

**From:** [Amy Defreese](#)  
**To:** [Creed Clayton](#); [Julie Reeves](#)  
**Subject:** FW: February 3rd BRTG meeting summary and draft EGS Biological Resources Survey Plan  
**Date:** Wednesday, February 18, 2015 4:58:13 PM  
**Attachments:** [EGS BRTG summary 2-3-2015 Draft.docx](#)  
[EGSBio Survey Plan Draft BRTG 02-09-15.pdf](#)  
[EGS comment tracking form Bio Survey Plan.docx](#)

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Hi Julie and Creed,

If you haven't already, could you pass this email and the documents along to the biologists in your office who need to review them?

Also, if you could send a list of the individuals that will address each species in your state, that would be helpful. Then I can email reminders to those folks directly as necessary.

Comments are due next Thursday the 26<sup>th</sup>. It would be ideal to provide comments to me by the 24<sup>th</sup>.

Thanks!

Amy

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**Subject:** February 3rd BRTG meeting summary and draft EGS Biological Resources Survey Plan

Hello all,

Attached is a draft summary from the February 3, 2015 BRTG meeting. Please review this summary and provide comments or edits to me by next Thursday, February 19th. Our next BRTG meeting is March 3, 2015 at 2:00 pm.

Also attached is the draft EGS Biological Resources Survey Plan for your review. The Biological Survey Plan describes our proposed approach to completing the surveys necessary for the geotechnical investigation and construction of the transmission line. The list of species was developed with feedback from the BRTG when the agency-preferred alternative was identified. In addition to your general comments, we are requesting specific feedback on:

- The overall survey approach
- The proposed survey areas and protocols
- Whether any important species/resources are omitted

Please provide your input on this plan by February 26<sup>th</sup> using the attached comment tracking form.

Thank you!

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# Energy Gateway South Transmission Project EIS

## Meeting Summary

**PURPOSE:** Monthly coordination meeting of the Biological Resources Task Group (BRTG)

**DATE AND TIME:** February 3, 2015; 2:00 to 3:00 pm (MST)

**LOCATION:** Conference Call

### **ATTENDANCE:**

#### **Bureau of Land Management**

Tamara Gertsch  
Desa Ausmus  
Dennis Saville  
Mary Read  
Robin Naeve

#### **Utah Reclamation, Mitigation, and Conservation Commission**

Not represented

#### **U.S. Forest Service**

Chris Mease  
Dave Olsen

#### **Utah Division of Wildlife Resources**

Makeda Hansen  
Pat Rainbolt

#### **Colorado Division of Parks and Wildlife**

Not represented

#### **National Park Service**

Not represented

#### **Bureau of Indian Affairs**

Not represented

#### **U.S. Fish and Wildlife Service**

Julie Reeves

#### **Wyoming Game & Fish**

Not represented

#### **EPG (third-party contractor)**

Cindy Smith  
Amanda O'Connor  
Reid Persing  
Ron Spears  
Adrien Elseroad  
John Curl  
David Kahrs

#### **AECOM (third-party contractor)**

Not represented

### **SUMMARY**

#### **Status of the Project**

Tamara Gertsch provided an update on the status of and schedule for the Energy Gateway South (EGS) Transmission Project (Project) Final Environmental Impact Statement (EIS).

The administrative Final EIS (AFEIS)/Proposed Land Use Plan Amendments (LUPAs) is anticipated to be distributed for a 4-week review by the Agency Interdisciplinary (ID) Team and Cooperating Agencies on April 23, 2015. The review period will end on May 20, 2015. EPG will then have 4 weeks to prepare the print-ready Final EIS, which will be distributed for review and approval to print on June 22, 2015.

The *Federal Register* Notice of Availability (NOA) of the Final EIS is anticipated to be published on September 18, 2015. A BLM Record of Decision is expected December 16, 2015.

### **Plan of Development**

Cindy Smith provided an update on the National Environmental Policy Act (NEPA) Plan of Development (POD) schedule and review process. Preparation of the NEPA POD will be completed prior to BLM signing a Record of Decision. The agencies and Rocky Mountain Power will both have several opportunities to review the NEPA POD. An important role of the agencies during the development of the POD will be to work with EPG to refine the mitigation measures for each resource addressed in the document. EPG currently is preparing the first preliminary draft of the NEPA POD, which will be the text volume. Map volumes will be developed for subsequent reviews of the NEPA POD. However, surveys for biological resources will not be completed prior to completion of the NEPA POD and, therefore, some placeholders in the NEPA POD will be necessary.

The preliminary NEPA POD will be sent to Rocky Mountain Power for review on March 23, 2015. Once comments have been incorporated, the document will be provided to the agencies for a 4-week review on about June 1, 2015. There will be two additional review periods during which both Rocky Mountain Power and the agencies will review and comment on the NEPA POD concurrently. The NEPA POD is scheduled to be completed on November 17, 2015. A detailed schedule for preparation of the NEPA POD was distributed with the BRTG agenda.

Through development of the EIS, the BRTG has identified additional plans that will need to be developed and included in the POD to facilitate management of biological resources during and after construction of the Project. These plans include a Biological Resources Monitoring Plan, an Adaptive Wildlife Management Plan, and a Migratory Bird Nest Management Plan. The BRTG will be involved in review and preparation of these three plans. However, these plans will be developed on a separate timeline from the NEPA POD and will not be included in the first agency review.

On January 22, 2015, a meeting was held to discuss the biological monitoring plan for the TransWest Express (TWE) Project. A representative from EPG, BLM's third-party contractor for preparation of the Energy Gateway South EIS, attended the meeting to promote consistency between the two projects. The approach to documenting the monitoring requirements and developing a monitoring plan for the two projects may vary slightly due to differences in organization of the relevant environmental documents. However, the final outcome and resource-specific monitoring requirements should be the same for both Projects. Robin Naeve suggested that the monitoring plan be developed as a matrix and included as an appendix to the POD. EPG will coordinate with the development of the TWE monitoring plan as they begin to prepare the Biological Resources Monitoring Plan for the EGS Project.

The group discussed clarifying the seasonal and spatial avoidance measures for biological resources in the NEPA POD. Stipulations and recommendations from relevant agency plans and policies were incorporated into the EIS and will be used to develop the final seasonal and spatial avoidance measures for the NEPA POD. Some resources have stipulations and recommended restrictions from multiple agencies (e.g., raptors). In many instances, these restrictions are not consistent. Through refinement of the POD, the BRTG will be asked to help consolidate and clarify which restrictions will be used in the POD. Dennis Saville noted that there may be instances where a management plan is very restrictive but it may be appropriate to consider a less restrictive stipulation. The goal of clarifying the

seasonal and spatial restrictions will be to develop standard restrictions using the best available information and local knowledge of each species and geographic region in order to make guidance clear for construction crews, reducing administrative burden and likelihood of noncompliance. To initiate this process, EPG will compile all of the stipulations and restrictions into a table for side-by-side comparison and distribute it to the resources specialists for consideration. If necessary, a meeting will be scheduled to discuss the seasonal and spatial restrictions with each state or field office.

### **Biological Resources Survey Plan**

EPG has prepared a Biological Resources Survey Plan describing the approach to completing the surveys necessary for the geotechnical investigation and construction of the transmission line. The survey plan addresses only the biological resource surveys that need to be completed to meet the requirements of the Section 7 consultation, provide information to inform the final design of the agency preferred alternative route and develop mitigation measures for the Construction POD, and complete the geotechnical investigation POD. Additional surveys will be required as a component of the biological monitoring conducted for the Project. These surveys will be addressed in the Biological Resources Monitoring Plan developed for the POD.

The geotechnical investigation will occur a few years prior to initiation of the construction of the transmission line. Due to the temporal and spatial differences between the construction of the transmission line and the geotechnical investigation, the approach to conducting the surveys required for each phase are different. Data standards and reporting requirements for the survey work will be refined as detailed survey protocols are approved by the agencies. EPG will distribute the survey plan to the BRTG for review in the next few days.

EPG requested that the agencies help clarify when and where surveys for black-footed ferret will be required and which protocol should be employed. Desa Ausmus will follow up with the resource leads in the BLM Colorado field offices to clarify survey requirements and the protocol to be employed. In Utah, EPG will coordinate with the BLM and the Utah Division of Wildlife to see where recent black-footed ferret surveys have been conducted.

### **Section 7 Consultation**

The draft Biological Assessment (BA) was distributed to the agencies for review on January 5, 2015. Comments are due to EPG on February 6, 2015. The schedule for preparation of the final BA may need to be adjusted based on the comments received and in consideration of the Applicant's new Project description. EPG will send out a doodle poll to schedule a meeting to discuss the agency comments on the BA.

### **Use of Support-assisted Lattice Structure Types**

The TWE and EGS Projects have both proposed incorporating support-assisted lattice structure types into their designs. Both projects have been discussing the use of these structure types with BLM, including discussing mitigation that may be required to reduce the effects of these structures. In some areas, the BLM is considering requiring self-supporting structure types. BLM expects that the structure type selected should be consistent between the two projects in areas where they will be colocated. D. Saville drafted a paper outlining important resource considerations that BLM is considering in these

discussions with both projects. The paper was distributed to the BRTG with the February BRTG meeting agenda.

R. Persing noted that the relative cost of each structure type, the effectiveness of altering the structure type to reduce adverse environmental effects, and the relative costs and benefits of other types of potential mitigation should be considered by the agencies in their discussions with the Applicant regarding structure types. Additional discussion regarding this subject will occur in upcoming meetings.

### **Greater Sage-grouse RMP Amendments**

Some of the cooperating agencies have expressed concern about coordinating the development of the EGS EIS with the ongoing BLM and sage-grouse resource management plan amendment (RMPA) EISs. BLM and EPG have been coordinating the development of the EGS EIS with the ongoing BLM and sage-grouse RMPA EISs to the extent feasible. The Project will need to comply with the RMP stipulations and land-use restrictions that are in place when the Record of Decision is signed. D. Saville noted that Wyoming has developed a state-wide plan, which has been endorsed by the U.S. Fish and Wildlife Service and is included as an alternative in the BLM RMPA EIS in Wyoming. If this alternative were to be selected by the BLM, the RMPAs would likely have little effect on the types of conservation measures and buffer distances currently in effect. D. Ausmus indicated that the Final EIS for Colorado is anticipated in mid-summer. Additional coordination will occur as the Final EISs for the sage-grouse RMPAs are released.

### **Other Topics**

The next BRTG meeting is scheduled for Tuesday, March 3, 2015.

### **Action Items**

- EPG will prepare a table of seasonal and spatial restrictions by resource and distribute this table to the BRTG for review and discussion. BRTG feedback will be used to develop seasonal and spatial restrictions to be included in the NEPA POD.
- EPG will distribute the Biological Resources Survey Plan to the BRTG for review.
- D. Ausmus will coordinate with the BLM Colorado field offices to identify black-footed ferret survey protocols and spatial requirements for the Project. Information will be provided to EPG.
- EPG will send out a doodle poll to schedule a meeting to discuss agency comments on the BA.

