

# **Farson/Eden Salinity Control Project, Eden Canal, E-5 & E-6 Laterals Environmental Assessment Addendum May 3, 2012**

## **Background**

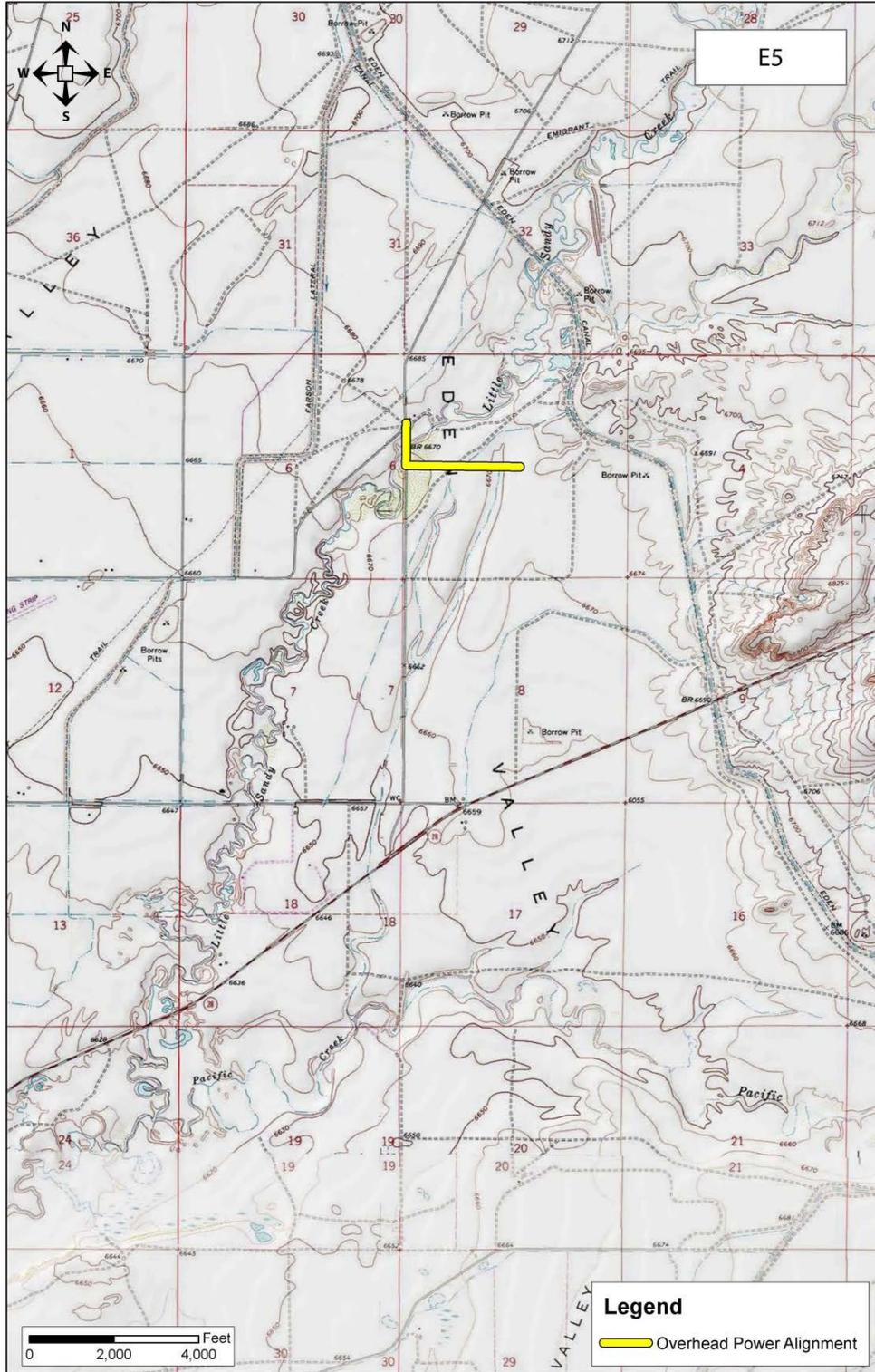
In compliance with the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ), and the Department of the Interior (DOI) regulations implementing NEPA, the Bureau of Reclamation, Provo Area Office (Reclamation) completed an Environmental Assessment (EA) and prepared a Finding of No Significant Impact (FONSI) for the Farson/Eden Salinity Control Project, Eden Canal, E-5 & E-6 Laterals (E-5 Project). The EA and subsequent FONSI (dated January 24, 2012) authorized the use of Federal funds, under the Colorado River Basin Salinity Control Program, to line a portion of the Eden Canal and replace the E-5 and E-6 laterals with a pipeline.

Since the completion of the EA, it has been determined that the installation of an overhead power line is required for the operation of the pipeline associated with the E-5 Project. This addendum to the EA analyzes the potential effects of the proposed power line on resources within the project area.

## **Proposed Action**

Under the Proposed Action evaluated in this addendum, a single phased electrical overhead power line would be installed to power the E-5 Project. The Proposed Action would install approximately 17, 25-foot tall wooden power poles and the associated power lines. The new electrical alignment would span an approximate length of 4,500 linear feet and parallel the E-5 pipeline alignment, an existing fence line along an agricultural field and the Farson 4<sup>th</sup> East Road (Figure 1, Project Location and Figure 2, Proposed Action).

Beyond the addition of the new electrical alignment, the Proposed Action would not impact or alter the Action Alternative and associated mitigation evaluated in the E-5 Project.



