

# BUFFERS SUMMARY

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## A. TIMBER HARVEST/HABITAT ENHANCEMENT BUFFERS (see pages 68-69)

Timber harvest/habitat enhancement buffers will be laid out in the field during the actual sale design and will be based upon the following guidelines:

### 1. BUFFERS AROUND CUTTING UNITS

Cutting units should generally be surrounded by a 100 foot buffer unless such a buffer is disadvantageous to wildlife or their habitat or unnecessary as a screen between the cutting area and most users of the area. However, required buffers shall be increased or decreased based on specific summer line-of-sight requirements necessary to maintain a natural-looking environment and to provide for restricted views from one cutting unit to another cutting unit.

### 2. BUFFERS AROUND PRIVATE LANDS

A minimum buffer of 200 feet will be left on state land between all operations resulting in forest clearings and any private lands. However, single-tree selection harvest may occur within these buffers up to 50 feet from private lands. No harvest may occur within 50 feet of private land.

### 3. EAGLE AND PEREGRINE FALCON PROTECTION BUFFERS

Eagle nest trees and Peregrine Falcon nests shall be protected as required by federal law. There will be no disturbance of natural vegetation within a 330' radius around any eagle or Peregrine Falcon nesting trees and/or nesting sites. (Mike Jacobson, Ecobiologist, Juneau, USFWS, 586-7244.)

### 4. ACTIVITIES ALLOWED IN TIMBER HARVEST/HABITAT ENHANCEMENT BUFFERS

- a. Selective-tree cutting as approved by ADF&G (Habitat Division) and DNR.
- b. Disease and insect control and prevention with pesticides and herbicides as approved by ADF&G, DNR and DEC.
- c. Grazing as approved by ADF&G and DNR, consistent with the grazing guidelines in this chapter on pages 103-117.
- d. Access and utility line development across buffer areas should be kept to a minimum. Access and utility facilities should be located:

(1) Outside of buffers to the extent feasible and prudent;

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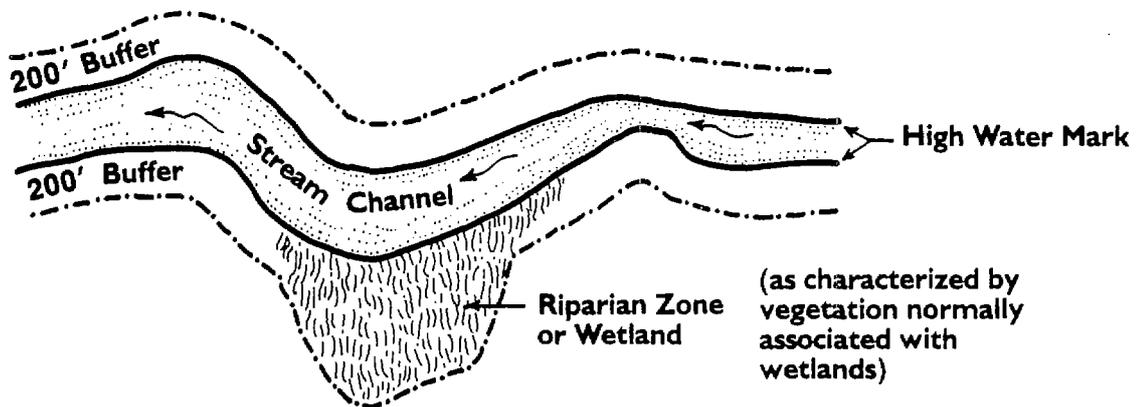
- (2) Perpendicular to buffers, upon entering the buffer, to the extent feasible and prudent;
- (3) So as to reduce visual impacts from primary access routes;
- (4) And require approval by DNR and ADF&G.

