

CHAPTER 5 - CONSULTATION AND COORDINATION

This chapter describes the consultation and coordination activities the BLM has carried out with interested agencies, organizations, Tribes, and individuals while preparing the Final EIS. The NEPA (42 USC §§ 4321-4347) and the regulations that implement it (43 CFR Part 46; 40 CFR §§ 1500-1508) require the public's involvement in the decision-making process as well as allowing for full environmental disclosure. Guidance for implementing public involvement also is outlined in Title 43 CFR, Part 1610.2.

During the early phases of the scoping process, the BLM determined that an EIS would be required to comply with NEPA prior to taking action on Solar Millennium's right-of-way application. An EIS is the most detailed and complex of NEPA documents, and it includes requirements for significant public coordination and involvement throughout its preparation and review. NEPA and CEQ require the BLM to identify and disclose any potential environmental impacts associated with the Proposed Action so that the BLM can make an informed decision when making its final decision.

5.1 PUBLIC INVOLVEMENT PROCESS

Public involvement in the EIS process includes the steps necessary to identify and address public concerns and needs. The public involvement process assists agencies in: (1) broadening the information base for decision-making, (2) informing the public about Proposed Actions, alternatives, and potential impacts that could result from implementation of the Proposed Action or alternatives, and (3) ensuring that public needs are understood by the agencies. Public participation in the EIS process is required by the NEPA at four specific points: (1) issue scoping, (2) review of the Draft EIS, (3) review of the Final EIS, and (4) receipt of the ROD.

5.1.1 Scoping

Public scoping is an integral part of the NEPA planning process. It provides "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" (40 CFR § 1501.7). Public and agency input is solicited in order to identify the range, or scope, of issues to be addressed during the environmental analysis and in the EIS. Initiation of the EIS process and the public scoping meetings for the proposed Project were announced through the Federal Register, BLM press releases, paid advertisements in the media, and postings on the BLM Project website. These activities are described below.

5.1.2 Federal Register Notice of Intent

The BLM Federal Register NOI, published on July 13, 2009 (Volume 74, Number 132, Page 33.458), marked the beginning of the public scoping period for the Project EIS. The scoping period, required to be a minimum of 30 days, was announced as ending on August 12, 2009. Public scoping meetings were not conducted within this time period; therefore, a second notice was published in the Federal Register on September 17, 2009 (Volume 74, Number 179,

Page 47820), reopening public scoping. This reopened scoping period was announced as ending on October 19, 2009. Four scoping meetings were held from August 17 through August 24, 2009, and one information meeting was held on September 22, 2009 (see below).

5.1.3 Media Notices

The BLM prepared a media release to introduce the proposed Project, announce the initial scoping meetings, and invite the public to provide input. The news release was issued on August 12, 2009 to local and regional newspapers, congressional offices, television stations, and radio stations. A second news release was issued on September 3, 2009, announcing the reopening of the scoping period.

In addition, paid advertisements were published in the following local newspapers:

- *Las Vegas Review-Journal* – legal ad published on July 31, 2009
- *Pahrump Valley Times* – display ads published on July 31, 2009 and September 18, 2009

5.1.4 Direct Mailings

A public scoping notice was prepared and mailed to inform the public about the scoping process for the preparation of the EIS and the scheduled scoping meetings. The public was invited to participate in the scoping process and to share any concerns or comments, submit information, and identify issues to be addressed during the EIS process.

The notice was mailed to federal, state, and local agencies; elected officials; Native American tribes; and special interest groups and organizations, during the week of August 3, 2009. The distribution list was compiled from a list of individuals, organizations, and agencies who had expressed interest in other BLM Pahrump Field Office projects. In addition, the notice was mailed to postal customers in the Amargosa Valley (zip code 89020).

A second notice was mailed to individuals and agencies/organizations on the mailing list and the members of the public who signed in at public scoping meetings held in August 2009 for the proposed Project. The second notice was to inform the public of the public information meeting to be held in Beatty on September 22, 2009. This meeting was an opportunity for the public to submit comments during the reopened scoping period.

5.1.5 Project Website

The BLM Southern Nevada District Office is hosting a website to inform the general public about the Proposed Action. Information on the website includes public meeting announcements, a Project description, and the EIS planning process. The website is available at: <http://www.blm.gov/nv/st/en/fo/lvfo.html>.

5.1.6 Public Scoping Meetings

The BLM held four public scoping meetings to identify issues and concerns regarding the Proposed Action. These scoping meetings provided an opportunity for the public to learn about the Proposed Action and to provide comments. Meeting locations, dates, and times are provided in Table 5-1. In addition to the public scoping meetings, one public information meeting was held during the reopened scoping period.

Location	Date	Time	Attendance*
Beatty, Nevada	August 17, 2009	6:00 – 8:00 p.m.	34
Amargosa Valley, Nevada	August 18, 2009	6:00 – 8:00 p.m.	112
Pahrump, Nevada	August 21, 2009	6:00 – 8:00 p.m.	26
Las Vegas, Nevada	August 24, 2009	6:00 – 8:00 p.m.	60
Beatty, Nevada**	September 22, 2009	6:00 – 8:00 p.m.	66
Total			298
*These counts reflect only those attendees who elected to sign in at the door			
**Public information meeting following reopened scoping period.			

5.1.7 Comment Methods

During the public scoping period (August 13 through October 19, 2009), a total of 151 comment documents were received. A comment document is defined as a method of response recorded as part of a public scoping transcript, email, fax, letter, or comment form. Because some documents had more than one comment, the total number of comments received is greater than the number of respondents or individuals who submitted comments. Table 5-2 presents the method of submittal of all responses.

Method of Submittal	Number Received
Comment Form	17
Email	36
Letter or Fax	19
Oral Comments Submitted at the Scoping Meetings (transcribed from the court reporter transcript)	–
Beatty scoping meeting	6

Method of Submittal	Number Received
Amargosa Valley scoping meeting	24
Pahrump scoping meeting	8
Las Vegas scoping meeting	22
Beatty information meeting	19
Total responses	151

5.2 SUBSTANTIVE ISSUES IDENTIFIED DURING SCOPING

Table 5-3 displays the relative interest of respondents who submitted comments on various topics. This breakdown does not show bias towards any issue; it simply indicates the level of interest on various issues. All issues are addressed equally in the EIS.

