

RESOLUTION NUMBER 97-089

A RESOLUTION TO AMEND THE DEVELOPMENT STANDARDS OF PLANNING AND ZONING DISTRICT #4 IN PATTEE CANYON, LOCATED IN THE EAST HALF OF SECTION 4, ALL OF SECTION 3, AND THAT PART OF SECTION 2 LYING WEST OF THE FORT MISSOULA TIMBER RESERVE, TOWNSHIP 12 NORTH, RANGE 19 WEST, P.M.M.

WHEREAS, on June 17, 1957, the Missoula County Planning and Zoning Commission created Planning and Zoning District #4 and adopted development standards governing the use of land and structures within this district; and,

WHEREAS, 76-2-106 M.C.A. authorizes the Planning and Zoning Commission to make changes in Planning and Zoning districts; and,

WHEREAS, notices of public hearing were mailed to affected and adjacent property owners within three hundred (300) feet of the district, and notices were posted in three (3) public places and published in the legal ads of the Missoulian more than fifteen (15) days prior to the public hearing; and,

WHEREAS, the Planning and Zoning Commission conducted a public hearing on July 16, 1997, and held the hearing open until August 27, 1997, in order to give the public an opportunity to be heard regarding the proposed revisions to the standards governing the use of land and structures within Planning and Zoning District #4;

NOW, THEREFORE, BE IT RESOLVED by the Missoula Board of County Commissioners that the attached amendments to the development standards of the Planning and Zoning District #4 be adopted.

PASSED AND ADOPTED THIS 2nd DAY OF September, 1997.

ATTEST:

BOARD OF COUNTY COMMISSIONERS  
Missoula County, Montana

Vickie M Zeier  
Vickie Zeier, Clerk and Recorder

Fern Hart  
Fern Hart, Chair

Michael Kennedy  
Michael Kennedy, Commissioner

Barbara Evans  
Barbara Evans, Commissioner

APPROVED AS TO FORM AND CONTENT:

Michael W. Sherbell  
County Attorney

RECEIVED SEP

# ZONING DISTRICT NO. 4

## SECTION I - PURPOSE:

Citizen-initiated Zoning District #4 in Pattee Canyon was established in 1957 and extensively revised in 1972. Given the difficulties in interpreting the regulations and recognizing that "growth management" has again become a topic of interest throughout Missoula County, we present a new version of zoning for "the Canyon" as we approach the late 1990's. Pattee Canyon is a special place for its residents, for the frequent visitors who use the Forest Service and other public lands on its eastern and upper reaches, and for the wide variety of wildlife with whom owners and visitors share the land. Recognizing this specialness, landowners incorporated themselves in 1980 with the expressed purpose "to work for the maintenance of the character of Pattee Canyon as a beautiful, rural, substantially natural setting with a low-density residential development."

Our purpose in presenting these new zoning standards is to retain the canyon's character. To that end we present a set of regulations which have very different features from those in previous versions:

- 1) The regulations are strongly prescriptive. Developers and landowners will know exactly what is expected of them, and the planners with the Office of Planning and Grants will have adequate guidance in overseeing applications.
- 2) Because the process is prescriptive, there will be no need for a public hearing to acquire a building permit, unless the owner or developer seeks a variance from the regulations.
- 3) The Development Standards contained in Section VI of these regulations shall be followed by anyone developing property within the district. The Development Guidelines contained in Section VII shall be addressed in any variance request brought before the Commissioners.

## SECTION II - APPLICABILITY:

The east ½ of Section 4, all of Section 3, and that part of Section 2 lying west of the Fort Missoula Timber Reserve, Township 12 North, Range 19 West, P.M.M.. See History. That portion of Zoning District #4 located in SE¼ Section 4, Township 12 North, Range 19 West, P.M.M. is exempt from the lot size and width requirements of these regulations, according to Book 40, Page 1461.

**SECTION III - SPACE AND BULK REQUIREMENTS:**

Maximum density	One dwelling unit per five (5) acres
Minimum lot size	Three (3) acres
Minimum lot width	Two hundred (200) feet on any side
Setbacks	Forty (40) feet from all property lines
Height	Thirty (30) feet, as defined by County Zoning Resolution 76-113

**SECTION IV - PERMITTED USES:**

No building, structure, or premises shall be used, erected, structurally altered, or maintained except as provided in these regulations.

1. One single residential dwelling unit per parcel built on-site with a permanent foundation.
2. Residential Accessory Uses, and Home Occupations as defined in Resolution #81-132.
3. Public utility installation, where no public business office and no repair or storage facilities are maintained.
4. Accessory buildings incidental to the above uses located on land owned by the owner of the building. The cumulative building coverage of accessory buildings shall be less than that of the primary structure or dwelling, and the accessory building floor area footprint shall be not more than one-half the dwelling floor area footprint.
5. Church
6. School
7. Agricultural activities as defined in MCA §76-2-902.

**SECTION V - GENERAL REGULATIONS:**

A. A legal nonconforming use of land is defined as any legal parcel of record, use or structure existing on the date of adoption of this amendment to the Zoning District #4 regulations, made no longer permissible by these regulations.

1. Any legal nonconforming use may be continued, provided the use does not change to any other nonconforming use. If any legal nonconforming use is discontinued for two years, all future uses must be in conformance with these regulations.

2. No legal nonconforming use shall be moved in whole or in part to any other part of the existing parcel or to any other lot, parcel or tract within this district.

3. Any nonconforming structure which is destroyed by any means to an extent of more than 50% of its replacement cost at the time of destruction shall not be reconstructed or replaced except in conformity with these regulations. If the destroyed structure was built after 1972 and was reviewed for compliance with the zoning regulations in place at that time, then the structure may be replaced with a structure which has the same type and degree of non-conformance as the destroyed structure. Existing accessory structures which have legal non-conforming setbacks may be reconstructed no closer to the property line than the original structure, with a minimum setback of ten feet from the nearest property line. Other non-conforming structures shall require a variance.

