historic and Scenic Trails) and Areas of Critical Environmental Concern (ACECs).[2] Additional areas of land may be excluded from wind energy development on the basis of findings of resource impacts that cannot be mitigated and/or conflict with existing and planned multiple-use activities or land use plans.

- To the extent possible, wind energy projects shall be developed in a manner that will not prevent other land uses, including minerals extraction, livestock grazing, recreational use, and other ROW uses.

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[1] Wind energy development is permitted in one NCA, the California Desert Conservation Area (CDCA), in accordance with the provisions of the *California Desert Conservation Area Plan 1980, as Amended* (BLM 1999).

[2] Although the MPDS developed for this PEIS (Section 2.2.1 and Appendix B) did not exclude all of these lands at the screening level, they will be excluded from wind energy development.

- Entities seeking to develop a wind energy project on BLM-administered lands shall consult with appropriate federal, state, and local agencies regarding specific projects as early in the planning process as appropriate to ensure that all potential construction, operation, and decommissioning issues and concerns are identified and adequately addressed.

- The BLM will initiate government-to-government consultation with Indian Tribal governments whose interests might be directly and substantially affected by activities on BLM-administered lands as early in the planning process as appropriate to ensure that construction, operation, and decommissioning issues and concerns are identified and adequately addressed.

- Entities seeking to develop a wind energy project on BLM-administered lands, in conjunction with BLM Washington Office (WO) and Field Office (FO) staff, shall consult with the U.S. Department of Defense (DoD) regarding the location of wind power projects and turbine siting as early in the planning process as appropriate. This consultation shall occur concurrently at both the installation/field level and the Pentagon/BLM WO level. An interagency protocol agreement is being developed to establish a consultation process and to identify the scope of issues for consultation. Lands withdrawn for military purposes are under the administrative jurisdiction of the DoD or a military service and are not available for issuance of wind energy authorizations by the BLM.

- The BLM will consult with the U.S. Fish and Wildlife Service (USFWS) as required by Section 7 of the Endangered Species Act of 1973 (ESA). The specific consultation requirements will be determined on a project-by-project basis.

- The BLM will consult with the State Historic Preservation Office (SHPO) as required by Section 106 of the National Historic Preservation Act of 1966 (NHPA). The specific consultation requirements will be determined on a project-by-project basis. If programmatic Section 106 consultations have been conducted and are adequate to cover a proposed project, additional consultation may not be needed.

- Existing land use plans will be amended, as appropriate, to (1) adopt provisions of the BLM's Wind Energy Development Program, (2) identify land considered to be available for wind energy development, and (3) identify land that will not be available for wind energy development.

- The level of environmental analysis to be required under NEPA for individual wind power projects will be determined at the FO level. For many projects, it may be determined that a tiered environmental assessment (EA) is appropriate in lieu of an EIS. To the extent that the PEIS addresses anticipated issues and

concerns associated with an individual project, including potential cumulative impacts, the BLM will tier off of the decisions embedded in the PEIS and limit the scope of additional project-specific NEPA analyses. The site-specific NEPA analyses will include analyses of project site configuration and micrositing considerations, monitoring program requirements, and appropriate mitigation measures. In particular, the mitigation measures discussed in Chapter 5 of the PEIS may be consulted in determining site-specific requirements. Public involvement will be incorporated into all wind energy development projects to ensure that all concerns and issues are identified and adequately addressed. In general, the scope of the NEPA analyses will be limited to the proposed action on BLM-administered public lands; however, if access to proposed development on adjacent non-BLM-administered lands is entirely dependent on obtaining ROW access across BLM-administered public lands and there are no alternatives to that access, the NEPA analysis for the proposed ROW may need to assess the environmental effects from that proposed development. The BLM's analyses of ROW access projects may tier off of the PEIS to the extent that the proposed project falls within the scope of the PEIS analyses.

- Site-specific environmental analyses will tier from the PEIS and identify and assess any cumulative impacts that are beyond the scope of the cumulative impacts addressed in the PEIS.

- The Categorical Exclusion (CX) applicable to the issuance of short-term ROWs or land use authorizations may be applicable to some site monitoring and testing activities. The relevant CX, established for the BLM in the DOI Departmental Manual 516, Chapter 11, Sec. 11.5, E(19) (DOI 2004), encompasses "issuance of short-term (3 years or less) rights-of-way or land use authorizations for such uses as storage sites, apiary sites, and construction sites where the proposal includes rehabilitation to restore the land to its natural or original condition."

- The BLM will require financial bonds for all wind energy development projects on BLM-administered public lands to ensure compliance with the terms and conditions of the rights-of-way authorization and the requirements of applicable regulatory requirements, including reclamation costs. The amount of the required bond will be determined during the rights-of-way authorization process on the basis of site-specific and project-specific factors. The BLM may also require financial bonds for site monitoring and testing authorizations.

- Entities seeking to develop a wind energy project on BLM-administered public lands shall develop a project-specific Plan of Development (POD) that incorporates all BMPs and, as appropriate, the requirements of other existing and relevant BLM mitigation guidance, including the BLM's interim off-site mitigation guidance (BLM 2005a). Additional mitigation measures will be

incorporated into the POD and into the ROW authorization as project stipulations, as needed, to address site-specific and species-specific issues. The POD will include a site plan showing the locations of turbines, roads, power lines, other infrastructure, and other areas of short- and long-term disturbance.

- The BLM will incorporate management goals and objectives specific to habitat conservation for species of concern (e.g., sage-grouse), as appropriate, into the POD for proposed wind energy projects.

- The BLM will consider the visual resource values of the public lands involved in proposed wind energy development projects, consistent with BLM Visual Resource Management (VRM) policies and guidance. The BLM will work with the ROW applicant to incorporate visual design considerations into the planning and design of the project to minimize potential visual impacts of the proposal and to meet the VRM objectives of the area.

- Operators of wind power facilities on BLM-administered public lands shall consult with the BLM and other appropriate federal, state, and local agencies regarding any planned upgrades or changes to the wind facility design or operation. Proposed changes of this nature may require additional environmental analysis and/or revision of the POD.

- The BLM's Wind Energy Development Program will incorporate adaptive management strategies to ensure that potential adverse impacts of wind energy development are avoided (if possible), minimized, or mitigated to acceptable levels. The programmatic policies and BMPs will be updated and revised as new data regarding the impacts of wind power projects become available. At the project-level, operators will be required to develop monitoring programs to evaluate the environmental conditions at the site through all phases of development, to establish metrics against which monitoring observations can be measured, to identify potential mitigation measures, and to establish protocols for incorporating monitoring observations and additional mitigation measures into standard operating procedures and project-specific stipulations.

A.2 Best Management Practices (BMPs)

The BMPs will be adopted as required elements of project-specific PODs and/or as ROW authorization stipulations. They are categorized by development activity: site monitoring and testing, development of the POD, construction, operation, and decommissioning. The BMPs for development of the POD identify required elements of the POD needed to address potential impacts associated with subsequent phases of development.

A.2.1 Site Monitoring and Testing

- The area disturbed by installation of meteorological towers (i.e., footprint) shall be kept to a minimum.

- Existing roads shall be used to the maximum extent feasible. If new roads are necessary, they shall be designed and constructed to the appropriate standard.

- Meteorological towers shall not be located in sensitive habitats or in areas where ecological resources known to be sensitive to human activities (e.g., prairie grouse) are present. Installation of towers shall be scheduled to avoid disruption of wildlife reproductive activities or other important behaviors.

- Meteorological towers installed for site monitoring and testing shall be inspected periodically for structural integrity.

A.2.2 Plan of Development Preparation

General

- The BLM and operators shall contact appropriate agencies, property owners, and other stakeholders early in the planning process to identify potentially sensitive land uses and issues, rules that govern wind energy development locally, and land use concerns specific to the region.

- Available information describing the environmental and sociocultural conditions in the vicinity of the proposed project shall be collected and reviewed as needed to predict potential impacts of the project.

- The Federal Aviation Administration (FAA)-required notice of proposed construction shall be made as early as possible to identify any air safety measures that would be required.

- To plan for efficient use of the land, necessary infrastructure requirements shall be consolidated wherever possible, and current transmission and market access shall be evaluated carefully.

- The project shall be planned to utilize existing roads and utility corridors to the maximum extent feasible, and to minimize the number and length/size of new roads, lay-down areas, and borrow areas.

- A monitoring program shall be developed to ensure that environmental conditions are monitored during the construction, operation, and

decommissioning phases. The monitoring program requirements, including adaptive management strategies, shall be established at the project level to ensure that potential adverse impacts of wind energy development are mitigated. The monitoring program shall identify the monitoring requirements for each environmental resource present at the site, establish metrics against which monitoring observations can be measured, identify potential mitigation measures, and establish protocols for incorporating monitoring observations and additional mitigation measures into standard operating procedures and BMPs.

- "Good housekeeping" procedures shall be developed to ensure that during operation the site will be kept clean of debris, garbage, fugitive trash or waste, and graffiti; to prohibit scrap heaps and dumps; and to minimize storage yards.

Wildlife and Other Ecological Resources

- Operators shall review existing information on species and habitats in the vicinity of the project area to identify potential concerns.

- Operators shall conduct surveys for federal and/or state-protected species and other species of concern (including special status plant and animal species) within the project area and design the project to avoid (if possible), minimize, or mitigate impacts to these resources.

- Operators shall identify important, sensitive, or unique habitats in the vicinity of the project and design the project to avoid (if possible), minimize, or mitigate impacts to these habitats (e.g., locate the turbines, roads, and ancillary facilities in the least environmentally sensitive areas; i.e., away from riparian habitats, streams, wetlands, drainages, or critical wildlife habitats).

- The BLM will prohibit the disturbance of any population of federal listed plant species.

- Operators shall evaluate avian and bat use of the project area and design the project to minimize or mitigate the potential for bird and bat strikes (e.g., development shall not occur in riparian habitats and wetlands). Scientifically rigorous avian and bat use surveys shall be conducted; the amount and extent of ecological baseline data required shall be determined on a project basis.

- Turbines shall be configured to avoid landscape features known to attract raptors, if site studies show that placing turbines there would pose a significant risk to raptors.

- Operators shall determine the presence of bat colonies and avoid placing turbines near known bat hibernation, breeding, and maternity/nursery colonies; in known migration corridors; or in known flight paths between colonies and feeding areas.

- Operators shall determine the presence of active raptor nests (i.e., raptor nests used during the breeding season). Measures to reduce raptor use at a project site (e.g., minimize road cuts, maintain either no vegetation or nonattractive plant species around the turbines) shall be considered.

- A habitat restoration plan shall be developed to avoid (if possible), minimize, or mitigate negative impacts on vulnerable wildlife while maintaining or enhancing habitat values for other species. The plan shall identify revegetation, soil stabilization, and erosion reduction measures that shall be implemented to ensure that all temporary use areas are restored. The plan shall require that restoration occur as soon as possible after completion of activities to reduce the amount of habitat converted at any one time and to speed up the recovery to natural habitats.

- Procedures shall be developed to mitigate potential impacts to special status species. Such measures could include avoidance, relocation of project facilities or lay-down areas, and/or relocation of biota.

- Facilities shall be designed to discourage their use as perching or nesting substrates by birds. For example, power lines and poles shall be configured to minimize raptor electrocutions and discourage raptor and raven nesting and perching.

Visual Resources

- The public shall be involved and informed about the visual site design elements of the proposed wind energy facilities. Possible approaches include conducting public forums for disseminating information, offering organized tours of operating wind developments, and using computer simulation and visualization techniques in public presentations.

- Turbine arrays and turbine design shall be integrated with the surrounding landscape. Design elements to be addressed include visual uniformity, use of tubular towers, proportion and color of turbines, nonreflective paints, and prohibition of commercial messages on turbines.

- Other site design elements shall be integrated with the surrounding landscape. Elements to address include minimizing the profile of the ancillary structures, burial of cables, prohibition of commercial symbols, and lighting. Regarding

lighting, efforts shall be made to minimize the need for and amount of lighting on ancillary structures.

Roads

- An access road siting and management plan shall be prepared incorporating existing BLM standards regarding road design, construction, and maintenance such as those described in the BLM 9113 Manual (BLM 1985) and the *Surface Operating Standards for Oil and Gas Exploration and Development* (RMRCC 1989) (i.e., the Gold Book).

