UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

AND

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

FINAL WORK PLAN FOR SECTION 368 CORRIDOR STUDY

July 8, 2013

Introduction

Through the Section 368 Corridor Study (Corridor Study), the Bureau of Land Management (BLM) and U.S. Forest Service (FS) (the Agencies) will study corridors designated pursuant to section 368 of the Energy Policy Act of 2005 (section 368 corridors) to assess their overall usefulness with regard to various factors, including their effectiveness in reducing the proliferation of dispersed rights-of-way crossing the landscape of federal lands. The Agencies will also assess efficiency and effectiveness of the section 368 corridors and record lessons learned in the siting process. The study will also identify where corridors are being over- or underutilized and evaluate use of the Interagency Operating Procedures (IOPs) for the section 368 corridors. The study will inform the regional periodic review of section 368 corridors including the review of IOPs and will be made public upon completion. The Agencies will develop a corridor monitoring plan to support this study. All work described in this work plan is contingent upon availability of appropriated funds.

Background

On August 8, 2005, the President signed into law the Energy Policy Act of 2005 (42 U.S.C. 15801 *et seq.*). In Section 368 of the Energy Policy Act (42 U.S.C. 15926), Congress directed the Secretaries of Agriculture, Commerce, Defense, Energy, and the Interior to designate corridors for oil, gas, and hydrogen pipelines and electricity transmission and distribution facilities (major linear projects) on federal land in the 11 contiguous western states. The Secretaries were also directed to perform any environmental reviews required to complete the designation of section 368 corridors, incorporate the section 368 corridors into land use plans, and establish a process for identifying new section 368 corridors.

On January 14, 2009, the BLM approved a record of decision (ROD) that amended 92 BLM land use plans and designated approximately 5,000 miles of section 368 corridors on BLM-administered lands. The affected states include Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. The FS issued a ROD on January 14, 2009, which amended 38 FS land use plans and designated approximately 990 miles of section 368 corridors on National Forest System lands in 10 states. The RODs stated that the Agencies intended to produce an interagency MOU for implementation of the RODs.

The BLM and the FS based the RODs on the analysis in a 2008 final programmatic environmental impact statement (FPEIS). The DOE and the BLM were lead agencies in preparation of the draft and final programmatic EIS. The FS, United States Department of Defense, and U.S. Fish and Wildlife Service participated as cooperating agencies. On July 7, 2009, several non-governmental organizations filed a complaint in the United States District Court for the Northern District of California challenging the DOI and FS RODs pursuant to the Energy Policy Act, National Environmental Policy Act, Endangered Species Act, and Administrative Procedure Act. *Wilderness Society v. United States Department of Interior*, No. 3:09-cv-03048-JW (D.N.D. Cal.). On July 11, 2012, the court dismissed the case pursuant to the settlement agreement (Settlement) entered into by the parties.

The primary objective of the Settlement is to ensure that revisions, deletions, and additions to section 368 corridors consider the following principles:

1. Location of section 368 corridors in favorable landscapes;
2. Facilitation of renewable energy projects where feasible;
3. Avoidance of environmentally sensitive areas to the maximum extent practicable;
4. Diminution of the proliferation of dispersed rights-of-way crossing the landscape; and
5. Improvement of the long-term benefits of reliable and safe transmission.

Corridor Study Objectives

The Corridor Study will focus on the information relating to use of section 368 corridors that is publicly available at the time the Agencies initiate the Corridor Study. During Regional Periodic Reviews, the Agencies will review the Corridor Study to determine if updates are needed to inform Regional Periodic Reviews. The Corridor Study will consist of the following tasks:

1. Collect new relevant, existing, publicly available data that has been created since the RODs were approved (January 2009 to conclusion of the comment period for the public outreach).

- Agencies will seek stakeholder input which may include release of a request for information (RFI) published in the Federal Register or other public outreach method. The Agencies will provide a 30-day public comment period.
- Agencies will update resource, land use allocation, and land status layers with publicly available data. See attached Appendix A for a listing of data layers, also posted on the study website http://corridoreis.anl.gov/. Appendix B contains a list of additional data layers that the Agencies anticipate updating as part of the Corridor Study. Specifically, the Agencies will:
  - Update data layers from the FPEIS with other relevant information publicly available at the time the Agencies initiate the Corridor Study;
  - Identify differences from FPEIS to present; and
  - In coordination with other Rapid Response Team for Transmission (RRTT) member agencies (for more information about the RRTT visit www.whitehouse.gov/administration/eop/ceq/initiatives), provide relevant, current information regarding resource, land use allocation, and land status.

2. **Analyze corridor use to assess the efficiency and effectiveness of section 368 corridors and record lessons learned in the siting process.**

   - Scope: The Agencies will identify an appropriate scope (i.e. types of projects) for authorized projects to be included in the Corridor Study, with consideration given to comments received during the public outreach effort. An initial list of authorized projects will be made available prior to the public outreach effort where comments will be requested. The initial list will include high voltage electric transmission lines (100 kV and higher), and oil, gas and hydrogen pipelines (10 inches in diameter or larger) both inside and outside of the section 368 corridors.
     - The scope will be temporally limited to those projects authorized from the time of approval of the January 2009 RODs to the time the Agencies initiate the Corridor Study. Projects authorized after initiation of the Corridor Study may be considered in future Corridor Study updates.
   - Information Gathering: The Agencies will identify authorized projects (according to the scope identified above), and gather relevant project information, including:
     - The types and numbers of authorized projects sited within and outside of the section 368 corridors;
     - Widths and lengths of projects sited within and outside the section 368 corridors; and
     - Spatial data/locational information/characteristics (e.g. length/width/etc.).
   - Analysis:
     - Map authorized uses;
     - Identify where corridors are being over- or underutilized;
     - Where authorized uses post-RODs deviated from corridor or didn't use corridors, identify/collect reason for deviation or non-use (e.g. NEPA document, ROD, plan of development, information in response to RFI, stakeholder interviews, etc.); and
     - Identify uses approved within the corridor other than major linear projects (including attendant facilities), and whether corridor compatibility was assessed for those uses.

3. **Assess the use of IOPs for authorized projects to inform the Periodic Review recommendations regarding additions, deletions, or revisions to IOPs.** IOPs are listed in Appendix C of this Work Plan. The Agencies will:
   - Review pertinent documents for authorized projects (e.g. the corresponding NEPA document and land use authorization) for compliance with IOPs;
   - Make information regarding use of IOPs available to the public and ask for stakeholder feedback on effectiveness of IOPs for authorized projects;
   - Assess effectiveness of IOPs for implementation and administration of authorized projects; and
   - Request suggestions for methodology for assessing the effectiveness of IOPs in the RFI or alternative public outreach method.