**Figure 1, Project Location**

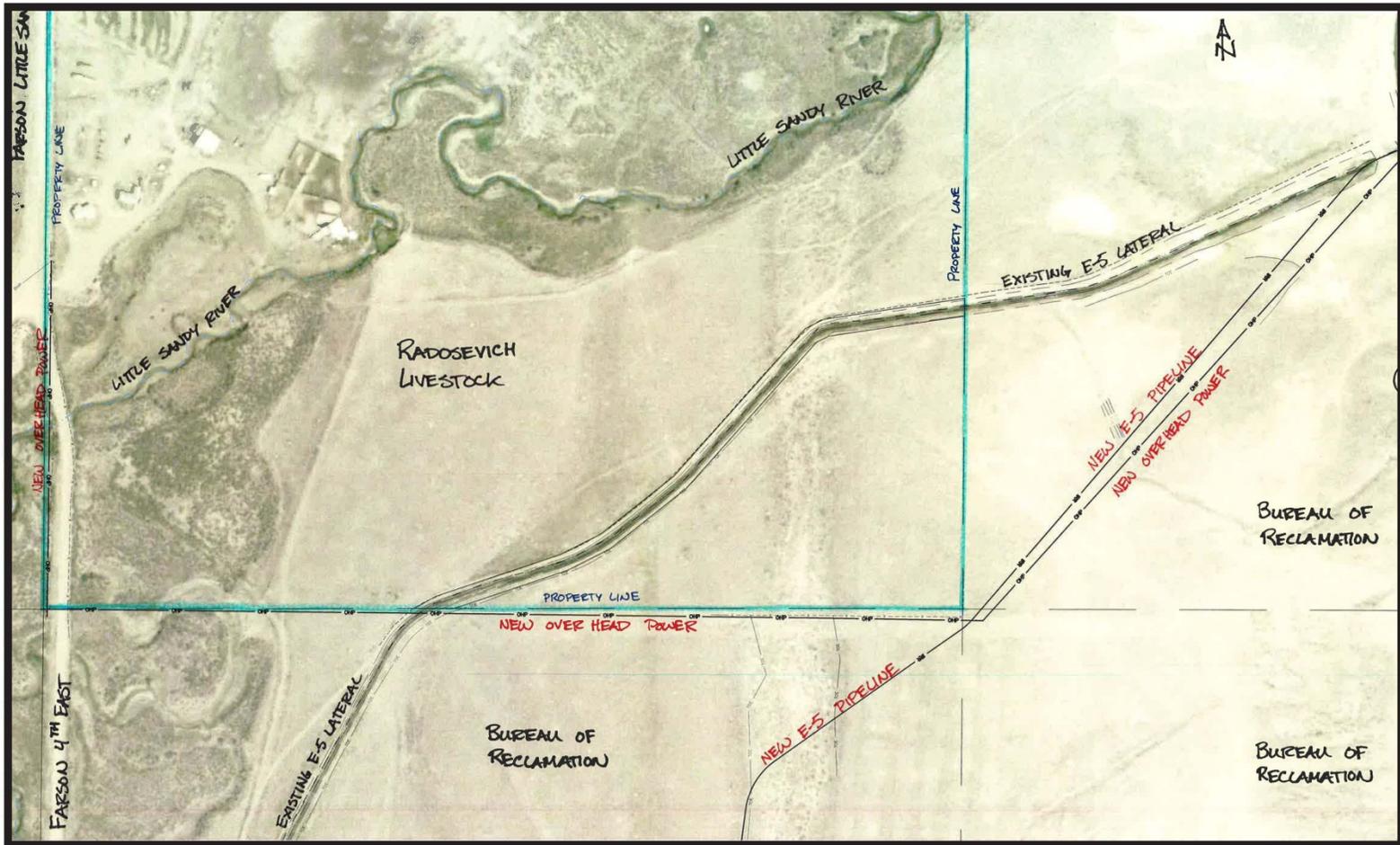


Figure 2, Proposed Action

## **Environmental Consequences**

### **Air Quality**

Under the Proposed Action there would be no long-term impacts to local air quality. Fugitive dust generation from construction activities would have a temporary, short-term effect on the air quality. The fugitive dust would be generated by excavation activities and the movement of construction equipment on unpaved roads. Best Management Practices (BMPs,) established in the E-5 Project EA and FONSI would be implemented. Impacts due to construction activities would be temporary and would cease once the project is completed.

### **Water Resources**

There are no water resources within the project action area and the Proposed Action would have no impact on water resources.

### **Water Quality**

The Proposed Action would have no impact to water quality.

### **Upland Vegetation Resources**

Construction activities for the Proposed Action would take place within the existing right-of-way of Farson 4<sup>th</sup> East, adjacent to the new E-5 pipeline alignment, and next to an existing fence line within an agricultural field. Upland vegetation resources are likely to experience some minor disturbances during construction (due to excavation activities and construction equipment). These disturbances would be minimal and short-term. Impacts to vegetation resources along the new E-5 alignment were accounted for in the E-5 Project EA. Impacts within the agricultural field are expected to be very minor (7 poles would be located in the agricultural field with maximum disturbance of 20 feet per pole). Therefore, there would be no significant long-term impacts to upland vegetation resources.

### **Wetland and Riparian Vegetation Resources**

There are no wetland or riparian resources within the project action area and the Proposed Action would have no impact on these resource.

### **Fish & Wildlife Resources**

A Biological Technical Memorandum for the Proposed Action was completed in May 2012 (Appendix A, Biological Technical Memo). Informal consultation with the Bureau of Land Management determined that the project action area falls within a State of Wyoming designated core area for the greater sage-grouse. In accordance with Executive Order (EO) 2011-05 Greater Sage-Grouse Core Area Protection, the Proposed Action is classified as an exempt activity. However, EO 2011-05 stipulates that new overhead power lines placed in designated core areas must have provisions to prevent raptors from perching on the power poles.

The project action area is also located within the pronghorn crucial winter range. Construction activities for the Project Action are anticipated to take place from May 4<sup>th</sup> to May 15<sup>th</sup>, outside of wintering season (October through March).

There have been no documented occurrences of any federally listed threatened, endangered or candidate species within the project area. Habitat for these species does not exist within the project action area. Therefore, there would no effect to fish & wildlife resources from the Proposed Action.

### **Cultural Resources**

A Class I literature review and a Class III cultural resource inventory were completed for the Area of Potential Effect (APE) by Western Archaeological Services in May 2012. The cultural resources survey concluded that there would be no adverse effect on cultural resources from the Proposed Action.

In compliance with 36 CFR 800.4(d)(1) and 36 CFR 800.11(d), a copy of the cultural resource inventory report and determination of no historic properties affected will be submitted for consultation to the Wyoming State Historic Preservation Office (WYSHPO) and local tribes.

### **Paleontological Resources**

There are no known paleontological resources within the project action area. Furthermore, the Proposed Action takes place in a previously disturbed area. Therefore, it is highly unlikely that the Proposed Action would impact paleontological resources. However, monitoring is required for all construction activities outside of the existing lateral alignments that have the potential to impact the bedrock layer.

### **Soil Sedimentation and Erosion**

Due to the minor nature of the construction activities, the Proposed Action would not increase erosion or sedimentation.

### **Indian Trust Assets**

There are no known Indian Trust Assets within the project action area.

### **Environmental Justice**

The proposed action would not involve population relocation, health hazards, hazardous waste, property takings, or substantial economic impacts. Therefore, there would be no impacts on Environmental Justice populations from the Proposed Action.