Ground Transportation

- A transportation plan shall be developed, particularly for the transport of turbine components, main assembly cranes, and other large pieces of equipment. The plan shall consider specific object sizes, weights, origin, destination, and unique handling requirements and shall evaluate alternative transportation approaches. In addition, the process to be used to comply with unique state requirements and to obtain all necessary permits shall be clearly identified.

- A traffic management plan shall be prepared for the site access roads to ensure that no hazards would result from the increased truck traffic and that traffic flow would not be adversely impacted. This plan shall incorporate measures such as informational signs, flaggers when equipment may result in blocked throughways, and traffic cones to identify any necessary changes in temporary lane configuration.

Noise

- Proponents of a wind energy development project shall take measurements to assess the existing background noise levels at a given site and compare them with the anticipated noise levels associated with the proposed project.

Noxious Weeds and Pesticides

- Operators shall develop a plan for control of noxious weeds and invasive species, which could occur as a result of new surface disturbance activities at the site. The plan shall address monitoring, education of personnel on weed identification, the manner in which weeds spread, and methods for treating infestations. The use of certified weed-free mulching shall be required. If trucks and construction equipment are arriving from locations with known

invasive vegetation problems, a controlled inspection and cleaning area shall be established to visually inspect construction equipment arriving at the project area and to remove and collect seeds that may be adhering to tires and other equipment surfaces.

- If pesticides are used on the site, an integrated pest management plan shall be developed to ensure that applications would be conducted within the framework of BLM and DOI policies and entail only the use of EPA-registered pesticides. Pesticide use shall be limited to nonpersistent, immobile pesticides and shall only be applied in accordance with label and application permit directions and stipulations for terrestrial and aquatic applications.

Cultural/Historic Resources

- The BLM will consult with Indian Tribal governments early in the planning process to identify issues regarding the proposed wind energy development, including issues related to the presence of cultural properties, access rights, disruption to traditional cultural practices, and impacts to visual resources important to the Tribe(s).

- The presence of archaeological sites and historic properties in the area of potential effect shall be determined on the basis of a records search of recorded sites and properties in the area and/or, depending on the extent and reliability of existing information, an archaeological survey. Archaeological sites and historic properties present in the area of potential effect shall be reviewed to determine whether they meet the criteria of eligibility for listing on the *National Register of Historic Places* (NRHP).

- When any rights-of-way application includes remnants of a National Historic Trail, is located within the viewshed of a National Historic Trail's designated centerline, or includes or is within the viewshed of a trail eligible for listing on the NRHP, the operator shall evaluate the potential visual impacts to the trail associated with the proposed project and identify appropriate mitigation measures for inclusion as stipulations in the POD.

- If cultural resources are present at the site, or if areas with a high potential to contain cultural material have been identified, a cultural resources management plan (CRMP) shall be developed. This plan shall address mitigation activities to be taken for cultural resources found at the site. Avoidance of the area is always the preferred mitigation option. Other mitigation options include archaeological survey and excavation (as warranted) and monitoring. If an area exhibits a high potential, but no artifacts were observed during an archaeological survey, monitoring by a qualified archaeologist could be required during all excavation and

earthmoving in the high-potential area. A report shall be prepared documenting these activities. The CRMP also shall (1) establish a monitoring program, (2) identify measures to prevent potential looting/vandalism or erosion impacts, and (3) address the education of workers and the public to make them aware of the consequences of unauthorized collection of artifacts and destruction of property on public land.

Paleontological Resources

- Operators shall determine whether paleontological resources exist in a project area on the basis of the sedimentary context of the area, a records search for past paleontological finds in the area, and/or, depending on the extent of existing information, a paleontological survey.

- If paleontological resources are present at the site, or if areas with a high potential to contain paleontological material have been identified, a paleontological resources management plan shall be developed. This plan shall include a mitigation plan for collection of the fossils; mitigation could include avoidance, removal of fossils, or monitoring. If an area exhibits a high potential but no fossils were observed during survey, monitoring by a qualified paleontologist could be required during all excavation and earthmoving in the sensitive area. A report shall be prepared documenting these activities. The paleontological resources management plan also shall (1) establish a monitoring program, (2) identify measures to prevent potential looting/vandalism or erosion impacts, and (3) address the education of workers and the public to make them aware of the consequences of unauthorized collection of fossils on public land.

Hazardous Materials and Waste Management

- Operators shall develop a hazardous materials management plan addressing storage, use, transportation, and disposal of each hazardous material anticipated to be used at the site. The plan shall identify all hazardous materials that would be used, stored, or transported at the site. It shall establish inspection procedures, storage requirements, storage quantity limits, inventory control, nonhazardous product substitutes, and disposition of excess materials. The plan shall also identify requirements for notices to federal and local emergency response authorities and include emergency response plans.

- Operators shall develop a waste management plan identifying the waste streams that are expected to be generated at the site and addressing hazardous waste determination procedures, waste storage locations, waste-specific management and disposal requirements, inspection procedures, and waste

minimization procedures. This plan shall address all solid and liquid wastes that may be generated at the site.

- Operators shall develop a spill prevention and response plan identifying where hazardous materials and wastes are stored on site, spill prevention measures to be implemented, training requirements, appropriate spill response actions for each material or waste, the locations of spill response kits on site, a procedure for ensuring that the spill response kits are adequately stocked at all times, and procedures for making timely notifications to authorities.

Storm Water

- Operators shall develop a storm water management plan for the site to ensure compliance with applicable regulations and prevent off-site migration of contaminated storm water or increased soil erosion.

Human Health and Safety

- A safety assessment shall be conducted to describe potential safety issues and the means that would be taken to mitigate them, including issues such as site access, construction, safe work practices, security, heavy equipment transportation, traffic management, emergency procedures, and fire control.

- A health and safety program shall be developed to protect both workers and the general public during construction, operation, and decommissioning of a wind energy project. Regarding occupational health and safety, the program shall identify all applicable federal and state occupational safety standards; establish safe work practices for each task (e.g., requirements for personal protective equipment and safety harnesses; Occupational Safety and Health Administration [OSHA] standard practices for safe use of explosives and blasting agents; and measures for reducing occupational electric and magnetic fields [EMF] exposures); establish fire safety evacuation procedures; and define safety performance standards (e.g., electrical system standards and lightning protection standards). The program shall include a training program to identify hazard training requirements for workers for each task and establish procedures for providing required training to all workers. Documentation of training and a mechanism for reporting serious accidents to appropriate agencies shall be established.

- Regarding public health and safety, the health and safety program shall establish a safety zone or setback for wind turbine generators from residences and occupied buildings, roads, rights-of-ways, and other public access areas that is sufficient to prevent accidents resulting from the operation of wind turbine generators. It shall identify requirements for temporary fencing

around staging areas, storage yards, and excavations during construction or decommissioning activities. It shall also identify measures to be taken during the operation phase to limit public access to hazardous facilities (e.g., permanent fencing would be installed only around electrical substations, and turbine tower access doors would be locked).

- Operators shall consult with local planning authorities regarding increased traffic during the construction phase, including an assessment of the number of vehicles per day, their size, and type. Specific issues of concern (e.g., location of school bus routes and stops) shall be identified and addressed in the traffic management plan.

- If operation of the wind turbines is expected to cause significant adverse impacts to nearby residences and occupied buildings from shadow flicker, low-frequency sound, or EMF, site-specific recommendations for addressing these concerns shall be incorporated into the project design (e.g., establishing a sufficient setback from turbines).

- The project shall be planned to minimize electromagnetic interference (EMI) (e.g., impacts to radar, microwave, television, and radio transmissions) and comply with Federal Communications Commission [FCC] regulations. Signal strength studies shall be conducted when proposed locations have the potential to impact transmissions. Potential interference with public safety communication systems (e.g., radio traffic related to emergency activities) shall be avoided.

- The project shall be planned to comply with FAA regulations, including lighting regulations, and to avoid potential safety issues associated with proximity to airports, military bases or training areas, or landing strips.

- Operators shall develop a fire management strategy to implement measures to minimize the potential for a human-caused fire.

A.2.3 Construction

General

- All control and mitigation measures established for the project in the POD and the resource-specific management plans that are part of the POD shall be maintained and implemented throughout the construction phase, as appropriate.

- The area disturbed by construction and operation of a wind energy development project (i.e., footprint) shall be kept to a minimum.

- The number and size/length of roads, temporary fences, lay-down areas, and borrow areas shall be minimized.

- Topsoil from all excavations and construction activities shall be salvaged and reapplied during reclamation.

- All areas of disturbed soil shall be reclaimed using weed-free native grasses, forbs, and shrubs. Reclamation activities shall be undertaken as early as possible on disturbed areas.

- All electrical collector lines shall be buried in a manner that minimizes additional surface disturbance (e.g., along roads or other paths of surface disturbance). Overhead lines may be used in cases where burial of lines would result in further habitat disturbance.

- Operators shall identify unstable slopes and local factors that can induce slope instability (such as groundwater conditions, precipitation, earthquake activities, slope angles, and the dip angles of geologic strata). Operators also shall avoid creating excessive slopes during excavation and blasting operations. Special construction techniques shall be used where applicable in areas of steep slopes, erodible soil, and stream channel crossings.

- Erosion controls that comply with county, state, and federal standards shall be applied. Practices such as jute netting, silt fences, and check dams shall be applied near disturbed areas.

Wildlife

- Guy wires on permanent meteorological towers shall be avoided, however, may be necessary on temporary meteorological towers installed during site monitoring and testing.

- In accordance with the habitat restoration plan, restoration shall be undertaken as soon as possible after completion of construction activities to reduce the amount of habitat converted at any one time and to speed up the recovery to natural habitats.

- All construction employees shall be instructed to avoid harassment and disturbance of wildlife, especially during reproductive (e.g., courtship and nesting) seasons. In addition, pets shall not be permitted on site during construction.

Visual Resources

- Operators shall reduce visual impacts during construction by minimizing areas of surface disturbance, controlling erosion, using dust suppression techniques, and restoring exposed soils as closely as possible to their original contour and vegetation.

Roads

- Existing roads shall be used, but only if in safe and environmentally sound locations. If new roads are necessary, they shall be designed and constructed to the appropriate standard and be no higher than necessary to accommodate their intended functions (e.g., traffic volume and weight of vehicles). Excessive grades on roads, road embankments, ditches, and drainages shall be avoided, especially in areas with erodible soils. Special construction techniques shall be used, where applicable. Abandoned roads and roads that are no longer needed shall be recontoured and revegetated.

- Access roads and on-site roads shall be surfaced with aggregate materials, wherever appropriate.

- Access roads shall be located to follow natural contours and minimize side hill cuts.

- Roads shall be located away from drainage bottoms and avoid wetlands, if practicable.

- Roads shall be designed so that changes to surface water runoff are avoided and erosion is not initiated.

- Access roads shall be located to minimize stream crossings. All structures crossing streams shall be located and constructed so that they do not decrease channel stability or increase water velocity. Operators shall obtain all applicable federal and state permits.

- Existing drainage systems shall not be altered, especially in sensitive areas such as erodible soils or steep slopes. Potential soil erosion shall be controlled at culvert outlets with appropriate structures. Catch basins, roadway ditches, and culverts shall be cleaned and maintained regularly.

Ground Transportation

- Project personnel and contractors shall be instructed and required to adhere to speed limits commensurate with road types, traffic volumes, vehicle types,

and site-specific conditions, to ensure safe and efficient traffic flow and to reduce wildlife collisions and disturbance and airborne dust.

- Traffic shall be restricted to the roads developed for the project. Use of other unimproved roads shall be restricted to emergency situations.

- Signs shall be placed along construction roads to identify speed limits, travel restrictions, and other standard traffic control information. To minimize impacts on local commuters, consideration shall be given to limiting construction vehicles traveling on public roadways during the morning and late afternoon commute time.

Air Emissions

- Dust abatement techniques shall be used on unpaved, unvegetated surfaces to minimize airborne dust.

- Speed limits (e.g., 25 mph [40 km/h]) shall be posted and enforced to reduce airborne fugitive dust.

- Construction materials and stockpiled soils shall be covered if they are a source of fugitive dust.

- Dust abatement techniques shall be used before and during surface clearing, excavation, or blasting activities.

Excavation and Blasting Activities

- Operators shall gain a clear understanding of the local hydrogeology. Areas of groundwater discharge and recharge and their potential relationships with surface water bodies shall be identified.

- Operators shall avoid creating hydrologic conduits between two aquifers during foundation excavation and other activities.

