

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.

Plan Components

Desired Conditions

Objectives

Suitability of Areas

Special Areas

Guidelines

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.

Soils, Watersheds, and Aquatic Ecosystems

- 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. Crossing location on roads being put into long-term storage 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 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. Minimum impact fire management and suppression techniques should be designed to minimize impacts on resources.
- c. Roads closed for two years or more, or scheduled for obliteration, should be treated for invasive plants before they become impassable.

Wildlife and Plants 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.
- b. Special use permits and operating plans should specify sanitation measures to reduce wildlife conflicts, and minimize bear mortality.

- c. When designing projects in important wildlife connectivity areas, consider lynx conservation agreements and Grizzly Bear Memorandum of Understanding regarding connectivity.
- d. 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.
- e. During project planning, applicable elements of the Montana Bald Eagle Management Plan should be incorporated.
- f. 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 12: Animal species of interest with guidelines specific to a group or species.

Common Name	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	<i>Cervus elaphus</i>	Work with the state towards meeting population objectives using vegetation and access management.
mule deer	<i>Odocoileus hemionus</i>	
bighorn sheep	<i>Ovis canadensis</i>	Manage vegetation to reduce high stand density in bighorn sheep ranges. Buffer sheep herds from domestic sheep and goats.

- g. 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 13: Animal species of concern with guidelines specific to a group of species.

Common Name	Scientific Name	Guideline
Bitterroot mountainsnail	<i>Oreohelix amariradex</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.
keeled mountainsnail	<i>Oreohelix carinifera</i>	

- h. The current Interagency Grizzly Bear Committee guidelines should guide project planning and implementation.
- i. The current access management terms and conditions in the Biological Opinion for the Kootenai, Idaho Panhandle, and Lolo National Forests Land and Resource Management Plans Amendment for Motorized Access Management within the Selkirk and Cabinet-Yaak Grizzly Bear Recovery Zones will guide project planning and implementation in that ecosystem.
- j. In occupied grizzly bear habitat where sight distance for traffic safety is not an issue, a vegetative screen should be maintained when brushing roads. Exceptions may be made in residential forest intermix areas.
- k. In the grizzly bear distribution area, vegetative cover within 600 feet of open roads should be maintained at a level adequate to hide grizzly bears.
- l. Apply the Lolo Coarse Woody Debris Guide to ensure adequate habitat for species dependent upon snags and down logs.
- m. 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 construction of new ones.
- n. Motorized vehicle use should be consistent with the Lolo National Forest Visitor Map which closes roads and areas to motorized use from December 1 to May 15 to minimize disturbance to big game in their winter range.

- o. For water howellia (*Howellia aquatilis*): Incorporate Flathead Conservation Strategy prescriptions on pages 17-19.
- p. 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.
- q. 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.

Riparian Conservation Areas

- a. Short-term impacts in RCAs may be considered when long-term benefits to species of concern or species of interest populations and their habitats would result.
- b. In RCAs, adverse impacts on species of concern or species of interest should be avoided or mitigated.
- c. The RCA widths described in the Glossary would apply except where site-specific analysis supports modification.

Forest Products

- a. Vegetation treatment projects should be designed to use small diameter trees to the extent that market conditions allow.
- b. Incorporate use of low impact equipment and techniques where feasible.

- c. Commercial forest product permits should be spatially explicit, require sanitation, and be monitored for resource impacts.
- d. Timber harvesting and 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 3.2 – Research Natural Areas

National Forest System Lands

- a. The following criteria should be considered when developing an adjustment plan (not in any particular order).
 - Acquisition:
 - Lands that can contribute to recovery of threatened or endangered species.
 - Lands important for wildlife connectivity and big game winter range.
 - Lands needed for the protection of important historical or cultural resources.
 - Lands that enhance recreation, public access and protection of aesthetic values.
 - Lands that contain rivers with potential for Wild and Scenic designation
 - Other environmentally sensitive lands.
 - Lands that reduce expenses and support more logical and efficient management.
 - Conveyance:
 - Lands and administrative buildings adjacent to communities that are chiefly valuable for non-National Forest System uses.
 - Lands with low resource value.
 - Inaccessible, isolated, or intermingled ownership parcels.
 - Lands with long-term, special use permits not consistent with national forest purposes and character.
 - Lands that are not logical and efficient to manage.

