

# **Addendum OP-A6-A**

## **Agency Review Letters**

### **USFWS**

Letter of December 18, 2009 from B.T. Kelly (USFWS) to J.W. Cash (LC ISR, LLC)  
is included after this cover page.

### **WGFD**

Letter of July 30, 2010 from J. Emmerich (WGFD) to R. Hoy (on behalf of LC ISR, LLC)  
is included after this cover page.

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## WYOMING GAME AND FISH DEPARTMENT

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July 30, 2010

WER 2792.03  
AATA International, Inc  
Wildlife Monitoring and Protection Plans  
Lost Creek ISR Project-Great Divide Basin, Wyoming

Roberta Hoy  
AATA International, Inc  
2240 Blake Street, Suite 210  
Denver, Colorado 80205

Dear Ms. Hoy:

The staff of the Wyoming Game and Fish Department has reviewed the Wildlife Monitoring and Protection Plans for Lost Creek ISR Project-Great Divide Basin, Wyoming. We offer the following comments for your consideration.

This project lies within a sage grouse core area. In order to comply with the Governor's Greater Sage Grouse Core Area Executive Order 2008-02, and to comply with the latest Sage Grouse Implementation Team's (SGIT) effort, we recommend the project proponent first conduct a disturbance evaluation following a Project Impact Analysis Area (PIAA) process as outlined in the new SGIT document ([http://gf.state.wy.us/wildlife/wildlife\\_management/sagegrouse/index.asp](http://gf.state.wy.us/wildlife/wildlife_management/sagegrouse/index.asp)). In addition, the following apply:

- Installation activities should occur in core areas between July 1 and March 14.
- No permanent surface disturbance should occur within 0.6 miles of sage grouse leks within core areas.
- Total surface disturbance should not exceed 5% for every 640 acres on average.
- We recommend the operator control invasive weeds during this project.

It is our understanding that a PIAA analysis has already been completed for an exploratory well operation (Lost Creek South) and it also included the Lost Creek ISR project in the analysis as well. This completed PIAA analysis meets the criteria outlined by the SGIT for this project to move forward.

Finally, we are satisfied with the wildlife monitoring protocol for this project as it is well designed to detect changes in populations and habitats used by sage grouse and other wildlife. As this project lies within a sage grouse core area, it will be highly important to evaluate

*"Conserving Wildlife - Serving People"*

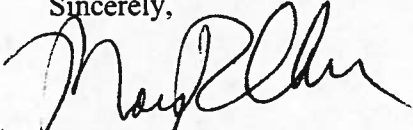
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Ms. Roberta Hoy  
July 30, 2010  
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potential impacts to sage grouse. We recommend the proponent provide timely wildlife monitoring reports (at least annually) to DEQ and WGFD as this project progresses.

Thank you for the opportunity to comment. If you have any questions or concerns, please contact Scott Gamo, Staff Terrestrial Biologist, at 307-777-4509.

Sincerely,



*for*  
John Emmerich  
Deputy Director

JE:MF:sg

cc: USFWS  
John Cash-URenergy  
Greg Hiatt - WGFD, Lander  
Tom Ryder - WGFD, Lander

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From: Scott Gamo [mailto:Scott.Gamo@wgf.state.wy.us]  
Sent: Thursday, August 05, 2010 4:21 PM  
To: Cash, John  
Cc: Mary Flanderka  
Subject: Re: FW: Please see attached Game and Fish comments

John- The bulleted item is used in conjunction with the language regarding the PIAA. You are correct that installation or construction should begin outside the lekking/nesting/early brood season which the first bullet pertains to. And you are correct on the timing of exploration activities. The main point is we are satisfied with the monitoring protocol.