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8 **Biological Resources Survey Plan**  
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Prepared by:  
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Draft: February 9, 2015

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# Table of Contents

Introduction.....	1
Need for Biological Resource Surveys .....	1
Approach to Biological Resource Surveys .....	2
Overview .....	2
Important Considerations .....	2
Geotechnical Investigation.....	3
Special Status Plants and Wetlands and Waters of the United States.....	4
Special Status Wildlife .....	7
Transmission-line Construction .....	8
Special Status Plants .....	8
Wetlands and Waters of the United States .....	9
Special Status Wildlife .....	10
Next Steps .....	11
Appendix A –Draft Biological Survey Requirements	
Table A-1 Draft Biological Survey Requirements for Geotechnical Investigation .....	A-1
Table A-2 Draft Biological Survey Requirements for Transmission-line Construction.....	A-11

## List of Figures

Figure 1	Energy Gateway South Biological Survey Timeline .....	5
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# List of Acronyms

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Applicant	PacifiCorp (doing business as Rocky Mountain Power)
BA	Biological Assessment
BE	Biological Evaluation
BLM	Bureau of Land Management
BO	Biological Opinion
EIS	Environmental Impact Statement
EPG	Environmental Planning Group, LLC
ESA	Endangered Species Act of 1973
FSM	Forest Service Manual
FWS	U.S. Fish and Wildlife Service
GPS	Global positioning system
NEPA	National Environmental Policy Act
NTP	Notice to Proceed
POD	Plan of Development
Project	Energy Gateway South Transmission Project
RMP	Resource Management Plan
UDWR	Utah Division of Wildlife Resources
UNPS	Utah Native Plant Society
U.S.	United States
USFS	U.S. Forest Service
USACE	U.S. Army Corps of Engineers
USFS	U.S. Forest Service
WYNDD	Wyoming Natural Diversity Database

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# Introduction

The purpose of this survey plan is to document and define the needs for biological resource surveys for the Energy Gateway South Transmission Project (Project) and to communicate the schedule, general methods, and approach for this work among PacifiCorp (doing business as Rocky Mountain Power [Applicant]), the coordinating agencies, and Project environmental and engineering staff. The plan addresses surveys that must be completed to ultimately inform the design of the transmission line and associated facilities. To that end, the results of the surveys will support the preparation of a Geotechnical Investigation Plan of Development (POD) and implementation and conduct of the geotechnical investigation, the results of which will contribute to the design of the transmission line and a POD<sup>1</sup> for the construction of the transmission line and associated facilities. This survey plan does not contain detailed work plans, survey protocols, specific reporting requirements, or maps of survey areas for these surveys. The detailed information will be documented in a survey protocol to be approved by the Bureau of Land Management (BLM), other relevant agencies, and Applicant prior to conducting surveys. In addition to development of the survey protocol, prefield activities will include desktop reconnaissance and coordination with the Applicant and relevant agencies for each required survey.

This survey plan also does not address additional biological resource survey work that will be conducted as a component of environmental and construction monitoring or special circumstances that may warrant collection of additional biological resource data. Requirements for environmental and construction monitoring will be informed by the findings of surveys described in this survey plan and will be documented in the Construction POD. This survey plan is a “living” document and can be modified throughout the Project as circumstances warrant.

## Need for Biological Resource Surveys

Biological resource surveys are necessary to inform the application of mitigation measures and to ensure compliance with laws, regulations, and agency policies described in the Project Environmental Impact Statement (EIS) as well as inform implementation of stipulations analyzed in the EIS and included in the right-of-way grant. The right-of-way grant will contain stipulations applicable to both the geotechnical investigation and transmission-line construction. Mitigation measures are described in the EIS and include seasonal avoidance measures during construction as well as design considerations to avoid or reduce impacts on sensitive resources.

Surveys will be conducted for plants and wildlife that could be affected by the Project and are designated as threatened, endangered, or candidates for listing under the Endangered Species Act of 1973 (ESA) as well as species listed as sensitive by the U.S. Forest Service (USFS), BLM, or states crossed by the route selected for construction of the transmission line. Surveys for wetlands and waters of the United States (U.S.) are required to obtain necessary permits from the U.S. Army Corps of Engineers (USACE) and also have been included in the plan.

1 The results of the surveys will be provided to the Applicant and the agencies for the Project record and  
2 will be incorporated into the relevant POD<sup>1</sup> (i.e., Geotechnical Investigation POD and/or Construction  
3 POD) as appropriate. In consultation with the Applicant and the agencies, the results of some surveys will  
4 inform application of mitigation measures (e.g., seasonal restrictions, design considerations, and spatial  
5 avoidance) and potential need for biological monitoring for the Project.

## 6 **Approach to Biological Resource Surveys**

### 7 **Overview**

8 Due to the temporal separation and different spatial requirements of the geotechnical investigation and the  
9 transmission-line construction, it is recommended that these phases of the Project employ different  
10 approaches for collecting required biological resource information. The geotechnical investigation is  
11 anticipated to begin in 2016 and require that biological data be collected only around drilling locations  
12 and new and improved access routes. Transmission-line construction is anticipated to begin in 2018 and  
13 will require biological data to be collected along the entire right-of-way, new and improved access routes,  
14 and ancillary facilities. This survey plan presents the recommended approach to conducting the biological  
15 resource surveys for the geotechnical investigation and the transmission-line construction separately.

### 16 **Important Considerations**

17 The approach to conducting biological resource surveys for each phase of the Project should be developed  
18 in consideration of the data needs for each resource, potential impact of survey findings on development  
19 of the relevant POD and final Project design, as well as schedule and cost implications. The approach for  
20 each biological resource survey must be agreed upon by the agencies and the Applicant.

21 The goal of the biological surveys addressed in this plan is to collect an appropriate amount of  
22 information to apply mitigation and achieve compliance with stipulations and biological resource goals as  
23 outlined in the right-of-way grant. Depending on the resource and phase of the Project, data needs may  
24 vary from relatively simple, preconstruction field resource checks (e.g., migratory birds) to data that are  
25 needed for revising the design of the Project, verifying permit thresholds, or preparing required permits  
26 (e.g., wetlands and waters of the U.S. and species listed under the ESA).

27 Performing surveys and the collection of biological resource information is a cost incurred by the  
28 Applicant. The strategy for collecting biological information for each resource should promote having  
29 required information available in a timely manner to inform Applicant and agency decisions while  
30 avoiding unnecessary costs. However, biological information collected for the Project has temporal  
31 relevance due to annual variations in environmental conditions. The results of some surveys have explicit  
32 expiration dates defined by agency protocols. The survey strategy for each resource should consider the  
33 temporal relevance of data collected as well as the impact of the survey findings on the Project schedule

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<sup>1</sup>For the route selected for construction of the transmission line, the BLM requires a POD. The POD provides direction to the Applicant's construction personnel, construction contractor(s) and crews, compliance inspection contractor, environmental monitors, and agency personnel regarding the specifications of construction. The POD also provides direction to the affected land-managing agencies and Applicant's personnel for operation and maintenance of the Project. Since the results of geotechnical investigation informs the engineering and design of the Project and the geotechnical investigation must be completed in advance of completion of this Construction POD, a separate POD is developed specifically for directing the conduct of the geotechnical investigation. Section 2.4 of the EIS provides a description of the Geotechnical Investigation POD and Construction POD.

1 and design. For example, it may be advisable for the Project to conduct critical surveys that will inform  
2 Project design one or more years ahead of the construction schedule to allow adequate time for design  
3 modifications and preparation of the POD. In some cases, this may require additional surveys or spot-  
4 checks prior to construction but will help avoid unnecessary Project delays during construction.

5 Special circumstances or needs could modify the strategy presented in this survey plan or make it  
6 advisable to collect supplemental biological information. The locations of Project features such as tower  
7 locations, new and improved access routes, and ancillary facilities have not been determined at the time  
8 this survey plan was prepared (January 2015). Coordination between Project environmental and  
9 engineering staff as features are designed can help with early identification and resolution of issues  
10 affecting the biological resource survey strategy. Furthermore, the desire or need for additional flexibility  
11 during the geotechnical investigation or construction of the transmission line may make it advisable to  
12 collect information earlier, from a larger geographic area, or more frequently than is presented in this  
13 strategy. The anticipated need for flexibility (e.g., seasonal stipulation waivers or modifications,  
14 alternative new and improved access routes to avoid areas closed by seasonal restrictions) should be  
15 carefully discussed between the Applicant and agencies in selection of an ultimate survey strategy for the  
16 objectives addressed in this plan and for subsequent survey needs (e.g., resource monitoring during  
17 construction).

18 The approach to conducting surveys for wetlands and waters of the U.S. presented in this plan assumes  
19 that adequate engineering design to conduct all wetland and waters of the U.S. surveys will not be  
20 complete by the initiation of the survey season in 2015, that all impacts associated with the Project could  
21 be permitted under USACE Nationwide Permit 12, and that permits required for the geotechnical  
22 investigation and transmission-line construction could be obtained in separate permitting efforts.  
23 Nationwide Permit 12 covers activities required for the construction of utility lines and associated  
24 facilities, provided that each crossing does not result in the loss of greater than 0.5-acre of waters of the  
25 U.S. Coordination with the USACE will be required to approve this approach to conducting required  
26 surveys and obtaining necessary permits. However, it is assumed this approach is feasible because the  
27 geotechnical investigation is an activity required to design the transmission line, and the disturbance from  
28 the geotechnical investigation would occur in the same areas that would be disturbed by transmission-line  
29 construction. Also, under Nationwide Permit 12, impacts on wetlands and waters of the U.S. are  
30 calculated separately for each distinct crossing. Alternatively, if adequate engineering design of the  
31 transmission line and new and improved access routes is available in 2015, surveys for wetlands and  
32 waters of the U.S. could be conducted in 2015 for both the geotechnical investigation and transmission-  
33 line construction.

## 34 **Geotechnical Investigation**

35 A geotechnical investigation will be conducted along the route selected for construction of the  
36 transmission line. The investigation consists of drilling and sampling soils to a depth of 50 to 60 feet to  
37 determine subsurface stability, the results of which will be used to design each transmission-line  
38 foundation and structure. Also, geotechnical investigation will be conducted at series compensation  
39 stations to quantify subsurface conditions and engineering properties of fill and placement of required fill  
40 material. Section 2.4.2.2 of the EIS provides a description of the geotechnical investigation.

41 The approach to, timing of, and requirements for the geotechnical investigation surveys are driven by the  
42 anticipated drilling schedule and degree to which the schedule can be modified based on the survey  
43 findings. Other important considerations in developing the approach to biological resource surveys for the  
44 geotechnical investigation include the geographic area requiring surveys, the relatively short duration of

activity at each site, the level of biological resource information desired for the Geotechnical Investigation POD, and whether information collected is required for obtaining certain permits or may require lengthy coordination with the agencies or modification of the drilling methods or borehole locations.

Figure 1 presents the current Project schedule (January 2015) and the anticipated timing and duration of surveys that will be necessary to complete the development of the Geotechnical Investigation POD and provide information necessary for coordination and permitting with the agencies. Issuance of the BLM Record of Decision and right-of-way grant are anticipated in December 2015. The geotechnical investigation is anticipated to begin in the early spring of 2016 and likely will be completed by late fall of 2016. In the event that work is not completed before adverse winter conditions prohibit operations, the geotechnical investigation may continue in the spring of 2017.

## **Special Status Plants and Wetlands and Waters of the United States**

The recommended approach for conducting special status plants and wetlands and waters of the U.S. surveys for the geotechnical investigation is driven by the timeframe in which special status plant surveys must be conducted (i.e., blooming periods), the anticipated need to coordinate with the agencies based on the results of the surveys (to be include results in the Geotechnical Investigation POD), and the potential need to conduct permitting activities with the USACE for crossings of wetlands or jurisdictional waters. A list of plant species for which surveys must be conducted, the agency-approved survey methodology, and the temporal and spatial extent of each survey for the geotechnical investigation is included in Table A-1 of Appendix A.

To allow adequate time for required agency coordination and permitting, surveys for special status plants and wetlands and waters of the U.S. are recommended in the spring and summer of 2015 at all geotechnical investigation boring locations and new and improved access routes (Figure 1). Coordination with the agencies, any required modification of geotechnical investigation boring locations or boring methods, and consultation and permitting with the USACE will occur following completion of the surveys and prior to initiation of the geotechnical investigation in early 2016.

The spatial requirements, survey methodologies, and surveyor qualifications for the special status plants and wetlands and waters of the U.S. surveys are generally similar. To promote cost efficiencies, it is recommended these surveys be conducted in a single visit to each geotechnical boring location to the extent feasible. These visits would be timed to correspond with the survey windows for special status plants that may be present at each location. In select locations with multiple target species, the survey window (i.e., blooming period) for all target special status plant species may not overlap and sufficiently allow for all surveys to be completed in a single visit. In these instances, two visits to some locations may be required. The schedule and number of required visits to each geotechnical boring location would be developed and documented in the agency-approved survey protocol on identification of the geotechnical boring locations in early 2015.

