

ATTACHMENT D

Listing of Options Available for Raptor and Bald Eagle Stipulation Relief

Proponents' Attachment D provides a listing of viable options available for raptor and bald eagle stipulation relief. These options are based on widely accepted and utilized practices within other oil and gas developments on other BLM-managed lands in Wyoming, and the Proponents' agreed-to voluntary Best Management Practices (BMPs) for raptor and bald eagle stipulation relief with the United States Fish and Wildlife Service (USFWS). These options contained in this attachment are in addition to the mitigation measures (as it applies to eagles and raptors) contained in RDSEIS Appendix 10 "Wildlife Monitoring Matrix" pp. 10-1 through 10-6.

It is understood from BLM that waiving all raptor (Bald Eagle included) stipulations or addressing future stipulations is not possible. The following options were proposed to eliminate most of the issues and allow year-round access. Many of the proposed options are taken from other Wyoming BLM field offices' documented past practices.

1. Change the one mile buffers for Ferruginous Hawks to a more suitable area of use following the Ferruginous Hawk territories indicated on the 2006 TRC Raptor map. These areas are directly used for feeding/foraging/nesting Ferruginous Hawks while still allowing protection to nesting birds.
2. Tighten the Bald Eagle winter forage buffer to areas that are actually used, following the 100 year flood zone along the New Fork River. This would exclude unused sage uplands where locations are and have been suggested to be built versus those in the lower lands by the river.
3. Proponents can move onto a pad outside of raptor, Ferruginous Hawk and Bald Eagle seasonal stipulations without doing surveys and stay on that pad until development activities are complete even if birds move into the area.
4. Proponents can move onto a pad during raptor, Ferruginous Hawk and Bald Eagle stipulations if they have performed surveys for birds and there are no birds using the area. Once on a pad, Proponents can stay on that pad until development activities are complete even if birds move into the area.
5. BLM needs to factor in its decisions that Proponents can reach approximately ½ mile with directional drilling.
6. Allow that exceptions may be granted if field surveys reveal a lack of use within the last 3 years and it is determined through site specific environmental analysis that specific actions would not interfere with critical habitat function or compromise animal condition within the project vicinity.

The development activity plans will be established annually via consultation with the BLM, WDEQ and WY Game and Fish as part of the annual planning process using the guiding principles as a basis. The annual plan will be part of a ten-year plan rolled forward each year. During the annual meetings, the participants will determine plans and mitigation utilizing the voluntarily agreed upon raptor/Bald Eagle best management practices (BMPs) for oil and gas development. The actual BMP document is included in

this attachment however (for sake of brevity only Shell's copy is included, Ultra's and Questar's are identical).

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**Best Management Practices (BMPs) for Bald Eagle Use Areas
Along the New Fork River in Wyoming**

Developed by Ultra Resources, Inc., Shell Rocky Mountain Production, Questar Market
Resources and Jonah Gas Gathering
with assistance from the U.S. Fish and Wildlife Service's
Cheyenne Field Office

The following is a list of BMPs from which operators may choose any or all applications to apply as voluntary protective measures, where possible and/or applicable to oil and gas activities along the New Fork River corridor south of Pinedale, Wyoming. Operators are not limited to the BMPs listed below; should new ideas and/or techniques become available we encourage the consideration of these techniques in coordination with the U.S. Fish and Wildlife Service's Cheyenne Field Office (Service). If an operator is unsure of whether or not to apply any or all of the below measures in any given situation it is recommended that they contact the Service and/or the Bureau of Land Management (BLM) for guidance.

Bald eagles are currently protected under the Endangered Species Act of 1973 (ESA), as amended, 16 U.S.C. 1531 *et seq.*, Migratory Bird Treaty Act (MBTA), 16 U.S.C. 703 and the Bald and Golden Eagle Protection Act (BGEPA), 16 U.S.C. 668. Currently, the bald eagle is being considered for delisting under the ESA. If delisted under the ESA, bald eagles would remain protected by the MBTA and BGEPA. Therefore, certain human-caused impacts to bald eagles would still be prohibited by law under the MBTA and BGEPA. Until the decision to delist is finalized, bald eagles continue to receive protection as a threatened species under the ESA.