- Foundations and trenches shall be backfilled with originally excavated material as much as possible. Excess excavation materials shall be disposed of only in approved areas or, if suitable, stockpiled for use in reclamation activities.

- Borrow material shall be obtained only from authorized and permitted sites. Existing sites shall be used in preference to new sites.

- Explosives shall be used only within specified times and at specified distances from sensitive wildlife or streams and lakes, as established by the BLM or other federal and state agencies.

Noise

- Noisy construction activities (including blasting) shall be limited to the least noise-sensitive times of day (i.e., daytime only between 7 a.m. and 10 p.m.) and weekdays.

- All equipment shall have sound-control devices no less effective than those provided on the original equipment. All construction equipment used shall be adequately muffled and maintained.

- All stationary construction equipment (i.e., compressors and generators) shall be located as far as practicable from nearby residences.

- If blasting or other noisy activities are required during the construction period, nearby residents shall be notified in advance.

Cultural and Paleontological Resources

- Unexpected discovery of cultural or paleontological resources during construction shall be brought to the attention of the responsible BLM authorized officer immediately. Work shall be halted in the vicinity of the find to avoid further disturbance to the resources while they are being evaluated and appropriate mitigation measures are being developed.

Hazardous Materials and Waste Management

- Secondary containment shall be provided for all on-site hazardous materials and waste storage, including fuel. In particular, fuel storage (for construction vehicles and equipment) shall be a temporary activity occurring only for as long as is needed to support construction activities.

- Wastes shall be properly containerized and removed periodically for disposal at appropriate off-site permitted disposal facilities.

- In the event of an accidental release to the environment, the operator shall document the event, including a root cause analysis, appropriate corrective actions taken, and a characterization of the resulting environmental or health and safety impacts. Documentation of the event shall be provided to the BLM authorized officer and other federal and state agencies, as required.

- Any wastewater generated in association with temporary, portable sanitary facilities shall be periodically removed by a licensed hauler and introduced into an existing municipal sewage treatment facility. Temporary, portable sanitary facilities provided for construction crews shall be adequate to support expected on-site personnel and shall be removed at completion of construction activities.

Public Health and Safety

- Temporary fencing shall be installed around staging areas, storage yards, and excavations during construction to limit public access.

A.2.4 Operation

General

- All control and mitigation measures established for the project in the POD and the resource-specific management plans that are part of the POD shall be maintained and implemented throughout the operational phase, as appropriate. These control and mitigation measures shall be reviewed and revised, as needed, to address changing conditions or requirements at the site, throughout the operational phase. This adaptive management approach would help ensure that impacts from operations are kept to a minimum.

- Inoperative turbines shall be repaired, replaced, or removed in a timely manner. Requirements to do so shall be incorporated into the due diligence provisions of the rights-of-way authorization. Operators will be required to demonstrate due diligence in the repair, replacement, or removal of turbines; failure to do so could result in termination of the rights-of-way authorization.

Wildlife

- Employees, contractors, and site visitors shall be instructed to avoid harassment and disturbance of wildlife, especially during reproductive (e.g., courtship and nesting) seasons. In addition, any pets shall be controlled to avoid harassment and disturbance of wildlife.

- Observations of potential wildlife problems, including wildlife mortality, shall be reported to the BLM authorized officer immediately.

Ground Transportation

- Ongoing ground transportation planning shall be conducted to evaluate road use, minimize traffic volume, and ensure that roads are maintained adequately to minimize associated impacts.

Monitoring Program

- Site monitoring protocols defined in the POD shall be implemented. These will incorporate monitoring program observations and additional mitigation measures into standard operating procedures and BMPs to minimize future environmental impacts.

- Results of monitoring program efforts shall be provided to the BLM authorized officer.

Public Health and Safety

- Permanent fencing shall be installed and maintained around electrical substations, and turbine tower access doors shall be locked to limit public access.

- In the event an installed wind energy development project results in EMI, the operator shall work with the owner of the impacted communications system to resolve the problem. Additional warning information may also need to be conveyed to aircraft with onboard radar systems so that echoes from wind turbines can be quickly recognized.

A.2.5 Decommissioning

General

- Prior to the termination of the rights-of-way authorization, a decommissioning plan shall be developed and approved by the BLM. The decommissioning plan shall include a site reclamation plan and monitoring program.

- All management plans, BMPs, and stipulations developed for the construction phase shall be applied to similar activities during the decommissioning phase.

- All turbines and ancillary structures shall be removed from the site.

- Topsoil from all decommissioning activities shall be salvaged and reapplied during final reclamation.

- All areas of disturbed soil shall be reclaimed using weed-free native shrubs, grasses, and forbs.

- The vegetation cover, composition, and diversity shall be restored to values commensurate with the ecological setting.

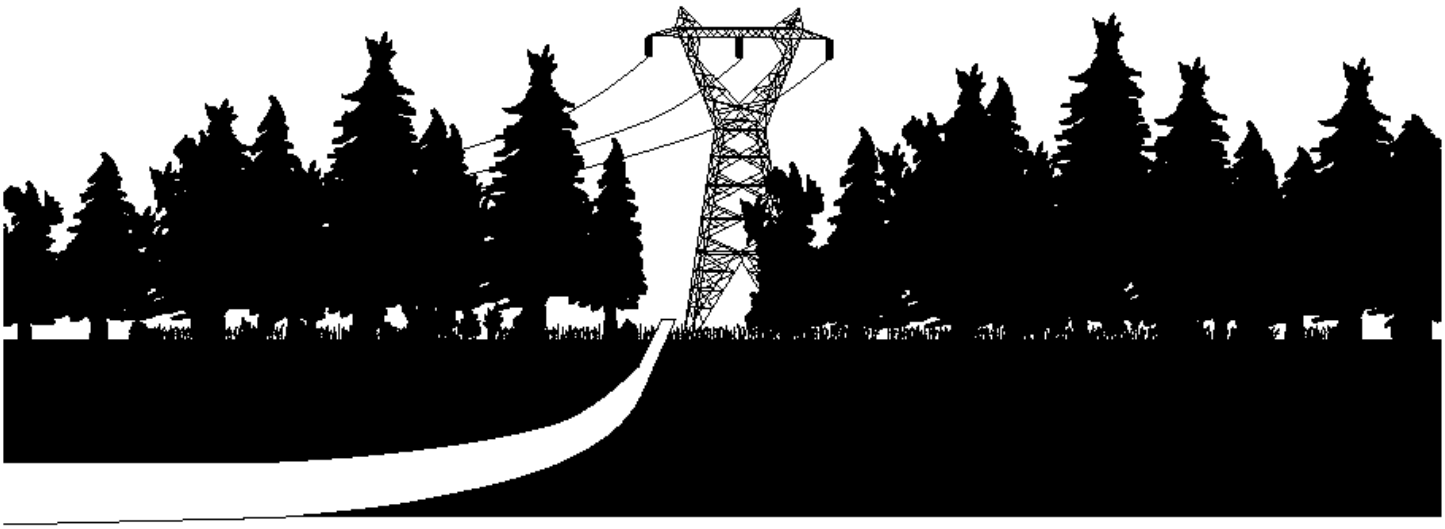
Appendix D: Western Area Power Administration Construction Standards

Western
AREA POWER
ADMINISTRATION

CONSTRUCTION STANDARDS

STANDARD 13

ENVIRONMENTAL QUALITY PROTECTION



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SAFETY
A HABIT TO LIVE BY

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SECTION 13.1--CONTRACTOR FURNISHED DATA

1. RECYCLED MATERIAL QUANTITY REPORT: Submit quantities for recycled material listed in Section 13.6, "Recycled Material Quantities", to the COR after completion and prior to submittal of final invoice.

2. RECOVERED MATERIAL AND BIOBASED PRODUCTS REPORT: Provide the COR the following information for purchases of items listed in Section 13.7, "Use of Recovered Material And Biobased Products":

   (1) Quantity and cost of listed items with recovered or biobased material content and quantity and cost of listed items without recovered or biobased material content after completion and prior to submittal of final invoice.

3. RECLAIMED REFRIGERANT RECEIPT: A receipt from the reclaimer stating that the refrigerant was reclaimed, the amount and type of refrigerant, and the date shall be submitted to the COR after completion and prior to submittal of final invoice in accordance with Section 13.8.5, –Refrigerants And Receipts".

4. WASTE MATERIAL QUANTITY REPORT: Submit quantities of total project waste material disposal as listed below to the COR after completion and prior to submittal of final invoice in accordance with Section 13.8.8, –Waste Material Quantity Report".

   (1) Sanitary Wastes: Volume in cubic yards or weight in pounds.

   (2) Hazardous or Universal Wastes: Weight in pounds.

   (3) PCB Wastes: Weight in pounds.

   (4) Other regulated wastes (e.g., lead-based paint or asbestos): Weight in pounds (specify type of waste in report).

5. SPILL PREVENTION NOTIFICATION AND CLEANUP PLAN (Plan): Submit the Plan as described in Section 13.10.2, "Spill Prevention Notification and Cleanup Plan", to the COR for approval 14 days prior to start of work. Approval of the Plan is for the purpose of determining compliance with the specifications only and shall not relieve the Contractor of the responsibility for compliance with all Federal, State, and Local regulations.

6. TANKER OIL SPILL PREVENTION AND RESPONSE PLAN: Submit the Plan as described in Section 13.10.3, "Tanker Oil Spill Prevention and Response Plan", to the COR for approval 14 days prior to start of work. Approval of the Plan is for the purpose of determining compliance with the specifications only and shall not relieve the Contractor of the responsibility for compliance with all Federal, State, and Local regulations.

7. PESTICIDE USE PLAN: Submit two copies of a pesticide use plan as described in Section 13.11.3, –Pesticide Use Plan", to the COR for approval 14 days prior to use. Approval of the plan is for the purpose of determining compliance with the specifications only and shall not relieve the Contractor of the responsibility for compliance with all Federal, State, and Local regulations. Within seven days after application, submit a written report in accordance with Standard 2 – Sitework, Section 2.1.1.5, –Soil-Applied Herbicide".

8. TREATED WOOD POLE AND MEMBERS RECYCLING CONSUMER INFORMATION RECEIPT: Submit treated wood pole and members consumer receipt forms to the COR after completion and prior to submittal of final invoice (see 13.12, –Treated Wood Poles and Members Recycling or Disposal").

9. PREVENTION OF AIR POLLUTION: Submit a copy of permits, if required, from Federal, State, or local agencies to the COR 14 days prior to the start of work.

10. ASBESTOS LICENSES OR CERTIFICATIONS: Submit a copy of licenses and/or certifications for asbestos work as described in 13.14, ~~"~~Handling and Management of Asbestos Containing Material" paragraph a., to the COR prior to work. Submit copies of certificates of disposal and/or receipts for waste to the COR after completion and prior to submittal of final invoice.

11. LEAD PAINT NOTICES: Submit a copy of lead paint notices as described in 13.15, ~~"~~Material with Lead-based Paint" paragraph b., to the COR upon completion and prior to submittal of final invoice. Submit copies of certificates of disposal and/or receipts for waste to the COR after completion and prior to submittal of final invoice.

12. WATER POLLUTION PERMITS: Submit copies of any water pollution permits as described in 13.16, ~~"~~Prevention of Water Pollution" paragraph b., to the COR prior to work.

13. PCB TEST REPORT: Submit a PCB test report as described in 13.17, ~~"~~Testing, Draining, Removal, and Disposal of Oil-filled Electrical Equipment" paragraph b., prior to draining, removal, or disposal of oil or oil-filled equipment that is designated for disposal.

14. OIL AND OIL-FILLED ELECTRICAL EQUIPMENT RECEIPT: Obtain and submit a receipt for oil and oil-filled equipment transported and disposed, recycled, or reprocessed as described in 13.17, ~~"~~Testing, Draining, Removal, and Disposal of Oil-filled Electrical Equipment", to the COR upon completion and prior to submittal of final invoice.

15. OSHA PCB TRAINING RECORDS: Submit employee training documentation records to the COR 14 days prior to the start of work as described in 13.18.1.

16. CLEANUP WORK MANAGEMENT PLAN: Submit a Cleanup Work Management Plan as described in 13.18, ~~"~~Removal of Oil-contaminated Material" paragraph b., to the COR for approval 14 days prior to the start of work. Approval of the plan is for the purpose of determining compliance with the specifications only and shall not relieve the Contractor of the responsibility for compliance with all Federal, State, and Local regulations.

