**Categorical Exclusion Documentation Format When Using**

**Categorical Exclusions Not Established by Statute**

**CX No.: WY-070-CX15-257**

## A. BACKGOUND

**BLM Office:** Buffalo Field Office **Lease/Serial/Case File No.: WYW168500**

**Proposed Action Title/Type:** Levaithan 3D Seismic Project

**Location of Proposed Action:**
Devon Energy Production Company, L.P. ("Devon") proposes to conduct the Leviathan 3D seismic geophysical survey.

Geophysical surveys use 3D seismic to image geologic structure by generating sonic energy and recording how that energy moves through the earth. Energy is generated at source points by vibroseis buggies. The energy from the vibroseis buggies is recorded using sensors called geophones, also known as receivers.

T. 44-50N, R.72-76W, for further detail see table 1 below. The Proposed Project would be located in Campbell County, Wyoming. The proposed project encompasses a total of approximately 419.12 square miles (268,235 acres). Not all surface within the project area would be accessed. This "No Access" surface would be avoided. Of the total project area acreage, approximately 13.55 square miles (8,672 acres/3.23% of the total project area) includes Bureau of Land Management ("BLM") surface. However, of that approximately 13.55 square miles of BLM surface, only approximately 12.13 square miles (7,764 acres/ 2.90%) of BLM surface would be accessed for this project. Geophysical survey operations would not occur on the approximately remaining 1.42 square miles (908 acres) of BLM No Access surface, which mostly includes small BLM surface tracts (usually 40 acres in size) throughout the project area (see Map 1).The remainder of the project area also includes state (20.81 square miles/ 13,319.78 acres/ 4.97%) and private surface (384.76 square miles/246,244.75 acres/ 91.80%).

The geophysical survey would contain approximately 59,753 acres on Devon's federal lease (~22% of the project area). Approximately 8,670 acres (~3% of project area) would be on BLM surface that is not on Devon's federal lease.

**Table 1: Leviathan 3DTownship, Range and Section (TRS) Breakdown Summary:**
T44N - R72W: Part of 06
T44N - R73W: All of 01-06
T44N - R74W: Part of 01-02
T45N - R72W: All of 06-17, 18-19, 30-31
T45N - R73W: All of 01-36
T45N - R74W: All of 01-03, 10-15, 22-26, 35-36
T46N - R72W: All of 06-17, 18-19, 30-31
T46N - R73W: All of 01-36
T46N - R74W: All of 01-04, 09-16, 21-28, 33-36 and Part of 05-06
T46N - R75W: Part of 01-02
T47N - R72W: All of 31
T47N - R73W: All of 06-07, 18-19, 30-36
T47N - R74W: All of 01-36

T47N - R75W: All of 01-36
T47N - R76W: All of 01, 12-13, 24-25 and Part of 36
T48N - R73W: All of 07, 18-19, 30-31 and Part of 06
T48N - R74W: All of 02-36 and Part of 01
T48N - R75W: All of 01-36
T48N - R76W: All of 01, 11-14, 23-25, 36 and Part of 02, 26
T49N - R73W: Part of 06-07, 18-19, 30-31
T49N - R74W: All of 01-36
T49N - R75W: All of 01-36
T49N - R76W: All of 01-02, 11-14, 24-25, 36
T50N - R74W: All of 25-36 and Part of 19-21
T50N - R74W: Part of 22-23
T50N - R75W: All of 25-36 and Part of 19-20, 22-24
T50N - R76W: All of 25-26, 35-36 and Part of 23-24

**Background:**
The Notice of Intent (NOI) and Authorization to Conduct Oil and Gas Geophysical Exploration Operations under the Levaithan 3D project on Federally-administered lands was received on December 10, 2014 and on December 18, 2014 electronically. October 21, 2014 Devon and BLM had the initial teleconference call/scoping meeting. On February 2, 2015 a scoping meeting via teleconference was held with Devon and BFO to discuss project deficiencies and timeframes. On February 17, 2015 the project deficiency letter was sent to Devon. On March 2, 2015 the operator had some questions concerning the project deficiencies. On March 3, 2015 BLM BFO provided the Devon with guidance and clarification. On March 13, 2015 Devon requested an extension for project deficiencies (archaeological and wildlife surveys) until July 1, 2015. On June 1, 2015 BLM conducted a conference call with Devon regarding their upcoming extension date and outstanding deficiencies and provided guidance and clarification on Devon's draft submittal.

