

**IDAHO DEPARTMENT OF LANDS**

**FOREST PRACTICE  
RULES  
GUIDANCE**

**RULES  
PERTAINING TO THE  
IDAHO FOREST PRACTICES ACT  
TITLE 38, CHAPTER 13, IDAHO CODE**

**IDAHO DEPARTMENT OF LANDS  
BOISE, ID**

**RULES REPRINTED  
JULY 1, 2014**

**Updated: August 1, 2018  
Replaces all previous versions**

## Table of Contents

<b>I.</b>	<b>HISTORY OF IDAHO FOREST PRACTICES REGULATIONS .....</b>	<b>3</b>
<b>II.</b>	<b>FOREST PRACTICES ACT POLICY .....</b>	<b>4</b>
<b>III.</b>	<b>INSPECTION PROCEDURE .....</b>	<b>6</b>
<b>IV.</b>	<b>FOREST PRACTICES RULES GUIDANCE .....</b>	<b>8</b>
010.	DEFINITIONS.....	10
020.	GENERAL RULES .....	27
030.	TIMBER HARVESTING .....	37
031.	CUMULATIVE WATERSHED EFFECTS.....	72
040.	ROAD CONSTRUCTION AND MAINTENANCE .....	75
050.	RESIDUAL STOCKING AND REFORESTATION .....	105
060.	USE OF CHEMICALS & PETROLEUM PRODUCTS.....	116
070.	SLASH MANAGEMENT.....	128
071.	PRESCRIBED FIRE.....	137

## I. HISTORY OF IDAHO FOREST PRACTICES REGULATIONS

Forest regulation in Idaho began in 1904, when the first landowner fire control association financed forest fire protection through a common assessment of acreage owned. Within a year, the State and the newly formed U.S. Forest Service were partners with landowners and timber companies in "Cooperative Forest Fire Protection," known as the "Idaho Idea."

"Slash" from logging was recognized as an explosive forest fire hazard in the frequently dry summers. In 1907, the Fallon Fire Law requiring timber companies to burn logged-over "slashed" acres entered the Political Code of Idaho. This requirement was expected to reduce fire hazard and assist pioneer farmers in cleaning up cut-over land. Instead, burning often destroyed residual forest growth, including young trees, on land unsuitable for farming. These indiscriminate broadcast burns often escaped as well, becoming destructive forest fires (Incidentally, slash was defined as 4" and less, not 3").

The federal Clark-McNary Act of 1924, partly inspired the Idaho Forestry Act, passed in 1925. Like earlier regulation, the Idaho Forestry Act sought forest fire control through slash hazard reduction and quick fire suppression. Expanded elements of the Idaho Forestry Act provided for reforestation consideration, with the U.S. Forest Service cost-sharing for fire control and seedling production.

The Idaho legislature passed Idaho's first forest practices act, the Cooperative Sustained Yield District Law, in 1937. This law aimed to minimize damage from skid trails and required retained seed trees in the logged area or 200 ponderosa pine saplings or 300 white pine saplings per acre. The law also exempted the remaining merchantable volume of seed trees from county taxes. The Declaration of Purpose section noted the public benefits of productive forests, but did not require provisions for soil or water protection. The authors of Idaho's 1974 Forest Practices Act ignored this law; it was repealed in 1987 at the State Forester's request.

The federal Clean Water Act was enacted in 1972 and amended in 1977 to protect the nation's water resources and maintain their beneficial uses. The Clean Water Act authorized national pollution control programs, many aimed at reducing point source pollution. Congress recognized that non-point source pollution could not be addressed by a national program with one set of standards. Section 208 of the Clean Water Act authorizes and encourages state and local management of non-point pollution sources, which include forest practices.

Partly in response to Section 208, the Idaho State Legislature passed the "Idaho Forest Practices Act," April 2, 1974 (Chapter 197 Idaho Code, SB #1409 As Amended). While water quality was the initiating factor, the Idaho Legislature recognized the need to protect such public resources as soil, air, and wildlife and aquatic habitat. The economic value of forestlands and the need for ongoing growth and harvest was recognized. Similar laws passed, in Nevada, Washington, Oregon, and California at approximately the same time, were among the first comprehensive forest practice laws in the nation.

The Idaho Forest Practices Act (currently Title 38, Chapter 13) requires the Idaho State Board of Land Commissioners (Land Board) to adopt rules describing minimum forest practice standards. A Forest Practices Advisory Committee (FPAC) provides technical advice to the Land Board through the IDL Director.

Oregon passed their Forest Practice Act of 1971 and in July 1972, the initial adoption of Oregon's forest practice rules occurred; by July 1974, Oregon had published the second revision of the rules. The 1974 proposed Idaho Forest Practices administrative rules were nearly identical (with the exception of stream definitions) to the Oregon rules from 1972 through 1974, which indicates there was significant collaboration between the IDL and the Oregon Department of Forestry (ODF). The Idaho rules were published and effective October 14, 1975.

FPA administrative rules are identified in the Idaho Water Quality Standards as the approved best management practices (BMPs) for silvicultural activities. These standards also describe the feedback loop process where designated BMPs are applied on the ground, monitored for their effectiveness at protecting designated beneficial uses, and evaluated against appropriate criteria. BMPs are then modified as needed to maintain, enhance, or restore beneficial uses. Because of this adaptive management process, FPA administrative rules have undergone significant evolution over the years, with rule changes or additions being proposed by the Forest Practices Advisory Committee, approved by the Land Board and adopted by the Legislature. Between 1975 and 2014, revisions occurred 18 times; on average every two years. One of the most significant revisions, in 1985, was the adoption of Oregon's 1974 Class I/Class II stream definition and shade retention structure. There have been only minor changes in this important rule since then, except for the promulgated 2014 Relative Stocking rule for Class I streams. In addition, the Idaho Legislature amended the Forest Practices Act in 1980, 1986, 1987, 1989-1992 and 1995, with concurrent rule amendments occurring about the same time.

## **II. FOREST PRACTICES ACT POLICY**

It is the public policy of the State of Idaho, through the Idaho Department of Lands (IDL), to regulate forest practices to maintain and enhance natural resources. The Idaho Legislature passed the Forest Practices Act (FPA) to ensure the continuous growing and harvesting of forest tree species, while maintaining soil, air, water, vegetation, and wildlife and aquatic habitat.

The Forest Practices Advisory Committee (FPAC) includes forest landowners, operators, general public representatives and a fisheries biologist. Following public reviews under the Administrative Procedures Act, rules are amended and adopted by the Land Board. The FPA administrative rules provide goals and direction to operators and landowners in order to meet the intent of the Act. IDL seeks voluntary cooperation and compliance with the Forest Practices Act. Operators are encouraged to comply with FPA standards, applying the best management practices (BMPs) outlined in the administrative rules <https://adminrules.idaho.gov/rules/current/20/200201.pdf>

and this corresponding guidance. More information can be found at:  
<https://www.idl.idaho.gov/forestry/fpa/index.html>.

Forest practices information and education programs explain to operators and landowners BMPs' significance and proper implementation:

<https://www.uidaho.edu/extension/idahoforestrybmps/>.

Private Forestry Specialists (PFSs) should encourage voluntary compliance, helping the operator or landowner without dictating solutions.

Operators who do not meet FPA standards must improve on-the-ground practices. Operators should be informed of the need for proper BMP selection and implementation, and the consequences of substandard practices. IDL will take enforcement actions if an operator violates the FPA rules and does not take corrective measures. In all cases, corrective action or mitigation will be applied to bring substandard practices into compliance. IDL will not accept notifications from operators who fail to take corrective actions. Should operators habitually fail to comply with the rules, they will be required to post a bond prior to operating.

Operators, landowners, and timber owners are urged to contact an IDL PFS for assistance in meeting FPA standards <https://www.idl.idaho.gov/areas/index.html> . The department will make every effort to respond promptly to any request for assistance or public complaint regarding forest practices.

### III. INSPECTION PROCEDURE

#### INSPECTION PRIORITIES

Ideally, every proposed forest practice should be visited. If this is not feasible, each Area Supervisor should set an inspection-rate goal with their PFS, targeting 50% of the notifications submitted to the Area Office. When inspecting operations, PFSs and Fire Wardens should conduct visits:

1. Before operations begin, if an operator has requested a pre-operational visit, to discuss potential problems and sensitive areas.
2. During operations, to see that all phases correctly implement the FPA rules and BMPs.
3. After completion of operations, to see that all harvesting and slash-management requirements have been met satisfactorily.

When prioritizing potentially inspected operations, prioritized focus should follow these guidelines (with red-font items receiving top priority levels):

1. ***Class I, Fish-Bearing***
  - a. SCAP SNF
  - b. Variance
  - c. TMDL Implementation plan Plan/CWEMP
  - d. Site-specific prescription
  - e. Steep sideslopes
  - f. Unstable soils
  - g. Clearcut/Heavy removal/Reforestation required
  - h. Prescribed burn/slash treatment
  - i. Operator with questionable history or Operator not known
2. ***Class II***
  - a. Site-specific prescription
  - b. TMDL Implementation Plan/CWEMP
  - c. Steep sideslopes
  - d. Variance
  - e. Prescribed burn/slash treatment
  - f. Unstable soils
  - g. Clearcut/Heavy removal/Reforestation required
  - h. SCAP SNF
  - i. Operator with questionable history or Operator not known

Stream Char. → Operation/Site Chars. ↓	<i>Class I</i> <i>Fish-Bearing</i>	<i>Class II</i>
SCAP SNF	Red	Green
Variance	Red	Orange
TMDL Implementation plan Plan/CWEMP	Red	Red
Site-specific prescription	Orange	Red
Steep sideslopes	Orange	Red
Unstable soils	Green	Green
Clearcut/Heavy removal/Reforestation	Green	Green
Prescribed burn/slash treatment	Green	Orange
Questionable/Unknown Operator	Blue	Blue

All priorities are subject to change based on the PFS's experience and discretion. Also, a complaint from the public can prioritize a needed inspection.

#### IV. FOREST PRACTICES RULES GUIDANCE

This rule guidance is broken into **Rule Intent**, **Unsatisfactory Condition**, and **Guidance** sections, as applicable, for each rule.

The **Rule Intent** section defines the desired situation, action or behavior that must occur for compliance to exist. Through understanding rule requirements, the person administering rules can determine whether a given practice is necessary to meet the rule intent and achieve compliance.

The **Unsatisfactory Condition** section states what constitutes noncompliance. The observed field condition or administrative procedure should be compared with these statements to determine if the conditions are unsatisfactory.

The **Guidance** section gives further insight into rule application and enforcement. Occasionally, guidance will suggest repairs for unsatisfactory conditions. Where no damage has occurred, apply the rule as written. Guidance can give additional measures for mitigation in specific situations.



## **IDAPA 20 TITLE 02 CHAPTER 01**

### **20.02.01—RULES PERTAINING TO THE IDAHO FOREST PRACTICES ACT**

#### **000. LEGAL AUTHORITY.**

In accordance with Section 38-1304, Idaho Code, the Idaho Board of Land Commissioners shall adopt rules establishing minimum standards for the conduct of forest practices on forestland. (7-1-96)

#### **001. TITLE AND SCOPE.**

**01. Title.** These rules shall be cited as IDAPA 20.02.01, “Rules Pertaining to the Idaho Forest Practices Act.”

**02. Scope.** These rules constitute the minimum standards for the conduct of forest practices on forestland and describe administrative procedures necessary to implement those standards.

(7-1-96)

**002. WRITTEN INTERPETATIONS.** Pursuant to Idaho Code Section 67-5201(19)(b)(iv), the Department maintains written interpretations of its rules which may include, but may not be limited to, written procedures manuals and operations manuals, Attorney General formal and informal opinions and other written guidance, which pertain to the interpretation of the rules of this chapter. Copies of the procedures manuals and operations manuals are available for public inspection and copying at the Idaho Department of Lands, 300 N. 6th Street, Suite 103, Boise, Idaho 83720. (4-12-06)

**003. ADMINISTRATIVE APPEALS.** All contested forest practice violations shall be governed by the provisions of Section 38-1307(3), Idaho Code. (7-1-96)

**004. INCORPORATION BY REFERENCE.** There are no documents incorporated herein by reference. (4-11-06)

**005. OFFICE – OFFICE HOURS – MAILING ADDRESS AND STREET ADDRESS.** The principal place of business of the Idaho Department of Lands is the Director’s Office at 300 N. 6<sup>th</sup> Street, Suite 103, Boise, Idaho 83720 and is open from 8 a.m. to 5 p.m. (MST), except Saturday, Sunday and legal holidays. The mailing address is Idaho Department of Lands, PO Box 83720, Boise, Idaho 83720-0050. The telephone of the office is (208) 334-0200 and the fax number (208) 334-2339. (4-11-06)

**006 PUBLIC RECORDS ACT COMPLIANCE.** All records relating to this chapter are public records except to the extent such records are by law exempt from disclosure. (4-11-06)

## Guidance

Persons requesting public records should be asked to make their request in writing ([public\\_records\\_request@idl.idaho.gov](mailto:public_records_request@idl.idaho.gov)). Department employees should become familiar with the standards described in the Idaho Public Records Law Manual prior to addressing such requests.

**007. – 009. (RESERVED).**

## **010. DEFINITIONS.**

Unless otherwise required by context as used in these rules: **(10-14-75)**

**01. Act. The Idaho Forest Practices Act, Title 38, Chapter 13, Idaho Code. (7-1-96)**

**02. Acceptable Tree Species. Any of the tree species normally marketable in the region, which are suitable to meet stocking requirements. Acceptable trees must be of sufficient health and vigor to assure growth and harvest. (7-1-96)**

## Guidance

"Normally marketable" refers to commercial tree species suitable for forest product use. Acceptable trees must be undamaged and of sufficient vigor to assure survival and growth. The growing of nontypical species (ornamental, fruit, nut, Christmas trees) on forestland does not require a Forest Practice Notification under 020.06.a. Deciduous trees are acceptable if they are locally marketable, as determined by the Private Forestry Specialist, are undamaged and of sufficient vigor to assure survival and growth.

**03. Additional Hazard. The debris, slashing and forest fuel resulting from a forest practice. (10-14-75)**

**04. Average DBH. The average diameter in inches of trees cut or to be cut, measured at four and one-half (4.5) feet above mean ground level on standing trees. All trees to be cut that do not have a measurable DBH will fall in the one inch (1") class. (7-1-96)**

**05. Best Management Practice (BMP). A practice or combination of practices determined by the board, in consultation with the department and the forest practices advisory committee, to be the most effective and practicable means of preventing or reducing the amount of nonpoint pollution generated by forest practices. BMPs shall include but not be limited to those management practices included in these rules. (9-11-90)**

**06. Board. The Idaho State Board of Land Commissioners or its designee. (10-14-75)**

**07. Buffer Strip. A protective area adjacent to an area requiring special attention or protection. (10-14-75)**

**08. Chemicals. Substances applied to forestlands or timber to accomplish specific purposes and includes pesticides as defined in the Idaho Pesticide Law, Title 22, Chapter 34, Idaho Code, fertilizers soil amendments, road dust abatement products and other materials that may present hazards to the environment. (7-1-98)**

Guidance

The term “pesticides” is an inclusive term defined in the Idaho Pesticide Law, Title 22, Chapter 34: “Pesticide” means, but is not limited to, (a) any substance or mixture of substances intended to prevent, destroy, control, repel or mitigate any insect, rodent, nematode, snail, slug, fungus, weed and any other form of plant or animal life or virus, except virus or fungus on or in living man or other animal, which is normally considered to be a pest or which the director may declare to be a pest, and (b) any substance or mixture of substances intended to be used as a plant regulator, defoliant or desiccant, and (c) any spray adjuvant.”

See road maintenance rules for road dust or road vegetation control chemicals.

**9. Constructed Skid Trail. A skid trail created by the deliberate cut and fill action of a dozer or skidder blade resulting in a road-type configuration. (7-1-96)**

Guidance

On steeper slopes and erosive soils, dropping the dozer or skidder blade or making repeated passes can result in an inadvertently “constructed” skid trail.

**10. Commercial Products. Salable forest products of sufficient value to cover cost of harvest and transportation to available markets. (10-14-75)**

Guidance

This definition refers to products stemming from tree wood and can include deciduous species. Commercial products include saw logs, peelers, poles, posts, pulp, chips, and fuel wood. Minor forest products such as cones, tree bark, berries, and greenery are *not* considered commercial products.

**11. Condition of Adjoining Area.** Those fuel conditions in adjoining areas that relate to spread of fire and to economic values of the adjoining area. (1-24-78)

**12. Contaminate.** To introduce into the atmosphere, soil, or water sufficient quantities of substances that are injurious to public health, safety, or welfare or to domestic, commercial, industrial, agriculture or recreational uses or to livestock, wildlife, fish or other aquatic life. (10-14-75)

**13. Cross-ditch.** A diversion ditch or hump in a trail or road for the purpose of carrying surface water runoff into the vegetation, duff, ditch, or other dispersion area so that it does not gain the volume and velocity which causes soil movement and erosion. (3-13-90)

**14. Cull.** Nonmerchantable, alive, standing trees of greater height than twenty (20) feet. (1-24-78)

**15. Department.** The Idaho Department of Lands. (10-14-75)

**16. Deterioration Rate.** The rate of natural decomposition and compaction of fuel debris which decreases the hazard and varies by site. (1-24-78)

Guidance

Deterioration rate refers to the time it takes slash to break down after a forest practice. Deterioration varies with species and site factors.

**17. Director.** The Director of the Idaho Department of Lands or his designee. (10-14-75)

Guidance

Private Forestry Specialists, Fire Wardens, Resource Specialists or other department employees charged with FPA administration are considered "designees."

**18. Emergency Forest Practice.** A forest practice initiated during or immediately after a fire, flood, windthrow, earthquake, or other catastrophic event to minimize damage to forestlands, timber, or public resources. (10-14-75)

**19. Fertilizers.** Any substance or any combination or mixture of substances used principally as a source of plant food or soil amendment.

**20. Fire Trail. Access routes that are located and constructed in a manner to be either useful in fire control efforts or deterring the fire spread in the hazard area. (10-14-75)**

**21. Forestland. Federal, state and private land growing forest tree species which are, or could be at maturity, capable of furnishing raw material used in the manufacture of lumber or other forest products. The term includes federal, state and private land from which forest tree species have been removed but have not yet been restocked. It does not include land affirmatively converted to uses other than the growing of forest tree species. (7-1-96)**

Guidance

Although not specifically addressed in the Act, county, municipal, and tribal lands can also be considered "forestlands." This definition does not distinguish commercial from noncommercial forestland or set a minimum acreage for forestland.

**22. Forest Practice. (10-14-75)**

**a. The harvesting of forest tree species including felling, bucking, yarding, decking, loading and hauling; road construction, improvement or maintenance including installation or improvement bridges, culverts or structures which convey stream flows within the operating area; also including the clearing of forest land for conversion to non-forest use when harvest occurs; (7-1-98)**

**b. Road construction, reconstruction or maintenance of existing roads including installation or improvement of bridges, culverts or structures which convey streams not within the operating area associated with harvesting of forest tree species; (7-1-98)**

Guidance

Use of a non-publicly maintained road, in conjunction with a forest practice, shall subject the operator to applicable provisions of road construction and maintenance rules. See road construction and maintenance guidance ([Rule 040](#)).

**c. Reforestation; (10-14-75)**

**d. Use of chemicals for the purpose of managing forest tree species or forestland; (7-1-98)**

**e. The management of slash resulting from harvest, management or improvement of forest tree species or the use of prescribed fire on forestland. (7-1-98)**

f. **"Forest Practice" shall not include preparatory work such as tree marking, surveying, and road flagging or removal or harvesting of incidental vegetation from forestlands; such as berries, ferns, greenery, mistletoe, herbs, mushrooms, or other products which cannot normally be expected to result in damage to forest soils, timber, or public resources.** (10-14-75)

Guidance

Forestland conversions are not considered forest practices unless timber harvest or other forest practices (as defined in the rules) occur. For further guidance, refer to Rule 020.02, Conversion of Forestlands, and Rule 020.06, Types of Operations for Which Notification Shall be Required.

**23. Forest Regions. Two (2) regions of forestland: one (1) being north of the Salmon River and one (1) being south of the Salmon River.** (7-1-96)

**24. Forest Type. Five forest types in Idaho are defined as follows:** (3-20-14)

a. **North Idaho grand fir/western red cedar (NIGF): moist to wet interior forests with western red cedar, western hemlock, and grand fir being primary climax species, found in forests north of the Clearwater and Lochsa Rivers.** (3-20-14)

b. **Central Idaho grand fir/western red cedar (CIGF): productive conifer forests found in forests between the Lochsa River Basin and the Salmon River, characterized by stands having western red cedar and grand fir as climax species, with a mixed-conifer overstory increasingly comprised of ponderosa pine, Douglas-fir, and larch in the river breaks canyon-lands. Stocking levels are generally lower than that of the NIGF stands.** (3-20-14)

c. **South Idaho grand fir (SIGF): mixed-conifer forests, dominated by ponderosa pine and Douglas-fir, found south of the Salmon River with grand fir and occasionally western red cedar being the stand climax species.** (3-20-14)

d. **Western hemlock-subalpine fir (WH): higher-elevation, moist, cool interior forests dominated by western hemlock, mountain hemlock, and/or subalpine fir.** (3-20-14)

e. **Douglas-fir-ponderosa pine (PP): drier forests dominated by ponderosa pine and Douglas-fir, generally found in lower-elevation, dry sites.** (3-20-14)

### Guidance

The Forest Type definitions apply to the Streamside Tree Retention Rule 030.07.e.ii. The forest types were initially developed by Cramer Fish Sciences and were presented in a paper titled “Using Stream Shade and Large Wood Recruitment Simulation Models to inform Forest Practices Regulations in Idaho” (January 2012). The definitions delineate geographic areas of similar productivity expressed as potential RS by forest type. It is important to recognize that the varied geology, micro-climate, aspect and elevation differences within a geographic region may impact the forest type chosen for a particular site, regardless of the region. The Private Forestry Specialist shall make the determination of which Forest Type definition best applies to a specific operation using their professional judgment and area knowledge.

**25. Fuel Quantity. The diameter, the number of stems and the predominate [sic] (*predominant*) species to be cut or already cut, and the size of the continuous thinning block all of which determine quantity of fuel per unit of area. (1-24-78)**

### Guidance

Refer to Rule 070, Table II, Hazard Points.

**26. Ground Based Equipment. Mobile equipment such as tractors, dozers, skidders, excavators, loaders, mechanized harvesters and forwarders used for harvesting, site preparation or hazard reduction. This does not include cable systems associated with stationary yarding equipment. (4-4-13)**

### Guidance

Classify tower yarders and other skyline operations stabilized with guy wires, operating from a road, as stationary yarding equipment. Consider excavators, jammers, tong- or choker-throwing equipment, or other wheeled or tracked equipment with short line yarding capabilities (<400 ft) stationary if operating from a road; otherwise this equipment is considered ground-based. Horses are animals, not equipment.

**27. Habitat Types. Forestland capable of producing similar plant communities at climax. (7-1-96)**

### Reference

Cooper, et.al. 1991. Forest Habitat Types of Northern Idaho: a Second Approximation. Gen. Tech. Rep. INT-236. Ogden, UT: USDA, For. Serv., Int. Res. Sta. 143p.

Steele, et.al. 1981. Forest Habitat Types of Central Idaho. Gen. Tech. Rep. INT-114. Ogden, UT: USDA For. Serv., Int. Res. Sta. 138 p.

Steele, et.al. 1983. Forest Habitat Types of Eastern Idaho-Western Wyoming. Gen. Tech. Rep. INT-144. Ogden, UT: USDA For. Serv., Int. Res. Sta. 122p.

**28. Harvesting. A commercial activity related to the cutting or removal of forest tree species to be used as a forest product. A commercial activity does not include the cutting or removal of forest tree species by a person for his own personal use. (10-24-75)**

Guidance

On occasion, harvested timber is used for barter. These harvests are considered commercial, the timber is being sold for another product or service in lieu of monetary payment.

Individuals harvesting for personal use should be encouraged to voluntarily apply BMPs. They should also be informed that counties, cities and other state agencies may have regulations that apply in situations that the FPA does not, particularly near streams and other water bodies.

**29. Hazard. Any vegetative residue resulting from a forest practice which constitutes fuel. (1-24-78)**

**30. Hazard Offset. Improvements or a combination of practices which reduces the spread of fire and increases the ability to control fires. (10-14-75)**

**31. Hazard Points. The number of points assigned to certain hazardous conditions on an operating area, to actions designed to modify conditions on the same area or to actions by the operator, timber owner or landowner to offset the hazardous conditions on the same area. (1-24-78)**

**32. Hazard Reduction. The burning or physical reduction of slash by treatment in some manner which will reduce the risk from fire after treatment. (10-14-75)**

Guidance

For rule s 010.30.- 32., Refer to Rule 070., Table I, Hazard Points; Table II, Hazard Points Worksheet; Table III, Hazard Offsets.

**33. Lake. A body of perennial standing open water, natural or human-made, larger than one (1) acre in size. Lakes include the beds, banks or wetlands below the ordinary high water mark. Lakes do not include drainage or irrigation ditches, farm or stock ponds, settling or gravel ponds. Any reference in these rules to Class I streams shall also apply to lakes. (7-1-96)**



### Guidance

Fish in private ponds are not considered a public resource, and these ponds are not considered lakes requiring Class I protection or site-specific riparian prescription.

For water bodies less than 1 acre in size, apply the Class II rules.

**34. Landowner. A person, partnership, corporation, or association of whatever nature that holds an ownership interest in forestlands, including the state. (10-14-75)**

### Guidance

In the case of federal, state, tribal, and local government lands, the agency representative should be considered the landowner. A partnership, corporation or association may have several individuals with ownership rights.

**35. Large Organic Debris (LOD). Live or dead trees and parts or pieces of trees that are large enough or long enough or sufficiently buried in the stream bank or bed to be stable during high flows. Pieces longer than the channel width or longer than 20 feet are considered stable. LOD creates diverse fish habitat and stable stream channels by reducing water velocity, trapping stream gravel and allowing scour pools and side channels to form (3-13-90)**

**36. Merchantable Material. That portion of forest tree species suitable for the manufacture of commercial products which can be merchandised under normal market conditions. (10-14-75)**

**37. Merchantable Stand of Timber. A stand of trees that will yield logs or fiber: (7-1-96)**

**a. Suitable in size and quality for the production of lumber, plywood, pulp, or other forest products; (10-14-75)**

**b. Of sufficient value at least to cover all costs of harvest and transportation to available markets. (10-14-75)**

**38. Noncommercial Forestland. Habitat types not capable of producing twenty (20) cubic feet per acre per year. (7-1-96)**

**39. Operator. A person who conducts or is required to conduct a forest practice. (10-14-75)**

### Guidance

The notification is a legal document which fixes the responsibility of compliance with the Forest Practices Act (FPA) and FPA administrative rules, and any associated legal liability. The **operator**, as listed on the notification, and as identified by a signature on the notification, is ultimately responsible for all forest practice activities and is legally liable for any repairs, fines, or legal action resulting from forest practices, if the operation is found to be in violation of the FPA rules. It is essential that the person whose name appears as the **operator** be aware of the responsibilities accepted; therefore, a signature from the operator must be obtained on the notification, even if the operator and the contractor are the same person or company.