Comment Category	Number Received
NEPA and NEPA Process	101
Alternatives	87
Air Quality and Climate Change	59
Cultural Resources	8
Cumulative Impacts	39
EJ	4
Fish and Wildlife	45
Floodplains	20
Geology and Mineral Resources	3
Health and Safety	77
Invasive Species	4
Lands and Access	66
Migratory Birds	13
Native American Religious Concerns	5
Noise	7

Table 5-3 Topics of Interest	
Comment Category	Number Received
Recreation	5
Socioeconomic Resources	198
Soils	6
Special Management Areas	28
Threatened, Endangered, and Candidate Plant Species	18
Threatened, Endangered, and Candidate Wildlife Species	53
Transportation	48
Vegetation	37
Visual Resources	25
Waste (hazardous and solid)	40
Water Resources	164
Wetlands and Waters of the U.S.	15
Total	1,175

Table 5-4 summarizes the substantive issues and concerns derived from the scoping comments and indicate where each issue identified during scoping is addressed in the EIS. This summary is intended to reflect the comments received during the scoping phase equally and does not attempt to assign value to any input. Specific comments and context are not provided here, only issues represented in those comments that can be applied directly to preparation of the EIS. For example, some respondents provided their views on the value (negative or positive) of solar energy development; only the issue areas they raised in conjunction with their views are provided. Issue statements and questions to address the issues in the EIS can be found in the public scoping report. Copies of the individual comments received during the scoping period are available for review at the BLM Pahrump Field Office.

Table 5-4 Issues Raised During Scoping	
Issues	Section(s) of the EIS Where Addressed
NEPA Process	
The EIS should consider how NEPA goals will be incorporated into the BLM's decision and describe how the proposed Project would be consistent with other national policy considerations.	1.1 – Introduction 1.5 – Scope of Analysis
Requests that the proposed Project be put on hold until all permits and easements have been received and the proposed Project has been reviewed by other agencies (e.g., Nevada Engineers Office, FEMA).	1.7 – Agency Coordination
Alternatives	
A reasonable range of management alternatives meeting the purpose and need should include alternative sites, capacities, and technologies, and include those that may not be within the jurisdiction of the lead agency.	2.2 – Alternatives Description
The three different technologies should be analyzed in the EIS: dry-cooling, hybrid cooling, and wet-cooling	2.2 – Alternatives Description
The BLM should consider other locations for the proposed Project that would reduce potential use conflicts and meet the Project purpose and need, even if they are not located on public land.	2.2 – Alternatives Description
Consider use of different solar energy technology, including the use of hybrid or dry-cooled systems or replacing trough technology with photovoltaic.	2.2 – Alternatives Description
Air Quality	
Activities related to the construction and operation of the proposed Project has the potential to result in increased dust. Additionally, construction, operation, and mitigation of the solar generating facility could result in increased emissions.	4.1 – Air Quality
The EIS should identify the types of dust control to be used during construction and operation, and if water is to be used, the amount of water needed, and the source of the water.	4.1 – Air Quality
Air monitoring should be conducted before, during, and after facility construction and operation. Specific concerns were expressed regarding hazardous materials that may be present in airborne dust (e.g., uranium, radon, and other hazardous elements in surface soils).	4.1 – Air Quality 4.13 – Hazardous Materials and Solid Waste
The EIS should include a discussion of ambient air conditions, NAAQS, and criteria pollutant nonattainment areas in all areas considered for solar development, and that the analysis should specify (1) the emission sources by pollutant from mobile sources, stationary sources, and ground disturbance; (2) the timeframe for release of these emissions over the lifespan of the Project; (3) proposed mitigation measures to minimize these emissions.	4.1 – Air Quality

Table 5-4 Issues Raised During Scoping	
Issues	Section(s) of the EIS Where Addressed
The EIS should identify the need for an Equipment Emissions Mitigation Plan, to identify actions to reduce diesel particulate, CO, hydrocarbons, and NO _x associated with construction activities for equipment such as drilling equipment, generators, compressors, graders, bulldozers, and dump trucks.	4.1 – Air Quality 4.13 – Hazardous Materials and Solid Waste
Cultural Resources	
Ground disturbing activities resulting from construction and operation of a solar generating facility have the potential to discover/disturb cultural resources in the area, including the physical integrity of sacred sites. The EIS should evaluate potential impacts on archaeological, cultural, and historical resources in the vicinity of the Project, including Native American resources, burial sites and artifacts, and historical mining operations and related artifacts.	3.7 – Historic and Cultural Resources 4.7 – Historic and Cultural Resources
Cumulative Impacts	
A number of other solar generating power facilities are being considered in southern Nevada and may impact a variety of resource values and uses, including water supply, endangered species, visual resources, wildlife, and threatened and/or endangered species habitat.	4.17 – Cumulative Impacts
Environmental Justice	
EJ (minority and low income) populations may be affected by the construction and operation of the Project.	4.10 – Environmental Justice
Fish and Wildlife	
Concerns about wildlife habitat from depletion of water resources and impacts to wildlife from site development and facilities.	4.6 – Biological Resources
Concern that impacts may extend beyond the physical footprint of the Project area. Requests made that Project monitoring be conducted to evaluate Project impacts, and adoption of adaptive mitigation solutions be considered.	4.6 – Biological Resources
Construction and operation of the facility could result in impacts to wildlife in the area, including: <ul style="list-style-type: none"> • impacts as a result of an increase in shade, dust, and heat, and impacts to wildlife species • impacts as a result of exposure to contaminants in evaporation ponds and/or stormwater ponds if these water structures attract wildlife, particularly migratory waterfowl and bats 	4.6 – Biological Resources
Geology, Mineral Resources, and Soils	
The Project may have impacts to soil resources, and may cause soil erosion.	4.3 – Soils

Table 5-4 Issues Raised During Scoping	
Issues	Section(s) of the EIS Where Addressed
Health and Safety	
Primary concerns were related to safety measures to be used during both construction and operation of the facility, and the proximity of the proposed Project to occupied residential areas (especially to residents living along Sandy Lane), and other built areas, including the Amargosa Elementary School and senior center.	4.9 – Socioeconomic Resources
Concerns regarding the potential for fire and explosions to occur at the site during operations.	4.9 – Socioeconomic Resources 4.13 – Hazardous Materials and Solid Waste
Lands and Realty	
Several right-of-way applications have been filed with the BLM for proposed solar generation facilities. One of the applications is for a proposed site immediately north of the Project and farther away from existing land uses.	2.2 – Alternatives Description
The EIS should describe the reasonably foreseeable future land use and associated impacts resulting from additional power supply in Amargosa Valley.	4.11 – Land Use, Recreation, Transportation and Access
The proposed Project area is located adjacent to existing residential and other community center uses (e.g., church, fire station, senior center).	4.11 – Land Use, Recreation, Transportation and Access
Native American Religious Concerns	
The EIS should address the existence of Indian sacred sites in the Project area and discuss how the BLM would avoid adversely affecting the physical integrity of sacred sites, if they exist.	3.7 – Historic and Cultural Resources 4.7 – Historic and Cultural Resources
The EIS should address EO 13007 and distinguish it from Section 106 of the NHPA.	3.7 – Historic and Cultural Resources
Noise	
The noise of construction and operation of a solar generating facility may be heard from residential areas near the proposed Project.	4.5 – Noise
Recreation	
No designated recreational uses occur on public lands in the Project area; however, recreational use occurs in the nearby Big Dune Special Recreation Area.	4.11 – Land Use, Recreation, Transportation and Access
Socioeconomic Resources	
Comments about the operation of the proposed facility indicate an interest in the opportunities for employment this Project would generate.	4.9 – Socioeconomic Resources