- o Lands eligible under the Small Tracts Act.
- b. Newly acquired lands should be assigned a management area designation and recreation opportunity spectrum (ROS) classification that is similar to or compatible with surrounding management areas.
- c. Existing communication sites and facilities should be utilized to the fullest practical extent before approving new facilities and locations.
- d. Obsolete or unused communication facilities should be removed from National Forest System land.
- e. 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.
- f. Where utility corridors occur within riparian zones, woody vegetation that provides rooting strength important for bank stability should be encouraged over grasses and forbs.
- g. Trees and shrubs in utility corridors should only be cleared in riparian areas when there is an imminent threat to facilities, and in these cases, trees should be left for large woody debris recruitment to the stream and riparian system.
- h. As utilities facilities are maintained or replaced, corridors should be relocated outside of riparian zones where feasible.

Livestock Grazing¹

- 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 toward desired condition or Plan objectives or (3) vacant allotments that have less than 50 AUMs.
- b. Domestic livestock grazing should not be allowed in developed campgrounds unless specifically permitted.
- c. Allotments without a current environmental analysis and decision 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

¹ Livestock grazing refers to cattle, horses, and recreational pack and saddle stock. Sheep grazing does not occur on this national forest.

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 the Forest Service, the Montana and Idaho State Historic Preservation Offices, and the Advisory Council on Historic Preservation should be followed.

Developed and Dispersed Recreation

- a. New or reconstructed recreation facilities should be designed to retain assigned ROS experience levels.
- b. 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.
- c. When use at unmanaged recreational shooting areas reaches a level that results in resource damage or reduced public safety, the area(s) should be closed or blocked. If closed, shooting would still be permitted during regulated hunting seasons.
- d. Recreational shooting areas should not be developed if there are sufficient opportunities and facilities available at private locations or facilities.
- e. No new permanent reference marks or climbing aids should be allowed in rock climbing areas.
- f. In developed campgrounds located within a riparian conservation area (RCA), trees may be felled and removed if they pose a safety risk.
- g. 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

- a. New outfitter and guide permits for traditional uses (for example, hunting, fishing, summer pack trips, or photography) should be considered only when the services offered by existing outfitters are fully utilized. Proposed transfer, termination or relinquishment of permits operating at less than 100 service days should be considered for phasing-out or relocation to current permit holders to provide for more economic operations.
- b. A party size limit should be implemented and enforced. If a party size limit is not currently in place, a default party size should be established until wilderness implementation plans are developed or amended.
- c. Follow LAC plan for BMWC and Rattlesnake for grazing.

Recommended Wilderness

New outfitter and guide permits for traditional uses (for example, hunting, fishing, summer pack trips, or photography) should be considered only when the services offered by existing outfitters are fully utilized. Proposed transfer, termination or relinquishment of permits operating at less than 100 service days should be considered for phasing-out or relocation to current permit holders to provide for more economic operations.

Access and Travel Management

- a. As soon as use is completed on temporary roads, they should be stabilized and closed to motorized traffic, and treated for invasive plants.
- b. Motorized vehicles whose maximum width (the distance from the outside of the left tire to the outside of the right tire or maximum tire width for motorcycles) does not fit on the existing or designed tread of a trail are prohibited on that trail.
- c. Following vegetation management activities in areas with high potential for off-highway vehicles (OHV) use, skid trails should be blocked or obliterated to prevent illegal use.
- d. Vegetation management treatments should be designed to avoid removing ground cover and natural vehicle obstructions in areas which may cause increased OHV 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, conservation strategies, or programmatic agreements.