**40. Operating Area. That area where a forest practice is taking place or will take place. (1-24-78)**

### Guidance

The operating area is the physical area on the ground impacted by the forest practice, on which equipment has operated, material has been removed or material has been added. The legal description listed on a notification form should include all of the operation area.

**41. Ordinary High Water Mark. That mark on all water courses, which will be found by examining the beds and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation, as that condition exists on the effective date of this chapter, or as it may naturally change thereafter. (10-14-75)**

### Guidance

The Ordinary High Water Mark (OHW) is located at the bankfull stage (i.e., the edge of the bankfull channel), which is easiest to identify on riffles rather than pools. The bankfull stage can be identified using multiple indicators:

- The break in slope of the bank, which if a floodplain is present, is often located at the slope break between the channel and the flat depositional feature of the active floodplain.
- The height of depositional features when present (e.g., gravel bars), however it may be even higher than these features.
- The lower limit of certain perennial plant species, however vegetation is not always the most reliable indicator.

For streams or lakes with broad flood plains, braided channels, and meandering overflow channels, the high water mark may be a considerable distance from the main channel.

**42. Outstanding Resource Water.** A high quality water, such as water of national and state parks and wildlife refuges and water of exceptional recreational or ecological significance, which has been so designated by the legislature. ORW constitutes an outstanding national or state resource that requires protection from nonpoint activities, including forest practices, that may lower water quality. (7-1-96)

Guidance

The legislature has not designated any ORWs where additional forest practice rules have been developed.

**43. Partial Cutting.** The well distributed removal of a portion of the merchantable volume in a stand of timber. This includes seed tree, shelterwood, or individual tree selection harvesting techniques. (10-14-75)

**44. Prescribed Fire.** The controlled application of fire to wildland fuels in either their natural or modified state, under such conditions of weather, fuel moisture and soil moisture, to allow the fire to be confined to a predetermined area and at the same time to produce the intensity of heat and rate of spread required to meet planned objectives. (7-1-96)

Guidance

The use of prescribed fire rules apply to the management of forestland only. Modified state means jackpot or slash piles resulting from harvest and slash management activities.

**45. Present Condition of Area.** The amount or degree of hazard present before a thinning operation commences. (1-24-78)

**46. Public Resource.** Water, fish, and wildlife, and in addition means capital improvements of the state or its political subdivisions. (10-14-75)

**47. Reforestation.** The establishment of an adequately stocked stand of trees of species acceptable to the department to replace the ones removed by a harvesting or a catastrophic event on commercial forestland. (10-14-75)

**48. Relative Stocking.** A measure of site occupancy calculated as a ratio comparison of actual stand density to the biological maximum density for a given forest type. This ratio, expressed as a percentage, shows the extent to which trees utilize a plot of forestland. (3/20/14)

## Guidance

Relative Stocking (RS) is a more robust measure of stand density which takes both stem size and stem frequency into account. RS is expressed as a percentage based on the theoretical biological maximum stocking levels for a given site. To simplify the implementation process, the state's timber stands are categorized into five forest types. There are many habitat types with different potential productivity lumped together into each of the five forest types. Because of this, it is possible that a site could have a calculated RS greater than 100.

Rule 030.07.e.ii contains a table with RS numbers based on diameter classes. An operator may choose to use the table or may choose to calculate each tree according to its specific diameter. The formula for calculating RS is:  $RS_i = (0.00545415 * di^{1.5}) / \text{Maximum RDsum}$ , where:  $RS_i$  = Relative Stocking Value (individual tree),  $di$  = tree diameter (individual tree) and Maximum RD sum is the Theoretical maxima derived from actual Idaho riparian data. The Maximum RD sum is 82.3 for NIGF, 70.6 for CIGF, 58.8 for SIGF, 64.7 for WHSF, and 52.9 for DFPP. The resulting value is a percentage of the RS value per acre of the tree.

**49. Relief Culvert. A structure to relieve surface runoff from roadside ditches to prevent excessive buildup in volume and velocity. (10-14-75)**

**50. Rules. Rules adopted by the Board pursuant to Section 38-1304, Idaho Code. (7-1-96)**

**51. Slash. Any vegetative residue three inches (3") and under in diameter resulting from a forest practice or the clearing of land. (7-1-96)**

**52. Site. An area considered as to its ecological factors with reference to capacity to produce forest vegetation; the combination of biotic, climatic, and soil conditions of an area. (10-14-75)**

**53. Site Factor. A combination of percent of average ground slope and predominate [sic] (*predominant*) aspect of the forest practice area which relate to rate of fire spread. (1-24-78)**

## Guidance

The site factor refers to the practices in Rule 070, Slashing Management.

**54. Site-specific Best Management Practice. A BMP that is adapted to and takes account of the specific factors influencing water quality, water quality objectives, on-site conditions, and other factors applicable to the site where a forest practice occurs, and which has been approved by the Department, or by**

**the Board in consultation with the Department and the Forest Practices Advisory Committee. (7-1-96)**

Guidance

Site-Specific Best Management Practices (SSBMP's) were developed under the Idaho Antidegradation Agreement from 1989-1995. These SSBMPs remain in effect and each Area Office needs to maintain watershed maps showing where SSBMPs apply within their area. At the time of notification, operators should be given a copy of any and all applicable SSBMPs for the geographical area of their operation. These SSBMPs are fully enforceable under the Forest Practices Act until replaced by Cumulative Watershed Effects Management Prescriptions (CWEMPs).

**55. Size of Thinning Block. Acres of continuous fuel creating an additional hazard within a forest practice area. Distance between the perimeter of thinning blocks containing continuous fuel must be a minimum of six (6) chains apart to qualify as more than one block. (1-24-78)**

**56. Snags. Dead, standing trees twenty (20) feet and greater in height. (1-24-78)**

**57. Soil Erosion. Movement of soils resulting from forest practices. (10-14-75)**

**58. Soil Stabilization. The minimizing of soil movement. (10-14-75)**

**58. State. The state of Idaho or other political subdivision thereof. (10-14-75)**

**60. Stream. A natural water course of perceptible extent with definite beds and banks which confines and conducts continuously or intermittently flowing water. Definite beds are defined as having a sandy or rocky bottom which results from the scouring action of water flow. Any reference in these rules to Class I streams shall also apply to lakes. (7-1-96)**

Guidance

The definition of a stream here applies to surface waters only. One of the purposes of the Forest Practices Act is to protect "water resources and aquatic habitat," including lakes, ponds, and streams. "Sandy or rocky" bottom also includes mud, clay, or silt bottoms; i.e., a non-vegetated channel bottom.

Operators should be reminded that smaller streams are often dry during the summer months, but still receive the same protection as those with flowing water

year-round. Some dry streams provide fish habitat during the wet season and therefore are designated as Class I.

Bogs, seeps, swamps, wet areas, springs, draws, or other sites where water is present are not considered streams. Rule 030.08.c. specifies the requirements for these areas.

**a. Class I streams are used for domestic water supply or are important for the spawning, rearing or migration of fish. Such waters shall be considered to be Class I upstream from the point of domestic diversion for a minimum of one thousand three hundred and twenty (1,320) feet. (11-7-86)**

#### Intent

This classification for streams is based on use, with the intent of developing rules to ensure that impacts of forest practices on streams are compatible with the needs of domestic water users and fish populations.

#### Guidance

The Private Forestry Specialist has the responsibility to designate stream classes on private lands.

Streams classified as Class I for “domestic water supply” purposes are used for drinking, culinary, or other household human use. Domestic use excludes livestock watering, irrigation, car washing, or other uses not directly associated with human health. Presence or absence of a water right does not constitute domestic use; domestic use should be verified. Uses can range from a seasonal cabin use via a two-inch pipe to municipal water systems. Judgment must be applied when setting SPZ extent. For major domestic uses or on high-hazard sites, Class I designation should exceed the 1,320 foot minimum. Operations in public water supply watersheds, as designated by DEQ (at least 25 users or 10 households), require a pre-operational inspection.

Streams classified as Class I for “fish use” have documented past or present fish populations and are capable of sustaining fish spawning, rearing, or migration. Class I streams may be intermittent. The following procedures were developed to help the Private Forestry Specialist classify streams in a consistent manner.

- (1) Consult existing sources for fish population distribution when classifying streams. The Staff Offices in Coeur d’Alene and Boise keep records of fish distribution from the Idaho Department of Fish and Game, and federal fish and wildlife Services. Local landowners may have electronic maps or other sources of information documenting past or present fish populations. If existing sources can document past or present fish populations within the operation area, designate the stream as Class I.

(2) Field inspection is required where fish presence/absence is questionable or unknown. Research has shown that streams capable of supporting the spawning, rearing, and migration of trout (native salmonids) demonstrate the following characteristics:

- (a) Perennial surface flow (although some intermittent streams support fish spawning),
- (b) Sustained stream gradient (as measured with a clinometer) less than 22%, and
- (c) Gravel substrate.

Conduct field inspections during summer flow conditions when the water is clear and stream temperatures sustain fish activity. Start at the downstream end of the operating area and slowly walk upstream watching for fish movement. If direct observation reveals fish presence, designate the stream as Class I to the upstream extent of fish use or operating area, whichever comes first.

Consider natural migration barriers when conducting field inspections that may preclude fish use. Natural migration barriers include waterfalls and bedrock slides. Structures such as log jams and beaver dams are not migration barriers because fish can usually navigate around, over, or through these structures given adequate stream flow. Always check upstream of migration barriers for fish presence because viable fish populations are sometimes found upstream of natural migration barriers.

If fish are not normally present at the time of inspection, or unobservable due to water conditions, and a stream exhibits the characteristics of a Class I stream it should be treated as such, even if it is not on the map. In such a case, the Class I-Class II stream boundary may be determined by using the acreage breaks identified in the Class II stream definition (Rule 010.59.b).

The department's fisheries biologist is available for field consultation and/or stream classification training by request. Requests for field consultation or training should be directed to the Interdisciplinary Team Leader by the Area Manager.

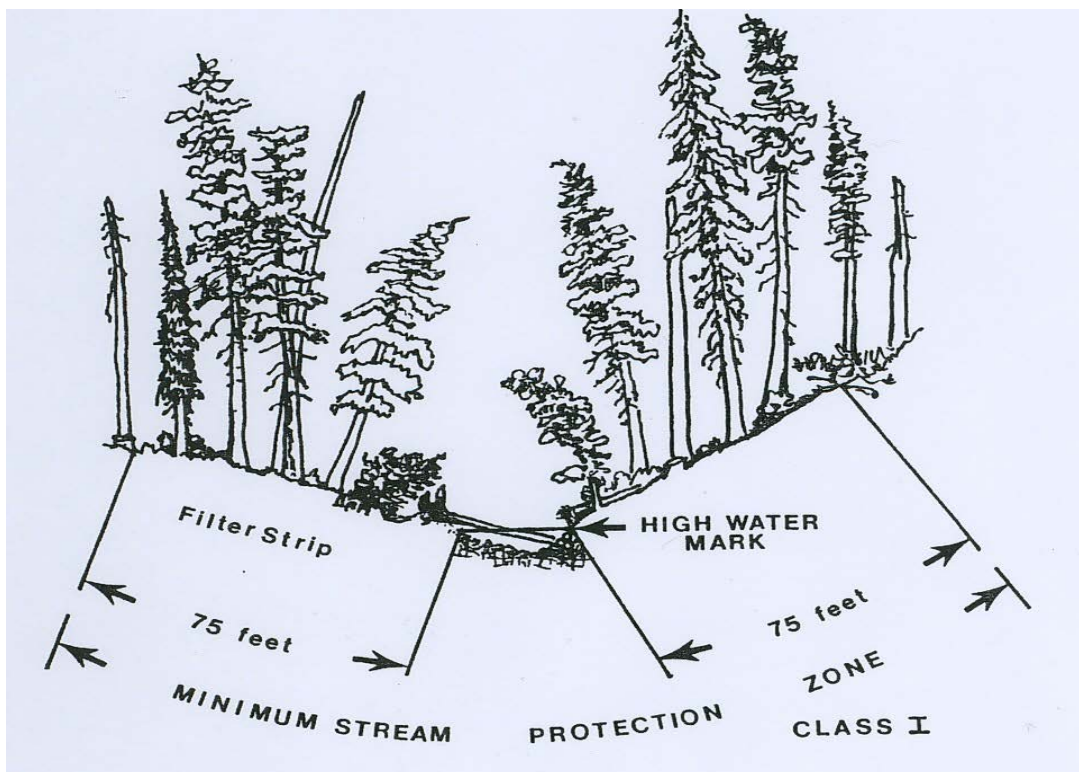
All known Class I streams should be designated on stream class maps. The maps must be updated as changes occur. The Private Forestry Specialists are responsible for keeping Area maps updated for private ownerships. The department's fisheries biologist has the responsibility of collecting Area map updates on a periodic basis and incorporating these changes in a statewide stream class map.

b. **Class II streams are usually headwater streams or minor drainages that are used by only a few, if any, fish for spawning or rearing. Where fish use is unknown, consider streams as Class II where the total upstream watershed is less than two hundred and forty (240) acres in the north forest region and four hundred and sixty (460) acres in the south forest region. Their principle value lies in their influence on water quality or quantity downstream in Class I streams. (7-1-96)**

Guidance

Class II stream designation is given to streams without proof of domestic water use or fish use and does not demonstrate the characteristics of a Class I stream. Class II stream flow may be intermittent. Where fish use is unknown, the rule attempts to provide guidance (watershed acres) to landowners/operators for determining the upstream extent of the stream network that fish are likely to use. Private Forestry Specialists are expected to make stream class determination based on direct observation and professional judgment and should not rely on the acreage breaks as an absolute standard.

c. **Class I Stream Protection Zone means the area encompassed by a slope distance of seventy-five (75) feet on each side of the ordinary high water marks. (Figure 1.) (7-1-96)**



Intent



Stream Protection Zones (SPZ) are areas adjacent to streams or lakes that include components (soils, rocks, vegetation, LOD, etc.) which provide beneficial functions to the water body.

SPZs are not intended to be “no touch zones,” but rather “carefully managed zones.”

### Guidance

Consider the 75 feet to be a minimum distance; encourage operators to adopt varying SPZ widths where site-specific conditions warrant. At times, activities beyond 75 feet may need to be modified to protect the components of the SPZ, such as timber felling or road construction on very steep slopes. In situations requiring modification of activities greater than 75 feet from the stream, enforcement action should focus on addressing impacts to SPZ components within the specified width of the SPZ.

For streams with broad flood plains, braided channels, and meandering overflow channels, the high water mark may be a considerable distance from the normal flow channel. Vegetated areas between the outermost ordinary high water marks on a braided channel stream should be considered part of the SPZ.

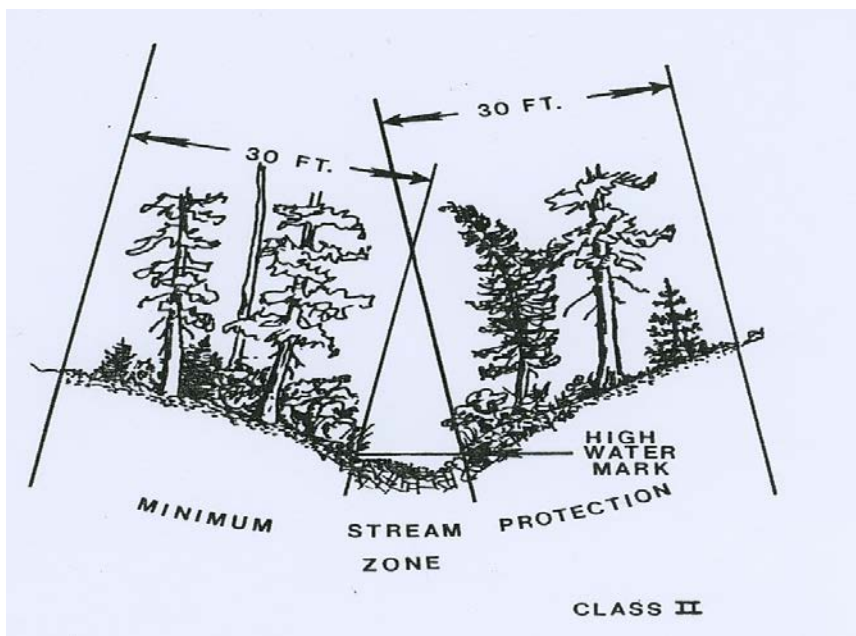
**d. Class II Stream Protection Zone means the area encompassed by a minimum slope distance of thirty (30) feet on each side of the ordinary high water marks. (Figure 2.) For Class II streams that do not contribute surface flow into Class I streams, provide soil stabilization and water filtering effects by leaving undisturbed soils in widths sufficient to prevent washing of sediment. In no case shall this width be less than five (5) feet slope distance on each side of the ordinary high water mark. (7-1-96)**

### Intent

Stream Protection Zones (SPZs) are areas adjacent to streams or lakes that include components (soils, rocks, vegetation, LOD, etc.) which provide beneficial functions to the water body.

SPZ's are not intended to be “no touch zones,” but rather “carefully managed zones.”

### **Figure 2.**



### Guidance

Perennial or intermittent stream flow is not a factor in determining if a 30-foot SPZ is required. The determining factor is where Class II water flows and if that water will affect beneficial uses. Streams that subside and lose their stream identity or flow into agricultural or industrial diversions do not directly influence Class I streams; therefore, the 5-foot-wide SPZ standard applies.

A given water course may exhibit alternating stream (bed and bank) and draw (no bank, vegetated bottom) segments. Draws that are connected above and below by Class II streams should be treated as Class II streams, with an appropriate SPZ width applied (5-30 feet).

**61. Timber Owner. A person, partnership, corporation, or association of whatever nature, other than the landowner, that holds an ownership interest in forest tree species on forestland. (10-14-75)**

**62. Time of Year of Forest Practice. Those combinations of months during which time the forest practice is taking place. Points assigned are: October through December - 2 points; August through September - 4 points; January through April - 7 points; May through July - 10 points. (1-24-78)**

011. - 019. (RESERVED)

## **020. GENERAL RULES**

**01. Compliance. Practices contained within a rule shall be complied with to accomplish the purpose to which the rule is related. (8-13-85)**

**a. If conditions of sites or activities require the application of practices which differ from those prescribed by the rules, the operator shall obtain a variance according to the following procedure: (8-13-85)**

**i. The operator shall submit a request for variance to the department in writing. The request shall include a description of the site and particular conditions which necessitate a variance, and a description of proposed practices which, if applied, will result in a violation of the rules. (8-13-85)**

**ii. Within fourteen (14) calendar days the department shall evaluate the request and notify the operator in writing of the determination to allow or disallow the variance request. (7-1-96)**

**iii. All practices authorized under this procedure shall provide for equivalent or better results over the long term than the rules which are superseded to ensure site productivity, water quality and fish and wildlife habitat. A variance can be applied only at approved sites. (8-13-85)**

### Rule Intent

A variance allows for an exception to the stated rule in a situation in which alternative practices (different than the rules) will provide equal or better protection of resources. Meeting the intent of a rule will be the overriding goal. Existing rules apply unless a variance has been requested by the operator and approved by the department. The approval of a variance is based on a finding that the prescribed alternative practice will result in meeting or exceeding the intent of the rule (i.e., meeting or exceeding the results of complying with the stated rule).

Both long-term and short-term impacts must be taken into account before the rule intent is judged as being met. Potential for future impacts must be evaluated when considering a variance. The Area Manager, at the Supervisory Area in which the variance applies, must approve the variance.

### Unsatisfactory Condition

Unsatisfactory conditions exist when additional required practices or other conditions, as stated on the variance form, have not been followed. Failure to obtain a variance for alternative practices, which do not comply with the FPA rules, is also an unsatisfactory condition.

### Guidance

This rule describes the variance procedure and specifies those conditions that must be met to obtain the variance. A variance must be obtained prior to implementation of an alternative practice. Variances will not be issued after unsatisfactory practices have occurred; however, if the alternative practice is to continue in another location within the operating area, a variance can be granted provided the "equivalent or better" standard can be met for the practice in the new area.

Failure to obtain the proper variance will be cited as an unsatisfactory condition and may be cited as a Notice of Violation if significant resource damage has occurred. If an unsatisfactory condition is found, it is important that the operator understands when a variance is needed and how to request one.

Refer to Section V. (Variances) of this document for detailed information on granting a variance.

**b. Practices shall also be in compliance with the Stream Protection Act (title 42, chapter 38, Idaho Code), Idaho Water Quality Standards and Waste Water Treatment Requirements (title 39, chapter 1, Idaho Code), the Idaho Pesticide Law (title 22, chapter 34, Idaho Code), and the Hazardous Waste Management Act of 1983 (title 39, chapter 44, Idaho Code), and rules and regulations pursuant thereto. (8-13-85)**

### Rule Intent

To ensure compliance with other applicable state laws, rules, and regulations outside the regulatory authority of the Forest Practices Act or the department.

### Guidance

In a given situation, there may be laws and regulations other than the Forest Practices Act that apply to harvesting and forest management activities. Within the scope of their knowledge, Private Forestry Specialists should inform operators that other applicable laws may apply. If an operation is suspected of being out of compliance with known regulations, the practice should be referred to the appropriate agency for enforcement. While the department lacks regulatory authority to enforce these laws, a Notice of Violation (NOV) can be issued if appropriate and in conjunction or concurrent with another agency's enforcement case. Private Forestry Specialists should consult the Regulatory Program Manager prior to issuing NOVs in these situations.

**c. Water may be diverted from a stream and used at any time to carry out Idaho forest practices and for forest road dust abatement, provided that: 1) the total daily volume diverted is no greater than two-tenths (0.2) acre-feet (65,170 gallons) from a single stream; and 2) the rate of diversion shall never exceed**

**twenty-five (25) percent of the rate of flow then available in the stream at the point of diversion for these purposes. (5-8-09)**

- i. No person shall, under this section, divert water from an irrigation canal, irrigation reservoir, or other irrigation facility while water is lawfully diverted, stored, captured, conveyed, used or otherwise physically controlled by an irrigator, irrigation district or canal company. (5-8-09)**
- ii. If water is to be diverted from a stream within a water district, or from a stream from which an irrigation delivery entity diverts water, a person diverting water shall give notice to the watermaster of the intent to divert water for the purposes as authorized herein. (5-8-09)**
- iii. Water diversion intakes used for diversions under this subsection shall be screened with a maximum screen mesh size as follows: 1) fish-bearing Class I streams: 3/32 inch, and 2) all other streams: 1/4 inch. (5-8-09)**

#### Rule Intent

FPAC added this rule to clarify water-diversion practices that are normally carried out during a forest practice. Paralleling a 2008 IDWR statute change, this rule allows operators and landowners to divert water from a stream without obtaining a temporary water right (or permit).

#### Unsatisfactory Condition

An unsatisfactory condition exists if there is evidence that water diversion does not meet the criteria and limitations defined in this rule.

#### Guidance

Private Forestry Specialists should be equipped to observe hose screen-mesh sizes and determine if the rate of water diversion is changing the rate of flow in the stream at the time of inspection. PFS's should also be aware of the type of waterway the water is being diverted from (e.g., an irrigation canal) so that illegal water diversion is not occurring.

**d. Any alternative conservation measure having received a favorable Biological Opinion/Incidental take Permit from the national Marine Fisheries Service or US Fish & Wildlife Service will be considered as complying with these rules. (4-4-13)**

### Rule Intent

The objective of this rule paragraph is to preserve the water-quality and aquatic-habitat standards expressed in any formal agreement between a forestland owner and the US Fish & Wildlife Service and/or the National Marine Fisheries Service (NOAA Fisheries). Such an agreement must have successfully gone through the consultation process and received a favorable Biological Opinion from the pertinent Endangered Species Act regulatory federal agencies.

### Unsatisfactory Condition

An unsatisfactory condition exists if any of the requirements of minimum standards expressed in these FPA administrative rules are infringed and there is *no* formally approved agreement in place with these federal agencies.

### Guidance

Formal agreements of this nature, applicable to forestlands, are often titled *Incidental Take Permits, Incidental Take Statements, Safe Harbor Agreements, Conservation Agreements* or *Habitat Conservation Plans (HCPs)*.

**02. Conversion of Forestlands. Conversions require a notification be filed, and compliance with all rules except those relating to reforestation. On converted parcels larger than one (1) acre, plant acceptable vegetative cover sufficient to maintain soil productivity and minimize erosion. Cover shall be established within one (1) year of completion of the forest practice, except that the director may grant an extension of time if weather or other conditions interfere. Within three (3) years of completion of the forest practice, the director shall determine if the conversion has been accomplished by: (7-1-96)**

**a. The presence or absence of improvements necessary for use of land for its intended purpose; (7-1-96)**

**b. Evidence of actual use of the land for the intended purpose. (10-14-75)**

**c. If the conversion has not been accomplished within three (3) years of the completion of harvest, supplemental reforestation Subsection 050.06 applies. (7-1-96)**

### Rule Intent

It is not within the purview of the FPA to dictate land-use changes. To protect water quality and promote soil stabilization and productivity during forest practice conversion operations. When the landowner converts to a non-forest use, criteria are given for making that conversion and reforestation is not required. All other

rules apply. If the operator wishes to deviate from applicable rules, an approved variance is required. This rule requires reforestation within a reasonable time if land is harvested and not “converted” preventing a landowner from converting forestland to no use or using this rule to avoid reforestation requirements. Any change in land use must be accomplished within an established time frame.

### Unsatisfactory Condition

An unsatisfactory condition exists when the site has not been re-vegetated according to the rule. If a site planned for conversion is not converted within the specified time frame and supplemental reforestation applies, cite this rule and Rule 050.06.

### Guidance

If a forest practice is not involved in the conversion to non-forest use, conversion activity is not regulated under the FPA (e.g., subdivision development where no commercial products are removed is not regulated, whereas a conversion from forestland to grazing land, involving the sale of timber is regulated).

The Private Forestry Specialist should refer to the notification to determine if a site is planned for conversion. Establishing cover means seeding or planting roads, trails, landings, and other heavily disturbed areas. Normally, this rule will not be cited in an NOV unless the site has not been re-vegetated. Other rules in violation will be cited as applicable.

Some landowners/operators will state they plan to convert (or decide to convert at a later date) land to subdivision or grazing use, but their intent is to avoid reforestation. Conversion does not mean subdividing a large parcel of forest land into 10-plus-acre lots for resale or removing all merchantable trees to convert to grazing when cattle were present before the operation. In both cases, the use has not changed. The landowner must provide evidence of conversion either visually (e.g., homes, mine, new fencing, water development) or with written documentation (e.g., building permit, land use tax-change notice, approved agricultural conservation plan).

Conversion in SPZs can only occur under an approved variance. Such a variance should only be considered if some other resource protection jurisdiction (e.g, county planning and zoning) has regulatory responsibility for the new land use and approves site disturbing activities in the SPZ. Consult with the Regulatory Program Manager and local agencies for planned conversions in the SPZ.

Consider the conversion complete when conditions in the rule have been met (i.e., the land has been effectively converted; roads, trails and disturbed sites are stabilized) and no other forest practices will be conducted. Once conversion is

successful, the Private Forestry Specialist should document that FPA jurisdiction has ended and no other FPA requirements apply.