4. Legal nonconforming above-ground service utility lines shall be brought into conformance with these regulations (placed underground), if technically and economically feasible, as a condition of issuance of a building permit for new construction, but not for remodeling of or additions to existing structures. As used in this section, "technically feasible" means that the trench through which the underground lines would run could be excavated by a conventional backhoe or trencher, with no blasting and with minimal use of jack hammers or like equipment required. As used in this section, "economically feasible" means that if the underground installation cost/unit does not exceed twice the overhead installation cost/unit, underground installation is feasible and shall be constructed at the expense of the utility and/or permittee.

B. A building permit shall be obtained from the City of Missoula prior to beginning construction on any new building or addition to any existing building.

C. No building, sign, or other structure shall be erected, moved, enlarged, rebuilt, added to, or structurally altered without having received a Zoning Compliance Permit issued by the Office of Planning and Grants in compliance with these regulations and other applicable codes and regulations.

D. Whenever a violation of these regulations occurs, or is alleged to have occurred, any person may file a written complaint fully stating the causes and basis of the complaint with the Office of Planning and Grants. The Office of Planning and Grants shall record and investigate the complaint, and if it is determined that any of the provisions of these regulations are being violated, OPG shall submit a written investigation report to the Office of the County Attorney for appropriate legal action.

E. Each application for a permit shall be accompanied by a site plan drawn to scale, a riparian resource management plan, and a grading plan which demonstrate compliance with the Development Standards in Section VI.

F. Definitions of terms as contained in the Missoula County Zoning Resolution #76-113 and the Montana Code Annotated shall apply in this district, unless otherwise defined herein.

#### **SECTION VI - DEVELOPMENT STANDARDS:**

These development standards shall apply to any request for zoning compliance for a building permit or for compliance with zoning during review of a subdivision request.

- A. Construction of all buildings or structures must be completed within one year from the start of construction.
- B. No temporary dwellings of any kind are permitted.
- C. All new service utility lines must be placed underground if technically and economically feasible. As used in this section, "technically feasible" means that the trench through which the underground lines would run could be excavated by a conventional backhoe or trencher, with no blasting and with minimal use of jack hammers or like equipment required. As used in this section, "economically feasible" means that if the underground installation cost/unit does not exceed twice the overhead installation cost/unit, underground installation is feasible and shall be constructed at the expense of the utility and/or permittee.
- D. Roofing materials may be only class A or B fire rated, which are composed of non-combustible materials.
- E. To protect from wildfire danger, all roofs pitches must be a minimum of a 4/12.
- F. New roadways or driveways may not exceed an eight percent (8%) grade. A ten percent (10%) grade may be maintained for lengths not to exceed fifty feet (50'), if approved by the appropriate fire jurisdiction.
- G. Dead-end driveways in excess of 150 feet in length shall have an approved turn-around for fire apparatus. A turn-around shall be located within 150 feet of the building. A minimum unobstructed width of not less than twenty (20) feet and an unobstructed vertical clearance of 13'6" shall be provided for any driveway over 150 feet. All other driveways shall be at least fourteen (14) feet wide. The opening through a gate should be two feet wider than the road. Final design shall be subject to approval by the Missoula Rural Fire District.

H. The maximum impervious material coverage of a lot is 10% of the total area (including newly constructed on-site driving surfaces, whether paved or gravel, structures, and other impervious surfaces) or 10,000 square feet (excluding all on-site driving surfaces), whichever is less.

I. Areas of Riparian Resource:

1. Development or improvements which encompass areas of riparian resource shall be placed outside the riparian area. "Area of Riparian Resource" means a stream, lake, wetland or other body of water and land containing any of the habitat or community types listed in Attachment B, and includes an adjacent area of varying width, where development may have significant negative impact on wildlife habitat, water quality and quantity, fish, or other aquatic resources.

2. No road shall be approved for construction in an area of riparian resource unless the road is for the purpose of crossing a stream. In the event any road is approved for construction in a riparian area, the following additional restrictions shall apply:

a. The sidecasting of road material into a stream, lake, wetland, or other body of water during road construction or maintenance is prohibited.

b. The slope of the area of riparian resource immediately adjacent to a stream shall be 10% or less for a distance of at least fifty (50) feet from the ordinary high water mark.

c. Effective erosion and sedimentation control practices shall be conducted during all clearing, construction or reconstruction operations.

d. Road fill material shall not be deposited in the area of riparian resource or in such a location or manner so that adverse impacts will result to the area.

e. Roads and trails should be located on the fringes of areas of riparian resource and habitat for species of special concern, rather than through them. In the event it is necessary to route a road or trail through such an area, then open areas should be utilized in order to minimize impact on vegetated areas.

J. Hillside Design Standards:

1. Lots shall have a building site for primary and accessory buildings with an existing slope of less than 25%.

2. All disturbed slopes greater than 10% shall be landform graded in order to accomplish the following:

a. Cut and fill slopes shall have continuous slopes that reflect the forms and shape

of surrounding topography. Landform Grading is defined as a contour grading method that creates artificial slopes with curves and varying slope ratios in the horizontal plane designed to simulate the appearance of surrounding natural terrain.

b. At the intersections of manufactured and natural slopes, contours shall be curved to blend with the natural slope.

c. Man-made slopes may exceed a ratio of 3:1 only if significant environmental characteristics of a site are preserved or the need for extensive cut and fill is substantially reduced.

d. All graded or disturbed areas shall be permanently revegetated with native plants or with fire-resistant vegetation that is compatible with naturalized areas, as listed in Attachment A.

e. Lawns and retaining walls are permitted.