Scott Gamo  
Staff Terrestrial Biologist  
Habitat Protection Program  
Wyoming Game and Fish  
Cheyenne, WY 82006  
Scott.Gamo@wgf.state.wy.us  
307-777-4509

>>> "Cash, John" <John.Cash@ur-energyusa.com> 8/5/2010 2:47 PM >>>  
Scott,

Thanks for the attached letter regarding the review of the Wildlife Monitoring and Protection Plans. We do need some clarification on the first bulleted item. Should we interpret the word "Installation" to mean exploration drilling and initiation of facility construction? It was our understanding during the final few SGIT meetings that we cannot initiate construction of the facility during the sage grouse timing restrictions but that once construction begins we can continue construction (installation) activities year round. It was also our understanding that exploration outside the mine units, as shown in the PIAA, is limited to July 1 to March 14th.

Thanks in advance for the clarification.

Regards,

John

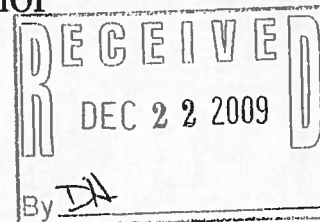
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# United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services  
5353 Yellowstone Road, Suite 308A  
Cheyenne, Wyoming 82009



In Reply Refer To:  
ES-61411/WY10EC0003

DEC 18 2009

Mr. John W. Cash  
Lost Creek ISR, LLC  
5880 Enterprise Dr., Suite 200  
Casper, Wyoming 82609

Dear Mr. Cash:

Thank you for your letter dated October 28, 2009, received in our office on November 2, and attached Wildlife Monitoring and Protection Plan (Plan) for the proposed Lost Creek ISR, LLC (Lost Creek) Lost Creek in-situ uranium Project (Project). You have requested that the U.S. Fish and Wildlife Service (Service) review the Plan and provide comments as per the Wyoming Department of Environmental Quality – Land Quality Division (WDEQ-LQD) regulations. The proposed Project is an in-situ uranium mine in Sections 13, 24, and 25, T. 25 N., R. 93 W., and Sections 16, 17, 18, 19, 20, 30, and 31, T. 25 N., R. 92 W., Sweetwater County, Wyoming.

In response to your request, the Service is providing you with the following information pursuant to the Endangered Species Act (Act) of 1973 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. Other fish and wildlife resources are considered under the Fish and Wildlife Coordination Act and the Fish and Wildlife Act of 1956, as amended, 70 Stat. 1119, 16 U.S.C. 742a-742j.

The National Environmental Protection Act (NEPA) analysis should disclose the full extent of proposed development as well as the direct and indirect effects of all aspects of the project and the cumulative impacts of past, present, and reasonably foreseeable future actions regardless of who is responsible for those actions.

In accordance with section 7 of the Act, the Service believes the following species may be present within or near the permit area. We would appreciate receiving information as to the current status of this species prior to implementation of the permit.

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SPECIES	STATUS	HABITAT
Blowout Penstemon ( <i>Penstemon haydenii</i> )	Endangered	Sand dunes

**Blowout penstemon:** Blowout penstemon is a perennial herb with stems less than 12 inches tall. The inflorescence is 2-6 inches long and has 6-10 compact whorls of milky-blue to pale lavender flowers. Blowout penstemon was listed as endangered on October 1, 1987. The plant's current known range in Wyoming consists of the Ferris dunes area in northwest Carbon County where the plant is restricted to two habitat types: steep, northwest facing slopes of active sand dunes with less than 5 percent vegetative cover; and on north facing sandy slopes, on the lee side of active blowouts with 25-40 percent vegetative cover. Recent surveys have indicated that systematic surveys are warranted in all lower elevations (below 6700 feet) in Wyoming where sand blowout features are located.

Blowouts are formed as strong winds deposit sands from the windward side of a dune to the leeward side and result in a sparsely vegetated crater-like depression. Associated vegetation includes blowout grass, thickspike wheatgrass, lemon scurfpea, Indian ricegrass and western wheatgrass. Threats to the plant occur when sand dunes are removed or overly disturbed by vehicular traffic. Known populations in Wyoming are found between 6680-7440 feet (Fertig 2001). However, recent surveys by Blomquist and Heidel (June 2002) indicate that surveys may be warranted in some lower elevations where active sand blowout features occur. Surveys should be conducted from mid-June to early-July when flowering occurs by knowledgeable botanists trained in conducting rare plant surveys. The Service does not maintain a list of "qualified" surveyors but can refer those wishing to become familiar with the blowout penstemon to experts who can provide training/services.