17. POST CLEANUP REPORT: Submit a Post-Cleanup Report as described in 13.18, ~~"~~Removal of Oil-contaminated Material" paragraph g., to the COR upon completion and prior to submittal of final invoice.

SECTION 13.2--ENVIRONMENTAL REQUIREMENTS

Comply with Federal, State, and local environmental laws and regulations. The sections in this Standard further specify the requirements.

SECTION 13.3--LANDSCAPE PRESERVATION

1. GENERAL: Preserve landscape features in accordance with the contract clause titled "Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements."

2. CONSTRUCTION ROADS: Location, alignment, and grade of construction roads shall be subject to the COR's approval. When no longer required, construction roads shall be restored to their original condition. Surfaces of construction roads shall be scarified to facilitate natural revegetation, provide for proper drainage, and prevent erosion. If re-vegetation is required, use regionally native plants.

3. CONSTRUCTION FACILITIES: Shop, office, and yard areas shall be located and arranged in a manner to preserve trees and vegetation to the maximum practicable extent and prevent impact on sensitive riparian areas and flood plains. Storage and construction buildings, including concrete footings and slabs, shall be removed from the site prior to contract completion. The area shall be re-graded as required so that all surfaces drain naturally, blend with the natural terrain, and are left in a condition that will facilitate natural revegetation, provide for proper drainage, and prevent erosion or transport of sediment and pollutants. If re-vegetation is required, use regionally native plants.

SECTION 13.4--PRESERVATION OF CULTURAL AND PALEONTOLOGICAL RESOURCES

1. GENERAL: Do not remove or alter cultural artifacts or paleontological resources (fossils). Cultural artifacts may be of scientific or cultural importance and include bones, pottery, glass, projectile points (arrowheads), other stone or metal tools, historic buildings, and features. Paleontological resources can be of scientific importance and include mineralized animals and plants or trace fossils such as footprints. Both cultural and paleontological resources are protected by Federal Regulations during Federal construction projects. Contractor must always stay within Western's right-of-way and/or easement.

2. KNOWN CULTURAL OR PALEONTOLOGICAL SITES: Following issuance of notice to proceed, Western will provide two sets of plan and profile drawings showing sensitive areas located on or immediately adjacent to the transmission line right-of-way and/or facility. These areas shall be considered avoidance areas. Prior to any construction activity, the avoidance areas shall be marked on the ground in a manner approved by the COR. Instruct employees, subcontractors, and others that vehicular or equipment access to these areas is prohibited. If access is absolutely necessary, first obtain approval from the COR. Western will remove the markings during or following final cleanup. For some project work, Western will require an archaeological, paleontological or tribal monitor at or near cultural or paleontological site locations. The contractor shall work with the monitor to insure that sensitive locations are avoided. Where monitors are required, the monitor shall meet with the crew each morning to go over the day's work. The monitor will also conduct awareness training for all contractors prior to any work in the field. Untrained personnel shall not be allowed in the construction area. For areas designated as sensitive and requiring a monitor, the contractor may not access those areas without a monitor being present.

3. UNKNOWN CULTURAL OR PALEONTOLOGICAL SITES: On rare occasions cultural or paleontological sites may be discovered during excavation or other earth-moving activities.

   (1) Reporting: If evidence of a cultural or paleontological site is discovered, cease work in the area immediately and notify the COR of the location and nature of the findings. If a monitor is present, the monitor should also be notified. Stop all activities within a 200-foot radius of the discovery and do not proceed with work within that radius until directed to do so by the COR.

   (2) Care of Evidence: Protect the area. Do not remove, handle, alter, or damage artifacts or fossils uncovered during construction.

SECTION 13.5--NOXIOUS WEED CONTROL

1. GENERAL: Comply with Federal, state, and local noxious weed control regulations. Provide a "clean vehicle policy" while entering and leaving construction areas to prevent transport of noxious weed plants and/or seed. Transport only construction vehicles that are free of mud and vegetation debris to staging areas and the project right-of-way.

SECTION 13.6--RECYCLED MATERIAL QUANTITIES

1. GENERAL: Record quantities of the following material by category that is salvaged, recycled, reused, or reprocessed:

   (1) Transformers, Breakers: Weight without oil.

   (2) Electrical Conductors: Length in feet and Type (for example, ACSR, Copper, and gauge).

   (3) Steel: Weight in pounds or tons.

   (4) Aluminum: Weight in pounds or tons

   (5) Copper: Weight in pounds or tons..

   (6) Other Metals: Weight in pounds or tons.

   (7) Oil: Gallons (separate by type - less than 2 ppm PCB, 2 to 50 ppm PCB, and 50 or greater ppm PCB).

   (8) Gravel, Asphalt, Or Concrete: Weight in pounds or tons.

   (9) Batteries: Weight in pounds.

   (10) Wood Poles and Crossarms: Weight in pounds.

   (11) Wood construction material: Weight in pounds.

   (12) Cardboard: Weight in pounds.

   (13) Porcelain insulators: Weight in pounds.

2. RECYCLED MATERIAL QUANTITY REPORT: Submit quantities for recycled material listed above to the COR after completion and prior to submittal of final invoice.

SECTION 13.7--USE OF RECOVERED MATERIAL AND BIOBASED PRODUCTS

1. RECOVERED MATERIAL PRODUCTS: If the products listed below are obtained as part of this project, purchase the items with the highest recovered material content possible unless recovered material products are not available: 1) competitively within a reasonable time frame; 2) meeting reasonable performance standards as defined in the Standards or Project Specifications; or 3) at a reasonable price.

   (1) Construction Products:

      1) Building Insulation Products.

      2) Carpet.

      3) Carpet cushion.

      4) Cement and concrete containing coal fly ash, ground granulated blast furnace slag, cenospheres, or silica fume.

      5) Consolidated and reprocessed latex paint.

      6) Floor Tiles.

      7) Flowable fill.

      8) Laminated Paperboard.

      9) Modular threshold ramps.

      10) Nonpressure pipe.

      11) Patio Blocks.

      12) Railroad grade crossing surfaces.

      13) Roofing materials.

      14) Shower and restroom dividers/partitions.

      15) Structural Fiberboard.

   (2) Landscaping Products:

      1) Compost made from yard trimmings or food waste.
      2) Garden and soaker hoses.
      3) Hydraulic Mulch.
      4) Lawn and garden edging.
      5) Plastic lumber landscaping timbers and posts.

   (3) Non-paper Office Products:

      1) Binders, clipboards, file folders, clip portfolios, and presentation folders.
      2) Office furniture.
      3) Office recycling containers.
      4) Office waste receptacles.
      5) Plastic desktop accessories.

6) Plastic envelopes.
7) Plastic trash bags.
8) Printer ribbons.
9) Toner cartridges.

(4) Paper and Paper Products:

1) Commercial/industrial sanitary tissue products.
2) Miscellaneous papers.
3) Newsprint.
4) Paperboard and packaging products.
5) Printing and writing papers.

(5) Park and Recreation Products:

1) Park benches and picnic tables.
2) Plastic fencing.
3) Playground equipment.
4) Playground surfaces.
5) Running tracks.

(6) Transportation Products:

1) Channelizers.
2) Delineators.
3) Flexible delineators.
4) Parking stops.
5) Traffic barricades.
6) Traffic cones.

(7) Vehicular Products:

1) Engine coolants.
2) Rebuilt Vehicular Parts.
3) Re-refined lubricating oils.
4) Retread tires.

(8) Miscellaneous Products:

1) Awards and plaques.
2) Bike racks.
3) Blasting grit.
4) Industrial drums.
5) Manual-grade strapping.
6) Mats.
7) Pallets.
8) Signage.
9) Sorbents.

(9) For a complete listing of products and recommendations for recovered content, see http://www.epa.gov/cpg/products.htm

2. BIOBASED PRODUCTS: If the products listed below are obtained as part of this project, purchase the items with the highest biobased content possible and no less than the percent indicated for each product unless biobased products are not available: 1) competitively within a reasonable

time frame; 2) meeting reasonable performance standards as defined in the Standards or Project Specifications; or 3) at a reasonable price.

(1) Mobile Equipment Hydraulic Fluids (minimum 24% biobased content).

(2) Urethane Roof Coatings (minimum 62% biobased content).

(3) Water Tank Coatings (minimum 62% biobased content).

(4) Diesel Fuel Additives (minimum 93% biobased content).

(5) Penetrating Lubricants (minimum 71% biobased content).

(6) Bedding, Bed Linens, and Towels (minimum 18% biobased content).

(7) Adhesive and mastic removers 58%.

(8) Plastic insulating foam for residential and commercial construction 7%.

(9) Hand cleaners and sanitizers.

1) Hand cleaners—64 %
2) Hand sanitizers (including hand cleaners and sanitizers)—73 %

(10) Composite panels.

1) Plastic lumber composite panels—23 %
2) Acoustical composite panels—37 %
3) Interior panels—55 %
4) Structural interior panels—89 %
5) Structural wall panels—94 %

(11) Fluid-filled transformers.

1) Synthetic ester-based fluid-filled transformers—66 %
2) Vegetable oil-based fluid-filled transformers—95 %

(12) Disposable containers 72%.

(13) Fertilizers 71%.

(14) Sorbents 89%.

(15) Graffiti and grease removers 34%.

(16) 2-Cycle engine oils 34%.

(17) Lip care products 82%.

(18) Films (used in packaging, wrappings, linings, and other similar applications).

1) Semi-durable films—45%
2) Non-durable films—85%

(19) Stationary equipment hydraulic Fluids 44%.

(20) Disposable cutlery 48%.

(21) Glass cleaners 49%.

(22) Greases.

1) Food grade grease—42%
2) Multipurpose grease—72%
3) Rail track grease—30%
4) Truck grease—71%
5) Greases not elsewhere specified—75%

(23) Dust suppressants 85%.

(24) Carpets 7%.

(25) Carpet and upholstery cleaners.

1) General purpose cleaners—54%
2) Spot removers—7%

(26) Bathroom and spa cleaners 74%.

(27) Concrete and asphalt release fluids 87%.

(28) General purpose de-icers 93%.

(29) Firearm lubricants 49%.

(30) Floor strippers 78%.

(31) Laundry products.

1) Pretreatment/spot removers—46%
2) General purpose laundry products—34%

(32) Metalworking fluids.

1) Straight oils—66%
2) General purpose soluble, semisynthetic, and synthetic oils—57%
3) High performance soluble, semisynthetic, and synthetic oils—40%

(33) Wood and concrete sealers.

1) Penetrating liquids—79%
2) Membrane concrete sealers—11%

For additional information regarding biobased products, see **http://www.biobased.oce.usda.gov**

3. RECOVERED MATERIAL AND BIOBASED PRODUCTS REPORT: Provide the COR the following information for purchases of those items listed above:

(1) Quantity and cost of listed items with recovered or biobased material content and quantity and cost of listed items without recovered or biobased material content after completion and prior to submittal of final invoice.

(2) Written justification 7 work days prior to purchase of listed items if recovered material or biobased products are not available: 1) competitively within a reasonable time frame; 2) meeting reasonable performance standards as defined in the Standards or Project Specifications; or 3) at a reasonable price.

SECTION 13.8--DISPOSAL OF WASTE MATERIAL

1. GENERAL: Dispose or recycle waste material in accordance with applicable Federal, State and Local regulations and ordinances. In addition to the requirements of the Contract Clause –Cleaning Up", remove all waste material from the construction site. No waste shall be left on Western property, right-of-way, or easement. Burning or burying of waste material is not permitted.

2. HAZARDOUS, UNIVERSAL, AND NON-HAZARDOUS WASTES: Manage hazardous, universal, and non-hazardous wastes in accordance with State and Federal regulations.

3. USED OIL: Used oil generated from the Contractor activities shall be managed in accordance with used oil regulations.

4. RECYCLABLE MATERIAL: Reduce wastes, including excess Western material, by recycling, reusing, or reprocessing. Examples of recycling, reusing, or reprocessing include reprocessing of solvents; recycling cardboard; and salvaging scrap metals.

5. REFRIGERANTS AND RECEIPTS: Refrigerants from air conditioners, water coolers, refrigerators, ice machines and vehicles shall be reclaimed with certified equipment operated by certified technicians if the item is to be disposed. Refrigerants shall be reclaimed and not vented to the atmosphere. A receipt from the reclaimer stating that the refrigerant was reclaimed, the amount and type of refrigerant, and the date shall be submitted to the COR after completion and prior to submittal of final invoice.