Schedule

Schedule is contingent upon availability of appropriated funds.

Milestone	Target Timeline
Publish RFI in Federal Register	
Comment period ends	30 days after publication date
Compile and analyze comments	30 days after close of comment period
Complete draft of Corridor Study	6 months after close of comment period
Circulate draft to Agencies for review	30 days
Compile and address Agency comments	30 days (may be reduced, depending on number and complexity of comments)
Circulate draft for review of other agencies	30 days
Compile and address other agency comments	30 days (may be reduced, depending on number and complexity of comments)
Finalize Corridor Study	12 months following initiation of Corridor Study

The Agencies may utilize contractors to assist with various tasks, including the Corridor Study document preparation, website and document hosting, and external outreach.

Changes to the Work Plan

Changes to the Work Plan may be made upon written agreement of both the BLM and FS.

Responsible Agency Points of Contact

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LIST OF CORRIDOR STUDY WORK PLAN APPENDICES

APPENDIX A – Geographic Information System Data List (Appendix I of the Final West-wide Energy Corridor Programmatic Environmental Impact Statement)

APPENDIX B – Additional Geographic Information System Data List

APPENDIX C – Interagency Operating Procedures (Appendix B of the BLM and FS Records of Decision for the West-wide Energy Corridors Final Programmatic Environmental Impact Statement)

GEOGRAPHIC INFORMATION SYSTEM DATA LISTING

A geographic information system (GIS) was used to support the mapping and location-specific analyses in the West-wide Energy Corridor (WWEC) Programmatic Environmental Impact Statement (PEIS). GIS databases contain spatial data including imagery, map graphics, and associated tabular data; and GIS software allows for storing, processing, analyzing, modeling, and visualing the spatial data. Table 1 on the following pages lists the GIS data that were used for the analyses and maps in the PEIS, as well as the sources, quality, and scale of the data. The table and additional information about the data are also at Appendix I of the Final WWEC PEIS at http://corridoreis.anl.gov.

TABLE I Characteristics of GIS Data Used in the WWEC PEIS

Data Description	Source	Data Quality
1 Kilometer Digital Elevation Model	Environmental Systems Research Institute	Medium Scale
1 Kilometer Shaded Relief	Environmental Systems Research Institute	Medium Scale
30 Meter Digital Elevation Model	United States Geological Survey	Local Scale
30 Meter Shaded Relief	Derived from 30 Meter Digital Elevation Model	Local Scale
Aquifers	National Atlas of the United States	Medium Scale
Areas of Critical Environmental Concern	Bureau of Land Management	Large Scale
BLM Field Office Boundaries	Compiled from data received by the Bureau of Land Management	Medium Scale
Boundaries of existing BLM land use plans	Bureau of Land Management	Medium Scale
Boundaries of future BLM land use plans	Bureau of Land Management	Medium Scale
Costly landslide events	National Atlas of the United States	Medium Scale
Costly regional landslide events	National Atlas of the United States	Medium Scale
Critical habitat for flora and fauna	U.S. Fish and Wildlife Service	Large Scale
DOD installations and ranges	Department of Defense	Local Scale
Earthquakes	National Atlas of the United States	Medium Scale
Fault lines	National Atlas of the United States	Local Scale
Federal ownership (including agency administration)	Compiled from data received by the Bureau of Land Management in consultation with the Land Resources Project Office	Medium Scale
FEMA Q3 Flood Data	U.S. Federal Emergency Management Agency	Local Scale
Flow characteristics at USGS stream gauges	United States Geological Survey	Local Scale
Generalized geologic regions	United States Geological Survey	Medium Scale
Instrument Military Training Routes	Department of Defense	Local Scale
Karst areas	National Atlas of the United States	Small Scale
Lakes, dry lakes, and reservoirs	National Atlas of the United States	Medium Scale
Landslides	National Atlas of the United States	Small Scale
Level III Ecoregions	National Atlas of the United States	Small Scale
Level IV Ecoregions	Environmental Protection Agency	Local Scale
Low-Level Military Training Routes	Department of Defense	Local Scale
Military Training Routes	Department of Defense	Local Scale
Military Training Routes with floors under 1,000 feet above ground level and slow routes under 1,500 feet above ground level	Department of Defense	Local Scale

TABLE I (Cont.)

Data Description	Source	Data Quality
National Scenic and Historic Trails	Bureau of Land Management National Landscape Conservation System	Small Scale
National Historic Landmarks	Compiled from data received from the National Registration Information System in consultation with the National Park Service	Local Scale
National Monuments	Compiled from BLM, USGS, and USFS sources	Medium Scale
National Natural Landmarks	National Park Service	Local Scale
Nonattainment areas	State Air Quality Offices	Local Scale
NPS Areas under Class I EPA Air Restrictions	National Park Service	Local Scale
Physiographic divisions	United States Geological Survey	Small Scale
Pre-contact Tribal boundaries	Handbook of North American Indians, Smithsonian Institution	Small Scale
Previously proposed energy corridors from other sources	Compiled from various sources	Small Scale
Previously proposed energy corridors from scoping comments	Compiled from various sources	Small Scale
Previously proposed energy corridors from Western Utility Group	Bureau of Land Management	Small Scale
Railroads	Bureau of Transportation Statistics National Transportation Atlas Data	Local Scale
Rivers and streams	National Atlas of the United States	Medium Scale
Roads	Bureau of Transportation Statistics National Transportation Atlas Data	Local Scale
Scenic Highways	Utah State University	Local Scale
Seismic hazard zones	National Atlas of the United States	Medium Scale
Special Use Airspace	Department of Defense	Local Scale
Special Use Airspace with floors under 1,000 feet above ground level	Department of Defense	Local Scale
Surficial geology	United States Geological Survey	Small Scale
USFS Areas under Class I EPA Air Restrictions	National Park Service	Local Scale
USFS Region boundaries	U.S. Forest Service	Small Scale
USFS roadless and specially designated areas	U.S. Forest Service	Local Scale
USFWS areas under Class I EPA air restrictions	National Park Service	Local Scale
Visual Military Training Routes	Department of Defense	Local Scale
Volcanoes	National Atlas of the United States	Medium Scale
Watersheds	National Atlas of the United States	Medium Scale
Wild and Scenic Rivers (including evaluated river segments determined suitable/eligible but not currently designated)	United States Geological Survey	Medium Scale
Wilderness Areas	National Atlas of the United States	Medium Scale
Wilderness Study Areas	Bureau of Land Management National Landscape Conservation System	Medium Scale