**Project Timeframe and Duration:**
The target date to begin non-casual use for geophysical surveys on BLM surface is July 15th, 2015. No geophysical surveys on BLM surface would begin before July 15th, 2015 nor before a BLM permit were issued. On non-BLM surface, geophysical surveys would begin earlier.
Once geophysical surveys on BLM surface begin, it will take approximately 120 days to pass through all BLM surface. The duration of the entire project (on and off BLM surface) is estimated to be 154 days.

**Project Goals:**
The Proposed Project is necessary to develop Devon oil and gas leases. Devon intends to collect data to achieve the following goals with the Proposed Project:
- Map the Turner, Parkman and the Frontier formations;
- Detect fractures in the formations which can contain economic quantities of hydrocarbons; and
- Determine proper locations for drilling future wells to reduce the potential for developing unproductive wells and constructing infrastructure associated with non-productive wells (roads, well pads, pipelines, etc).

**Land Surveys**:
Land surveyors will be used to determine and record GPS locations for receiver and source points and pre-designated travel routes for conducting geophysical surveys. When conducting land surveys, land surveyors would travel by vehicle only on existing roads and two tracks, but might drive UTV's and ATV's off road. Base stations for GPS radio towers may be set up, but would be located next to roads

when possible. Pin flags would be used to mark receiver points and paint would be used to mark source points that vibroseis buggies would occupy. Any garbage generated by land-survey operations would be removed upon completion.

**Receiver Points**:
Receiver points would be located in east-west rows, called receiver lines, along which up to six geophones would be placed in a small circle at each receiver point. Receiver points along a receiver line would be spaced approximately 165' apart. Receiver lines would run close to parallel with one another, and be about 825' apart. Accordingly, there would be approximately 86,528 receiver points in the project area. Of these, approximately 2778 receiver points would be on BLM surface (3.2% of project total). Geophones may be deployed in as much as 45 square miles at any given time during the project.

Pre-plot receiver point locations are estimated receiver point locations. Land surveyors would use global positioning systems ("GPS") to record actual receiver point locations. An updated map post-plot map showing exact receiver point locations will be created and available to the BLM as part of the Notice of Completion.

**Source Points**:
Source points, at which vibroseis buggies would be used to generate energy, would be spaced in north-south rows, called source lines. No shotholes would be used. Source points along a source line would be approximately 165' apart from one another. Source lines would run close to parallel and be approximately 825' apart. This would create approximately 205 source points per square mile and approximately 85,692 source points in the project area. Of these, about 2,778 source points (3.2% of project total) would be on BLM surface.

**Logistics:**
Helicopter longline operations would be required for transporting equipment. Helicopters would not be used for transporting people. Up to 3 helicopters would be utilized. Helicopter types will be either light or medium lift helicopters. Helicopter operations would only occur during daylight hours. Helicopters would operate as low as 200' to 500' above ground level.

Staging areas would not be located on BLM surface. Staging areas would be used for temporary placement of cable and geophone trailers, helicopter fuel storage, helicopter land pad, and parking for crew transport vehicles. A typical staging area would be approximately 300 by 300 feet or larger in size. Staging area locations are as yet unidentified, but would be located on previously disturbed areas such as well pads on adjacent private land.

**Vibroseis Buggies**:
This method of creating sonic energy utilizes vibroseis buggies, which are vehicles mounted with plates that vibrate the ground at points on the earth's surface to create sound waves. Buggies weigh approximately 60,000 pounds. To generate ground vibration waves, a buggy would lower a 4.5 x 7.5-foot metal pad onto the earth's surface at a pressure of only approximately 16 pounds per square inch. The buggy would then cause the pad to pulse and thus generate a series of ground vibrations.