### Migratory Birds

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 MBTA 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. If the activity may impact migratory birds, please contact our office to discuss protective measures.

The Service has reviewed the proposed nesting and production status surveys for raptors and migratory birds of high federal interest. We have also enclosed the Wyoming Ecological Services Field Office Raptor Recommendations, which outlines recommended steps for addressing raptors in the planning process, provides information regarding seasonal and spatial buffers, and provides links to additional planning resources.

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## Sensitive Species

*Greater sage-grouse:* The Service is currently conducting a status review of the greater sage-grouse (*Centrocercus urophasianus*) for possible listing under the Act (73 FR 10218). We continue to have concerns regarding sage-grouse population status, trends and threats, as well as concerns for other sagebrush obligate species. The following information is provided for your use in the evaluation of this permit and the potential effects to sage-grouse.

Greater sage-grouse are dependent on sagebrush habitats year-round. Habitat loss and degradation, as well as loss of population connectivity have been identified as important factors contributing to the decline of greater sage-grouse populations rangewide (Braun 1998, Wisdom et al. 2002). Therefore, any activities that result in loss or degradation of sagebrush habitats that are important to this species should be closely evaluated for their impacts to sage-grouse. If important breeding habitat (leks, nesting or brood rearing habitat) is present in the project area, the Service recommends no project-related disturbance March 15 through June 30, annually. Minimization of disturbance during lek activity, nesting, and brood rearing is critical to sage-grouse persistence within these areas. Likewise, if important winter habitats are present, we recommend no project-related disturbance from November 15 through March 14.

We recommend you contact the Wyoming Game and Fish Department to identify important greater sage-grouse habitats within the project area, and appropriate mitigative measures to minimize potential impacts from the proposed project. The Service recommends surveys and mapping of important greater sage-grouse habitats where local information is not available. The results of these surveys should be used in project planning, to minimize potential impacts to this species. No project activities that may exacerbate habitat loss or degradation should be permitted in important habitats.

In Wyoming, information suggests that greater sage-grouse populations are negatively affected by energy development activities, especially those that degrade important sagebrush habitat, even when mitigative measures are implemented (Braun 1998, Lyon 2000, Naugle et al. 2006). Greater sage-grouse populations can repopulate areas developed for resource extraction after habitat reclamation for the species (Braun 1987). However, there is no evidence that populations attain their previous levels and reestablishment of sage-grouse in a reclaimed area may take 20 to 30 years, or longer (Braun 1998). Therefore, this project should be carefully evaluated for long-term and cumulative effects on the greater sage-grouse, since reclamation may not restore populations to pre-activity levels. The project proponent should ensure this activity does not exacerbate greater sage-grouse declines on either a local or range-wide level.

*Mountain Plover:* The Service has agreed to reopen the comment period in 2010 on the proposed rule to list the mountain plover as a threatened species (67 FR 72396, December 5, 2002) and to complete a new final determination on the proposal by May 1, 2011. Once the comment period is reopened and pending the completion of the new final determination, the mountain plover will be proposed for listing. Section 7(a)(4) of the Act, requires Federal agencies to confer with us on any action that is likely to jeopardize the continued existence of

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any species proposed for listing. Federal action agencies may also request a conference on any proposed action that may affect a species proposed for listing.