ADDITIONAL
GEOGRAPHIC INFORMATION SYSTEM DATA LISTING
ANTICIPATED TO BE COLLECTED AND UPDATED
AS PART OF THE CORRIDOR STUDY

- BLM land use plan designated right-of-way exclusion and avoidance areas
- BLM land use plan designated visual resource management classes (I-III)
- Existing linear facilities (i.e. railroads, roads, transmission lines, pipelines)
- Lands with wilderness characteristics
- Migratory bird Flyways
- National Landscape Conservation Service
- National Register of Historic Places eligible or listed sites/resources/places
- Prime and Unique Farmlands
- Raptor Nests
- State and local government corridor designations and land use classifications
- State and local government parks and recreation areas
- Underground mines and other subsidence prone areas
- United States Department of Agriculture Land Conservation Programs: Natural Resources Conservation Service and Farm Service Agency (and other known private easements)
- Wetlands and waters of the United States under U.S. Army Corps of Engineers jurisdiction
- Potential or designated habitat for listed species
- Potential habitat for special status species (e.g. sage-grouse)

APPENDIX B:
INTERAGENCY OPERATING PROCEDURES

APPENDIX B: INTERAGENCY OPERATING PROCEDURES

These Interagency Operating Procedures (IOPs) are adopted as part of the plan amendments and are mandatory, as appropriate, for projects proposed within the Section 368 corridors. Not all IOPs will be appropriate for all projects; those that apply to pipelines, for instance, are not appropriate to transmission lines. These IOPs are practicable means to avoid or minimize environmental harm from future project development that may occur within the designated corridors.

The IOPs set forth below are not intended and should not be construed to alter applicable provisions of law or regulation or to reduce the protections afforded thereby to the resources addressed in the IOPs.

These IOPs are adopted as proposed in the Final PEIS, with minor technical edits and clarifications.

B.1 PROJECT PLANNING

Regulatory Compliance

1. The appropriate agency, assisted by the applicant, must conduct project-specific NEPA analyses in compliance with Section 102 of NEPA. The scope, content, and type of analysis shall be determined on a project-by-project basis by the Agencies and the applicants.
2. The appropriate agency, assisted by the project applicant, must comply with Section 106 of the NHPA on a project-by-project basis. Consultation with SHPOs, any federally recognized Tribes, and other appropriate parties as per regulations (36 CFR 800) must begin early in the planning process and continue throughout project development and execution. The ACHP retains the option to comment on all undertakings (36 CFR 800.9).
3. The appropriate agency, assisted by the project applicant, must consult with the USFWS and the NMFS as required by Section 7 of ESA. The specific consultation requirements, as set forth in regulations at 50 CFR Part 402, would be applied on a project-by-project basis. Applicants shall identify known occupied sites, such as nest sites, for threatened and endangered species and special status species (BLM 2008).
4. The appropriate agency, assisted by the project applicant, must coordinate and consult with NMFS regarding potential impacts to essential fish habitat (EFH) as required by the 1996 reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act.

Agency Coordination

1. Applicants seeking to develop energy transport projects within corridors located on or near DOD facilities or flight training areas (see Appendix L of the PEIS for applicable corridors) must, early in the planning process and in conjunction with the appropriate agency staff, inform and coordinate with the DOD regarding the characteristics and locations of the anticipated project infrastructure.
2. Early in the planning process, applicants seeking a ROW authorization within a Section 368 energy corridor that is located within 5 miles of a unit of the NPS should contact the appropriate Agency staff and work with the NPS regarding the characteristics and locations of anticipated project infrastructure. In those instances where corridors cross lands within the boundaries of a unit of the NPS, the National Park Service Organic Act and other relevant laws and policies shall apply.
3. In those instances where projects using energy corridors are proposed to also cross National Wildlife Refuge System lands, the National Wildlife System Administration Act and other relevant laws and policies pertinent to national wildlife refuges shall apply.
4. For electricity transmission projects, the applicant shall notify the Federal Aviation Administration (FAA) as early as practicable in the planning process in order to identify appropriate aircraft safety requirements.
5. All project applications must reflect applicable findings, mitigation, and/or standards contained in regional land management plans, such as the Northwest Forest Plan, when such regional plans have been incorporated into agency planning guidelines and requirements. Modification of some standards may be needed to reasonably allow for energy transport within a corridor.

Government-to-Government Consultation

1. The appropriate agency, assisted by the project applicant, must initiate government-to-government consultation with affected Tribes at the outset of project planning and shall continue consultation throughout all phases of the project, as necessary. Agencies should determine how to consult in a manner that reflects the cultural values, socioeconomic factors, and administrative structures of the interested Tribes.

2. The agency POC may require the project proponent to prepare an ethnographic study when Tribal consultation indicates the need. The study shall be conducted by a qualified professional selected in consultation with the affected Tribe.

General

1. Applicants seeking to develop an electricity transmission or pipeline project will develop a project-specific plan of development (POD). The POD should display the location of the project infrastructure (i.e., towers, power lines) and identify areas of short- and long-term land and resource impacts and the mitigation measures for site-specific and resource-specific environmental impacts. The POD should also include notification of project termination and decommissioning to the agencies at a time period specified by the agencies.
2. Applicants, working with the appropriate agencies, shall design projects to comply with all appropriate and applicable agency policies and guidance.
3. Project planning shall be based on the current state of knowledge. Where corridors are subject to sequential projects, project-related planning (such as the development of spill-response plans, cultural resource management plans, and visual resource management plans) and project-specific mitigation and monitoring should incorporate information and lessons learned from previous projects.
4. Applicants shall follow the best management practices for energy transport project siting, construction, and operations of the states in which the proposed project would be located, as well as Federal agency practices.
5. Corridors are to be efficiently used. The applicant, assisted by the appropriate agency, shall consolidate the proposed infrastructure, such as access roads, wherever possible and utilize existing roads to the maximum extent feasible, minimizing the number, lengths, and widths of roads, construction support areas, and borrow areas.
6. When concurrent development projects are proposed and implemented within a corridor, the agency POCs shall coordinate the projects to ensure consistency with regard to all regulatory compliance and consultation requirements, and to avoid duplication of effort.
7. Applicants, assisted by the appropriate agency, shall prepare a monitoring plan for all project-specific mitigation activities.
8. Potential cumulative impacts to resources should be considered during the early stages of the project. Agency POCs must coordinate various development projects to consider and minimize cumulative impacts. A review of resource impacts resulting from other projects in the region should be conducted and any pertinent information be considered during project planning.