### **Public Safety, Access, and Transportation**

A portion of the construction activities would take place along Farson 4<sup>th</sup> East Road. These activities may cause minor temporary disruption, and traffic volume would increase slightly during construction. Emergency dispatch service for Eden is operated from the Eden Valley Fire District in Farson. Service from the fire station would not be impacted by the Proposed Action.

Therefore, there would be no impact to public safety, access or transportation from the Proposed Action.

## **Cumulative Impacts**

Cumulative impacts from the Proposed Action and related actions were assessed during the resource evaluation. This analysis determined that there were no adverse cumulative impacts.

## **Mitigation**

All BMPs and mitigation measures established in the E-5 Project EA and FONSI applicable to the Proposed Action will be followed during construction and implementation of the Proposed Action. In addition, power poles used for the Proposed Action must meet the raptor-proof criteria established in EO 2011-05.

## **Conclusion**

The resource evaluation determined that the proposed electrical alignment would not yield any significant impact. Therefore, the existing FONSI for the Farson/Eden Salinity Control Project, Eden Canal, E-5 & E-6 Laterals dated January 24, 2012 should remain valid.

**Appendix A**  
**Biological Technical Memo**



# TECHINICAL MEMO

May 3, 2012

To: Jeffery D'Agostino (Environmental Chief, Bureau of Reclamation, Provo Area Office); Bryson Code (Biologist, Bureau of Reclamation, Provo Area Office); Mark Snyder (Wildlife Biologist, Bureau of Land Management, Rock Springs Field Office); Jon Frazier, P.E. (J-U-B); Brian Deeter, P.E. (J-U-B); and, Marti Hoge (J-U-B Environmental Planner).

Copy: J-U-B File #55-11-033

From: Vincent J. Barthels, Biologist (J-U-B)

**Subject: Biological Evaluation of the New Overhead Power Line Alignment associated with the E-5 Salinity Control Project, Sweetwater County, Wyoming.**

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A Finding of No Significant Impact (FONSI), issued in accordance with the National Environmental Policy Act (NEPA) process, was signed into place on January 24, 2012 for the E-5 lateral salinity control project. The NEPA document (i.e. an Environmental Assessment (EA)) did not account for the overhead power line alignment correlated to the E-5 lateral. The installation of the new overhead power line alignment is deemed an interrelated project action. Therefore, this technical memo is intended to act as an addendum to the EA. This biological evaluation has been developed commensurately to document the pertinent biological parameters linked to the installation and ongoing operation of the new overhead power line associated with the E-5 lateral project.

## Project Action Description:

A single phased electrical current source is required to power the inlet structure of the E-5 lateral. A new overhead power line is planned to be constructed parallel to the new E-5 pipeline alignment, an existing fence line along an agricultural field and the Farson 4th East Road. The overhead power line alignment is located within Sections 5 and 6; Township 25 North and Range 105 West. The attached exhibits illustrate the alignment of the overhead power line. This project action involves the installation of the 17 new (25-foot tall), wooden power poles and connecting power lines. Construction activities are anticipated to occur during the day (i.e. between 10:00 AM and 4:00 PM) between May 4<sup>th</sup> and May 15<sup>th</sup>, 2012. An auger drill rig with a 35-foot boom will be the primary piece of equipment utilized to set the power poles into place and subsequently run the power lines.

### Known Biological Resources in the Project Action Area:

Based on a recent review of Wyoming Game and Fish Department's database, the project action area falls within a designated core area for greater sage grouse; however, there are no active or occupied leks within a one mile radius of the proposed project action area (Snyder 2012). In accordance with EO 2011-5, the construction of overhead power lines are considered "exempt (*de minimus*) activities" if the construction activities are more than 0.6 miles from known leks (WGFD 2011). The relevant portion of EO 2011-05 (i.e. page 16, item # 5) is attached to this memo (please see attached). In addition, EO 2011-05 stipulates that new overhead power lines should be raptor proof (page 9, item # 5).

Prior to initiating construction activities along the new overhead power line servicing the E-5 lateral, it has been determined that greater sage-grouse leks are not documented to be present within the construction area. The construction area occurs along an established roadway corridor, the new E-5 pipeline alignment and a disturbed agricultural field. Further coordination with Wyoming Game and Fish Department or Reclamation's Provo Area Office Biologist, specifically in regard to the presence of greater sage-grouse leks, is not warranted. However, should any greater sage-grouse be observed within the construction action area during construction activities, subsequent monitoring by a biologist is required consistent with the FONSI to ensure impacts to greater sage-grouse are avoided.

Within the FONSI (please see attached), there is an environmental commitment associated with "Sage Grouse Monitoring (on page 4, item # 10)," which is required to be implemented as part of the proposed project action. Construction activities associated with the proposed project action are scheduled to commence May 2012. This memo documents compliance with the aforementioned environmental commitment linked to greater sage-grouse and the E-5 lateral construction project.

The recent Wyoming Game and Fish Department's database search (Snyder 2012) also revealed that the overhead power line action area is within a pronghorn crucial winter range. All construction activities associated with the overhead power line will take place in May, well outside of the wintering season.

With respect to the information presented herein, I can be reached at (509) 458-3727 [office phone] or (509) 951-9564 [cell phone] or via email at [vbarthels@jub.com](mailto:vbarthels@jub.com).

### List of Attachments:

- (1) Aerial Project Locator Exhibit
- (2) Project Locator Exhibit with a Quad Map Background