We encourage project planners to develop and implement protective measures should mountain plovers occur within project areas. Measures to protect the mountain plover from further decline may include: (1) avoidance of suitable habitat during the plover nesting season (April 10 through July 10), (2) prohibition of ground disturbing activities in prairie dog towns, and (3) prohibition of any permanent above ground structures that may provide perches for avian predators or deter plovers from using preferred habitat. Suitable habitat for nesting mountain plovers includes grasslands, mixed grassland areas and short-grass prairie, shrub-steppe, plains, alkali flats, agricultural lands, cultivated lands, sod farms, and prairie dog towns. We strongly encourage you to develop protective measures with an assurance of implementation should mountain plovers be found within the project areas.

*Pygmy Rabbit*: The Service is currently conducting a status review of the pygmy rabbit (*Brachylagus idahoensis*) for possible listing under the Act (78 FR 1312). Pygmy rabbits occur in portions of many western states including southwestern Wyoming where they have been confirmed to occur in isolated populations in Carbon, Lincoln, Uinta, Sweetwater, Sublette and Fremont counties. Pygmy rabbits are sagebrush obligates, and are primarily found in dense sagebrush communities where there is a forb understory. Conversion of sagebrush grasslands, habitat fragmentation and overgrazing are potential threats to pygmy rabbits. Project measures that retain large tracts of suitable habitat and corridors to adjacent habitat will aid in the conservation of this species.

### ***In situ* Uranium Mining**

High selenium concentrations can occur in wastewater from *in situ* mining of uranium ore as uranium-bearing formations are usually associated with seleniferous strata (Boon 1989). The disposal of this wastewater can expose migratory birds to selenium which is known to cause impaired reproduction and mortality in sensitive species of birds such as waterfowl.

The *in situ* mining wastewater is typically disposed of through deep-well injection or discharge into large evaporation ponds. One mining operation in Converse County disposes of the wastewater through land application using center-pivot irrigation after treatment for removal of uranium and radium.

In 1998, the Service conducted a study of grassland irrigated with wastewater from an *in situ* uranium mine and found that selenium was mobilized into the food chain and bioaccumulated by grasshoppers and songbirds (Ramirez and Rogers 2002). Disposal of the *in situ* wastewater through irrigation is not recommended by the Service due to the potential for selenium bioaccumulation in the food chain and adverse effects to migratory birds and aquatic species. Additionally, land application may result in the contamination of groundwater and eventually seep out and reach surface waters. Additionally, the selenium-contaminated groundwater could seep into low areas or basins in upland sites and create wetlands which would attract migratory birds and other wildlife.

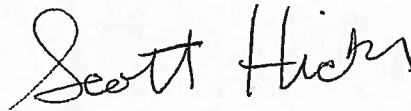



The Service is also concerned with the potential for elevated selenium in evaporation ponds receiving *in situ* wastewater. Waterborne selenium concentrations  $\geq 2 \mu\text{g/L}$  are considered hazardous to the health and long-term survival of fish and wildlife (Lemly 1996). Additionally, water with more than  $20 \mu\text{g/L}$  is considered hazardous to aquatic birds (Skorupa and Ohlendorf 1991). Chronic effects of selenium manifest themselves in immune suppression to birds (Fairbrother et al. 1994), which can make affected birds more susceptible to disease and predation. Selenium toxicity will also cause embryonic deformities and mortality (See et al. 1992, Skorupa and Ohlendorf 1991, Ohlendorf 2002).

If submerged aquatic vegetation and/or aquatic invertebrates are present in evaporation ponds with high waterborne selenium concentrations, extremely high dietary levels of this contaminant can be available to aquatic migratory birds. Ramirez and Rogers (2000) documented selenium concentrations ranging from 434 to 508  $\mu\text{g/g}$  in pondweed (*Potamogeton vaginatus*) collected from a uranium mine wastewater storage reservoir that had waterborne selenium concentrations ranging from 260 to 350  $\mu\text{g/L}$ .

We look forward to working with you throughout the planning process for this project. If you have any questions regarding this letter, please contact Travis Sanderson at the letterhead address or phone (307) 328-4333.