Table 5-4 Issues Raised During Scoping	
Issues	Section(s) of the EIS Where Addressed
The proposed Project may impact public services, including potential population influx and increased service needs (e.g., water supply, school attendance, police and fire protection, etc.).	4.9 – Socioeconomic Resources
Tax benefits may be available to local communities as a result of the proposed Project, including benefits to local tax payers and utility companies and lower property taxes.	4.9 – Socioeconomic Resources
Special Management Areas	
The Project area is not within or adjacent to any special management area. However, nearby special management areas may be sensitive to the uses proposed by the generation facility.	4.6 – Biological Resources 4.12 – Visual Resources
Threatened, Endangered, and Candidate Plant and Wildlife Species	
There may be threatened, endangered, and special status species and habitat in the Project area. What effect would construction and operation of a solar power generating facility and associated facilities have on local population of ESA listed or candidate species or other special status species and suitable habitats?	4.6 – Biological Resources
Transportation	
The existing Amargosa Farm Road is proposed to be rerouted to accommodate the proposed Project and may affect local transportation.	4.11 – Land Use, Recreation, Transportation and Access
Project-related travel may result in increased traffic on Amargosa Farm Road through the local community.	4.11 – Land Use, Recreation, Transportation and Access
Visual Resources	
Construction and operation of a solar facility would introduce multiple structures and modifications to the landscape. The Project area is adjacent to residential areas and community infrastructure (e.g., senior center, fire station school).	4.12 – Visual Resources
The proposed Project may have impacts on scenic quality and scenic vistas of the surrounding desert landscape.	4.12 – Visual Resources
What effects will the proposed Project have on viewers traveling to and from Death Valley National Park?	4.12 – Visual Resources
What effects will safety/night lighting have on the dark skies and stargazing opportunities?	4.12 – Visual Resources
What effects will a 0.25-mile landscape buffer have in mitigation or shielding views? Are there any design techniques that could blend the Project with the natural environment from a visual perspective?	4.12 – Visual Resources
Waste (Hazardous and Solid)	
The solar generating facility has the potential to produce hazardous waste and concentrated de-watered waste from evaporation ponds.	4.13 – Hazardous Materials and Solid Waste

Table 5-4 Issues Raised During Scoping	
Issues	Section(s) of the EIS Where Addressed
Water Resources	
Construction and operation of the solar generation facility could result in impacts to the quantity of water, including groundwater and surface water sources. Project activities also have the potential to affect the quality of surface and groundwater as a result of Project discharges (i.e., stormwater, evaporation pond water, effluent).	4.4 – Water Resources
Operation of the proposed solar generating facility would require up to 4,000 acre-feet of water per year. Alternative sources of water should be considered to provide this needed supply. Additionally, other solar generating technologies are available, including photovoltaic, dry-cooling, and hybrid systems.	2.2 – Alternatives Description 4.4 – Water Resources
The EIS should disclose the specific locations, amounts, and well completions of existing water rights, which may be purchased or leased for this Project to facilitate a meaningful analysis of impacts; evaluate the extent to which these water rights have been fully utilized in the past (determine any increases in actual pumping, which may occur as a result of the full utilization of the rights); evaluate the impacts and cumulative impacts of the full utilization of these and other existing rights in the basin; and evaluate the impacts of any changes in consumptive use due to the change to solar energy production.	3.4 – Water Resources 4.4 – Water Resources
Wetlands/Waters of the U.S.	
The Project area is located in portions of the Fortymile Wash Modification of the landscape for construction of the facility could result in alteration of the Fortymile Wash natural drainage patterns in the Project area.	4.4 – Water Resources

5.2.1 Draft EIS Review

The 45-day comment period for public review of the Draft EIS began with the publication of the Notice of Availability in the Federal Register on Friday March 19, 2010. The BLM distributed press releases announcing the dates, locations, and times of the public meetings to local and regional print and broadcast media. The Draft EIS was posted on the BLM Southern Nevada District Office website at: http://www.blm.gov/nv/st/en/fo/lvfo/blm_programs/energy/proposed_solar_millennium.html, and distributed to agencies and individual who have requested copies.

Four public meetings were held during the public comment period (from March 19, 2010 – May 3, 2010) to receive comments on the Draft EIS. Dates and locations of these meetings, and the number of attendees are as follows:

Beatty, NV – 10 attendees

Date: April 6, 2010

Time: 6pm – 8pm

Location: Beatty Community Center Hall, 100 S. A Avenue, Beatty

Amargosa Valley, NV – 63 attendees

Date: April 7, 2010

Time: 6pm – 8pm

Location: Amargosa Valley Community Center, 821 E. Amargosa Farm Road, Amargosa Valley

Pahrump, NV – 24 attendees

Date: April 13, 2010

Time: 6pm – 8pm

Location: Pahrump Library, 701 East Street, Pahrump

Las Vegas, NV – 19 attendees

Date: April 14, 2010

Time: 6pm – 8pm

Location: Centennial Hills YMCA, 6601 North Buffalo Drive, Las Vegas

During the 45-day comment period, the BLM received 37 comment documents (e.g., letters, emails, faxes, etc.) from individuals, private companies, interest groups, and federal and state agencies commenting on the Draft EIS. A list of comment documents received, the content of each letter, and BLM's responses to comments are contained in Appendix G of the Final EIS. Each comment letter was assigned a reference number and each comment was identified with a number. Where appropriate, changes and additions are reflected in the Final EIS to respond to comments.

This Final EIS has been distributed with the publication of the Notice of Availability in the Federal Register.

5.2.2 Final EIS

After the public comment period for the Draft EIS, this Final EIS was prepared. This document and Appendix G will include descriptions of public comments and indicates how they have been addressed in the Final EIS. A Notice of Availability accompanied this Final EIS. Per 40 CFR § 1506.10, a 30-day waiting period is required between the publication of the Final EIS and issuance of the ROD.

5.3 FORMAL CONSULTATION WITH INTERESTED AGENCIES AND TRIBAL GOVERNMENT

Federal and state agencies were contacted individually to gather input for the EIS. Other resource management agencies were consulted at the federal and state levels to identify common concerns related to the Proposed Action or Alternatives. Cooperating agencies on this EIS include the U.S. DOD, DOE, NPS, USACE, NDOW, and Nye County.