Project Design

1. Applicants shall locate desired projects within energy corridors to promote effective use of the corridors by subsequent applicants and to avoid the elimination of use or encumbrance of use of the corridors by ROW holders. Proposed projects should be compatible with identified energy transport modes and avoid conflicts with other land uses within a corridor.
2. Applicant shall identify and delineate existing underground metallic pipelines in the vicinity of a proposed electricity transmission line project and design the project to avoid accelerating the corrosion of the pipelines and/or pumping wells.

Transportation

1. The applicant shall prepare an access road siting and management plan that incorporates relevant agency standards regarding road design, construction, maintenance, and decommissioning. Corridors will be closed to public vehicular access unless determined by the appropriate Federal land manager to be managed as part of an existing travel and transportation network in a land use plan or subsequent travel management plan(s).
2. The applicant shall prepare a comprehensive transportation plan for the transport of transmission tower or pipeline components, main assembly cranes, and other large equipment. The plan should address specific sizes, weights, origin, destination, and unique equipment handling requirements. The plan should evaluate alternative transportation routes and should comply with state regulations and all necessary permitting requirements. The plan should address site access roads and eliminate hazards from truck traffic or adverse impacts to normal traffic flow. The plan should include measures such as informational signage and traffic controls that may be necessary during construction or maintenance of facilities.
3. Applicants 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) should be identified and addressed in the traffic management plan.

Groundwater

1. Applicants must identify and delineate all sole source aquifers in the vicinity of a proposed project and design the project to avoid disturbing these aquifers or to minimize potential risks that the aquifers could be contaminated by spills or leaks of chemicals used in the projects.
2. In instances where a project within an energy corridor crosses sole source aquifers, the applicant must notify the U.S. Environmental Protection Agency (EPA) and the agencies that administer the land as early as practicable in the planning process. Section 1424(e) of the Safe Drinking Water Act (42 USC Chapter 6A) and other relevant laws and policies pertinent to the corridors that cross sole source aquifers shall apply.

Surface Water

1. Applicants must identify all wild and scenic rivers (designated by act of Congress or by the Secretary of the Interior under Section 3(a) or 2(a)(ii) of the Wild and Scenic Rivers Act (16 USC 1271-1287), respectively), congressionally authorized wild and scenic study rivers, and agency identified (eligible or suitable) wild and scenic study rivers in the vicinity of a proposed project and design the project to avoid the rivers or mitigate the disturbance to the rivers and their vicinity.
2. In instances where a project within an energy corridor crosses a wild and scenic river or a wild and scenic study river, the appropriate Federal permitting agency, assisted by the project applicant, must coordinate and consult with the river-administrating agency regarding the protection and enhancement of the river's free-flowing condition, water quality, and outstandingly remarkable natural, cultural, and recreational values.
3. Applicants shall identify all streams in the vicinity of proposed project sites that are listed as impaired under Section 303(d) of the Clean Water Act (33 USC Chapter 26) and provide a management plan to avoid or mitigate adverse impacts on those streams.

Paleontological Resources

1. The applicant shall conduct an initial scoping assessment to determine whether construction activities would disturb formations that may contain important paleontological resources. Potential impacts to significant paleontological resources should be avoided by moving or rerouting the site of construction or removing or reducing the need for surface disturbance. When avoidance is not possible, a mitigation plan should be prepared to identify physical and administrative protective measures and

protocols such as halting work, to be implemented in the event of fossil discoveries. The scoping assessment and mitigation plan should be conducted in accordance with the managing agency's fossil management practices and policies.

2. If significant paleontological resources are known to be present in the project area, or if areas with a high potential to contain paleontological material have been identified, the applicant shall prepare a paleontological resources management and mitigation plan. If adverse impacts to paleontological resources cannot be avoided or mitigated within the designated corridors, the agency may consider alternative development routes to avoid, minimize, or mitigate adverse effects.
3. A protocol for unexpected discoveries of significant paleontological resources should be developed. Unexpected discovery during construction should be brought to the immediate attention of the responsible Federal agency's authorized officer. Work should be halted in the vicinity of the discovery to avoid further disturbance of the resource while the resource is being evaluated and appropriate mitigation measures are being developed.

Ecological Resources

1. Applicants shall identify important, sensitive, or unique habitats and BLM-special status species (BLM 2008), FS-sensitive, and state-listed species in the vicinity of proposed projects and design the project to avoid or mitigate impacts to these habitats and species.
2. To restore disturbed habitats, the applicant will prepare a habitat restoration plan that identifies the approach and methods to be used to restore habitats disturbed during project construction activities. The plan will be designed to expedite the recovery to natural habitats supporting native vegetation, and require restoration to be completed as soon as practicable after completion of construction, minimizing the habitat converted at any one time. To ensure rapid and successful restoration efforts, the plan will include restoration success criteria, including time frames, which will be developed in coordination with the appropriate agency and which must be met by the applicant. Bonding to cover the full cost of restoration will be required.
3. In consultation with the U.S. Army Corps of Engineers, the appropriate agency, assisted by the project applicant, will identify wetlands (including ephemeral, intermittent, and isolated wetlands), riparian habitats, streams, and other aquatic habitats in the project area and design the project to avoid or mitigate impacts to these habitats.

Vegetation Management

Applicants shall develop an integrated vegetation management plan consistent with applicable regulations and agency policies for the control of unwanted vegetation, noxious weeds, and invasive species (E.O. 13112). The plan should address monitoring; ROW vegetation management; the use of certified weed-seed-free hay, straw, and/or mulch; the cleaning of vehicles to avoid the introduction of invasive weeds; education of personnel on weed identification, the manner in which weeds spread, and the methods for treating infestations (BLM 2006, 2007a,b, 2008).