## B. LAKESHORES AND STREAM CORRIDOR BUFFERS (see pages 98-100)

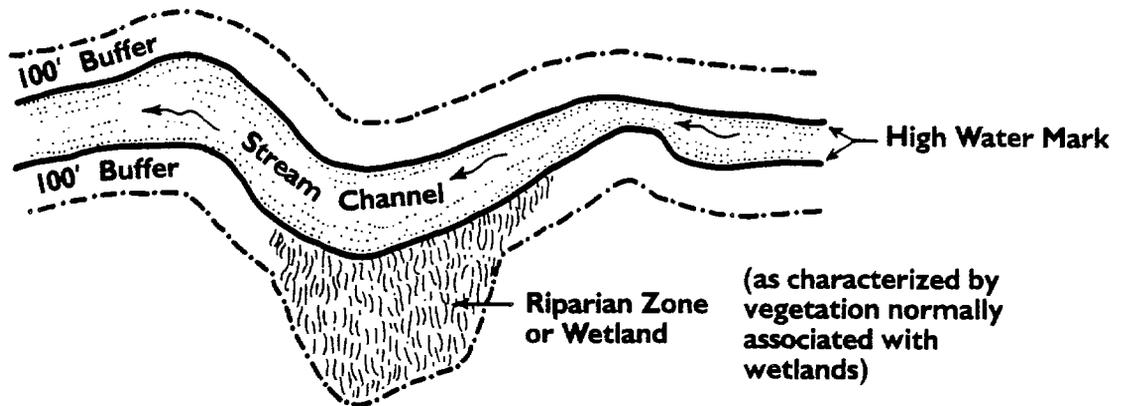
### 1. STREAM BUFFERS

In order to protect water quality, riparian habitat, and recreational values, a buffer of essentially undisturbed land and vegetation should be protected along streams.

- a. Group I - Anadromous Fish Streams. The buffer area shall be normally 200 feet on both sides of the high water mark and shall include all streamside riparian vegetation zones. (See Map 3 on page 23 and Figure below.) In the case of coal development, the buffer will follow the existing standards in the Alaska Surface Coal Mining Control and Reclamation Act (ASCMCRA), and will require a minimum 100 foot setback on all streams.



- b. Group II - Perennial Streams not known to have anadromous fish but which are identified on a U.S.G.S. 1 to 63,360 topographic map or field verified by ADF&G and DNR: The buffer shall be 100 feet wide on both sides of the high water mark and shall encompass the adjacent riparian vegetation zones. (See Map 8 on page 47 and Figure below.)



c. Buffer Adjustments

- (1) Riparian Zone Less Than 100'. The buffer width on Group II streams may be reduced to the width of the riparian zone or 50 feet, whichever is greater, if field verification by ADF&G and DNR concludes the riparian zone is less than 100 feet wide.
- (2) Slope Effects. Buffer widths on Group I and II streams should be adjusted to reduce potentially adverse impacts of development within sloping buffer areas. Buffer widths should conform to the following table:

<u>Average Side Slope</u>	<u>Buffer Width</u>
0 - 20%	SB
20 - 40%	SB + 25%
40% or greater	SB + 50%

SB = Standard buffer (Group I = 200', 100' for coal and Group II = 100')

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- (3) Wind Effect. Riparian buffer widths should be widened as necessary to increase resistance to windthrow of the residual buffer trees in areas subject to strong winds.
- d. Activities Allowed. Activities allowed within Group I and Group II stream buffers include the following:
  - (1) Selective-tree cutting as approved by ADF&G and DNR.
  - (2) Disease and insect control and prevention with pesticides and/or tree removal as approved by ADF&G, DNR and DEC.
  - (3) Grazing as approved by ADF&G and DNR, consistent with the grazing guidelines in this chapter on pages 103-117.
  - (4) Road and trail access to and/or across streams for recreation, habitat enhancement, or forest product harvest purposes as approved by ADF&G and DNR.
  - (5) Access to and/or across streams for utility lines such as powerlines and waterlines, etc. as approved by ADF&G and DNR. Utility systems should not be located so that they parallel stream systems; rather they should cross streams in a perpendicular fashion to the extent feasible and prudent.