**03. Annual Review and Consultation.** The director shall, at least once each year, meet with other state agencies and the Forest Practices Advisory Committee and review recommendations for amendments to rules, new rules, or repeal of rules. He shall then report to the board a summary of such meeting or meetings, together with recommendations for amendments to rules, new rules, or repeal of rules. (10-14-75)

**04. Consultation.** The director shall consult with other state agencies and departments concerned with the management of forest environment where expertise from such agencies or departments is desirable or necessary. (10-14-75)

a. The Idaho Water Quality Standards and Waste Water Treatment Requirements (Title 39, Chapter 1, Idaho Code) reference the Forest Practices Rules as approved best management practices and describe a procedure of modifying the practices based on monitoring and surveillance. The director shall review petitions from Idaho Department of Health and Welfare for changes or additions to the rules according to Administrative Procedures Act (Title 67, Chapter 52, Idaho Code) and make recommendations for modification to the Board of Land Commissioners. (9-20-88)

#### Rule Intent

The Forest Practices Act positions IDL as the lead agency for addressing forest practices issues of interest to other agencies; however, the Department of Environmental Quality (DEQ) and other parties can recommend FPA rule changes to FPAC. The FPA rules are recognized in DEQ's Water Quality Standards (approved by EPA) as the approved water quality Best Management Practices (BMPs) for forestry activities.

#### Guidance

An operator may not violate this rule. The department has the responsibility to forward requests for rule changes from DEQ, or other state agencies, to the Forest Practices Advisory Committee (FPAC).

**05. Notification of Forest Practice.** (10-14-75)

a. Before commencing a forest practice or a conversion of forestlands the department shall be notified as required in Subsection 020.05.b. The notice shall be given by the operator. However, the timber owner or landowner satisfies the responsibility of the operator under this subsection. When more than one forest practice is to be conducted in relation to harvesting of forest tree species,



**one notice including each forest practice to be conducted shall be filed with the department. (7-1-96)**

**b. The notification required by Subsection 020.05.a shall be on forms prescribed and provided by the department and shall include the name and address of the operator, timber owner, and landowner; the legal description of the area in which the forest practice is to be conducted; whether the forest practice borders a outstanding resource water and other information the department considers necessary for the administration of the rules adopted by the board under Section 38-1304, Idaho Code. All notifications must be formally accepted by the department before any forest practice may begin. Promptly upon formal acceptance of the notice but not more than fourteen (14) calendar days from formal acceptance of the notice, the department shall mail a copy of the notice to whichever of the operator, timber owner, or landowner that did not submit the notification. The department shall make available to the operator, timber owner, and landowner a copy of the rules. (7-1-96)**

#### Rule Intent

To ensure that the **operator** (or the timber owner or landowner who chooses to assume the role of the **operator**) gives prior notice of any forest practice activity, so the department may address concerns, problem areas, or other factors.

#### Unsatisfactory Condition

An unsatisfactory condition exists when a forest practice begins before the department has accepted the notification.

#### Guidance

The person or company assuming the responsibility of being the **operator**, and the entity assuming the responsibility of the **contractor**, must both sign the agreement/notification in the appropriate signatory blocks, even if they are the same entity. If a company, LLC or trust is the **operator**, a company representative must sign.

If an operator fails to provide notification, report an unsatisfactory condition. The operator must provide proper notification within 24 hours to clear the violation.

If an operator has a habit of not providing adequate notification or if other compliance problems exist, the Private Forestry Specialist should consider issuing a Notice of Violation. The operator should be reminded that habitual offenders may be required to post a bond.

**c. An operator, timber owner, or landowner, whichever filed the original notification, shall notify the department of any subsequent change in the**

**information contained in the notice within thirty (30) calendar days of the change. Promptly upon receipt of notice of change, but not to exceed fourteen (14) calendar days from receipt of notice, the department shall mail a copy of the notice to whichever of the operator, timber owner, or landowner that did not submit the notice of change. (7-1-96)**

Rule Intent

This rule instructs the person who filed the notification to inform the department of any changes that affect the notification. The rule establishes requirements to execute any changes.

Guidance

Violations normally are not issued for this rule. Since operators may change, the original operator should inform the department, to be absolved of liability. If the Private Forestry Specialist observes conditions in the field to be different from the notification, the changed condition should be discussed with the operator and landowner and the notification amended.

**d. The notification is valid for the same period as set forth in the certificate of compliance under Section 38-122, Idaho Code. At the expiration of the notification, if the forest practice is continuing, the notification shall be renewed using the same procedures provided for in this section. (4-21-92)**

Rule Intent

To establish a definite period for the notification's validity, coinciding with the Certificate of Compliance.

Guidance

For those practices that require a notification but not a certificate of compliance (i.e., a use of chemicals), the notice shall be valid for a period not to exceed two (2) years from the notification acceptance date.

**e. If the notification required by Subsection 020.05.a. of this section indicates that at the expiration of the notification that the forest practice will be continuing, the operator, timber owner, or landowner, at least thirty (30) calendar days prior to the expiration of the notification, shall notify the department and obtain a renewal of the notification. Promptly upon receipt of the request for renewal, but not to exceed fourteen (14) calendar days from receipt of the request, the department shall mail a copy of the renewed notification to whichever of the operator, timber owner, or landowner that did not submit the request for renewal. (7-1-96)**

**06. A notification of forest practice is required except for: (7-1-98)**

**a. Routine road maintenance, recreational uses, grazing by domestic livestock, cone picking, culture and harvest of Christmas trees on lands used solely for the production of Christmas trees, or harvesting of other minor forest products. (10-14-75)**

**b. Non-commercial cutting and removal of forest tree species by a person for his own personal use. (10-14-75)**

**c. Clearing forestland for conversion to surface mining or dredge and placer mining operations under a reclamation plan or dredge mining permit. (9-20-88)**

Rule Intent

Rule 020.06. is intended to clarify types of operations not requiring notification. The rule also intends that all operations comply with other applicable rules and regulations, even if notification is not required (i.e., routine maintenance on a forest road does not require notification, but the activity must still comply with road maintenance rules).

Guidance

Operators will not be cited under this rule; however, if Private Forestry Specialists identify environmental degradation, they will address it under the appropriate rule or refer it to the responsible agency. Notification is required for harvest, road construction, and slash management (forest practices) conducted in conjunction with a reclamation or mining operation.

Private Forestry Specialists should distinguish routine road maintenance from road construction/reconstruction. Routine road maintenance not associated with a specific forest practice does not require notification and includes culvert cleaning, road grading, occasional installation of culverts that do not convey streams (e.g. ditch relief culverts), spot rocking, brush cutting and dust abatement.

Road construction/reconstruction requires a notification and includes installation or replacement of stream crossing structures such as bridges and culverts, alteration of road cut and fills, road resurfacing, clearing and grubbing of brush to reopen old roads, and substantial modification of road drainage (i.e., installation of rolling dips, inside ditches, berms, in-sloping or out-sloping).

**07. Emergency Forest Practices. No prior notification shall be required for emergency forest practices necessitated by and commenced during or**

**immediately after a fire, flood, windthrow, earthquake, or other catastrophic event. Within forty-eight (48) hours after commencement of such practice, the operator, timber owner, or landowner shall notify the director with an explanation of why emergency action was necessary. Such emergency forest practices are subject to the rules herein, except that the operator, timber owner, or landowner may take any reasonable action to minimize damage to forestlands, timber, or public resource from the direct or indirect effects of the catastrophic event. (7-1-96)**

**08. Duty of Purchaser. The initial purchaser of forest tree species which have been harvested from forestlands shall, before making such purchase or contract to purchase or accepting delivery of the same, receive and keep on file a copy of the notice required by Section 38-1306, Idaho Code relating to the harvesting practice for which the forest tree species are being acquired by the initial purchaser. Such notice shall be available for inspection upon request by the department at all reasonable times. (7-1-96)**

**09. State Divided into Regions. For the purpose of administering this Act, the State is divided into two (2) forest regions: one (1) north of the Salmon River and one (1) south of the Salmon River. (7-1-96)**

Guidance

North of the Salmon River means the river itself, not the drainage, and north of the town of North Fork.

**10. Regions Divided into Forest Habitat Types. For the purpose of further refining the on-the-ground administration of the Act, the forest regions can be divided into Habitat Types. (7-1-96)**

Guidance

This rule refers to reforestation; also see the Habitat Type definition, 10.26.

## 030. TIMBER HARVESTING

**01. Purpose.** Harvesting of forest tree species is a part of forest management by which wood for human use is obtained and by which forests are established and tended. It is recognized that during harvesting operations there will be a temporary disturbance to the forest environment. It is the purpose of these rules to establish minimum standards for forest practices that will maintain the productivity of the forestland and minimize soil and debris entering streams and protect wildlife and fish habitat. (10-14-75)

### Rule Intent

To provide a framework for the timber harvest rules. This rule will not be used for enforcement purposes. The rule acknowledges that harvest practices disturb the environment and that minimum standards must maintain forestland productivity, minimize soil and debris movement into streams, and protect fish and wildlife habitat.

**02. Quality of Residual Stocking.** Reforestation is required if harvesting reduces stocking of acceptable trees below minimums of Subsection 050.04. (7-1-96)

### Rule Intent

This rule reminds the operator or landowner that reforestation may be required if an acceptable stand of leave trees is not present following harvest. It compliments reforestation rules by reminding the operator to provide for quality stocking.

### Unsatisfactory Condition

An unsatisfactory condition exists when leave trees are of poor vigor, their survival and growth are questionable, or minimum stocking standards of Rule 050.04 are not present.

### Guidance

If harvest reduces stocking of acceptable trees (010.02) below minimums of 050.04, artificial reforestation may be required. Cite this rule and 050.04 as unsatisfactory if reforestation is not planned. Do not cite this rule if a natural event (e.g., fire, wind) reduces stocking below minimums; this situation is addressed in rule 050.

If “reforestation” is checked on the notification, it is understood that the operator or landowner may be establishing a new timber stand using artificial reforestation.

Cite this rule and 050.04 if reforestation hasn't been accomplished after 3 years following the completion of harvesting.

For marginally acceptable stands (i.e., those with minimum numbers of barely acceptable trees at high risk of blowdown, insect or disease mortality), the site should be re-inspected in 3 years to determine if artificial reforestation is needed.

For noncommercial operations or operations less than 10 acres in size (rule 050.05 exemptions) where quality residual stocking is not acceptable, comment in the inspection report that while the quality of stocking is unacceptable, reforestation is not required because of the exemption.

**03. Soil Protection. Select for each harvesting operation the logging method and type of equipment adapted to the given slope, landscape and soil properties in order to minimize soil erosion. (8-13-85)**

#### Rule intent

This rule directs that suitable logging methods and equipment be used after considering slope stability and erosion potential. The intent is to minimize soil deterioration and erosion and avoid damage to site productivity, water quality, or aquatic habitat caused by use of the wrong equipment. Soil erosion includes mass wasting, surface rilling, displacement, destabilization, and compaction.

#### Unsatisfactory Condition

An unsatisfactory condition exists when the use of inappropriate harvesting methods results, or may result, in excessive soil erosion, actually or potentially impacting water quality or site productivity.

#### Guidance

This situation most often occurs when ground-based equipment, instead of cable or helicopter systems, is used on steep ground. Cite this rule only when more specific subparagraphs do not address the situation. If a more specific rule does not apply, require the appropriate harvest method under this rule. Economic constraints may make it impractical to harvest some stands with anything but traditional ground-based systems. In these situations, traditional methods can only be used provided other applicable rules are adhered to and the proposed harvest method poses no undue risk to protected resources.

**a. An operation that uses ground-based equipment shall not be conducted if it will cause rutting, deep soil disturbance, or accelerated erosion. On slopes exceeding forty-five (45) percent gradient and which are immediately adjacent to a Class I or II stream, ground-based equipment shall not be used except with an approved variance. Where slopes in the area to be logged exceed**

**forty-five (45) percent gradient the operator, landowner or timber owner shall notify the department of these steep slopes upon filing the notification as provided for in Subsection 020.05. (4-4-13)**

### Rule Intent

The rule intends to prevent water-quality or site-productivity impacts caused by skidding, or any ground-based equipment use, on saturated, geologically unstable, highly erodible or easily compacted soils. Ground-based equipment use on 45% slopes adjacent to streams is prohibited except under an approved variance. If deep soil disturbances or accelerated soil erosion occur, area streams may be impacted.

### Unsatisfactory Condition

An unsatisfactory condition exists when ground-based equipment is operating on 45% and greater slopes adjacent to streams, or ground-based equipment causes deep soil disturbance and accelerated erosion.

### Guidance

Apply this rule's standards to use of any ground-based equipment (not just skidding equipment), including harvester-processers, feller-bunchers, forwarders, and excavators that may be piling slash after harvesting is completed.

Identification of damage or potential damage can be difficult, but judgment should rest primarily on the stability of the geology and soil type, as well as steepness and proximity to the stream channel. The primary consideration is the likelihood that runoff over these compacted trails will result in sediment delivery to the stream channel.

Anytime ground-based skidding occurs on forest soils, soil deterioration decreases the site's productivity. Repeated passes by equipment over the same area usually reduce the site class. Soil deterioration can be kept to a minimum by pre-designating skid trails. Repeated skidding over more than 20% of the area is considered excessive.

"Rutting, deep soil disturbance or accelerated erosion" generally occur under saturated soil conditions during late fall, mid-winter thaws, or spring breakup. Operation of ground-based equipment should not occur at these times.

Since equipment use is prohibited in SPZs, consider "immediately adjacent to streams" to mean areas beyond the stream protection zone (SPZ) where erosion may result in displaced soil reaching streams. Soil type, slope, vegetation, topography, intersecting roads/trails, and installations of drainage features (e.g.,

waterbars) should all be considered when using professional judgment to determine whether skidding is "immediately adjacent" and would result in sediment reaching the stream. A variance is needed to skid, or use ground-based equipment, on slopes greater than 45% adjacent to streams. Generally, variances to this rule should only be granted to cover small areas, should avoid construction of new trails, only occur during dry or frozen soil conditions, and should maintain surface vegetation to prevent soil delivery to streams.

**b. Limit the grade of constructed skid trails on geologically unstable, saturated, or highly erodible or easily compacted soils to a maximum of thirty percent (30%). (7-1-96)**

#### Rule Intent

To prevent the erosion of steep skid trails on high-hazard sites from cut and fill skid trail construction.

#### Unsatisfactory Condition

An unsatisfactory condition exists when constructed skid trail grades exceed 30% on geologically unstable, saturated, highly erodible, or easily compacted soils.

#### Guidance

Consider these types of trails, and constructed fire trails around prescribed fire units, as subject to regulation under this rule. "Geologically unstable" soils have high potential for mass failure. Consider landform type, slope, drainage, and extent of ground-disturbing activity to determine potential for failure. Consultation with a specialist may be necessary. A cut-bank-ramp (greater than 30% grade) approach from a road to an upslope skid trail that breaks to less than 30% grade is not subject to regulation under this rule.

**c. In accordance with appropriate silvicultural prescriptions, skid trails shall be kept to the minimum feasible width and number. Tractors used for skidding shall be limited to the size appropriate for the job. (8-13-85)**

#### Rule Intent

To limit equipment size and skid trail width and number to minimize soil disturbance.

#### Unsatisfactory Condition

Unsatisfactory conditions exist when excessive skid trails (i.e., trails that cover more than 20% of the area) are used to log a stand.



### Guidance

Reuse of existing skid trails, provided their use does not violate current rules, is encouraged. Violations of this rule usually occur in conjunction with violations of other subparagraphs of Rule 030.03. Apply this rule to traditional ground-based tractors and skidders, not cut-to-length systems operating on a slash mat or new-generation excavators doing shovel logging. Operators should be encouraged to pre-designate skid trails prior to felling operations.

**d. Uphill cable yarding is preferred. Where downhill yarding is used, reasonable care shall be taken to lift the leading end of the log to minimize downhill movement of slash and soils. (8-13-85)**

### Rule Intent

This rule is partly advisory. It indicates that uphill cable yarding is recommended over downhill yarding. Downhill yarding tends to increase downslope movement of soil and concentrate surface drainage on exposed soils, including landings. This rule requires minimum soil disturbance when downhill cable yarding is used.

### Unsatisfactory Condition

An unsatisfactory condition exists when downhill cable yarding is used and excessive soil disturbance occurs or is likely to occur.

### Guidance

When identifying damage or potential damage, soil properties must be considered and provisions made for drainage and soil stabilization on cable skidding corridors. Ensure adequate deflection to minimize soil disturbance. Consider hand cross-ditching, seeding or placing slash on heavily disturbed corridors.

**04. Location of Landings, Skid Trails, and Fire Trails. Locate landings, skid trails, and fire trails on stable areas to prevent the risk of material entering streams. (10-14-75)**

### Rule Intent

To prohibit landings, skid trails, and fire trails from being built or reused on potentially unstable or highly erodible sites prone to mass soil movement. When the natural drainage in such areas is altered, the improper design and location of landings or trails can trigger landslides.

### Unsatisfactory Condition

An unsatisfactory condition exists when landings or trails are located on unstable, steep areas with high risk of mass failure.

### Guidance

This rule is concerned with unstable fill on landings, skid trails and fire trails that may trigger landslides. As is the case with roads, similar clues that indicate a potential instability problem with trails and landings include buried debris in fills and presence of tension cracks. For surface erosion problems on skid trails and landings, use Rule 030.05, Drainage Systems.

- a. All new or reconstructed landings, skid trails, and fire trails shall be located on stable areas outside the appropriate stream protection zones. Locate fire and skid trails where side-casting is held to a minimum. (3-13-90)**

### Rule Intent

To minimize unnecessary soil disturbance by building skid trails, fire trails, and landings that conform to the topography and are outside the stream protection zones (SPZs).

### Unsatisfactory Condition

An unsatisfactory condition exists when skid trails and landings are constructed or reconstructed within SPZs or side-cast material from landing or trail construction out of the SPZ is deposited in the SPZ.

### Guidance

This rule also applies to reconstruction of existing landings and skid trails. Damage or potential damage should be identified only after considering soil properties, slope, and proximity to streams. The less cutting and side-casting, the better. "Reconstructed" means repair or reuse involving vegetation removal or reshaping where resource impacts could occur. Variances may be issued provided the equivalent or better standard is met. If streams must be crossed, refer to Rule 030.07, Stream Protection. "Fire trails" refers to trails constructed for slash management, not wildfire control.

**b. Minimize the size of a landing to that necessary for safe economical operation. (8-13-85)**

Rule Intent

To minimize landing size and reduce potential impacts to water quality or soil productivity.

Unsatisfactory Condition

An unsatisfactory condition exists if landings are larger than necessary to safely accommodate needed equipment or if landing size may impact water quality or site productivity.

Guidance

It is better to design a landing of generous size in accordance with the rules than to minimize initial size and increase it later by burying slash and debris that may result in a perched landing configuration. The Department of Labor and Industrial Services Logging Safety Division may be consulted when determining a "safe" landing size. Helicopter landings close to streams deserve special attention due to their tendency to expand.

**c. To prevent landslides, fill material used in landing construction shall be free of loose stumps and excessive accumulations of slash. On slopes where side-casting is necessary, landings shall be stabilized by use of seeding, compaction, riprapping, benching, mulching or other suitable means. (8-13-85)**

Rule Intent

To prevent landing fill failure, which may affect long-term site productivity or cause materials to enter streams. Stumps, slash and thick duff should be removed from landing area so that only bare soil remains to receive the fill. Compacted and stabilized fill can prevent mass failure.

Unsatisfactory Condition

An unsatisfactory condition exists when the landing has organic material, unconsolidated inorganic material, or snow incorporated in the fill, or factors such as inadequate compaction make the fill unsafe and prone to failure.

Guidance

All landings must be stabilized for the long term. While seeding and mulching will protect a landing from surface erosion, it may not be enough to prevent a slide.

Landing slides are usually the result of buried organic debris, inadequate compaction or poor drainage. Repair may require removal of buried debris. Slash or waste deposited on the landing during harvest should be considered unstable if it creates a perched landing likely to fail. Meaningful compaction can only be accomplished with heavy equipment (e.g., sheep's foot roller) designed for that purpose. A few passes with a dozer does not provide adequate surface pressure to compact landing fills.

**05. Drainage Systems. For each landing, skid trail or fire trail a drainage system shall be provided and maintained that will control the dispersal of surface water to minimize erosion. (4-21-92)**

Rule Intent

To minimize erosion on all soils exposed by harvest operations. Drainage systems should be installed and maintained on landings, skid trails, and fire trails during and after harvest. Drainage systems should drain water onto undisturbed forest soils or areas of vegetation, allowing it to infiltrate the soil prior to entering streams. This rule also serves as a purpose statement for other subparagraphs containing specific practices.

Unsatisfactory Condition

An unsatisfactory condition exists when controlled drainage is lacking on landings, skid trails, or fire trails causing damage or potential damage to water quality, aquatic habitat, or soil productivity.

Guidance

Line skidding corridors with excessive soil disturbance that will result in erosion should be considered a skid trail subject to drainage provisions. Cite the 030.05 subparagraph which best describes the violation.

**a. Stabilize skid trails and fire trails whenever they are subject to erosion, by water barring, cross draining, out-sloping, scarifying, seeding or other suitable means. This work shall be kept current to prevent erosion prior to fall and spring runoff. (8-13-85)**

Rule Intent

This paragraph requires controlled drainage of skid trails and fire trails to prevent soil erosion. To stabilize soil, properly construct and locate cross-ditches, dips, water bars or other diversions; seeding, mulching, use of organic debris or matting is also effective. Soils should be stabilized before fall rains or spring breakup. Drainage must be maintained throughout the logging season, when trails are not in use.

### Unsatisfactory Condition

An unsatisfactory condition exists when skid trails and fire trails do not have adequate drainage control to prevent damage or potential damage to water quality, aquatic habitat, or soil productivity.

### Guidance

Erosion can occur at any time of the year; therefore, erosion control structures should be installed as soon as skid trail and fire trail use is complete. Bedded slash or out-sloping can provide adequate drainage control in some cases. Ideally, an operator should complete all skidding and install structures before leaving an area.

At times an operator may need to leave an area before skidding is complete, with the intention to finish up “in a few days.” In this situation, the operator should install drainage structures prior to leaving the area, regardless of future skidding plans. This will ensure that unforeseen delays do not result in resource damage and corresponding enforcement action.

When the rule has not been complied with and there is time to bring in equipment to complete the necessary work, an inspection report should be completed showing that an unsatisfactory condition exists. A NOV is warranted if drainage is not provided by fall or spring runoff and has, or certainly will result in, resource damage.

Cross-ditch spacing guidelines are useful, but the PFS determines what constitutes adequate drainage control. Often, cross-ditches need to be placed in specific locations to be effective due to the local terrain and the proximity to streams. In these situations, the PFS may wish to mark the locations in the field using ribbon or paint, instead of specifying a set spacing guide.

**b. Reshape landings as needed to facilitate drainage prior to fall and spring runoff. Stabilize all landings by establishing ground cover or by some other means within one year after harvesting is completed. (8-13-85)**

### Rule Intent

This rule requires that landings be reshaped, stabilized, and provided with drainage to minimize soil erosion. Whenever possible, shape the landing to eliminate low spots. Water accumulation on landings on steep slopes can cause mass failure. Landing drainage needs to be in place *no later than* fall rains for summer operations and spring runoff for winter operations. A time frame should be established to re-vegetate landings.

### Unsatisfactory Condition

An unsatisfactory condition exists when the landing lacks drainage or is not sufficiently stabilized to prevent erosion during runoff periods.

### Guidance

If landings are constructed correctly, minor reshaping and seeding upon completion of use is generally all that is needed to comply with the rule. Guidance for Rule 030.05.a regarding an operator leaving an area before completing the job, also applies here. Additional stabilizing measures may be required if ground cover is not established within a year. An unsatisfactory condition exists any time landing drainage is not installed after use; an NOV is warranted if drainage has not been provided by fall rains or spring runoff and it results in, or certainly will result in, resource damage.

**06. Treatment of Waste Materials. All debris, overburden, and other waste material associated with harvesting shall be left or placed in such a manner as to prevent their entry by erosion, high water, or other means into streams. (10-14-75)**

### Rule Intent

This is the purpose statement for handling waste materials. The intent is to prevent waste materials from entering streams. All waste materials should be strategically located above the high water mark and in stable areas where they cannot move into streams.

### Unsatisfactory Condition

An unsatisfactory condition exists when water quality or aquatic habitat is threatened by waste materials associated with timber harvest.

### Guidance

Waste material in this rule refers to soil and woody debris. This paragraph should be cited only when the violation cannot be described by a more specific subparagraph of Rule 030.06. Enforcement concerning unstable slash concentrations on landings may occur under this rule or Rule 030.04.c.

**a. Wherever possible trees shall be felled, bucked, and limbed in such a manner that the tree or any part thereof will fall away from any Class I streams. Continuously remove slash that enters Class I streams as a result of harvesting operations. Continuously remove other debris that enters Class I streams as a result of harvesting operations whenever there is a potential for stream blockage**

**or if the stream has the ability for transporting such debris. Place removed material five (5) feet slope distance above the ordinary high water mark.**

**(3-13-90)**

#### Rule Intent

This rule identifies and prevents stream bank disturbance or deposition in streams of slash, large-wood waste or large quantities of fine organic materials such as leaves, needles, and twigs. Stream blockage and diversion of normal flows can damage roadways and stream crossings. The rule discourages any felling, bucking and limbing that allows trees, tops or limbs to fall across or into Class I streams. During harvest, debris deposited in streams must be placed above high-water levels.

#### Unsatisfactory Condition

An unsatisfactory condition exists when harvest activities result in unstable slash or debris being left in a Class I stream. Noncompliance also exists if harvest activities have damaged stream bank integrity by uprooting vegetation and exposing soil.

#### Guidance

The rule recognizes operator's best attempts to keep logging slash, tops and trees out of streams is not always successful. If the operator is making a prudent attempt to keep this debris out of Class I streams, and some gets in, it only becomes a violation if the unstable material is left in the stream.

Slash, as defined in the rules, should be removed immediately. Large organic debris (LOD), as defined in the rules, can be left in place. Woody material in size between slash (<3 in. diameter) and large organic debris (longer than channel width or 20 feet) should be removed if it has a blockage potential. Removal should occur continuously, preferably within one week. Leaning trees on or close to the stream bank likely to fall across or into the stream should be left standing. Stream bank and SPZ integrity must be maintained and soil disturbance prevented during removal of debris.

**b. Remove slash and other debris that enters Class II streams whenever there is a potential for stream blockage or if the stream has the ability for transporting the debris immediately following skidding and place removed material above the ordinary high water mark or otherwise treat as prescribed by the department. No formal variance is required. (11-7-86)**

#### Rule Intent

To prevent stream bank disturbances, or sluice-outs of slash concentrations, which can block Class II streams and damage water quality and aquatic habitat.

A variance is not needed to work below the ordinary high water mark to remove slash from streams by hand.

### Unsatisfactory Condition

An unsatisfactory condition exists if slash and other debris is not removed where it will cause Class II stream blockage and diversion.

### Guidance

Except at stream crossings, debris transport and blockage in Class II streams is generally not a problem. Slash should always be placed above the ordinary high water mark, and soils should not be exposed or disturbed in the removal process. In general, remove all slash above Class II stream culverts or bridges for at least 50 feet.

Hand removal is preferred. If equipment must be used for safety or immediacy purposes, and provided the operator did not cause the problem (e.g., beavers plug a culvert) a variance is needed to comply with rule 030.07.c, regarding the equipment prohibition in SPZs. A variance is not needed to use equipment if the operation is cited as an unsatisfactory condition and equipment use is prescribed and documented to correct the unsatisfactory condition.