In locations where special status plants are identified in the survey area for a borehole location, coordination with the relevant agencies would occur. Depending on the quantity and extent of special status plants at the borehole location, the agencies may request the borehole location or access road be modified to avoid the plants, the drilling method be modified to reduce impacts, or a biological monitor assists the drilling team in avoiding the plants. Agency coordination would occur on completion of the surveys and survey reports. The locations of special status plant and required mitigation would be documented in the Geotechnical Investigation POD.



Environmental Impact Statement and Construction Milestone Schedule		Final EIS																							
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		NEPA and Geotechnical Investigation PODs																							
						Geotechnical Investigation																			
									Construction POD									Transmission-line Construction							
Year		2015				2016				2017				2018				2019				2020			
Quarter		First	Second	Third	Fourth	First	Second	Third	Fourth	First	Second	Third	Fourth	First	Second	Third	Fourth	First	Second	Third	Fourth	First	Second	Third	Fourth
Plants	Geotechnical	Plant Surveys																							
		Plant Survey Reports and Geotechnical Investigation POD																							
						Plant Monitoring																			
	Transmission line		Transmission-line Surveys Required by BA/BO																						
						Transmission-line Plant Surveys				Year 2 Plant Surveys <sup>1</sup>															
									Transmission-line Plant Survey Reports and Construction POD																
														Transmission-line Construction Monitoring											
	Wildlife	Geotechnical	Geotechnical Investigation POD Production																						
						Wildlife Surveys and Monitoring																			
Transmission line						Transmission-line Wildlife Surveys				Year 2 Wildlife Surveys <sup>1</sup>															
									Transmission-line Wildlife Survey Reports and Construction POD																
														Transmission-line Construction Monitoring											
Wetlands and Jurisdictional Waters	Geotechnical	Geotechnical Surveys																							
			USACE Consultation and Permitting and Geotechnical Investigation POD Production																						
	Transmission line					Transmission-line Surveys																			
									USACE Consultation and Permitting and Construction POD																
NOTES: <sup>1</sup> Year 2 surveys to be conducted only for those species for which their protocol requires 2 years of surveys. BA = Biological Assessment      BO = Biological Opinion      EIS = Environmental Impact Statement      NEPA = National Environmental Policy Act      NTP = Notice to Proceed      POD = Plan of Development      ROD = Record of Decision      USACE = U.S. Army Corps of Engineers																									

1    **Figure 1      Energy Gateway South Biological Survey Timeline**

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1 In locations where wetlands or waters of the U.S. are located during field surveys, it may be advisable to  
2 modify the boring location or access route or to avoid activities that would require USACE permitting to  
3 allow dredge or fill in wetlands or waters of the U.S. or modification to stream channels. This  
4 coordination would occur following completion of surveys in 2015 and modified features would be  
5 documented in the Geotechnical Investigation POD. Permitting would be required for any wetlands or  
6 waters of the U.S. that could not be avoided through modifications. USACE coordination and permit  
7 applications would occur in summer and fall of 2015. Permits would need to be issued at all locations for  
8 all wetlands or waters of the U.S. that could be affected by the geotechnical investigation activities. In the  
9 event that adequate engineering design of the transmission line and new and improved access routes is  
10 available in 2015, surveys for wetlands and waters of the U.S. could be conducted in 2015 for both the  
11 geotechnical investigation and transmission-line construction.

## 12 **Special Status Wildlife**

13 The recommended approach for conducting special status wildlife surveys for the geotechnical  
14 investigation is driven by the timeframe in which special status wildlife surveys must be conducted  
15 relative to the geotechnical investigation (e.g., migratory bird clearances within 7 days of activity), the  
16 anticipated flexibility in the geotechnical investigation schedule, the assumption that select areas could be  
17 seasonally avoided, and the Geotechnical Investigation POD could be developed to clearly direct Project  
18 staff based on survey findings. A list of wildlife species for which surveys must be conducted, the  
19 agency-approved survey methodology, and the temporal and spatial extent of each survey for the  
20 geotechnical investigation is included in Table A-1 of Appendix A.

21 Based on the anticipated schedule for the geotechnical investigation, the majority of activities are likely to  
22 take place during the spring and summer of 2016 during the migratory bird and raptor nesting period.  
23 Pedestrian raptor nest surveys and migratory bird nest clearances will be required prior to geotechnical  
24 activities during the nesting season. To avoid the need to conduct separate surveys requiring multiple  
25 visits to individual locations, it is recommended the geotechnical investigation drilling activities in and  
26 adjacent to potential Mexican spotted owl and yellow-billed cuckoo habitats be avoided during the  
27 nesting season. These habitats are limited in the Project area and are unlikely to affect many borehole  
28 locations.

29 The spatial requirements and surveyor qualifications for surveys for terrestrial special status wildlife and  
30 mountain plover are generally similar. The results of surveys for terrestrial special status wildlife, which  
31 will be required for the geotechnical investigation, are generally predictable based on the analysis  
32 conducted for the EIS. These species are likely to be found at some borehole locations. It is recommended  
33 that the Geotechnical Investigation POD be developed to provide clear instructions regarding mitigation  
34 actions (e.g., avoiding breeding season, altering drilling technique or equipment used, modifying location  
35 of borehole) in the event these species are located during surveys. To promote cost efficiencies, it is  
36 recommended that surveys for all wildlife species be conducted concurrently to the extent feasible, using  
37 the anticipated schedule flexibility in the drilling activity at each geotechnical boring location to conduct  
38 only required schedule modifications to avoid resources.

39 To implement the recommended approach, the Geotechnical Investigation POD would need to be  
40 developed to include mitigation actions based on survey findings. A team of biological monitors would be  
41 deployed to the field to work with the drilling contractors and agencies. The biological monitors would  
42 coordinate the drilling schedule with the drilling contractor and conduct all required surveys at each  
43 borehole location up to 7 days ahead of drilling activities, as required for migratory bird nest clearances.  
44 Access to a borehole location and drilling at that location would be postponed until after the nesting  
45 season in locations where migratory bird or raptor nests are located by the biological monitors. The

biological monitor would contact the appropriate land-management agency and the appropriate mitigation action outlined in the Geotechnical Investigation POD would be implemented at all borehole locations where other special status wildlife species are located.

In the event survey information for special status wildlife species (e.g., locations of prairie dog colonies, raptor nest occupancy) is desired earlier than in the strategy described above, surveys could be conducted in 2015 or earlier in the season in 2016. If conducted in 2015, some survey results could be incorporated into the Geotechnical Investigation POD. However, these locations would likely need to be revisited or monitored prior to and/or during drilling activities in 2016.

## Transmission-line Construction

The approach to, timing of, and requirements for surveys conducted for the construction of the transmission line are driven by the following:

- The anticipated level of impact associated with the transmission-line construction;
- The need to have sensitive resources identified and design modifications implemented to avoid these resources before construction starts; and
- The Applicant's need to understand the restrictions associated with the resources encountered prior to initiation of construction activities.

Information gathered during sensitive resource surveys addressed in this plan will inform mitigation necessary for the final engineering and design of the transmission line. Mitigation will be identified and documented in the Construction POD, which must be approved prior to the initiation of construction activities. Additionally, survey results will inform construction monitoring needs. A list of special status plants and wildlife for which surveys must be conducted, the agency-approved survey methodology and the temporal and spatial extent of each survey for the transmission-line construction is included in Table A-2 of Appendix A.

Figure 1 presents the current Project schedule (January 2015) and the anticipated timing and duration of surveys that will be necessary to complete the development of the Construction POD and provide information necessary for coordination and permitting with the agencies. The BLM Record of Decision and right-of-way grant are anticipated in December 2015 and the Notice to Proceed is expected to be granted on completion of the Construction POD by the end of 2017. The transmission-line construction is anticipated to begin in 2018 and may continue through 2020.

## Special Status Plants

The recommended approach to, timing of, and requirements for the special status plant surveys for transmission-line construction are driven by requirements contained in relevant environmental documents (e.g., Biological Assessment and Biological Opinion), the need for survey results to inform development of final mitigation measures for agency-sensitive species, and the need for survey results to inform the final design of the Project before construction starts. Information gathered during sensitive plant surveys will inform mitigation necessary for the final engineering and design of the transmission line and must be identified and documented in the Construction POD prior to the anticipated transmission-line construction in 2018. Additionally, survey results will inform construction monitoring needs by identifying the known locations of special status plants and areas of suitable habitat where they may be encountered. A list of special status plants, for which surveys must be conducted, the agency-approved survey methodology,

1 and the temporal and spatial extent of each survey for the transmission-line construction is included in  
2 Table A-2 of Appendix A.

3 Stipulations contained in the Project Biological Assessment will require surveys for some federally listed  
4 plant species be conducted as early as the summer of 2015. The agencies have required these early  
5 surveys for species of exceptional concern for the Project, including Uinta Basin hookless cactus and clay  
6 phacelia, to allow adequate time for development of mitigation and incorporation of results into early  
7 design of the Project. Due to the anticipated density and/or sensitivity of these species along the agency-  
8 preferred alternative route, the results of these surveys could have a substantial effect on the design and  
9 alignment of the Project and the development of necessary compensatory mitigation.

10 Surveys for all other special status plants are recommended to occur in 2016 and be conducted  
11 concurrently for all species to the extent feasible. Species with protocols that require 2 years of surveys  
12 would be conducted in 2016 and 2017. In select locations, the survey window (i.e., blooming period) for  
13 all target special status plant species may not overlap sufficiently to allow for all surveys to be completed  
14 in a single visit. In these instances, separate surveys may be required. The schedule and number of  
15 required visits would be developed and documented in the agency-approved survey protocol. The results  
16 of these surveys will be incorporated into the Construction POD, used to develop final mitigation and  
17 used to develop monitoring requirements in coordination with the relevant agencies.

18 The spatial requirements, survey methodologies, and surveyor qualifications for the special status plants  
19 and wetlands and waters of the U.S. surveys are generally similar. To promote cost efficiencies, it is  
20 recommended that the 2016 special status plant surveys be conducted concurrently with wetland  
21 delineations and waters of the U.S. surveys to the extent feasible. These surveys would be timed to  
22 correspond with the survey windows for special status plants that may be present along the right-of-way.

## 23 **Wetlands and Waters of the United States**

24 The recommended approach to, timing of, and requirements for surveys for wetlands and waters of the  
25 U.S. for transmission-line construction are driven by the need for the survey results to be available to  
26 inform avoidance and mitigation measures necessary for the final engineering and design of the  
27 transmission line, to allow time for this information to be incorporated into the Construction POD, and to  
28 allow adequate time for required permitting processes with the USACE. Based on these requirements,  
29 surveys for wetlands and waters of the U.S. are recommended to occur in 2016 in all areas along the  
30 right-of-way not surveyed during the surveys conducted for the geotechnical investigation in 2015.  
31 Surveys for wetlands and waters of the U.S. would be conducted concurrently with surveys for special  
32 status plants in 2016 to the extent feasible. Alternatively, if adequate engineering design information is  
33 available in 2015, all wetlands and waters of the U.S. surveys could be conducted in 2015 during the  
34 surveys for the geotechnical investigation.

35 In locations where potential wetlands or waters of the U.S. are located during field surveys, it may be  
36 advisable to modify new and improved access routes or structure locations to avoid activities that would  
37 require USACE permitting. All wetlands and waters of the U.S. that are confirmed through coordination  
38 with the USACE and cannot be avoided will require permitting and must be identified and documented in  
39 the Construction POD prior to the anticipated transmission-line construction in 2018.

## Special Status Wildlife

The recommended approach to, timing of, and requirements for surveys for special status wildlife for the transmission-line construction are driven by the need for the survey results to be available to inform avoidance and mitigation measures to be developed and included in the Construction POD, inform the final engineering and design of the transmission line, and to provide information regarding the resources and resource density likely to be encountered during the construction of the transmission line. Based on these requirements and the Project schedule, surveys for special status wildlife are recommended to begin in 2016. Species with protocols that require 2 years of surveys (e.g., Mexican spotted owl) would be conducted in 2016 and 2017. Survey results will be used to inform construction and resource monitoring needs. A list of special status wildlife, for which surveys must be conducted, the agency-approved survey methodology, and the temporal and spatial extent of each survey for the transmission-line construction is included in Table A-2 of Appendix A.