K. No roadside signs or roadside advertisements for any commercial, business, or professional purpose are allowed.

#### **SECTION VII - DEVELOPMENT GUIDELINES:**

The following guidelines shall be addressed by the applicant in any variance application for a variance from zoning. In addition, adherence to these guidelines are recommended for any project within the district.

A. Road Construction and Maintenance. To minimize erosion, weed infestations, and other environmental impacts of road building and logging, the following guidelines may apply:

1. The use of existing logging roads is preferable if they are appropriate for residential use, including access by emergency vehicles.
2. Annual road maintenance should include keeping the cut and fill slope planted, fertilized and free of weeds. Suppression of noxious weeds should occur annually in compliance with the Missoula County Weed District Noxious Weed Management Plan and should consist of hand pulling and spot spraying.
3. Areas disturbed by construction and road building should be revegetated with a seed mix that includes a fast, early-growing species such as annual wild rye or yellow sweetclover or vegetation approved by the County Extension Office to provide a dense vegetation cover on disturbed areas.

**B.** Wildfire Prevention Guidelines: The property owner should create a defensible space for fire protection purposes using roof construction standards, planting appropriate vegetation, and clearing highly-flammable vegetation.

1. Vegetation should be managed around each building according to the slope. Single ornamental trees or shrubs need not be removed as long as all vegetation near them is reduced according to the vegetation chart in Attachment C. Ornamental trees and shrubs should not touch any buildings. When planting, the property owner should select trees, shrubs, and vegetation that limit or retard fire spread as follows:

a. Choose hardy perennial flowers that are adapted to our climate. These green leafy, succulent plants are difficult to burn. Watering and regular weeding improves fire resistance;

b. Evergreen shrubs such as dwarf conifers or junipers and evergreen trees tend to ignite easily and should be spaced in accordance with the landscaping guidelines in Attachment C.

c. Deciduous trees can be clumped, scattered, or planted in greenbelt or windbreak patterns.

2. For homesites outside of the Rural Fire Department jurisdiction, owners should consider installing residential sprinkler systems.

### **SECTION VIII - VARIANCES:**

**A.** A variance may be granted after a public hearing before the Missoula County Planning and Zoning Commission. The Board of County Commissioners may authorize variances which will not be contrary to the public interest where, owing to special conditions, literal enforcement would result in an unnecessary hardship. Public notification of the variance request and of the time and place of the public hearing shall be accomplished by all of the following:

1. All adjacent property owners (as listed in the most recent County Assessor's Tax Records) within 300 feet of the parcel requesting the variance shall be notified by first class mail at least fifteen (15) days prior to the public hearing.

2. The Pattee Canyon Landowners Association shall be notified by first class mail at least fifteen (15) days prior to the public hearing. It is the responsibility of the Landowners Association to keep the Office of Planning and Grants informed of the current names and addresses of Association Officers.

3. The property requesting the variance shall be posted in at least three (3) conspicuous places, stating the date, time, and place of the public hearing, at least fifteen (15) days prior to the public hearing.

4. A legal advertisement shall be placed in a newspaper of general circulation stating the nature of the request and the date, time and place of the public hearing, at least fifteen (15) days prior to the public hearing.

5. A fee to cover the administrative costs of processing the variance request must be paid by the applicant at the time that the variance request is submitted to the Office of Planning and Grants. This fee shall be for the amount determined by the County Commissioners for variance request in all citizen-initiated zoning districts.

6. In approving variances, the governing body may require conditions that secure the objectives of the standards or guidelines of these regulations.

#### **SECTION IX - SEVERABILITY CLAUSE:**

In the event any court of competent jurisdiction holds any section, subsection, part, term, clause or provision contained in the standards of this Zoning District No. 4 to be invalid, illegal, unconstitutional or otherwise unenforceable, then, nevertheless, all other and remaining sections, subsections, parts, terms, clauses and provisions thereof and hereof shall continue and remain in force and effect.

#### **SECTION X - HISTORY:**

Two family dwellings deleted (10May72)

Delete the following from Zoning District #4: Beginning at a point North 004" West 1,320 feet from the south ¼ corner of Section 4, Township 12 North, Range 19 West, thence East 660 feet, thence North 1,980 feet, thence North 360 East 1,050 feet, thence North 730 West 1,350 feet, thence South 004" East 3,230 feet +/-, to the point of beginning. (22Jun77)

Development standards and guidelines adopted and public hearing process for zoning compliance permits eliminated, except for variances. (27Aug97)

#### **ATTACHMENTS:**

**Attachment A:** List of Native Vegetation or Vegetation that is Compatible with Naturalized

Areas.

**Attachment B:** Areas of Riparian Resource habitat and community types.

**Attachment C:** Department of State Lands Fire Protection Guidelines for Wildland Residential Interface Development.

- (E) If a plan calls for a development time of eighteen (18) months or more for improvements, the subdivider shall provide a schedule showing the times when the improvements will be completed.

### 3-13 AREAS OF RIPARIAN RESOURCE

(1) Purpose: The intent of this section is to ensure that no subdivision shall be approved which is determined by the governing body to be unsuitable by reason of flooding, erosion, inadequate drainage, or impact on areas of riparian resource, or any other feature likely to be harmful to the health, safety and welfare of the future residents of the proposed subdivision and the residents of Missoula County. More specifically, it is the intent of these regulations to ensure the following:

- (A) That areas of riparian resource remain available to support diverse and productive aquatic and terrestrial riparian systems and habitats and protect water quality;
- (B) That stream channels, banks and lakeshores are protected;
- (C) That areas of riparian resource are preserved to act as an effective sediment filters which help to maintain water quality;
- (D) That areas of riparian resource shall be protected to preserve large, woody debris that is eventually recruited into a stream to maintain riffles, pools and other elements of channel structure and further to provide shade to regulate stream temperature;
- (E) That the area of riparian resource shall be preserved to promote floodplain stability;
- (F) That the public interest in the quality and quantity of surface and ground waters shall be protected;
- (G) That standards for development of land in areas of riparian resource are site-specific, allowing for flexibility for development while maintaining the integrity of these areas.

