

## Mitigation Guidelines for Surface-Disturbing Activities

### Introduction:

The mitigation guidelines and guidance outlined below are designed to inform the public of the general rules under which potentially surface and wildlife disturbing activities may take place on BLM-administered lands in the Glennallen District and what the goals and general rules are designed to achieve. The guidelines will form the basis for stipulations for permitted activities and conditions for actions requiring plans of operations and environmental assessments. The guidelines have been drafted as stipulations, though managers may alter the wording and entirely waive some provisions, provided that protection standards outlined in the guidance are maintained.

The guidelines assist in the planning process. Although all of them may not be applied to all future surface-disturbing activities in the district, and additional restrictions may be imposed in certain cases to achieve stated planning goals and objectives, the planning team, in the course of analyzing the impacts of the alternatives, assumes they will apply.

Some of the specific guidelines are dependent on decisions reached in this planning process. Consequently some guidelines would apply only to specific alternatives. Once the plan is approved, the guidelines will be revised to reflect the restrictions adopted by the plan.

### Guidelines and Guidance:

#### 1. Surface Disturbance Mitigation:

##### Guidelines:

- a. Surface disturbance will be prohibited in any of the following areas:
  - Slopes in excess of 30%
  - Land within 200 feet of anadromous streams or lakes and streams with spawning or incubating habitat for priority resident species, dependent on local soil and slope conditions.
  - Land within 200 feet of lakes and streams, dependent on local soil and slope conditions.
  - Land within 200 feet of wetlands, dependent on local soil and slope conditions.

Modifications to these limitation in any year may be approved in writing by the authorizing officer.

- b. Overland movement (where roads are not available) of equipment, materials, and supplies is allowed when soils are frozen and eight inches of snow cover is available to prevent soil compaction and loss or damage to vegetation.

- c. Roads and trails are designed, constructed, and maintained in a manner that minimizes the effect on landscape hydrology; concentration of overland water flow, subsurface water flows; minimizes erosion, and minimizes sediment transport.
- d. Treatments to alter the vegetative composition of a site, such as prescribed burning, seeding, or planning will be based on the potential of the site and will:
  - Minimize soil compaction and thereby retain infiltration, permeability, and soil moisture storage
  - Protect water quality
  - Help prevent the introduction and spread of noxious weeds.
  - Contribute to the diversity of plant communities, and plant community composition and structure.
- e. Soil erosion will be minimized by restricting the removal of vegetation adjacent to streams and by stabilizing disturbed soil as soon as possible. (NOTE: This is not intended to preclude activities which by nature must occur in riparian or wetland areas, such as placer mining.)
- f. When necessary for erosion control and stabilization, certified native seed will be used for revegetation, with exceptions made for establishment of an annual cover crop to facilitate native revegetation.

Guidance:

The surface disturbing guidelines are intended to prevent unacceptable soil erosion, degradation of water quality and important fish habitat. Surface disturbing activities would be restricted or prohibited in the above areas, unless or until the permittee or his or her designated representative and the surface management agency arrive at an acceptable plan for mitigation of anticipated impacts. This negotiation would occur prior to development. Waiver or modification of requirements developed from this guideline may be made by the authorizing officer but must be based upon environmental analysis or proposals, such as, plans of developments, plans of operations, Application for Permit to Drill, and, if necessary, must allow for other mitigation to be applied on a site-specific basis.

## 2. Riparian/Wetland Mitigation

Guidelines: All guidelines listed above apply to riparian/wetlands areas. In addition:

- a. Structural and vegetative treatment in riparian and wetland areas will be compatible with the capability of the site, including the system's hydrologic regime, and maintenance or restoration of properly functioning condition.
- b. New structures are located away from riparian or wetland areas if they conflict with achieving or maintaining riparian or wetland function. Existing structures

are used in a way that does no conflict with riparian or wetland functions or are relocated or modified when incompatible. (NOTE: This is not intended to preclude activities that by nature must occur within riparian or wetland areas, such as placer mining.)

- c. Projects affecting water, and associated resources, will be designed to protect water quality and quantity.
- d. Human use will be managed to achieve and maintain water quality standards and avoid human waste management problems and water quality impacts.
- e. To the extent feasible and prudent, channeling, diversion, or damming that will alter the natural hydrological conditions and have a significant adverse impact upon riparian habitat will be avoided.
- f. Land management practices will be directed to avoid or minimize adverse impacts upon hydrological, habitat, subsistence, and recreational values of public wetlands.
- g. Activities in wetlands will comply with Federal and State permit requirements related to the fill, removal, and alteration of wetlands.

Guidance:

Riparian/wetland mitigation measures are designed to maintain riparian areas in proper functioning condition and to comply with State and Federal water quality standards.