**c. Deposit waste material from construction or maintenance of landings and skid and fire trails in geologically stable locations outside of the appropriate Stream Protection Zone. (8-13-85)**

### Rule Intent

To require placement of excess fill material, stumps, and woody debris from construction and maintenance of landings and trails in stable locations outside the appropriate SPZs.

### Unsatisfactory Condition

An unsatisfactory condition exists when waste material is placed in, or will move into, the SPZ as a result of runoff or mass wasting events.

### Guidance

Construction or reconstruction of landings and skid trails along SPZs or on steep slopes may necessitate end hauling of waste material to a stable disposal site.

**07. Stream Protection. During and after forest practice operations, stream beds and streamside vegetation shall be protected to leave them in the most natural condition as possible to maintain water quality and aquatic habitat.**



(8-13-95)

### Rule Intent

This is the “umbrella” rule, or the purpose statement, for specific practices in the subparagraphs that follow. This rule intends that harvest activities leave streams, streambeds, and streamside vegetation in “the most natural condition possible” to maintain water quality, soil productivity, and wildlife and aquatic habitat. It further states that this maintenance and protection of riparian resources is to occur *during* and *after* forest practice operations. Streams and adjacent ground are the most sensitive areas on forestland. Drinking water, fisheries, and riparian wildlife habitat are concentrated in these areas. Poor harvest practices can damage these resources. A primary tenet of the FPA is that careful management of streamside zones can maintain and enhance riparian benefits and generate timber income.

### Guidance

This paragraph will not be used in enforcement. If violations occur, cite the specific subparagraph that best describes the violation. The protection of water quality is one of the primary objectives of the Idaho Forest Practices Act. To help protect water quality, buffers are required along water bodies. These buffers have different characteristics depending upon the body of water they attempt to protect. Their purpose is to act as filters to minimize pollutants (mostly sediment delivery from eroded mineral soil) that may result, in part, from a forest practice.

- a. **Lakes require an approved site-specific, riparian, management prescription prior to conducting forest practices within the stream protection zone.** (7-1-96)

### Rule Intent

The FPA Rules require the minimum protection for lakes to be equal to the protections provided for Class I streams. This approach may have provided not enough, or too much, lake protection in some situations. The intent is to develop site-specific BMPs, via a riparian management prescription, to prevent potential nutrient or sediment delivery when operations occur in a lakeside area. These BMPs should be in place before forest practices commence. The designated beneficial uses of lakes must be protected and maintained.

As defined in the FPA Rules definitions for Class I streams, the **stream protection zone** (SPZ) referred to in this rule is the area encompassed by a slope distance of 75 ft. from the OHW mark of a lake shore. This rule applies to operations occurring within the lake’s SPZ. If operations are planned near a lake, but will not encroach within the 75-foot SPZ, no riparian management prescription is required.

### Unsatisfactory Condition

An unsatisfactory condition exists when a forest practice commences within 75 feet of the OHW mark of a lakeshore without an approved riparian prescription in place; or if BMPs described in the prescription (or required by Class I rules) are not followed.

### Guidance

The compliance/notification should indicate whether the operation is adjacent to a lake. The operator should then be referred to the Private Forestry Specialist (PFS) for consultation on developing a site-specific plan for the lakeside operation. Management plans that have been developed for many Idaho lakes contain information on sources of pollution and general BMP recommendations for all land use impacts, including forest practices. When appropriate, the PFS should refer to these plans to gain insight into lake water quality issues as they are developing a riparian management prescription.

BMPs for lakes can differ from stream BMPs, but the language of the rule indicates that for most forest practices, the rules that apply to Class I streams should likewise apply to lakes. However, PFSs should consider potential degradation specific to lakes when writing the site-specific riparian prescription. Lakeshore stability must be maintained, nutrient and sediment delivery should be prevented, shade must be maintained, fish cover/habitat must be sustained, LOD recruitment must be promoted, and water filtering effects of vegetation must be protected. Therefore, very careful consideration should be given to the proximity of all burning, harvesting and other soil-exposing activities that occur within a lake's SPZ. For some lakeside operations, if on-the-ground conditions warrant it, all bank trees and shrubs should be retained within a lake's SPZ. No mechanically piled slash should burn within the SPZ of a lake.

Always consider all rules which regulate activities in the SPZ of a Class I stream. No ground-based operations should occur within the lake's SPZ and the operator should retain the minimum number of standing trees and shade required in rules 030.07.e.ii and 030.07.e.vi. No ground-based skidding should occur on slopes exceeding 45% gradient which are immediately adjacent to a lake without a variance.

In accordance with rule 060.02, petroleum product storage containers with capacities of more than 200 gallons should be located no closer than 100 feet from the lake side and all fueling operations and maintenance of equipment should be conducted outside of any area that could potentially deliver chemicals to the lake if spillage occurs. All other chemical-storage rules contained in subsections of this rule also apply to lakes.

All other applicable FPA Rules should be applied to lakeside practices.

If in place, a lakeside-specific riparian management prescription may be enforced under this rule. If a prescription is not in place, the PFS should schedule a pre-operational inspection with the landowner or operator to develop lakeside-specific practices for the operation. This inspection should occur within 10 days of notification.

PFSs are encouraged to distribute the Lake Protection Supplemental Information (below) to landowners and operators who are planning lakeside forest practices. Operators need to understand that the additional measures described below are voluntary on their part.

## Additional Reference Materials

### Lake Protection Information

This supplemental information has been developed by the department to inform lakeside operators who are interested in specifics contained in the lake-protection rule, as well as additional voluntary actions that may further reduce the risk of negative impacts to lakes. If operators choose to implement some or all of these additional measures, they will likely reduce risks and help ensure that water quality, and fish and wildlife habitat are protected.

Studies indicate that lake water quality is declining in Idaho, and that human activity is often a major factor. In 1993, the Department of Environmental Quality studied 17 north Idaho lakes and found that only two fully supported their designated beneficial uses. Other studies over the last 10 years indicate that human activity contributes to sedimentation and nutrient enrichment, causing water quality to decline at an accelerated rate. Evidence of this decline includes decreased clarity, large algae blooms, unsafe drinking water, oxygen loss in deeper waters, shallowing, dense aquatic plant growth and changes in fish and wildlife communities. Studies identify many human activities that impact Idaho's lake environment to varying degrees. Wastewater disposal, storm water runoff, agriculture, grazing, road construction and maintenance, human development and recreation can all affect water quality.

Although a number of factors contribute to the degradation of Idaho's lake environment, this paper will focus on the effects of timber practices on lake water quality and how best to reduce these impacts. Research has shown that improper road location, construction and/or maintenance, slash burning, fertilizing, and timber harvest often result in sedimentation and nutrient input. Studies indicate that road systems deliver more than 70% of the sediment associated with logging operations. Minimization of road construction and adherence to site-specific best management practices (BMPs) in the design, construction and maintenance of roads can greatly reduce sediment production and delivery. Skidders and other machinery can disturb the ground, increasing the sediment load to lakes. With well planned and executed timber harvest activities and careful adherence to BMPs, sediment production and delivery can be reduced.

Increased nutrient input, particularly phosphorus and nitrogen input, can cause large algae blooms and increased aquatic plant growth. Fertilization and the burning of slash and debris near water can increase nitrogen input. Healthy vegetated filter strips can absorb much of this nutrient before it enters a lake; in fact, heavily vegetated stream banks can actually remove nitrogen from the stream. Phosphorous, unlike nitrogen, binds to soil particles and is not usually water soluble. Consequently, logging practices that increase erosion and sedimentation contribute to phosphorous input to lakes. To reduce nutrient input, forest operations should minimize erosion, avoid lakes during fertilization, herbicide application, and slash burning, and maintain healthy stream protection zones (SPZs).

A lake is defined as a natural or man-made body of perennial standing water larger than 1 acre in size. The Forest Practices Rules require the minimum protection for lakes to be equal to the protections provided for Class I streams. As defined in the Forest Practices Rules definitions for Class I streams, the SPZ of a lake is the area encompassed by a slope distance of 75 ft. from the OHW mark of a lake shore. Rule 030.07.a requires that an approved site-specific riparian prescription be in place before a forest practice is conducted within a lake's SPZ. The operator should consult with an IDL Private Forestry Specialist at the time of notification to start the prescription-development process.

BMPs for lakes can differ from Class I stream BMPs, but the language of the rule indicates that for most forest practices, the rules that apply to Class I streams should likewise apply to lakes. However, Private Forestry Specialists will consider potential degradation specific to lakes when writing the site-specific riparian prescription. Lakeshore stability must be maintained, nutrient and sediment delivery should be prevented, shade must be maintained, fish cover/habitat must be sustained, LOD recruitment must be promoted, and water filtering effects of vegetation must be protected. Therefore, very careful consideration should be given to the proximity of all burning, harvesting and other soil-exposing activities that occur within a lake's SPZ. For most lakeside operations, all bank trees and shrubs should be retained within a lake's SPZ. No slash burning should occur within the SPZ of a lake.

All other applicable Forest Practices Rules should be applied to lakeside practices.

Additional (voluntary) measures that may further reduce negative impacts to lakes:

1. Careful analysis of any proposed harvest that will occur within 300 feet of a lake, closely looking at potential degradation that may result from an operation.
2. Large continuous underburns that would alter shading and filtering effects should be avoided within 300 feet of lakes.
3. A pre-operational inspection should be requested if there are plans to construct or reconstruct roads located on highly erosive or unstable soils adjacent to a lake's SPZ.

4. All sediment traps or filters must be placed at least 30 feet from the lake's ordinary high water mark unless the department pre-approves another alternative. This will help ensure trapped sediment does not wash into a lake during flood events.
7. Fertilizers should not be used within a lake's SPZ.
8. All maintenance of equipment should be conducted outside of a lake's SPZ unless special measures are taken to prevent petroleum product or chemical spills.

#### Guidance for Use of Rule 030.07 Site Specific Riparian Management Plans

There are cases when strict adherence to forest practices rules could result in greater resource impact than modifying a practice or rule for a specific situation. Forest Practices rules allow a practice to vary from specific BMPs under an Area Manager approved variance. Usually a variance is for a specific rule(s), activity, location, and finite duration. Often the possible impact of a practice under a variance will be of short duration (less than a few years) or of minimal impact. In some cases, there may be a legitimate reason to vary from a rule where the time restriction and limited documentation of a variance hinders appropriate resource protection requirements. When situations occur within a SPZ that may affect long-term water quality, IDL may require a Site-specific Riparian Management Plan (SSRMP) as a supplement to a variance application. This additional requirement provides sufficient background to justify the potential risk to long-term water quality. Each SSRMP shall function as a supplement to a Request for Forest Practice Rules Variance.

An example is harvesting trees within a Class I SPZ to levels below the minimum rule requirements in 030.07.e. The removal of shade is a long-term impact because it will take more than two years for vegetation to provide equal or greater shade to the stream or lake. However, if the stand is in very poor health and decadent, dead, and dying trees present a forest health risk to surrounding stands preventing the establishment of healthy forest conditions near the stream, it may be appropriate to remove more of the trees than allowed under the current rule. This allows establishment a healthy forest condition next to the stream more rapidly and actually improves long-term shade development. The justification is that long-term benefit outweighs short-term impact. The benefits are improved shade and LOD for a century versus a few decades or shorter due to insect, disease or wildfire risk.

Another example is public safety. Public safety takes precedence over forest practices rules. Except in the case of emergency forest practices or specific imminent threats to public safety, obtain an approved variance prior to implementing a practice outside forest practice rules. Because of the potential for longer-term impact to the resources, a SSRMP might more clearly define the need for the variance and possible mitigation for the impact.

Other scenarios that may require a site-specific riparian management plan include the construction or reconstruction of a road within the SPZ, where the development has a

significant long-term impact on shade, LOD, or other resources or the need to salvage trees from an SPZ following a catastrophic event.

When applying a variance to an area, such as the SPZ of a stream rather than to a specific activity at a specific point, it is critical that the variance specifically identify the area where it applies.

**b. Operations that utilize ground-based equipment that result in logs being skidded or forwarded in or through streams shall not be permitted. When streams must be crossed, adequate temporary structures to carry stream flow shall be installed. Cross the stream at right angles to its channel if at all possible. (Construction of hydraulic structures in stream channels is regulated by the Stream Protection Act - title 42, chapter 38, Idaho Code). Remove all temporary crossings immediately after use and, where applicable, water bar the ends of the skid trails. (4-4-13)**

#### Rule Intent

This rule paragraph intends to prevent the use of ground-based equipment, and any similarly caused disturbance, directly in stream channels and requires temporary or permanent bridges, culverts, or other approved structures to cross streams. These structures must allow continued stream flow and fish passage and minimize water quality impacts. Temporary structures must be removed immediately after use. Skid trails accessing the stream crossing must be drained properly. All disturbed soils must be stabilized by seeding, mulching, or other means. Stream Channel Protection Act (SCPA) or IDWR MOU requirements may apply.

#### Unsatisfactory Conditions

An unsatisfactory condition exists if ground-based equipment crosses a stream, or enters a stream channel, without providing for a temporary structure that allows for the free flow of water.

Also, an unsatisfactory condition exists if a temporary structure is not removed immediately after use (before high flow), if fish passage is not provided for during periods of fish use, or if approaches to the crossing are not properly drained, stabilized or armored.

#### Guidance

The rules for road location, design, and construction apply if the operator or landowner intends to build a permanent crossing structure. This rule requires a temporary structure (not necessarily designed to carry a 50-year event), when streams are crossed by yarding or skidding equipment. IDWR MOU provisions must be applied on perennial streams to install a temporary crossing for use by

skidding equipment. If the stream is intermittent and the MOU is not applicable, apply the rule as written.

The incidental crossing, over and back without a drag, over a stream with ground-based equipment does not require an MOU permit or variance. Soil disturbance must be minimal and conditions prescribed to facilitate the one-time crossing (e.g., during times when the channel is dry or frozen), and the equipment in a condition where petroleum products will not leak, or enter by contact, into the stream. Incidental crossing, over and back, with excavation equipment, for the purpose of installing an approved stream-crossing structure, does not require a variance; for qualifying culvert, bridge or ford installations on perennial streams, an approved Supplemental Notification Form (substitutes for an IDWR Stream Channel Alteration Permit) should be on file. If an Operator is carrying out a cable yarding (skyline) operation, a necessary one-time crossing over and back for an appropriate piece of equipment acting as a tail-hold does not require a variance; these one-time crossings must not cause resource damage to the stream channel or surrounding SPZ.

Generally, variances may only be granted for limited equipment crossing without a temporary crossing if there is no flow, the soil is dry or frozen, and approaches are shallow and rocky and do not require excavation; provided this will result in less soil disturbance than installation and removal of a temporary crossing.

Stabilize banks as needed after temporary crossings have been removed. Removal "immediately after use" means upon completion of skidding and no later than fall rains, when conducting summer or fall forest operations, or spring runoff, when conducting winter forest practices. On perennial streams, refer any suspected violations of the SCPA to IDWR.

Temporary structures must allow for fish passage, if applicable at the time of use, should not pond water upstream and must be free of slash and dirt. If log structures are used, consider installing fabric and cabling the logs together prior to installation to minimize sediment delivery upon removal.

**c. Operation of ground based equipment shall not be allowed within the Stream Protection Zone except for approaches to stream crossings. (7-1-96)**

#### Rule Intent

To prohibit the use of ground-based equipment in Class I and II stream and lake protection zones. Variances may be granted for equipment use in these zones if equivalent or better resource-protection standards are met.

### Unsatisfactory Condition

An unsatisfactory condition exists when ground-based equipment is operating in a SPZ without a variance and outside an approach to a crossing. This includes equipment used for harvesting or conducting slash management/prescribed fire activities.

### Guidance

If an operator is working in the SPZ and not exposing soil or otherwise impacting the vegetation (forbs, grass, brush, trees, etc.), the equipment should be removed from the SPZ and the operator should be reminded of the rule intent. An operator must obtain a variance to operate equipment within the SPZ, even if the activity is not causing soil or vegetation disturbance. Variances may be granted for SPZ activities operating in a manner that do not disturb the soil or streamside vegetation or result in construction or reconstruction of trails (e.g., operating on top of several feet of frozen snow). Soil displacement can be avoided and vegetation protected by limiting the number of passes, operating on snowpack or during frozen conditions, or reusing existing trails that do not require clearing and grubbing to reopen. The key to this rule is to not allow soil to become exposed and enter streams during skidding, damage to residual vegetation, or construction of slash piles that may expose soil and result in a nutrient flush to streams during burning.

**d. When cable yarding is necessary, across or inside the Stream Protection Zones it shall be done in such a manner as to minimize stream bank vegetation and channel disturbance. (8-13-85)**

### Rule Intent

To provide protection to stream banks and streamside vegetation when cable yarding across SPZs is necessary. Whenever practical, yard away from the stream on each side. If yarding across streams is necessary, operators must protect the stream banks and streamside vegetation.

### Unsatisfactory Condition

An unsatisfactory condition exists when yarding damages vegetation within the SPZ (essential to providing shade, LOD, aquatic habitats, water-filtering effects, or stream bank stability) or disturbs streambanks/stream channels by exposing soil that will enter streams or otherwise modify the stream channel.

### Guidance

Fly logs over leave trees and other streamside vegetation, when cable yarding across streams. When adequate deflection cannot be achieved, corridors may be cut through the SPZ, provided shade and tree-retention requirements are met.



Corridors should be narrow and widely spaced. Remove as few trees as possible from the corridors, but allow for safe yarding. Where full suspension over streams is not possible, bump logs may be placed on the streambank and removed after use. Lateral yarding techniques minimize the swinging of the load and reduce soil disturbance in the SPZ.

**e. Provide for large organic debris (LOD), shading, soil stabilization, wildlife cover and water filtering effects of vegetation along streams. (7-1-96)**

#### Rule Intent

Vegetative filter strips are required along all streams. This rule also allows an alternative, site-specific, riparian, management prescription to provide adequate filter strip requirements. The minimum requirements for SPZs are to provide for soil stabilization, water filtering, shading, LOD recruitment, and wildlife cover.

#### Guidance

Rule Paragraph 030.07.e. specifically charges the operator with providing for large organic debris (LOD), shading, soil stabilization, wildlife cover and water-filtering effects of vegetation. Adequate shade must be left over Class I streams to maintain stream temperatures, thermal cover, and wildlife cover. Trees shall be left adjacent to Class I streams in adequate numbers to provide LOD into the stream channel to maintain aquatic habitats and provide channel stability. While standing dead trees are not used in the calculation of Relative Stocking in 030.07.e.ii, their value as a source of LOD is significant. For this reason To not to promote the wholesale harvest of snags within the SPZ; especially if standing dead trees are all that remain following a disturbance. The PFS should strongly encourage the operator to retain trees suitable for LOD recruitment within the SPZ, unless LOD has been otherwise addressed in a Site-specific Riparian Management Plan.

**i. Leave shrubs, grasses, and rocks wherever they afford shade over a stream or maintain the integrity of the soil near a stream. (3-20-14)**

#### Rule Intent

If shrubs, grasses and rocks provide shade for streams or help maintain streambank or streamside soil integrity, they must remain in place.

#### Unsatisfactory Conditions

Shrubs, grasses, rocks, or naturally downed timber, that provide shade or soil stability, are removed.

Guidance

While this subsection applies to the entire SPZ, it is particularly important to areas within and adjacent to the ordinary high water mark. It is important to leave shrubs, grasses, and rocks to provide shade over the stream and maintain the integrity of the soil near the stream. Address any removal of streamside hardwoods (e.g., cottonwoods) in a site-specific prescription.

**ii. Adjacent to all Class I streams, to maintain and enhance shade and large woody debris recruitment, landowners must comply with one of the two following options defining tree retention. The Relative Stocking per acre (RS) referenced in the options is calculated according to the relative- stocking-contribution table below. (3-20-14)**

**Option 1: Within twenty-five (25) feet from the ordinary high water mark on each side of the stream, live conifers and hardwoods will be retained to maintain a minimum relative stocking per acre of sixty (60). A relative stocking per acre of thirty (30) must be retained in the stream protection zone between twenty-five (25) feet and seventy-five (75) feet from the ordinary high water mark on both sides of the stream. (3-20-14)**

**Option 2: Within fifty (50) feet from the ordinary high water mark on each side of a stream, live conifers and hardwoods will be retained to maintain a minimum relative stocking per acre of sixty (60). A relative stocking per acre of ten (10) must be retained in the stream protection zone between fifty (50) feet and seventy-five (75) feet from the ordinary high water mark on both sides of the stream. (3-20-14)**

**Only one (1) option may be implemented within the stream protection zones of a harvesting unit covered by a single notification. Landowners are strongly encouraged to retain all trees immediately adjacent to the stream. (3/20/14)**

Forest Type	Per Tree Contribution to Relative Stocking by Diameter Class						
	Diameter Class (DBH in inches)						
	4-7.9"	8-11.9"	12-15.9"	16-19.9"	20-23.9"	24-27.9"	28-31.9"
NIGF (North Idaho Grand Fir)	0.097	0.209	0.347	0.506	0.683	0.878	1.088
CIGF (Central Idaho Grand Fir)	0.113	0.244	0.405	0.59	0.797	1.024	1.27
SIGF (Southern Idaho Grand Fir)	0.136	0.293	0.486	0.708	0.957	1.229	1.524
WHSF (Western Hemlock-Subalpine Fir)	0.123	0.267	0.442	0.644	0.87	1.117	1.385
DFPP (Douglas-fir-Ponderosa Pine)	0.151	0.326	0.54	0.787	1.063	1.366	1.693

Determination of Forest Type

The Private Forestry Specialist has the responsibility to determine Forest Type using the definitions provided in section 020.24, their professional judgment and local knowledge.

## Rule Intent

Rule Subparagraph 030.07.e.ii specifically requires a minimum Relative Stocking (RS) to remain in the inner and outer zones of the stream protection zone (SPZ) of Class I streams. The “inner” zone of Option 1 (60/30) includes the 25-ft.-wide strip of SPZ immediately adjacent to the stream’s ordinary high water mark, and the “outer” zone includes the 50-ft.-wide strip of SPZ between 25 ft. and 75 ft. from the stream’s ordinary high water mark. Conversely, the “inner” zone of Option 2 (60/10) includes the 50-ft.-wide strip of SPZ immediately adjacent to the stream’s ordinary high water mark, and the “outer” zone includes the 25-ft.-wide strip of SPZ between 50 ft. and 75 ft. from the stream’s ordinary high water mark. The density metric expressed in this table is Relative Stocking, a more robust measure of stand density which takes both stem size and stem frequency into account.

The table in the rule is intended to be a tool to help simplify implementation. It presents per acre RS values. The formulas given in the definition of Relative Stocking may also be used to make calculations.

Only one option may be implemented within the SPZ of a harvesting unit covered by a single notification. The intent of this portion of the rule is to discourage operators from quickly re-entering an SPZ harvested under one option and removing additional trees by harvesting under the other option the second time. It is also intended to make inspection of the harvested SPZ easier in that only one option has been implemented on the site. An operator therefore cannot choose a different option for each side of the stream for example or change options along the stream under a single notification. There are legitimate management reasons for choosing different options in different areas however and the intention is not to prohibit operators from making appropriate management decisions.

Landowners are encouraged but are not required to retain trees immediately adjacent to the stream. Trees whose roots form an integral part of the stream bank stability should be protected when practical. These trees provide the greatest level of protection to the stream and should be afforded the highest priority for retention, when they do not create or add to forest health concerns.

The intent of this rule, while allowing for active management in productive SPZ sites, is to keep levels of relative stocking (and by association – shade) uniform throughout the stream protection zone, according to the minimum standards expressed in the rule. FPAC provided the two options as a means by which to encourage operators to practice some silviculture within the SPZs to maintain them in a healthy state. It was not FPACs intent to create no harvest zones.

Specific streamside silvicultural and forest-health scenarios can alter how best to meet the rule. The rules allow development of site-specific riparian management prescriptions if, over the long term, they meet the intent set forth in Rule Paragraph

030.07.e. A site-specific riparian management plan may allow for a short time period (for example, 5-15 years) of reduced stocking, followed by a longer time period (for example, 30-50+ years) of higher stocking. The intent of these site-specific riparian management plans is to move the forest condition to an appropriate level of stocking with healthy trees. The goal is to encourage silviculture practices that result in greater shade over a longer time frame than if the existing riparian area is left unmanaged.

### Unsatisfactory Conditions

An unsatisfactory condition exists if: (1) Any stems are removed from either zone of the Class I SPZ if that zone did not have the required minimum level of Relative Stocking prior to harvest. (2) A planned forest practice results in Relative Stocking being reduced below minimum levels described in the rule. (3) The terms and conditions of an approved site-specific riparian management prescription were not followed.

### Guidance

This Rule Subparagraph is related to shade and LOD contributions to a Class I stream and applies to the entire 75-ft.-wide SPZ where forest practices are planned. A planned forest practice shall not result in the Relative Stocking falling below required minimums defined in the rule. If current conditions do not meet minimum Relative Stocking requirements either because not enough trees are naturally present or the zone was previously harvested, then the landowner will not be able to remove trees. If there is a compelling reason which requires removal of trees below the required minimums (e.g., insect infestations, hazard tree removal, or wildfire threat), it will need to be addressed in a site-specific riparian management prescription as part of a variance.

Non-forested areas are to be included as part of the stream reach as they occur. A road, meadow or rockslide that occurs along a stream within the SPZ shall be counted as part of the total stream reach and shall be sampled accordingly. Operators may designate larger contiguous areas as being outside the harvest area. RS minimums must be retained in all areas where planned forest practices will occur. If a forest practice is planned for both sides of a stream then both sides must meet rule minimums independently. An operator shall not use an exceptionally high RS on one side of a stream to justify harvesting below minimum RS on the other side unless approved in a site-specific riparian management plan.

To meet the intent of the rule, there should be a relatively continuous distribution of leave trees along the entire length of the SPZ in an effort to emulate the natural distribution of stems present. Clumping is not an appropriate methodology for distributing retained trees. The retention of trees closer to the stream at a higher density is to be expected and is appropriate. But large scale clumping or group selection would not be appropriate. While the need for line corridors and skid trail

crossings is recognized, removal of trees must be carefully planned and executed to minimize disturbance to leave trees and other SPZ vegetation. Line corridors should be appropriate in size and quantity and placed in natural openings whenever possible. The resulting riparian stand of retained trees, post-harvest, should meet the RS minimums for the Shade Rule option being implemented. If the application of line corridors will result in RS falling below rule minimums or in the necessity to harvest trees in a zone that is below minimums, mitigation or limitations may be addressed in a site-specific riparian management plan. The application of the rule should not preclude the operator from conducting a line skidding operation, if the activity is an appropriate management tool given the circumstances.