Duration and frequency of the vibrations would be tested and determined in the field.
Nine to twelve vibroseis buggies would be used on gentler terrain and roads within. Buggies would be split into teams of 3 units for more efficient data acquisition. The buggies would begin on the north end of the project area and complete the project on the south end. They would utilize GPS to identify source points and predetermined travel routes. They would travel single file, bumper-to-bumper, stopping to vibrate at each predetermined source point.

The buggies would be equipped with smooth tread flotation tires 67 inches tall and 34 inches wide. Ground contact pressures would be only approximately 26 psi. Where possible, vibroseis buggies would proceed from one source point to the next with only one pass per source line. If preferred, the buggies could travel in an off-set pattern, instead of single file, to minimize each buggy driving in the others' tire tracks. No additional clearing or grading of existing roads and trails is proposed. In some instances, tree limbs overhanging a road may be removed to allow passage of buggies and to prevent additional damage to an affected tree. Any surface damage would be minimal and short term.

**Cleanup and Demobilization:**
Cleanup would proceed concurrently with recording. After source energy is generated and recorded, the same crews used for placing geophones and recording equipment would re-enter the area to remove geophones, recording equipment. Geophones and recording equipment would be placed into bags and removed by helicopter longline. All trash (pin flags, stakes, flagging, project equipment, and commercial waste) would also be gathered and bagged daily as the field groups and crewmembers complete portions of the project. Equipment and trash would be placed at points on roads or trails to be collected and transported by vehicle to staging areas where personnel would organize materials, handle equipment, and dispose of used/unusable materials. At the completion of recording, a follow up or trash crew would also make a complete sweep of the project area to ensure no trash or equipment has been left behind. The final sweep would be completed within about ten days after the conclusion of the recording.

A joint final inspection should take place with the BLM representative, in coordination with the Wyoming Oil and Gas Conservation Commission within a reasonable time after completion of the project. The time of year and accompanying environmental factors (such as snow cover) that are present when seismic operations are completed may determine when the final inspection can take place.

For further detail in regards to recording and recording equipment, logistics, and resource protection commitments please refer to the Levaithan 3D Operations Plan.

**B. LAND USE PLAN CONFORMANCE**
**Land Use Plan Name:** Buffalo Resource Management Plan (RMP)
**Date Approved:** 1985 and Amendments (2003, 2011)

The proposed action is in conformance with the applicable LUP because it is specifically provided for in the following LUP decision(s): Minerals Management – Oil and Gas

The proposed action is in conformance with the LUP, even though it is not specifically provided for, because it is clearly consistent with the following LUP decision(s) (objectives, terms, and conditions):

**Decision Record MM-7** – Continue to lease and allow development of federal oil and gas in the Buffalo Resource Area

**C: COMPLIANCE WITH NEPA**
The Proposed Action is categorically excluded from further documentation under the National Environmental Policy Act (NEPA) in accordance with 516 DM 11.9(B)(6):

**"Approval of Notices of Intent to conduct geophysical exploration of oil, gas, or geothermal, pursuant to 43 CFR 3150 or 3250, when no temporary or new road construction is proposed".**

This categorical exclusion is appropriate in this situation because there are no extraordinary circumstances potentially having effects that may significantly affect the environment. I've reviewed the proposed action and none of the extraordinary circumstances described below and in 516 DM 2 apply.

**Cultural:**
In accordance with section 106 of the National Historic Preservation Act, BLM must consider impacts to historic properties (sites that are eligible for or listed on the National Register of Historic Places (NRHP)). For an overview of cultural resources that are generally found within BFO the reader is referred to the *Draft Cultural Class I Regional Overview, Buffalo Field Office* (BLM, 2010). A Class III (intensive) cultural resource inventory (BFO project no. 70150078) was performed in order to locate specific historic properties which may be impacted by the proposed project. The following resources are located in or near the proposed project area.