### 3. Road Mitigation

Guidelines:

- a. Stream crossing should be avoided. When a stream might be crossed to construct a road, the crossing should be as close as possible to a 90 degree angle to the stream. Stream crossings should be made at stable sections on the stream channel.
- b. Stream crossing will not occur in critical spawning habitat.
- c. Construction in wetlands, floodplains, and other poorly drained areas should be minimized and existing drainage patterns maintained. Culverts should be installed where necessary to enable free movement of fluids, mineral salts, and nutrients.
- d. Bridges and culverts should be large enough to accommodate or positioned to avoid altering the direction and velocity of stream flow or interfering with

migrating or spawning activities of fish and wildlife. Bridges and culverts should span the entire non-vegetated stream channel; those intended for permanent use should be large enough to accommodate at least the 25-year peak discharge.

- e. Disturbed stream banks should be recommended, re-vegetated, or other protective measures should be taken to prevent soil erosion into adjacent waters.
- f. During winter, snow ramps, snow bridges, or other methods should be used to provide access across frozen rivers, lakes, and stream to avoid cutting, eroding, or degrading of banks. These facilities should be removed immediately after final use.
- g. All road construction and maintenance will comply with water quality standards of the State of Alaska.

#### 4. Wildlife Disturbing Mitigation

##### Guidelines:

- a. To protect important big game winter habitat (caribou, moose, mountain goat), surface occupancy or disturbance will not be allowed from October 15, March 31 within certain areas encompassed by the authorization. The same criteria apply to defined big game calving/birthing areas from May 1 to June 15. These limitations may or may not apply to ongoing long-term operation and maintenance of a developed project, pending environmental analysis of any operational or production aspects. Modification to this limitation in any year may be approved in writing by authorized officer.
- b. To protect important raptor (bald eagle, osprey) nesting habitat, activities or surface occupancy or disturbance exceeding fourteen days would not be allowed with  $\frac{1}{4}$  mile of historically active nest sites from April 1 to August 31. This limitation may or may not apply to ongoing long-term operation and maintenance of a developed project, pending environmental analysis of any operational or production aspects. Modification to this limitation in any year may be approved in writing by the authorizing officer.
- c. To protect trumpeter swan nesting habitat, activities or surface use exceeding fourteen days would not be allowed in primary trumpeter swan breeding habitat from April 1 to September 15. Modification to this limitation in any year may be approved in writing by the authorizing officer.
- d. To protect trumpeter swan nesting and staging habitat, recreational developments, permits, or leases generally would not be allowed on lakes or the shores of lakes which have historically active nest sites or are used as staging areas.

- e. Overhead powerline construction will be avoided in primary trumpeter swan breeding habitat.
- f. No activities or surface use will be allowed on that portion of the authorized area identified within (*legal description*) for the purpose of protecting (*e.g. nesting site of trumpeter swan or bald eagles*) habitat. Modifications to this limitation in any year may be approved in writing by the authorizing officer.
- g. Portions of the authorized use area legally described as (*legal description*) are known or suspected to be essential habitat for (*name*) which is a threatened/endangered species. Prior to conducting any onsite activities, the lessee/permittee will be required to conduct inventories or studies in accordance with BLM and Fish and Wildlife Service guidelines to verify the presence or absence of this species. In the event that (*name*) occurrence is identified, the lessee/permittee will be required to modify operation plans to include the protection requirements of this species and its habitat (*e.g. seasonal use restrictions, occupancy limitations, facility design modifications ect.*)
- h. In mountain goat habitat, no timber harvest should occur within ½ mile of alpine tree line, except with approval and design consultation with biologist.

Guidance:

The Wildlife Disturbing Guideline is intended to provide protection for habitat of priority species in the district. BLM will have to provide legal descriptions of restricted areas for some legal documents such as oil and gas leases; these descriptions should be measurable and legally definable. There are no minimum subdivision requirements. The area delineated can and should be defined as necessary, based upon current biological data, prior to the time of processing an application and issuing the use authorization. The legal description must eventually become a condition for approval or the permit, plan of development, and/or other use authorization. Item g, regarding the prohibition of activity or surface use at all times, not just during a specific period, should only be imposed to protect areas or values that limit life-cycle activities (*e.g. known threatened and endangered species habitat*) that cannot be protected using seasonal restrictions.

Waiver or modification of requirements developed from this guideline must be based upon environmental analysis of proposals, such as plans of development, plans of operation, and Application for Permit to Drill, and, if necessary, must allow for other mitigation to be applied on a site specific basis.

## 5. Cultural Resource Disturbance Mitigation

### Guidance:

- a. To protect cultural properties, surface disturbance will not be allowed from May 16 to October 15 in TLAD. This limitation may or may not apply to ongoing long-term operation and maintenance of a developed project, pending environmental analysis of any operational or production aspects. Modifications to this limitation any year may be approved in writing by the authorizing officer.

### Guidance:

When a proposed discretionary land use has potential for affecting the characteristics which qualify as cultural property for the National Register of Historic Places, mitigation will be considered. In accordance with Sections 106, 110, and 101d of the Historic Preservation Act, procedures under BLM's 1997 National Programmatic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation in arriving at determination regarding the needs and type of mitigation to be required.