## 2. LAKESHORE BUFFERS

- a. 5 Acre Lakes. Buffer widths for lakes up to 5 acres in size are set at 200' landward of the lake's high water mark.
- b. 5-100 Acre Lakes. Buffer widths for lakes between 5 and 100 acres in size are set at 300' landward of the lake's high water mark.
- c. 100+ Acre Lakes. Buffer widths for lakes exceeding 100 acres in size are set at 400' landward of the lake's high water mark.
- d. Slope Effects. Buffer widths for lakes should be adjusted to reduce potentially adverse impacts on wetlands from development on adjacent side slopes. Buffers should be the standard buffer width for side slopes of 0 - 20%, 25% additional buffer should be added to the normal buffer width for side slopes of 20 - 40% and 50% additional buffer should be added to the normal buffer width for side slopes of 40% or greater.

- e. Activities Allowed. Activities allowed within lakeshore buffers include the following:
- (1) Selective-tree cutting as approved by ADF&G and DNR.
  - (2) Disease and insect control and prevention with pesticides and/or tree removal as approved by ADF&G, DNR and DEC.
  - (3) Grazing as approved by ADF&G and DNR, consistent with the grazing guidelines in this chapter on pages 103-117.
  - (4) Road and trail access to lakes for recreation (including sportfishing), habitat enhancement, or forest product harvest purposes as approved by ADF&G and DNR. These roads and trails should not be located so that they parallel the lakeshore within the buffer.
  - (5) Access to lakes for utility lines such as powerlines and waterlines, etc. as approved by ADF&G and DNR. Utility systems should not be located so that they parallel lakeshores.

## C. WETLAND BUFFERS (see pages 101-102)

### 1. WETLAND BUFFERS

- a. Width. Buffer widths for all wetlands are set at 100' landward of the wetland edge (defined as the limit of wetland vegetation as described on page 101).
- b. Slope Effects. All wetland buffers should be adjusted to reduce potentially adverse impacts on wetlands from development on adjacent side slopes. Buffers should be the standard buffer width for side slopes of 0 - 20%, 25% additional buffer should be added to the normal buffer width for side slopes of 20 - 40% and 50% additional buffer should be added to the normal buffer width for side slopes of 40% or greater.
- c. Activities Allowed. Activities allowed within wetland buffers include the following:
  - (1) Selective-tree cutting as approved by ADF&G and DNR.
  - (2) Disease and insect control and prevention with pesticides and/or tree removal as approved by ADF&G, DNR and DEC.
  - (3) Grazing as approved by ADF&G and DNR, consistent with the grazing guidelines in this chapter on pages 103-117.

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- (4) Road and trail access to wetlands lakes for recreation (including sportfishing), habitat enhancement, or forest product harvest purposes as approved by ADF&G and DNR. These roads and trails should not be located so that they parallel the wetland within the buffer.
  - (5) Access to wetlands for utility lines such as powerlines and waterlines, etc. as approved by ADF&G and DNR. Utility systems should not be located so that they parallel wetlands.
- d. Access. Access through wetland buffers and wetlands will be allowed only on winter ice roads for recreation, habitat enhancement, forest product harvest and other activities as approved by ADF&G and DNR.

## D. TRAIL BUFFERS (see pages 121-122)

### 1. TRAIL BUFFERS

- a. Non-historic Trails. No standard minimum vegetated buffer is recommended for most trails since they are located in areas that will be used for multiple use purposes. This diversity of use will provide a variety of viewing opportunities. For example, a trail may transect a habitat enhancement area thus providing a greater opportunity to view and/or harvest wildlife.
- b. Historic Trails. The Chickaloon-Knik-Nelchina, Chickaloon River and the Old 98 Trails are historically significant and shall have a standard minimum 100' vegetated buffer on each side of the existing trail center line. The buffer width may increase up to 300' maximum based on the summer line-of-sight requirement, which dictates that the buffer extends just beyond the point where the summer line-of-sight is blocked by standing vegetation. Artificial strengthening of the buffer through seedling transplants may be incorporated with the approval of ADF&G and DNR.