To promote cost efficiencies, it is recommended that surveys for multiple wildlife species be conducted concurrently to the extent feasible. The spatial requirements and surveyor qualifications for white-tailed prairie dog, pygmy rabbit, Wyoming pocket gopher, and mountain plover are generally similar and are recommended to be conducted concurrently where survey areas overlap to the extent feasible.

Helicopter surveys designed to detect raptor nests are recommended to occur during the appropriate breeding season in 2016. Where feasible, these surveys should overlap with helicopter sage-grouse lek surveys to promote cost efficiencies. It is important to note that helicopter raptor surveys are not efficient for detecting ground-nesting raptors (e.g., burrowing owls, short-eared owls, northern harrier) or raptor nests located in dense tree canopies. At the time this plan was prepared (January 2015), it is anticipated additional pedestrian surveys for ground-nesting raptors will be conducted as part of the preconstruction monitoring requirements. These surveys will be conducted by the construction environmental team and/or the construction inspection contractor and are not included in this plan. Incidental observations of ground and tree nests detected during pedestrian surveys for terrestrial wildlife will be recorded in survey reports and documented in the Construction POD. Depending on the anticipated need for detailed raptor nest and occupancy data to support construction scheduling, monitoring, seasonal restrictions, and the processing of variance requests, it may be beneficial to conduct more thorough raptor nest surveys and annual nest-occupancy determinations in the years leading up to the initiation of construction. Annual nest monitoring beginning as early as 2015 could provide a baseline of raptor nest occupancy information that could be used to support the construction phase of the Project but is not required for the objectives of this plan and has not been included at this time.

On completion of the special status wildlife surveys, coordination with the relevant agencies would occur to develop and document appropriate avoidance, minimization, and mitigation measures. Depending on the quantity and extent of each resource present, the agencies may request that a biological monitor be present during construction activities to assist crews with avoiding the resource in the field, structure locations or new and improved access routes be modified to avoid the resource, and the construction methods be modified or appropriate mitigation measures applied to reduce impacts. This coordination would occur on completion of the surveys and survey reports and would be documented in the Construction POD.

## Next Steps

The content of the survey plan will be presented and reviewed with the BLM Project Manager, the Applicant, and Project engineering staff on January 27, 2015. The strategy described in the survey plan may be modified based on the discussion at this meeting.

After revision, the survey plan will be distributed to the Biological Resource Task Group for review and any necessary edits will be completed by Environmental Planning Group, LLC (EPG). The revised survey plan will be presented to BLM and Rocky Mountain Power for approval. Once this survey plan is approved, EPG will begin preparing a survey protocol, detailed schedule, and cost estimate for work to be completed in 2015. The survey protocol will include the specific requirements and methodologies for all biological surveys including data standards, reporting requirements, and next steps for mitigation development and application.

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DRAFT

1      **Appendix A – Draft Biological Survey**  
2      **Requirements**

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Table A-1 Draft Biological Survey Requirements for Geotechnical Investigation (as of March 18, 2014)									
Resource	Resource Status	Survey Requirement	Geographic Region Where Surveys are Required	Survey Area	Timing of Surveys in Relation to Project	Number of Years of Survey Required	Survey Schedule (Year)	Avoidance/Survey Window (approximate)	Methodology
Wildlife Listed Under the Endangered Species Act									
Black-footed ferret ( <i>Mustela nigripes</i> )	Federally endangered/experimental nonessential population	Recommend adherence to seasonal restrictions to avoid the need for surveys	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Avoid disruptive activities within 0.5 mile of prairie dog colonies known to be occupied by black-footed ferret during the reproductive period (March 1 through July 15), with special emphasis on avoiding the period between birthing and the emergence of young (May 1 through July 15).	Not applicable
Greater sage-grouse ( <i>Centrocercus urophasianus</i> )	Candidate species for listing under the Endangered Species Act (ESA). Bureau of Land Management (BLM)-sensitive species, state-sensitive species	Recommend adherence to seasonal restrictions to avoid the need for surveys	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Avoid agency-identified occupied habitat used in the Environmental Impact Statement (EIS) by 4 miles between March 15 and May 1	Not applicable
Mexican spotted owl ( <i>Strix occidentalis lucida</i> )	Federally threatened	Recommend adherence to seasonal restrictions to avoid the need for surveys	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Avoid potentially suitable habitat identified in the EIS by 0.5 mile between March 1 and August 31	Not applicable
Yellow-billed cuckoo ( <i>Coccyzus americanus</i> )	Proposed threatened species under the ESA; U.S. Fish and Wildlife Service (FWS), BLM- and state-sensitive species (Colorado, Wyoming, and Utah), and U.S. Forest Service (USFS)-sensitive species	Recommend adherence to seasonal restrictions to avoid the need for surveys	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Avoid areas identified as containing suitable habitat for the yellow-billed cuckoo within 1 mile of geotechnical bore holes and access roads mid-May through mid-September	Not applicable
Bureau of Land Management and U.S. Forest Service Sensitive Wildlife									
Raptor nests	Protected by the Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act. Many are BLM-sensitive species	Surveys required to identify active and inactive nests near borehole locations (Migratory Bird Treaty Act, Romin and Muck 2002, Utah BLM guidance on nesting raptors, Executive Order 13186, BLM Instruction Memorandum No. 2006-096 – Utah Supplemental Planning Guidance: Raptor Best Management Practices)	All geotechnical investigation locations where drilling would occur during applicable seasonal restrictions	Within 1.0, 0.75, 0.5, or 0.25 mile (depending on the appropriate BLM/FWS field office spatial buffers for each raptor species) of the edge of work areas and new and improved access routes	Where required, concurrent with migratory bird surveys	Only required when geotechnical investigation would occur during raptor nesting season	2016	During applicable agency nesting seasons (approximately February 1 to October 31)	Pedestrian surveys according to protocols for common western raptors (Call 1978) as well as those identified by the FWS <i>Utah Field Office Guidelines for Raptor Protection</i> (Romin and Muck 2002).  FWS Wyoming Raptor Guidelines will be used in Wyoming and Colorado
Bald eagle communal and winter roost areas ( <i>Haliaeetus leucocephalus</i> )	Protected by the Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act	Recommend adherence to seasonal restrictions to avoid the need for surveys  Avoidance may also be accomplished by employing a biological monitor	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Avoid bald eagle communal winter roost areas by 0.5 November 1 through April 1 and concentration areas February 1 through August 15	Not applicable

Table A-1 Draft Biological Survey Requirements for Geotechnical Investigation (as of March 18, 2014)									
Resource	Resource Status	Survey Requirement	Geographic Region Where Surveys are Required	Survey Area	Timing of Surveys in Relation to Project	Number of Years of Survey Required	Survey Schedule (Year)	Avoidance/Survey Window (approximate)	Methodology
Boreal toad ( <i>Bufo boreas boreas</i> )	Species petitioned for listing under the ESA  BLM- and state-sensitive species  Protected by Utah Boreal Toad Conservation Plan 2005	Recommend adherence to seasonal restrictions to avoid the need for surveys  Avoidance also may be accomplished by employing a biological monitor	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Avoid mountain riparian, wetlands, ponds, wet meadows, and artificial wetlands in Spanish Fork Canyon by 100 meters during the breeding and migration seasons (April to July) and the migration season (August to September)	Pedestrian survey protocol developed through the collaboration of the BLM, USFS, and FWS designed to identify potentially suitable boreal toad habitat and relocate work areas and routes if necessary  <b>Protocol:</b> Record observations of egg masses, tadpoles, and adults using global positioning system (GPS) locations. Document observations with photographs. If boreal toads are found, BLM strongly suggests to microsite the proposed action to avoid boreal toad breeding habitat. The regional Utah Division of Wildlife Resources (UDWR) aquatic biologist and the BLM/USFS biologist must be contacted immediately for future action that may require translocation of egg strands, tadpoles or individuals, if warranted.  <b>Reporting:</b> Provide a shapefile of any surveys conducted regardless of occupancy status. Shapefile must have metadata.
Mountain plover ( <i>Charadrius montanus</i> )	FWS species of concern; BLM- and state-sensitive species (Wyoming)	Surveys required near borehole locations during nesting season, as required by FWS and BLM Handbook 6840	Geotechnical investigation locations near areas of potentially suitable habitat identified in EIS	Within 300 feet of work areas and new and improved access routes	Where required, prior to ground-disturbing activities, concurrent with migratory bird surveys	Only required when geotechnical investigation would occur during nesting season	2016	May 1 through June 15	Pedestrian (presence/absence) surveys according to protocols identified in <i>Field Surveys for Mountain Plovers (Charadrius montanus)</i> in the BLM Rawlins Field Office (Beauvais 2003)
Pygmy rabbit ( <i>Brachylagus idahoensis</i> )	BLM- and state-sensitive species, FWS species of concern	Surveys required near borehole locations, as required by BLM Handbook 6840	Geotechnical investigation locations near areas of potentially suitable habitat identified in EIS	Within 300 feet of work areas and new and improved access routes	Where required, prior to ground-disturbing activities	1	2016	Surveys can be conducted any time of year; winter surveys preferred	Pedestrian (presence/absence) surveys according to the protocols identified in <i>Surveying for Pygmy Rabbits</i> (Ulmschneider et al. 2004)
White-tailed prairie dog ( <i>Cynomys leucurus</i> )	BLM- and state-sensitive species, FWS species of concern	Surveys required near borehole locations, as required by BLM Handbook 6840	Geotechnical investigation locations near areas of potentially suitable habitat identified in EIS	Within 660 feet of work areas and new and improved access routes	Where required, prior to ground-disturbing activities	1	2016	April 1 through September 30	Pedestrian (presence/absence) surveys according to the protocols identified in <i>Wildlife Survey Protocols Pinedale Field Office</i> (BLM 2011)
Wyoming pocket gopher ( <i>Thomomys clusius</i> )	BLM- and state-sensitive species, FWS species of concern	Surveys required near borehole locations in modeled habitat, as required by BLM Handbook 6840	Geotechnical investigation locations near areas of potentially suitable habitat identified in EIS	Within 660 feet of work areas and new and improved access routes	Where required, prior to ground-disturbing activities	1	2016	April 1 through September 30	Pedestrian (presence/absence) surveys according to the protocols identified in <i>Pocket Gopher Surveys in Southwestern Wyoming</i> (Wyoming Natural Diversity Database [WYNDD] 2010)
Plants Listed Under the Endangered Species Act									
Clay phacelia ( <i>Phacelia argillacea</i> )	Listed as endangered under the ESA	Surveys near borehole locations required to verify results of Section 7 consultation and compliance with terms and conditions in the Biological Opinion (BO)	Within modeled habitat in Soldier Creek Canyon in Utah County, Utah	Suitable habitat (identified by USFS and FWS for EIS analysis) within 650 feet of work areas and new and improved access routes	Prior to completion of the Geotechnical Investigation Plan of Development (POD)	1	2015	June	Follow protocol in FWS <i>Utah Field Office Guidelines for Conducting and Reporting Botanical Inventories and Monitoring of Federally Listed, Proposed and Candidate Plants</i> (FWS 2011)
Clay reed-mustard ( <i>Schoenocrambe argillacea</i> )	Listed as threatened under the ESA	Surveys near borehole locations required to verify results of Section 7 consultation and compliance with terms and conditions in the BO	Within the FWS 5-year review habitat polygons near the Green River crossing in Uintah County, Utah	Within 300 feet of work areas and new and improved access routes	Prior to completion of the Geotechnical Investigation POD	1	2015	April through May	Follow protocol in FWS <i>Utah Field Office Guidelines for Conducting and Reporting Botanical Inventories and Monitoring of Federally Listed, Proposed and Candidate Plants</i> (FWS 2011)