**Cultural Resources Located In or Near the Project Area**

| Site Number | Site Type | NRHP Eligibility |
|---|---|---|
| 48CA719 | Prehistoric Stone Features/ Lithic Scatter | Not Eligible |
| 48CA7221 | Historic Cairn | Not Eligible |
| 48CA7222 | Prehistoric Stone Feature/ Lithic Scatter | Not Eligible |
| 48CA7223 | Prehistoric Stone Feature/ Lithic Scatter | Not Eligible |
| 48CA7224 | Prehistoric Lithic Tool/ Historic Debris Scatter | Not Eligible |

BLM policy states that a decision maker's first choice should be avoidance of historic properties (BLM Manual 8140.06(C)). If historic properties cannot be avoided, mitigation measures must be applied to resolve the adverse effect. No historic properties will be impacted by the proposed project. Following the *State Protocol Between the Wyoming Bureau of Land Management State Director and The Wyoming State Historic Preservation Officer*, Section V(D)(i) the Bureau of Land Management electronically notified the Wyoming State Historic Preservation Officer (SHPO) on 7/10/2015 that no historic properties exist within the area of potential effect (APE). If any cultural values (sites, features or artifacts) are observed during operation, they will be left intact and the Buffalo Field Manager notified. If human remains are noted, the procedures described in Appendix L of the PRB FEIS must be followed.

**Wildlife:**
BLM reviewed the proposal and determined that it is: (1) consistent with the FEIS and its supplements, the RMP and the above tiered NEPA analyses; and (2) consistent with the programmatic biological opinion (ES-6-WY-02-F006), which is an update from the PRB FEIS, Appendix K. The PRB FEIS identified wildlife species occurring in the PRB, pp. 3-113 to 3-206. Big Horn Environmental Consultants (BHEC 2015) performed a habitat assessment in the project area during the spring of 2014 and 2015. All surveys were performed with accepted protocol for the species expected to occur in the proposed project area (See AR). The habitat assessment concluded the area contains numerous raptor nests and suitable greater sage-grouse habitat. Although due to the timing, duration, lack of surface disturbing activities and non-invasive nature of the proposed project no negative impacts are expected to occur.

**Extraordinary Circumstances (from 516 DM 2, Appendix 2)**

Extraordinary circumstances exist for individual actions within categorical exclusions which may:

2.1. Have significant impacts on public health or safety.

2.2. Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds; and other ecologically significant or critical areas.

2.3. Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [National Environmental Policy Act Section 102(2)(E)].

2.4. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.

2.5. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects.

2.6. Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects.

2.7. Have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by either the bureau or office.

2.8. Have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species.

2.9. Violate a Federal law, or a state, local, or tribal law or requirement imposed for the protection of the environment.

2.10. Have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898).

2.11. Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007).

2.12. Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112).

**D: SIGNATURE**

Authorizing Signature: /s/ Duane W. Spencer Date: 7/8/2015

(Signature)

Name: Duane W. Spencer Title: Field Manager

**Contact Person**
For additional information concerning this CX review, contact:
Andy Perez

Bureau of Land Management
Buffalo Field Office
1425 Fort St.
Buffalo, WY 82834
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**DECISION RECORD**

Lease/Serial/Case File No.: **WYW168500**

**Recommendation/Rationale**: I recommend approving Devon Energy Production Company, L.P. ("Devon") Notice of Intent to Conduct Geophysical Exploration Operations on public lands administered by the BLM in the Leviathan 3D Seismic Project Area with the mitigation measures described below. Devon will utilize the subsurface information gathered by this project to explore for and develop the oil and gas resources in this area. The subsurface data will limit unnecessary drilling, reduce surface disturbance, and reduce adverse impacts to other resources.

**Mitigation Measures:**

1. No Surface Disturbing activities are authorized with this action.

2. Notify Andy Perez (Authorizing Officer) 72 hrs. prior commencement of work.

3. Disruptive activities are prohibited or restricted on public surface in the project area from March 15th through June 30 in suitable sage-grouse nesting and early brood-rearing habitat.
   a. Disruptive activities are prohibited or restricted for operations occurring within 0.5 mile of all active raptor nests (Identified in BHEC 2015 report found in AR) will take place between 9 a.m. and 3 p.m. on public lands from February 1st – July 31st.