Sincerely,



 Brian T. Kelly  
Field Supervisor  
Wyoming Field Office

Enclosure (1)

cc: WDEQ-LQD, District Supervisor, Program Supervisor, Sheridan, WY (M. Rogaczewski)  
WGFD, Non-game Coordinator, Lander, WY (B. Oakleaf)  
WGFD, Statewide Habitat Protection Coordinator, Cheyenne, WY (M. Flanderka)

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## U.S. Fish and Wildlife Service, Wyoming Ecological Services Field Office

### Protections for Raptors

Raptors, or birds of prey, and the majority of other birds in the United States are protected by the Migratory Bird Treaty Act, 16 U.S.C. 703 (MBTA). A complete list of migratory bird species can be found in the Code of Federal Regulations at 50 CFR 10.13. Eagles are also protected by the Bald and Golden Eagle Protection Act, 16 U.S.C. 668 (Eagle Act).

The MBTA protects migratory birds, eggs and nests from possession, sale, purchase, barter, transport, import, export, and take. The regulatory definition of take, defined in 50 CFR 10.12, means to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to hunt, shoot, wound, kill, trap, capture, or collect a migratory bird. Activities that result in the unpermitted take (e.g., result in death, possession, collection, or wounding) of migratory birds or their eggs are illegal and fully prosecutable under the MBTA. Removal or destruction of active nests (i.e., nests that contain eggs or young), or causing abandonment of an active nest, could constitute a violation of the MBTA, the Eagle Act, or both statutes.

Removal of any active migratory bird nest or any structure that contains an active nest (e.g., tree) where such removal results in take is prohibited. Therefore, if nesting migratory birds are present on or near a project area, project timing is an important consideration during project planning. As discussed below, the Eagle Act provides additional protections for bald and golden eagles and their nests. For additional information concerning nests and protections under the MBTA, please see the U.S. Fish and Wildlife Service's (Service) Migratory Bird Permit Memorandum, MBMP-2.

The Service's Wyoming Ecological Services Field Office works to raise public awareness about the possible occurrence of birds in proposed project areas and the risk of violating the MBTA, while also providing guidance to minimize the likelihood that take will occur. We encourage you to coordinate with our office before conducting actions that could lead to the take of a migratory bird, their young, eggs, or active nests (e.g., construction or other activity in the vicinity of a nest that could result in a take). If nest manipulation is proposed for a project in Wyoming, the project proponent should also contact the Service's Migratory Bird Office in Denver at 303-236-8171 to see if a permit can be issued. Permits generally are not issued for an active nest of any migratory bird species, unless removal of the nest is necessary for human health and safety. If a permit cannot be issued, the project may need to be modified to ensure take of migratory birds, their young or eggs will not occur.

For infrastructure (or facilities) that have potential to cause direct avian mortality (e.g., wind turbines, guyed towers, airports, wastewater disposal facilities, transmission lines), we recommend locating structures away from high avian-use areas such as those used for nesting, foraging, roosting or migrating, and the travel zones between high-use areas. If the wildlife survey data available for the proposed project area and vicinity do not provide the detail needed to identify normal bird habitat use and movements, we recommend collecting that information prior to determining locations for any infrastructure that may create an increased potential for avian mortalities. We also recommend contacting the Service's Wyoming Ecological Services office for project-specific recommendations.

### Additional Protections for Eagles

The Eagle Act protections include provisions not included in the MBTA, such as the protection of unoccupied nests and a prohibition on disturbing eagles. Specifically, the Eagle Act prohibits knowingly taking, or taking with wanton disregard for the consequences of an activity, any bald or golden eagle or their body parts, nests, chicks or eggs, which includes collection, possession, molestation, disturbance, or killing. The term "disturb" is defined as "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior" (50 CFR 22.3 and see also 72 FR 31132).

The Eagle Act includes limited exceptions to its prohibitions through a permitting process. The Service has issued regulations concerning the permit procedures for exceptions to the Eagle Act's prohibitions (74 FR 46836), including permits to take golden eagle nests which interfere with resource development or recovery operations (50 CFR 22.25). The regulations identify the conditions under which a permit may be issued (i.e., status of eagles, need for action), application requirements, and other issues (e.g., mitigation, monitoring) necessary in order for a permit to be issued.