Cultural Resources

1. Cultural resources management services and individuals providing those services shall meet the Secretary of the Interior's Standards for Archeology and Historic Preservation, 48 FR 44716 (Sept. 29, 1983).
2. The project applicant may, with the approval of the agency POC, assign a Cultural Resource Coordinator to ensure an integrated compliance process across administrative and jurisdictional boundaries. The Cultural Resource Coordinator will facilitate and coordinate compliance with multiple laws, policies, regulations, and existing pertinent agreements (PAs, MOAs, or MOUs) among multiple agencies and other entities, jurisdictions, and federally recognized Tribes. The coordinator may assist with development of pertinent agreements among concerned parties during the course of the project. The coordinator shall be a qualified professional with experience in cultural resource compliance. Where appropriate, the Cultural Resource Coordinator may also serve as the Tribal Coordinator. Alternatively, the agency POC may assign such coordinators, to be paid for through project cost-recovery funds. The agencies, through the POC, remain responsible for consultation.
3. The project applicant may, with the approval of the agency POC, assign a Tribal Coordinator to facilitate and coordinate consultation and compliance with multiple laws, agencies, and Tribes in order to ensure effective government-to-government consultation throughout the life of the project. Alternatively, the agency POC may assign such coordinators, to be paid for through project cost-recovery funds. The agencies, through the POC, remain responsible for consultation.
4. All historic properties in the Area of Potential Effect (APE) will be identified and evaluated. The APE shall include that area within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties and shall include a reasonable construction buffer zone and laydown areas, access roads, and borrow areas, as well as a reasonable assessment of areas subject to effects from visual, auditory, or atmospheric impacts, or impacts from increased access.

5. Project proponents must develop a cultural resources management plan (CRMP) to outline the process for compliance with applicable cultural resource laws during pre-project planning, management of resources during operation, and consideration of the effect of decommissioning. The CRMPs should meet the specifications of the appropriate agency and address compliance with all appropriate laws. The CRMPs should include the following, as appropriate: identification of the federally recognized Tribes, State Historic Preservation Offices (SHPOs), and consulting parties for the project; identification of long- and short-term management goals for cultural resources within the APE of the project; the definition of the APE; appropriate procedures for inventory, evaluation, and identification of effects to historic properties; evaluation of eligibility for the National Register of Historic Places (NRHP) for all resources in the APE; description of the measures to avoid, minimize, or mitigate adverse effects to historic properties; procedures for inadvertent discovery; procedures for considering Native American Graves Protection and Repatriation Act (NAGPRA) issues, monitoring needs, and plans to be employed during construction; curation procedures; anticipated personnel requirements and qualifications; public outreach and interpretation plans; and discussion of other concerns. The draft CRMP should be reviewed and approved by the agency POC in consultation with historic preservation partners, including appropriate SHPOs, Tribes, and consulting parties. The CRMPs must specify procedures that would be followed for compliance with cultural resource laws should the project change during the course of implementation.

6. Project applicants will provide cultural resources training for project personnel regarding the laws protecting cultural resources, appropriate conduct in the field (such as procedures for the inadvertent discovery of human remains), and other project-specific issues identified in the CRMP. Training plans should be part of the CRMP and should be subject to the approval of the POC. When government-to-government consultation identifies the need and the possibility, Tribes may be invited to participate in or contribute to relevant sessions.

7. If adverse effects to historic properties will result from a project, a Historic Property Treatment Plan will be developed in consultation with the SHPO, the appropriate federally recognized Tribes, and any consulting parties. The plan will outline how the impacts to the historic properties would be mitigated, minimized, or avoided. Agency officials will give full consideration to the applicable mitigation measures found in Section 3.10.5.2 of the Final PEIS when consulting during the project pre-planning stages to resolve adverse effects on historic properties.

8. As directed by the agency POC, project proponents will prepare a public education and outreach component regarding project-related cultural resource issues (e.g., discoveries, impacts) such as a public presentation, a news article, a publication, or a display. Public education and outreach components will be subject to Agency approval and Tribal review and consultation when the content or format is of interest to affected Tribes.

9. Cultural resources inventory, evaluation, and mitigation practices should incorporate modeling and sampling strategies to the extent practicable, in concurrence with SHPOs and other relevant parties, and as approved by the agency POC.

10. Project applicants shall provide all cultural resources reports and data in an electronic format that is approved by the Agency POC and integrated across jurisdictional boundaries, that meets current standards, and that is compatible with SHPO systems. The Agency will submit this data to the SHPO in a timely fashion. Project proponents should submit cultural resources data on a regular basis to ensure that SHPO systems are kept up to date for reference as the different phases of the project proceed. Paper records may also be required by the agency.
11. Cultural resources inventory procedures, specified in the CRMP, will include development of historic contexts based on the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (48 FR 44716) sufficient to support the evaluation of cultural resources encountered in the APE.

Tribal Traditional Cultural Resources

1. The appropriate agency, assisted by the applicant, must comply with all laws, policies, and regulations pertaining to government-to-government consultation with federally recognized Tribes. Agencies shall initiate consultation with affected Tribes at the outset of project planning and shall continue consultation throughout project planning, construction, operation, and decommissioning. Consultation shall include, but not be limited to, the following: (a) identification of potentially affected Tribes; (b) identification of appropriate Tribal contacts and the preferred means of communication with these Tribes; (c) provision to the Tribes of project-specific information (e.g., project proponents, maps, design features, proposed ROW routes, construction methods, etc.) at the outset of project planning and throughout the life of the project; (d) identification of issues of concern specific to affected Tribes (e.g., potential impacts to culturally sensitive areas or resources, hazard and safety management plans, treaty reserved rights and trust responsibilities); (e) identification of areas and resources of concern to Tribes; and (f) resolution of concerns (e.g., actions to avoid, minimize, or mitigate impacts to important resources; Memoranda of Agreement stating what actions would be taken to mitigate project effects; or agreements for Tribal participation in monitoring efforts or operator training programs).
2. The appropriate agency, assisted by the applicant, must comply with all pertinent laws, policies, and regulations addressing cultural and other resources important to Tribes, including the NHPA, the Archaeological Resources Protection Act (ARPA), the Native American Graves Protection Act (NAGPRA), and other laws and regulations as listed in Table 3.11-2 in Volume I of the PEIS.
3. The agencies shall recognize the significance to many Tribes of traditional cultural places, such as sacred sites, sacred landscapes, gathering grounds, and burial areas, and shall seek to identify such areas through consultation with affected Tribes early in the project planning process. Agencies shall seek to avoid, minimize, or mitigate impacts to such places in consultation with the Tribes, project proponents, and other relevant parties.

Where confidentiality concerning these areas is important to an affected Tribe, agencies shall honor such confidentiality unless the Tribe agrees to release the information.