<div>Table A-1</div> <div>Draft Biological Survey Requirements for Geotechnical Investigation (as of March 18, 2014)</div>									
Resource	Resource Status	Survey Requirement	Geographic Region Where Surveys are Required	Survey Area	Timing of Surveys in Relation to Project	Number of Years of Survey Required	Survey Schedule (Year)	Avoidance/Survey Window (approximate)	Methodology
Deseret milkvetch ( <i>Astragalus desereticus</i> )	Listed as threatened under the ESA	Surveys near borehole locations required to verify results of Section 7 consultation and compliance with terms and conditions in the BO	Areas adjacent to known occupied and potential habitat in Thistle Creek Valley in Utah County, Utah	Within 300 feet of work areas and new and improved access routes	Prior to completion of the Geotechnical Investigation POD	1	2015	May through June	Follow protocol in FWS <i>Utah Field Office Guidelines for Conducting and Reporting Botanical Inventories and Monitoring of Federally Listed, Proposed and Candidate Plants</i> (FWS 2011)
Shrubby reed-mustard ( <i>Schoenocrambe suffrutescens</i> )	Listed as endangered under the ESA	Surveys near borehole locations required to verify results of Section 7 consultation and compliance with terms and conditions in the BO	Areas near the Badland Cliffs population (i.e., Wrinkles Road) in Duchesne County, Utah	Work areas and new and improved access routes within 300 feet of occupied shrubby reed-mustard habitat	Prior to completion of the Geotechnical Investigation POD	1	2015	April to May	Follow protocol in FWS <i>Utah Field Office Guidelines for Conducting and Reporting Botanical Inventories and Monitoring of Federally Listed, Proposed and Candidate Plants</i> (FWS 2011)
Uinta Basin hookless cactus ( <i>Sclerocactus wetlandicus</i> )	Listed as threatened under the ESA	Surveys near borehole locations required to verify results of Section 7 consultation and compliance with terms and conditions in the BO	Within the Sclerocactus survey polygon provided by the FWS in Duchesne and Uintah counties, Utah	Within 300 feet of work areas and new and improved access routes	Prior to completion of the Geotechnical Investigation POD	1	2015	Anytime without snow cover	Follow protocol in FWS <i>Utah Field Office Guidelines for Conducting and Reporting Botanical Inventories and Monitoring of Federally Listed, Proposed and Candidate Plants</i> (FWS 2011)
Ute ladies'-tresses ( <i>Spiranthes diluvialis</i> )	Listed as threatened under the ESA	Surveys near borehole locations required to verify results of Section 7 consultation and compliance with terms and conditions in the BO	Areas of potentially suitable modeled habitat identified in the BA	Within 300 feet of work areas and new and improved access routes	Prior to completion of the Geotechnical Investigation POD	1	2015	August	Follow protocol in FWS <i>Utah Field Office Guidelines for Conducting and Reporting Botanical Inventories and Monitoring of Federally Listed, Proposed and Candidate Plants</i> (FWS 2011)
Bureau of Land Management and U.S. Forest Service Sensitive Plants									
Argyle Canyon phacelia ( <i>Phacelia argylensis</i> )	BLM-sensitive species (Utah)	Surveys near borehole locations required by BLM Handbook 6840	Vicinity of Argyle Canyon in Uintah County, Utah	Within 150 feet of work areas and new and improved access routes	Prior to completion of the Geotechnical Investigation POD	1	2015	July through August	Habitat assessments followed by pedestrian belt transects within identified suitable habitat
Beaver Rim phlox ( <i>Phlox pungens</i> )	BLM- and state-sensitive species (Wyoming)	Surveys near borehole locations required by BLM 6840 policy and BLM Rawlins Resource Management Plan (RMP) Appendix 24 (BLM 2008)	Areas of modeled potentially suitable habitat; from Wyoming Natural Diversity Database (WYNDD) model in Carbon County, Wyoming	Within 150 feet of work areas and new and improved access routes	Prior to completion of the Geotechnical Investigation POD	1	2015	Flowers in May and June (NatureServe 2012)	Plant Survey Requirements and Protocols from the Wyoming BLM, Lander Field Office, 2014
Caespitose cat's-eye ( <i>Cryptantha caespitosa</i> )	BLM-sensitive species (Colorado)	Surveys near borehole locations required by BLM Handbook 6840	Vicinity of known locations in Duchesne County, Utah	Within 150 feet of work areas and access routes	Prior to completion of the Geotechnical Investigation POD	1	2015	Late April to June; some flowers in early May to July	Habitat assessments followed by pedestrian belt transects within identified suitable habitat
Canyon sweet-vetch ( <i>Hedysarum occidentale</i> var. <i>canone</i> )	USFS-sensitive species	Surveys near borehole locations required by USFS Biological Evaluation (BE) and Forest Service Manual (FSM) 2670	Within EPG-modeled habitat on USFS-administered lands in Carbon, Emery and Duchesne counties, Utah	Within 150 feet of work areas and new and new and improved access routes	Prior to completion of the Geotechnical Investigation POD	1	2015	June to early August (Utah Native Plant Society [UNPS])	Follow protocol in <i>U.S. Forest Service Threatened, Endangered and Sensitive Plants Survey Field Guide</i> (USFS 2005)
Carrington daisy ( <i>Erigeron carringtoniae</i> )	USFS-sensitive species	Surveys near borehole locations required by USFS BE and FSM 2670	Within EPG-modeled habitat on USFS-administered lands in Emery and Sanpete counties, Utah	Within 150 feet of work areas and new and improved access routes	Prior to completion of the Geotechnical Investigation POD	1	2015	Late June through mid-August (UNPS)	Follow protocol in <i>U.S. Forest Service Threatened, Endangered and Sensitive Plants Survey Field Guide</i> (USFS 2005)
Cedar Rim thistle ( <i>Cirsium aridum</i> )	BLM- and state-sensitive species (Wyoming)	Surveys near borehole locations required by BLM 6840 policy and BLM Rawlins RMP Appendix 24 (BLM 2008)	Areas of modeled potentially suitable habitat in Carbon and Sweetwater counties, Wyoming	Within 150 feet of work areas and new and improved access routes	Prior to completion of the Geotechnical Investigation POD	1	2015	June through August	Plant Survey Requirements and Protocols from the Wyoming Bureau of Land Management, Lander Field Office, 2014

Table A-1 Draft Biological Survey Requirements for Geotechnical Investigation (as of March 18, 2014)									
Resource	Resource Status	Survey Requirement	Geographic Region Where Surveys are Required	Survey Area	Timing of Surveys in Relation to Project	Number of Years of Survey Required	Survey Schedule (Year)	Avoidance/Survey Window (approximate)	Methodology
Debris milkvetch ( <i>Astragalus detritalis</i> )	BLM-sensitive species (Colorado)	Surveys near borehole locations required by BLM Handbook 6840	Vicinity of known locations in Uintah and Duchesne counties, Utah and Moffat County, Colorado	Within 150 feet of work areas and new and improved access routes	Prior to completion of the Geotechnical Investigation POD	1	2015	Flowers April to early June, fruits from late May through June (NatureServe 2012)	Habitat assessments followed by pedestrian belt transects within identified suitable habitat
Duchesne milkvetch ( <i>Astragalus duchesnensis</i> )	BLM-sensitive species (Colorado)	Surveys near borehole locations required by BLM Handbook 6840	Vicinity of known locations in Uintah and Duchesne counties, Utah, and Moffat and Rio Blanco counties, Colorado	Within 150 feet of work areas and new and improved access routes	Prior to completion of the Geotechnical Investigation POD	1	2015	Flowers late April through June (NatureServe 2012)	Habitat assessments followed by pedestrian belt transects within identified suitable habitat
Gibbens' beardtongue ( <i>Penstemon gibbensii</i> )	BLM- and state-sensitive species (Wyoming, Colorado, Utah)	Surveys near borehole locations required by BLM Handbook 6840 and BLM Rawlins RMP Appendix 24 (BLM 2008)	Predicted suitable habitat in Sweetwater and Carbon Counties, Wyoming, and Moffat County, Colorado.	Within 150 feet of work areas and new and improved access routes	Prior to completion of the Geotechnical Investigation POD	1	2015	June; July through August in Wyoming	Plant Survey Requirements and Protocols from the Wyoming Bureau of Land Management, Lander Field Office, 2014
Goodrich's blazingstar ( <i>Mentzelia goodrichii</i> )	BLM-sensitive species (Utah), USFS- sensitive species	Surveys near borehole locations required by BLM Handbook 6840, USFS BE, and FSM 2670	Within EPG-modeled habitat on USFS- and BLM-administered lands in Duchesne County, Utah	Within 150 feet of work areas and new and improved access routes	Prior to completion of the Geotechnical Investigation POD	1	2015	July through August	On BLM-administered land, habitat assessments followed by pedestrian belt transects within identified suitable habitat; on USFS-administered land, follow protocol in <i>U.S. Forest Service Threatened, Endangered and Sensitive Plants Survey Field Guide</i> (USFS 2005)
Graham's beardtongue ( <i>Penstemon grahamii</i> )	BLM-sensitive species (Colorado, Utah)	Surveys near borehole locations required by BLM Handbook 6840	Within potential habitat; outcrops of the Parachute Creek member of the Green River formation in Duchesne and Uintah counties, Utah, and Rio Blanco County, Colorado	Within 300 feet of work areas and new and improved access routes	Prior to completion of the Geotechnical Investigation POD	1	2015	May through June	Follow protocol in <i>FWS Utah Field Office Guidelines for Conducting and Reporting Botanical Inventories and Monitoring of Federally Listed, Proposed and Candidate Plants</i> (FWS 2011)
Green River greenthread ( <i>Thelesperma caespitosum</i> )	BLM-sensitive species (Wyoming, Utah), USFS- sensitive species	Surveys near borehole locations required by BLM Handbook 6840, USFS BE, and FSM 2670	USFS- and BLM-administered lands within EPG-modeled habitat for this species in Duchesne County, Utah	Within 150 feet of work areas and new and improved access routes	Prior to completion of the Geotechnical Investigation POD	1	2015	May through June	On BLM-administered land, Plant Survey Requirements and Protocols from the Wyoming Bureau of Land Management, Lander Field Office, 2014 On USFS-administered land, follow protocol in <i>U.S. Forest Service Threatened, Endangered and Sensitive Plants Survey Field Guide</i> (USFS 2005)
Hairy Townsend daisy ( <i>Townsendia strigosa</i> var. <i>prolixa</i> )	BLM-sensitive species (Utah)	Surveys near borehole locations required by BLM Handbook 6840	Clay badlands within the Uinta Basin in Uintah County, Utah, and Moffat County, Colorado	Within 150 feet of work areas and new and improved access routes	Prior to completion of the Geotechnical Investigation POD	1	2015	May through June	Habitat assessments followed by pedestrian belt transects within identified suitable habitat
Horseshoe milkvetch ( <i>Astragalus equisolensis</i> )	BLM-sensitive species (Colorado, Utah)	Surveys near borehole locations required by BLM Handbook 6840	Within agency-provided suitable habitat in the vicinity of Horseshoe Bend in Uintah County, Utah.	Within 150 feet of work areas and new and improved access routes	Prior to completion of the Geotechnical Investigation POD	1	2015	April through early June	Habitat assessments followed by pedestrian belt transects within identified suitable habitat
Huber's pepperwort ( <i>Lepidium huberi</i> )	BLM-sensitive species (Utah)	Surveys near borehole locations required by BLM Handbook 6840	Associated sandstone formations in the Raven Ridge area in Uintah County, Utah	Within 150 feet of work areas and new and improved access routes	Prior to completion of the Geotechnical Investigation POD	1	2015	June through August	Habitat assessments followed by pedestrian belt transects within identified suitable habitat
Meadow pussytoes ( <i>Antennaria arcuata</i> )	BLM- and state-sensitive species (Wyoming)	Surveys near borehole locations required by BLM 6840 policy and BLM Rawlins RMP Appendix 24 (BLM 2008)	Areas of potentially suitable habitat identified in the WYND model in Carbon County, Wyoming	Within 150 feet of work areas and new and improved access routes	Prior to completion of the Geotechnical Investigation POD	1	2015	Flowers July to September (NatureServe 2012)	Plant Survey Requirements and Protocols from the Wyoming Bureau of Land Management, Lander Field Office, 2014
Narrow-stem gilia ( <i>Gilia stenothyrsa</i> )	BLM-sensitive species (Colorado)	Surveys near borehole locations required by BLM Handbook 6840	Vicinity of known locations in Rio Blanco County, Colorado	Within 150 feet of work areas and new and improved access routes	Prior to completion of the Geotechnical Investigation POD	1	2015	Flowers in May and June (NatureServe 2012)	Habitat assessments followed by pedestrian belt transects within identified suitable habitat