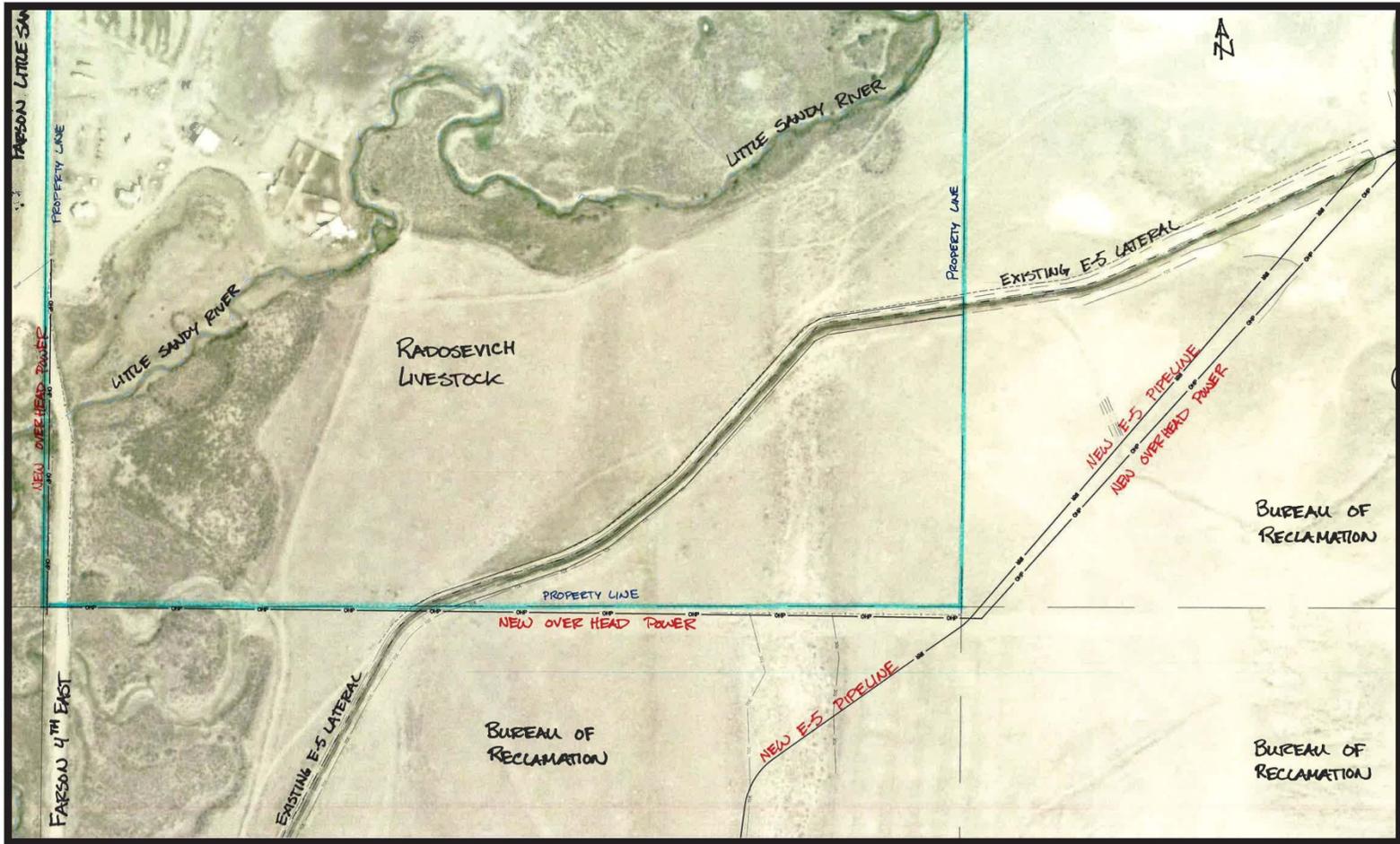
(3) FONSI dated December 9, 2010

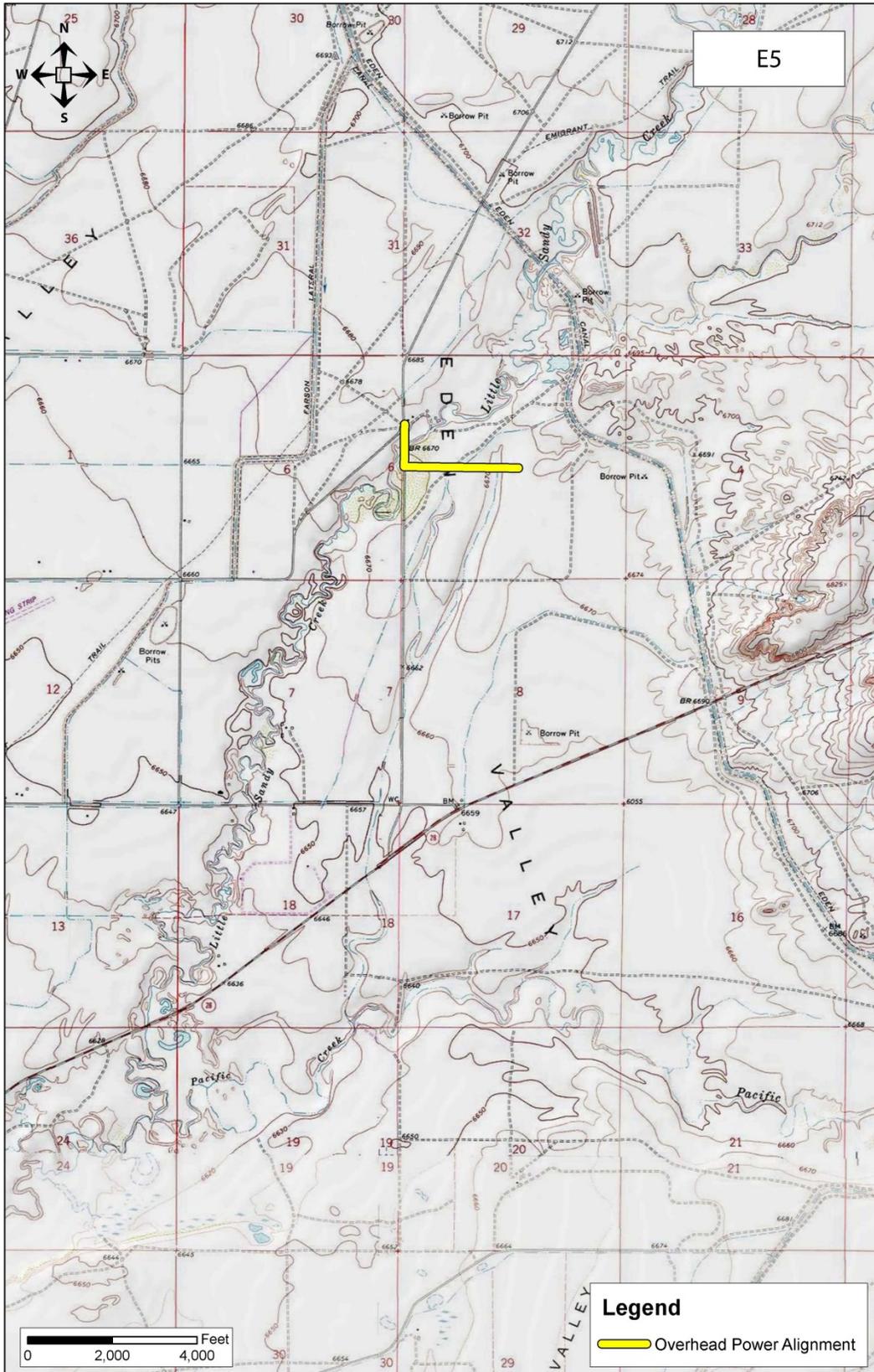
(4) Pages 9 and 16 of EO 2011-05

**References and Personal Communication Cited:**

Snyder, Mark. May 2, 2012. Bureau of Land Management (BLM), Rock Springs Field Office, Wildlife Biologist. Address: 280 Hwy 191 N., Rock Springs, WY 82901. Phone # (307)352-0368. Personal communication via email; email address: [msnyder@blm.gov](mailto:msnyder@blm.gov).