4. Disruptive activities are prohibited or restricted on public lands from February 1st – August 15th for nesting bald eagles, and from November 1st – April 1st for roosting bald eagles prior to surveys according to BLM protocol. Survey results shall be submitted in writing to a BLM biologist prior to commencement of activities.

5. (4) All identified cultural sites in the project area shall be avoided by at least 30 meters by all geophysical operations.

6. Vehicular travel shall be suspended when ground conditions are wet enough to cause rutting or other noticeable surface deformation and severe compaction. As a general rule, if vehicles or other project equipment create ruts in excess of four inches deep when traveling cross-country over wet soils, the soil shall be deemed too wet for vehicular use.

7. The staging area(s) shall be kept clean and free of litter. Appropriate human waste facilities will be provided and properly maintained. Such waste facilities shall be removed from the site upon completion of the project.

8. All flagging, lath, pin flags, and similar materials used in the seismic project will be removed from public land and disposed of at an authorized landfill.

9. Roads will not be constructed for geophysical projects authorized under a categorical exclusion.

10. Operators of vehicles and equipment shall be responsible for not damaging fences and keeping gates as found. As a last resort, should a fence be cut for access, that fence must be repaired to former or better condition, immediately after equipment has passed through.

11. If soil is disturbed to the extent that erosion is likely or visual impacts are readily apparent, the disturbed areas will be rehabilitated utilizing the following techniques:

Ruts and vehicle tracks will be filled with soil and/or obliterated by either hand raking or similar method. When completing this work, care will be taken to minimize disturbance to surrounding lands that have not been disturbed. All areas where rehabilitation work is accomplished will be reseeded with the seed mix provided below.

The seeded area should be hand raked to assure the seed is covered with approximately ¼ to ½ inch of soil.

The seed shall be certified, pure live seed, and seed tags must be available if requested by the authorized officer. Certified weed free seed is to be used to rehabilitate disturbed land.

**Sandy/Loamy Ecological Site Seed Mix**

| Species | % in Mix | Lbs PLS* |
|---|---|---|
| ***Western Wheatgrass*** (Pascopyrum smithii) | 30 | 3.6 |
| ***Bluebunch Wheatgrass*** (Pseudoroegneria spicata ssp. Spicata) | 20 | 2.4 |
| ***Green needlegrass*** (Nassella viridula) | 20 | 2.4 |
| ***Thickspike Wheatgrass*** (Elymus lanceolatus ssp. lanceolatus) | 15 | 1.8 |
| ***Prairie coneflower*** (Ratibida columnifera) | 5 | 0.6 |
| **Prairie sandreed** – *Goshen* | 5 | 0.6 |
| **Indian ricegrass** – *Paloma or Rimrock* | 5 | 0.6 |
| **Totals** | **100%** | **12 lbs/acre** |

*PLS = pure live seed
*Northern Plains adapted species
*Double this rate if broadcast seeding

Authorizing Signature: /s/ Duane W. Spencer Date: 7/8/2015

Name: Duane W. Spencer Title: Field Manager

**Decision**
I have reviewed the plan conformance and NEPA compliance record and have determined that the proposed project is in conformance with the approved land use plan and no further environmental analysis is required.

It is my decision to implement the project as described with the mitigation measures identified above and included in the Special Terms and Conditions along with the mitigation measures in the Standard Terms and Conditions attached to the Notice of Intent to Conduct Geophysical Exploration Operations.

Authorizing Signature: /s/ Duane W. Spencer Date: 7/8/2015

Name: Duane W. Spencer Title: Field Manager

**DECISION FACTORS**

1. **Land Status Including Prior Existing Rights and Land Ownership of Adjacent Non-Federal Lands**: The affected public land in the project area is intermingled with private and Forest Service Lands. The approval of the NOI is only for geophysical operations on public lands. The Wyoming Oil and Gas Conservation Commission authorize geophysical operations on private lands in the project area.

2. **Pending Applications:** None.