(2) Designation as Areas of Riparian Resource: Areas of riparian resource means a stream, lake, wetland or other body of water and land containing any of the habitat or community types listed in Appendix VIII and an adjacent area of varying width where development may have significant negative impacts on wildlife habitat or water quality and quantity, fish, or other aquatic resources.

(3) Management Plan: In order to meet the purposes outlined in Section 3-13 (1), a management plan for areas of riparian resource must be submitted with the subdivision proposal. The plan shall include, but not be limited to, the following:

- (A) Proposed access to or through the area;
- (B) Proposed low-impact use of the area;

- (C) Planned restoration of the area with native species;
- (D) Planned mitigation of impacts from all proposed uses.
- (E) Planned buffer to mitigate development adjacent to areas of riparian resources.

Approval of the management plan by the governing body is required as a condition of subdivision approval.

(4) Subdivision prohibition:

- (A) Except as provided in Sections 5 and 6 below, no subdivision shall be approved which is determined to be wholly within areas of riparian resource. Subdivisions which encompass portions of areas of riparian resource shall provide for protection of the resource specific to the area, as outlined in the management plan and as approved by the governing body.
- (b) Subdivisions which encompass areas of riparian resource shall place development outside the areas of riparian resource. Except for road construction as provided for in (5) below, areas of no improvements of any kind shall be approved within the area of riparian resource, including fencing except for those improvements which are outlined in the management plan and as approved by the governing body. The area of riparian resource may be available to the subdivision proposal for purposes of determining density allocations or number of lots and to satisfy the parks and open space requirements.

(5) Road Construction in Areas of Riparian Resource: No proposed road shall be approved for construction if located in an area of riparian resource unless the road is for the purpose of crossing an area of riparian resource in order to access a body of water or stream and is outlined in a management plan and as approved by the governing body. The following restrictions shall apply to all road construction:

- (A) The intentional sidecasting of road material into a stream, lake, wetland, or other body of water during road construction or maintenance is prohibited. The following additional standards shall apply to roads in these areas:
  - (1) Effective erosion and sedimentation control practices shall be conducted during all clearing, construction or reconstruction operations;
  - (2) Road fill material shall not be deposited in the areas of riparian resource or in such a location or manner so that adverse impacts will result to the area.

(B) The following guidelines for placement and construction of roads shall be considered in areas of riparian resource but may be waived with the consent of the governing body.

(1) In the event it is necessary to route a road through an area of riparian resource, then open areas should be utilized in order to minimize impact on vegetated areas;

(2) Roads should not be constructed in areas where soils have a high susceptibility to erosion which would create sedimentation and pollution problems during and after construction.

(3) Roads should not intrude into areas adjacent to open exposures of water and should avoid scenic intrusion by building below ridge crests and high points.

(6) Variance Procedure: The governing body may grant variances from the following requirements of this section if it determines that strict compliance will result in undue hardship and when compliance with the regulations is not essential to the public welfare.

(A) Designation of areas of riparian resource;

(B) Restriction of the development, improvement or road construction in an area of riparian resource;

(C) Restrictions on the location or standards applied to the construction of roads.

(D) The governing body shall consider the following criteria as well as those contained in Sections 3-13(1) and 6-1 in determining whether to grant a variance.

The following criteria shall be applied by the governing body to the habitat and community types found in Appendix VIII in considering a variance to this section:

1. Abundance of the type.
2. The restoration potential of the site after disturbance and whether the type is threatened by or is the result of human disturbance.
3. The structural layers present in the type (short, medium or tall).
4. The stage of the type (early, mid or late).
5. The contribution of the type to stream bank stabilization.
6. The susceptibility of the soil in the type to compaction.
7. The contribution of the type in offering protection from erosion.

8. The contribution of the type to big game habitat (forage & thermal & security cover) of the type.
9. The contribution of the type to upland game bird, waterfowl and small animal habitat (forage and cover).
10. The contribution of the type to non-game bird habitat (forage, thermal and security cover and nesting, including neo-tropical migrant species).
11. The contribution of the type to fisheries, especially native species and species of special concern.
12. The contribution of the type to wide-ranging species of limited distribution, particularly threatened or endangered species and species of special concern.

For additional information on the contribution of habitat and community types, their abundance and other variables, see: Classification and Management of Riparian and Wetland Sites in Montana, 1991, (1994 - 1995 update in press), Montana Riparian Association, Montana Forest and Conservation Experiment Station, School of Forestry, University of Montana, Missoula, MT 59812 (406) - 243-2050.

Missoula County Riparian/Wetland Habitat & Community Types  
Appendix VIII, Missoula County Subdivision Regulations  
Office of Planning and Program Development

Coniferous Tree Types

Grand fir/lady fern H.T.  
Subalpine fir/bluejoint reedgrass (bluejoint reed grass Phase)  
Subalpine fir/bluejoint reedgrass (Canby's licorice root Phase)  
Subalpine fir/bluejoint reedgrass (dwarf huckleberry Phase)  
Subalpine fir/sweetscented bedstraw H.T.  
Subalpine fir/Labrador tea (bluejoint reedgrass Phase)  
Subalpine fir/Labrador tea (Labrador tea Phase)  
Subalpine fir/devil's club (fool's huckleberry Phase)  
Subalpine fir/clasping-leafed twisted stalk (clasping-leafed twisted stalk Phase)  
Rocky Mountain juniper/red osier dogwood H.T.  
Spruce/bluejoint reedgrass C.T.  
Spruce/red osier dogwood H.T.  
Spruce/field horsetail H.T.  
Spruce/sweet-scented bedstraw H.T.  
Ponderosa pine/red osier dogwood H.T.  
Douglas fir/red osier dogwood H.T.  
Western red cedar/lady fern (lady fern Phase)  
Western red cedar/oak fern H.T.  
Western red cedar/devil's club H.T.  
Western hemlock/oak fern H.T.