Wyoming Game and Fish Department (WGFD). Website [On-line]. Accessed May 2, 2012 at [http://gf.state.wy.us/wildlife/wildlife\\_management/sagegrouse/index.asp](http://gf.state.wy.us/wildlife/wildlife_management/sagegrouse/index.asp).





PRO-FONSI-11-

**FINDING OF NO SIGNIFICANT IMPACT  
And Decision Document**

**Farson/Eden Salinity Control Project Eden Canal, and E-5 and E-6 Laterals  
Eden Project  
Sweetwater County, Wyoming**

**United States Department of the Interior  
Bureau of Reclamation  
Upper Colorado Region  
Provo Area Office  
Provo, Utah**

Recommended by:

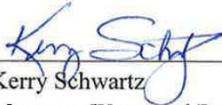


Jeffrey D'Agostino  
Chief, Environmental Group

1/24/2012

Date

Concur:



Kerry Schwartz  
Manager, Water and Environmental  
Resources Division

1/24/12

Date

Approved by:



Curtis A. Pledger  
Area Manager, Provo Area Office

1/24/2012

Date

## **FINDING**

The Bureau of Reclamation, Provo Area Office, has determined that implementing the proposed action analyzed in the Farson/Eden Salinity Control Project Eden Canal, E-5 and E-6 Laterals Environmental Assessment (EA) would not have a significant impact on the quality of the human environment and that an Environmental Impact Statement is not required. This decision was based on a thorough review of the EA and on agency correspondence received on the EA. This decision is in accordance with the National Environmental Policy Act (NEPA) of 1969 (Public Law 91-90), as amended, and both the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA (40 CFR 1500-1508), and the Department of the Interior regulations implementing NEPA (43 CFR 46).

## **DECISION**

Reclamation has decided to provide funding authorized under the Colorado River Basin Salinity Control Program to implement the Action Alternative described in the EA. The Eden Canal is approximately 6,200 feet long from the Farson Lateral to the Little Sandy Creek Siphon. The proposed lining of the Eden Canal would stay entirely within the existing Eden Canal alignment. The E-5 lateral is approximately 14,850 feet long and the E-6 lateral is approximately 9,520 feet long from the turnouts on the Eden Canal to the end of service. These laterals would be replaced with a single pipeline that would run 16,790 feet in length. This new pipeline would abandon the large majority of the existing E-5 lateral and would completely abandon the existing E-6 lateral. The new pipeline would begin at the existing turnout for the E-5 lateral and would range in size from 34 inches to 12 inches in diameter.

The proposed project would allow the lining of the Eden Canal and replacing of the E-5 and E-6 laterals with a pipeline while protecting environmental resources as described in Chapter 3 of the EA. Open water habitat along the laterals would be lost once the laterals are abandoned and the new pipeline is placed and buried. A habitat replacement plan to compensate for wildlife values foregone must be prepared and finalized by the Eden Valley Irrigation and Drainage District, and approved by Reclamation following coordination with the U.S. Fish and Wildlife Service (USFWS) and the Wyoming Game and Fish Department prior to project completion and final payment of funds.

## **REASONS FOR THE DECISION**

The finding of no significant impact and the decision to authorize funding for the project are based on the following:

1. The proposed project would have no significant effect on such unique characteristics as wilderness areas or wetlands.

2. The environmental effects of the proposed action are neither controversial nor do they involve unique or unknown risks.
3. The proposed action would have no effect on species either currently listed or proposed for listing as candidate, endangered or threatened species, and would not affect designated critical habitat for these species.
4. The proposed action does not threaten to violate Federal, state, or local laws or requirements imposed for protection of the environment.

Reclamation has analyzed the environmental effects, agency comments, and the Action Alternative in detail. Reclamation believes that the Action Alternative best meets the purpose and need described in the EA.

#### **PUBLIC INVOLVEMENT AND AGENCY COORDINATION**

On December 12, 2011, Reclamation sent the EA to interested individuals, groups, stakeholders, municipalities, organizations and agencies for review and comment. No comments were received during the comment period.

The Wyoming State Historic Preservation Office, the Bureau of Land Management, the USFWS, the Wyoming Game and Fish Department, and the U.S. Army Corps of Engineers were contacted pursuant to applicable laws and coordination with those agencies was completed.

Tribal consultation in accordance with 36 CFR 800(c)(2) was also completed.

#### **SUMMARY OF ENVIRONMENTAL IMPACTS**

The expected environmental impacts of the Action Alternative are described in Chapter 3 and summarized on pages 38-39 of the EA. The environmental analysis indicates that under the Action Alternative there would be impacts to riparian resources from the permanent loss of the riparian areas along the existing E-5 and E-6 laterals. The existing unlined laterals would be abandoned and replaced with a buried pipeline.

#### **ENVIRONMENTAL COMMITMENTS**

The environmental commitments described in Chapter 4 of the EA must be implemented as an integral part of the proposed action. These commitments include:

1. **Standard Reclamation Best Management Practices** - Standard Reclamation Best Management Practices would be applied during construction activities to minimize environmental effects and would be implemented by construction personnel or included in contract specifications.

