

## Chapter 3: Design Criteria

### Guidelines Component

Guidelines provide technical specifications and guidance for project and activity decision-making to help achieve desired conditions and objectives. Guidelines are not commitments or final decisions approving projects or activities.

A project or activity will apply relevant guidelines, unless there is a documented reason to adjust the guideline. If adjustment would be neutral with regard to the relevant social, economic, or ecological condition or would be a more appropriate way to achieve desired conditions and objectives, the Responsible Official will describe the proposed adjustment and explain the relationship to desired conditions and objectives in the project-level environmental analysis and decision documents.,

#### Plan Components

[Desired Conditions](#)

[Objectives](#)

[Suitability of Areas](#)

[Special Areas](#)

**Guidelines**

#### Soils, Watersheds, and Aquatic Ecosystems

Guidelines Plan Component

- a. When riparian conservation areas (RCAs) are intact and functioning at desired condition, then management activities should maintain or improve that condition.
- b. When RCAs are not intact and functioning at desired condition, then management activities should include restoration components that exceed full compensation for project effects to promote a trend toward desired conditions.
- c. Management activities in RCAs should not result in long-term degradation to aquatic conditions. Limited short-term effects from activities in the RCAs may be acceptable when they support long-term benefits to the RCAs and aquatic resources.
- d. Soil and snow should not be sidecast into surface water.
- e. New, replacement, and reconstructed crossing sites (culverts, bridges and other stream crossings) should be designed to:
  - Accommodate 100-year floods including associated bedloads and debris.

- Prevent diversion of stream flow out of the channels.
  - Provide and maintain fish passage up to bankfull discharge.
- f. On roads being put into long-term storage crossing locations should provide fish passage.
  - g. Grazing management should prevent trampling of native fish redds by livestock.
  - h. Minimum impact suppression tactics should be used within RCAs.
  - i. Trees felled in RCAs for safety concerns should be left on-site.
  - j. When drafting water from streams, pumps should be screened to prevent entrainment<sup>1</sup> of fish and aquatic organisms.
  - k. Project proposals larger than 1,000 acres that are located within active restoration watersheds should include aquatic restoration elements or contribute to long-term improvement of watershed and aquatic ecosystem conditions (prescribed fire and wildland fire use are excluded).
  - l. New stream diversions and associated ditches should be screened to prevent loss of fish and other aquatic organisms.
  - m. When designing projects that may affect movement or migration of fish, develop measures to prevent new introductions of non-native fish.

### Vegetative Composition, Size Class, and Structure

- a. Revegetation projects should favor native seed mixes; use locally collected seed if possible.
- b. Fire suppression strategies should be designed to minimize impacts on resources.

### Wildlife and Plant Species Diversity

- a. Project activities should not occur within one mile of known active dens or rendezvous sites of wolves between April 15 and June 30.

<sup>1</sup> Screens are needed on pumps to prevent fish or other aquatic organisms from being sucked into them.

- b. All special use permits and operating plans should specify sanitation measures to reduce wildlife conflicts and minimize bear mortality.
- c. The following table displays the wildlife species of interest and project guidelines for each species or group of species that require management above what is provided with existing direction for ecosystem diversity.

Table 14: Animal species of interest with guidelines specific to a group or species.

Common name	Species scientific name	Guideline
common loon	<i>Gavia immer</i>	Continue to cooperate in educating the public on how to avoid disturbing nesting loons.
peregrine falcon	<i>Falco peregrinus</i>	Continue with cooperative monitoring.
Townsend's big-eared bat	<i>Corynorhinus townsendii</i>	Survey mines, caves and structures for hibernacula or nurseries before implementing projects. Protect occupied sites.
Rocky Mountain elk white-tailed deer	<i>Cervus elaphus</i> <i>Odocoileus virginianus</i>	Work with the state towards meeting population objectives using vegetation and access management.

- d. The following table displays the wildlife species of concern and project guidelines for each species or group of species that require management above what is provided with existing direction for ecosystem diversity.