A BA is being prepared for the Proposed Action and will be submitted to the USFWS as required by Section 7 of the ESA (1973). A species list was requested from the USFWS at the beginning of EIS development. The species list identified any plant and wildlife species listed as threatened, endangered or candidate species within the Project area. At the request of the USFWS, detailed rare plant, sensitive wildlife species, and desert tortoise surveys have been conducted within the Project area. The BLM will continue to coordinate with the USFWS throughout the EIS environmental review and decision-making process.

Nye County has negotiated a Development Agreement with Solar Millennium to mitigate direct impacts to roads, emergency services, and other visual and socioeconomic aspects of the Project. The Development Agreement is available in Appendix F.

The BLM consulted with Native American Tribes that have ancestral ties to, or traditional culture use of, Project area lands. On June 17, 2009, the BLM mailed formal letters to the following tribal groups:

- Pahrump Paiute Tribe
- Las Vegas Paiute Tribe
- Chemehuevi Indian Tribe
- Colorado River Indian Tribes
- Timbisha Shoshone Tribe

The consultation letter, with attachments that explained each proposal in more detail, described the Proposed Action, in addition to five other renewable energy projects being proposed in the Pahrump and Amargosa Valleys of Nye County, Nevada. The BLM requested (1) tribal input regarding any concerns about traditional cultural practices or other issues that might be affected by the Proposed Action, (2) information on how they would like to be involved in the planning process, and (3) names of other individuals that should be notified or consulted about the Project.

On August 5, 2009, the same tribes were e-mailed information about the Project's scoping meetings if they wanted to attend and make comments. A field trip with a representative of the Timbisha Shoshone into the Project area was conducted on September 17, 2009. At this time, no tribal verbal or written religious or cultural concerns have been expressed concerning the proposed Project or Project area.

5.4 LIST OF AGENCIES, ORGANIZATIONS, AND PERSONS TO WHOM COPIES OF THE EIS WERE SENT

This section lists the agencies, officials, and other interested parties who requested copies of the Final EIS. The BLM filed copies with the EPA, who publishes a Notice of Availability of the Final EIS in the Federal Register. The BLM also distributed paper and electronic (on CD-ROM) copies to federal agencies, key state agencies, elected officials, local libraries, and other requesting parties. The BLM will provide copies to other interested organizations or individuals on request.

5.4.1 Federal Government

USACE
U.S. DOD
U.S. DOE
U.S. EPA
U.S. DOI – NPS
U.S. DOI – USFWS

5.4.2 State Government

Nevada State Clearinghouse – The Nevada State Clearinghouse distribute copies of government documents to various State Offices for comment.

5.4.3 Local Governments

Nye County

5.4.4 Tribal Governments

Pahrump Paiute Tribe
Las Vegas Paiute Tribe
Chemehuevi Indian Tribe
Colorado River Indian Tribes
Timbisha Shoshone Tribe

5.4.5 Other Organizations

Amargosa Conservancy
Center for Biological Diversity
Defenders of Wildlife
Desert Tortoise Council
International Brotherhood of Electrical Workers, Local 357
Ironworkers, Local 433

Las Vegas Valley Water District
League of Women Voters
Los Angeles and Salt Lake Railroad Company
Nevada Conservation League
Nevada Outdoor Recreation Association
Off-Road Business Association
Plumbers and Pipefitters, Local 525
Red Rock Audubon Society
Southern Nevada Building and Construction Trades Council
Southern Nevada Water Authority
Southwest Gas Company Right-of-Way Department
Toiyabe Chapter of the Sierra Club
Valley Electric Association, Inc.
Western Lands Project

5.4.6 Elected Government Officials

Jim Gibbons, State of Nevada Governor
Ed Goedhart, Nevada Assembly
Mike McGinness, Nevada Senate
Shelley Berkley, Nevada 1st District, U.S. House of Representatives
Dean Heller, Nevada 2nd District, U.S. House of Representatives
Dina Titus, Nevada 3rd District, U.S. House of Representatives
John Ensign, U.S. Senate
Harry M. Reid, U.S. Senate

5.4.7 Availability

Copies of the Amargosa Farm Road Solar Energy Project EIS are available for public inspection at the following public libraries and BLM offices.

Amargosa Valley Library
829 E. Farm Rd.
Amargosa Valley, NV 89020

Beatty Library
400 North Fourth St.
Beatty, NV 89003

Pahrump Community Library
701 East St.
Pahrump, NV 89048

BLM, Nevada State Office
1340 Financial Blvd.
Reno, NV 89502

BLM, Southern Nevada District Office
4701 N. Torrey Pines Dr.
Las Vegas, NV 89130

5.5 LIST OF PREPARERS

5.5.1 BLM Core Interdisciplinary Team and Technical Specialty

5.5.1.1 BLM – Nevada State Office

- Ron Wenker – State Director
- Amy Leuders – Associate State Director
- JoLynn Worley – Public Affairs
- Erin Eastvedt – Renewable Energy Project Coordinator

5.5.1.2 BLM – Pahrump and Las Vegas Field Offices

- Mary Jo Rugwell – District Manager
- Patrick Putnam – Field Manager
- Gregory Helseth – Renewable Energy Project Manager
- Mark Chandler – Realty Specialist
- Gayle Marrs-Smith – Acting Pahrump Field Manager
- Hillerie Patton – Public Affairs Specialist
- Jayson Barangan – Natural Resource Specialist
- Michele Bilodeau – Environmental Coordinator
- Lisa Christianson – Environmental Protection Specialist
- Fred Edwards – Botanist
- Dave Fanning – Geologist
- Susan Farkas – Planning and Environmental Coordinator
- Krystal Johnson – Burro Specialist

- Amanda Hamlin – Administrative Professional
- Sarah Peterson – Hydrologist
- Meghan Magill – Hydrologist
- Marc Sanchez – Recreation Planner
- Kathleen Sprowl – Archaeologist/Paleontologist
- Jeff Steinmetz – Lead Planning and Environmental Coordinator

5.6 EIS CONTRACTOR AND SUBCONTRACTORS

Name	Degree(s)	Professional Discipline/Expertise	Years of Experience
Karen Anderson	BA	Document Production, Quality Assurance/Quality Control	26
Emily Belts	BA	Land Use, Recreation, Transportation	4
Garlyn Bergdale	MLA, BS	Senior NEPA Reviewer	33
Glenn Darrington	PhD, MA, BA	Historic and Cultural Resources	22
Avril Fabian	MLA, BS	Land Use, Recreation, Transportation, Special Management Areas	5
Sandra Fairchild	BS, AA	NEPA Project Manager, Water Resources	26
Kristi Gardner		Document Production, Quality Assurance/Quality Control	12
Barbara Garrison	BS	Biological Resources	27
Rebecca Halbmaier	MSC, BA	Historic and Cultural Resources	8
Mathew Hamilton	MS, BS	EJ, Socioeconomic Resources	12
Chris Harris	B.S.	Visual Resources	5
Amy Jerome	MBA, BS	Senior NEPA Reviewer	12
Michael Kirby	PhD, MS, BS	Geologic Hazards and Mineral Resources, Soils, Paleontological Resources	20
N. Conrad Langley	MLA, BFA	Visual Resources	12
Diana Nickels	AA	Document Production/Graphics	21
Alison Pruet	MS, BS	Biological Resources	3
Ashley Rosia	BA	Air Quality, Hazardous Materials	1
Michael Burrill – LFR	BA	Environmental Land Use Noise Compatibility	20
Kevin Fowler – LFR	BA	Environmental Noise Control	4