2. **Additional Analysis** - If the proposed action were to change significantly from the alternative described in this EA, additional environmental analyses would be undertaken as necessary.
3. **Cultural Resources** - Any person who knows or has reason to know that he/she has inadvertently discovered possible human remains on Federal land, must provide immediate telephone notification of the discovery to Reclamation's Provo Area Office archaeologist. Work would stop until the proper authorities are able to assess the situation onsite. This action would promptly be followed by written confirmation to the responsible Federal agency official, with respect to Federal lands. The Wyoming State Historic Preservation Office and interested Native American tribal representatives would be promptly notified. Consultation would begin immediately. This requirement is prescribed under the Native American Graves Protection and Repatriation Act (43 CFR Part 10); and the Archaeological Resources Protection Act of 1979 (16 U.S.C. 470).
4. **Paleontological Resources** - Monitoring is required for all excavation activities associated with the Action Alternative. If bedrock of the Laney Shale Member (lithified layers of *in-situ* and/or sandstone) is encountered anywhere within the area of potential effect during construction and a paleontological monitor is not present, construction activities should cease until a Reclamation-permitted paleontologist arrives on site. In addition, if any subsurface bones or other potential fossils are unearthed during construction and a paleontological monitor is not present, Reclamation must be contacted immediately and work in the area of discovery should cease until a Reclamation-permitted paleontologist can assess the discovery, determine its significance, and make additional recommendations.
5. **Construction Activities Confined to the Surveyed Corridor** - All construction activities would be confined to the 100 foot wide corridor that has been surveyed for cultural, paleontological, and biological resources.
6. **Roads** - Existing roads would be used whenever possible for project activities. New access roads would be necessary along the new E-5 alignment.
7. **Disturbed Areas** - During construction topsoil would be saved and then redistributed after completion of construction activities. Subsequently, disturbed areas resulting from the project would be smoothed, shaped, contoured, and reseeded to as near their pre-project condition as practicable. Seeding and planting would occur at appropriate times with weed-free seed mixes of native plants and agricultural grasses, distributed where appropriate. Blue-bunch wheatgrass would be used to reseed barren areas (outside of agricultural fields), post construction at a dispersal rate of at least 40 pounds per acre.
8. **Air Quality** - Best Management Practices would be implemented to control fugitive dust during construction. The contractor would follow the Environmental Protection Agencies recommended control methods for aggregate storage pile emissions to minimize dust generation, including periodic watering of equipment, staging areas, and dirt/gravel roads. All loads that have the potential of leaving the bed of the truck during

transportation would be covered or watered to prevent the generation of fugitive dust. Construction machinery and operation/maintenance vehicles would be routinely maintained to ensure that engines remain tuned and emission-control equipment is properly functioning as required by law. Additionally, the contractor would comply with all Wyoming State air quality regulations.

9. **Habitat Replacement** - A plan to replace wildlife values foregone will be prepared by the applicant and approved by Reclamation following coordination with the USFWS and Wyoming Department of Game and Fish. Total acreage of wildlife habitat predicted to be lost is 10.19 acres of riparian habitat along the lateral prism.
10. **Sage Grouse Monitoring** – Prior to initiating construction activities, and as the project proceeds, the applicant will ensure that surveys and monitoring would be conducted to ensure that greater sage grouse leks do not exist within the construction area. If there are leks present in the area, the applicant and contractor shall notify the Wyoming Department of Game and Fish and Reclamation’s Provo Area Office biologist. Regardless of the presence of leks, any observation of sage grouse would lead to monitoring by a biologist to ensure that impacts to sage grouse are avoided.

level of disturbance. Distribution of disturbance may be considered and approved on a case-by-case basis. Unsuitable habitat should be identified in a seasonal and landscape context, on a case-by-case basis, outside the 0.6 mile buffer around leks. This will incentivize proponents to locate projects in unsuitable habitat to avoid creating additional disturbance acres. Acres of development in unsuitable habitat are not considered disturbance acres. The primary focus should be on protection of suitable habitats and protecting from habitat fragmentation. See Appendix 1 for a description of suitable, unsuitable habitat and disturbance.

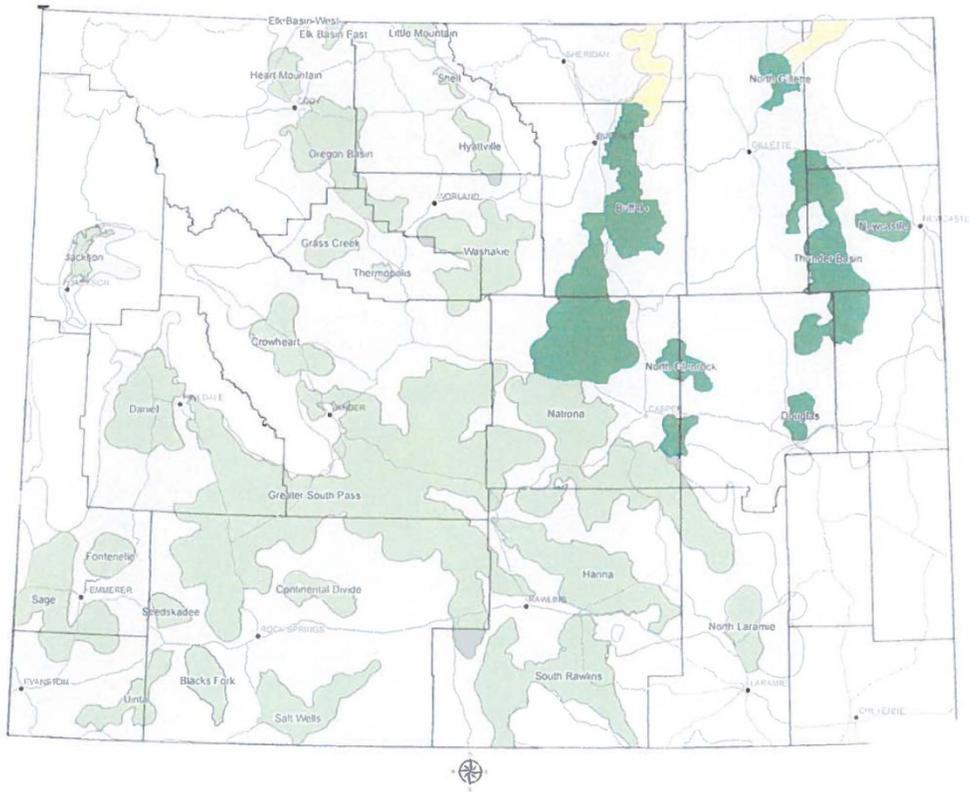
2. **Surface Occupancy:** Within 0.6 miles of the perimeter of occupied sage-grouse leks there will be no surface occupancy (NSO). NSO, as used in these recommendations, means no surface facilities including roads shall be placed within the NSO area. Other activities may be authorized with the application of appropriate seasonal stipulations, provided the resources protected by the NSO are not adversely affected. For example, underground utilities may be permissible if installation is completed outside applicable seasonal stipulation periods and significant resource damage does not occur. Similarly, geophysical exploration may be permissible in accordance with seasonal stipulations.
3. **Seasonal Use:** Activity (production and maintenance activity exempted) will be allowed from July 1 to March 14 outside of the 0.6 mile perimeter of a lek in core areas where breeding, nesting and early brood-rearing habitat is present. In areas used solely as winter concentration areas, exploration and development activity will be allowed March 14 to December 1. Activities in unsuitable habitat may also be approved year-round (including March 15 to June 30) on a case-by-case basis (except in specific areas where credible data shows calendar deviation). Activities may be allowed during seasonal closure periods as determined on a case-by-case basis. While the bulk of winter habitat necessary to support core sage-grouse populations likely occurs inside Core Population Areas, seasonal stipulations (December 1 to March 14) should be considered in locations outside Core Population Areas where they have been identified as winter concentration areas necessary for supporting biologically significant numbers of sage-grouse nesting in Core Population Areas. All efforts should be made to minimize disturbance to mature sagebrush cover in identified winter concentration areas.
4. **Transportation:** Locate main roads used to transport production and/or waste products > 1.9 miles from the perimeter of occupied sage-grouse leks. Locate other roads used to provide facility site access and maintenance > 0.6 miles from the perimeter of occupied sage-grouse leks. Construct roads to minimum design standards needed for production activities.
5. **Overhead Lines:** Bury lines when possible, if not; locate overhead lines at least 0.6 miles from the perimeter of occupied sage-grouse leks. New lines should be raptor proofed if not buried.
6. **Noise:** New noise levels, at the perimeter of a lek, should not exceed 10 dBA above ambient noise (existing activity included) from 6:00 p.m. to 8:00 a.m. during the initiation of breeding (March 1 – May 15). Ambient noise levels should be determined by measurements taken at the perimeter of a lek at sunrise.
7. **Vegetation Removal:** Vegetation removal should be limited to the minimum disturbance required by the project. All topsoil stripping and vegetation removal in suitable habitat