3. **Economic and Social Effects**: NA

4. **Access**: Access to the project area is via State highways, existing county and private roads, and existing two-track trails.

5. **Land Use Capability and Past, Present, and Future Land Uses**: Livestock grazing, wildlife habitat, agriculture, oil and gas production, and residential & business uses are the primary land uses in the general area.

6. **Government and Public Support**: None.

7. **Legal Requirements**: No special legal requirements are applicable to this action.

**Table 4.1 Summary of Threatened and Endangered Species Habitat and Project Effects for the Devon-Nord Kraken 3D**

| Common Name (scientific name) | Habitat | Presence | Project Effects | Rationale |
|---|---|---|---|---|
| *Threatened* | | | | |
| Ute ladies'-tresses orchid | Riparian areas with permanent water | NP | NE | Habitat not present |
| *Proposed* | | | | |
| Northern Long-eared Bat | Conifer and deciduous forest, caves and mines | NP | NE | The project area is outside the species' range, and the species is not expected to occur. Only known to occur in extreme Northeast WY (mainly Crook and Weston counties, very limited in northern Campbell county.) |
| *Candidate* | | | | |
| Greater Sage-grouse | Basin-prairie shrub, mountain-foothill shrub | S | MIIH | Nesting habitat is present. No occupied leks within 2 miles. |

**Project Effects**
**LAA** - Likely to adversely affect
**NE** - No Effect
**NLAA** - May Affect, not likely to adversely affect individuals or habitat.
**NLJ** – Not likely to jeopardize the continued existence of the species
**MIIH** – May impact individuals and habitat
**NP** - Habitat not present and species unlikely to occur within the project area.

**Summary of Sensitive Species Habitat and Project Effects.**

| Common Name (scientific name) | Habitat | Presence | Project Effects | Rationale |
|---|---|---|---|---|
| *Amphibians* | | | | |
| Northern leopard frog (*Rana pipiens*) | Beaver ponds and cattail marshes from plains to montane zones. | NP | NI | Habitat not present. |
| Columbia spotted frog (*R*anus pretiosa) | Ponds, sloughs, small streams, and cattails in foothills and montane zones. Confined to headwaters of the S Tongue R drainage and tributaries. | NP | NI | The project area is outside the species' range, and the species is not expected to occur. |
| *Fish* | | | | |

| Common Name (scientific name) | Habitat | Presence | Project Effects | Rationale |
|---|---|---|---|---|
| Yellowstone cutthroat trout (*Oncoryhynchus clarki bouvieri*) | Cold-water rivers, creeks, beaver ponds, and large lakes in the Upper Tongue sub-watershed | NP | NI | The project area is outside the species' range, and the species is not expected to occur. |
| *Birds* | | | | |
| Plains Sharp-tailed Grouse (*Tympanuchus phasianellus*) | Savannah style prairie with grasses dominant and shrub patches mixed throughout, with minimal patches of trees. Selection of these specific habitats depends on the quality of habitat available to grouse | NP | NI | Habitat not present. |
| Baird's sparrow (*Ammodramus bairdii*) | Shortgrass prairie and basin-prairie shrubland habitats; plowed and stubble fields; grazed pastures; dry lakebeds; and other sparse, bare, dry ground. | S | MIIH | There have been no records of Baird's Sparrows nesting in Campbell County. Migrants may be impacted by dust, noise, human activities, or habitat loss. |
| Bald eagle (*Haliaeetus leucocephalus*) | Mature forest cover often within one mile of large water body with reliable prey source nearby. | NP | NI | Nesting and winter roosting habitat is not present. May avoid foraging habitats impacted by dust, noise, or human activities. |
| Brewer's sparrow (*Spizella breweri*) | Sagebrush shrubland | K | MIIH | A timing limitation will protect active nests from destruction during the nesting season. Nesting and foraging habitat may be impacted by dust, noise, human activities, and direct loss. Species may avoid area. |
| Ferruginous hawk (*Buteo regalis*) | Basin-prairie shrub, grasslands, rock outcrops | S | MIIH | Foraging habitat may be impacted by dust, noise, human activities, and direct loss. Species may avoid area. |
| Loggerhead shrike (*Lanius ludovicianus*) | Basin-prairie shrub, mountain-foothill shrub | NS | NI | Some habitat present adjacent to project location. |
| Long-billed curlew (*Numenius americanus*) | Grasslands, plains, foothills, wet meadows | NP | NI | Habitat not present. |
| Mountain Plover | Short-grass prairie with slopes < 5% | NP | NI | Habitat not present |
| Northern goshawk (*Accipiter gentilis*) | Conifer and deciduous forests | NP | NI | Habitat not present. |
| Peregrine falcon (*Falco peregrinus*) | Cliffs | NP | NI | Habitat not present. |