Chapter 5 - Consultation and Coordination

Name	Degree(s)	Professional Discipline/Expertise	Years of Experience
Guy Roemer – GeoTrans	BS, MS	Water Resources, Groundwater Modeling	13
Matt Sauter	MS, BA	Geologic Hazards and Mineral Resources, Soils	2
Marc Schwartz	MLA, BS	Visual Resources	10
Mickey Siegel	MCRP, BS	Management	30
E. Linwood Smith	PhD, MS, BA	Biological Resources	35
Paul Trenter	BSLA	Management	23
Buddy Borden University of Nevada, Reno	MS	Community Economic Development	20
Mariah Evans University of Nevada, Reno	PhD	Sociology (Social Impact Assessment)	27

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CHAPTER 6 - REFERENCES

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CHAPTER 7 - GLOSSARY

ACEC: A BLM designation pertaining to areas where specific management attention is needed to protect and prevent irreparable damage to important historical, cultural, and scenic values, fish or wildlife resources, or other natural systems or processes, or to protect human life and safety from natural hazards

Acre-foot: A unit commonly used for measuring the volume of water; equal to the quantity of water required to cover one acre (43,560 square feet or 4,047 square meters) to a depth of 1 foot (0.30 meter) and equal to 43,560 cubic feet (1,234 cubic meters), or 325,851 gallons.

Action: In the context of the NEPA, describes actions proposed to meet a specific purpose and need and that may have effects on the environment, which are potentially subject to Federal control and responsibility. Federal actions generally fall into the categories of adoption of official policy, formal plans, and programs; or approval of specific projects. For this document, the term action applies to a specific project.

Affected environment: Existing biological, physical, social, and economic conditions of an area subject to change, both directly and indirectly, as the result of a proposed human action.

Air quality: A measure of the health-related and visual characteristics of the air, often derived from quantitative measurements of the concentrations of specific injurious or contaminating substances.

Air Quality Standards: The level of pollutants prescribed by regulation that may not be exceeded during a specified time in a defined area.

Ambient: The surrounding natural conditions (or environment) in a given place and time.

Alluvium: A general term for clay, silt, sand, gravel, or similar consolidated material deposited during comparatively recent geologic time by a stream or other body of running water in the bed of the stream, river, or floodplain, or as a cone or fan at the base of a mountain slope.

Alternative: Any one of a number of options for a project.

Ambient: Of the environment surrounding a body, encompassing on all sides. Most commonly applied to air quality and noise.

American Indian tribe (or tribe): Any American Indian group in the conterminous United States that the Secretary of the Interior recognizes as possessing tribal status (listed periodically in the Federal Register).

Annual (ecology): A plant that completes its development in one year or one season and then dies.

Aquatic: Growing or living in or near the water.

Aquifer: A water-bearing rock unit (unconsolidated or bedrock) that will yield water in a usable quantity to a well or spring.

Archaeological site: A discrete location that provides physical evidence of past human use.

Archaeology: The scientific study of the life and culture of past, especially ancient, peoples, as by excavation of ancient cities, relics, artifacts, etc.

Area of Critical Environmental Concern (ACEC): A Bureau of Land Management (BLM) designation pertaining to areas where specific management attention is needed to protect and prevent irreparable damage to important historical, cultural, and scenic values, fish or wildlife resources, or other natural systems or processes, or to protect human life and safety from natural hazards.

Artifact: Any object showing human workmanship or modification, especially from a prehistoric or historic culture.

Assessment: The act of evaluating and interpreting data and information for a defined purpose.

A-Weighted Sound Levels: Decibels (referenced to 20 micro-Pascals) as measured with an A-weighting network of a standard sound level meter, abbreviated dB(A).

Backfill: The fill, often mine waste or rock, that replaces the void left from where a rock or ore has been removed. Also, the material used to fill in a trench in the groundbed (i.e., pipeline trench). The composition of the backfill varies based on the soil type being used and the component being covered.

Background (visual): That portion of the visual landscape lying from the outer limit of the middleground to infinity. Color and texture are subdued in this area, and visual sensitivity analysis here is primarily concerned with the two-dimensional shape of landforms against the sky.

Baseline: The existing conditions against which impacts of the proposed action and its alternatives can be compared.

Basin: A depressed area having no surface outlet (topographic basin); a physiographic feature or subsurface structure that is capable of collecting, storing, or discharging water by reason of its shape and the characteristics of its confining material (water); a depression in the earth's surface, the lowest part often filled by a lake or pond (lake basin); a part of a river or canal widened (drainage, river, stream basin).

Best management practices: A suite of techniques that guide, or may be applied to, management actions to aid in achieving desired outcomes and help to protect the environmental resources by avoiding or minimizing impacts of an action.

Big game: Large species of wildlife that are hunted (such as elk, deer, pronghorn antelope).

Biological assessment: Information prepared by, or under the direction of, a Federal agency to determine whether a proposed action is likely to (1) adversely affect listed species or designated critical habitat; (2) jeopardize the continued existence of species that are proposed for listing; or (3) adversely modify proposed critical habitat.

Biological opinion: A document that is the product of formal consultation, stating the opinion of the U.S. Fish and Wildlife Service on whether or not a Federal action is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat.

Butte: A steep hill standing alone in a plain.

Candidate species: A plant or animal species not yet officially listed as threatened or endangered, but which is undergoing status review by the U.S. Fish and Wildlife Service.

Clean Air Act of 1990: Federal legislation governing air pollution. The Clean Air Act established NAAQS for CO, NO_x, O₃, PM, SO₂, and Pb. PSD classifications define the allowable increased levels of air quality deterioration above legally established levels and include the following:

Class I – minimal additional deterioration in air quality (certain national parks and wilderness areas)

Class II – moderate additional deterioration in air quality (most lands)

Class III – greater deterioration for planned maximum growth (industrial areas)

Clean Water Act of 1987: National environmental law enforced by the U.S. EPA that regulates water pollution.

Cooperating Agency: Assists the lead Federal agency in developing an environmental assessment or EIS. The CEQ regulations implementing NEPA define a cooperating agency as any agency that has jurisdiction by law or special expertise for proposals covered by NEPA (40 CFR 1501.6). Any Federal, state, or local government jurisdiction with such qualification may become a cooperating agency by agreement with the lead agency.