4. A protocol must be developed for inadvertent discovery of Native American human remains and funerary items to comply with the NAGPRA in consultation with appropriate federally recognized Tribes. Unexpected discovery of such items during construction must be brought to the immediate attention of the responsible Federal agency's authorized officer. Work must be halted in the vicinity of the find of Native American graves and funerary items to avoid further disturbance to the resources while they are being evaluated and appropriate mitigation measures are being developed. The procedures for reporting items covered under NAGPRA must be identified in the CRMP.

Visual Resources

1. Applicants shall identify and consider visual resource management (VRM) and scenery management (SMS) issues early in the design process to facilitate integration of VRM and scenery treatments into the overall site development program and construction documents. Visual/scenery management considerations, environmental analyses, mitigation planning, and design shall reference and be in accordance with the land management agency visual/scenery management policies and procedures applicable to the jurisdiction the project lies within. Applicants shall coordinate between multiple agencies on visual/scenery sensitive issues when projects transition from one jurisdiction to another, especially when transitions occur within a shared viewshed.

2. Applicants shall prepare a VRM or scenery management plan. The applicant's planning team shall include an appropriately trained specialist, such as a landscape architect with demonstrated VRM and/or scenery management system (SMS) experience. The VRM/SMS specialist shall coordinate with the BLM/FS on the availability of the appropriate visual or scenic inventory data, VRM management class delineations, Scenic Integrity Objectives (SIOs), and Federal agency expectations for preparing project plans and mitigation strategies to comply with RMP or LRMP direction related to scenery and/or visual resources. Applicants shall confirm that a current Visual Resource Inventory and/or Scenic Class inventory is available and that the resource management plan (RMP) or land resource and management plan (LRMP) VRM classifications or SIOs have been designated in the current land management plan. Project plans shall abide by the VRM class designations and SIOs and consider sensitivities defined within the visual or scenic resource inventory. If visual or scenic management objectives are absent, then the proper inventory and classification process shall be followed to develop them in accordance with the BLM VRM manual and handbooks or FS SMS process, depending on the agency. When the VRM management classes or SIOs are absent, then the project alternatives must reflect a range of management options related to scenery and visual resources that reflect the values identified in the visual/scenic inventory. Responsibility for developing an inventory or VRM management classes (or in the case of the FS, Scenic Classes and SIOs) will remain with the respective agency, but how to accomplish

these tasks will be determined by the field office manager or forest supervisor, who will consider the applicant's role and financial participation in completing the work.

3. Visual and scenic mitigation planning/design and analysis shall be performed through integrated field assessment, applied global positioning system (GPS) technology, field photo documentation, use of computer-aided design and development software, 3-D modeling GIS software, and visual simulation software, as appropriate. Proposed activities, projects, and site development plans shall be analyzed and further developed using these technologies to meet visual and scenic objectives for the project area and surrounding areas sufficient to provide the full context of the viewshed. Visual simulations shall be prepared according to BLM Handbook H-8432-1, or other agency requirements, to create spatially accurate depictions of the appearance of proposed facilities, as reflected in the 3-D design models. Simulations shall depict proposed project appearance from sensitive/scenic locations as well as more typical viewing locations. Transmission towers, roads, compressor stations, valves, and other aboveground infrastructure should be integrated aesthetically with the surrounding landscape in order to minimize contrast with the natural environment.

4. Applicants shall develop adequate terrain mapping on a landscape/viewshed scale for site planning/design, visual impact analysis, visual impact mitigation planning/design, and for full assessment and mitigation of cumulative visual impacts through applied, state-of-the-art design practices using the cited software systems. The landscape/viewshed scale mapping shall be geo-referenced and at the same Digital Elevation Model (DEM) resolution and contour interval within the margin of error suitable for engineered site design. This level of mapping shall enable proper placement of proposed developments into the digital viewshed context. Final plans shall be field verified for compliance.

5. The full range of visual and scenic best management practices shall be considered, and plans shall incorporate all pertinent best management practices (BMPs). Visual and scenic resource monitoring and compliance strategies shall be included as a part of the project mitigation plans.

6. Compliance with VRM/SMS objectives shall be determined through the use of the BLM Contrast Rating procedures defined in BLM Handbook H-8431-1 Visual Contrast Rating, or the FS SMS Handbook 701. Mitigation of visual impacts shall abide by the requirements of these handbooks.

Public Health and Safety

1. An electricity transmission project shall be planned by the applicant 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.

2. A health and safety program shall be developed by the applicant to protect both workers and the general public during construction, operation, and decommissioning of an energy transport project. The program should 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, measures for reducing occupational electromagnetic field [EMF] exposures), and define safety performance standards (e.g., electrical system standards). The program should 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 should be established.

3. The health and safety program shall establish a safety zone or setback from roads and other public access areas that is sufficient to prevent accidents resulting from various hazards. It should identify requirements for temporary fencing around staging areas, storage yards, and excavations during construction or decommissioning activities. It should also identify measures to be taken during the operations phase to limit public access to those components of energy facilities that present health or safety risks.

4. Applicants shall develop a comprehensive emergency plan that considers the vulnerabilities of their energy system to all credible events initiated by natural causes (earthquakes, avalanches, floods, high winds, violent storms, etc.), human error, mechanical failure, cyber attack, sabotage, or deliberate destructive acts of both domestic and international origin and the potential for and possible consequences of those events. Vulnerability, threat, and consequence assessment methodologies and criteria in the sector-specific plan (SSP) for energy[6] will be used and appropriate preemptive and mitigative response actions will be identified. The applicant must coordinate emergency planning with state, local, and Tribal emergency and public safety authorities and with owners and operators of other energy systems collocated in the corridor or in adjacent corridors that could also be impacted.

5. In addition to directives contained in other IOPs herein, the applicant must identify all Federal, state, and local regulations pertaining to environmental protection, worker health and safety, public safety, and system reliability that are applicable throughout the construction, operation, and decommissioning phases of their facility's life cycle and must develop appropriate compliance strategies, including securing all necessary permits and approvals.

Hazardous Materials Management

Applicants for petroleum pipelines and projects involving oil-filled electrical devices shall develop a spill prevention and response plan identifying spill prevention measures

6 The SSP for energy, developed by the Department of Energy's Office of Electricity Delivery and Energy Reliability, is one of seventeen such SSPs that comprise the National Infrastructure Protection Plan (NIPP). The energy SSP (redacted) is available at http://www.oe.energy.gov/DocumentsandMedia/Energy_SSP_Public.pdf. The NIPP is available at http://www.dhs.gov/xlibrary/assets/NIPP_Plan.pdf.

to be implemented, training requirements, appropriate spill response actions, and procedures for making timely notifications to authorities. The spill prevention and response plan should include identification of any sensitive biotic resources and locations (such as habitats) that require special measures to provide protection, as well as the measures needed to provide that protection.