Under the MBTA and the BGEPA, companies are obligated to protect migratory birds, including bald and golden eagles and other raptors. The MBTA, enacted in 1918, prohibits the taking of any migratory birds, their parts, nests, or eggs, except as permitted by regulations, and does not require intent to be proven. Section 703 of the Act states, "Unless and except as permitted by regulations ... it shall be unlawful at any time, by any means or in any manner, to ... take, capture, kill, attempt to take, capture, or kill, or possess ... any migratory bird, any part, nest, or eggs of any such bird..." The BGEPA, prohibits knowingly taking, or taking with wanton disregard for the consequences of an activity, any bald or golden eagles or their body parts, nests, or eggs, which includes collection, molestation, disturbance, or killing. A violation of the ESA, MBTA and/or the BGEPA may result in fines and/or imprisonment. Penalties increase substantially for additional offenses and a second violation of the ESA is a felony.

The 2006 *Draft National Bald Eagle Management Guidelines* (National Guidelines) developed by the U.S. Fish and Wildlife Service defines "disturb" as "to agitate or bother a bald or golden eagle to the degree that interferes with or interrupts normal breeding, feeding or sheltering habits or causing injury, death, or nest abandonment." In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death or nest abandonment. The voluntary BMPs have incorporated many of the stipulations found within the National Guidelines. These National

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Guidelines recommend that those states, which have current management plans, regulations or guidance for land owners and managers, continue development and use of such plans to benefit bald eagles. Shell should also understand that until the National Guidelines are finalized, there may be additional changes to the document.

Pursuant to the ESA, all federal agencies (e.g. BLM and Forest Service) are required to initiate section 7 consultation with the Service when actions they authorize, fund, or permit may affect bald eagles or other listed species. In this case, the federal agency is required to analyze the action on federal lands as well as any action on non-federal lands that is interrelated and interdependent to the action on federal lands. An interrelated and interdependent action is an action that would not occur, be feasible, or would occur to a lesser extent without the associated action on federal land (i.e. use of BLM access road to private land). In the event that an action, on non-federal land and interrelated and interdependent to an action on federal land, is not included in section 7 consultation, the private land owners and/or operators may request to be included in consultation with the federal agency when their lands are associated with an action on federal lands.

In no way does the inclusion of private lands in section 7 consultation allow access or authority to private lands by any federal agency to private lands. This inclusion may benefit the private land owner and/or operator by exempting their actions from violations regarding "take" of listed species under section 9 of the ESA.

By utilizing the following voluntary BMPs and seeking technical assistance from the BLM and the Service, Shell will demonstrate proactive wildlife stewardship in their efforts to minimize or avoid adverse effects to bald eagles and other raptors. However, use of the BMPs does not absolve individuals from liability pursuant to the ESA, MBTA and BGEPA.

1. Conduct appropriate raptor surveys before commencement of ground disturbing activities and within 1 mile of proposed disturbance to determine status of known nests and roosts and to identify new nests and roosts.
2. Monitor and prohibit any activities that may adversely impact bald eagles and other raptor species.
3. Restrict activities within 0.5 mile of active raptor nests (1 mile of active bald eagle and ferruginous hawk nests) from the period of early courtship through the fledging of chicks (generally from February 1 to August 15). With assistance from the Service, modifications to protective buffers may be considered when topography, vegetation and other variables serve as natural barriers.
4. Restrict activities within 1 mile of known bald eagle winter roosts from November 1 to April 1, when activity has been verified. With assistance from the Service, modifications to protective buffers may be considered when topography, vegetation and other variables serve as natural barriers.