Council on Environmental Quality: An advisory council to the President established by the NEPA. It reviews Federal programs for their effort on environmental studies, and advises the President on environmental matters.

Criteria: Standards on which a judgment or decision can be based.

Cultural resources: Remains of human activity, occupation, or endeavor as reflected in districts, sites, buildings, objects, artifacts, ruins, works of art, architecture, and natural features important in human events.

Cumulative effect (or impact): The impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable

actions. Cumulative impacts are evaluated as part of the EIS, and may include consideration of additive or interactive effects regardless of what agency or person undertakes the other actions.

Daytime: The period from 7:00 a.m. to 10:00 p.m.

Decibel: A unit for expressing the relative intensity of sounds on a logarithmic scale from zero for the average least perceptible sound to about 130 for the average level at which sound causes pain to humans. For traffic and industrial noise measurements, the dBA, a frequency-weighted noise unit, is widely used. The dBA scale corresponds approximately to the frequency response of the human ear and thus correlates well with loudness.

Degradation: The wearing down or away, and general lowering or reducing, of the earth's surface by the processes of weathering and erosion.

Discharge: Outflow of surface water in a stream or canal (water). Discharge from an industrial facility that may contain pollutants harmful to fish or animals if it is released into nearby water bodies usually requires a permit issued by the U.S. EPA and is monitored.

Distance zone: A visibility threshold distance where visual perception changes. They usually are defined as foreground, middleground, and background.

Diversion: A channel, embankment, or other manmade structure constructed to divert water from one area to another; the process of using these structures to move water.

Drainage: The natural or artificial removal of surface water and groundwater from a given area. Many agricultural soils need drainage to improve production or to manage water supplies.

Drawdown: The decrease in elevation of the water surface in a well, the local water table or the pressure head on an artesian well due to extraction of groundwater or decrease in recharge to the aquifer.

Easement: A right afforded a person, agency, or organization to make limited use of another's real property for access or other purposes.

Ecology: The relationship between living organisms and their environment.

Effect (or impact): A modification of the existing environment as it presently exists, caused by an action (such as construction or operation of facilities). An effect may be direct, indirect, or cumulative. The terms effect and impact are synonymous under the NEPA. A direct effect is caused by an action and occurs at the same time and same place (40 CFR 1508.8(a)). An indirect effect is caused by the action later in time or farther removed in distance, but still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Emission: Effluent discharged into the atmosphere, usually specified by mass per unit time, and considered when analyzing air quality.

Endangered species: A plant or animal that is in danger of extinction throughout all or a significant portion of its range. Endangered species are rarely identified by the Secretary of the Interior in accordance with the ESA of 1973.

Endangered Species Act of 1973: Provides a means whereby the ecosystems upon which threatened and endangered species depend may be conserved and to provide a program for the conservation of such threatened and endangered species. The ESA requires all Federal agencies to seek to conserve threatened and endangered species, use applicable authorities in furtherance of the purposes of the ESA, and avoid jeopardizing the continued existence of any species that is listed or proposed for listing as threatened and endangered or destroying or adversely modifying its designated or proposed critical habitat. The U.S. Fish and Wildlife Service is responsible for administration of this act.

Energy conservation: A means of saving energy.

Environment: The surrounding conditions, influences, or forces that affect or modify an organism or an ecological community and ultimately determine its form and survival.

Environmental Impact Statement: A document prepared to analyze the impacts on the environment of a proposed action and released to the public for review and comment. An EIS must meet the requirements of NEPA, CEQ, and the directives of the agency responsible for the proposed action.

Environmental justice: The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people including racial, ethnic, or socioeconomic group should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of Federal, state, local, and tribal programs and policies (see EO 12898).

Ephemeral wash or stream: A stream that flows only in direct response to precipitation in the immediate watershed or in response to the melting of a cover of snow and ice and has a channel bottom that is always above the local water table.

Erosion: The wearing away of the land surface by running water, wind, ice, or other geologic agents and by such processes as “gravitation creep.”

Federal Register: Published by the Office of the Federal Register, National Archives and Records Administration, the Federal Register is the official daily publication for rules, proposed rules, and notices of Federal agencies and organizations, as well as EOs and other presidential documents.

Floodplain: That portion of a river or stream valley, adjacent to a river channel, that is built of sediments and is inundated with water when the stream overflows its banks.

Foreground: The visible area from a viewpoint or use area out to a distance of 0.5 mile. The ability to perceive detail in a landscape is greatest in this zone.

Fossil: Any remains, trace, or imprint of a plant or animal that has been preserved by natural process in the earth's crust since some past geologic time.

Geographic information system: A system of computer hardware, software, data, people and applications that capture, store, edit, analyze, and graphically display a potentially wide array of geospatial information.

Geology: The science that relates to the earth, the rocks of which it is composed, and the changes that the earth has undergone or is undergoing.

Geothermal resource: Heat found in rocks and fluids at various depths that can be extracted by drilling or pumping for use as an energy source. This heat may be residual heat, friction heat, or a result of radioactive decay.

Global warming: An increase in the average temperature of the earth's atmosphere and oceans. The term also is used to describe the theory that increasing temperatures are the result of a strengthening greenhouse effect caused primarily by manmade increases in CO₂ and other greenhouse gases.

Groundwater: Subsurface water that fills available openings in rock or soil materials to the extent that they are considered water saturated.

Habitat: A specific set of physical conditions in a geographic area(s) that surrounds a single species, group of species, or large community. In wildlife management, the major components of habitat are food, water, cover, and living space.

Hydrology: The study of the movement, distribution, and quality of water throughout the earth, addresses both the hydrologic cycle and water resources.

Impact (or effect): A modification of the existing environment as it presently exists, caused by an action (such as construction or operation of facilities). An impact may be direct, indirect, or cumulative. The terms effect and impact are synonymous under NEPA.

Indirect effect (or impact): Secondary effects that occur in locations other than the initial action or later in time, but that are caused by the proposed action.

Industrial area: A land use zoning term used to describe or designate areas in which heavy industry is concentrated or allowed.

Infrastructure: The facilities, services, and equipment needed for a community or facility to function, such as and including roads, sewers, water lines, and electric lines.

Intermittent: A river or stream that flows for a period of time, usually seasonally during rainy periods, and stops during dry periods. In arid regions, dry periods may be interrupted by occasional flash floods from brief but intense rain storms.

Invasive species: Describes a large number of nonnative plant species whose introduction causes or is likely to cause economic or environmental harm or harm to human health.

Issue: Describes the relationship between actions (proposed, connected, cumulative, similar) and environmental (natural, cultural, and socioeconomic) resources. Issues may be questions, concerns, problems, or other relationships, including beneficial ones. Issues do not predict the degree or intensity of harm the action might cause, but simply alert the reader as to what the environmental problems might be. The NEPA document should address issues identified through interaction with agencies and/or the public, and/or through resource studies.