will occur between July 1 and March 14 in areas that are within 4 miles of an occupied lek. Initial disturbance in unsuitable habitat between March 15 and June 30 may be approved on a case-by-case basis.

8. **Sagebrush Treatment:** Sagebrush eradication is considered disturbance and will contribute to the 5% disturbance factor. Northeast Wyoming, as depicted in Figure 1, is of particular concern because sagebrush habitats rarely exceed 15% canopy cover and large acreages have already been converted from sagebrush to grassland or cropland. Absent some demonstration that the proposed treatment will not reduce canopy cover to less than 15% within the treated area, habitat treatments in northeast Wyoming (Figure 1) should not be conducted. In stands with less than 15% cover, treatment should be designed to maintain or improve sagebrush habitat. Sagebrush treatments that maintain sagebrush canopy cover at or above 15% total canopy cover within the treated acres will not be considered disturbance. Treatments that reduce sagebrush canopy cover below 15% will be allowed, excluding northeast Wyoming (Figure 1), if all such treated areas make up less than 20% of the suitable sagebrush habitat within the DDCT, and any point within the treated area is within 60 meters of sagebrush habitat with 10% or greater canopy cover. Treatments to enhance sagebrush/grassland will be evaluated based upon the existing habitat quality and the functional level post-treatment.
9. **Monitoring/adaptive response:** Proponents of new projects are expected to coordinate with the permitting agency and local WGFD biologist to determine which leks need to be monitored and what data should be reported by the proponent. Certain permits may be exempted from monitoring activities pending permitting agency coordination. If declines in affected leks (using a three-year running average during any five year period relative to trends on reference leks) are determined to be caused by the project, the operator will propose adaptive management responses to increase the number of birds. If the operator cannot demonstrate a restoration of bird numbers to baseline levels (established by pre-disturbance surveys, reference surveys and taking into account regional and statewide trends) within three years, operations will cease until such numbers are achieved.
10. **Reclamation:** Reclamation should re-establish native grasses, forbs and shrubs during interim and final reclamation to achieve cover, species composition, and life form diversity commensurate with the surrounding plant community or desired ecological condition to benefit sage-grouse and replace or enhance sage-grouse habitat to the degree that environmental conditions allow. Seed mixes should include two native forbs and two native grasses with at least one bunchgrass species. Where sagebrush establishment is prescribed, establishment is defined as meeting the standard prescribed in the individual reclamation plan. Landowners should be consulted on desired plant mix on private lands. The operator is required to control noxious and invasive weed species, including cheatgrass. Rollover credit, if needed, will be outlined in the individual project reclamation plan.

Credit may be given for completion of habitat enhancements on bond released or other minimally functional habitat when detailed in a plan. These habitat enhancements may be used as credit for reclamation that is slow to establish in order to maintain the disturbance cap or to improve nearby sage-grouse habitat.

Figure 1. Wyoming Core Area with northeast Wyoming core (dark green) and connectivity areas (yellow).



11. **Existing Activities:** Areas already disturbed or approved for development within Core Areas prior to August 1, 2008 are not subject to new sage-grouse stipulations with the exception existing operations may not initiate activities resulting in new surface occupancy within 0.6 mile of the perimeter of a sage-grouse lek. Any existing disturbance will be counted toward the calculated disturbance cap for a new proposed activity. The level of disturbance for existing activity and rollover credit may exceed 5%.
12. **Exceptions:** Any exceptions to these general or specific stipulations will be considered on a case by case basis and must show that the exception will not cause declines in sage-grouse populations.

**SPECIFIC STIPULATIONS (To be applied in addition to general stipulations)**

1. **Oil and Gas:** Well pad densities not to exceed an average of one pad per square mile (640 acres) and suitable habitat disturbed not to exceed 5% of suitable habitat within the DDCT. As an example, the number of well pads within a two mile radius of the perimeter of an occupied sage-grouse lek should not exceed 11, distributed preferably in a clumped pattern in one general direction from the lek.
2. **Mining**
  - a. For development drilling or ore body delineation drilled on tight centers, (approximately 100' X 100') the disturbance area will be delineated by the external limits of the development area. Assuming a widely-spaced disturbance pattern, the actual footprint will be considered the disturbance area.
  - b. Monitoring results will be reported annually in the mine permit annual report and to WGFD. Pre-disturbance surveys will be conducted as required by the appropriate regulatory agency.
  - c. The number of active mining development areas (e.g., operating equipment and significant human activity) are not to exceed an average of one site per square mile (640 acres) within the DDCT.
  - d. Surface disturbance and surface occupancy stipulations will be waived within the Core Area when implementing underground mining practices that are necessary to protect the health, welfare, and safety of miners, mine employees, contractors and the general public. The mining practices include but are not limited to bore holes or shafts necessary to: 1) provide adequate oxygen to an underground mine; 2) supply inert gases or other substances to prevent, treat, or suppress combustion or mine fires; 3) inject mine roof stabilizing substances; and 4) remove methane from mining areas. Any surface disturbance or surface occupancy necessary to access the sites to implement these mining practices will also be exempt from any stipulation.
  - e. Coal mining operations will be allowed to continue under the regulatory and permit-specific terms and conditions authorized under the federal Surface Mining Control and Reclamation Act.
3. **Connectivity:**
  - a. The suspension of federal and state leases in connectivity corridors (Figure 1) is encouraged where there is mutual agreement by the leasing agency and the operator. These suspensions should be allowed until additional information

clarifies their need. Where suspensions cannot be accommodated, disturbance should be limited to no more than 5% (up to 32 acres) per 640 acres of suitable sage-grouse habitat within connectivity corridors.