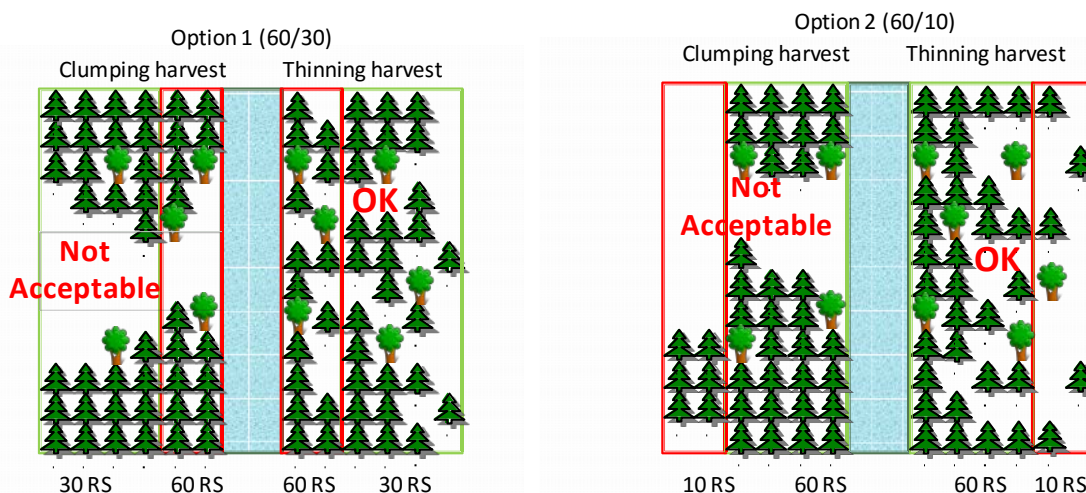


Figure 1. Clumping of retained trees is not an acceptable method for either option.

Each PFS should use professional discretion to determine rule compliance in an initial inspection (just visually inspecting an operation). If ocular estimates are not conclusive, the PFS should cruise a sample stream reach to determine compliance using a fixed-plot sampling technique. If the plot locations used by the operator to determine Relative Stocking are still available, the PFS should evaluate the same plots and determine if the sampling methodology used was appropriate.

A site-specific prescription is highly recommended in riparian zones where SPZs are located in areas that promise difficulty in retaining live trees throughout the harvesting and burning operations or where stream orientation, topographic shade, and/or stream width would significantly affect shade availability. Each PFS will use their professional judgment to assess possible silvicultural and harvesting options with operators desiring to mitigate wildfire-threatened or infested SPZs.

If an unsatisfactory condition is found, and the retained Relative Stocking is below minimum standards as a result of the operation, repairs can include limiting harvest in uncut areas adjacent to the stream and/or streamside site preparation and planting. Where stream-adjacent, un-cut areas are not available, harvest may be

limited downstream or on a different tributary within the same watershed and ownership.

### Using Sampling

Generally sampling is not the preferred method, but may be more practical when dealing with very long stream segments (over 1000' for example). When using any sample method the total retained RS shall be equal or greater than the minimum required. Sampling error in itself should not be used as grounds for an unsatisfactory condition.

When using the spreadsheet provided by IDL the plots are tallied cumulatively and the total shall be equal or greater than the rule minimums. A minimum 20% sample is recommended to verify compliance with the rule. The methodology recommended for using a plot system is to use 50' X 75' rectangular plots spaced systematically along the stream length (see figure 1). Starting at a point where a harvest unit boundary intersects the stream the first plot is placed at a fixed distance into the unit (100' for example). Subsequent plots should also be placed a fixed distance apart (200' for example).

Calculation of Relative Stocking needs to be explained to the operator to facilitate compliance with this rule. One role of the Private Forestry Specialist is to provide technical assistance in helping the landowner or operator implement the rule; the PFS should not provide full layout, calculation, and tree designation services on a large scale. The PFS should attempt to teach the operator the methodology; this may include helping with the layout of a few plots or a stretch of stream, but should not entail a whole day of sale preparation work. An initial sample of streamside trees will need to be taken to accurately calculate existing Relative Stocking in the SPZ. Tools online at [idl.idaho.gov](http://idl.idaho.gov) include the Forest Practices Foresters Forum #17 ( <https://www.idl.idaho.gov/forestry/forester-forums/fpa17.pdf> ) and relative stocking spreadsheet calculators and apps, to help operators.

While each stand structure within streamside SPZs will vary and accurate Relative Stocking calculations may be difficult, IDL offers the following recommendation for SPZ sampling:

Place fixed-area sample plots in areas where harvesting is planned, at even spacing, in the method illustrated below, one 50 foot stream length plot should be established per 250 feet of stream length, resulting in about a 20% sample.

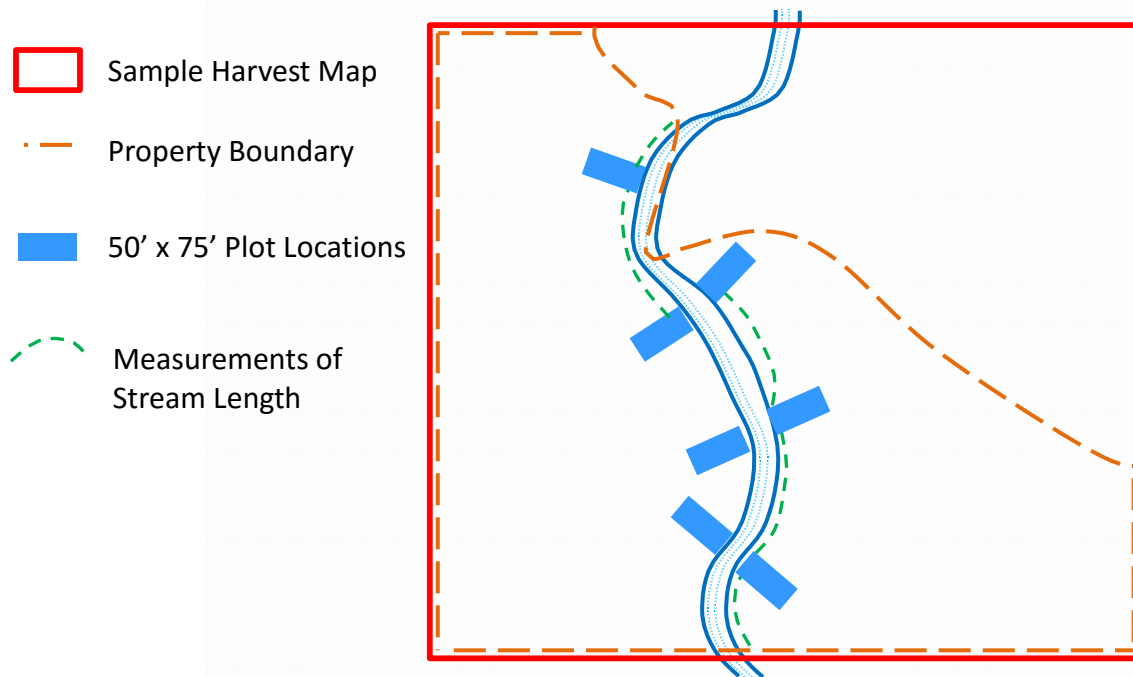


Figure 2. Recommended sampling methodology.

RS is based partly on site productivity; because of this it is possible, although unlikely that when an operator is calculating RS they may come up with figures in excess of 100 RS. This would occur when sampling a riparian area that lies within one of the most productive habitat types used to calculate the specific forest type.

An operator's failure to meet specific minimum density requirements should not automatically result in a violation, as that determination is subject to sampling variation and judgment. The rule is met if the sampling is conducted according to the above specifications and the tree harvest results in the minimum levels of Relative Stocking retained as expressed in this. If following the harvest levels calculated in the plots result in some areas being below minimum Relative Stocking levels, the PFS must make a professional judgment as to whether the intent of the rule has been followed.

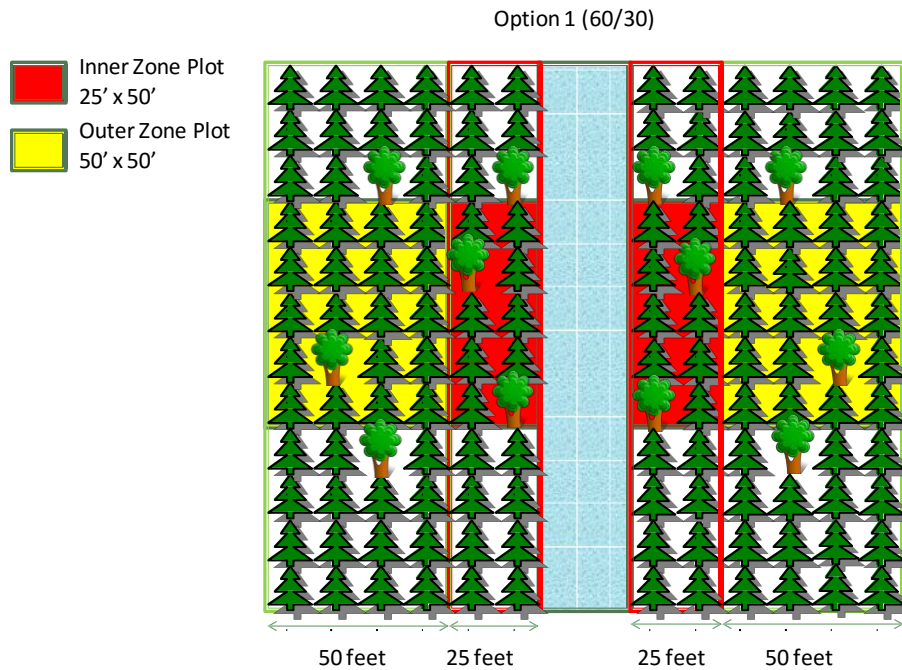


Figure 3. Fixed-area sampling methods for determining existing inventory using the 60/30 option. Rectangular fixed sample plots. One 25' X 50' plot in the inner zone and one 50' X 50' plot in the outer zone every 250 feet of SPZ.

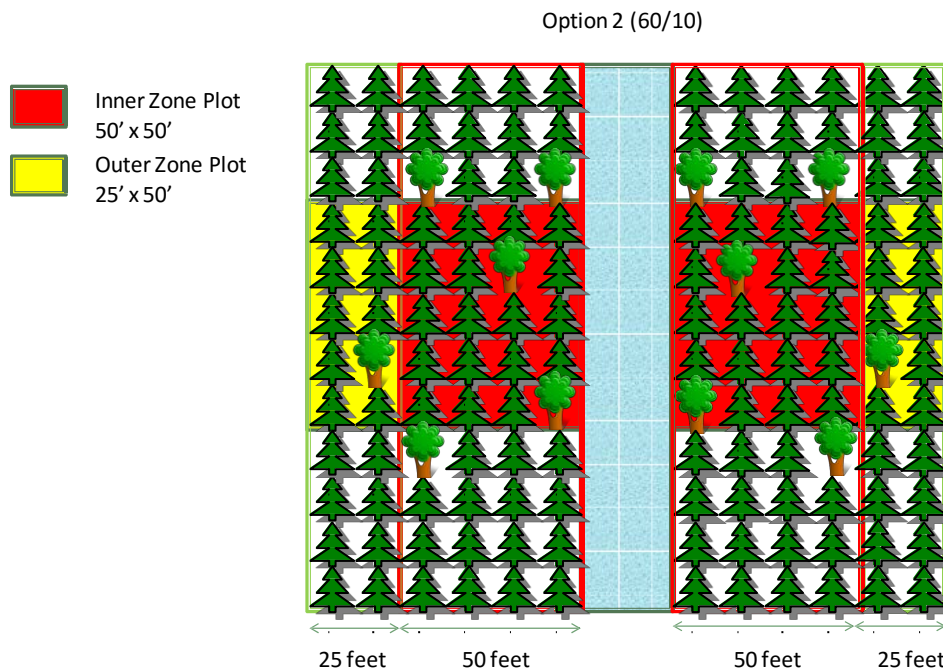


Figure 4. Fixed-area sampling method for determining existing inventory using the 60/10 option. Rectangular fixed sample plots. One 50' X 50' plot in the inner zone and one 50' X 25' plot in the outer zone every 250 feet of SPZ.



**iii. To protect filtering and shade effects of streamside vegetation adjacent to all Class II streams following harvesting and hazard management activities, live trees will be retained or new trees established within thirty (30) feet on each side of the streams ordinary high water mark to comply with the minimum stocking standards expressed in Subsection 050.04. (3-20-14)**

### Guidance

To protect streamside vegetation within the SPZ of Class II streams to provide filtering and shade effects. The intent is that operators will choose to leave or retain healthy trees in sufficient numbers and diameter classes to meet the minimum stocking standards expressed in 050.04; however an operator may harvest all of the trees out of the SPZ of a Class II stream, provided the operator replants the area according to 050.04. The previous requirement to retain small trees often resulted in decadent trees being left. In many cases it may be preferential to remove those trees in order to better facilitate the establishment of a new stand of trees that will likely be more effective at providing shade and filtering effects.

Remember that shrub, grass and rock retention are required under Rule 030.07.e.i. Operators are encouraged to acquire approved site-specific management prescriptions for areas where Class II streams flow in deep V-shaped valleys or other challenging areas where prescribed burning may result in violation of Rule 030.07.e.i.

Post-burning (or post-site-prep) Class II SPZ stands will be evaluated on a case-by-case basis. The PFS will need to use his/her discretion on deciding if “reasonable and prudent efforts” were made to protect the filtering and shade effects of streamside vegetation after harvest was completed.

The determination of “reasonable and prudent efforts” should include consideration of the following aspects of slash-mitigation activities:

Ignition sequence, spatially

Use of fuel breaks around SPZs

Felling practices (directional felling) and yarding practices (whole tree skidding and YUM yarding) to reduce slash accumulation within and immediately adjacent to SPZs

Mechanical piling around SPZs

Burn season (spring preferred)

**iv. During harvesting, carefully remove timber from the Stream Protection Zone in such a way that large organic debris, shading and filtering effects are maintained and protected. When portions of felled trees fall into or over a Class I stream, leave the portion consistent with the LOD definition of Subsection 010.35. (4-11-06)**

### Rule Intent

Trees available for harvest after the requirements in e.i. and e.ii. are met, may be logged in accordance with other applicable rules. To ensure adequate recruitment of LOD, a portion of any tree felled into or over a Class I stream must be left.

### Unsatisfactory Conditions

Vegetation needed for shade and soil stabilization in the SPZ is destroyed through careless forest practices, including slash management.

If trees of sufficient size to meet the LOD definition are felled into or over a Class I stream and are not left in or over the stream.

### Guidance

This subsection promotes careful forest practices in the SPZ. Harvest, site preparation or hazard reduction activities must reasonably protect the shading and filtering effects of vegetation, organic debris and duff. For Class II streams surrounded by planned burn units this is particularly important. Dozer piling in the SPZ is prohibited by rule 030.07.c. Class II SPZs can be reasonably protected within the zone through whole-tree removal, low-intensity prescription burns, YUM yarding, or no slashing. Hazard management practices that violate this rule should also be cited under Rule 070.01.

**v. When harvesting portions of trees that have fallen naturally into or over a Class I stream, leave the portions over the stream consistent with the LOD definition of Subsection 010.35. Leaving the section with the root ball attached is preferred. (4-11-06)**

### Rule Intent

To protect the natural recruitment process of LOD for Class I streams. At the same time, allow for the salvage of some value without disturbing the natural stream structure.

### Unsatisfactory Conditions

An unsatisfactory condition exists when naturally fallen trees are removed from the stream channel or from a position over the stream channel.

### Guidance

For LOD that has fallen into the stream or below the ordinary high water mark, leaving the entire tree should be encouraged, but is not required. Rather, leaving a portion of the tree equal to the stream width is acceptable to meet the intent of the rule to provide for LOD recruitment yet allow capture of some value. Removal

of fallen LOD that threatens to block and damage a bridge or culvert requires a variance. Consult with the hydrologist as needed.

If LOD has been removed, repairs can include limiting harvest in uncut areas adjacent to the stream, streamside planting and designed placement of LOD. No special permit is needed to place LOD in the stream provided it is done to mitigate for a cited unsatisfactory condition. Consult with the hydrologist or fisheries biologist as needed.

**vi. During harvesting operations, portions of felled or bucked trees not meeting the LOD definition shall be removed, consistent with the slash removal requirements of Subsection 030.06. (4-11-06)**

**vii. To obtain a variance from the standing tree and shade requirements, the operator must develop a site-specific riparian management prescription and submit it to the department for approval. The prescription should consider stream characteristics and the need for large organic debris, stream shading and wildlife cover which will achieve the objective of these rules. (4-11-06)**

#### Rule Intent

This rule recognizes the variability of streamside vegetation and the occasional need to customize a harvesting prescription while still achieving the standards of best management practices.

#### Guidance

This rule recognizes the site-specific riparian management prescription as the alternative to strict shade or leave-tree rule requirements. These prescriptions are intended to be developed by the operator and submitted to the Private Forestry Specialist as a variance request. Consult the fisheries biologist and hydrologist, when needed.

**viii. Stream width shall be measured as average between ordinary high water marks. (3-13-90)**

**f. Direct ignition of prescribed burns will be limited to hand piles within the stream protection zones (SPZ), all other direct ignitions shall occur outside of SPZs, so a backing (cooler) fire will more likely occur within the SPZ. (4-11-06)**

**i. Hand piles shall be at least five (5) feet from the ordinary high water-mark of streams. (4-11-06)**

**ii. No mechanical piling of slash or natural forest fuels is allowed in a SPZ (an exception is filter windrows for erosion control which shall not be ignited). (4-12-06)**

**08. Maintenance of Productivity and Related Values. Harvesting practices will first be designed to assure the continuous growing and harvesting of forest tree species by suitable economic means and also to protect soil, air, water, and wildlife resources. (10-14-75)**

#### Rule Intent

This rule requires a balance between the economic value of continuous tree growth and harvest, and the social, economic, and other values of soil, air, water, and wildlife protection. In most harvest operations, resource protection and harvest can be accomplished simultaneously. The subparagraphs of this rule describe certain situations where resource protection values may require special practices.

#### Guidance

Violations normally are issued only for the specific sub-paragraph that best applies.

**a. Where major scenic attractions, highways, recreation areas or other high-use areas are located within or traverse forestland, give special consideration to scenic values by prompt cleanup and regeneration. (10-14-75)**

#### Rule Intent

This rule is advisory in nature and does not preclude harvesting nor place restrictions on harvesting methods due to scenic values.

This rule puts special emphasis on expeditious cleanup and reforestation in and around forested scenic attractions, recreation areas, and highways.

This rule encourages that a reasonable attempt should be made (considering time of year, unit layout, and post-harvest treatments) to treat slash and begin reforestation prior to the standard time-frames.

#### Unsatisfactory Condition

An unsatisfactory condition exists when a harvest unit near a major scenic attraction, highway, or recreational area is not promptly cleaned up after harvest or is not reforested within the time limits prescribed in Rule 050.

### Guidance

This rule may be used to support other rules to expedite cleanup and reforestation after logging. Cleanup means any post-harvest requirement and includes providing road drainage, landing/skid trail stabilization, and treatment of waste material and slash.

"Located within or traverse forestland" refers to those harvest units visible from the scenic attractions. Voluntary compliance with visual management guidelines should be encouraged.

**b. Give special consideration to preserving any critical aquatic or wildlife habitat including snags, especially within stream protection zones. Wherever practical, preserve fruit, nut, and berry producing trees and shrubs. (4-4-13)**

### Rule Intent

This rule is generally advisory in nature. Operators who employ Best Management Practices (FPA Rules) should inherently be in compliance with the intent of this rule. Snag retention is encouraged to provide needed wildlife habitat and nutrient cycling.

### Unsatisfactory Condition

An unsatisfactory condition exists when an operator or landowner is not making a prudent effort to adequately protect critical wildlife or aquatic habitat during forest practice operations. Normally, an unsatisfactory condition could be better addressed under another practice-specific rule.

### Guidance

Operators should be aware of habitat on or adjacent to their operating area and modify their activities to maintain the primary function of the habitat, such as scheduling an operation to avoid disturbing elk during calving season, or eagles during nesting and fledgling stages.

When a PFS becomes aware of a potential conflict between a proposed or active forest practice and a threatened, endangered or protected nongame species, the PFS will recommend to the operator that he/she contact the appropriate agency (USF&W, NOAA Fisheries, or IDF&G) for consultation.

The Forest Practices Act recognizes the importance of wildlife habitat but is not the enforcement mechanism for regulations promulgated and/or administered by other agencies.

**c. Avoid conducting operations along or through bogs, swamps, wet meadows, springs, seeps, wet draws, or other locations where the presence of water is indicated by associated vegetation; temporary crossings can be used as referred to in Paragraph 030.07.b. Protect soil and vegetation from disturbance which would cause adverse affects [sic] on water quality, quantity and wildlife and aquatic habitat. (4-4-13)**

#### Rule Intent

To protect soil and vegetation in areas such as swamps, wet meadows, springs, seeps, bogs, and draws, preventing damage to water quality, quantity, and aquatic or wildlife habitats. Determination of “wet areas” should primarily rest on the presence of “water-loving” vegetation (e.g., skunk cabbage, cattails and aquatic reeds) and the appearance of water-saturated soils. Leave filter strips of undisturbed soil and vegetation around wet areas.

If the wet area can be crossed with a temporary crossing that will result in minimal disturbance to the wet area and the associated vegetation, then crossings may be installed and used in accordance with the requirements expressed in rule paragraph 030.07.b.

#### Unsatisfactory Condition

An unsatisfactory condition exists when there is disturbed soil and vegetation around a wet area, draw, etc. that creates adverse impacts on water quality and aquatic habitat.

#### Guidance

Operate on snowpack or frozen conditions during skidding, to avoid disturbing soil and vegetation. This rule applies to draws that carry water seasonally and have a down-drainage impact on water quality. Operations within a wetland may require an Army Corps of Engineers (COE) special permit if more than 200 yards of fill material are involved. Consider a minimum twenty (20) foot vegetative filter around wet areas. There are no special COE requirements for conducting forest practice operations in wetlands if all applicable FPA rules are satisfactorily implemented. If an operator fails to apply applicable rules (BMPs) in a wetland, the COE should be notified.

Any installed temporary crossings must be pulled with minimal disturbance at the end of the harvesting operation.

**d. Clear cutting operations within a single ownership, in which essentially all trees have been removed in one operation, shall be planned so that adequate wildlife escape cover (e.g. topography, vegetation, stream protection zones, etc.) is available within one-quarter (1/4) mile. (4-4-13)**

### Rule Intent

To retain escape cover for viable wildlife populations. Successful wildlife management requires diversity of vegetative covers.

To be applied to individual ownerships and does not consider the management practices applied to adjoining ownership parcels.

### Unsatisfactory Condition

Within an ownership, an unsatisfactory condition exists when adequate wildlife escape cover is not available within one-quarter (1/4) mile of any portion of a unit where all the timber cover has been removed.

### Guidance

The rule does not restrict the overall size of a harvest unit where all timber is removed but does affect its shape. Escape cover is referring to line-of-sight distances. Escape cover is provided by those physical structures that either break the line of sight, or because of physical attributes, are conducive to wildlife movement. Private Forestry Specialists should work closely with wildlife biologists when unit size and shape may affect escape cover.

This rule is not intended to require one landowner's operation to compensate, by providing escape cover, for the actions of adjacent landowners. Where escape cover is lacking because of adjacent land use practices, the Private Forestry Specialist should encourage voluntary application of this rule on the affected ownership.

## 031. CUMULATIVE WATERSHED EFFECTS

**01. Purpose.** In accordance with Section 38-1305(8). Idaho Code, the department has developed methods for controlling cumulative watershed effects (CWE). The methods and procedures are described in the department manual entitled “Forest Practices Cumulative Watershed Effects Process for Idaho.” Proper application of this process will help ensure watersheds are managed to protect water quality so that beneficial uses are supported. This rule describes how the process is to be implemented on forest land. (7-1-98)

### Rule Intent

To recognize the CWE process, as described in the manual, as the mechanism to conduct watershed assessments on Idaho forestlands. The referenced code does not dictate how CWE will be implemented; therefore, rule paragraphs that follow describe how the process will be applied. As this purpose statement does not contain operator requirements, it will not be used for enforcement.

### Guidance

While the CWE manual is cited by reference in this rule, its procedures are not specifically recognized as administrative rules subject to Administrative Procedures Act rulemaking.

**02. Process Application.** (7-1-98)

**a. Application of the CWE process and any resulting site-specific BMPs are encouraged but not mandatory.** (7-1-98)

**b. The process may be initiated by either the department, a watershed advisory group (WAG), or an individual landowner or group of landowners that collectively own at least twenty-five (25) percent of the forested land in a watershed. In any case, a reasonable effort will be made to notify forest landowners within the watershed, and the landowners will be given the opportunity to participate in the process.** (7-1-98)

**c. The department shall be notified prior to the initiation of the CWE process.** (7-1-98)

**d. The department will review and approve the watershed assessment and CWE site-specific BMPs for compliance with the Forest Practices Act.** (7-1-98)



### Rule Intent

To describe who may initiate the CWE implementation process and requires the department be notified when the process is started. For accountability purposes, the department will review and approve all CWE watershed assessments and resulting site-specific BMPs. While notification and approval of the CWE process is required, there is no requirement to use the process or apply all best management practices developed from it.

### Unsatisfactory Condition

An unsatisfactory condition exists if some entity initiates the CWE process without notifying the department. Assessments completed without department review and approval have no standing with respect to this rule and resulting site-specific best management practices will not be recognized by the department.

### Guidance

Since application of the process results are intended to be voluntary and the notification and approval requirements fulfill administrative needs; unsatisfactory reports should not be issued for this rule. If landowners are willing to invest the time to learn how to apply the process they can make their own determination as to its value. If deemed a valuable tool to help manage watersheds, landowners may notify the department of this commitment and the department should review and approve the assessment and any resulting CWE-related BMPs. Review of the assessment process is the responsibility of the CWE coordinator, approval of any resulting BMPs is the responsibility of the Regulatory Program Manager.

**03. Site-specific BMP Implementation. Approved CWE site-specific BMPs are encouraged and applied on a voluntary basis. (7-1-98)**

### Rule Intent

This rule formally recognizes the voluntary application of CWE-related BMPs (CWEMPs). If an operator or landowner is not voluntarily applying CWE site-specific BMPs, the Private Forestry Specialist should encourage voluntary compliance in the comments section of an inspection report. Emphasis should be placed on reasons why the BMPs should be followed.

**04. Site-specific BMPs on former Stream Segments of Concern. Practices approved by the department from 1989 through 1995 under former stream segments of concern rules remain in effect until revised by a CWE analysis, at which point the CWE site-specific BMPs would be mandatory. (7-1-98)**

### Rule Intent

To provide a mechanism through application of the CWE process to modify site-specific BMPs developed under the former Rule 080, Stream Segments of Concern (SSOC). Normally, site-specific BMPs developed by CWE are voluntary; unless they replace SSOC-related BMPs developed under former Rule 080, or are an extension of existing rules.

### Unsatisfactory Condition

An unsatisfactory condition exists if approved CWE site-specific BMPs (CWEMPs), designed to replace former Stream Segments of Concern BMPs, or CWEMPs that are a modification of existing rules, are not adhered to.

### Guidance

The Regulatory Program Manager has the responsibility to notify affected districts when approved CWEMPs have replaced SSOC BMPs or modified existing rules and to which watersheds they apply. These CWEMPs have the full force of the FPA behind them for enforcement purposes and if violated, this rule should be cited. SSOC-related BMPs developed under Rule 080, and still in effect, are cited as violations of Section 38-1305(7), Idaho Code.

## 040. ROAD CONSTRUCTION AND MAINTENANCE

**01. Purpose. Provide standards and guidelines for road construction, reconstruction and maintenance that will maintain forest productivity, water quality, and fish and wildlife habitat. (4-5-00)**

### Rule Intent

To provide a framework for the road construction, reconstruction and maintenance rules. In general, it will not be used for enforcement. The rule lists forest productivity, water quality, and fish and wildlife habitat as protected resources. Individual rules in this section often address only the prevention of materials entering streams, however, materials entering streams may impact water quality and aquatic habitat. A logical, systematic, practical approach to road location, design, construction, and maintenance is the goal of this section.

