

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 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

- 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. Downed woody material and snags should be retained in the following minimum amounts within each treatment unit (see Table 10). Amounts will vary from one acre to another, but should be well-distributed across the treatment unit. Downed woody material should vary by species and size classes available in the treatment unit, favoring material over four inches in diameter where available. Material may be standing (snags) or on the ground.

Table 10: Guidelines for downed woody material and snags in tons per acre.

Dominant Vegetation Type	Downed Woody Material and Snags Tons per Acre
Ponderosa Pine (PP)	5
Douglas-fir (DF) on dry sites	5
Shade intolerant mixed species (PP, Western Larch, LP, DF) on moist sites	10
Lodgepole Pine (LP)	10
Shade tolerant Western Red Cedar, Grand Fir, and Western Hemlock	10
Shade tolerant Engelmann Spruce and Subalpine Fir	10

- c. Snags should be retained in the following amounts across analysis areas (see table below). The number of snags may vary from one acre to another, but should meet these levels across an analysis area. Retained snags should include representation across species and size classes in the analysis area, favoring trees over 15 inches in diameter where available. Clumped distribution of snags is preferred.

Table 11: Guidelines for number of snags per acre by dominant vegetation type.

Dominant Vegetation Type	Snags per Acre
Ponderosa Pine (PP)	2-5
Douglas-fir (DF) on dry sites	2-5
Shade intolerant mixed species (PP, Western Larch, LP, DF) on moist sites	4-12
Lodgepole Pine (LP)	10-15
Shade tolerant Western Redcedar, Grand Fir, and Western Hemlock	4-12
Shade tolerant Engelmann Spruce and Subalpine Fir	10-15

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.
- b. 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 12: Animal species of interest with guidelines specific to a group or species.

Common Name	Scientific Name	Guideline
Rocky Mountain elk mule deer	<i>Cervus elaphus</i> <i>Odocoileus hemionus</i>	Work with the states toward meeting population objectives using vegetation and access management.
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.
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 that might affect such sites. Protect occupied sites.

- d. For plant species of interest and concern¹:
- 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.
 - Reduce the risk of introducing or spreading invasive plants at known sites for all species of concern and species of interest plants.
- e. New facilities in important wildlife connectivity areas should be avoided. Expansion and/or improvement of existing facilities should be favored over construction of new ones in these areas.
- f. To minimize disturbance to big game, winter range should be closed to motorized vehicles from December 1 to June 15. Limited motorized routes through winter range may be designated to provide access to other lands.
- g. 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 the Forest Service management.

¹ For a list of plant species of interest and concern, see the Plan Set of Documents.

- h. Projects should be designed and implemented to minimize impacts to wallows, seeps, licks, aquatic and vernal pools, fens and fen margins, marshlands, springs and wet meadows, and riparian conservation areas.
- i. During project planning in Montana, applicable elements of the Montana Bald Eagle Management Plan should be incorporated. In Idaho, incorporate direction for bald eagles from the Idaho Comprehensive Wildlife Conservation Strategy.
- j. 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.
- k. In RCAs, adverse impacts on species of concern or species of interest should be avoided or mitigated.
- l. 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 utilize small diameter trees (less than 7 inches in diameter) to the extent that emerging markets and desired conditions allow.
- 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 3.2 – Research Natural Areas
 - Blue Joint and Sapphire Wilderness Study 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. 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) transitory forage that comprised most of the forage base has been eliminated or (2) no management option can maintain progress toward desired conditions or Plan objectives.
- b. At the time of revision of an allotment management plan or special use permit re-issuance, season-long grazing should be replaced with a grazing system that includes periods of rest.
- c. Allotments should include the following utilization guidelines. These guidelines would apply to recreational stock 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 following treatment.
- 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.

Heritage Resources

- The Forest should continue to participate in regional, interregional, and national programmatic agreements with the Montana and Idaho

- State Historic Preservation Offices and the Advisory Council on Historic Preservation.

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. The number of outfitter and guide special use permits should not increase over 35 for hunting, fishing, horseback riding, snowmobile riding, OHV riding, float fishing, and white water rafting. Institutional outfitting should be considered on an annual basis.
- c. No new permanent reference marks or climbing aids should be allowed in rock climbing areas.
- d. In developed campgrounds and dispersed recreation sites located within a riparian conservation area (RCA), trees may be felled and removed if they pose a safety risk.

Wilderness Dams (MA 1.1)

- a. Mechanized and motorized access to wilderness dams should be allowed only when analysis indicates this is the most appropriate means in a given situation. Mechanized access should be accomplished in ways that minimize effects to wilderness values.
- b. Use of light motorized tools (such as chainsaws, motorized drills, or compressors) and explosives should be allowed on the dam structure and within the impoundment for the purpose of maintaining, operating, reconstructing, or breaching wilderness dams. The Forest Service may impose reasonable restrictions on such use to reduce effects on wilderness values.
- c. Storage of equipment should be allowed near wilderness dams only when analysis indicates this is the most appropriate way to achieve operation, maintenance, reconstruction, or breaching of dams. Equipment storage should be accomplished in ways that minimize effects on wilderness values.

Access and Travel Management

- a. As soon as use is completed on temporary roads, they should be stabilized, closed to motorized traffic, and monitored for invasive plants.
- b. Following vegetation management activities in areas with high potential for off-highway vehicle (OHV) use, skid trails should be blocked or obliterated to prevent illegal use. They should be monitored for invasive plants.

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, policies, Memoranda of Understanding, forest orders, conservation strategies, programmatic agreements, or implementation plans.