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5. In coordination with the Service, noise reduction barriers may be used to minimize disturbance when activities are proposed within an established protective buffer.
6. Prohibit activities that produce extremely loud noises within 1 mile of active bald eagle nests, unless greater tolerance to the activity (or similar activity) has been demonstrated by the particular pair of bald eagles.
7. Build all power lines to standards identified in Avian Power Line Interaction Committee and utilize industry-accepted standards to prevent raptors from being electrocuted on towers and poles.
8. To preclude bald eagles or other raptors from nesting on human-made structures such as cell phone towers and condensate tanks and to avoid impeding operation or maintenance activities, install anti-perching devices on structures to discourage use by raptors. Additionally, in coordination with the Service and based on appropriate ecosystem management, construct artificial nesting platforms to encourage raptors to nest away from human activity.
9. As necessary, notify the appropriate authorities (Wyoming Department of Transportation on Highways and Wyoming Game and Fish Department or the BLM on rural and county roads) of the presence of roadside carrion and ask that they remove the carrion as soon as possible. Carcasses may be covered in the interim to discourage scavenging by bald eagles and other raptors, but only authorized personnel may touch or remove the carcasses.
10. When possible, include the Service in on-site reviews or for future project sites.
11. Strive to work with private landowners to identify voluntary opportunities to conserve and or improve natural resources in the affected area to promote a positive land ethic. Maintain adequate buffers from riparian habitats where possible (outside edge of trees as area of effect). Protective buffers should be site specific depending on vegetation and topography. They should be developed in coordination with qualified biologists, the Service and/or the BLM. Strive to conserve potential nesting, roosting and foraging habitat whenever possible by retaining mature trees and old growth stands wherever possible, particularly within 0.5 mile of water.

The following BMPs have been identified by the companies, as indicated above, to minimize disturbance to bald eagles and other raptors when their activities are proposed within recommended protective buffers for bald eagles. However, the Service reminds the companies that we do not support activities within recommended protective buffers as this may result in adverse effects to bald eagles and/or other raptors. The below BMPs, when implemented within a recommended protective buffer, should be used with caution. Should "take" of a bald eagle or other raptor occur, the Company may be liable under the ESA, MBTA and/or the BGEPA.

1. During night operations and only when worker's safety is not reduced, direct lighting toward the pad to avoid light disturbance to surrounding areas.

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2. Reduce unnecessary traffic and encourage travel times to be during daylight hours between 9am and 3pm.
3. In areas within 1 mile of active nests where there is line of sight from active nests to the activity, pipeline installation equipment shall be shielded from the affected area with camouflage netting.
4. Avoid potentially disruptive activities or permanent above ground structures in the bald eagles' direct flight path between their nest and roost sites and important foraging areas.

Point of Contact List

U.S. Fish and Wildlife Service, Cheyenne Field Office

Field Supervisor, Brian T. Kelly	307-772-2374
Fish and Wildlife Biologist, Kathleen Erwin	307-772-2374
Fish and Wildlife Biologist, Alex Schubert	307-772-2374
Fish and Wildlife Biologist, Pat Deibert	307-772-2374

USFWS Migratory Bird Office, Denver

303-236-8169

Bureau of Land Management, Pinedale Field Office

Field Manager, Dennis Stenger	307-367-5300
Wildlife Biologist, Lisa Solberg	307-367-5340
Wildlife Biologist, Pauline Schuette	307-367-5317

Wyoming Game and Fish Department

Terrestrial Habitat Coordinator	307-367-4352
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Wyoming Department of Transportation

Maintenance, Gary Schriver	307-367-2888
Supervisor, Jim Monturo	307-352-3000

Glossary of Terms

Action area – all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action.

Communal roost sites – Areas where bald eagles gather and perch overnight and sometimes during the day to protect themselves from inclement weather. Communal roost sites are usually in large trees (live or dead) that are relatively sheltered from wind and are generally in close proximity to foraging areas. These roosts may also serve a social purpose for pair bonding and communication between bald eagles. Many roost sites are used year after year.