Deciduous Tree Habitat Types

Russian olive C.T. (non-upland)  
Quaking aspen/bluejoint reedgrass H.T.  
Quaking aspen/red osier dogwood H.T.  
Quaking aspen/western sweet-cicely H.T.  
Quaking aspen/Kentucky bluegrass C.T.  
Black cottonwood/red osier dogwood C.T.  
Black cottonwood/Herbaceous C.T.  
Black cottonwood/recent alluvial bar C.T.  
Black cottonwood/western snowberry

Willow Shrub Habitat Types

Bebb willow C.T.  
Drummond willow/bluejoint reedgrass H.T.  
Drummond willow/beaked sedge H.T.  
Drummond willow C.T.  
Sandbar willow C.T.  
Geyer's willow/bluejoint reedgrass H.T.  
Geyer's willow/beaked sedge H.T.  
Geyer's willow C.T.  
Whiplash willow C.T.

### Non-Willow Shrub Habitat Types

Mountain alder C.T.  
Sitka alder C.T.  
Bog birch/beaked sedge H.T.  
Water birch C.T.  
Red osier dogwood C.T.  
Succulent hawthorn C.T.  
Small leaved laurel/Holm's Rocky Mountain sedge H.T.  
Shrubby cinquefoil/tufted hairgrass H.T.  
Woods rose C.T.  
Douglas's spirea C.T.  
Western snowberry C.T.

### Sedge Habitat Types

Water sedge (water sedge Phase)  
Slender sedge H.T.  
Mud sedge H.T.  
Nebraska sedge H.T.  
Beaked sedge H.T. (water sedge phase)  
Beaked sedge H.T. (beaked sedge Phase)  
Beaked sedge H.T. (tufted hairgrass Phase)  
Holm's Rocky Mountain sedge H.T.  
Short beaked sedge H.T.

### Non-sedge Habitat Types

Redtop C.T.  
Smooth brome C.T.  
Bluejoint reedgrass H.T.  
Tufted hairgrass H.T.  
Common spikesedge H.T.  
Few-flowered spike rush H.T.  
Water horsetail H.T.  
Northern mannagrass H.T.  
Baltic rush H.T.  
Canary reed H.T.  
Common reed H.T.  
Fowl bluegrass C.T.  
Kentucky bluegrass C.T.  
Hardstem bulrush H.T.  
Arrowleaf groundsel C.T.  
Common Cattail H.T.

For additional information on site types, classification, function and areas of riparian resource, see: *The Classification and Management of Riparian and Wetland Sites in Montana, 1992 (1994-1995 update in press)*, Montana Riparian Association, Montana Forest and Conservation Experiment Station, School of Forestry, University of Montana, Missoula, Montana 59812.

# FIRE STANDARDS

## BACKGROUND

A Wildland/Residential Interface (WRI) fire situation exists anywhere that structures are located close to combustible wildland vegetation. A fire can spread from the vegetation to structures or vice-versa. The distance between structures directly affects how fast a wildfire can spread. A WRI can vary from a large housing development adjacent to combustible wildland vegetation to a structure(s) surrounded by combustible wildland vegetation.

## ADOPTED SUBDIVISION REGULATIONS

### PAGE 2 1-3 PURPOSE AND INTENT:

Add: 14. The reduction of risk of fire damage by reducing and managing the buildup of fuels, building and maintaining adequate road systems, providing adequate water to firefighters, and using fire-resistant materials and designs for homes and outbuildings.

## DEFINITIONS

Add: FIRE PROTECTION JURISDICTION - An area within legally defined boundaries with fire protection responsibilities.

Add: FUELBREAK - A strip of land where the natural fuels have been greatly reduced or thinned.

Add: FIRE PROTECTION GREENBELT - A strip of land with lawn or other small quantities of green vegetation. Examples: golf courses, mowed parks, riverbank paths, etc.

Add: UNIFORM FIRE CODE - Uniform Fire Code as adopted by the State of Montana and local fire protection jurisdictions, as amended.

Add: WILDLAND/RESIDENTIAL INTERFACE (WRI) -

1. Boundary WRI - An area where a clearly defined, linear boundary of homes meets combustible wildland vegetation. Typically, this sort of interface is found on the fringe of large towns.

2. Intermix WRI - An area where structures are scattered among or mixed with wildland vegetation, without a clearly defined boundary. Typically, the intermix WRI is found in rural areas where people have subdivided wildlands into small parcels of 1 to 40 acres.

AGE 14 ARTICLE 3-1(1)(B) GENERAL STANDARDS. Add after Floodplain Regulations.

...Uniform Fire Code, and all other applicable regulations...

AGE 16 ARTICLE 3-2(E). Add to the end of the existing paragraph.

... Access routes shall be reviewed by the County Surveyor and the appropriate fire jurisdiction and be approved by the governing body. All subdivisions within areas of Wildland/Residential Interface are recommended to have more than one access route. When two access routes are not provided, an RSID/SID waiver statement shall be required stating that the acceptance of a deed for a lot within the subdivision constitutes the assent of the owners to any future RSID/SID for the construction of a second access route and may be used in lieu of their signature on an RSID/SID petition.