6. HALONS: Equipment containing halons that must be tested, maintained, serviced, repaired, or disposed must be handled according to EPA requirements and by technicians trained according to those requirements.

7. SULFUR HEXAFLOURIDE (SF_6): SF_6 shall be reclaimed and not vented to the atmosphere.

8. WASTE MATERIAL QUANTITY REPORT: Submit quantities of total project waste material disposal as listed below to the COR after completion and prior to submittal of final invoice.

   (1) Sanitary Wastes: Volume in cubic yards or weight in pounds.

   (2) Hazardous or Universal Wastes: Weight in pounds.

   (3) PCB Wastes: Weight in pounds.

   (4) Other regulated wastes (e.g., lead-based paint or asbestos): Weight in pounds (specify type of waste in report).

SECTION 13.9--CONTRACTOR'S LIABILITY FOR REGULATED MATERIAL INCIDENTS

1. GENERAL: The Contractor is solely liable for all expenses related to spills, mishandling, or incidents of regulated material attributable to his actions or the actions of his subcontractors. This includes all response, investigation, cleanup, disposal, permitting, reporting, and requirements from applicable environmental regulation agencies.

2. SUPERVISION: The actions of the Contractor employees, agents, and subcontractors shall be properly managed at all times on Western property or while transporting Western's (or previously owned by Western) regulated material and equipment.

SECTION 13.10--POLLUTANT SPILL PREVENTION, NOTIFICATION, AND CLEANUP

1. GENERAL: Provide measures to prevent spills of pollutants and respond appropriately if a spill occurs. A pollutant includes any hazardous or non-hazardous substance that when spilled, will contaminate soil, surface water, or ground water. This includes any solvent, fuel, oil, paint, pesticide, engine coolants, and similar substances.

2. SPILL PREVENTION NOTIFICATION AND CLEANUP PLAN (Plan): Provide the Plan to the COR for approval 14 days prior to start of work. Approval of the plan is for the purpose of determining compliance with the specifications only and shall not relieve the Contractor of the responsibility for compliance with all Federal, State, and Local regulations. Include the following in the Plan:

   (1) Spill Prevention measures. Describe the work practices or precautions that will be used at the job site to prevent spills. These may include engineered or manufactured techniques such as installation of berms around fuel and oil tanks; Storage of fuels, paints, and other substances in spill proof containers; and management techniques such as requiring workers to handle material in certain ways.

   (2) Notification. Most States and the Environmental Protection Agency require by regulation, that anyone who spills certain types of pollutants in certain quantities notify them of the spill within a specific time period. Some of these agencies require written follow up reports and cleanup reports. Include in the Plan, the types of spills for which notification would be made, the agencies notified, the information the agency requires during the notification, and the telephone numbers for notification.

   (3) Employee Awareness Training. Describe employee awareness training procedures that will be implemented to ensure personnel are knowledgeable about the contents of the Plan and the need for notification.

   (4) Commitment of Manpower, Equipment and Material. Identify the arrangements made to respond to spills, including the commitment of manpower, equipment and material.

   (5) If applicable, address all requirements of 40CFR112 pertaining to Spill Prevention, Control and Countermeasures Plans.

3. TANKER OIL SPILL PREVENTION AND RESPONSE PLAN: Provide a Tanker Oil Spill Prevention and Response Plan as required by the Department of Transportation if oil tankers with volume of 3,500 gallons or more are used as part of the project. Submit the Tanker Oil Spill Prevention and Response Plan to the COR for approval 14 days prior to start of work. Approval of the plan is for the purpose of determining compliance with the specifications only and shall not relieve the Contractor of the responsibility for compliance with all Federal, State, and Local regulations.

SECTION 13.11--PESTICIDES

1. GENERAL: The term "pesticide" includes herbicides, insecticides, rodenticides and fungicides. Pesticides shall only be used in accordance with their labeling and applied by appropriately certified applicators.

2. ENVIRONMENTAL PROTECTION AGENCY REGISTRATION: Use EPA registered pesticides that are approved for the intended use.

3. PESTICIDE USE PLAN: The plan shall contain: 1) a description of the pesticide to be used, 2) where it is to be applied, 3) the application rate, 4) a copy of the label, and 5) a copy of required applicator certifications. Submit two copies of the pesticide use plan to the COR for approval 14 days prior to the date of intended application. Approval of the plan is for the purpose of determining compliance with the specifications only and shall not relieve the Contractor of the responsibility for compliance with all Federal, State, and Local regulations. Within seven days after application, submit a written report, including the pesticide applicators report, in accordance with Standard 2 – Sitework, Section 2.1.1.5, "Soil-Applied Herbicide".

SECTION 13.12--TREATED WOOD POLES AND MEMBERS RECYCLING OR DISPOSAL

Whenever practicable, treated wood poles and members removed during the project shall be recycled or transferred to the public for some uses. Treated wood poles and members transferred to a recycler, landfill, or the public shall be accompanied by a written consumer information sheet on treated wood as provided by Western. Obtain a receipt form, part of the consumer information sheet, from the recipient indicating that they have received, read, and understand the consumer information sheet. Treated wood products transferred to right-of-way landowners shall be moved off the right-of-way. Treated wood product scrap or poles and members that cannot be donated or reused shall be properly disposed in a landfill that accepts treated wood and has signed Western's consumer information sheet receipt. Submit treated wood pole and members consumer receipt forms to the COR after completion and prior to submittal of final invoice.

SECTION 13.13--PREVENTION OF AIR POLLUTION

1. GENERAL: Ensure that construction activities and the operation of equipment are undertaken to reduce the emission of air pollutants. Submit a copy of permits, if required, from Federal, State, or local agencies to the COR 14 days prior to the start of work.

2. MACHINERY AIR EMISSIONS: The Contractor and subcontractor machinery shall have, and shall use the air emissions control devices required by Federal, State or Local Regulation or ordinance.

3. DUST ABATEMENT: Dust shall be controlled. Oil shall not be used as a dust suppressant. Dust suppressants shall be approved by the COR prior to use.

SECTION 13.14--HANDLING AND MANAGEMENT OF ASBESTOS CONTAINING MATERIAL

1. GENERAL: Obtain the appropriate Federal, State, Tribal or local licenses or certifications prior to disturbing any regulated asbestos-containing material. If a building or portion of a building will be demolished or renovated, obtain an Asbestos Notice of and Permit for Demolition and Renovation from the State or Tribal Department of Environmental Quality, Division of Air Quality (or equivalent). The building(s) shall be inspected by a State-Certified or Tribal accepted Asbestos Building Inspector and the inspector shall certify the presence and condition of asbestos on site as directed on the State or Tribal Demolition and Renovation Notice/Permit. The inspections shall be performed and notifications shall be submitted whether asbestos is present or not. Submit a copy of licenses, certifications, Demolition and Renovation Notifications and Permits for asbestos work to the COR 14 days prior to work. Ensure: 1) worker and public safety requirements are fully implemented and 2) proper handling, transportation, and disposal of asbestos containing material.

2. TRANSPORTATION OF ASBESTOS WASTE: Comply with Department of Transportation, Environmental Protection Agency, and State and Local requirements when transporting asbestos wastes.

3. CERTIFICATES OF DISPOSAL AND RECEIPTS: Obtain certificates of disposal for waste if the waste is a hazardous waste or receipts if the waste is a non-hazardous waste. Submit copies to the COR after completion and prior to submittal of final invoice.

SECTION 13.15--MATERIAL WITH LEAD-BASED PAINT

1. GENERAL: Comply with all applicable Federal, State and local regulations concerning work with lead-based paint, disposal of material painted with lead-based paint, and management of these material. OSHA and General Industry Standards apply to worker safety and right-to-know issues. Federal EPA and State agencies regulate waste disposal and air quality issues.

2. TRANSFER OF PROPERTY: If lead-based paint containing equipment or material is to be given away or sold for reuse, scrap, or reclaiming, a written notice shall be provided to the recipient of the material stating that the material contains lead-based paint and the Hazardous Waste regulations may apply to the waste or the paint in some circumstances. The new owner must also be notified that they may be responsible for compliance with OSHA requirements if the material is to be cut, sanded, abraded, or stripped of paint. Submit a copy of lead paint notices to the COR upon completion and prior to submittal of final invoice.

3. CERTIFICATES OF DISPOSAL AND RECEIPTS: Obtain certificate of disposals for waste if the waste is a hazardous waste or receipts if the waste is a non-hazardous waste. Submit copies to the COR after completion and prior to submittal of final invoice.

SECTION 13.16--PREVENTION OF WATER POLLUTION

1. GENERAL: Ensure that surface and ground water is protected from pollution caused by construction activities and comply with applicable regulations and requirements. Ensure that streams, waterways and other courses are not obstructed or impaired unless the appropriate Federal, State or local permits have been obtained.

2. PERMITS: Ensure that:

   (1) A National Pollutant Discharge Elimination System (NPDES) permit is obtained from the US Environmental Protection Agency or State as appropriate if the disturbed construction area equals 1 acre or more. Disturbed areas include staging, parking, fueling, stockpiling, and any other construction related activities. Refer to www.epa.gov/npdes/stormwater for directions and forms.

   (2) A dewatering permit is obtained from the appropriate agency if required for construction dewatering activities.

   (3) Copies of permits and plans, approved by the appropriate regulating agencies, are submitted to the COR 14 days prior to start of work.

3. EXCAVATED MATERIAL AND OTHER CONTAMINANT SOURCES: Control runoff from excavated areas and piles of excavated material, construction material or wastes (to include truck washing and concrete wastes), and chemical products such as oil, grease, solvents, fuels, pesticides, and pole treatment compounds. Excavated material or other construction material shall not be stockpiled or deposited near or on streambanks, lake shorelines, ditches, irrigation canals, or other areas where run-off could impact the environment.

4. MANAGEMENT OF WASTE CONCRETE OR WASHING OF CONCRETE TRUCKS: Do not permit the washing of concrete trucks or disposal of excess concrete in any ditch, canal, stream, or other surface water. Concrete wastes shall be disposed in accordance with all Federal, State, and local regulations. Concrete wastes shall not be disposed on any Western property, right-of-way, or easement; nor on any streets, roads, or property without the owner's consent.

5. STREAM CROSSINGS: Crossing of any stream or other waterway shall be done in compliance with Federal, State, and local regulations. Crossing of some waterways may be prohibited by landowners, State or Federal agencies or require permits.

SECTION 13.17--TESTING, DRAINING, REMOVAL, AND DISPOSAL OF OIL-FILLED ELECTRICAL EQUIPMENT

1. SAMPLING AND TESTING OF INSULATING OIL FOR PCB CONTENT: Sample and analyze the oil of electrical equipment (which includes storage tanks) for PCB's. Use analytical methods approved by EPA and applicable State regulations. Decontaminate sampling equipment according to documented good laboratory practices (these can be contractor developed or EPA standards). Use only laboratories approved by Western. The COR will furnish a list of approved laboratories.

2. PCB TEST REPORT: Provide PCB test reports that contain the information below for disposing of oil-filled electrical equipment. Submit the PCB test report prior to draining, removal, or disposal of oil or oil-filled equipment that is designated for disposal.

   (1) Name and address of the laboratory.

   (2) Description of the electrical equipment (e.g. transformer, breaker).

   (3) Serial number for the electrical equipment.

   (4) Date sampled.

   (5) Date tested.

   (6) PCB contents in parts per million (ppm).

   (7) Unique identification number of container into which the oil was drained (i.e., number of drum, tank, tanker, etc.)

3. OIL CONTAINING PCB: Comply with the Federal regulations pertaining to PCBs found at Title 40, Part 761 of the U.S. Code of Federal Regulations (40 CFR 761).

4. REMOVAL AND DISPOSAL OF INSULATING OIL AND OIL-FILLED ELECTRICAL EQUIPMENT: Once the PCB content of the oil has been identified from laboratory results, the oil shall be transported and disposed, recycled, or reprocessed according to 40 CFR 761 (if applicable), Resource Conservation and Recovery Act (RCRA) ~~u~~sed oil", and other applicable regulations. Used oil may be transported only by EPA-registered used oil transporters. The oil must be stored in containers that are labeled ~~U~~sed Oil." Use only U.S. transporters and disposal sites approved by Western.

