



ADMINISTRATIVE RULES OF MONTANA

36.11.425 WATERSHED MANAGEMENT - STREAMSIDE MANAGEMENT ZONES, EQUIPMENT RESTRICTION ZONES, AND RIPARIAN MANAGEMENT ZONES

- (1) The department shall establish an equipment restriction zone (ERZ) adjacent to the minimum width of the SMZ required under ARM 36.11.302 when forest management activities are proposed on sites with high erosion risk.
- (2) The department shall determine the presence of high erosion risk from:
 - (a) established soil surveys;
 - (b) existing inventories; or
 - (c) site-specific field evaluations.
- (3) When the department proposes forest management activities on sites determined to have high erosion risk:
 - (a) the department shall establish an ERZ that when combined with the SMZ has a minimum of 100 feet when activities are located on slopes greater than 25 percent but less than 35 percent;
 - (b) the department shall establish an ERZ that when combined with the SMZ has a minimum of 150 feet when activities are located on slopes greater than or equal to 35 percent, but less than 50 percent;
 - (c) the department shall establish an ERZ that when combined with the SMZ has a minimum of 200 feet when forest management activities are located on slopes greater than or equal to 50 percent; and
 - (d) the department may modify and shorten ERZ widths established for high erosion risk when topographic breaks, existing roads or other factors are present that reduce erosion risk and provide suitable sediment delivery filtration. Modified or shortened ERZs must still meet the minimum width of the SMZ required under ARM 36.11.302 and riparian management zone (RMZ) required under ARM 36.11.425.
- (4) The following restrictions apply to forest management activities conducted within an ERZ established for high erosion risk:
 - (a) The department shall limit new road construction within an ERZ to situations in which:
 - (i) a stream crossing is required;
 - (ii) potential impacts can be adequately mitigated; or
 - (iii) alternative locations pose higher risk of resource impacts.

- (b) The department shall restrict ground-based equipment operations within the ERZ.
 - (i) The department shall not allow the operation of wheeled or tracked equipment within an ERZ when it is located on slopes greater than 35 percent;
 - (ii) The department shall not allow the operation of wheeled or tracked equipment within an ERZ when it is located on slopes less than 35 percent, unless the operation can be conducted without causing excessive compaction, displacement, or erosion of the soil;
 - (iii) The department may allow the use of wheeled or tracked equipment inside of that portion of an SMZ or ERZ when operated from an established road on the side of the road away from the stream pursuant to ARM 36.11.304.
 - (c) The department shall restrict cable yarding of logs within and across an ERZ to cable systems and operations that do not cause excessive ground disturbance within the SMZ or ERZ.
- (5) The department shall establish an RMZ, which includes the minimum width of the SMZ required under ARM 36.11.302, when timber harvests are proposed on sites adjacent to fish bearing streams and lakes and on HCP covered lands adjacent to all Class I streams or lakes, which will:
- (a) have a minimum width equal to the 100-year site index tree height;
 - (b) determine the 100-year site index tree height at the project level by field sampling the age and height of several site trees within the riparian stand and comparing those values to locally or regionally develop site index curves;
 - (c) maintain a 50-foot wide buffer within Class I RMZs, which:
 - (i) will start at the ordinary high-water mark and extend across the RMZ to a slope distance of 50 feet when measured perpendicular to the stream or lake; but
 - (ii) within the 50-foot wide buffer, it may be necessary to allow corridors associated with cable logging systems to fully suspend logs across streams; and
 - (iii) in these situations, the minimum corridor spacing will be 150 feet with no more than 15 percent of the 50-foot wide buffer affected;
 - (d) retain shrubs and sub-merchantable trees to the fullest extent practicable, and a minimum of 50 percent of the trees greater than or equal to 8 inches DBH for harvest within the remainder of the RMZ;
 - (e) specify that multiple harvest entries into a specific RMZ stand will only occur if:
 - (i) the existing RMZ stand is classified as a medium to well-stocked, poletimber or saw timber size class; and
 - (ii) the proposed harvest meeting the minimum retention tree requirements in ARM 36.11.305; and
 - (f) extend SMZs to include adjacent wetlands, where the normal SMZ boundary intercepts a wetland. Retention tree requirements are the same as the requirements for the first 50 feet of SMZ.
- (6) The department will extend RMZs on HCP lands in situations where channel migration is likely to influence riparian functions that are potentially affected by timber harvests by:

- (a) establishing a Type 1 Channel Migration Zone (CMZ) within the flood prone area of meandering valley bottom streams that are actively eroding and depositing sediment through lateral migration of the stream channel, where:
 - (i) the portion of RMZ restricted to 50 percent retention on a Type 1 CMZ is extended to incorporate the entire flood prone area;
 - (ii) the standard RMZ harvest restrictions will be applied in the event that the width of the flood prone area does not extend beyond the normal RMZ;
 - (iii) the 50-foot buffer will not be extended on a Type 1 CMZ;
- (b) establishing a Type 2 CMZ within the flood prone area of unstable streams exhibiting sudden erosion and deposition processes, where:
 - (i) on a Type 2 CMZ the normal 50-foot RMZ buffer is extended to include the entire flood prone area plus an additional 50 feet within the RMZ;
 - (ii) no timber harvest will occur within the entire flood prone width;
 - (iii) the delineation of the normal RMZ, including the additional 50 foot buffer, will begin at the edge of the flood prone width; and
 - (iv) examples of sudden erosion and deposition process are:
 - (A) moderately contained stream channels with evidence of recent sediment deposition in the flood prone area;
 - (B) alluvial fans; and
 - (C) debris flows or torrents.
- (7) The department shall retain all bank edge trees on timber harvests conducted adjacent to streams.
- (8) Allowances for harvest within Class I RMZ buffers include:
 - (a) potential harvest of diseased and insect-infested trees when an RMZ is being impacted by disease or insect infestations; where:
 - (i) such harvest must still meet the minimum retention tree requirements of ARM 36.11.305(2);
 - (ii) retained trees will include all streambank and downed trees lying within the stream channel or embedded in the stream bank;
 - (b) harvest of diseased and insect infested trees from the remaining RMZ, outside of the first 50 feet, may exceed those levels necessary to meet the normal 50 percent retention requirement;
 - (c) the salvage harvest of dead or downed trees which may exceed the normal 50 percent retention requirement in that portion of the RMZ outside of the 50-foot buffer in areas within an RMZ that have been subjected to windthrow and/or severe or stand-replacement fires, but:
 - (i) such harvest must still meet the minimum retention tree requirement of the SMZ Law;
 - (ii) no salvage harvest of fire-killed trees will occur within the 50-foot buffer;

- (iii) downed trees lying within the stream channel or embedded in the stream bank will be managed pursuant to ARM 36.11.305(4)(d);
- (d) necessary management of a portion of the total Class 1 RMZ acres of forested trust lands using harvest prescriptions designed to meet the minimum retention tree requirements under ARM 36.11.305 (SMZ Law), where:
 - (i) the RMZ stands target to be managed in this manner will be those stand types where shade-tolerant species exists, and regeneration or maintenance of shade-intolerant tree species is necessary to achieve or maintain desired future stand types or provide long-term riparian functions;
 - (ii) a 50-foot wide buffer will not be required in these situations; and
 - (iii) tree retention will be based on the number of trees within the first 50 feet of RMZ on both sides of a stream. Where 50 percent of the trees greater than or equal to 8 inches DBH, or 10 trees per 100-foot segment of stream, whichever is greater, will be retained on each side of the stream.
- (9) The department shall use existing roads in the SMZ or RMZ only if potential water quality impacts are adequately mitigated and beneficial uses are fully protected.

Authorizing statute(s): 77-1-202, 77-1-209, 77-5-201, 77-5-204, MCA

Implementing statute(s): 77-5-116, 77-5-204, 77-5-206, 77-5-207, MCA

History: NEW, 2003 MAR p. 397, Eff. 3/14/03; AMD, 2020 MAR p. 2239, Eff. 12/12/20.