AGE 19 ARTICLE 3-2(H) ADD:

Bridges and drainage structures shall be reviewed by the County Surveyor and the appropriate fire district and be approved by the County Surveyor and the governing body. In all areas of Boundary Wildland/Residential Interface, bridge shall be as wide as the streets, roads or driveways they connect. At primary entrances and exits of developed of developed areas, all bridges or culverts shall be built or reinforced to a design load of 40 tons (80,000 pounds) minimum. All other bridges within developments shall be built or reinforced to a design load of 20 tons (40,000 pounds).

ARTICLE 3-2(3)(B) Road rights-of-way and surfacing widths shall meet the following standards:

(B) Maximum grade shall be 8%. Grades up to 10% may be allowed for short distances, provided traffic safety has been considered and the design reviewed by the appropriate fire jurisdiction and approved by the County Surveyor and the governing body.

Add new section 3-2(3)(C) The minimum unobstructed width of not less than 20' and an unobstructed vertical clearance for roadways and bridges, within

areas of Wildlands/Residential Interface, shall be 13 feet 6 inches, and shall be reviewed by the appropriate fire jurisdiction for combustibility and emergency access, and approved by the County Surveyor, appropriate fire jurisdiction, and governing body.

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ARTICLE 3-2(2)(6) Driveways.

Add:

(E) Dead-end driveways in excess of 150 feet in length shall be provided with approved provisions for the turning around of fire apparatus. A turnaround shall be within 150 feet of the building. A minimum unobstructed width of not less than 20 feet and an unobstructed vertical clearance of 13'6" for any driveway over 150 feet. The opening through a gate should be two feet wider than the road. Final design shall be approved by the appropriate fire jurisdiction. The governing body may require the developer to enter into a development agreement to ensure future compliance or require that the covenants contain a provision that allows the county to enforce these standards.

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3-7 WATER, SEWAGE DISPOSAL, AND SOLID WASTE

Add the following before the last sentence:

Water supply for fire protection purposes shall be provided by one of the following and shall be approved by the appropriate fire jurisdiction:

- \_\_\_ Municipal water system with 1,000 gpm minimum.
- \_\_\_ Wells with 350 gpm well and a minimum 2000 gallon storage
- \_\_\_ Storage tanks/cisterns with fire hydrants attached
- \_\_\_ Ponds, rivers
- \_\_\_ Residential Sprinkler Systems (In the event that Residential Sprinklers are an acceptable alternative for fire protection, as recommended by the appropriate fire jurisdiction and approved by the governing body, that the requirements of installation shall be included in an agreement with the governing body which shall be filed with the plat).

If no community or municipal water system with 1000 gallons per minute minimum fire flow is provided, an RSID/SID waiver statement shall be required stating that at such time a community or municipal water system is available, the property-owner shall be required to participate in the RSID/SID.

**PAGE 25     ARTICLE 3-8(1) PARKS AND OPEN SPACE REQUIREMENTS**

**Add at the end of the paragraph:**

In areas of WRI, consideration should be given to the use of open spaces and public use areas, such as parks, recreation sites, picnic areas and trails as an effective means of providing fire protection through fuelbreaks and fire protection greenbelts. A mechanism shall be provided by the subdivider to assure continued maintenance of these areas. The use of areas for these purposes shall, be balanced against the need to maintain riparian areas and habitat for species of special concern.

**PAGE 56     ARTICLE 5-1(5)(H) Preliminary Plat Supplements, Covenants and Restrictions.**

In areas of Wildland/Residential Interface the following statement shall be included in a development agreement between the governing body and the developer or in the covenants, except in those cases when the need to protect areas of riparian resource or habitat for species of special concern outweighs the danger of wildfire:

The property-owner shall create a defensible space for fire protection purposes as approved by the appropriate fire jurisdiction. Vegetation shall be removed and reduced around each building according to the slope. Single ornamental trees or shrubs need not be removed as long as all vegetation near them is reduced according to the guideline. Ornamental trees and shrubs should not touch any buildings.

When planting the property owner shall select tress, shrubs, and vegetation that limit or retard fire spread as suggested below:

- A.     Perennial: Choose hardy perennial flowers that are adapted to our climate. These green, leafy, succulent plants are difficult to burn. Watering and regular weeding improves fire resistance.
- B.     Shrubs: Evergreen shrubs such as dwarf conifers or junipers tend to ignite easily: avoid them unless well spaced.
- C.     Trees: Deciduous trees can be clumped, scattered, or planted in greenbelts or windbreak patterns. Evergreen trees tend to ignite easily and should be spaced in accordance with the landscaping guidelines (Appendix VII).

Roof Construction: In areas of Wildland/Residential Interface the following standards shall be used in roof construction:

Use only Class A or B fire-rated roofing materials.

Fire Rating	Type of Material	Spread Index
Class A	Slate	0-25
	Rock shingle	
	Concrete tile	
	Fiberglass based: - asphalt shingle - rolled roofing	
Class B	Aluminum shingle	26-75
	Aluminum or steel panels	

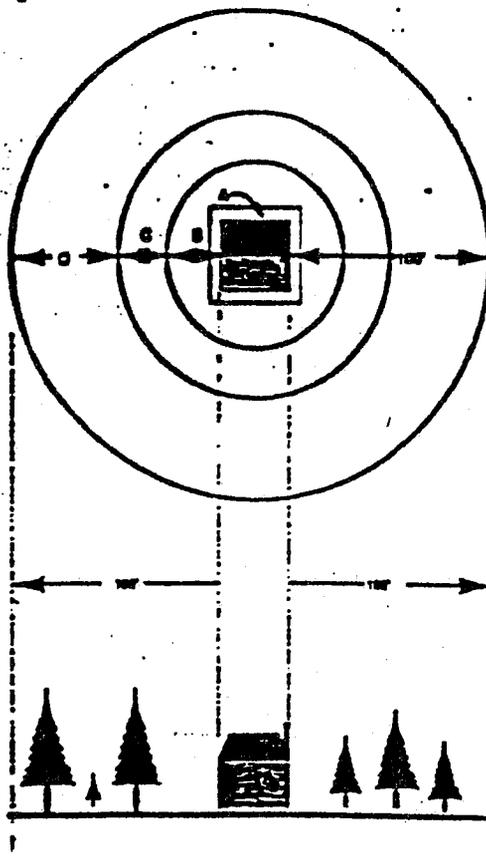
PAGE 74 COMMUNITY IMPACT 2-1(6) Emergency Services:

Add: 2-1(6)(A)(1) Fire Protection Jurisdictions having authority:

- Missoula Rural Fire Dept.
- East Missoula Fire Dept.
- Clinton Rural Fire Dist.
- Frenchtown Fire Dist.
- Florence Fire Dist.
- Arlee Fire Dist.
- Seeley Lake Fire Dist.
- Greenough-Potomac FSA
- Department of State Lands
- U.S. Forest Service
- No existing fire department

# VEGETATION REDUCTION GUIDELINES

## 0% TO 10% SLOPE



**A - THE FIRST 3 FEET OF B**

Maintain an area of non-combustible material - flowers, plants, concrete, gravel, mineral soil, etc.

**B - 10 FEET**

Remove all trees and downed woody fuels.

**C - 20 FEET**

Thin trees to 10 feet between crowns.

Prune limbs of all remaining trees to 15 feet or one-third the total live crown height, whichever is less.

Maintain surface vegetation at 3 inches or less.

Remove all downed woody fuels.

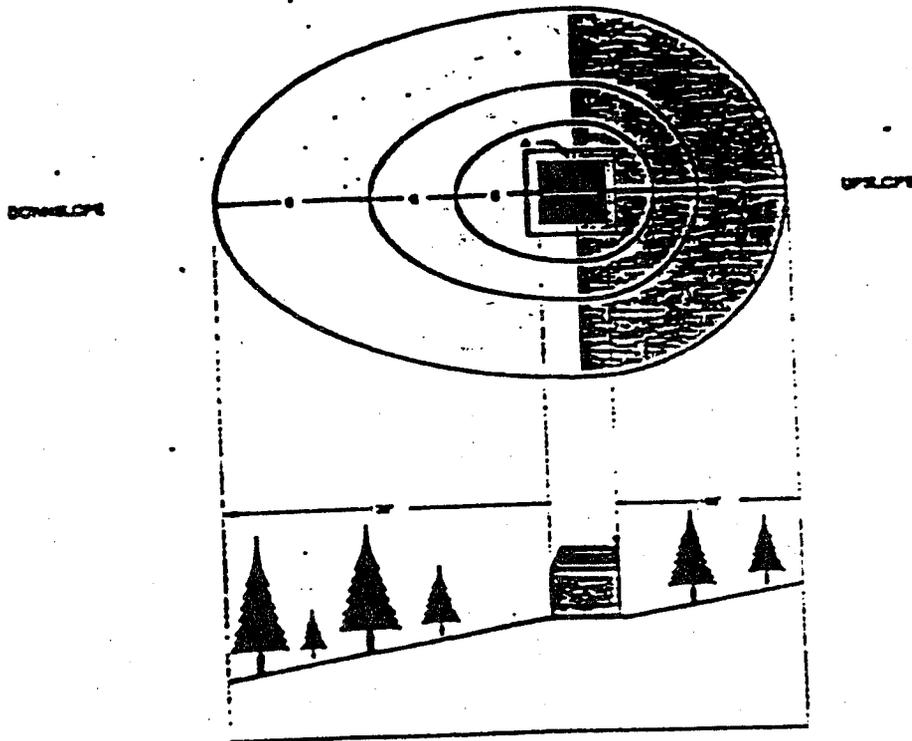
**D - 70 FEET**

Thin trees to 10 feet between crowns.

Prune limbs of all remaining trees to 15 feet or one-third the total live crown height, whichever is less.

Remove all downed woody fuels more than 3 inches in diameter.

VEGETATION REDUCTION GUIDELINES  
10% TO 20% SLOPE



The shaded areas (upslope) of B, C, & D remain a constant distance of 10', 20', and 70' respectively. The shaded area begins from the mid-section of a structure. The unshaded areas (downslope) of B, C, & D increase with slope as detailed below:

**A - THE FIRST 3 FEET OF B**

Maintain an area of non-combustible material - flowers, plants, concrete, gravel, mineral soil, etc.

**B - 15 FEET**

Remove all trees and downed woody fuels.

**C - 25 FEET**

Thin trees to 10 feet between crowns.

Prune limbs of all remaining trees to 15 feet or one-third the total live crown height, whichever is less.

Maintain surface vegetation at 3 inches or less.

Remove all downed woody fuels.