5. OIL AND OIL-FILLED ELECTRICAL EQUIPMENT RECEIPT: Obtain and submit a receipt for oil and oil-filled equipment transported and disposed, recycled, or reprocessed to the COR upon completion and prior to submittal of final invoice.

SECTION 13.18--REMOVAL OF OIL-CONTAMINATED MATERIAL

1. GENERAL: Removing oil-contaminated material includes excavating, stockpiling, testing, transporting, cleaning, and disposing of these material. Personnel working with PCBs shall be trained in accordance with OSHA requirements. Submit employee training documentation records to the COR 14 days prior to the start of work.

2. CLEANUP WORK MANAGEMENT PLAN: Provide a Cleanup Work Management Plan that has been approved by applicable Federal, State, or Local environmental regulation agencies. Submit the plan to the COR for approval 14 days prior to the start of work. Approval of the plan is for the purpose of determining compliance with the specifications only and shall not relieve the Contractor of the responsibility for compliance with all Federal, State, and Local regulations. The plan shall address on-site excavation of contaminated soil and debris and include the following:

   (1) Identification of contaminants and areas to be excavated.
   (2) Method of excavation.
   (3) Level of personnel/subcontractor training.
   (4) Safety and health provisions.
   (5) Sampling requirements including quality control, laboratory to be used.
   (6) Management of excavated soils and debris.
   (7) Disposal methods, including transportation to disposal.

3. EXCAVATION AND CLEANUP: Comply with the requirements of Title 40, Part 761 of the U.S. Code of Federal Regulations (40 CFR 761).

4. TEMPORARY STOCKPILING: Excavated material, temporarily stockpiled on site, shall be stored on heavy plastic and covered to prevent wind and rain erosion at a location designated by the COR.

5. SAMPLING AND TESTING: Sample contaminated debris and areas of excavation to ensure that contamination is removed. Use personnel with experience in sampling and, in particular, with experience in PCB cleanup if PCBs are involved. Use analytical methods approved by EPA and applicable State regulations.

6. TRANSPORTION AND DISPOSAL OF CONTAMINATED MATERIAL: The Contractor shall be responsible and liable for the proper loading, transportation, and disposal of contaminated material according to Federal, State, and local requirements. Use only U.S. transporters and disposal sites approved by Western.

7. POST CLEANUP REPORT: Provide a Post-Cleanup Report that describes the cleanup of contaminated soils and debris. Submit the report to the COR upon completion and prior to submittal of final invoice. The report shall contain the following information:

   (1) Site map showing the areas cleaned.

   (2) Description of the operations involved in excavating, storing, sampling, and testing, and disposal.

   (3) - Sampling and analysis results including:

      1) Name and address of the laboratory;
      2) sample locations;
      3) sample dates;
      4) analysis dates;
      5) contents of contaminant (e.g., PCB or total petroleum hydrocarbons) in parts per million (ppm).

(4) Certification by the Contractor that the cleanup requirements were met.

(5) Copies of any manifests, bills of lading, and disposal certificates.

(6) Copies of correspondence with regulatory agencies that support completion of the cleanup.

SECTION 13.19--CONSERVATION OF NATURAL RESOURCES

1. GENERAL: Federal law prohibits the taking of endangered, threatened, proposed or candidate wildlife and plants, and destruction or adverse modification of designated Critical Habitat. Federal law also prohibits the taking of birds protected by the Migratory Bird Treaty Act, and the Bald and Golden Eagle Protection Act. ~~"T~~"take" means to pursue, hunt, shoot, wound, kill, trap, capture or collect a protected animal or any part thereof, or attempt to do any of those things. The Contractor will take reasonable precaution to avoid harming other wildlife species. Contractor must always stay within Western's right-of-way and/or easement.

2. KNOWN OCCURRENCE OF PROTECTED SPECIES OR HABITAT: Following issuance of the notice to proceed, and prior to the start of construction, Western will provide training to all contractor and subcontractor personnel involved in the construction activity. Untrained personnel shall not be allowed in the construction area. Western will provide two sets of plan and profile drawings showing sensitive areas located on or immediately adjacent to the transmission line right-of-way and/or facility. These areas shall be considered avoidance areas. Prior to any construction activity, the avoidance areas shall be marked on the ground in a manner approved by the COR. If access is absolutely necessary, the contractor shall first obtain permission from the COR, noting that a Western and/or other government or tribal agency biologist may be required to accompany personnel and equipment. Ground markings shall be maintained through the duration of the contract. Western will remove the markings during or following final inspection of the project.

3. UNKNOWN OCCURRENCE OF PROTECTED SPECIES OR HABITAT: If evidence of a protected species is found in the project area, the contractor shall immediately notify the COR and provide the location and nature of the findings. The contractor shall stop all activity in the vicinity of the protected species or habitat and not proceed until directed to do so by the COR.

Appendix E: Visual Simulations and Contrast Rating Forms

Form 8400-4

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date	June 2, 2009
District	Las Vegas Field Office
Resource Area	
Activity (program)	Proposed Wind Generation

SECTION A. PROJECT INFORMATION

1. Project Name
Searchlight Wind Project

2. Key Observation Point
KOP 1 – Railroad Pass Hotel/Casino

3. VRM Class
NA

4. Location

Township 23S
Range 63E
Section 2

5. Location Sketch

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Gently rolling to flat valleys with angular and jagged mountainous features	Pixilated and amorphous/patchy	Vertical, horizontal, angular, cylindrical, and geometric
LINE	Strong horizon line with jagged terrain and various silhouettes	Simple and irregular	Straight, horizontal, angular, geometric, and vertical
COLOR	Various grays, tans, browns, and reds with a slight bluish hue due to hazy atmospheric conditions in the distance	Forest, true, and olive greens with various hues	White, tan, metallic, reds, yellows, and browns
TEX-TURE	Rough to smooth	Medium, scattered, and clumped	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Gently rolling valley with anular, jagged mountains	Pixilated and amorphous/patchy	Vertical and oscillating (revolving/gyrating)
LINE	Strong jagged horizo0n and silhouette lines	Simple and irregular	Vertical and angular
COLOR	Various tans, grays, and browns	Forest, true, and olive greens with various hues	White
TEX-TURE	Smooth	Medium, scattered, and clumped	Smooth

SECTION D. CONTRAST RATING ☐ SHORT TERM ☒ LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
ELEMENTS	Form				X				X			X	
	Line				X				X				X
	Color				X				X			X	
	Texture			X					X				X

2. Does project design meet visual resource management objectives?
☒ Yes ☐ No
(Explain on reverse side)

3. Additional mitigating measures recommended?
☐ Yes ☒ No
(Explain on reverse side)

Evaluator's Names Date

Robert Evans June 2, 2009

Original

Simulation

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date	June 3, 2009
District	Las Vegas Field Office
Resource Area	
Activity (program)	Proposed Wind Generation

SECTION A. PROJECT INFORMATION

1. Project Name
Searchlight Wind Project

2. Key Observation Point
KOP2 – U.S. 95 looking south toward Searchlight, NV

3. VRM Class
NA

4. Location

Township _____
Range _____
Section _____

5. Location Sketch

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Broad rolling alluvial valley with rugged background terrain	Moderately uniform with patches of taller more dominant vegetation	Vertical and horizontal
LINE	Undulating with a strong horizon line	Undulating with edge created by man-made structures (road)	Vertical with divergent bands/lines
COLOR	Browns, tans, and grays	Various hues of green with some tan and brown	Metallic and various grays
TEX-TURE	Medium to smooth	Medium to smooth	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Possible geometric patterns and simple indistinct forms created by cut and fill	Possible geometric shapes and simple indistinct forms created by clearings for roads and structure pads (construction activities)	Vertical, angular, and oscillating circular elements (revolving/gyrating)
LINE	Undulating with edges and lines created by possible visible cut and fill	Lines and edges created by clearing vegetation for construction activities	Vertical, angular, and circular oscillating blades/line features
COLOR	Tans and browns	Various light to dark greens	White
TEX-TURE	Smooth	Patchy	Smooth

SECTION D. CONTRAST RATING ☐ SHORT TERM ☒ LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
ELEMENTS	Form			X			X					X	
	Line		X				X					X	
	Color			X				X			X		
	Texture				X		X						X

2. Does project design meet visual resource management objectives?
☒ Yes ☐ No
(Explain on reverse side)

3. Additional mitigating measures recommended?
☒ Yes ☐ No
(Explain on reverse side)

Evaluator's Names Date

Robert Evans June 3, 2009

Original

Simulation

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date	June 2, 2009
District	Kingman Field Office
Resource Area	
Activity (program)	Proposed Wind Generation

SECTION A. PROJECT INFORMATION

1. Project Name
Searchlight Wind Project

2. Key Observation Point
KOP 3 – U.S. 93 past Hoover Dam

3. VRM Class
NA

4. Location

Township 28N
Range 22W
Section 1

5. Location Sketch

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Pyramidal and angular, rugged mountains and flat plateaus with sweeping sides often exhibiting dendritic patterns. Dominant mesa in foreground creates strong silhouette.	Pixilated, sparse and dotted	
LINE	Angular and hard with jagged terrain and silhouettes. Dominant silhouette (mesa) in foreground.	Simple and undulating	
COLOR	Various grays, tans, browns, and a blue or deep aqua color for the water	True and olive greens which are indistinct in the background	
TEX-TURE	Rough with numerous silhouettes	Dotted, medium	

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Sweeping smooth water feature with pyramidal and angular, rugged mountains and flat plateaus with sweeping sides often exhibiting dendritic patterns	Pixilated, sparse and dotted	Vertical, angular, and oscillating (revolving/gyrating)
LINE	Angular and hard with jagged terrain and silhouettes	Simple and undulating	Vertical and angular
COLOR	Various tans, grays, and browns	Forest, true, and olive greens with various hues	White
TEX-TURE	Rough with numerous silhouettes	Medium, dotted	Smooth

SECTION D. CONTRAST RATING ☐ SHORT TERM ☒ LONG TERM

1. DEGREE OF CONTRAST

		FEATURES												2. Does project design meet visual resource management objectives? ☒ Yes ☐ No (Explain on reverse side)
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				3. Additional mitigating measures recommended? ☐ Yes ☒ No (Explain on reverse side)
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	
ELEMENTS	Form				X				X			X		Evaluator's Names Date
	Line				X				X			X		Robert Evans June 2, 2009
	Color			X					X			X		
	Texture				X				X			X		

Original

Simulation

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date	June 2, 2009
District	Kingman Field Office
Resource Area	
Activity (program)	Proposed Wind Generation

SECTION A. PROJECT INFORMATION

1. Project Name
Searchlight Wind Project

2. Key Observation Point
KOP 4 – Windy Point Campground

3. VRM Class
NA-to be provided

4. Location

Township 24N
Range 18W
Section 25

5. Location Sketch

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Jagged with pyramidal and angular, rugged mountains in the foreground and background bisected by relatively flat valley floors (textbook basin and range)	Patchy and pixilated with simple forms created by vegetation along slopes in the foreground to middleground	Angular and geometric in the middleground
LINE	Angular with sharp silhouettes created by the peaks and mountain ranges	Simple forms and digitate edges created by the vegetation on the slopes in the middleground and foreground	Curvilinear features (roads) and edges created by angular structures
COLOR	Various grays, tans, browns, and red hues	Various greens (dark to light tones)-foreest, true, olive as well as orange and yellow (flowers)	Metallic, white, and tan
TEX-TURE	Rough in foreground/middleground to amorphous and smooth in the background	Rough in the immediate foreground, with medium in foreground and smooth in middleground/background	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Jagged silhouettes created by distant mountains	Simple, smooth patterns (random)	Vertical, angular, and oscillating (revolving/gyrating)
LINE	Horizon and silhouette lines in the middle to background	Simple and indistinct patterns	Vertical and angular
COLOR	Various tans, grays, red hues, and browns (with a bluish hue in the background)	Various light to dark greens	White
TEX-TURE	Rough to smooth	Rough to smooth	Smooth

SECTION D. CONTRAST RATING ☐ SHORT TERM ☒ LONG TERM

1. DEGREE OF CONTRAST

		FEATURES												2. Does project design meet visual resource management objectives? ☒ Yes ☐ No (Explain on reverse side)
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				3. Additional mitigating measures recommended? ☒ Yes ☐ No (Explain on reverse side)
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	
ELEMENTS	Form				X				X				X	Evaluator's Names Date
	Line				X				X			X		Robert Evans June 2, 2009
	Color			X					X			X		
	Texture				X				X				X	