- b. For protection of connectivity corridors (Figure 1), a controlled surface use (CSU) buffer of 0.6 miles around leks or their documented perimeters is required. In addition, a March 15 to June 30 timing limitation stipulation is required within nesting habitat within 4 miles of leks.
4. Process Deviation or Undefined Activities: Development proposals incorporating less restrictive stipulations or development that is not covered by these stipulations may be considered depending on site-specific circumstances and the proponent must have data demonstrating that the alternative development proposal will not cause declines in sage-grouse populations in the core area. Proposals to deviate from standard stipulations will be considered by a team including WGFD and the appropriate land management and permitting agencies, with input from the U.S. Fish and Wildlife Service. Project proponents need to demonstrate that the project development would meet at least one of the following conditions:
  - a. No suitable habitat is present in one contiguous block of land that includes at least a 0.6 mile buffer between the project area and suitable habitat;
  - b. No sage-grouse use occurs in one contiguous block of land that includes at least a 0.6 mile buffer between the project area and adjacent occupied habitat, as documented by total absence of sage-grouse droppings and an absence of sage-grouse activity for the previous ten years;
  - c. Provision of a development/mitigation plan that has been implemented and demonstrated by previous research not to cause declines in sage-grouse populations. The demonstration must be based on monitoring data collected and analyzed with accepted scientific based techniques.
5. Wind Energy Development: Wind development is not recommended in sage-grouse core areas, but will be reevaluated on a continuous basis as new science, information and data emerges.

**Appendix I**  
**Suitable Sage-Grouse Habitat Definition**

Sage-grouse require somewhat different seasonal habitats distributed over large areas to complete their life cycle. All of these habitats consist of, are associated with, or are immediately adjacent to, sagebrush. If sage-grouse seasonal habitat use maps do not exist for the project site the following description of suitable habitat should be used to determine areas of unsuitable sage-grouse habitat for development siting purposes. An abbreviated description of a complex system cannot incorporate all aspects of, or exceptions to, what habitats a local sage-grouse population may or may not utilize.

**Suitable sage-grouse habitat** (nesting, breeding, brood-rearing, or winter) is within the mapped occupied range of sage-grouse, and:

- 1) has 5% or greater sagebrush canopy cover as measured by the technique developed by interagency efforts. "Sagebrush" includes all species and sub-species of the genus *Artemisia* except the mat-forming sub-shrub species: *frigida* (fringed) and *pedatifida* (birdfoot); or
- 2) is riparian, wet meadow (native or introduced) or areas of alfalfa or other suitable forbs (brood rearing habitat) within 60 meters of sagebrush habitat with 10% or greater canopy cover and the early brood rearing habitat does not exceed 20% of the suitable sagebrush habitat present within the DDCT, Larger riparian/wet meadow, and grass/forb producing areas may be considered suitable habitat as determined on a case by case basis.

**Transitional sage-grouse habitat** is land that has been treated or burned prior to 2011 resulting in <5% sagebrush cover but is actively managed to meet a minimum of 5% sagebrush canopy cover with associated grasses and forbs by 2021 (by analysis of local condition and trend) and may or may not be considered disturbed. Land that does not meet the above vegetation criteria by 2021 should be considered disturbed.

Land treatments post 2010 must meet sagebrush vegetation treatment guidelines or the treatment will be considered disturbed. Following wildfire, lands shall be treated as disturbed pending an implementation management plan with trend data showing the area returning to functional sage-grouse habitat.

To evaluate the 5% disturbance cap per average 640 acres using the DDCT, suitable habitat is considered disturbed when it is removed and unavailable for immediate sage-grouse use.

The following items are guidelines for determining suitable habitat:

- a. Long-term removal occurs when habitat is physically removed through activities that replace suitable habitat with long term occupancy of unsuitable habitat such as a road, well pad or active mine.
- b. Short-term removal occurs when vegetation is removed in small areas, but restored to suitable habitat within a few years of disturbance, such as a successfully reclaimed pipeline, or successfully reclaimed drill hole or pit.
- c. There may be additional suitable habitat considered disturbed between two or more long term (greater than 1 year) anthropogenic disturbance activities with a footprint greater than 10 acres each if the activities are located such that sage-grouse use of the suitable habitat between these activities is significantly reduced due to the close proximity (less than 1.2 miles apart, 0.6 miles from each activity) and resulting in cumulative effects of these large scale activities. Exemptions may be provided.

**ATTACHMENT C**  
**Exempt (“de minimus”) Activities**

**Existing Land Uses and Landowner Activities in Greater Sage-Grouse Core Population  
Areas That Do Not Require State Agency Review for Consistency  
With Executive Order No. 2011-02**

1. Existing animal husbandry practices (including branding, docking, herding, trailing, etc).
2. Existing farming practices (excluding conversion of sagebrush/grassland to agricultural lands).
3. Existing grazing operations that utilize recognized rangeland management practices (allotment management plans, NRCS grazing plans, prescribed grazing plans, etc).
4. Construction of agricultural reservoirs and habitat improvements less than 10 surface acres and drilling of agriculture and residential water wells (including installation of tanks, water windmills and solar water pumps) more than 0.6 miles from the perimeter of the lek. Within 0.6 miles from leks no review is required if construction does not occur March 15 to June 30 and construction does not occur on the lek. All water tanks shall have escape ramps.
5. Agricultural and residential electrical distribution lines more than 0.6 miles from leks. Within 0.6 miles from leks no review is required if construction does not occur March 15 to June 30 and construction does not occur on the lek. Raptor perching deterrents shall be installed on all poles within 0.6 miles from leks.
6. Agricultural water pipelines if construction activities are more than 0.6 miles from leks. Within 0.6 miles from leks no review is required if construction does not occur March 15 to June 30 and construction is reclaimed.
7. New fencing more than 0.6 miles from leks and maintenance on existing fence. For new fencing within 0.6 miles of leks, fences with documented high potential for strikes should be marked.
8. Irrigation (excluding the conversion of sagebrush/grassland to new irrigated lands).
9. Spring development if the spring is protected with fencing and enough water remains at the site to provide mesic (wet) vegetation.
10. Herbicide use within existing road, pipeline and power line rights-of-way. Herbicides application using spot treatment. Grasshopper/Mormon cricket control following Reduced Agent-Area Treatments (RAATS) protocol.
11. Existing county road maintenance.
12. Cultural resource pedestrian surveys.
13. Emergency response.