Labor force: All persons 16 years of age or over who are either employed or unemployed and actively looking for a job.

Land use plan: A plan or document developed by a government entity, which outlines specific functions, uses, or management-related activities of an area, and may be identified in combination when joint or seasonal uses occur and may include land used for support facilities that are an integral part of the use.

Landform: A term used to describe the many land surfaces that exist as a result of geologic activity and weathering (e.g., plateaus, mountains, plains, and valleys).

Landscape: An area composed of interacting ecosystems that are repeated because of geology, landform, soils, climate, biota, and human influences throughout the area. Landscapes are generally of a size, shape, and pattern, which are determined by interacting ecosystems.

Ldn: Day/Night Sound Level: A 24-hour average, where sound levels during the nighttime hours of 10:00 p.m. to 7:00 a.m. have an added 10 dB weighting, but no added weighting on the evening hours, abbreviated as DNL or L_{DN} .

Lease: An authorization or contract by which one party (lessor) conveys the use of property to another (lessee) in return for rental payments. In cases of resource production, lessees pay royalties to the lessor in addition to rental payments.

L_{EQ} : The equivalent sound level, or the time-integrated continuous sound level, that represents the same sound energy as the varying sound levels, over a specified monitoring period.

Megawatt: A unit for measuring power equal to one million watts. The productive capacity of electrical generators is measured in MW.

Mesa: An isolated, nearly level land mass, formed on nearly horizontal rocks, standing above the surrounding country and bounded with steep sides.

Mineral resources: Any inorganic or organic substance occurring naturally in the earth that has a consistent and distinctive set of physical properties. Examples of mineral resources include coal, nickel, gold, silver, and copper.

Minimal (impact): Unless otherwise specified, “minimal” shall mean non-deleterious impacts that are measurable on the short term, but not significant (see definition herein).

Mitigation: The abatement or reduction of an impact on the environment by (1) avoiding a certain action or parts of an action, (2) employing certain construction measures to limit the

degree of impact, (3) restoring an area to preconstruction conditions, (4) preserving or maintaining an area throughout the life of a project, (5) replacing or providing substitute resources to the environment, or (6) gathering data (e.g., archaeological or paleontological) prior to disturbance.

Multi-Use: Land use where a combination of use types can be found in close proximity together: commercial, residential, public, industrial, etc.

National Ambient Air Quality Standards: The allowable concentrations of air pollutants in the air specified by the Federal government. The air quality standards are divided into primary standards (based on the air quality criteria and allowing an adequate margin of safety and requisite to protect the public health) and secondary standards (based on the air quality criteria and allowing an adequate margin of safety and requisite to protect the public welfare) from any unknown or expected adverse effects of air pollutants.

National Environmental Policy Act of 1969: Our nation's basic charter for protection of the environment. It establishes policy, sets goals, and provides means for carrying out the policy. In accordance with NEPA, all Federal agencies must prepare a written statement on the environmental impacts of a proposed action. The provisions to ensure that Federal agencies act according to the letter and spirit of NEPA are in the CEQ regulations for implementing NEPA (43 CFR 1500-1508).

National Register of Historic Places: A listing, maintained by the Secretary of the Interior, of districts, sites, buildings, structures, and objects worthy of preservation. To be eligible a property must normally be at least 50 years old, unless it has exceptional significance, and have national, State, or local significance in American history, architecture, archaeology, engineering, or culture; and possess integrity of location, design, setting, material, workmanship, feeling, and association; and (a) be associated with events that have made a significant contribution to the broad patterns of history, (b) be associated with the lives of persons significant in our past, or (c) embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; possess high artistic values; or represent a significant and distinguishable entity whose components may lack individual distinction; or (d) have yielded, or may be likely to yield, information important to prehistory or history.

Negligible (impact): Unless otherwise specified, "negligible" shall mean impacts of such a small scale such as to be non-measurable.

Nighttime: Periods other than daytime (as defined above), including legal holidays.

Noise: Loud, unpleasant, unexpected, or undesired sound that disrupts or interferes with normal human a

Noise Emission: The industry standard format of sound power level, which is the total acoustic power radiated from a given sound source as relates to a reference power level of 10 picowatts. Sound power level differs from sound pressure level, which quantifies the fluctuations in air pressure caused by acoustic energy.

Noise Level Measurements: Unless otherwise indicated, the use of A-weighted and "slow" response of a noise monitoring instrument complying with at least Type 2 requirements as defined by the latest revision of American National Standard Institute S1.4 Specification for Sound Level Meters.

Nonattainment area: An air quality control region (or portion thereof) in which the U.S. EPA has determined that ambient air concentrations exceed NAAQS for one or more criteria pollutants.

Noxious weed: Nonnative plant species that negatively impact crops, native plant communities, and/or management of natural or agricultural systems. Noxious weeds are officially designated by a number of states (including Nevada) and Federal agencies.

Particulates: Minute, separate particles, such as dust or other air pollutants.

Perennial stream: A stream or that part of a stream that flows continuously during all of the calendar year as a result of groundwater discharge or surface runoff.

Perennial yield: The amount of usable water from a groundwater aquifer that can be withdrawn economically and consumed each year for an indefinite period of time. It cannot exceed the natural recharge to that aquifer and ultimately is limited to maximum amount of discharge that can be used for beneficial use.

Pipeline: A continuous pipe conduit for transporting fluids such as natural gas and/or supplemental gaseous fuels, oil, or water from one point to another, usually from a point in or beyond the producing field or processing plant to another pipeline or to points of use.

Playa: The shallow central lake basin of a desert plain, in which water gathers after a rain and is evaporated.

Prime farmland: A special category of highly productive cropland that is recognized and described by the U.S. Department of Agriculture's Soil Conservation Service and receives special protection under the Surface Mining Law of 1977.

Project area: Footprint of the project.

Public land: Land or interest in land owned by the United States and administered through the Secretary of the Interior through the BLM without regard to how the United States acquired ownership, except lands on the Outer Continental Shelf, and land held in trust for the benefit of American Indians, Aleuts, and Eskimos.

Range: A large, open area of land over which livestock can wander and graze.

Raptor: A bird of prey.

Rare: A plant or animal restricted in distribution. May be locally abundant in a limited area or few in number over a wide area.

Recharge: Replenishment of a groundwater reservoir (aquifer) by the addition of water, through either natural or artificial means.

Reclamation: Restoration of land disturbed by natural or human activity (e.g., mining, pipeline construction) to original contour, use, or condition. Also describes the return of land to alternative uses that may, under certain circumstances, be different from those prior to disturbance.

Recontouring: Return a surface to or near to its original form through some type of action such as grading.