### Guidance

Routine road maintenance not associated with a specific forest practice does not require notification and includes culvert cleaning, road grading, occasional installation of culverts that do not convey streams, spot rocking, brush cutting, spraying, or dust abatement.

Spot rocking refers to adding rock to a specific short segment of road (50 – 100 ft.) generally in response to the development of a soft roadbed.

Road construction/reconstruction requires a notification and includes installation or replacement of stream crossing structures such as bridges and culverts, alteration of road cut and fills, road resurfacing, clearing and grubbing of brush to reopen old roads, and substantial modification of road drainage (i.e., installation of rolling dips, inside ditches, berms, in-sloping or out-sloping).

**02. Road Specifications and Plans. Road specifications and plans shall be consistent with good safety practices. Plan each road to the minimum use standards, adapted to the terrain and soil materials to minimize disturbances and damage to forest productivity, water quality, fish, and wildlife habitat. (4-5-00)**

### Rule Intent

This is the purpose statement for rules covering road design, plans and specifications. Specific planning rules are developed under its framework. Road design should protect water quality through proper location and the engineering of cut and fill slopes, drainage, and road grade. Water quality, fish and aquatic habitat are the primary resources being protected. Operational safety is a major concern and design element.

### Unsatisfactory Condition

An unsatisfactory condition exists if location and/or design specifications on new and reconstructed roads fail to provide proper drainage and protect area resources, or pose undue travel risk, and no other subparagraphs adequately address the design deficiencies.

### Guidance

Violations to this rule only apply when more specific subparagraphs of 040.02 or 040.03 do not appropriately address the situation. Compliance with 040.02 rules is best addressed during pre-operational inspections. Except for culverts (rule 040.02.e.) once construction has begun, refer to 040.03 or 040.04 and use planning rules to support the case.

While safety is a goal, any safety compliance issues associated with forest practices fall under the jurisdiction of the Department of Labor, Logging Safety Division, and should be referred to them.

Displaced rocks, debris or logs generated during logging road construction can cause a safety hazard on a public road. Clearing public roads of such debris or taking legal action against the responsible party falls under local/state highway jurisdiction. Highway officials should be notified immediately if this situation arises.

**a. Plan transportation networks to avoid road construction within stream protection zones, except at approaches to stream crossings. Leave or reestablish areas of vegetation between roads and streams. (4-5-00)**

### Rule Intent

To prohibit the construction or reconstruction of roads within the stream protection zone (SPZ). Roads are a major source of sediment and can adversely impact water quality and fisheries habitat. Where roads must cross SPZs, To require vegetative filter strips between roads and streams to mitigate surface erosion.

### Unsatisfactory Condition

An unsatisfactory condition exists when roads (except for approaches to crossings) are planned within the SPZ. Vegetation filters should be left between roads and streams.

### Guidance

To prevent a violation, plan roads outside the SPZ and ensure that the filter strip is wide enough to trap sediment between roads and stream. Except for approaches to stream crossings, road construction or reconstruction within the SPZ requires a variance.

**b. Roads shall be no wider than necessary to safely accommodate the anticipated use. Minimize cut and fill volumes by aligning the road to fit the natural terrain features as closely as possible. Adequately compact fill material. Dispose of excess material on geologically stable sites. (4-5-00)**

### Rule Intent

To keep road width appropriate for intended use. Narrower roads limit construction activity and potential disturbance in the surrounding area. Compaction is required and should be planned for in the design process. All excess material from cut and fill operations should be stabilized or removed to prevent erosion and subsequent impacts to water quality.

### Unsatisfactory Condition

An unsatisfactory condition exists when exposed road waste material poses a threat to the water quality of nearby streams or when roads are not adequately compacted.

### Guidance

Except for the compaction requirement, this rule may be difficult to enforce because the terms "wider than necessary" and "anticipated use" are subjective; however, failure to comply with this rule usually involves noncompliance with 040.03 rules; enforceable under road construction. The Private Forestry Specialist should refer to this rule if road width may present a hazard to water quality. Determining if adequate compaction has occurred is best dealt with under road construction rules.

Geotechnical advice may aid decisions dealing with road waste disposal. Since this rule's ground application has operational and technical limits, it should remain advisory and not subject to full enforcement procedures. If waste material is a problem, emphasize planned location of waste or borrow areas and ways to stabilize exposed material. Road construction or maintenance rules (040.03 and 040.04) offer clear guidelines for enforcement actions regarding excess waste material.

**c. Plan roads to drain naturally by out-sloping or in-sloping with cross-drainage and by grade changes where possible. Plan dips, water bars, cross-drainage or subsurface drainage on roads, when necessary. (4-5-00)**

Rule Intent

This rule requires a road surface and subsurface drainage system to prevent water accumulation and resulting erosion. Use out-sloping, rolling dips, and changing grades as drainage methods to control surface drainage, when feasible. Provide subsurface drainage where needed in critical locations.

Unsatisfactory Condition

An unsatisfactory condition exists when roads lack appropriate and adequate drainage.

Guidance

New roads lacking proper drainage should be enforced under road construction Rule 040.03. Existing roads should be enforced under road maintenance Rule 040.04. Consult with the geotechnical specialist if needed to help design for subsurface drainage. This rule can be cited in cases where subsurface drainage is an issue.

**d. Relief culverts and roadside ditches shall be planned whenever reliance upon natural drainage would not protect the running surface, cut slopes or fill slopes. Plan culvert installations to prevent erosion of the fill by properly sizing, bedding and compacting. Plan drainage structures to achieve minimum direct discharge of sediment into streams. (4-5-00)**

Rule Intent

To prevent road erosion and water quality damage due to improper drainage. Poor culvert installations or too few cross-drains can cause erosion of fill material and the road subgrade. Improperly installed culverts significantly increase the risk of future failures. Drainage structures should be installed in roadside ditches above stream crossings to filter muddy ditch water through vegetative zones or otherwise prevent sediment from entering streams.

Unsatisfactory Condition

An unsatisfactory condition occurs when culvert installations are inadequate or too infrequent to stop erosion of road fill and impact water quality. Ditches should not deposit sediment in streams.

### Guidance

This rule applies to new roads under construction. Violations for recently completed or existing roads are issued under road construction or road maintenance rules. Correction of an unsatisfactory condition under this rule may require culvert relocation, reinstallation or placement of additional drainage structures. Installation of a filtering or settling system may be needed to filter sediment from ditches or cuts and fills.

**e. The following rule applies to installations of new culverts and reinstallations during road reconstructions or reinstallations caused by flood or other catastrophic events. Culverts used for temporary crossings are exempt from the fifty (50) year design requirement, but they must be removed immediately after they are no longer needed and before the spring run-off period. (4-5-00)**

**i. Culvert installations on fish bearing streams must provide for fish passage. (4-5-00)**

### Unsatisfactory Condition

An unsatisfactory condition exists when a culvert installation does not provide for fish passage. This can be due to an outlet drop of 1 foot or greater, an inlet drop, maximum flow velocities exceeding those allowable for the fish type, or if minimum water depths are less than those needed for the fish that are present. The PFS should consider the natural, current water depth in the stream relative to the minimum water depth requirements in evaluating the status of a culvert.

### Guidance

According to the Stream Channel Alteration Rules (IDAPA 37, Title 3, Chapter 7), fish passage criteria at culverts includes:

- Minimum water depth shall be approximately eight (8) inches for salmon and steelhead and at least three (3) inches in all other cases (Rule 062.04.g.).
- Maximum flow velocities for streams shall not exceed those shown in the Alaskan Curve for more than a forty-eight (48) hour period. The curve used will depend on the type of fish passing (Rule 062.04.h.). For a culvert that is less than or equal to 40 feet long and when the fish type is a trout, then the maximum allowable flow velocities are approximately 4 feet per second (ft/s). Use the following Hydraulic Design table for these culverts ( $\leq 40$  ft.) when the fish type is trout, to determine if the flow velocities in a culvert will meet the velocity criteria of 4 ft/s (assuming that the culvert is sized according to the Culvert Sizing Tables in the following section (ii.)).

<b>Drainage Area (Acres)</b>	<b>Maximum Allowable Slope of Installed Culvert</b>
<201	3%
201-350	2%
351-1000	1%
1001-2600	0.5%
2601-8200	0%

- Where fish passage must be provided, upstream drops at the entrance to a culvert will not be permitted and a maximum drop of one (1) foot will be permitted at the downstream end if an adequate jumping pool is maintained below the drop (Rule 062.05.a.). Generally an adequate jumping pool exists when the ratio of the outlet drop height to the jumping pool depth is 1:1.25.

Fish passage must be provided for permanent and temporary culverts; however, temporary culverts need only consider the short-term season of use. Adequate fish passage is determined by site-specific reference migration criteria. In a questionable case, consult the fisheries biologist. In high flow situations, consider installing detachable welded fishladders for culverts with a gradient less than 4 percent. If installing a fish ladder will compromise the 50-year flow requirement, additional measures are needed.

More stream crossing options that allow for fish passage can be found in the Forester Forum, FPA 12, *Fish Passage Guidelines When Installing Stream Crossings*. ([click here](#) to access this Forester Forum on the IDL Intranet). Generally, if the stream gradient and drainage area for the stream crossing do not meet the requirements shown in the Hydraulic Design chart, then a structure that will allow for stream channel simulation should be considered (e.g. bridge, open-bottom structure, buried pipes, etc.)

The Private Forestry Specialist (PFS) should make sure the operator installing a culvert crossing structure for fish-bearing streams clearly understands the installation specifications. To ensure that the specifications are met, the PFS will need to take measurements using a surveyor's level and rod. It is important that the operator knows up front the required accuracy and allowed tolerances. Culverts that do not meet the specification for fish passage will need to be re-installed. Therefore, it is important that the installation of culverts for fish passage are discussed with the operator and documented on an inspection report.

**ii. Design culverts for stream crossings to carry the 50-year peak flow using engineering methods acceptable to the department or determine culvert size by using the culvert sizing tables below. The minimum size culvert required for stream crossings shall not be less than eighteen (18) inches in diameter, with**



**the exception of that area of the Snake River drainage upstream from the mouth of the Malad River, including the Bear River basin, where the minimum size shall be fifteen (15) inches. (7-1-96)**

**CULVERT SIZING TABLE - I**

**USE FOR NORTH IDAHO AND THE SALMON RIVER DRAINAGE**

**This culvert sizing table will be used for the area of the state north of the Salmon River and within the South Fork Salmon River drainage. It was developed to carry the fifty (50) year peak flow at a headwater-to-diameter ratio of one (1).**

<b>Watershed Area (acres)</b>	<b>Required Culvert Diameter (inches)</b>	<b>Culvert Capacity (in cubic feet/sec)</b>
<b>Less than 32</b>	<b>18</b>	<b>6</b>
<b>33 – 74</b>	<b>24</b>	<b>12</b>
<b>75 – 141</b>	<b>30</b>	<b>20</b>
<b>142 – 240</b>	<b>36</b>	<b>32</b>
<b>241 – 366</b>	<b>42</b>	<b>46</b>
<b>367 – 546</b>	<b>48</b>	<b>65</b>
<b>547 – 787</b>	<b>54</b>	<b>89</b>
<b>788 – 1027</b>	<b>60</b>	<b>112</b>

**Strongly consider having culverts larger than 60 inches designed, or consider alternative structures such as bridges, mitered culverts, arches, etc.**

<b>1028 – 1354</b>	<b>66</b>	<b>142</b>
<b>1355 – 1837</b>	<b>72</b>	<b>176</b>
<b>1838 – 2431</b>	<b>84</b>	<b>270</b>
<b>2732 - 4111</b>	<b>96</b>	<b>370</b>
<b>4112 – 5830</b>	<b>108</b>	<b>500</b>
<b>5831 – 8256</b>	<b>120</b>	<b>675</b>

**Culverts larger than one hundred twenty (120) inches must be designed; consider alternative structures. (4-5-00)**

## CULVERT SIZING TABLE – II

### USE FOR SOUTH IDAHO

This culvert sizing table will be used for the area of the state south of the Salmon River and outside the South Fork Salmon River drainage. It was developed to carry the fifty (50) year peak flow at a headwater-to-diameter ratio of one (1).

Watershed Area (acres)	Required Culvert Diameter (inches)	Culvert Capacity (in cubic feet/sec)
Less than 72	18#	6
73 – 150	24	12
151 – 270	30	20
271 – 460	36	32
461 – 720	42	46
721 – 1025	48	65
1026 – 1450	54	89
1451 – 1870	60	112

Strongly consider having culverts larger than sixty (60) inches designed, or consider alternative structures such as bridges, mitered culverts, arches, etc.

1871 – 2415	66	142
2416 – 3355	72	176
3356 – 5335	84	270
5336 - 7410	96	370
7411 – 9565	108	500
9566 – 11780	120	675

Culverts larger than one hundred twenty (120) inches must be designed; consider alternative structures.

# See exception for southeast Idaho in Subsection 040.02.ii of this rule. (4-1-00)

iii. Relief culverts, and those used for seeps, springs, wet areas, and draws shall not be less than twelve (12) inches in diameter for permanent installations. (7-1-96)

#### Rule Intent

To describe design requirements and minimum culvert sizes for permanent and temporary stream crossings and relief culverts, draws, seeps and wet areas. All culvert installations on Class I streams must provide for fish passage. All permanent stream-crossing installations must be designed to carry the 50-year peak flow.

To prevent road erosion and water quality damage during peak runoff and reduce culvert maintenance. Culverts smaller than the prescribed standard have an unacceptably high risk of failure. The tables are provided for use if site-specific 50-year design expertise is unavailable or cost-prohibitive.

### Unsatisfactory Condition

Unsatisfactory conditions exist if culverts do not provide for fish passage. Unsatisfactory conditions exist when new, permanent stream crossing culvert installations are not sized for the 50-year event; when culverts measure less than 15/18 inches; when other permanent culvert installations (relief culverts, etc.) are less than 12 inches; or when temporary crossings or culverts are not removed prior to spring runoff.

### Guidance

Fish passage must be provided for permanent and temporary culverts according to the previous section of this rule (i).

The rule does not intend to require the replacement of culverts in use prior to the original effective date of this rule (4/92). Failed culverts will be replaced according to this rule. “North of the Salmon River” refers to the river itself, not the drainage, and north of the town of North Fork.

A culvert can be sized for a 50-year event and not meet the size requirements of the table, if an appropriate design methodology is used to determine pipe size. There are a number of acceptable 50-year design methods; consult the IDL hydrologist for an updated list. Generally, infiltration-limited models (Talbot's formula, rational rule) are not acceptable. The table is based on a flow frequency analysis model. This model's regional regression equations can be used to more accurately calculate site-specific discharge. Once discharge is calculated and other factors considered [culvert type (round, squash), inlet type (mitered, headwall, projecting), and headwater/diameter ratio, a nomograph can be used to specifically determine pipe diameter.

Temporary crossings include culverts not sized for a 50-year event, culverts below the minimum 15 or 18-inch size, log culverts or snow bridges. When installing temporary crossings, maintain bed and bank integrity as much as possible. Remove temporary crossings with minimum disturbance to stream bank and avoid soil deposition in the stream. Stabilize banks as needed.

The CFS (at headwater/depth of one, projecting entrance) for 12 inch culverts is 2.2 and for 15 inch culverts is 3.6.

**f. On existing roads that are not reconstructed or damaged by catastrophic events, landowners or operators are encouraged, but not required, to replace or provide mitigation for culverts that do not provide for fish passage in accordance with Subsection 040.02.e.i. or cannot carry the fifty (50) year peak flow of Subsection 040.02.e.ii. (4-12-06)**

Rule Intent

To stress the importance of insuring fish passage. This rule is advisory only.

**g. Stream crossings, including fords, shall be minimum in number and planned and installed in compliance with the Stream Channel Protection Act, Title 42, Chapter 38, Idaho Code, and with culvert sizing requirements of Subsection 040.02.e. Fords are an acceptable stream crossing structure on small, shallow streams with flat, less than four percent (4%) gradients. Fords should cross the stream at right angles and ensure fish passage. Approaches shall be adequately cross-drained and rocked for at least seventy-five (75) feet. During times of salmonid spawning and egg incubation or to protect active domestic water diversions, use shall be limited to low water, dry, or frozen conditions and hauling or equipment crossing trips limited to minimize sediment delivery to streams. (4-12-06)**

Rule Intent

To require compliance with the Stream Channel Protection Act (SCPA) and the referenced culvert rule for road stream crossings.

To acknowledge fords as an acceptable stream crossing structure under certain conditions.

Unsatisfactory Condition

An unsatisfactory condition exists when the crossing is not in compliance with the Stream Channel Protection Act and rule 040.02.e., where fords do not meet the conditions stated in the rule or any prescription provided for the use of fords exempt from SCPA requirements.

Guidance

See the FPA Administrative Procedures related to the MOU with the Idaho Department of Water Resources (IDWR). The MOU applies to culvert installations on perennial streams.

Failure to comply with the Supplemental Notification Form requirements will be cited under this rule. IDWR should also be notified, through the Regulatory Program Manager, of any violations associated with this rule. For structures

outside the scope of the MOU, the Private Forestry Specialist should tell operators of their responsibility under the SCPA and refer them to IDWR.

A variance is not needed to use a ford, however provisions associated with the MOU will apply on constructed/reconstructed fords on perennial streams. If a Supplemental Notification Form is not needed, ford use guidelines that would normally be detailed on the supplement (limit use to low water conditions, limit daily hauling, avoid use during spawning, rock and drain approaches) should be detailed in an inspection report and are enforceable under this rule.

Provisions of the MOU and applicable FPA rules must be followed to replace bridges or stream culverts, but a variance is not required.

The incidental crossing, over and back, of a stream with road building equipment in and of itself does not require a MOU permit or variance. Soil disturbance must be minimized and the equipment in a condition where petroleum products will not leak, or enter by contact, into the stream.

**h. Avoid reconstruction of existing roads located in stream protection zones, except for approaches to stream crossings, unless it will result in the least long-term impact on site productivity, water quality, and fish and wildlife habitat. Reconstruction of existing roads in stream protection zones will require a variance. Reusing existing roads in stream protection zones for skidding or landing logs shall require a variance. Reusing existing roads in stream protection zones for hauling fully suspended logs only, where no reconstruction will occur, does not require a variance. (4-12-06)**

#### Rule Intent

To discourage the use of roads located in the SPZ that will cause disturbance to soils or vegetation. It also allows for the use of existing roads located in the SPZ for hauling, when it does not result in any disturbance.

#### Unsatisfactory Condition

An unsatisfactory condition occurs when a forest road, in the SPZ, is reconstructed or reused for skidding, landing, processing or decking logs, without an approved variance.

#### Guidance

This rule applies to roads, not publicly maintained, used in conjunction with a forest practice. This rule does not apply to road approaches to stream crossings or the crossings themselves, but rather to roads that are within and parallel a stream for a significant distance.

A commonly requested variance is for reuse of existing roads in SPZs (versus new construction outside the SPZ) that may pose a greater risk to stream sedimentation. Reuse is acceptable if the road is stable, does not need significant equipment work or vegetation removal to reopen, and an adequate filter strip of vegetation exists between the road and the stream (to trap sediment and provide for shade, bank stabilization, water filtration and LOD). It generally is not acceptable if the road is unstable, revegetated with trees sapling size or larger or infringes upon the ordinary high water mark. On occasion, the old road is the only way into a stand or is the deeded access. If such a road is not suitable for forest practice use, the Private Forestry Specialist should guide the operator to develop an alternative access, logging method, or apply other mitigation.

Decisions should be made based on which option would cause the least long-term impact on site productivity, water quality, and fish and wildlife habitat.

Reuse of existing roads routinely occurs for such activities as log hauling and forest management. The *passage* over a road for these purposes, where no reconstruction is needed, does not violate any rules and variances are not required. The prohibition on reuse in this rule refers to skidding (including forwarders and cut-to-length systems), using the road as a landing or to yard from.

Routine road maintenance is addressed under the road maintenance rules and does not require a variance. Such maintenance includes culvert cleanout, road grading, installation of culverts that do not convey streams, spot rocking, brush cutting or spraying, and applying dust abatement.

When an existing road is planned for reuse, the following are considered reconstruction activities:

1. Extensive road surfacing of a native surface road thereby converting it into an improved secondary or main haul road. Resurfacing of an existing rocked road or spot rocking is considered maintenance.
2. Alteration of cuts and fills
3. Clearing and grubbing of brush
4. Substantial modification of road drainage

When these activities take place within the SPZ, a variance will be required.

Replacement of stream crossing structures is a reconstruction activity. Address stream crossings in the related stream crossing rules, since this rule is concerned with road reconstruction/reuse in the SPZ and not activity below the ordinary high water mark.

**03. Road Construction. Construct or reconstruct roads in a manner to prevent debris, overburden, and other material from entering streams. (4-5-00)**

Rule Intent

This is the purpose statement for road construction rules and the framework under which specific rules are developed. The debris, overburden, and other excess materials associated with road construction must be stabilized in a location outside the SPZ, where it will not enter streams.

Unsatisfactory Condition

Placing or leaving road construction materials where they threaten the water quality of streams is an unsatisfactory condition.

Guidance

Construction rules are intended to apply to forest roads, not publicly maintained roads or roads used for other land uses. Only cite this rule when a more specific subparagraph cannot be applied.

**a. Roads shall be constructed in compliance with the planning guidelines of Subsection 040.02. (7-1-96)**

Rule Intent

To require that road construction comply with the planning guidelines in Rule 040.02.

Guidance

Violations are normally not issued. Specific problems with road planning, construction, and maintenance rules are addressed under the appropriate subparagraph.

**b. Clear all debris generated during construction or maintenance which potentially interferes with drainage or water quality. Deposit excess material and slash on geologically stable sites outside the stream protection zones. (4-5-00)**

Rule Intent

To maintain proper drainage through removal of materials that may plug drainage ways or culverts. Drainage ways include man-made drainage ditches or natural drainage features such as draws or swales. Excess materials associated with road construction must be stabilized in a suitable location outside the SPZ.

### Unsatisfactory Condition

An unsatisfactory condition exists when water quality and aquatic habitat are damaged or have potential to be damaged by road construction debris that plugs a drainage way or culvert or when unstable waste material and slash have been placed inside the SPZ.

### Guidance

Violations may be avoided by keeping excess debris from drainage ways and placing removed debris where it will not cause blockage. Sloughing cut banks or poor road grading practices are a common cause of drainage way blockage. Corrective measures must be completed before heavy rains or runoff events, to prevent debris jams and plugged culverts.

Excess road construction materials should be removed from unstable locations or from the SPZ and/or stabilized through riprapping, compacting, revegetation, or other measures. Except for approaches to stream crossings, roads should not be built in SPZs unless a variance has been granted.

**c. Where exposed material (road surface, cut slopes or fill slopes, borrow pits, waste piles, etc.) is potentially erodible, and where sediments would enter streams, stabilize prior to fall or spring runoff by seeding, compacting, rocking, riprapping, benching, mulching or other suitable means. (4-5-00)**

### Rule Intent

To prevent erodible material associated with roads from directly entering streams, from affecting soil productivity or from triggering a landslide in geologically unstable areas.

### Unsatisfactory Condition

An unsatisfactory condition exists when potentially erodible material has not been adequately stabilized.

### Guidance

Erodible materials must be stabilized or removed before heavy rains and seasonal runoff to prevent surface erosion or possibly triggering a landslide. Corrective measures and timing of installation must be considered when determining what constitutes effective stabilization. Grass seeding and mulching is a long-term stabilization measure that does not provide the more immediate stabilization benefits of installing filter windrows, straw bales, silt fences,



compacting, or riprapping. Compacting fill material *as it is placed* in shallow lifts (not after) also provides immediate benefits.

**d. In the construction of road fills, compact the material to reduce the entry of water, minimize erosion, and settling of fill material. Minimize the amount of snow, ice, or frozen soil buried in embankments. No significant amount of woody material shall be incorporated into fills. Available slash and debris may be utilized as a filter windrow along the toe of the fill, but must meet the requirements of the Idaho Forest Act and Fire Hazard reduction Laws, Title 38, Chapters 1 and 4, Idaho Code. (4-5-00)**

#### Rule Intent

To require that road fills be properly compacted to reduce water penetration, surface erosion and the potential for fill failure to damage streams and site productivity. The burying of slash, logs, and other large quantities of organic material in road fills is prohibited, regardless of proximity to streams. Road subgrades should be cleared down to mineral soil to comply with the intent of this rule.

#### Unsatisfactory Condition

An unsatisfactory condition exists when slash, logs, other large quantities of organic material or snow/ice have been buried in a road fill. A violation also exists when road fills have not been properly compacted.

#### Guidance

Burying of woody debris is prohibited in roads and landings (040.03.d. and 030.04.c.). In situations where damage has not yet occurred, it is often difficult to determine if enough buried debris is present to cause failure. The geotechnical specialist may help determine the potential for a slide and the effectiveness of various stabilization measures.

Gradual decomposition of large organic material can cause road fill to settle and weaken the fill's support. In advanced stages, organic material decomposition causes voids and piping which ultimately cause fill failure. Large quantities of organic material consisting of small debris (needles, duff, grass, or ferns) also create a potential problem on roads constructed on steep, unstable slopes.

Proper compaction is critical in preventing fill failure. Fill should be relatively free of organic material and may require retaining structures or riprapping for stability. Some stabilization measures, such as grass seeding, have limited value in stabilizing uncompacted road fills in steep terrain. Minor fill tension cracks may be the result of normal settling or may indicate a failure in the making.

Stabilizing measures should be completed before fall rains or other wet periods. Appropriate treatment of buried debris includes the removal of organic material from the fill. This removal may disrupt road stability; care must be exercised to restore the road to a stable condition.

Slash filter windrows can be constructed and are encouraged at the toe of fills at road approaches to crossings, but should not extend across the stream channel.

**e. During and following operations on out-sloped roads, retain out-slope drainage and remove berms on the outside edge except those intentionally constructed for protection of road grade fills. (8-13-85)**

Rule Intent

To provide for adequate surface drainage on out-sloped roads during and following construction.

Unsatisfactory Condition

An unsatisfactory condition exists when surface drainage is inadequate, out-sloping was not provided or there is potential for surface erosion.

Guidance

Flexibility and discretion should be used in the administration of this rule. There are a number of techniques other than out-sloping that provide adequate surface drainage on roads. Adequate surface drainage must be provided at all times through out-sloping, in-sloping and piping, crowning, or other techniques. Outside berms should be removed except where necessary to protect fill slopes from surface water.

**f. Provide for drainage of quarries to prevent sediment from entering streams. (8-13-85)**

Rule Intent

To require adequate drainage of rock quarries or borrow pits to prevent sediment from reaching a stream.

Unsatisfactory Condition

An unsatisfactory condition develops when eroded sediment from rock quarries or borrow pits reaches streams.

### Guidance

To prevent sediment from leaving the pit and entering a stream, provide drainage such as cross-ditching at the pit entrance and along the access road. Where there is potential for a significant amount of sediment to be transported, sediment traps should be used. Methods for controlling sediment are covered in detail in the *Idaho Surface Mining Act – Best Management Practices*.