Original

Simulation

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date	June 2, 2009
District	Las Vegas Field Office
Resource Area	
Activity (program)	Proposed Wind Generation

SECTION A. PROJECT INFORMATION

1. Project Name: **Searchlight Wind Project**
2. Key Observation Point: **KOP 5 – Palm Community**
3. VRM Class: **NA**
4. Location: Township 31S; Range 64E; Section 32
5. Location Sketch

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat to rolling foreground valley views with dramatic and rugged terrain in the background	Uniform and undulating	Vertical and geometric
LINE	Undulating to rugged silhouettes in the background	Butt edges created between uniform vegetation and the dramatic background terrain	Vertical, angular, and geometric
COLOR	Grays, tans, browns, and a bluish hue created by atmospheric conditions	Monochromatic tans and olive greens	Metallic
TEX-TURE	Medium to smooth in the foreground and middleground to course in the background	Course to smooth in the foreground and middleground to fine in the background	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Possible geometric shapes created by cut and fill for roads	Possible geometric shapes created by clearings for roads and structure pads	Vertical, angular, and oscillating (revolving/gyrating)
LINE	Edges created by possible visible cut and fill for roads	Possible edges created by clearing vegetation for structure pads	Vertical and angular
COLOR	Various tans and browns	Various light to dark olive greens	White
TEX-TURE	Smooth	Patchy to smooth	Smooth

SECTION D. CONTRAST RATING ☐ SHORT TERM ☒ LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
ELEMENTS	Form			X				X				X	
	Line			X					X				X
	Color			X					X		X		
	Texture			X				X					X

2. Does project design meet visual resource management objectives? ☒ Yes ☐ No (Explain on reverse side)

3. Additional mitigating measures recommended? ☒ Yes ☐ No (Explain on reverse side)

Evaluator's Names Date

Robert Evans June 2, 2009

Original

Simulation

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date	June 3, 2009
District	Kingman Field Office
Resource Area	
Activity (program)	Proposed Wind Generation

SECTION A. PROJECT INFORMATION

1. Project Name: **Searchlight Wind Project**
2. Key Observation Point: **KOP6 – View from Lake Mojave**
3. VRM Class: **NA – NPS**
4. Location: Township 24N; Range 22W; Section 29
5. Location Sketch

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Rough to smooth water feature in the foreground with pyramidal angular land features on the shoreline and rugged mountain silhouettes in the background	Patchy and sparse	
LINE	Angular with a butt edge created where water feature and land meet as well as a strong horizon line	Simple and undulating with vegetation edges along the water where vegetation is more dense	
COLOR	Various grays, tans, browns, with a reddish hue and a blue bluish hue to the distant mountains with a blue or light aqua color for the water	Dark green	
TEX-TURE	Rough to smooth	Dotted, medium to smooth	

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Rough to smooth water feature in the foreground with pyramidal angular land features on the shoreline and rugged mountain silhouettes in the background	Patchy and sparse	Vertical, angular, and oscillating (revolving/gyrating)
LINE	Angular with a butt edge created where water feature and land meet as well as a strong horizon line (possibly interrupted by revolving wind towers)	Simple and undulating with vegetation edges along the water where vegetation is more dense	Vertical and angular with oscillating or revolving circles
COLOR	Various grays, tans, browns, with a reddish hue and a blue bluish hue to the distant mountains with a blue or light aqua color for the water	Dark green	White
TEX-TURE	Rough to smooth	Medium to smooth, dotted	Smooth

SECTION D. CONTRAST RATING ☐ SHORT TERM ☒ LONG TERM

1. DEGREE OF CONTRAST

	FEATURES											
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
ELEMENTS Form				X				X		X		
ELEMENTS Line				X				X		X		
ELEMENTS Color				X				X		X		
ELEMENTS Texture				X				X			X	

2. Does project design meet visual resource management objectives? ☒ Yes ☐ No (Explain on reverse side)

3. Additional mitigating measures recommended? ☐ Yes ☒ No (Explain on reverse side)

Evaluator's Names Date

Robert Evans June 3, 2009

Original

Simulation

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date	June 6, 2009
District	Las Vegas Field Office
Resource Area	
Activity (program)	Proposed Wind Generation

SECTION A. PROJECT INFORMATION

1. Project Name
Searchlight Wind Project

2. Key Observation Point
KOP 7 – Searchlight Nugget Casino

3. VRM Class
NA

4. Location

Township _____

Range _____

Section 2

5. Location Sketch

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Gently rolling with some prominent elevated features	Patchy with both vertical and broad bushy elements	Vertical, horizontal, angular, cylindrical, and geometric
LINE	Horizontal with edges created by man-made structures, some undulating elements in the background	Simple and irregular/vertical	Straight, horizontal, angular, divergent bands, geometric, and vertical
COLOR	Various grays, tans, browns, and red hues	Forest, true, and various olive greens with various hues	White, tan, metallic, reds, yellows, and browns
TEX-TURE	Medium to smooth	Rough, scattered, and clumped	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Gently rolling with some prominent elevated features	Patchy with both vertical and broad bushy elements	Vertical and oscillating (revolving/gyrating)
LINE	Horizontal with edges created by man-made structures, some undulating elements in the background	Simple and irregular	Vertical and angular
COLOR	Various tans, grays, and browns	Forest, true, and olive greens with various hues	White
TEX-TURE	Medium to smooth	Rough, scattered, and clumped	Smooth

SECTION D. CONTRAST RATING ☐ SHORT TERM ☒ LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
ELEMENTS	Form				X				X			X	
	Line				X				X				X
	Color				X				X			X	
	Texture			X					X				X

2. Does project design meet visual resource management objectives?
☒ Yes ☐ No
(Explain on reverse side)

3. Additional mitigating measures recommended?
☐ Yes ☒ No
(Explain on reverse side)

Evaluator's Names Date

Robert Evans June 2, 2009

Original

Simulation

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date	June 2, 2009
District	Las Vegas Field Office
Resource Area	
Activity (program)	Proposed Wind Generation

SECTION A. PROJECT INFORMATION

1. Project Name
Searchlight Wind Project

2. Key Observation Point
KOP 8 – Development in Searchlight

3. VRM Class
NA

4. Location

Township 28S
Range 65E
Section 35

5. Location Sketch

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Jagged with pyramidal and angular, rugged mountains and silhouettes in the middleground and background rolling in the foreground	Patchy and sparse	Angular, vertical, and horizontal
LINE	Angular and undulating with sharp silhouettes created by the peaks and mountain ranges	Patchy, simple forms	Divergent bands (roads) and horizontal
COLOR	Various grays, tans, browns, and red hues	Light hued greens	Metallic, various grays, green, red brick, brown (wood), and tan
TEX-TURE	Rough in foreground/middleground to amorphous and smooth in the background	Patchy (due to a lack of)	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Jagged with pyramidal and angular, rugged mountains and silhouettes in the middleground and background rolling in the foreground	Patchy and sparse	Vertical, angular, and oscillating (revolving/gyrating)
LINE	Angular and undulating with sharp silhouettes created by the peaks and mountain ranges	Patchy, simple forms	Vertical and angular
COLOR	Various grays, tans, browns, and red hues	Light hued greens	White
TEX-TURE	Rough in foreground/middleground to amorphous and smooth in the background	Patchy (due to a lack of)	Smooth

SECTION D. CONTRAST RATING ☐ SHORT TERM ☒ LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
ELEMENTS	Form				X				X		X		
	Line				X				X			X	
	Color			X					X		X		
	Texture				X				X				X

2. Does project design meet visual resource management objectives?
☒ Yes ☐ No
(Explain on reverse side)

3. Additional mitigating measures recommended?
☒ Yes ☐ No
(Explain on reverse side)

Evaluator's Names Date

Robert Evans June 2, 2009

Original

Simulation

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date	June 3, 2009
District	Southern Nevada
Resource Area	Las Vegas Field Office
Activity (program)	Visual Resources

SECTION A. PROJECT INFORMATION

1. Project Name **Searchlight Wind Project**	4. Location Township 24N Range 22W Section 29	5. Location Sketch See KOP Map
2. Key Observation Point **KOP 9 – View from Cottonwood Cove**		
3. VRM Class **NPS (No VRM)**		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Water – flat, continuous – land – bold, prominent, rolling hills, sloping, flowing from hills to water	Low, pixilated, patchy	Horizontal, boxy, geometric
LINE	Undulating, butt edge between water and land	Digitate edges on hill crests	Vertical, horizontal, sweeping divergent bands
COLOR	Water – green, aqua Tans, browns, reddish hue	Dark green with olive	White, blue, red, metallic, brown, tan
TEX-TURE	Medium to smooth	Sparse, some stipple with dense patches close to development	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Indiscernible change	Indiscernible change	Vertical, angular, and oscillating (revolving/gyrating)
LINE	Indiscernible change	Indiscernible change	Vertical, angular, and circular line features
COLOR	Indiscernible change	Indiscernible change	White (or gray)
TEX-TURE	Indiscernible change	Indiscernible change	Smooth

SECTION D. CONTRAST RATING ☐ SHORT TERM ☒ LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource management objectives? ☒ Yes ☐ No (Explain on reverse side) 3. Additional mitigating measures recommended? ☐ Yes ☒ No (Explain on reverse side)
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	
ELEMENTS	Form				X				X			X		Evaluator's Names Date Richard Stuhan June 3, 2009
	Line				X				X			X		
	Color				X				X				X	
	Texture				X				X				X	

Original

Simulation

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 8-31-11

District/ Field Office: Las Vegas Field Office

Resource Area:

Activity (program): Proposed Wind Generation

SECTION A. PROJECT INFORMATION

1. Project Name	4. Location	5. Location Sketch
Searchlight Wind Energy Project	Township_____	
2. Key Observation Point KOP 10 - View of Travelers Exiting the Lake Mead NRA and Lake Mohave on Cottonwood Cove Road	Range_____	
3. VRM Class	Section_____	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Broad rolling alluvial valley with rugged background terrain	Moderately uniform with patches of taller more dominant vegetation	Horizontal (road) Vertical/boxy (entrance station)
LINE	Undulating with a strong horizontal line	Undulating with edge created by manmade structures (road)	Horizontal and vertical
COLOR	Browns, tans and grays	Various hues of green with some tan and brown	Metallic and various grays
TEX-TURE	Medium to smooth	Medium to smooth	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Possible geometric patterns and simple indistinct forms created by cut and fill	Possible geometric shapes and simple indistinct forms created by clearings for roads and structure pads (construction activities)	Vertical, angular, and circular oscillating blades/line features
LINE	Undulating with edges and lines created by possible visible cut and fill	Lines and edges created by clearing vegetation for construction activities	Vertical, angular, and circular oscillating blades/line features
COLOR	Tans and browns	Various light to dark greens	White
TEX-TURE	Smooth	Patchy	Smooth

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM			X			X					X	
	LINE		X				X					X	
	COLOR			X				X			X		
	TEXTURE				X		X					X	

2. Does project design meet visual resource management objectives?
☒Yes ___No
(Explain on reverses side)

3. Additional mitigating measures recommended
☒Yes ___No (Explain on reverses side)

Evaluator's Names — Date
Anne DuBarton — 8-31-11

Form 8400-04
(September 1985)

Original

Simulation

Form 8400-4

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 8-31-11

District/ Field Office: Las Vegas Field Office

Resource Area:

Activity (program): Proposed Wind Generation

SECTION A. PROJECT INFORMATION

1. Project Name	4. Location	5. Location Sketch
Searchlight Wind Energy Project	Township_____	
2. Key Observation Point KOP 11 – Comm Towers Near Spirit Mountain	Range_____	
3. VRM Class	Section_____	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Jagged with pyramidal and angular, rugged mountains in the foreground and background bisected by a relatively flat valley floor	Patchy and pixilated with simple forms created by vegetation along slopes in the foreground to middleground	Angular and geometric in the foreground and middleground
LINE	Angular with sharp silhouettes created by the peaks and mountain ranges	Simple forms and digitate edges created by vegetation on the slopes in the foreground and middleground	Curvilinear to linear features (roads) and edges created by angular structures
COLOR	Various grays, tans, browns, and red hues	Various greens (dark to light tones)- forest, true, olive as well as orange and yellow (flowers)	Metallic, white and tan
TEX-TURE	Rough in foreground/middleground to amorphous and smooth in background	Rough to medium in the immediate foreground, and smooth in middleground/background	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Jagged silhouettes created by distant mountains	Simple, smooth patterns (random)	Vertical, angular, and oscillating (revolving/gyrating)
LINE	Horizon and silhouette lines in the middle to background	Simple and indistinct patterns	Vertical and angular
COLOR	Various tans, grays, red hues, and browns (with a bluish hue in the background)	Various light to dark greens	White
TEX-TURE	Rough to smooth	Rough to smooth	Smooth