Fire Management

1. Applicants shall develop a fire management strategy to implement measures to minimize the potential for a human-caused fire during project construction, operation, and decommissioning. The strategy should consider the need to reduce hazardous fuels (e.g., native and non-native annual grasses and shrubs) and to prevent the spread of fires started outside or inside a corridor, and clarify who has responsibility for fire suppression and hazardous fuels reduction for the corridor.
2. Applicants must work with the local land management agency to identify project areas that may incur heavy fuel buildups, and develop a long-term strategy on vegetation management of these areas. The strategy may include land treatment during project construction, which may extend outside the planned ROW clearing limits.

B.2 PROJECT CONSTRUCTION

General

1. To avoid conflict with Federal and non-Federal operations, the applicant shall be aware of liabilities pertaining to environmental hazards, safety standards, and military flying areas.
2. The applicant shall locate all stationary construction equipment (i.e., compressors and generators) as far as practicable from nearby residences.
3. Applicants shall pay fair market value to the land management agency for any merchantable forest products that will be cut during ROW clearing. The local land management agency will determine the fair market value, which will be paid prior to clearing. The applicant will either remove the forest products from the area or will stack the material at locations determined by the local land management agency. Treatment of unmerchantable products will be determined by the local land management agency.

Soils, Excavation, and Blasting

1. Applicants shall salvage, safeguard, and reapply topsoil from all excavations and construction activities during restoration.
2. All areas of disturbed soil shall be restored by the applicant using weed-free native grasses, forbs, shrubs, and trees as directed by the agency. Restoration should not be unnecessarily delayed. If native species are not available, noninvasive vegetation recommended by agency specialists may be used.
3. The applicant must not create excessive slopes during excavation. Areas of steep slopes, biological soil crusts, erodible soil, and stream channel crossings will often require site-specific and specialized construction techniques by the applicant. These specialized construction techniques should be implemented by adequately trained and experienced employees.
4. Blasting activities will be avoided or minimized in the vicinity of sole source aquifer areas to reduce the risk of releasing sediments or particles into the groundwater and inadvertently plugging water supply wells.
5. The applicant must backfill foundations and trenches with originally excavated material as much as possible. Excess excavation materials should be disposed of by the applicant only in approved areas.
6. The applicant shall obtain borrow (fill) material only from authorized sites. Existing sites should be used in preference to new sites.
7. The applicant shall prepare an explosives use plan that specifies the times and meteorological conditions when explosives will be used and specifies minimum distances from sensitive vegetation and wildlife or streams and lakes.
8. If blasting or other noisy activities are required during the construction period, the applicant must notify nearby residents in advance.

Mitigation and Monitoring

All control and mitigation measures established for the project in the POD and other required plans shall be maintained and implemented by the applicant throughout construction. Necessary adjustments may be made with the concurrence of the appropriate agency.

Surface and Groundwater Resources

1. The applicant shall safeguard against the possibility of dewatering shallow groundwater and/or wetlands in the vicinity of project sites during foundation excavations or excavations for buried pipelines.
2. The applicant shall implement erosion controls complying with county, state, and Federal standards, such as jute netting, silt fences, and check dams, and secure all necessary storm water pollution prevention plan (SWPPP) permits.
3. The applicant shall minimize stream crossings by access roads to the extent practicable. All structures crossing intermittent and perennial streams shall be located and constructed so that the structures do not decrease channel stability, increase water velocity, or impede fish passage.
4. Applicants shall not alter existing drainage systems and shall give particular care to sensitive areas such as erodible soils or steep slopes. Soil erosion shall be reduced at culvert outlets by appropriate structures. Catch basins, roadway ditches, and culverts shall be cleaned and maintained.
5. Applicants must not create hydrologic conduits between aquifers.

Paleontological Resources

1. Project construction activities will follow the protective measures and protocols identified in the paleontological resources mitigation plan.
2. All paleontological specimens found on Federal lands remain the property of the U.S. government. Specimens, therefore, shall only be collected by a qualified paleontologist under a permit issued by the managing agency and must be curated in an approved repository.

Ecological Resources

1. Areas that are known to support ESA-listed species, BLM-special-status species, FS-sensitive, and state-listed species or their habitats shall be identified and marked with flagging or other appropriate means to avoid direct impacts during construction activities. Construction activities upslope of these areas should be avoided to prevent indirect impacts of surface water and sediment runoff.

2. All construction activities that could affect wetlands or waters of the United States shall be conducted in accordance with the requirements identified in permits issued by the U.S. Army Corps of Engineers.

Visual Resources

A pre-construction meeting with BLM/FS landscape architects or other designated visual/scenic resource specialist shall be held before construction begins to coordinate on the VRM/SMS mitigation strategy and confirm the compliance-checking schedule and procedures. Applicants shall integrate interim/final reclamation VRM/SMS mitigation elements early in the construction, which may include treatments such as thinning and feathering vegetation along project edges, enhanced contour grading, salvaging landscape materials from within construction areas, special revegetation requirements, etc. Applicants shall coordinate with BLM/FS in advance to have BLM/FS landscape architects or other designated visual/scenic resource specialists onsite during construction to work with implementing BMPs.

Cultural Resources

1. Project applicants shall provide all cultural resources reports and data in an approved electronic format that is integrated across jurisdictional boundaries, that meets current standards, and that is compatible with SHPO systems. Project proponents shall submit cultural resources data on a regular basis to ensure that SHPO systems are kept up-to-date for reference as the different phases of the project proceed.
2. When an area is identified as having a high potential for cultural resources but none are found during a pre-construction field survey, a professionally qualified cultural resources specialist will be required to monitor ground-disturbing activities during project construction, and to complete a report when the activities are finished. The protocol for monitoring should be identified in the CRMP.
3. When human remains, funerary objects, sacred objects, or objects of cultural patrimony are inadvertently discovered, the provisions of NAGPRA shall apply and the process identified in the CRMP must be followed.

Hazardous Materials and Wastewater Management

1. Any wastewater generated by the applicant in association with temporary, portable sanitary facilities must be periodically removed on a schedule approved by the agency, by a licensed hauler and introduced into an existing municipal sewage treatment facility.