Regardless of size, when rock (either processed or in the rough) is sold, the rock pit or quarry must be permitted by IDL under Section 47-1509, Idaho Code.,

**g. Construct cross drains and relief culverts to minimize erosion of embankments. Installation of erosion control devices should be concurrent with road construction. Use riprap, vegetative matter, downspouts and similar devices to minimize erosion of the fill. Install drainage structures or cross drain incomplete roads which are subject to erosion prior to fall or spring runoff. Install relief culverts with a minimum grade of one percent (1%). (4-5-00)**

### Rule Intent

To require drainage structures to minimize erosion of fill slopes, embankments below culverts and road surfaces, especially on uncompleted roads. Drainage must be installed concurrent with construction.

### Unsatisfactory Condition

An unsatisfactory condition exists when erosion of fill slopes, embankments, and road surfaces occurs because preventative measures were not installed in a timely manner.

### Guidance

At culvert installation sites, erosion control measures such as riprap, mulch, downspouts and other devices minimize the impact of water discharging directly onto erodible fill material. In some situations, the lack of armor at the culvert head or outfall allows eroded cut/fill material to damage water quality. Relief culverts with a minimum grade of 1%, and ideally 3%, should be installed to prevent sediment from settling and causing blockage. Consider using sediment catch basins at the culvert entrance to minimize sediment entry.

Temporary erosion control structures should be in place on pioneer or incomplete roads within a few days of initial construction, regardless of wet weather season timing. All permanent drainage structures or erosion control measures should be installed concurrent with final road work, or if the road is incomplete, prior to fall rains.

**h. Earthwork or material hauling shall be postponed during wet periods if, as a result, erodible material would enter streams. (4-5-00)**

Rule Intent

Road construction and other earthwork (ROW log or rock hauling) should be halted during excessively wet periods when the soil is vulnerable to erosion.

Unsatisfactory Condition

An unsatisfactory condition exists when there is potential for serious soil erosion and the operator has ignored weather conditions and has continued to haul or run heavy equipment.

Guidance

Several options can prevent erosion during wet periods. Construction activity may be halted or limited (e.g., installing drainage on a pioneer road before pioneering more road) or equipment type may be limited (i.e., a small excavator instead of a large dozer). Measures should be taken before deep soil disturbance or excessive erosion occurs.

Placing restrictions on hauling is a judgment call; where this may be a concern, an inspection report should state hauling limitations. If a road is damaged due to hauling during wet weather, require mitigation to bring the road back to an acceptable standard.

**i. Cut slopes shall be reconstructed to minimize sloughing of material into road surfaces or ditchlines. Remove or stabilize material subject to sloughing concurrent with the construction operation. (4-5-00)**

Rule Intent

To require that cut slope sloughing be mitigated, if there is potential for slumps and debris to block road drainage

Unsatisfactory Condition

An unsatisfactory condition exists when cut slopes overhang and create the potential for slumping and road drainage obstruction or when the unstable situation has not been stabilized.

Guidance

Steep or overhanging cut banks may cause soil and other debris to slump onto the road. This may block an inside ditch and cause water to be diverted onto a road surface. Stable vegetative cover is difficult to establish or maintain on steep

cut slopes. Where sloughing is a significant and continuing problem the usual remedies of debris removal or laying back the cut slopes and removing unstable trees may not solve the problem, if subsurface water flow is contributing to the problem. These problems should be addressed during the construction phase, not after a slump has already occurred.

**j. Roads constructed on slopes greater than sixty percent (60%) in unstable or erodible soils shall be full benched without fill slope disposal. At stream crossings keep fills to a minimum. A variance is required if a full bench is not used. (4-5-00)**

#### Rule Intent

To require full bench construction on roads built or reconstructed on steep sideslopes that exceed sixty (60) percent. The excavated soil material will probably require end-hauling, but it should be left up to the operator how best to dispose of the fill in stable locations.

To minimize or prevent landslides triggered by road fill failures.

#### Unsatisfactory Condition

If a portion of the road is on fill material, the potential exists for the fill to fail and trigger landslides. An unsatisfactory condition exists where fill material is side-cast on slopes greater than 60 percent, either uphill or downhill.

#### Guidance

Landslides triggered by fill slope failures can significantly impact water quality, site productivity and capital investments such as roads and culverts. Slope steepness can play a significant role in shallow landsliding. Steeper slopes tend to be less stable. The soil mantle, depending on characteristics, has a natural angle at which it is relatively stable (natural angle of repose). In a general sense, this angle of repose may approximate 60 percent. When hill slopes evolve to be steeper than the natural angle of repose of the soil mantle, the hill slope is less stable and more prone to shallow landslides triggered by fill failures, especially under wet conditions. The combination of steep slopes and convergent topography has the highest potential for shallow landsliding.

Recommend an excavator in the construction of steep, side-hill roads. Slope staking may be necessary to ensure that a full bench road is constructed. Fill should be end-hauled to a stable location but or wasted on the road surface in compacted lifts. Excess material can be placed as fill at stream crossings, provided it is designed, compacted, and adequately stabilized and the crossing does not become a convenient waste disposal site. Cut slopes must be stabilized and adequate cross drainage installed. Minor amounts of material inadvertently

side-cast during construction should not be an undue cause for concern provided slash filter windrows are in place.

Variances can be granted for this rule in situations where the road is temporary in nature and side-cast material is pulled back and stabilized prior to fall rains. A variance may also be granted where any fill material is designed to be keyed into a bench and compacted in shallow lifts or otherwise supported by various engineered Mechanically Stabilized Earth (MSE) structures such as gabions, welded wire walls or geogrids.

Road construction costs associated with end-hauling can be significant, and therefore, operators should be encouraged to consider an engineered design for the road.

**04. Road Maintenance. Conduct regular preventive maintenance operations to minimize disturbance and damage to forest productivity, water quality, and fish and wildlife habitat. (4-5-00)**

Rule Intent

To protect forest productivity, water quality, and fish and wildlife habitat.

To achieve a stable road surface and keep drainage systems functional on all active, inactive, and abandoned roads.

This is the purpose statement for the rules for road maintenance.

The rule recognizes four classifications of forest roads: *active*, *inactive*, *long-term inactive*, and *abandoned*. Active roads are in current use or being maintained for removal of commercial forest products. Inactive roads are not currently used for commercial hauling of forest products, but may be left open for general forest management purposes. Long-term inactive roads are not intended to be used until some point in the future. Abandoned roads are not intended to be used again. Active and inactive roads must be maintained to meet the same standard requirements of stable surfaces and functional drainage systems, though the effort necessary to accomplish this may vary. Abandoned roads are impassable and no longer intended for forest management use. Prior to abandonment, the roads must be stabilized, adequately drained and culverts pulled so that no further maintenance is required.

Unsatisfactory Condition

An unsatisfactory condition exists when maintenance practices are not applied and damage results to forest productivity, water quality, or fish and wildlife habitat. Use this rule where specific subparagraphs of this rule do not apply. The

most common unsatisfactory conditions involve lack of surface drainage, hauling under saturated conditions and failure to keep ditches and culverts functional.

### Guidance

The **operator** is held responsible for compliance with these road construction and maintenance rules. The operator is the person, company or entity listed on the *Notification of Forest Practice* (which is also the entity that signed the notification as the *operator*). The landowner may become responsible once the road is in an inactive status (if land ownership hasn't changed since the notification expired). No further maintenance is required once culverts and bridges are removed, banks stabilized, and the road declared abandoned. If future impacts to water quality occur, the Idaho Dept. of Environmental Quality should be contacted. There are no further FPA requirements.

Where ownerships are consolidated and the landowner is the principal user of the inactive road, this guidance is easily applied. Where ownerships are mixed, easements are involved, or the road is considered public access, the Private Forestry Specialist should place initial responsibility on the **operator**.

Recreational users, local residents or transients have no responsibility for maintenance under the Forest Practices Act. Landowners should restrict access if they do not want to bear the responsibility for the actions of such users. If restricting access is not an option (the case on public access roads), the operator, landowner or Private Forestry Specialist should contact other road users to discuss cooperative maintenance and road-use measures. Regardless of other road user impacts, the operator must maintain road drainage as long as the practice is active. A final inspection should be made to verify compliance and release the operator from further obligation.

The operator generally has no maintenance responsibility on publicly maintained roads, unless operator negligence results in damage to the public road.

Public access roads used in this context present unique difficulties. By deed or adverse possession, they are recognized as legal access; in place to provide landowner ingress/egress. While IDL cannot forbid the use of such roads, the Private Forestry Specialist may dictate the conditions under which they will be used. While they may be used occasionally to haul timber, they are not considered forest roads that exist primarily for forest management purposes. Most public access roads are poorly engineered and maintained, and are not subject to substantive local government regulation. Operators must provide and maintain adequate drainage on these roads during use and until the practice complies with the FPA upon completion. Release any future maintenance obligation on an inspection report.

Local users may complain that logging operations have destroyed a road that was in poor condition to begin with. Operators should leave roads of this type in as good or better condition than they found them. At a minimum, road cross-drainage should be installed and additional measures such as spot rocking or culvert replacement may be included, if logging operations rendered these structures ineffective.

Identifying specific road maintenance violations can be difficult if other road users or precipitation events obliterate forest practice activity. Evidence of nonfunctioning drainage structures may or may not indicate a lack of maintenance by the operator. If it can be proven that the road drainage system was nonfunctional prior to forest practices, an unsatisfactory condition existed irrespective of other events. If the road was properly maintained and the precipitation event or other road use appeared to create the situation, no violation is warranted and the Private Forestry Specialist should attempt to get all involved parties to cooperatively repair the drainage systems.

An unsatisfactory condition may exist when damage has not yet occurred. Enforcement procedures and corrective measures may be used when maintenance fails to prevent imminent problems. An operation may be cited for poor maintenance work before a major erosion or road failure occurs.

- a. Place all debris or slide material associated with road maintenance in a manner to prevent their entry into streams. (4-5-00)**

#### Rule Intent

This rule is designed to prevent debris from slumps, slides, grading, and ditch pulling from being placed in a position where it could enter a stream.

#### Unsatisfactory Condition

An unsatisfactory condition exists when side-cast road debris is placed in a stream or has the potential to reach the stream due to high water or surface or mass erosion.

#### Guidance

This rule generally addresses regular, ongoing maintenance practices and can be used when a more specific subparagraph does not apply. For roads in close proximity to streams, avoid side-casting or dumping of road maintenance debris (e.g., cut slope slump) in the SPZ. Blade operators should pull material away from, rather than toward, the stream during grading operations.

- b. Repair and stabilize slumps, slides, and other erosion sources causing stream sedimentation to minimize sediment delivery. (4-5-00)**



### Rule Intent

To ensure that slumps, landslides, and erosion features are stabilized and the damage repaired to the extent possible. In addition, it seeks to stabilize any potentially unstable or erodible road feature that may pose a risk of delivering sediment to a stream. While other rules address the need to plan, construct and maintain roads to prevent slides, this rule recognizes that a landslide or soil erosion may still occur and it must be stabilized.

### Unsatisfactory Condition

An unsatisfactory condition exists when slumps, landslides and other erosion features have not been repaired and stabilized; or when potentially unstable or erodible areas identified by the department have not been mitigated to the degree needed to ensure stability.

### Guidance

Merely restoring expedient passage does not constitute landslide repair. Repair and stabilization of slumps and landslides is costly and time consuming; therefore, the best practice is to avoid locating roads on geologically unstable or highly erodible areas. Most slide problems are attributable to poor road construction practices (i.e., debris buried in the fill, improper fill compaction, improper road design and drainage or locating the road on unstable side slopes). Repair may include that side-cast or fill be pulled back and end-hauled to a stable location, side slope armoring, revegetation, reestablishing natural drainage of blocked or diverted streams, subsurface drain installation, buttress or retaining wall construction or relocation of road segments. For some slides, the soil movement can stabilize a previously unstable situation and no further repair, other than seeding, is necessary. The IDL geotechnical specialist should be consulted to help determine the appropriate stabilization measures.

Determining responsibility for landslide repair is relatively easy if the operation is still active. When slide and slump problems are identified along inactive or abandoned roads, however, the landowner may be responsible. See Rule 040.04. guidance.

Completion deadlines for landslide repair will be an issue if repairs are numerous or costly. The Private Forestry Specialist, working with the landowner or operator, should develop a mutually agreeable repair schedule, avoiding further significant impact to beneficial uses.

**c. Active roads. An active road is a forest road being used for hauling forest products, rock and other road building materials. The following maintenance shall be conducted on such roads. (8-13-85)**

- i. Culverts and ditches shall be kept functional. (8-13-85)**
- ii. During and upon completion of seasonal operations, the road surface shall be crowned, out-sloped, in-sloped or cross-ditched, and berms removed from the outside edge except those intentionally constructed for protection of fills. (4-5-00)**
- iii. The road surface shall be maintained as necessary to minimize erosion of the subgrade and to provide proper drainage. (8-13-85)**
- iv. Hauling shall be postponed during wet periods if necessary to minimize erosion of the subgrade and to provide proper drainage. (4-5-00)**
- v. If road surface stabilizing materials are used, apply them in such a manner as to prevent their entry into streams. (4-5-00)**

#### Rule Intent

To define an active road as one being used for hauling forest products or rock and other road-building materials. All primary haul roads used and maintained for forest management operations are classified as active.

#### Unsatisfactory Condition

An unsatisfactory condition exists when water quality, forest productivity or wildlife habitat is being damaged or threatened by any of the following conditions:

- A. Culverts and ditches are unable to carry runoff during a major precipitation event because they are plugged or partially plugged.
- B. Drainage structures, ditches, crowns, and berms are not kept in good working condition.
- C. The road surface is not maintained.
- D. Hauling occurs during wet periods and sediment has or will enter streams or the subgrade has been significantly eroded.
- E. Dust abatement materials (magnesium-chloride, calcium lignosulfonate) enter streams.

#### Guidance

This rule can apply to roads within the individual practice area and off operational access roads used for hauling forest products. These roads represent a major

capital investment and can be a major threat to streams; responsibility for their maintenance must be established early. The responsibility can vary from the logging contractor or landowner to the road owner or prime maintainer. The operator has no FPA authority over publicly maintained roads.

Drainage by out-sloping and the removal of berms not protecting a fill is generally preferred. In-sloping and inside ditches are appropriate for surfaced roads and in high-hazard areas where precise control of runoff drainage is necessary. Use of in-sloping requires cross-drainage structures or relief culverts to prevent excessive build-up of ditch line flow. Structure placement must direct the flow onto a stable area, *never* into a stream. To minimize direct inside ditch discharge into a stream, install relief drainage as close as practical above the stream crossing. In all cases the immediate dispersal of runoff is the goal.

Active roads must be monitored and maintained on a regular basis to ensure that culverts, in-sloping, ditches, out-sloping, berms, surface drainages, and other erosion control devices are fully operational. Rule 040.04.cii. requires maintenance of erosion and drainage structures during and upon completion of the operation. Seasonal removal or reinstallation of temporary structures may occur, provided sediment will not enter a stream. Corrective measures may include installation of additional permanent drainage.

While maintenance must occur on haul roads off the operating area, determining the extent of responsibility may be a challenge if multiple operations use the same main line road. In this case, operators and landowners should develop a cooperative maintenance plan with all active users. In any case, if an operator damages a drainage structure, they are responsible for repairing it.

Placing restrictions on hauling is a judgment call, where this may be a concern, an inspection report should state hauling limitations. If a road is damaged due to hauling during wet weather, require mitigation to bring the road back to an acceptable standard.

**d. Incidental Haul Road. An incidental haul road is a multi-use road (residential traffic; its primary purpose is other than forest practices) that has log haul during active harvest activities. Active road maintenance requirements apply. Once active road maintenance is completed, no other maintenance is required under the Idaho Forest Practices Act (FPA). (4-12-06)**

#### Rule Intent

To differentiate between forest roads used exclusively for forest management and those which are occasionally used for forest activities, but are routinely and regularly used for other purposes.

### Guidance

To define the level of maintenance required for an incidental road. For enforcement of road maintenance standards refer to the road maintenance rule 040.04.

**e. Inactive Roads. An inactive road is a forest road (primary purpose is for forest practices) no longer used for commercial hauling but maintained for access (e.g., for fire control, forest management activities, recreational use, and occasional or incidental use for minor forest products harvesting). The following maintenance shall be conducted on inactive roads. (4-12-06)**

**i. Following termination of active use, ditches and culverts shall be cleared and the road surface shall be crowned, out-sloped or in-sloped, water barred or otherwise left in a condition to minimize erosion. Drainage structures will be maintained thereafter as needed. (7-1-96)**

**ii. The roads may be permanently or seasonally blocked to vehicular traffic. (8-13-85)**

### Rule Intent

To ensure inactive roads have a stable surface and that drainage systems operate properly. Even though a road is not actively used for commercial hauling of forest products, it must still be maintained to minimize erosion. The rule also allows for a landowner to reduce road maintenance needs by temporarily or permanently eliminating vehicular access to an inactive road.

### Unsatisfactory Condition

Failure to maintain inactive roads to prevent damage or potential damage to forest productivity, water quality, or aquatic habitat constitutes an unsatisfactory condition. Following termination of active road use, culverts and ditches must be cleaned and the road surface must be properly drained to be in compliance.

### Guidance

The listed operator is responsible for road maintenance while the notification is active. Landowners may be held responsible for road maintenance after the notification has expired. This guidance is easily applied to inactive roads where ownerships are consolidated and the landowner is the principle user of the road. Mixed ownerships can complicate matters. Rule 040.04 addresses guidance for assigning responsibility. Correcting an unsatisfactory condition should involve cleaning culverts, ditches, and other drainage structures.

Recreational users, local residents or transients have no responsibility for road maintenance under the Forest Practices Act. Unless operators want to bear the responsibility for such users, they should be permanently or temporarily restrict access.

As an alternative to continuous maintenance on an inactive road, this rule allows for the use of road blocks. The road must be left in stable condition with culverts, ditches, and drainage systems working properly. If the road blockage is poorly constructed (allows traffic to access the road and damage cross-ditches) cite improper maintenance under Rule 040.04.d.i.

**f. Long-term Inactive Roads. A long-term inactive road is not intended to be used again in the near future but will likely be used again at some point in the future. No subsequent maintenance of a long-term inactive road is required after the following procedures are completed: (4-5-00)**

**i. The road is left in a condition suitable to control erosion by out-sloping, water barring, seeding, or other suitable methods; (8-13-85)**

**ii. The road is blocked to vehicular traffic; (8-13-85)**

**iii. The department may require the removal of bridges, culverts, ditches, and unstable fills. Any bridges or culverts left in place shall be maintained by the landowner. (4-5-00)**

#### Rule Intent

A long-term inactive road is not intended to be used again for several years. This rule specifies that roads classified as long-term inactive must meet erosion control requirements. If the owner chooses to leave in culverts and bridges, they must be maintained. Long-term inactive roads do not require future maintenance once adequate erosion control measures are installed.

#### Unsatisfactory Condition

A road considered in long-term inactive status is in an unsatisfactory condition when:

- a) Erosion control measures are not adequate for future needs.
- b) Road blocks are ineffective and allow vehicular entry.
- c) Bridges, culverts, or unstable fills have not been removed and banks not stabilized as required or where the landowner elected to leave the structures in place, bridges or culverts have not been maintained.

### Guidance

Because long-term inactive status may constitute the end of operator or landowner responsibility under the Forest Practices Act, Private Forestry Specialists should verify that all conditions for long-term inactive status have been met. The inspection report should note rule compliance. In addition, the report should outline landowner responsibilities for future maintenance of stream crossings and relief culverts. If an operator complies with the rule, any future impact on water quality should be referred to the Idaho Dept. of Environmental Quality, IDWR, or other appropriate agency.

**g. Permanently Abandoned Roads. Permanently abandoned roads are not intended to be used again. All drainage structures must be removed and roadway sections treated so that erosion and landsliding are minimized.**

**(4-5-00)**

**i. Drainage structures shall be removed and stream gradients restored to their natural slope.**

**(4-5-00)**

**ii. The road system shall be treated to break up compacted areas.**

**(4-5-00)**

**iii. Fill slopes of roads within stream protection zones shall be pulled back to a stable configuration unless long-term stability has already been achieved.**

**(4-5-00)**

**iv. Unstable sidehill fills shall be pulled back to a stable configuration.**

**(4-5-00)**

**v. Ditch line erosion shall be controlled by cross-ditching, outsloping, or regrading to eliminate ditches.**

**(4-5-00)**

**vi. All bare earth areas created by regrading, ripping, and drainage removal shall be stabilized by seeding mulching, armoring, or other suitable means.**

**(4-5-00)**

### Rule Intent

To specify certain long-term stability and erosion control requirements. A permanently abandoned road has no expected future use. Installation of these practices will render the road unsuitable for motorized traffic. No further maintenance will be required on properly abandoned roads.

### Unsatisfactory Condition

A permanently abandoned road is considered to be in an unsatisfactory condition when:

- a) Culverts or bridges have not been removed or stream gradients restored to a natural configuration.
- b) The road surface has not been ripped.
- c) Fills in SPZs, or unstable side-hill fills, have not been pulled back or otherwise left in a stable configuration.
- d) Ditchlines are not eliminated, where water will run down versus across the road.
- e) Bare earth areas have not been revegetated or armored.

### Guidance

Because abandonment constitutes the end of operator or landowner responsibility under the Forest Practices Act, Private Forestry Specialists should verify that all conditions for abandonment have been met. The inspection report should note rule compliance. If an operator complies with the rule, any future impact on water quality should be referred to the Idaho Dept. of Environmental Quality, or other appropriate agency.

While abandoned roads must be left in a stable configuration, this rule does not require full re-contouring to the original slope.

As a condition of this rule, variances are not required to operate equipment in SPZs to pull structures or abandon roads.

**05. Winter Operations. Due to risk of erosion and damage from roads and constructed skid trails inherent in winter logging, at minimum the following shall apply: (4-21-92)**

**a. Roads to be used for winter operations must have adequate surface and cross drainage installed prior to winter operations. Drain winter roads by installing rolling dips, drivable cross ditches, open top culverts, out-sloping, or by other suitable means. (4-21-92)**

**b. During winter operations, roads will be maintained as needed to keep the road surface drained during thaws or breakup. This may include active maintenance of existing drainage structures, opening of drainage holes in snow**

**berms and installation of additional cross drainage on road surfaces by ripping, placement of native material or other suitable means. (4-21-92)**

Rule Intent

To emphasize that installation and maintenance of road and skid trail drainage during winter operating conditions is critical. The rule specifically requires construction of adequate road drainage to control runoff prior to active use of the road or constructed skid trail. Periodic drainage maintenance to prevent erosion during mid-winter thaws, rain on snow events, or spring breakup may be required.

Unsatisfactory Condition

An unsatisfactory condition exists when adequate erosion control measures have not been installed and maintained on roads and constructed skid trails prior to and during their active use.

Guidance

The rule does not require measures beyond those generally contained in other rules and it is recognized winter logging has some operational and environmental benefits. It is specific to winter operations, because erosion and mass wasting problems can occur during thaw and breakup, particularly during a rain on snow event, causing significant impacts. The rule recommends several methods of erosion control and drainage maintenance which can include structures such as flappers, logs partially buried in the road, or trenches cut across the road. In cases where operations will be conducted under snowpack or frozen conditions on existing roads or snow roads, no drainage installation work will be required if the road had adequate drainage prior to active use. If the drainage structures remain functional and not blocked by debris or snow berms, erosion can be controlled during run-off events.



## 050. RESIDUAL STOCKING AND REFORESTATION

**01. Purpose.** The purpose of these rules is to provide for residual stocking and reforestation that will maintain a continuous growing and harvesting of forest tree species by describing the conditions under which reforestation will be required, specifying the minimum number of acceptable trees per acre, the maximum period of time allowed after harvesting for establishment of forest tree species; and, for sites not requiring reforestation, to maintain soil productivity and minimize erosion. (7-1-96)

### Rule Intent

To provide the framework for the residual stocking and reforestation rules; in general, it will not be used for enforcement.

To describe when reforestation is required and provide for the continual growing and harvesting of forest tree species as well as vegetative cover to maintain soil productivity.

To describe minimum stocking standards; it is not intended to require a landowner, who may have other objectives, to practice silviculture that maximizes growth and yield.

**02. Quality of Residual Stocking.** On any operation, trees left for future harvest shall be of acceptable species and adequately protected from harvest damage to enhance their survival and growth. This may be accomplished by locating roads and landings and by conducting felling, bucking, skidding, yarding and decking operations so as to minimize damage to residual trees. Acceptable residual trees should have a minimum live crown ratio of thirty (30) percent, minimum basal scarring, and should not have dead or broken tops. When stands have a high percentage of unacceptable trees, consider stand replacement rather than intermediate cuttings. (7-1-96)

### Rule Intent

To ensure a viable future stand of healthy and merchantable trees and to protect them from physical damage during logging. Protection is mandatory and various methods are suggested. Guidance, tempered by the Private Forestry Specialist's judgment, is also provided on what constitutes an acceptable leave tree. The rule also recognizes that stand conversion, rather than intermediate cuttings, may be the preferred alternative.

### Unsatisfactory Condition

An unsatisfactory condition exists when leave trees left for future harvest are of poor vigor and health or their survival and growth are questionable.

## Guidance

Appropriate action to minimize tree damage includes changing the method of operation and salvaging heavily damaged trees. If the stocking of acceptable tree species is reduced below minimum stocking standards of subsection 050.04, reforestation will be required, unless an exemption applies.

**03. Sites Unpractical to Reforest. Sites unpractical to reforest, generally ponderosa pine and drier Douglas-fir habitat types, shall not be harvested below minimum stocking, unless the site is converted to some other use, or in instances of wildfire, insects, disease or other natural causes where salvage of the damaged timber is planned. (4-4-13)**

**a. When harvesting timber on these sites, one (1) of the following actions must be taken: (4-4-13)**

**i. Establish a new stand by leaving seed trees on the site and inter-planting at least once within five (5) years of completing the harvest, if needed to meet minimum stocking. (4-4-13)**

**ii. Establish a new stand of timber by planting the site with an acceptable tree species, and inter-planting at least once within five (5) years of the original planting, if needed to meet minimum stocking. (4-4-13)**

**b. If the efforts listed in Subparagraphs 050.03.a.i. and 050.03.a.ii. fall short of meeting the minimum stocking level, the landowner will be encouraged, but not required, to meet the minimum stocking level through additional reforestation efforts. (4-4-13)**

## Rule Intent

To prevent harvest below minimum stocking levels on these low site-index sites and to ensure a viable stand for the future through natural regeneration.

This rule subsection recognizes successful reforestation has silvicultural limits due to climate, site factors, or availability of planting stock. Artificial reforestation is not practical (or even possible) on some marginally productive sites.

This rule also recognizes that harvesting on these sites is prudent in the case of wildfire or insect and disease outbreaks, and while reforestation efforts may be extremely difficult, some level of effort is needed to provide responsible land stewardship, which includes a good-faith effort to reforest the site.

Unsatisfactory Condition

An unsatisfactory condition occurs when habitat types described in the rule, or possible cold/wet/high-altitude habitat types, are harvested below minimum stocking.

Guidance

If a violation occurs, there may be no practical reforestation repair that is silviculturally feasible. Avoid this situation by identifying these habitat types prior to harvest and convincing the operator or landowner to not harvest below minimums, or to convert the land to some other use (e.g., grazing).