Table A-1 Draft Biological Survey Requirements for Geotechnical Investigation (as of March 18, 2014)									
Resource	Resource Status	Survey Requirement	Geographic Region Where Surveys are Required	Survey Area	Timing of Surveys in Relation to Project	Number of Years of Survey Required	Survey Schedule (Year)	Avoidance/Survey Window (approximate)	Methodology
Ownbey's thistle ( <i>Cirsium ownbeyi</i> )	BLM- and state-sensitive species (Wyoming)	Surveys near borehole locations required by BLM 6840 policy and BLM Rawlins RMP Appendix 24 (BLM 2008)	Areas of potentially suitable habitat identified in the WYNDD model in Carbon and Sweetwater counties, Wyoming, and areas of potentially suitable habitat in Rio Blanco and Moffat counties, Colorado, and Uintah County, Utah	Within 150 feet of work areas and new and improved access routes	Prior to completion of the Geotechnical Investigation POD	1	2015	June and July	Plant Survey Requirements and Protocols from the Wyoming Bureau of Land Management, Lander Field Office, 2014
Persistent-sepal yellowcress ( <i>Rorippa calycina</i> )	BLM- and state-sensitive species (Wyoming)	Surveys near borehole locations required by BLM 6840 policy and BLM Rawlins RMP Appendix 24 (BLM 2008)	Areas of potentially suitable habitat identified in the WYNDD model in Carbon and Sweetwater counties, Wyoming	Within 150 feet of work areas and new and improved access routes	Prior to completion of the Geotechnical Investigation POD	1	2015	Flowers June through August (NatureServe 2012)	Plant Survey Requirements and Protocols from the Wyoming Bureau of Land Management, Lander Field Office, 2014
Rollins' cat's-eye ( <i>Cryptantha rollinsii</i> )	BLM-sensitive species (Colorado)	Surveys near borehole locations required by BLM Handbook 6840	Portions of the Green River Formation in Rio Blanco County, Colorado	Within 150 feet of work areas and new and improved access routes	Prior to completion of the Geotechnical Investigation POD	1	2015	Flowers in May and June (NatureServe 2012)	Habitat assessments followed by pedestrian belt transects within identified suitable habitat
Spanish bayonet ( <i>Yucca harrimaniae</i> var. <i>sterilis</i> )	BLM-sensitive species (Utah)	Surveys near borehole locations required by BLM Handbook 6840	Sandy soils within Uintah and Duchesne counties, Utah	Within 150 feet of work areas and access routes	Prior to completion of the Geotechnical Investigation POD	1	2015	Anytime without snow cover	Habitat assessments followed by pedestrian belt transects within identified suitable habitat
Untermann's daisy ( <i>Erigeron untermannii</i> )	BLM-sensitive species (Utah), USFS-sensitive species	Surveys near borehole locations required by BLM Handbook 6840, USFS BE, and FSM 2670	Within modeled habitat for the species on USFS- and BLM-administered lands in Duchesne County, Utah	Within 150 feet of work areas and new and improved access routes	Prior to completion of the Geotechnical Investigation POD	1	2015	May through July	On BLM-administered land, habitat assessments followed by pedestrian belt transects within identified suitable habitat; on USFS-administered land, follow protocol in <i>U.S. Forest Service Threatened, Endangered and Sensitive Plants Survey Field Guide</i> (USFS 2005).
White River beardtongue ( <i>Penstemon scariosus</i> var. <i>albifluvis</i> )	BLM-sensitive species (Utah)	Surveys near borehole locations required by BLM Handbook 6840	Within potential habitat; outcrops of the Parachute Creek member of the Green River formation in Uintah County, Utah, and western Rio Blanco County, Colorado	Within 300 feet of work areas and new and improved access routes	Prior to completion of the Geotechnical Investigation POD	1	2015	May through June	Follow protocol in FWS <i>Utah Field Office Guidelines for Conducting and Reporting Botanical Inventories and Monitoring of Federally Listed, Proposed and Candidate Plants</i> (FWS 2011)
<p>SOURCES:</p> <p>Beauvais, G.P., and R. Smith. 2003. Model of breeding habitat of the mountain plover (<i>Charadrius montanus</i>) in western Wyoming. <i>Western North American Naturalist</i> 63(1): 88-96.</p> <p>Bureau of Land Management (BLM). 2008. <i>Record of Decision and Approved Rawlins Resource Management Plan</i>. Rawlins Field Office, Rawlins, Wyoming.</p> <p>Bureau of Land Management (BLM). 2014. Plant Survey Requirements and Protocols. Lander Field Office, Wyoming.</p> <p>Call, M.W. 1978. Nesting habitats and surveys techniques for common western raptors. U.S.E.I., Bureau of Land Management, Technical Note TN-316. 115pp.</p> <p>NatureServe. 2012. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. Arlington, Virginia. Available at: <a href="http://www.natureserve.org/explorer">http://www.natureserve.org/explorer</a>, accessed November 30, 2012.</p> <p>Romin, L.A. and J.A. Muck. 2002. Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances. U.S. Fish and Wildlife Service, Utah Ecological Services, West Valley City.</p> <p>Ulmschneider, H. 2008. Surveying for pygmy rabbits (<i>Brachylagus idahoensis</i>). Interagency Pygmy Rabbit Working Group.</p> <p>U.S. Fish and Wildlife Service (FWS). 2011. U.S. Fish and Wildlife Service Utah Field Office Guidelines for Conducting and Reporting Botanical Inventories and Monitoring of Federally Listed, Proposed and Candidate Plants.</p> <p>U.S. Forest Service (USFS). 2005. Threatened, Endangered and Sensitive Plants Survey Field Guide. Washington, D.C.</p> <p>Wyoming Natural Diversity Database. 2010. Pocket Gopher Surveys in Southwestern Wyoming. Laramie, Wyoming.</p> <p>NOTES:</p> <div><div>BE = Biological Evaluation</div><div>BLM = Bureau of Land Management</div><div>BO = Biological Opinion</div><div>EIS = Environmental Impact Statement</div><div>ESA = Endangered Species Act of 1973</div><div>FSM = Forest Service Manual</div><div>FWS = U.S. Fish and Wildlife Service</div><div>GPS = Global positioning system</div><div>POD = Plan of Development</div><div>UDWR = Utah Division of Wildlife Resources</div><div>UNPS = Utah Native Plant Society</div><div>USFS = U.S. Forest Service</div><div>WYNDD = Wyoming Natural Diversity Database</div></div>									

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Table A-2 Draft Biological Survey Requirements for Transmission-line Construction (as of March 18, 2014)									
Resource	Resource Status	Survey Requirement	Geographic Region Where Surveys are Required	Survey Area	Timing of Surveys in Relation to Project	Number of Years of Survey Required	Survey Schedule (Year)	Survey Window (approximate)	Methodology
Wildlife Listed Under the Endangered Species Act									
Black-footed ferret ( <i>Mustela nigripes</i> )	Federally endangered/experimental nonessential population	Required to verify results of Section 7 consultation and to apply terms and conditions of the U.S. Fish and Wildlife Service (FWS) Biological Assessment (BA) and Biological Opinion (BO)	Prairie dog colonies known to be occupied by black-footed ferrets	Within 0.5 mile of prairie dog colonies known to be occupied by black-footed ferrets	Prior to completion of Transmission-line Construction Plan of Development (POD) and Notice to Proceed (NTP)	1	2016	Diurnal Surveys: December 1 through March 31  Nocturnal Surveys: July 1 through October 31	Spotlight surveys in accordance with an FWS-approved protocol
Greater sage-grouse ( <i>Centrocercus urophasianus</i> )	Candidate species for listing under the Endangered Species Act (ESA). Bureau of Land Management (BLM)-sensitive species, state-sensitive species	Lek surveys required in sage-grouse habitat within 4 miles of route selected for construction of the transmission line for completion of Construction POD (BLM Handbook 6840 and U.S. Forest Service [USFS] 2760)	Occupied, Preliminary Priority Habitat, and Preliminary General Habitat identified in the Environmental Impact Statement (EIS)	Occupied greater sage-grouse habitat within 4 miles of the route selected for the construction of the transmission line (including any construction areas outside the right-of-way subject to human activity and increased equipment traffic)	Prior to completion of Construction POD and NTP	1	2016	March 15 through May 1	Aerial lek surveys following the field protocol identified in the <i>Utah Greater Sage-Grouse Management Plan</i> (Utah Division of Wildlife Resources[UDWR] 2009)
Mexican spotted owl ( <i>Strix occidentalis lucida</i> )	Federally threatened	Required to verify results of Section 7 consultation and to apply terms and conditions of the BA and BO	Potentially suitable habitat identified in the EIS that is outside of areas currently surveyed by the BLM on regular intervals	Within 0.5 mile of work areas, new and improved access routes, and a 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	2 years of surveys; each survey year will include four site visits; last survey must be conducted within 2 years of construction	2016 to 2017	March 1 through June 30	Pedestrian (presence/absence) surveys according to the <i>Mexican Spotted Owl Survey Protocol</i> (FWS 2012)
Yellow-billed cuckoo ( <i>Coccyzus americanus</i> )	Proposed threatened species under the ESA; FWS-, BLM- and state-sensitive species (Colorado, Wyoming, and Utah), and USFS-sensitive species	Required to verify results of Section 7 consultation and to apply terms and conditions of the BA and BO	Areas identified as containing suitable habitat for the yellow-billed cuckoo within 1 mile of transmission line and access roads	Areas identified as containing suitable habitat for the yellow-billed cuckoo within 1 mile of the edge of work areas, new and improved access routes, and a 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	Mid-May through mid-September	Survey methodology will be discussed with the Project Biological Resources Task Group on February 3, 2015. Suggested methods include:  <i>Surveys for Yellow-billed Cuckoos on Lands Managed by the National Park Service in Dinosaur National Monument and Northwest Colorado</i> (Beason 2009)  Utah Standard Operating Procedure #3: <i>Conducting Yellow-billed Cuckoo Surveys</i> (May 24, 2010)
Bureau of Land Management and U.S. Forest Service Sensitive Wildlife									
Raptor nests	Protected by the Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act. Many are BLM-sensitive species	Surveys required to identify active and inactive nests along the route selected for the construction of the transmission line (Migratory Bird Treaty Act, FWS 2002, Utah BLM guidance on nesting raptors, Executive Order 13186, BLM Instruction Memorandum No. 2006-096 – Utah Supplemental Planning Guidance: Raptor Best Management Practices)	Within appropriate spatial buffers along the route selected for construction of the transmission line	Within 1, 0.75, 0.5, or 0.25 miles (depending on the appropriate BLM/FWS field office spatial buffers for each raptor species) of the edge of work areas, new and improved access routes, and a 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	During applicable agency nesting seasons (approximately February 1 to October 31)	Aerial surveys according to protocols for common western raptors (Call 1978) as well as those identified by the FWS <i>Utah Field Office Guidelines for Raptor Protection</i> (Romin and Muck 2002); FWS – Wyoming Raptor Guidelines will be used in Wyoming and Colorado