Temporary, portable sanitary facilities provided for construction crews should be adequate to support expected onsite personnel and should be removed at completion of construction activities.

2. All hazardous materials (including vehicle and equipment fuels) brought to the project site will be in appropriate containers and will be stored in designated and properly designed storage areas with appropriate secondary containment features. Excess hazardous materials will be removed from the project site after completion of the activities in which they are used.

Air Emissions

1. The applicant shall cover construction materials and stockpiled soils if these are sources of fugitive dust.
2. To minimize fugitive dust generation, the applicant shall water land before and during surface clearing or excavation activities. Areas where blasting would occur should be covered with mats.

Noise

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

Fire Safety

1. The applicant must ensure that all construction equipment used is adequately muffled and maintained and that spark arrestors are used with construction equipment in areas with, and during periods of, high fire danger.
2. Flammable materials (including fuels) will be stored in appropriate containers.

B.3 PROJECT OPERATION

Mitigation and Monitoring

All control and mitigation measures established for the project shall be maintained and implemented by the applicant throughout the operation of the project. Necessary adjustments may be made with the concurrence of the appropriate agency.

Ecological Resources

1. Applicants shall review existing information regarding plant and animal species and their habitats in the vicinity of the project area and identify potential impacts to the applicable agencies.
2. Project developer staff shall avoid harassment or disturbance of wildlife, especially during reproductive courtship, migratory, and nesting seasons.
3. Observations by project staff of potential wildlife problems, including wildlife mortality, will be immediately reported to the applicable agency authorized officer.

Pesticide and Herbicide Use

1. If pesticides are used, the applicant shall ensure that pesticide applications as specified in the integrated vegetation management plan are conducted within the framework of agency policies and entail only the use of EPA-registered pesticides that are applied in a manner consistent with label directions and state pesticide regulations. Pesticide use shall be limited to non persistent immobile pesticides and shall be applied only in accordance with label and application permit directions and stipulations for terrestrial and aquatic applications (BLM 2007a).
2. Pesticide and herbicide uses shall be avoided in the vicinity of sole source aquifer areas (BLM 2007a).

Visual Resources

Terms and conditions for VRM/SMS mitigation compliance shall be maintained and monitored for compliance with visual objectives, adaptive management adjustments, and modifications as necessary and approved by the BLM/FS landscape architect or other designated visual/scenic resource specialist.

Hazardous Materials, Wastes, and Wastewater Management

1. The applicant shall provide secondary containment for all onsite hazardous materials and waste storage areas.
2. The applicant shall ensure that wastes are properly containerized and removed periodically for disposal at appropriate offsite permitted disposal facilities.
3. In the event of an accidental release to the environment, the applicant shall initiate spill cleanup procedures and document the event, including a 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 land management agency's authorized officer and other Federal and state agencies, as required.

Air Quality

Dust abatement techniques (e.g., water spraying) shall be used by the applicant on unpaved, unvegetated surfaces to minimize airborne dust. Water for dust abatement shall be obtained and used by the applicant under the appropriate state water use permitting system. Used oil will not be used for dust abatement.

Noise

The applicant shall ensure that all equipment has sound-control devices no less effective than those provided on the original equipment.

B.4 PROJECT DECOMMISSIONING

General

1. Where applicable, decommissioning activities will conform to agency standards and guidance for mitigation and reclamation (e.g., BLM's Gold Book[7]).
2. Applicants must receive approval for changes to the ROW authorization prior to any modifications to the ROW required for decommissioning.
3. Gravel work pads will be removed; gravel and other borrow material brought to the ROW during construction will be disposed of as approved by the agency.
4. Any wells constructed on the ROW to support operations shall be removed and properly closed in accordance with applicable local or state regulations.
5. All equipment, components, and above-ground structures shall be cleaned and removed from the site for reclamation, salvage, or disposal; all below-ground components shall be removed to a minimum depth of 3 feet to establish a root zone free of obstacles; pipeline segments and other components located at greater depths may be abandoned in place provided they are cleaned (of all residue) and filled with inert material to prevent possible future subsidence.
6. Dismantled and cleaned components shall be promptly removed; interim storage of removed components or salvaged materials that is required before final disposition is completed will not occur on Federal land.
7. At the close of decommissioning, applicants will provide the Federal land manager with survey data precisely locating all below-grade components that were abandoned in place.

Mitigation and Monitoring

All control and mitigation measures established for the project in the POD and other required plans shall be incorporated into a decommissioning plan that shall be approved by the Federal land manager(s); the decommissioning plan shall include a site reclamation plan and a monitoring program and shall be coordinated with owners and operators of other systems on the corridor to ensure no disruption to the operation of those systems.

7 Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development, 4th Edition, revised 2007. Available electronically at http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/best_management_practices/gold_book.html.

Surface Water

A SWPPP permit shall be obtained and its provisions implemented for all affected areas before any ground-disturbance activities commence.

Transportation

Additional access roads needed for decommissioning shall follow the paths of access roads established during construction to the greatest extent possible; all access roads not required for the continued operation and maintenance of other energy systems present in the corridor shall be removed and their footprints reclaimed and restored.

Restoration

1. Topsoil removed during 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 or other plant species approved by the land management agency; grades shall be returned to pre-development contours to the greatest extent feasible.
2. The vegetation cover, composition, and diversity shall be restored to values commensurate with the ecological setting, as approved by the authorizing officer.

Hazardous Materials and Waste Management

1. All fuels, hazardous materials, and other chemicals shall be removed from the site and properly disposed of or reused.
2. Incidental spills of petroleum products and other chemicals shall be removed and the affected area cleaned to meet applicable standards.
3. Solid wastes generated during decommissioning shall be accumulated, transported, and disposed in permitted offsite facilities in accordance with state and local requirements; no solid wastes shall be disposed of within the footprint of the ROW or the corridor.
4. Hazardous wastes generated as a result of component cleaning shall be containerized and disposed of in permitted facilities.

References

BLM, 2006, BLM Manual 9011-Chemical Pest Control. Available at http://www.blm.gov/ca/st/en/prog/weeds/9011.print.html. Accessed October 30, 2008.

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BLM, 2007b, *Vegetation Treatments on Bureau of Land Management Lands in 17 Western States Final Programmatic Environmental Report*, U.S. Department of the Interior, June.

BLM, 2008, *Integrated Vegetation Management Handbook 1740-2, Programmatic Biological Assessment for Vegetation Management*, U.S. Department of the Interior.