For additional recommendations specific to Bald Eagles please see our Bald Eagle information web page (<http://www.fws.gov/wyominges>).

### Recommended Steps for Addressing Raptors in Project Planning

Using the following steps in early project planning, agencies and proponents can more easily minimize impacts to raptors, streamline planning and permitting processes, and incorporate measures into an adaptive management program:

1. Coordinate with appropriate Service offices, Wyoming Game and Fish Department, Tribal governments, and land-management agencies at the earliest stage of project planning.
2. Identify species and distribution of raptors occurring within the project area by searching existing data sources (e.g., Wyoming Game and Fish Department, Federal land-management agencies) and by conducting on-site surveys.
3. Plan and schedule short-term and long-term project disturbances and human-related activities to avoid raptor nesting and roosting areas, particularly during crucial breeding and wintering periods
4. Determine location and distribution of important raptor habitat, nests, roost sites, migration zones and, if feasible, available prey base in the project impact area.
5. Document the type, extent, timing, and duration of raptor activity in important use areas to establish a baseline of raptor activity.
6. Ascertain the type, extent, timing, and duration of development or human activities proposed to occur, and the extent to which this differs from baseline conditions.
7. Consider cumulative effects to raptors from proposed projects when added to past, present, and reasonably foreseeable actions. Ensure that project mitigation adequately addresses cumulative effects to raptors.
8. Minimize loss of raptor habitats and avoid long-term habitat degradation. Mitigate for unavoidable losses of high-valued raptor habitats, including (but not limited to) nesting, roosting, migration, and foraging areas.
9. Monitor and document the status of raptor populations and, if feasible, their prey base post project completion, and evaluate the success of mitigation efforts.
10. Document meaningful data and evaluations in a format that can be readily shared and incorporated into wildlife databases (contact the Service's Wyoming Ecological Services office for details).

Protection of nesting, wintering (including communal roost sites), and foraging activities is considered essential to conserving raptors. In order to promote the conservation of migratory bird populations and their habitats, Federal agencies should implement those strategies directed by Executive Order 13186, "Responsibilities of Federal Agencies To Protect Migratory Birds" (66 FR 3853).

#### **Recommended Seasonal and Spatial Buffers to Protect Nesting Raptors**

Because many raptors are particularly sensitive to disturbance (that may result in take) during the breeding season, we recommend implementing spatial and seasonal buffer zones to protect individual nest sites/territories (Table 1). The buffers serve to minimize visual and auditory impacts associated with human activities near nest sites. Ideally, buffers would be large enough to protect existing nest trees and provide for alternative or replacement nest trees. The size and shape of effective buffers vary depending on the topography and other ecological characteristics surrounding the nest site. In open areas where there is little or no forested or topographical separation, distance alone must serve as the buffer. Adequate nesting buffers will help ensure activities do not take breeding birds, their young or eggs. For optimal conservation benefit, we recommend that no temporary or permanent surface occupancy occur within species-specific spatial buffer zones. For some activities with very substantial auditory impacts (e.g., seismic exploration and blasting) or visual impacts (e.g., tall drilling rig), a larger buffer than listed in Table 1 may be necessary, please contact the Service's Wyoming Ecological Services office for project specific recommendations on adequate buffers.

As discussed above, for infrastructure that may create an increased potential for raptor mortalities, the spatial buffers listed in Table 1 may not be sufficient to reduce the incidence of raptor mortalities (for example, if a wind turbine is placed outside a nest disturbance buffer, but inadvertently still within areas of normal daily or migratory bird movements); therefore, please contact the Service's Wyoming Ecological Services office for project specific recommendations on adequate buffers.