The preferred strategy for treating potential effects on cultural properties is "avoidance". If avoidance involves project relocation, the new project area may also require cultural resource inventory. If avoidance is imprudent or unfeasible, appropriate mitigation may include excavation (data recovery), stabilization, monitoring, protection barriers and signs, interpretation and education, or other physical and administrative measures.

Reports documenting results of cultural resource inventory, evaluation, and the establishment of mitigation alternatives (if necessary) shall be written according to standards contained in BLM Manuals, the 1998 BLM protocol with the State Historic Preservation Officer, the cultural resource permit stipulations, and other policy issued by the BLM. These reports must provide sufficient information for Section 106 consultation. Reports shall be reviewed for adequacy by the appropriate BLM archaeologist. If cultural properties on, or eligible for, the National Register are located within these areas of potential impact and cannot be avoided, the authorized officer shall begin the Section 106 consultation process in accordance with the procedures contained in the 1997 National Programmatic Agreement for Section 106 compliance and its implementing 1998 Protocol with the Alaska SHPO.

Mitigation measures shall be implemented according to the mitigation plan approved by the BLM Authorizing Officer. Such plans are usually prepared by the land use applicant's contract archaeologist according to BLM specifications. Mitigation plans will be reviewed as part of Section 106 consultation for National Register eligible or listed properties. The extent and nature of recommended mitigation shall be commensurate with the significance of the cultural resource

involved and the anticipated extent of the damage. Reasonable costs for mitigation will be borne by the land use applicant. Mitigation must be cost effective and realistic. It must consider project requirements and limitations, input from concerned parties, and be approved or formulated by the BLM.

When a previously unknown Native American burial is found, its management would follow procedures according to the Native American Graves Protection and Repatriation Act, its regulations, and BLM policy. This included notification of tribes likely related to the grave.

Mitigation of paleontological sites will be treated on a case-by-case basis in accordance with BLM Manual and handbook for Paleontological Resource management. Factors such as site significance, economics, safety, and project urgency must be taken into account when making a decision to mitigate. Authority to protect (through mitigation) such values is provided for in FLPMA, Section 102 (8). When avoidance is not possible, appropriate mitigation may include excavation (data recovery), stabilization, monitoring, protection barriers and signs, or other physical and administrative protection measures.

## 6. Special Resource Mitigation

### Guideline:

- a. To protect (*resource value*), activities or surface disturbance will not be allowed (*i.e. within a specific distance of the resource value or between data-to –date*) in (*legal subdivision*). This limitation may or may not apply to ongoing long-term operation and maintenance of a developed project, pending environmental analysis of any operational or production aspects. Modification to this limitation in any year may be approved in writing by the authorizing officer.

### Guidance:

The Special Resource Mitigation Guideline is intended for use only in site-specific situations where one of the first three general mitigation guidelines will not adequately address the concern. These may include among others, recreation areas, special management areas, sections of major rivers, prior existing rights-of-way, and occupied dwellings. The resource value, location, and specific restrictions on development will be required prior to development and will become a condition for approval of the permit, plan of development, or other use authorizations.

Waiver or modification of requirements developed from this guideline must be based on environmental analysis of proposals, such as plans of development, plans of operations, and Application for Permit to Drill, and, if necessary, must allow for other mitigation to be applied on a site-specific basis.

## 7. No Surface Occupancy Mitigation

### Guideline:

- a. No surface occupancy will be allowed on the following described lands (*legal subdivision/area*) because of (*resource value*).

### Guidance:

The No Surface Occupancy (NSO) Mitigation Guidelines is intended for use only when other mitigation is determined insufficient to adequately protect public interest and is the only alternative to “no development” or “no leasing”. The legal subdivision and resource value of concern must be identified and be tied to an NSO land use planning decision. The resources that might be protected under this provision may include, among others, recreation areas (such as campgrounds) and special management areas (such as ACECs and W&SRs).

Waiver of or exception(s) to the NSO requirement will be subject to the same test used to initially justify its imposition. If, upon evaluation of the site-specific proposal, it is found that less restrictive mitigation would adequately protect the public interest or value of concern, then a waiver of exception to the NSO requirement is possible. The record must show that because conditions or uses have changed, less restrictive requirements will protect the public interest. An environmental analysis must be conducted and documented (EA or EIS, as necessary) in order to provide the basis for a waiver or exception to an NSO planning decision. If the waiver or exception is found to be consistent with the intent of the planning decision, a plan amendment would be required before the waiver or exception could be granted.

When considering the “no development” or “no leasing” option, a rigorous test must be met and fully documented in the record. This test must be based upon stringent standards described in the land use planning document. Since rejection of all development rights is more severe than the most restrictive mitigation requirement, the record must show that consideration was given to development subject to reasonable mitigation, including No Surface Occupancy. The record must also show that other mitigation was determined to be insufficient to adequately protect the public interest. A “no development” or “no leasing” decision should not be made solely because it appears that conventional methods of development would be unfeasible, especially, where an NSO restriction may be acceptable to a potential permittee. In such cases, the potential permittee should have the opportunity to decide whether or not to go ahead with the proposal (or accept the use authorization), recognizing that an NSO restriction is involved.