| Common Name (scientific name) | Habitat | Presence | Project Effects | Rationale |
|---|---|---|---|---|
| Sage sparrow (*Amphispiza billneata*) | Basin-prairie shrub, mountain-foothill shrub | S | MIIH | Foraging individuals may be impacted by dust, noise, human activities, or habitat loss . |
| Sage thrasher (*Oreoscoptes montanus*) | Basin-prairie shrub, mountain-foothill shrub | S | MIIH | Foraging individuals may be impacted by dust, noise, human activities, or habitat loss |
| Trumpeter swan (*Cygnus buccinator*) | Lakes, ponds, rivers | NP | NI | Habitat not present. |
| Western Burrowing owl (*Athene cunicularia*) | Grasslands, basin-prairie shrub | NP | NI | Habitat not present. |
| White-faced ibis (*Plegadis chihi*) | Marshes, wet meadows | NP | NI | Habitat not present. |
| Yellow-billed cuckoo (*Coccyzus americanus*) | Open woodlands, streamside willow and alder groves | NP | NI | Habitat not present. |
| *Mammals* | | | | |
| Black-tailed prairie dog (*Cynomys ludovicianus*) | Prairie habitats with deep, firm soils and slopes less than 10 degrees. | NP | NI | Habitat not present |
| Fringed myotis (*Myotis thysanodes*) | Conifer forests, woodland chaparral, caves and mines | NP | NI | Habitat not present. |
| Long-eared myotis (*Myotis evotis*) | Conifer and deciduous forest, caves and mines | NP | NI | Habitat not present |
| Swift fox (*Vulpes velox*) | Grasslands | NP | NI | Habitat not present |
| Townsend's big-eared bat (*Corynorhinus townsendii*) | Caves and mines. | NP | NI | Habitat not present |
| *Big Game* | Basin-prairie, mountain-foothill, woodlands, and riparian habitats. | K | MIIH | Not a designated parturition area or critical seasonal area. Foraging individuals within seasonal habitats may be impacted by dust, noise, human activities, or habitat loss. |
| | | | | |
| *Plants* | | | | |
| Limber Pine (*Pinus flexilis*) | Mountains, associated with high elevation conifer species | NP | NI | Habitat not present. |
| Porter's sagebrush (*Artemisia porteri*) | Sparsely vegetated badlands of ashy or tufaceous mudstone and clay slopes 5300-6500 ft. | NP | NI | Habitat not present. |

| Common Name (scientific name) | Habitat | Presence | Project Effects | Rationale |
|---|---|---|---|---|
| William's wafer parsnip (*Cymopterus williamsii*) | Open ridgetops and upper slopes with exposed limestone outcrops or rockslides, 6000-8300 ft. | NP | NI | Project area outside of species' range. |

**Presence**
**K -** Known, documented observation within project area.
**S** - Habitat suitable and species suspected, to occur within the project area.
**NS -** Habitat suitable but species is not suspected to occur within the project area.
**NP -** Habitat not present and species unlikely to occur within the project area.

**Project Effects**
**NI** - No Impact.
**MIIH -** May Impact Individuals or Habitat, but will not likely contribute to a trend towards Federal listing or a loss of viability to the population or species.
**WIPV** - Will Impact Individuals or Habitat with a consequence that the action may contribute to a trend towards Federal listing or cause a loss of viability to the population or species.
**BI -** Beneficial Impact