Buffer recommendations may be modified on a site-specific or project-specific basis based on field observations and local conditions. The sensitivity of raptors to disturbance may be dependent on local topography, density of vegetation, and intensity of activities. Additionally, individual birds may be habituated to varying levels of disturbance and human-induced impacts. Modification of protective buffer recommendations may be considered where biologically supported and developed in coordination with the Service's Wyoming Ecological Services Field Office.

Because raptor nests are often initially not identified to species (e.g., preliminary aerial surveys in winter), we first recommend a generic raptor nest seasonal buffer guideline of January 15<sup>th</sup> – August 15<sup>th</sup>. Similarly, for spatial nesting buffers, until the nesting species has been confirmed, we recommend applying a 1-mile spatial buffer around the nest. Once the raptor species is confirmed, we then make species-specific and site-specific recommendations on seasonal and spatial buffers (Table 1).

Activities should not occur within the spatial/seasonal buffer of any nest (occupied or unoccupied) when raptors are in the process of courtship and nest site selection. Long-term land-use activities and human-use activities should not occur within the species-specific spatial buffer of occupied nests. Short-term land use and human-use activities proposed to

occur within the spatial buffer of an occupied nest should only proceed during the seasonal buffer after coordination with the Service, State, and Tribal wildlife resources management agencies, and/or land-management agency biologists. If, after coordination, it is determined that due to human or environmental safety or otherwise unavoidable factors, activities require temporary incursions within the spatial and seasonal buffers, those activities should be planned to minimize impacts and monitored to determine whether impacts to birds occurred. Mitigation for habitat loss or degradation should be identified and planned in coordination with applicable agencies.

Please contact the Service's Wyoming Ecological Services Field Office if you have any questions regarding the status of the bald eagle, permit requirements, or if you require technical assistance regarding the MBTA, Eagle Act, or the above recommendations. The recommended spatial and seasonal buffers are voluntary (unless made a condition of permit or license) and are not regulatory, and they do not supersede provisions of the MBTA, Eagle Act, Migratory Bird Permit Memorandum (MBMP-2), and Endangered Species Act. Assessing legal compliance with the MBTA or the Eagle Act and the implementing regulations is ultimately the authority and responsibility of the Service's law enforcement personnel. Our recommendations also do not supersede Federal, State, local, or Tribal regulations or permit conditions that may be more restrictive.

**Table 1. Service's Wyoming Ecological Services Field Office's Recommended Spatial and Seasonal Buffers for Breeding Raptors**

<b>Raptors of Conservation Concern (see below for more information)</b>		
<b>Common Name</b>	<b>Spatial buffer (miles)</b>	<b>Seasonal buffer</b>
Golden Eagle	0.5	January 15 - July 31
Ferruginous Hawk	1	March 15 - July 31
Swainson's Hawk	0.25	April 1 - August 31
Bald Eagle	see our <u>Bald Eagle</u> information web page	
Prairie Falcon	0.5	March 1 - August 15
Peregrine Falcon	0.5	March 1 - August 15
Short-eared Owl	0.25	March 15 - August 1
Burrowing Owl	0.25	April 1 - September 15
Northern Goshawk	0.5	April 1 - August 15
<b>Additional Wyoming Raptors</b>		
<b>Common Name</b>	<b>Spatial buffer (miles)</b>	<b>Seasonal buffer</b>
Osprey	0.25	April 1 - August 31
Cooper's Hawk	0.25	March 15 - August 31
Sharp-shinned Hawk	0.25	March 15 - August 31
Red-tailed Hawk	0.25	February 1 - August 15
Rough-legged Hawk (winter resident only)	----	----
Northern Harrier	0.25	April 1 - August 15
Merlin	0.5	April 1 - August 15
American Kestrel	0.125	April 1 - August 15
Common Barn Owl	0.125	February 1 - September 15
Northern Saw-whet Owl	0.25	March 1 - August 31
Boreal Owl	0.25	February 1 - July 31
Long-eared Owl	0.25	February 1 - August 15
Great Horned Owl	0.125	December 1 - September 31
Northern Pygmy-Owl	0.25	April 1 - August 1
Eastern Screech -owl	0.125	March 1 - August 15
Western Screech-owl	0.125	March 1 - August 15
Great Gray Owl	0.25	March 15 - August 31