Disturbance – In the context of BGEPA, is to agitate or bother a bald eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, causing injury, death, or nest abandonment. In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time

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when eagles are not present, if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and cause injury, death or nest abandonment.

Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 *et seq.* – Section 7 of the ESA outlines procedures for interagency cooperation to conserve Federally listed species and designated critical habitat. It requires Federal agencies to further the conservation of listed species and to consult with the Fish and Wildlife Service to ensure their actions (permitting, funding, authorizing) do not jeopardize the continued existence of listed species or destroy or modify designated critical habitat.

Fledge – To leave the nest and begin flying. For bald eagles, this normally occurs at 10-12 weeks of age.

Fledgling – A juvenile bald eagle that has taken the first flight from the nest but is not yet independent. The juvenile bird may remain dependant on the natal nest for a short time after fledging.

Foraging area – An area where bald eagles feed, typically near open water such as rivers, lakes, reservoirs, and bays where fish and waterfowl are abundant, or in areas with little or no water (i.e., rangelands, barren land, tundra, suburban areas, etc.) where other prey species (e.g., rabbit, rodents, deer) or carrion (such as at landfills) are abundant.

Landscape buffer – A natural or human-made landscape feature that screens bald eagles from human activity (e.g., strip of trees, hill, cliff, berm, sound wall).

Likely to Adversely Affect – Finding when a biological assessment/analysis determines that an adverse effect to a listed species may occur as a direct or indirect result of a proposed action or its interrelated or interdependent actions and where the effect is not discountable, insignificant or beneficial. (see not likely to adversely affect below)

Nest – A structure built, maintained, or used by bald eagles for the purpose of reproduction. An **active nest** is a nest that is attended (built, maintained or used) by a pair of bald eagles during a given nesting season, whether or not eggs are laid. An **alternate nest** is a nest that is not used for breeding by eagles during a given nesting season. (In Wyoming we recommend protection of alternate nests as wells)

Nest abandonment – Nest abandonment occurs when adult eagles desert or stop attending to a nest and do not subsequently return and successfully raise young in that nest for the duration of a breeding season. A nest can be abandoned due to alterations around the site that occurred prior to the nesting season, if such alterations agitate or bother the eagle to a degree that causes the eagles to either (1) not use the nest for breeding purposes, or (2) not occupy the nest at all that season. For eagles that migrate during the non-nesting season, nest abandonment can occur at any point between the time the eagles return to the nesting site for the breeding season and the time when all progeny from the breeding season have dispersed. If the eagles remain in the area

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throughout the non-breeding season, nest abandonment can occur at any point after the eagles initiate behaviors that indicate they will use the nest for breeding purposes until such time that all progeny of the breeding season have dispersed.

Not likely to Adversely Affect – Finding when the biological assessment/analysis determines that the effects on listed species are expected to be discountable, insignificant or completely beneficial.

Project footprint – The area of land (and water) that will be permanently altered for a development project, including access roads.

Similar scope – In the vicinity of a bald eagle nest, an existing activity is of similar scope to a potential new activity where the types of impacts to bald eagles are similar in nature, and the impacts of the existing activity are of the same or greater magnitude than the impacts of the potential new activity. Examples: (1) An existing single-story home 200 feet from a nest is similar in scope to an additional single-story home 200 feet from the nest; (2) An existing multistory, multi-family dwelling 150 feet from a nest has impacts of a greater magnitude than a potential new single-family home 200 feet from the nest; (3) One existing single-family home 200 feet from the nest has impacts of a lesser magnitude than three single-family homes 200 feet from the nest. The existing activities in examples (1) and (2) are of similar scope, while the existing activity in example (3) is not.

Take – To harm, harass, pursue, hunt, shoot, wound, kill, trap, capture or collect or attempt to engage in such conduct a listed species. Further defined as modifying or degrading habitat that results in death or injury by significantly impairing breeding, feeding or sheltering.

Vegetative buffer – An area surrounding a bald eagle nest that is wholly or largely covered by forest, vegetation, or other natural ecological characteristics, and separates the nest from human activities.