Table A-2 Draft Biological Survey Requirements for Transmission-line Construction (as of March 18, 2014)									
Resource	Resource Status	Survey Requirement	Geographic Region Where Surveys are Required	Survey Area	Timing of Surveys in Relation to Project	Number of Years of Survey Required	Survey Schedule (Year)	Survey Window (approximate)	Methodology
Bald eagle winter and communal roost areas ( <i>Haliaeetus leucocephalus</i> )	Protected by the Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act	Surveys of the route selected for construction of the transmission line required to identify active bald eagle winter roosts and/or concentration areas along the route selected for the construction of the transmission line (Migratory Bird Treaty Act, FWS 2002, Utah BLM guidance on nesting raptors, Executive Order 13186, BLM Instruction Memorandum No. 2006-096 – Utah Supplemental Planning Guidance: Raptor Best Management Practices)	Riparian areas along major rivers and large cottonwood/conifer stands	Within 1 mile of the edge of work areas, new and improved new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	Surveys of the route selected for construction of the transmission line required to identify active bald eagle communal winter roosts November 1 through April 1 and concentration areas February 1 through August 15.	Pedestrian surveys according to protocols for common western raptors (Call 1978) as well as those identified by the FWS <i>Utah Field Office Guidelines for Raptor Protection</i> (Romin and Muck 2002)  Potentially suitable roost area guidelines: ( <a href="http://wildlife.utah.gov/publications/pdf/2010_bald_eagle.pdf">http://wildlife.utah.gov/publications/pdf/2010_bald_eagle.pdf</a> )
Boreal toad ( <i>Bufo boreas boreas</i> )	Species petitioned for listing under the ESA  BLM- and state-sensitive species; protected by Utah Boreal Toad Conservation Plan 2005	Recommend adherence to seasonal restrictions to avoid the need for surveys  Avoidance also may be accomplished by employing a biological monitor	Spanish Fork Canyon: Mountain riparian, wetlands, ponds, wet meadows, artificial wetlands	Mountain riparian, wetlands, ponds, wet meadows, artificial wetlands within 100 meters of Project facilities	Prior to completion of Construction POD and NTP	1	2016	Avoid mountain riparian, wetlands, ponds, wet meadows, and artificial wetlands in Spanish Fork Canyon by 100 meters during the breeding and migration seasons (April– July) and the migration season (August – September)	Pedestrian survey protocol developed through the collaboration of the BLM, USFS, and FWS designed to identify potentially suitable boreal toad habitat and relocate work areas and routes if necessary  <b>Protocol:</b> Record observations of egg masses, tadpoles, and adults using global positioning system (GPS) locations. Document observations with photographs. If boreal toad observations are found, BLM strongly suggests to microsite the proposed action to avoid boreal toad breeding habitat. The regional UDWR aquatic biologist and the BLM/USFS biologist must be contacted immediately for future action that may require translocation of egg strands, tadpoles or individuals, if warranted.  <b>Reporting:</b> Provide a shapefile of any surveys conducted regardless of occupancy status; shapefile must have metadata
Mountain plover ( <i>Charadrius montanus</i> )	FWS species of concern; BLM- and state-sensitive species (Wyoming)	Surveys of the route selected for construction of the transmission line required by BLM Handbook 6840	Areas of potentially suitable habitat identified in EIS	Within 300 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	May 1 through June 15	Pedestrian (presence/absence) surveys according to protocols identified in <i>Field Surveys for Mountain Plovers (Charadrius montanus)</i> in the BLM Rawlins Field Office (Beauvais 2003)
Pygmy rabbit ( <i>Brachylagus idahoensis</i> )	BLM- and state-sensitive species, FWS species of concern	Surveys of the route selected for construction of the transmission line required by BLM Handbook 6840	Areas of potentially suitable habitat identified in EIS	Within 300 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	Surveys can be conducted any time of year. Winter surveys preferred	Pedestrian (presence/absence) surveys according to the protocols identified in <i>Surveying for Pygmy Rabbits</i> (Ulmschneider et al. 2004)
White-tailed prairie dog ( <i>Cynomys leucurus</i> )	BLM- and state-sensitive species, FWS species of concern	Surveys of the route selected for construction of the transmission line required by BLM Handbook 6840	Areas of potentially suitable habitat identified in EIS	Within 660 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	April 1 through September 30	Pedestrian (presence/absence) surveys according to the protocols identified in <i>Wildlife Survey Protocols Pinedale Field Office</i> (BLM 2011)
Wyoming pocket gopher ( <i>Thomomys clusius</i> )	BLM- and state-sensitive species, FWS species of concern	Surveys within modeled habitat along the route selected for the construction of the transmission line required by BLM Handbook 6840	Areas of potentially suitable habitat identified in EIS	Within 660 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	April 1 through September 30	Pedestrian (presence/absence) surveys according to the protocols identified in <i>Pocket Gopher Surveys in Southwestern Wyoming</i> (Wyoming Natural Diversity Database [WYNDD] 2010)

<div>Table A-2</div> <div>Draft Biological Survey Requirements for Transmission-line Construction (as of March 18, 2014)</div>									
Resource	Resource Status	Survey Requirement	Geographic Region Where Surveys are Required	Survey Area	Timing of Surveys in Relation to Project	Number of Years of Survey Required	Survey Schedule (Year)	Survey Window (approximate)	Methodology
Plants Listed Under the Endangered Species Act									
Clay phacelia ( <i>Phacelia argillacea</i> )	Listed as endangered under the ESA	Surveys of the route selected for construction of the transmission line required to verify results of Section 7 consultation and compliance with terms and conditions in the BA and BO	Within modeled habitat in Soldier Creek Canyon in Utah County, Utah	Suitable habitat (identified by USFS and FWS for EIS analysis) within 650 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2015	June	Follow protocol in FWS <i>Utah Field Office Guidelines for Conducting and Reporting Botanical Inventories and Monitoring of Federally Listed, Proposed and Candidate Plants</i> (FWS 2011)
Clay reed-mustard ( <i>Schoenocrambe argillacea</i> )	Listed as threatened under the ESA	Surveys of the route selected for construction of the transmission line required to verify results of Section 7 consultation and compliance with terms and conditions in the BA and BO	Within the FWS 5-year review habitat polygons near the Green River crossing in Uintah County, Utah	Within 300 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	April through May	Follow protocol in FWS <i>Utah Field Office Guidelines for Conducting and Reporting Botanical Inventories and Monitoring of Federally Listed, Proposed and Candidate Plants</i> (FWS 2011)
Deseret milkvetch ( <i>Astragalus desereticus</i> )	Listed as threatened under the ESA	Surveys of the route selected for construction of the transmission line required to verify results of Section 7 consultation and compliance with terms and conditions in the BA and BO	Areas adjacent to known occupied and potential habitat in Thistle Creek Valley in Utah County, Utah	Within 300 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	May through June	Follow protocol in FWS <i>Utah Field Office Guidelines for Conducting and Reporting Botanical Inventories and Monitoring of Federally Listed, Proposed and Candidate Plants</i> (FWS 2011)
Shrubby reed-mustard ( <i>Schoenocrambe suffrutescens</i> )	Listed as endangered under the ESA	Surveys of the route selected for construction of the transmission line required to verify results of Section 7 consultation and compliance with terms and conditions in the BA and BO	Areas near the Badland Cliffs population (i.e., Wrinkles Road) in Duchesne County, Utah	Within 300 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	April to May	Follow protocol in FWS <i>Utah Field Office Guidelines for Conducting and Reporting Botanical Inventories and Monitoring of Federally Listed, Proposed and Candidate Plants</i> (FWS 2011)
Uinta Basin hookless cactus ( <i>Sclerocactus wetlandicus</i> )	Listed as threatened under the ESA	Surveys of the route selected for construction of the transmission line required to verify results of Section 7 consultation and compliance with terms and conditions in the BA and BO	Within the Sclerocactus survey polygon provided by the FWS in Duchesne and Uintah counties, Utah	Within 300 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	Anytime without snow cover	Follow protocol in FWS <i>Utah Field Office Guidelines for Conducting and Reporting Botanical Inventories and Monitoring of Federally Listed, Proposed and Candidate Plants</i> (FWS 2011)
Ute ladies'-tresses ( <i>Spiranthes diluvialis</i> )	Listed as threatened under the ESA	Surveys of the route selected for construction of the transmission line required to verify results of Section 7 consultation and compliance with terms and conditions in the BA and BO	Areas of potentially suitable modeled habitat identified in the BA	Within 300 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	August	Follow protocol in FWS <i>Utah Field Office Guidelines for Conducting and Reporting Botanical Inventories and Monitoring of Federally Listed, Proposed and Candidate Plants</i> (FWS 2011)
Bureau of Land Management and U.S. Forest Service Sensitive Plants									
Argyle Canyon phacelia ( <i>Phacelia argylensis</i> )	BLM-sensitive species (Utah)	Surveys of the route selected for construction of the transmission line required by BLM Handbook 6840	Vicinity of Argyle Canyon in Uintah County, Utah.	Within 150 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	July through August	Habitat assessments followed by pedestrian belt transects within identified suitable habitat
Beaver Rim phlox ( <i>Phlox pungens</i> )	BLM- and state-sensitive species (Wyoming)	Surveys of the route selected for construction of the transmission line required by BLM Handbook 6840and BLM Rawlins Resource Management Plan (RMP) Appendix 24 (BLM 2008)	Areas of modeled potentially suitable habitat (from the WYNDD Model) in Carbon County, Wyoming	Within 150 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	Flowers in May and June (NatureServe 2012)	Plant Survey Requirements and Protocols from the Wyoming Bureau of Land Management, Lander Field Office, 2014

Table A-2 Draft Biological Survey Requirements for Transmission-line Construction (as of March 18, 2014)									
Resource	Resource Status	Survey Requirement	Geographic Region Where Surveys are Required	Survey Area	Timing of Surveys in Relation to Project	Number of Years of Survey Required	Survey Schedule (Year)	Survey Window (approximate)	Methodology
Caespitose cat's-eye ( <i>Cryptantha caespitosa</i> )	BLM-sensitive species (Colorado)	Surveys of the route selected for construction of the transmission line required by BLM Handbook 6840	Vicinity of known locations in Duchesne County, Utah	Within 150 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	Late April to June; some flowers in early May to July	Habitat assessments followed by pedestrian belt transects within identified suitable habitat
Canyon sweet-vetch ( <i>Hedysarum occidentale</i> var. <i>canone</i> )	USFS-sensitive species	Surveys of the route selected for construction of the transmission line required by USFS Biological Evaluation (BE) and Forest Service Manual (FSM) 2670	Within EPG-modeled habitat on USFS-administered lands in Carbon, Emery and Duchesne counties, Utah	Within 150 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	June to early August (Utah Native Plant Society [UNPS])	Follow protocol in <i>U.S. Forest Service Threatened, Endangered and Sensitive Plants Survey Field Guide</i> (USFS 2005)
Carrington daisy ( <i>Erigeron carringtoniae</i> )	USFS-sensitive species	Surveys of the route selected for construction of the transmission line required by USFS BE and FSM 2670	Within EPG-modeled habitat on USFS-administered lands in Emery and Sanpete counties, Utah	Within 150 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	Late June through mid-August (UNPS)	Follow protocol in <i>U.S. Forest Service Threatened, Endangered and Sensitive Plants Survey Field Guide</i> (USFS 2005)
Cedar Rim thistle ( <i>Cirsium aridum</i> )	BLM- and state-sensitive species (Wyoming)	Surveys of the route selected for construction of the transmission line required by BLM Handbook 6840 and BLM Rawlins RMP Appendix 24 (BLM 2008)	Areas of modeled potentially suitable habitat in Carbon and Sweetwater counties, Wyoming	Within 150 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	June through August	Plant Survey Requirements and Protocols from the Wyoming Bureau of Land Management, Lander Field Office, 2014
Debris milkvetch ( <i>Astragalus detritalis</i> )	BLM-sensitive species (Colorado)	Surveys of the route selected for construction of the transmission line required by BLM Handbook 6840	Vicinity of known locations in Uintah and Duchesne counties, Utah, and Moffat County, Colorado	Within 150 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	Flowers April to early June, fruits from late May through June (NatureServe 2012)	Habitat assessments followed by pedestrian belt transects within identified suitable habitat
Duchesne milkvetch ( <i>Astragalus duchesnensis</i> )	BLM-sensitive species (Colorado)	Surveys of the route selected for construction of the transmission line required by BLM Handbook 6840	Vicinity of known locations in Uintah and Duchesne counties, Utah, and Moffat and Rio Blanco counties, Colorado	Within 150 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	Flowers late April through June (NatureServe 2012)	Habitat assessments followed by pedestrian belt transects within identified suitable habitat
Gibbens' beardtongue ( <i>Penstemon gibbensii</i> )	BLM- and state-sensitive species (Wyoming, Colorado, Utah)	Surveys of the route selected for construction of the transmission line required by BLM Handbook 6840 and BLM Rawlins RMP Appendix 24 (BLM 2008)	Predicted suitable habitat near the Colorado-Utah border; survey areas include Sweetwater and Carbon counties, Wyoming, and Moffat County, Colorado	Within 150 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	June; July through August in Wyoming	Plant Survey Requirements and Protocols from the Wyoming Bureau of Land Management, Lander Field Office, 2014
Goodrich's blazingstar ( <i>Mentzelia goodrichii</i> )	BLM-sensitive species (Utah), USFS- sensitive species	Surveys of the route selected for construction of the transmission line required by BLM Handbook 6840, USFS BE and FSM 2670	Within EPG-modeled habitat on USFS- and BLM-administered lands in Duchesne County, Utah	Within 150 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	July through August	On BLM-administered land, habitat assessments followed by pedestrian belt transects within identified suitable habitat; on USFS-administered land, follow protocol in <i>U.S. Forest Service Threatened, Endangered and Sensitive Plants Survey Field Guide</i> (USFS 2005)
Graham's beardtongue ( <i>Penstemon grahamii</i> )	BLM-sensitive species (Colorado, Utah)	Surveys of the route selected for construction of the transmission line required BLM Handbook 6840	Within potential habitat; outcrops of the Parachute Creek member of the Green River formation in Duchesne and Uintah counties, Utah, and Rio Blanco County, Colorado	Within 300 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	May through June	On BLM-administered land, habitat assessments followed by pedestrian belt transects within identified suitable habitat; on USFS-administered land, follow protocol in <i>U.S. Forest Service Threatened, Endangered and Sensitive Plants Survey Field Guide</i> (USFS 2005)