SECTION D. CONTRAST RATING __SHORT TERM ☒ LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X				X
	LINE				X				X			X	
	COLOR			X					X			X	
	TEXTURE				X				X				X

2. Does project design meet visual resource management objectives?
☒Yes ___No
(Explain on reverses side)

3. Additional mitigating measures recommended
☒Yes ___No (Explain on reverses side)

Evaluator's Names — Date
Anne DuBarton — 8-31-11

Original

Simulation

Form 8400-4

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 8-31-11

District/ Field Office: Las Vegas Field Office

Resource Area:

Activity (program): Proposed Wind Generation

SECTION A. PROJECT INFORMATION

1. Project Name	4. Location	5. Location Sketch
Searchlight Wind Energy Project	Township_____	
2. Key Observation Point KOP 12 - View from Cal-Nev-Ari North Toward Searchlight	Range_____	
3. VRM Class	Section_____	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Gently rolling alluvial valley with rugged background terrain	Patchy with both vertical and broad bushy elements.	Vertical, horizontal, angular, cylindrical, and geometric
LINE	Horizontal with edges created by man-made structures, some undulating elements in the background	Undulating with edge created by manmade structures (road)	Straight, horizontal, angular, divergent bands, geometric, and vertical
COLOR	Various grays, tans, browns and red hues	Various hues of green with some tan and brown	Metallic and various paint colors on buildings
TEX - TURE	Medium to smooth	Rough, scattered and clumped	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Gently rolling with some prominent elevated features	Patchy with both vertical and broad bushy elements	Vertical, angular, and circular oscillating blades/line features
LINE	Horizontal with edges created by man-made structures, some undulating elements in the background	Simple and irregular	Vertical, angular, and circular oscillating blades/line features
COLOR	Tans, grays and browns	Various light to dark greens	White
TEX - TURE	Medium to Smooth	Rough, scattered, and clumped	Smooth

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1) STRONG	MODERATE	WEAK	NONE	VEGETATION (2) STRONG	MODERATE	WEAK	NONE	STRUCTURES (3) STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				X				X			X	
	LINE				X				X				X
	COLOR				X						X	X	
	TEXTURE			X					X				X

2. Does project design meet visual resource management objectives? ☒Yes ___No
(Explain on reverses side)

3. Additional mitigating measures recommended
___ Yes ___No (Explain on reverses side)

Evaluator's Names — Date
Anne DuBarton — 8-31-11

Original

Simulation

Form 8400-4

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 9-1-11

District/ Field Office: Las Vegas Field Office

Resource Area:

Activity (program): Proposed Wind Generation

SECTION A. PROJECT INFORMATION

1. Project Name	4. Location	5. Location Sketch
Searchlight Wind Energy Project	Township_____	
2. Key Observation Point KOP 13 – Outside Searchlight Historic Hospital	Range_____	
3. VRM Class	Section_____	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Gently rolling with some prominent elevated features	Patchy with both vertical and broad bushy elements.	Vertical, horizontal, angular, cylindrical, and geometric
LINE	Horizontal with edges created by man-made structures	Undulating with edge created by manmade structures (road/ buildings)	Straight, horizontal, angular, divergent bands, geometric, and vertical
COLOR	Various grays, tans, browns and red hues	Various hues of green with some tan and brown	Metallic and various paint colors on buildings
TEX-TURE	Medium to smooth	Rough, scattered and clumped	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Gently rolling with some prominent elevated features	Patchy with both vertical and broad bushy elements	Vertical, angular, and circular oscillating blades/line features
LINE	Horizontal with edges created by man-made structures	Simple and irregular	Vertical, angular, and circular oscillating blades/line features
COLOR	Tans, grays and browns	Various light to dark greens	White
TEX-TURE	Medium to Smooth	Rough, scattered, and clumped	Smooth

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST

ELEMENTS	FEATURES: LAND/WATER BODY (1) STRONG	MODERATE	WEAK	NONE	VEGETATION (2) STRONG	MODERATE	WEAK	NONE	STRUCTURES (3) STRONG	MODERATE	WEAK	NONE
FORM				X				X			X	
LINE				X				X				X
COLOR				X							X	
TEXTURE			X					X				X

2. Does project design meet visual resource management objectives?
☒Yes ___No
(Explain on reverses side)

3. Additional mitigating measures recommended
___ Yes ___No (Explain on reverses side)

Evaluator's Names — Date
Anne DuBarton — 8-31-11

Original

Simulation

Form 8400-4

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 8-31-11

District/ Field Office: Las Vegas Field Office

Resource Area:

Activity (program): Proposed Wind Generation

SECTION A. PROJECT INFORMATION

1. Project Name Searchlight Wind Energy Project	4. Location Township_____	5. Location Sketch
2. Key Observation Point KOP 14 - View from Cottonwood Cave Looking West	Range_____	
3. VRM Class	Section_____	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Broad rolling alluvial valley with rugged background terrain	Moderately uniform with patches of taller more dominant vegetation	Horizontal (road) Vertical (flagpole/lightpoles)
LINE	Undulating with a strong horizontal line	Undulating with edge created by manmade structures (road/poles)	Horizontal and vertical
COLOR	Browns, tans and grays	Various hues of green with some tan and brown	Metallic and various grays
TEX-TURE	Medium to smooth	Medium to smooth	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Possible geometric patterns and simple indistinct forms created by cut and fill	Possible geometric shapes and simple indistinct forms created by clearings for roads and structure pads (construction activities)	Vertical, angular, and circular oscillating blades/line features
LINE	Undulating with edges and lines created by possible visible cut and fill	Lines and edges created by clearing vegetation for construction activities	Vertical, angular, and circular oscillating blades/line features
COLOR	Tans and browns	Various light to dark greens	White
TEX-TURE	Smooth	Patchy	Smooth

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM			X			X					X	
	LINE		X				X					X	
	COLOR			X				X			X		
	TEXTURE				X		X					X	

2. Does project design meet visual resource management objectives?
☒Yes ___No
(Explain on reverses side)

3. Additional mitigating measures recommended
☒Yes ___No (Explain on reverses side)

Evaluator's Names — Date
Anne DuBarton — 8-31-11

SECTION D. (Continued)

Original

Simulation

Form 8400-4

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 9-1-11

District/ Field Office: Las Vegas Field Office

Resource Area:

Activity (program): Proposed Wind Generation

SECTION A. PROJECT INFORMATION

1. Project Name	4. Location	5. Location Sketch
Searchlight Wind Energy Project	Township_____	
2. Key Observation Point KOP 15 - View from Cottonwood Cave Looking South	Range_____	
3. VRM Class	Section_____	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Broad rolling alluvial valley with rugged background terrain	Moderately uniform with patches of taller more dominant vegetation	Horizontal (road) Vertical (power lines)
LINE	Undulating with a strong horizontal line	Undulating with edge created by manmade structures (road/poles)	Horizontal and vertical
COLOR	Browns, tans and grays	Various hues of green with some tan and brown	Metallic, brown, and various grays
TEX-TURE	Medium to smooth	Medium to smooth	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Possible geometric patterns and simple indistinct forms created by cut and fill	Possible geometric shapes and simple indistinct forms created by clearings for roads and structure pads (construction activities)	Vertical, angular, and circular oscillating blades/line features
LINE	Undulating with edges and lines created by possible visible cut and fill	Lines and edges created by clearing vegetation for construction activities	Vertical, angular, and circular oscillating blades/line features
COLOR	Tans and browns	Various light to dark greens	White
TEX-TURE	Smooth	Patchy	Smooth

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1) STRONG	MODERATE	WEAK	NONE	VEGETATION (2) STRONG	MODERATE	WEAK	NONE	STRUCTURES (3) STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM			X			X				x		
	LINE		X				X				X		
	COLOR			X				X			X		
	TEXTURE				X		X				x		

2. Does project design meet visual resource management objectives?
☒Yes ___No
(Explain on reverses side)

3. Additional mitigating measures recommended
☒Yes ___No (Explain on reverses side)

Evaluator's Names — Date
Anne DuBarton — 9-31-11

Original

Simulation

Form 8400-4

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VISUAL CONTRAST RATING WORKSHEET

Date: 9-1-11

District/ Field Office: Las Vegas Field Office

Resource Area:

Activity (program): Proposed Wind Generation

SECTION A. PROJECT INFORMATION

1. Project Name	4. Location	5. Location Sketch
Searchlight Wind Energy Project	Township_____	
2. Key Observation Point KOP 16 - View from Cottonwood Cave Looking North	Range_____	
3. VRM Class	Section_____	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Rolling hills in foreground with rugged background terrain	Moderately uniform with patches of taller more dominant vegetation	None
LINE	Undulating with a strong horizontal line	Undulating with edge created by manmade structures (road/poles)	None
COLOR	Browns, tans and grays	Various hues of green with some tan and brown	None
TEX-TURE	Medium to smooth	Medium to smooth	None

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Possible geometric patterns and simple indistinct forms created by cut and fill	Possible geometric shapes and simple indistinct forms created by clearings for roads and structure pads (construction activities)	Vertical, angular, and circular oscillating blades/line features
LINE	Undulating with edges and lines created by possible visible cut and fill	Lines and edges created by clearing vegetation for construction activities	Vertical, angular, and circular oscillating blades/line features
COLOR	Tans and browns	Various light to dark greens	White
TEX-TURE	Smooth	Patchy	Smooth

SECTION D. CONTRAST RATING __SHORT TERM __LONG TERM

1. DEGREE OF CONTRAST		FEATURES											
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM			X			X					X	
	LINE		X				X					X	
	COLOR			X				X			X		
	TEXTURE				X		X					X	

2. Does project design meet visual resource management objectives?
☒Yes ___No
(Explain on reverses side)

3. Additional mitigating measures recommended
☒Yes ___No (Explain on reverses side)

Evaluator's Names — Date
Anne DuBarton — 9-31-11

Original

Simulation

Form 8400-04
(September 1985)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date	June 3, 2009
District	Las Vegas Field Office
Resource Area	
Activity (program)	Proposed Wind Generation

SECTION A. PROJECT INFORMATION

1. Project Name
Searchlight Wind Project
2. Key Observation Point
VP 2 – Cottonwood Cove
3. VRM Class
VRM III

4. Location
Township _____
Range _____
Section _____

5. Location Sketch

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Developed in the foreground with rolling to rugged in middleground and background with pyramidal shapes and silhouettes in background	Sparse and pixilated	Vertical, horizontal, angular, and geometric
LINE	Rolling hills with distinct peaks created a bold horizon line and silhouette lines in the background	Digitate edges on hill crests, undulating	Vertical, horizontal, curvilinear, and converging
COLOR	Browns and tans with a reddish hue and darker blue hues in the background crated by atmospheric conditions	Light and dark green hues with some tan	Metallic, browns, and tans
TEX-TURE	Medium to smooth and course in the foreground	Medium to smooth	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Possible geometric patterns created by cut and fill	Possible geometric shapes created by clearings for roads and structure pads (construction activities)	Vertical, angular, and oscillating (revolving/gyrating)
LINE	Edges and lines created by possible visible cut and fill	Possible lines and edges created by clearing vegetation for construction activities	Vertical, angular, and circular line features
COLOR	Tans and browns	Light to dark greens	White (or gray)
TEX-TURE	Patchy and smooth	Patchy	Smooth

SECTION D. CONTRAST RATING ☐ SHORT TERM ☒ LONG TERM

1. DEGREE OF CONTRAST

ELEMENTS	FEATURES: LAND/WATER BODY (1) Strong	Moderate	Weak	None	VEGETATION (2) Strong	Moderate	Weak	None	STRUCTURES (3) Strong	Moderate	Weak	None
Form			X				X				X	
Line		X						X		X		
Color			X					X		X		
Texture			X				X				X	

2. Does project design meet visual resource management objectives?
☐ Yes ☒ No
(Explain on reverse side)

3. Additional mitigating measures recommended?
☒ Yes ☐ No
(Explain on reverse side)

Evaluator's Names Date

Robert Evans June 3, 2009