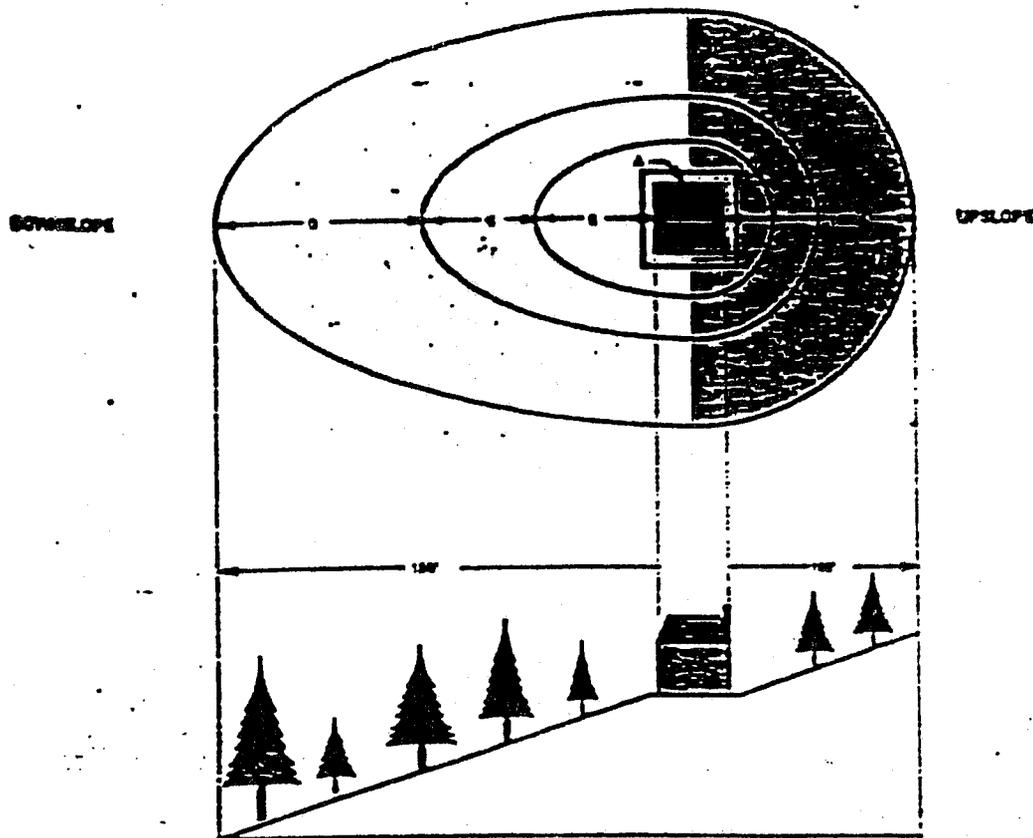
**D - 40 FEET**

Thin trees to 10 feet between crowns.

Prune limbs of all remaining trees to 15 feet or one-third the total live crown height, whichever is less.

Remove all downed woody fuels more than 3 inches in diameter.

# VEGETATION REDUCTION GUIDELINES 20% TO 30% SLOPE



The shaded areas (upslope) of B, C, & D remain a constant distance of 10', 20', and 70' respectively. The shaded area begins from the mid-section of a structure. The unshaded areas (downslope) of B, C, & D increase with slope as detailed below:

**A - THE FIRST 3 FEET OF B**

Maintain an area of non-combustible material - flowers, plants, concrete, gravel, mineral soil, etc.

**B - 20 FEET**

Remove all trees and downed woody fuels.

**C - 30 FEET**

Thin trees to 10 feet between crowns.

Prune limbs of all remaining trees to 15 feet or one-third the total live crown height, whichever is less.

Maintain surface vegetation at 3 inches or less.

Remove all downed woody fuels.

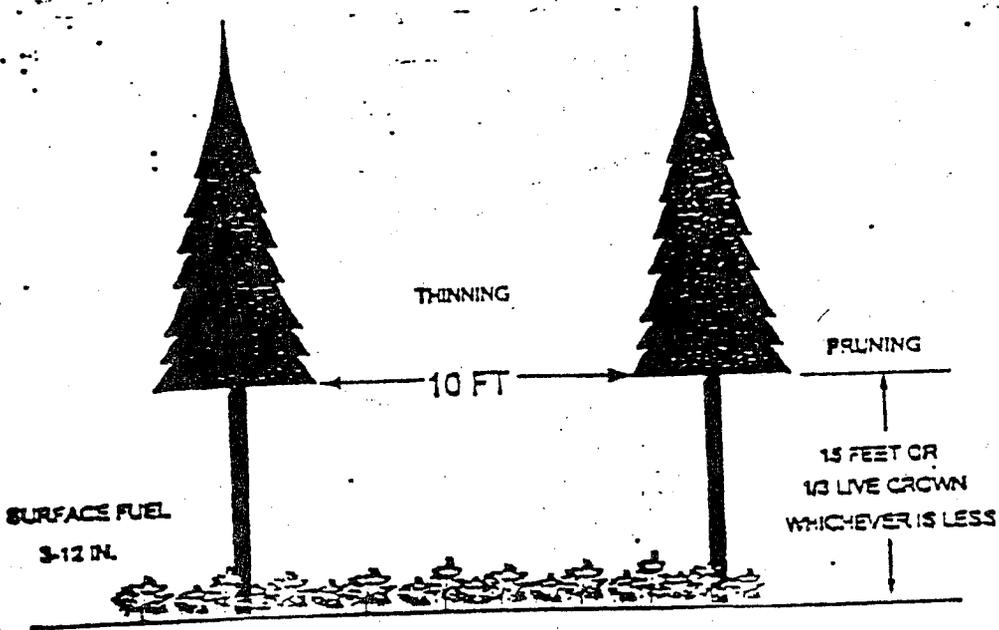
**D - 100 FEET**

Thin trees to 10 feet between crowns.

Prune limbs of all remaining trees to 15 feet or one-third the total live crown height, whichever is less.

Remove all downed woody fuels more than 3 inches in diameter.

# VEGETATION REDUCTION GUIDELINES THINNING AND PRUNING



In areas where vegetation modification is prescribed, use the following guidelines:

**A. THINNING**

Thin trees to 10 feet between crowns.

**B. PRUNING**

Prune the limbs of all remaining trees to 15 feet or one-third the total live crown height, whichever is less.

**C. SURFACE VEGETATION**

Maintain surface vegetation at 3" to 12" as detailed.