Table 15: Animal species of concern with guidelines specific to a group of species,

Common name	Species scientific name	Guidelines
alpine mountainsnail carinate mountainsnail lake disc	<i>Oreohelix alpina</i> <i>Oreohelix elrodi</i> <i>Discus brunsoni</i>	Survey suitable habitat that may be impacted by a project if that project is within 20 miles of a known dry mollusk population. Occupied habitat should be protected by a 50-meter buffer zone or some other appropriate mitigation.

- e. The current Interagency Grizzly Bear Committee guidelines should guide project planning and implementation.
- f. The over-snow vehicle use map would be used for consistency for motorized access and road closures in big game winter range habitat.
- g. In the Emery Creek winter range and calving areas, motorized access restrictions from December 1 to July 1 should be applied as necessary to prevent disturbance to big game.
- h. During facilities planning, new facilities (or expansion of existing facilities) in important wildlife connectivity areas should be avoided. Expansion and/or improvement of existing facilities should be favored over the construction of new ones.
- i. When designing projects in important wildlife connectivity areas, consider lynx conservation agreements and grizzly bear Memorandum of Understanding regarding connectivity.
- j. In occupied grizzly bear habitat where traffic safety is not an issue, a vegetative screen should be maintained when brushing roads.
- k. The Lynx Conservation Assessment and Strategy (LCAS) is being followed. Dialogue with US Fish and Wildlife Service continues, to determine the best ways to incorporate the science with respect to the Canada lynx into Forest Service management.
- l. During project planning, applicable elements of the Montana Bald Eagle Management Plan should be incorporated.
- m. Water howellia: Incorporate Flathead Conservation Strategy prescriptions which are located on page 17-19 of the conservation strategy.
- n. For Spalding's catchfly (*Silene spaldingii*), incorporate recommendations for grazing, invasive plant management and prescribed fire in the Montana Natural Heritage Program Conservation Strategy, pages 41-42.
- o. For plant species of concern and species of interest:
  - Minimize and/or mitigate impacts to plant species of concern and species of interest from ground disturbance, grazing, recreation use, and herbicide application. Short-term impacts may be considered when outweighed by long-term benefits to species of concern and species of interest populations and their habitats.

- Prevent invasive plant introduction and spread at known sites for all species of concern and species of interest plants.
  - Minimize and/or mitigate impacts to plants from rock climbing routes for species of concern and species of interest associated with (1) canyon walls, crevices, rock outcrops, and slides and (2) vernal moist cliffs and mossy talus slopes. Short-term impacts may be considered when outweighed by long-term benefits to species of concern and species of interest populations and their habitats.
- p. Short-term impacts in riparian conservation areas (RCAs) may be considered when long-term benefits to species of concern or species of interest populations and their habitats would result.
- q. In RCAs, adverse impacts on species of concern or species of interest should be avoided or mitigated.
- r. The RCA widths described in the Glossary would apply except where site-specific analysis supports modification.

### Forest Products

- a. Vegetation management projects should be designed to integrate forest health, fuels, and timber management objectives.
- b. Timber harvesting or salvage logging should not be considered appropriate tools to achieve desired conditions on other lands classified as suitable for timber harvesting in the following management areas:
- MA 1.2 – Recommended Wilderness
  - MA 2.1 – Wild River Segments (outside designated wilderness)
  - MA 3.1 – Jewel Basin Hiking Area and botanical areas
  - MA 3.2 – Research Natural Areas

### **National Forest System Lands**

- a. Newly acquired lands should be assigned a management area designation that is similar to or compatible with surrounding management areas.
- b. Existing communication sites and facilities should be utilized to the fullest practical extent before approving new facilities and locations.
- c. Obsolete or unused communication facilities should be removed from National Forest System land.
- d. New utilities (such as power lines, telephone lines, or gas lines) should be co-located within existing corridors whenever feasible, or within existing rights-of-way (including road rights-of-way) and follow major transportation routes.