Record of Decision: A document separate from, but associated with, an EIS that publicly and officially discloses the responsible official's decision on a proposed action.

Region of Influence: Area which is impacted by activities related to the project. Varies by species and activity, however, for this project it has been defined as the hydrographic unit.

Reservation: Land set aside to achieve a particular land use or conservation objective. For the purposes of this document, reservation refers to those lands managed by an American Indian tribe under the U.S. Department of the Interior's Bureau of Indian Affairs. The reservation land is Federal territory held in trust for tribes. The American Indian tribes have limited national sovereignty.

Revegetation: The reestablishment and development of self-sustaining plant cover. On disturbed sites, this normally requires human assistance such as reseeding.

Reverse osmosis: A separation process that uses pressure to force a solvent through a membrane that retains the solute on one side and allows the pure solvent to pass to the other side. More formally, it is the process of forcing a solvent from a region of high solute concentration through a membrane to a region of low solute concentration by applying a pressure in excess of the osmotic pressure.

Revised Statute 2477: the right of way for the construction of highways across public lands not otherwise reserved for public purposes." That right-of-way is a legitimate property right (most often of the counties and states), and, consequently, carries with it a bundle of associated rights, including the right to maintain the roads and upgrade them under certain circumstances. Roads can be federally designated 'RS 2477'.

Right-of-way: Land authorized to be used or occupied for the construction, operation, maintenance, and termination of a project, such as a road or utility.

Riparian: Referring or relating to areas adjacent to water or influenced by free water associated with streams or rivers on geologic surfaces occupying the lowest position of a watershed. Pertaining to, living or situated on banks of rivers, streams, or other body of water. Normally used to refer to the plants of all types that grow along, around, or in wet areas.

Rural: Sparsely settled places away from the influence of large cities and towns. Such areas are distinct from more intensively settled urban and suburban areas, and also from unsettled lands

such as outback or wilderness. People tend to live in villages, on farms, and in other isolated houses on large plots of land.

Scoping: The process open to the public early in the preparation of an EIS for determining the scope of issues related to a proposed action and identifying significant issues to be addressed in an EIS.

Screen: An initial assessment performed with few data and many assumptions to identify alternatives that should be evaluated more carefully.

Sediment: Solid fragmental material, either mineral or organic, that is transported or deposited by air, water, gravity, or ice.

Sedimentation: The result when soil or mineral is transported by moving water, wind, gravity, or glaciers and deposited in streams or other bodies of water, or on land. Also, letting solids settle out of wastewater by gravity during treatment.

Sensitive receptor: In terms of noise, people or animals that may hear a noise or be sensitive to increased noise levels within their range of hearing.

Sensitive Receptor Location: A location of regulatory compliance where particular sensitivities to noise exist, such as residential areas, institutions, hospitals, parks, or other environmentally sensitive areas.

Sound Pressure Level (SPL): The observable effect of acoustic energy radiation, quantifying the sound level as perceivable by the receiver. When Sound Pressure is used to describe a noise source, the distance between source and receiver must be known in order to yield useful information about the power rating of the source.

Sensitivity: The state of being readily affected by the actions of external influence.

Significant (impact): Unless otherwise specified, “significant” has been used in this document to describe any impact that would cause an impact that is irreversible and/or irretrievable without human intervention (i.e., mitigation/restoration)

Special Development Area: sets aside public or private areas of special interest that would be subject to a specific POD or a Development Agreement in accordance with Nye County Code Title 16.32. SDA is a mixed-use designation and a variety of land uses might be proposed for approval, such as the Yucca Mountain Project Gateway Area Concept Plan, and projects under review by the Bureau of Land Management, such as the Solar Energy Facilities. A property owner/developer must provide a specific POD for the subject property and obtain recommendations from the Planning Committee and the Town Advisory Board prior to Nye County Commission approval.

Special status species: Wildlife and plant species either federally listed or proposed for listing as endangered or threatened; state-listed; or priority species of concern to Federal agencies or tribes.

Sound power Level (PWL): A specialized analytical metric used to fully quantify the acoustic energy emitted by a source which is considered a complete value without the accompanying information on the position of measurement relative to the source. It may be used to calculate the sound pressure level at any desired distance away from the source.

Surface water: All bodies of water on the surface of the earth and open to the atmosphere such as rivers, lakes, reservoirs, ponds, seas, and estuaries.

Surfactant: Any substance that when dissolved in water or an aqueous solution reduces its surface tension or the interfacial tension between it and another liquid.

Terrain: Used to describe the geophysiographic characteristics of land in terms of elevation, slope, and orientation.

Threatened or Endangered Species: Animal or plant species that are listed under the Federal ESA of 1973, as amended (federally listed), or under similar state laws (state-listed).

Total dissolved solids: A term that describes the quantity of dissolved material in a sample of water.

Traditional cultural places: These named places (landscape features) comprise the cultural landscape that provides the context for evaluating specific traditional cultural properties.

Transition zone: The area between two discrete environmental areas, and thus containing elements of each. For example, the transition zone between an upland piñon forest and a lowland desert scrub environment.

Transmissivity: The rate at which water is transmitted through a unit width of the aquifer under a unit hydraulic gradient.

Tribe: Any Indian tribe, band, group, or community having a governing body recognized by the Secretary of Interior.

Undertaking: A project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; those requiring a Federal permit, license, or approval; and those subject to State or local regulation administered pursuant to a delegation or approval of a Federal agency.

Urban: An area where there is an increased density of human-created structures in comparison to the areas surrounding it. Urban areas are frequently referred to as cities or towns. The U.S. Census Bureau defines an urbanized area as: “Core census block groups or blocks that have a population density of at least 1,000 people per square mile and (386 per square kilometer) and surrounding census blocks that have an overall density of at least 500 people per square mile (193 per square kilometer).”

Vegetation communities: Species of plants that commonly live together in the same region or ecotone.

Visibility: The distance to which an observer can distinguish objects from their background. The determinants of visibility include the characteristics of the target object (shape, size, color, pattern), the angle and intensity of sunlight, the observer's eyesight, and any screening present between the viewer and the object (i.e., vegetation, landform, even pollution such as regional haze).

Visual resource management classes: Categories assigned to public lands based on scenic quality, sensitivity level, and distance zones. There are four classes, each of which has an objective that prescribes the amount of change allowed in the characteristic landscape.

Waters of the United States: All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce including adjacent wetlands and tributaries to water of the United States; and all waters by which the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce.

Watershed: All land and water within the confines of a drainage divide.

Well field: Area containing one or more wells that produce usable amounts of water or oil.

Wetlands: Areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Examples of wetlands include marshes, shallow swamps, lakeshores, bogs, muskegs, wet meadows, estuaries, and riparian areas.

Wilderness: An area formally designated by Congress as part of the National Wilderness Preservation System.

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