Table A-2 Draft Biological Survey Requirements for Transmission-line Construction (as of March 18, 2014)									
Resource	Resource Status	Survey Requirement	Geographic Region Where Surveys are Required	Survey Area	Timing of Surveys in Relation to Project	Number of Years of Survey Required	Survey Schedule (Year)	Survey Window (approximate)	Methodology
Green River greenthread ( <i>Thelesperma caespitosum</i> )	BLM-sensitive species (Wyoming, Utah), USFS-sensitive species	Surveys of the route selected for construction of the transmission line required by BLM Handbook 6840, BLM Rawlins RMP (BLM 2008), USFS BE and FSM 2670	USFS- and BLM-administered lands within EPG-modeled habitat for this species in Duchesne County, Utah	Within 150 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	May through June	On BLM-administered land, Plant Survey Requirements and Protocols from the Wyoming Bureau of Land Management, Lander Field Office, 2014; on USFS-administered land, follow protocol in <i>U.S. Forest Service Threatened, Endangered and Sensitive Plants Survey Field Guide</i> (USFS 2005)
Hairy Townsend daisy ( <i>Townsendia strigosa</i> var. <i>prolixa</i> )	BLM-sensitive species (Utah)	Surveys of the route selected for construction of the transmission line required BLM Handbook 6840	Clay badlands within the Utah portions of the Uinta Basin in Uintah County, Utah, and Moffat County, Colorado	Within 150 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	May through June	Habitat assessments followed by pedestrian belt transects within identified suitable habitat
Horseshoe milkvetch ( <i>Astragalus equisolensis</i> )	BLM-sensitive species (Colorado, Utah)	Surveys of the route selected for construction of the transmission line required BLM Handbook 6840	Within agency-provided suitable habitat in the vicinity of Horseshoe Bend in Uintah County, Utah	Within 150 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	April through early June	Habitat assessments followed by pedestrian belt transects within identified suitable habitat
Huber's pepperwort ( <i>Lepidium huberi</i> )	BLM-sensitive species (Utah)	Surveys of the route selected for construction of the transmission line required BLM Handbook 6840	Associated sandstone formations in the Raven Ridge area in Uintah County, Utah	Within 150 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	June through August	Habitat assessments followed by pedestrian belt transects within identified suitable habitat
Meadow pussytoes ( <i>Antennaria arcuata</i> )	BLM- and state-sensitive species (Wyoming)	Surveys of the route selected for construction of the transmission line required for BLM Handbook 6840 and BLM Rawlins RMP Appendix 24 (BLM 2008)	Areas of potentially suitable habitat identified in the WYNDD model in Carbon County, Wyoming	Within 150 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	Flowers July to September (NatureServe 2012)	Plant Survey Requirements and Protocols from the Wyoming Bureau of Land Management, Lander Field Office, 2014
Narrow-stem gilia ( <i>Gilia stenothyrsa</i> )	BLM-sensitive species (Colorado)	Surveys of the route selected for construction of the transmission line required BLM Handbook 6840	Vicinity of known locations in Rio Blanco County, Colorado	Within 150 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	Flowers in May and June (NatureServe 2012)	Habitat assessments followed by pedestrian belt transects within identified suitable habitat
Ownbey's thistle ( <i>Cirsium ownbeyi</i> )	BLM- and state-sensitive species (Wyoming)	Surveys of the route selected for construction of the transmission line required for BLM Handbook 6840 and BLM Rawlins RMP Appendix 24 (BLM 2008)	Areas of potentially suitable habitat identified in the WYNDD model in Carbon and Sweetwater counties Wyoming; and areas of potentially suitable habitat in Rio Blanco and Moffat counties, Colorado, and Uintah County, Utah	Within 150 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	June and July	Plant Survey Requirements and Protocols from the Wyoming Bureau of Land Management, Lander Field Office, 2014
Persistent-sepal yellowcress ( <i>Rorippa calycina</i> )	BLM- and state-sensitive species (Wyoming)	Surveys of the route selected for construction of the transmission line required for BLM Handbook 6840 and BLM Rawlins RMP Appendix 24 (BLM 2008)	Areas of potentially suitable habitat identified in the WYNDD model in Carbon and Sweetwater counties, Wyoming	Within 150 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	Flowers June through August (NatureServe 2012)	Plant Survey Requirements and Protocols from the Wyoming Bureau of Land Management, Lander Field Office, 2014
Rollins' cat's-eye ( <i>Cryptantha rollinsii</i> )	BLM-sensitive species (Colorado)	Surveys of the route selected for construction of the transmission line required BLM Handbook 6840	Portions of the Green River Formation in Uintah County, Utah.	Within 150 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	Flowers in May and June (NatureServe 2012)	Habitat assessments followed by pedestrian belt transects within identified suitable habitat

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Spanish bayonet ( <i>Yucca harrimaniae</i> var. <i>sterilis</i> )	BLM-sensitive species (Utah)	Surveys of the route selected for construction of the transmission line required BLM Handbook 6840	Sandy soils within the Uinta Basin in Duchesne and Uintah counties, Utah	Within 150 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	Anytime without snow cover	Habitat assessments followed by pedestrian belt transects within identified suitable habitat																				
Untermann's daisy ( <i>Erigeron untermannii</i> )	BLM-sensitive species (Utah), USFS-sensitive species	Surveys of the route selected for construction of the transmission line required by BLM Handbook 6840, USFS BE and FSM 2670	Within EPG-modeled habitat for the species on USFS- and BLM-administered lands in Duchesne County, Utah	Within 150 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	May through July	On BLM-administered land, habitat assessments followed by pedestrian belt transects within identified suitable habitat; on USFS-administered land, follow protocol in <i>U.S. Forest Service Threatened, Endangered and Sensitive Plants Survey Field Guide</i> (USFS 2005).																				
White River beardtongue ( <i>Penstemon scariosus</i> var. <i>albifluvis</i> )	BLM-sensitive species (Utah)	Surveys of the route selected for construction of the transmission line required by BLM Handbook 6840	Within potential habitat; outcrops of the Parachute Creek member of the Green River formation in Uintah County, Utah	Within 300 feet of the edge of work areas, new and improved access routes, and the 250-foot-wide right-of-way along the route selected for the construction of the transmission line	Prior to completion of Construction POD and NTP	1	2016	May through June	Habitat assessments followed by pedestrian belt transects within identified suitable habitat																				
<p>SOURCES:</p> <p>Beason, J.P. 2009. Surveys for Yellow-billed Cuckoos on Lands Managed by the National Parks Service in Dinosaur National Monument and Northwest Colorado. Tech Rep. SC-YBCU-NPS-09-1. Rocky Mountain Bird Observatory, Brighton, Colorado.</p> <p>Beauvais, G.P., and R. Smith. 2003. Model of breeding habitat of the mountain plover (<i>Charadrius montanus</i>) in western Wyoming. <i>Western North American Naturalist</i> 63(1): 88-96.</p> <p>Bureau of Land Management (BLM). 2008. <i>Record of Decision and Approved Rawlins Resource Management Plan</i>. Rawlins Field Office, Rawlins, Wyoming.</p> <p>BLM. 2011. Wildlife Survey Protocols, Version 2.3. Pinedale Field Office, Wyoming.</p> <p>BLM. 2014. Plant Survey Requirements and Protocols. Lander Field Office, Wyoming.</p> <p>Call, M.W. 1978. Nesting habitats and surveys techniques for common western raptors. U.S.E.I., Bureau of Land Management, Technical Note TN-316. 115pp.</p> <p>NatureServe. 2012. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. Arlington, Virginia. Available at: <a href="http://www.natureserve.org/explorer">http://www.natureserve.org/explorer</a>, accessed November 30, 2012.</p> <p>Romin, L.A. and J.A. Muck. 2002. Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances. U.S. Fish and Wildlife Service, Utah Ecological Services, West Valley City.</p> <p>Ulmschneider, H. 2008. Surveying for pygmy rabbits (<i>Brachylagus idahoensis</i>). Interagency Pygmy Rabbit Working Group.</p> <p>U.S. Fish and Wildlife Service (FWS). 2011. U.S. Fish and Wildlife Service Utah Field Office Guidelines for Conducting and Reporting Botanical Inventories and Monitoring of Federally Listed, Proposed and Candidate Plants.</p> <p>FWS. 2012. Mexican Spotted Owl Survey Protocol of the U.S. Fish and Wildlife Service.</p> <p>U.S. Forest Service (USFS). 2005. Threatened, Endangered and Sensitive Plants Survey Field Guide. Washington, D.C.</p> <p>Utah Division of Wildlife Resources. 2009. Utah Greater Sage-groue Management Plan. Utah Department of Natural Resources, Division of Wildlife Resources, Publication 09-17, Salt Lake City, Utah.</p> <p>Wyoming Natural Diversity Database. 2010. Pocket Gopher Surveys in Southwestern Wyoming. Laramie, Wyoming.</p> <p>NOTES:</p> <table><tr><td>BA = Biological Assessment</td><td>EIS = Environmental Impact Statement</td><td>GPS = Global positioning system</td><td>POD = Plan of Development</td><td>UNPS = Utah Native Plant Society</td></tr><tr><td>BE = Biological Evaluation</td><td>ESA = Endangered Species Act of 1973</td><td>NTP = Notice to Proceed</td><td></td><td>USFS = U.S. Forest Service</td></tr><tr><td>BLM = Bureau of Land Management</td><td>FSM = Forest Service Manual</td><td>UDWR = Utah Division of Wildlife Resources</td><td></td><td>WYNDD = Wyoming Natural Diversity Database</td></tr><tr><td>BO = Biological Opinion</td><td>FWS = U.S. Fish and Wildlife Service</td><td></td><td></td><td></td></tr></table>										BA = Biological Assessment	EIS = Environmental Impact Statement	GPS = Global positioning system	POD = Plan of Development	UNPS = Utah Native Plant Society	BE = Biological Evaluation	ESA = Endangered Species Act of 1973	NTP = Notice to Proceed		USFS = U.S. Forest Service	BLM = Bureau of Land Management	FSM = Forest Service Manual	UDWR = Utah Division of Wildlife Resources		WYNDD = Wyoming Natural Diversity Database	BO = Biological Opinion	FWS = U.S. Fish and Wildlife Service			
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