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### **Raptors of Conservation Concern**

The Service's Birds of Conservation Concern (2008) report identifies "species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing" under the Endangered Species Act (16 U.S.C 1531 et seq.). This report is intended to stimulate coordinated and proactive conservation actions among Federal, State, and private partners. The Wyoming Partners in Flight Wyoming Bird Conservation Plan identifies priority bird species and habitats, and establishes objectives for bird populations and habitats in Wyoming. This plan also recommends conservation actions to accomplish the population and habitat objectives.

We encourage project planners to develop and implement protective measures for the Birds of Conservation Concern as well as other high-priority species identified in the Wyoming Bird Conservation Plan. For additional information on the Birds of Conservation Concern that occur in Wyoming, please see our Birds of Conservation Concern web page.

### **Additional Planning Resources**

Avian Power Line Interaction Committee (APLIC). 2006. Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006. Edison Electric Institute, APLIC, and the California Energy Commission. Washington, D.C. and Sacramento, CA.

Edison Electric Institute and the Raptor Research Foundation. 1996. Suggested Practices for Raptor Protection on Power Lines - The State of the Art in 1996. Washington, D.C.

Edison Electric Institute's Avian Power Line Interaction Committee and U.S. Fish and Wildlife Service. 2005. Avian Protection Plan Guidelines.

Edison Electric Institute and the Raptor Research Foundation. 1994. Mitigating Bird Collisions with Power Lines - The State of the Art in 1994. Washington, D.C.

U.S. Fish and Wildlife Service. 2000. Siting, Construction, Operation and Decommissioning of Communications Towers and Tower Site Evaluation Form (Directors Memorandum September 14, 2000), Arlington, Virginia.

U.S. Fish and Wildlife Service. 2007. National Bald Eagle Management Guidelines. United States Department of Interior, Fish and Wildlife Service, Arlington, Virginia. 23 pp.

Wyoming Game and Fish Department Internet Link to Raptor Information

### **References**

50 CFR 10.12 – Code of Federal Regulations. Title 50--Wildlife and Fisheries, Chapter I--United States Fish and Wildlife Service, Department of the Interior, Part 10--General Provisions.

50 CFR 10.13– Code of Federal Regulations. Title 50--Wildlife and Fisheries, Chapter I--United States Fish and Wildlife Service, Department of the Interior, Part 10--General Provisions.

50 CFR 22.3 – Code of Federal Regulations. Title 50--Wildlife and Fisheries, Chapter I--United States Fish and Wildlife Service, Department of the Interior, Part 22—Eagle Permits.

50 CFR 22.25– Code of Federal Regulations. Title 50--Wildlife and Fisheries, Chapter I--United States Fish and Wildlife Service, Department of the Interior, Part 22—Eagle Permits.

66 FR 3853 - Presidential Documents. Executive Order 13186 of January 10, 2001. Responsibilities of Federal Agencies To Protect Migratory Birds. Federal Register, January 17, 2001.

72 FR 31132 - Protection of Eagles; Definition of "Disturb". Final Rule. Federal Register, June 5, 2007.

74 FR 46836 - Eagle Permits; Take Necessary To Protect Interests in Particular Localities. Final Rule. Federal Register, September 11, 2009.

U.S. Fish and Wildlife Service. 2003. Migratory Bird Permit Memorandum, MBMP-2, Nest Destruction (Directors Memorandum April 15, 2003), Washington, D.C.

U.S. Fish and Wildlife Service. 2008. Birds of Conservation Concern 2008. United States Department of Interior, Fish and Wildlife Service, Division of Migratory Bird Management, Arlington, Virginia. 85 pp.



**Addendum OP-A6-B**

**PIAA Analysis**

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