### **Livestock Grazing**

- a. Allotments should be closed where: (1) tree regeneration in old harvest units or burned areas eliminates the transitory forage base for domestic livestock or (2) no management option can maintain progress towards desired condition or Plan objectives.
- b. Domestic livestock grazing should not be allowed in developed campgrounds unless specifically permitted.
- c. Allotments should include the following utilization guidelines to maintain stable soil and vegetation conditions and arrest any downward ecological trend until the completion of an updated site-specific grazing prescription. These guidelines would apply to recreational stock use as well.
  - Thirty-five percent maximum allowable utilization on palatable and available plant species on big game winter range sites.
  - Fifty percent maximum allowable utilization on palatable and available plant species on all other upland and riparian primary, secondary or transitory rangeland sites.
  - Invasive plants are not palatable species and are excluded from utilization measurements.

- For continuous season-long grazing, utilization should not exceed 25 percent of palatable and available plant species in riparian areas or 35 percent of palatable and available plant species in upland areas.
- d. On allotment pastures that have received substantial broadcast herbicide treatment, grazing should be rested or deferred for at least one season.
- e. If allotments or pastures used by cattle are appreciably affected by wildfire they should be rested or deferred from grazing for a period necessary for vegetative recovery.

### **Minerals and Geology**

- a. Caving groups should have a Memorandum of Understanding that addresses their use of caves including: caving experience, schedules, party sizes, campsites, length of stay, exploration methods, equipment removal, campsite cleanup, rescue plan, and safety procedures.
- b. Caves (including alpine karsts) should not be identified on maps or discussed in brochures without a plan that authorizes such activities.
- c. Permanent or semi-permanent reference marking, climbing aids, facilities or caches should not be allowed in or around caves (including alpine karsts) or climbing faces.

### **Heritage Resources**

The programmatic agreements between Region One (northern region office) of the Forest Service, the Montana State Historic Preservation Office, and the Advisory Council on Historic Preservation should be followed.

### **Developed and Dispersed Recreation**

- a. When issuing and re-issuing permits for recreation residences, recreation resorts, outfitter and guide operations, ski areas, and recreation events, permit conditions should include food storage requirements and protection requirements for bears.
- b. Dispersed and developed recreation use or occupancy should be adjusted if they are impacting water quality, riparian areas, aquatic ecosystems (including instream habitat features), or other resource

values. Where adjustment measures, such as education, use limitations, traffic control devices, increased maintenance, relocation of facilities, and/or specific site closures, are not effective in reducing resource impacts, applicable practices or site occupancy should be eliminated.

- c. In developed campgrounds located within a riparian conservation area (RCA), trees may be felled and removed if they pose a safety risk.
- d. In dispersed recreation sites located within an RCA, trees may be felled if they pose a safety risk. Trees may be left in streams or on-site if they are not deemed an attractive nuisance.

### Designated Wilderness

- Wilderness party sizes should be limited to the following:
  - Bob Marshall Wilderness Complex: 15 persons, 35 stock
  - Mission Mountains Wilderness: 8 persons, 8 stock.

### Access and Travel Management

- a. When roads are closed to wheeled vehicular traffic and converted to maintenance level 1, all stream crossing structures should be evaluated and treated<sup>1</sup>, if necessary, to minimize or avoid the potential for failure.
- b. If a road is planned to be converted to a trail and crossing structures are needed for trail use (winter or summer), they should be evaluated and treated<sup>1</sup>, if necessary, to minimize or avoid the potential for a crossing failure.
- c. As soon as access use is completed on temporary roads, they should be stabilized and closed to motorized traffic and treated for invasive plants.
- d. When constructing, reconstructing, or maintaining trail systems, the motorized vehicle maximum width (the distance from the outside of the left tire to the outside of the right tire or maximum tire width for a motorcycle) should fit within the existing trail or road tread or road profile.

<sup>1</sup> Treatments at stream crossings may include construction of overflow channels, vegetation removal, structure modification, etc.



- e. Following vegetation management activities in areas with potential for off-highway vehicle (OHV) use, skid trails should be blocked or obliterated to prevent illegal use. Skid trails should also be treated for invasive plants.
- f. When decommissioning roads that are used as winter motorized routes, consider designing stream crossings that provide for over-snow use.

## Other Design Criteria

The Plan Set of Documents contains a wide variety of other guidance for project and activity decision-making. This guidance may be in the form of laws, regulations, policy, Memoranda of Understanding, Flathead Forest Reference Guides, conservation strategies, or programmatic agreements.