### 2. ACTIVITIES ALLOWED. Activities allowed within historic trail buffers include the following.

- a. Disease and insect control and prevention with pesticides or selective tree cutting as approved by ADF&G, DNR and DEC.
- b. Other recreational trails may cross these trails and their buffers.
- c. Logging roads and utility lines may cross these trails and their buffers if no feasible and prudent alternative exists. Such crossing should be at 90° or as close to that as possible.

- d. Material sites solely for the purpose of maintaining the trail.
- e. Habitat enhancement activities that involve the conversion of brush are allowed. Selective tree cutting of large trees (8 inches or larger) is not allowed.

## E. ROAD BUFFERS (see pages 126-127)

### 1. ROAD BUFFERS

Buffers of naturally occurring vegetation will be maintained along major roads such as the Glenn Highway, Permanente, Fish-Drill Lake, Buffalo Mine, Castle Mountain Mine and Chickaloon River Roads. These buffers shall be 100 feet wide measured from the outside edge of the right-of-way. However, entry to or exit from the timber harvest/habitat enhancement areas shall be allowed from the road beds. These entry/exit ways may be harvested and therefore should not be more than 100 feet wide nor should the minimum distance between the entry/exit way be closer than 0.25 mile along these roads. The standard 100 foot buffer may be modified based on the line-of-sight requirements as necessary to provide for restricted views through these buffers.

### 2. ACTIVITIES ALLOWED. Activities allowed within road buffers include the following:

- a. Selective-tree cutting as approved by ADF&G (Habitat Div.) and DNR.
- b. Disease and insect control and prevention with pesticides as approved by ADF&G, DNR and DEC.
- c. Grazing as approved by ADF&G and DNR and consistent with the grazing guidelines in this chapter on pages 103-117.
- d. Roads, trails and utility lines may cross the buffer and should be as close to a 90° angle as possible.
- e. Powerlines may be located within the buffer if the purpose is to screen them from the road and sufficient vegetation exists in the right-of-way and buffer to accomplish this.
- f. Recreational trails (e.g. for snowmobiles or 3-wheelers) may be located within the buffer if there is no room for them in the right-of-way and putting them in the buffer does not significantly reduce its screening capability.

### 3. SPUR ROAD ACCESS

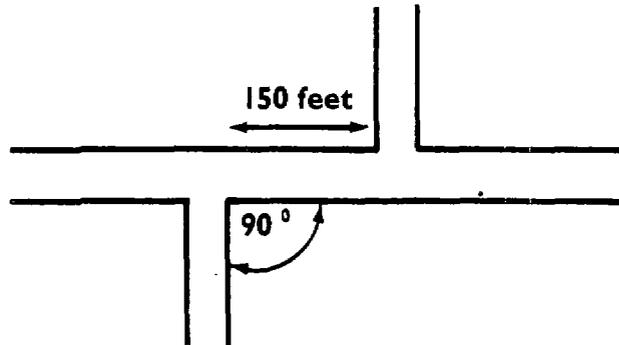
When personal use firewood cutting occurs along a trail, DOF will build spur side trails through the buffer to access the timber rather than allow cutting of buffers.

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4. OFF-SET CROSSING OF LOGGING ROADS.

Logging roads or trails shall cross existing trails at a 90° angle or as close to that as possible. On those portions of the Chickaloon River and the Chickaloon-Knik-Nelchina Trails on which there is vehicular use. Such crossings shall be offset at least 150 feet. (See illustration below.)

Figure 5: OFFSET CROSSING OF LOGGING ROADS



5. CUTTING PERMITS

Personal firewood cutting permits shall specify that no cutting is allowed within the buffer.