If an operation is found in violation and the operator makes a reasonable attempt to change harvesting practices, an NOV will not be issued. If the operator refuses to change practices or continues them on a future operation, an NOV is warranted.

If, after a legitimate salvage operation, a good-faith effort is made to reforest/plant the stand, an unsatisfactory condition will not be issued, even if the stand does not support minimum stocking levels five years after the completion of the harvest.

**04. Stocking. Stocking will be deemed adequate immediately following harvest if the following number of acceptable trees per acre, for at least one (1) size class, are reasonably well distributed over the area affected by forest harvesting. (Note: (1) DBH = Average Diameter, outside of the bark, of a tree 4.5 feet above mean ground level): (4-4-13)**

**MINIMUM STOCKING - ACCEPTABLE TREES**

Idaho Region	Size Class DBH (inches)	Average Number of Retained Trees Per Acre	Average Spacing (feet)
North	0" – 2.9"	170	16 x 16
South	0" – 2.9"	125	18 x 18
North	3.0" – 10.9"	110	19 x 19
South	3.0" – 10.9"	75	24 x 24
North	11.0" and greater	20	46 x 46
South	11.0" and greater	15	53 x 53

**If immediately following harvest, the stand consists of retained trees of mixed size**

**classes that are reasonably well distributed over the harvested area, and none of the size classes individually equal or exceed the minimum trees per acre shown above, stocking will also be deemed adequate if the weighted total of all of the size classes of the retained trees exceeds a value of 170 for a stand in the North Region and 125 in the South Region. The weighted total is calculated by multiplying the number of retained trees per acre in each size class by the weighting factors below, and adding all of these size class totals together.**

Size Class	Weight
0" – 2.9"	1
3.0" – 10.9"	1.6
11.0" and greater	8.4

**Harvested stands which are not adequately stocked, as defined above, will be subject to supplemental reforestation requirements specified in Subsection 050.06. Minimum stocking requirements for Class I stream protection zones are specified in Subparagraphs 030.07.e.ii. and 030.07.3.vi. (4-4-13)**

#### Rule Intent

To prescribe the minimum number of acceptable trees per acre that must be present following harvest. If requirements are met, no additional reforestation is required.

To prescribe different minimum stocking levels for sites north of Salmon River (North Region) and south of Salmon River (South Region). The South Region standards also apply to dry, ponderosa-pine-Douglas-fir forest types north of Salmon River, and the North Region standards apply to highly productive, mixed conifer stands south of the Salmon River. The operator should provide sound reasoning to justify the region he/she reports and the PFS should provide concurrence. The landowner should then be notified which minimum-stocking standard will be applied to the harvested unit.

#### Unsatisfactory Condition

When reforestation is not checked on the Notification/Compliance, an unsatisfactory condition may exist if stocking levels are below prescribed minimum numbers following harvest. The Private Forestry Specialist (PFS) is encouraged to communicate with the operator and landowner to ensure the landowner's intent. If after explaining the need for planting, the landowner refuses to carry out supplemental reforestation, then an unsatisfactory report can be issued *to the landowner* (refer to rule paragraph 050.06.b.).

#### Guidance

If stocking is acceptable following harvest, reforestation is not required. If post-harvest, stocking does not meet the minimum levels expressed in this rule, the condition should be documented on the inspection report with notation to re-

inspect for adequate stocking in three growing seasons. Document the party responsible for reforestation (generally the landowner) at this time, if not previously identified.

If post-harvest stocking does not meet the minimum levels expressed in this rule, and the operator has not checked the reforestation box on the Notification/Compliance, the PFS must use discretion in deciding if the operator genuinely realized the error. If the PFS determines that retained seed trees cannot possibly regenerate the site to meet the minimum stocking standards, and the landowner refuses to commit to planting the needed amount of seedlings, an unsatisfactory report can be issued immediately following harvest.

Stands are considered minimally stocked if one or more of the size class stocking requirements are met. The process of calculating stocking levels and determining rule compliance when several size classes are present is described in this rule subsection. Various methods of fixed-plot stocking surveys are acceptable. The PFS should select a method best adapted to the given situation. Determining what constitutes "reasonably well distributed" is left to the PFS's judgment.

A variance from the stocking table can be considered if harvest is planned on commercial forestland not adequately stocked due to natural events or historic logging. The PFS should develop a prescription that includes leaving a mix of residuals and inter-planting to accelerate achievement of "future growth and harvest" on lands that would otherwise not be harvested.

Variations can also be considered for stocking below stated minimums to achieve historic stand conditions that are not reflected in the stocking table. Documentation must be provided to demonstrate the desired historic condition actually existed and is achievable on the site.

- 05. Reforestation Exemptions. (7-1-96)**
- a. Reforestation is not required for: (7-1-96)**
  - i. Noncommercial forestland; (7-1-96)**
  - ii. Land converted to another use. This may include land converted to roads used in a forest practice. (7-1-96)**
  - iii. A forest practice which will result in ten (10) acres or less below minimum stocking levels. (7-1-96)**

**b. On lands exempted under Subsection 050.05.a., where reforestation is not being planned, some form of grass or planted cover shall be established within one year in order to maintain soil productivity and minimize erosion.**

**(7-1-96)**

#### Rule Intent

To describe exceptions to the reforestation requirements. All harvested areas on exempt lands require establishment of seeded or natural grass or other planted cover to provide for soil stabilization within one year after logging ceases. *Avoiding noxious weed infestation is a priority.*

#### Unsatisfactory Condition

On exempt lands, an unsatisfactory condition exists if after one year, sufficient vegetative cover is not established to provide soil stability.

#### Guidance

- i. Noncommercial forestland means lands that cannot produce more than 20 cubic feet (of wood) per acre per year or habitat types that are rated very low for timber productivity. In questionable cases, radial growth and height measurements should be applied to the appropriate volume table to determine growth rates.
- ii. The conversion of forestlands to other uses is discussed in Rule 020.02. Converting a commercial timber stand to the growing of noncommercial or ornamental species constitutes a conversion.
- iii. If more than ten (10) acres over the forest practice area are not adequately stocked following the harvest, reforestation requirements must be met. On larger ownerships with non-stocked holes, count holes in two-acre or larger increments only.

The soil stabilization requirements apply to all exempt lands. In most situations, grass seeding should be required to stabilize the soil and prevent the spread of weeds.

Except for lands described in 050.03, *Sites Unpractical to Reforest*, the harvest of trees killed by fire, wind, insect, or disease is *not* exempt from reforestation requirements. If no harvest occurs, there is no forest practice and therefore no reforestation requirement.

**06. Supplemental Reforestation. Seeding or planting may be required if after three growing seasons from the date of harvest, stocking levels do not meet**

**the standards in Subsection 050.04. Required seeding or planting shall be completed before the end of the fifth growing season following the time of harvest, except that the director shall grant an extension of time if suitable seeds or seedlings are not available or if weather or other conditions interfere.**

**(7-1-96)**

**a. Reforestation practices must ensure seedlings become established. This can be accomplished by adequate site preparation, utilizing acceptable seed or seedlings, following accepted planting or sowing practices, or by other suitable means. (7-1-96)**

**b. The party responsible for reforestation is the landowner during the harvest which reduced stand stocking below the minimum levels stated in Subsection 050.04. (4-4-13)**

*(Rule guidance is for Rule subsection and paragraphs 050.06., 050.06.a. and 050.06.b.)*

#### Rule Intent

To ensure the site is sufficiently stocked by the end of the fifth growing season. If adequate stocking levels have not been reached by the end of the third growing season, supplemental reforestation is required. Exceptions to the rule for time extensions may be granted by the department.

#### Unsatisfactory Condition

If an inspection five years following harvest reveals that minimum stocking levels are not successfully free-to-grow in the harvested area, an unsatisfactory condition exists. If the supplemental reforestation (planting) is not completed in a timely manner following the five-year-post-harvest inspection, an NOV may be issued.

When minimum stocking levels have not been met by the end of the third growing season following harvest, the Private Forestry Specialist needs to communicate with the landowner to inform them that minimum stocking levels have not yet been established; and that planting must be completed to meet these minimum levels by the end of the fifth growing season following harvest (in two more years).

#### Guidance

The landowner is responsible for supplemental reforestation, however, the Idaho Forest Practices Act requires rule violations be issued only to the operator. The Inspection Report should document landowner responsibility for reforestation when the initial determination is made that minimum residual stocking levels are

not met. Encourage landowners to sign a Reforestation Supplemental Notification Form at the time the Notification is submitted ([click here](#) to see an example of a Reforestation SNF on the IDL Intranet), then refer back to this document once it has been completed. Completion of the Supplemental Notification Form reinforces the landowner's understanding of this responsibility.

Once an unsatisfactory condition has been identified, it should be clearly stated in the comments of the Inspection Report that the finding has been given to the landowner, not the operator, in accordance with this rule paragraph.

The landowner can choose to replant, reseed, or rely on natural regeneration to meet minimum stocking requirements by the third growing season. If stocking is unacceptable following the third growing season, it must be documented on the inspection report regarding this rule and rule subsection 050.04. The responsible party, now the landowner, must be informed of their reforestation obligation. The responsible party should sow seed or plant trees as required to complete reforestation by the end of the fifth growing season. An unsatisfactory finding (or NOV, if warranted) will be issued if these conditions are not met.

Seed transfer guidelines should be used when choosing seed species for reforestation. Proper planting and sowing practices ensure adequate survival and growth of acceptable species to meet or exceed minimum stocking requirements. Site preparation and vegetation or animal control may be required to establish seedlings. Provide reforestation guidance, including ordering, shipping and storage considerations, as needed.

Exceptions to the reforestation timetable may be granted by the PFS on an inspection report when planting stock or seed is not available or when natural climatic factors prevent meeting the requirements. The landowner, however, must have made a reasonable and prudent attempt to comply with reforestation requirements.

Consider growing seasons to begin the spring following completion of harvest within an operating unit, regardless of continued harvest in adjacent units within the forest practice area.

While an unsatisfactory report may be issued to a landowner in accordance with the terms of this rule, the Private Forestry Specialist (or Forest Practices inspector) should consult with the BFA Bureau Chief or FPA Program Manager prior to issuing an NOV to ensure alignment with statutory provisions stated in the Idaho Forest Practices Act.

### Fire Salvage Reforestation

This section of the guidance clarifies some forest practices rule interpretations related to salvage activities to help ensure that IDL is presenting a unified,



consistent message. The Forest Practices Advisory Committee (FPAC) and IDL have discussed the implementation of the rules related to fire salvage activities.

#### General Reforestation:

If a landowner engages in Salvage logging they are required to meet stocking requirements under Rule 050.04., unless the stand meets the requirements of 050.03. We will assist landowners with reforestation cost share through the NRCS; generally FPA rules allow enough time to provide reforestation. If there is a critical shortage of available and appropriate seedlings the issue may be revisited. On a case-by-case basis, if a PFS determines that re-planting a stand within 3-5 years is unlikely to succeed because of soil degradation or lack of soil—or natural regeneration is likely going to take longer than 5 years to re-establish minimum stocking, a variance can be considered under the exception granted by 050.03.b. for wildfire. We will not, however, issue blanket variances from reforestation rules. If the PFS determines that replanting within five years is likely feasible and a landowner does not intend to replant, they must convert use or choose not to salvage.

#### Variances:

The requirements for issuing variances do not change because of catastrophic events such as wildfire. Any approved variances must meet the criteria of providing “equivalent or better results over the long term.” Variances are not approved for cost savings.

#### LOD Requirements:

There is no longer a specific snag retention component within the Streamside Shade rule. However, rule **030.07.e** states, “**Provide for large organic debris (LOD), shading, soil stabilization, wildlife cover and water filtering effects of vegetation along streams.**” Unfortunately this rule does not provide specific numbers of snags or pieces of wood per foot of stream. IDL cannot independently provide quantifiable standards not specified in the rules. After discussing this issue with FPAC, IDL has determined that under the current rules we cannot require anyone to leave standing dead trees in a Stream Protection Zone (SPZ).

We do recommend that Operators leave some standing trees in SPZs that have been thoroughly burned, in accordance with the recommendations of the IDL Interdisciplinary (ID) team or a local Burned Area Emergency Recovery (BAER) team if this information is available. The ID team provides post-fire analyses and recommendations to IDL forest managers as salvage sales are planned on state endowment forestland. If either of these teams’ reports are available, use recommendations from these reports to provide like recommendations for salvage logging, or remediation efforts, on adjacent private land. In areas where

those numbers are not available, each PFS will have to exercise his/her own best judgment to match the rule standards to the specific burned sites.

Inspecting PFSs will need to assess ecological and biological impacts from the fire and recommend tree retention standards to best remediate these impacts (e.g., leaving extra trees next to severely burned flashy streams to provide needed, extra, channel stability).

**Shade Rule Requirements:**

The “Shade Rule” is clear that only live trees are counted in Relative Stocking calculations. Dead trees do not contribute to Relative Stocking under the current rules. We will not prevent landowners from harvesting dead trees from SPZs; all other rules still apply (e.g., no equipment in the SPZ). If an SPZ and stream channel was only lightly burned with a handful of trees killed or sure to die (See Forest Health flyers on *Tree Mortality*) the operator will be allowed to salvage those dead and dying trees because they are of little value for shade. No variance (Site-specific Riparian Management Plan) is needed to harvest below rule minimums because the trees are not counted in Relative Stocking calculations. If harvest occurs, reforestation is required to establish a new stand or bring the current stand to a fully stocked state.

The rules do not specifically dictate to what extent reforestation within the SPZ is required, if salvage harvest or fire reduce the stand below specified rule minimums. IDL has discussed this issue with FPAC. The new Class I tree retention rule does state what the minimum acceptable stocking within an SPZ must be. By using the table below, the number of trees needed to achieve minimum stocking requirements can be quantified.

		<b>60</b>	<b>RS</b>	<b>30</b>	<b>RS</b>	<b>10</b>	<b>RS</b>
4- 7.9" dbh		TPA	Spacing	TPA	Spacing	TPA	Spacing
NIGF	0.097	618.6	8.4	309.3	11.9	170	16
CIGF	0.113	531.0	9.1	265.5	12.8	170	16
SIGF	0.136	441.2	9.9	220.6	14.1	125	18
WHSF	0.123	487.8	9.4	243.9	13.4	170	16
DFPP	0.151	397.4	10.5	198.7	14.8	Either	16 or 18

The outer zone of the SPZs must be planted to a density at least equal to the upland requirements. In the outer zone under an Option 2 (60/10), the minimum stocking would be the same as the upland (170 TPA in the North and 125 TPA in the South (weighted)). Landowners may choose either Option to plant back to, but if the inner 25’ is part of the salvage harvest they may find that Option 1 (60/30) requires fewer trees to be planted. With regard to the non-salvage application of

the rules, if an Operator does not harvest within a rule-defined zone, they are not required to plant within that zone. If there are “survivors” within the SPZ they should be weighted to reduce the number of trees required to be planted. We do not require planting under live trees or in un-plantable sites. It is not the intent to force people to plant trees in sites where there is little if any chance of survival. SPZs with very rocky or shallow soils may be very difficult to achieve successful regeneration. The species chosen must be appropriate for the site and meet the standards defined in rule **010.02 Acceptable Tree Species**.

A low-intensity burn scenario requires more in-depth analysis. Determinations should be made by the PFS on a case-by-case, site-specific basis. First, the PFS must confirm that the trees removed were indeed dead or dying if SPZ stocking levels are reduced below rule minimums. Second, the PFS must determine if replanting is required on each specific site. The PFS may have to require additional site prep to plant seedlings, as they would do in any other situation where the SPZ stocking levels were reduced below a minimum rule standard. We do not want landowners to remove brush that currently provides shade and channel stability only to create an opening for a tree that will take years to provide those benefits. Live trees and brush, which are providing shade and channel stability, should be accounted for in the replanting recommendations. All recommended or required reforestation activities, including site prep, should not require an Operator or landowner to apply any chemical pesticides/herbicides in, or close to, an SPZ. All required activities should be in compliance with all forest practices rules, including the pesticide-application buffer standards.

## **060. USE OF CHEMICALS & PETROLEUM PRODUCTS**

**01. Purpose. Chemicals perform an important function in the growing and harvesting of forest tree species. The purpose of these rules is to regulate handling, storage, and application of chemicals in such a way that the public health and aquatic and terrestrial habitats will not be endangered by contamination of streams or other bodies of water. In addition, the application of chemicals are regulated by the Commercial Fertilizer Law, Title 22, Chapter 6; the Soil and Plant Amendment Law, Title 22, Chapter 22; and the Idaho Pesticide Law, Title 22, Chapter 34, Idaho Code and IDAPA 02.03.03 “Rules Governing Pesticide Use and Application.” (7-1-98)**

### Rule Intent

To describe the broad purpose statement for more specific rules to cover chemical use and petroleum storage. Chemical use requires handling, storage, and application that does not endanger public health and aquatic and terrestrial habitat or contaminate streams or other bodies of water. Application of chemicals and pesticides is also regulated by the Idaho Pesticide Law.

### Guidance

Generally, this rule will not be used in enforcement. The misuse or overuse of chemicals can be an environmental and safety hazard and a politically sensitive issue. Private Forestry Specialists must be Idaho State Department of Agriculture (ISDA) licensed as pesticide control consultants to advise landowners on pesticide use. Private Forestry Specialists must recognize that label restrictions might exceed FPA minimum requirements. For example, some chemicals such as Tordon are limited to use on certain soil types. The Natural Resources Conservation Service (NRCS) maintains a pesticide and soils database to rate pesticides on leaching or surface runoff potential among soil types.

Chemicals can contaminate ground water; however, the FPA rules for use of chemicals apply to surface waters only.

**02. Petroleum Products. Petroleum product storage containers with capacities of more than two hundred (200) gallons, stationary or mobile, will be located no closer than one hundred (100) feet from stream, water course, lake, or area of open water. Dikes, berms or embankments will be constructed to contain at least one hundred ten (110%) percent of the volume of petroleum products stored within the tanks. Diked areas will be sufficiently impervious and of adequate capacity to contain spilled petroleum products. In the event any leakage or spillage enters any stream, water course, lake, or area of open water, the operator will immediately notify the department. (7-1-98)**

**a. Transferring Petroleum Products. During fueling operations or petroleum product transfer to other containers, there shall be a person attending such operations at all times. Fueling operations should not take place where, if spillage occurs, the fuel will enter streams, lakes, or other areas of open water. (7-1-98)**

**b. Equipment used for transportation or storage or transfer of petroleum products shall be maintained in a leakproof condition. If the department determines there is evidence of petroleum product leakage or spillage, the use of such equipment shall be suspended until the deficiency has been corrected. (7-1-98)**

**c. Waste resulting from logging operations, such as crankcase oil, filters, grease, oil containers, or other nonbiodegradable waste shall be removed from the operating area and disposed of properly. (7-1-98)**

#### Rule Intent

To require operators to take any and all reasonable precautions to prevent leakage or accidental spillage of gasoline, diesel, motor oil, and other petroleum products, particularly near streams. Logging waste or garbage is not to be disposed of or left in the operating area.

#### Unsatisfactory Condition

Unsatisfactory conditions exist when the operator has not taken all reasonable precautions, as described in the rule, to prevent leakage or accidental spillage of petroleum products. Unsatisfactory conditions also exist when waste or garbage is left in the operating area.

#### Guidance

Use the numbers in the rule as a guide, not an absolute; evaluate each situation on its own merits. To prevent spills or leakage, if a spill can occur and it will enter water, the containers should be moved or diked. Do not categorically exclude smaller containers (those less than 200 gallons, single or aggregate) from review nor assume all larger containers require berms. There are many types of storage containers built to varying safety and spill-prevention engineering standards.

If petroleum transport vehicles remain on-site longer than reasonably necessary to transfer petroleum products, they will be considered "storage containers" requiring a containment structure. Where available, natural terrain features may be considered containment structures. If variances to this rule are requested, the Private Forestry Specialist should consider input from the Idaho Department of Environmental Quality (DEQ). Factors to be considered on a variance include: alternative containment structures (i.e., fuel bladders); safety and economy of

fueling, particularly for helicopter operations; fuel spill response plans; and amount of ground disturbance necessary to access fuel storage sites and construct berms. If a fuel spill occurs and petroleum products have entered or will enter streams, contact DEQ; issuance of an unsatisfactory condition or an NOV is at the PFS's discretion.

The local fire protection organization ensures that chemical and petroleum product storage complies with Uniform Fire Codes. EPA may also have jurisdiction and can require a Spill Prevention Control and Countermeasure Plan.

**03. Licensing. Any person applying, mixing or loading pesticides shall comply with the licensing requirements of the Idaho Pesticide Law and IDAPA 02.03.03 "Rules Governing Pesticide Use and Application." This requirement does not pertain to individuals applying general use pesticides on their own property. (7-1-98)**

#### Rule Intent

To notify operators or applicators that they must comply with Idaho Pesticide Law requirements when applying pesticides. General use pesticides may be applied by individuals on their own property without a license.

#### Unsatisfactory Condition

An unsatisfactory condition exists when pesticides are applied without meeting Idaho Pesticide Law licensing requirements.

#### Guidance

An operator who fails to obtain the required license to apply pesticides is in violation. The Private Forestry Specialist should ask to see the applicator license. The Idaho State Department of Agriculture must be notified and operations must cease until the operator obtains a proper license.

**04. Maintenance of Equipment. (10-14-75)**

**a. Equipment used for transportation, storage or application of chemicals shall be maintained in leakproof condition. If, in the director's judgment, there is evidence of chemical leakage, he shall have the authority to suspend the further use of such equipment until the deficiency has been corrected. (10-14-75)**

**b. The storage of pesticide shall also be conducted in accordance with the requirements of the Idaho Pesticide Law and Pesticide Use and IDAPA 02.03.03 "Rules Governing Pesticide Use and Application." (7-1-98)**

### Rule Intent

To define IDL's authority to suspend the use of any leaky equipment until it is repaired. Pesticides must be stored in accordance with the Idaho Pesticide Law.

### Unsatisfactory Condition

An unsatisfactory condition exists when any piece of equipment used for transportation, storage, or application of chemicals leaks or shows evidence of leakage. It is also a violation when chemicals are not stored in accordance with the Idaho Pesticide Law and associated rules.

### Guidance

Specific guidance for spills is in Rule 060.12.

After a leak is identified, action must be taken to prevent further leakage and contain and neutralize the spilled chemical before it can contaminate the area. Where leaking equipment is involved, the operator can achieve compliance by repairing it or discontinuing its use.

The department has no regulatory authority to enforce the Idaho Pesticide Law but advises operators to ensure they know of the pesticide law's provisions. When Private Forestry Specialists feel an operator is in violation, the matter should be referred to the Idaho Department of Agriculture for immediate enforcement.

- 05. Mixing (10-14-75)**
  - a. When water is used in mixing chemicals: (10-14-75)**
    - i. Provide an air gap or reservoir between the water source and the mixing tank. (10-14-75)**
    - ii. Use uncontaminated tanks, pumps, hoses and screens to handle and transfer mix water for utilization in pesticide operations. (7-1-98)**
  - b. Mixing and landing areas: (10-14-75)**
    - i. Mix chemicals and clean tanks and equipment only where spills will not enter any water source or streams. (10-14-75)**
    - ii. Landing areas shall be located where spilled chemicals will not enter any water source or stream. (8-13-85)**

- iii. Rinsate and wash water should be recovered and used for make-up water, be applied to the target area, or be disposed of according to state and federal laws. (7-1-98)**

Rule Intent

To prevent contamination of streams, lakes or other water sources, when rinsate, wash water or fresh water, is taken from a stream and mixed with chemicals. It also prohibits mixing of chemicals, cleaning of tanks, or landing of aircraft where the potential exists for chemical contamination of nearby water sources or streams. Immediate and appropriate action is required to neutralize or contain any spilled chemical.

Unsatisfactory Condition

An unsatisfactory condition exists anytime water is taken from streams, lakes, or other water sources in such a manner that chemical contamination is possible. An unsatisfactory condition also exists when chemicals are mixed, tanks cleaned, or aircraft landed at locations where spillage has occurred or can occur.

Guidance

To prevent contamination, operators should refrain from mixing chemicals or cleaning containers close to streams and other water sources. If spilled, chemicals should be contained or neutralized. Generally, chemicals can be contained by encirclement with a dike or by collection in a low, waterless area. Some chemicals can be neutralized by activated charcoal. The Idaho State Dept. of Agriculture and the Idaho Dept. of Environmental Quality should be notified immediately if chemicals have been spilled. Reference Rule 060.12.

**06. Aerial Application (10-14-75)**

- a. With the exception of pesticides approved for aquatic use and applied according to labeled directions, when applying pesticide leave at least one (1) swath width (minimum one hundred (100) feet) untreated on each side of all Class I streams, flowing Class II streams and other areas of open water. When applying pelletized fertilizer, leave a minimum of fifty (50) feet untreated on each side of all Class I streams, flowing Class II streams, and other areas of open water. (7-1-98)**

- b. Use a bucket or spray device capable of immediate shutoff. (10-14-75)**

- c. Shut off chemical application during turns and over open water. (10-14-75)**



**d. Aerial application of pesticides shall also be conducted according to the Idaho Pesticide Law and IDAPA 02.03.03 “Rules Governing Pesticide Use and Application.” (7-1-98)**

Rule Intent

To protect water quality in Class I streams, flowing Class II streams and lakes by not directly applying chemicals aerially within a 100 foot wide buffer immediately adjacent to the high water mark of the stream or lake.

The rule is also intended to minimize accidental spraying on non-target areas and over open water. Aerial applications of pesticides must comply with the Idaho Pesticide Law.

The buffer for pelletized fertilizer applications is 50 feet wide adjacent to streams and lakes.

Unsatisfactory Condition

An unsatisfactory condition exists when an application of chemical results in the chemical being directly applied to the water or the buffer area of Class I streams, flowing Class II streams, lakes, or areas of open water (i.e., swamps, impoundments, and springs).

Failure to provide an immediate shut-off device on the bucket or spray device, or failure to shut off chemical applications over open water, also constitutes an unsatisfactory condition.

A violation also occurs when aerial applications are not in compliance with the Idaho Pesticide Law.

Some chemicals are labeled for over-water application; a variance is not needed to use these chemicals over water. However, an unsatisfactory condition may result if significant stream-side vegetation is killed.

Guidance

If the spray application is not in compliance with the Idaho Pesticide Law, the operation must cease and the Idaho Dept. of Agriculture will be notified.

If the spray application results in chemical entering a Class I stream, flowing Class II stream, lake, or area of open water (i.e., swamp, impoundment, and spring), all operations must cease, and the Idaho Dept. of Environmental Quality and the Idaho State Dept. of Agriculture will be notified at once.

It is important to recognize that the buffer is not intended to be absolutely chemical-free, however the vegetative components of the SPZ are important for providing shade, sediment filtration, LOD and protection of other aquatic resources. The Private Forestry Specialist will need to use professional judgment in determining if a chemical application impacted the buffer significantly enough to affect overall water quality.

Application of fertilizer within lakeside zones should be addressed in a site-specific prescription, see rule 030.07.a. guidance.

**07. Ground Application with Power Equipment. (10-14-75)**

**a. With the exception of pesticides approved for aquatic use and applied according to labeled direction, when applying pesticide leave at least twenty-five (25) feet untreated on each side of all Class I streams, flowing Class II streams and areas of open water. (7-1-98)**

**b. When applying fertilizer, leave at least ten (10) feet untreated on each side of all streams and areas of open water. (10-14-75)**

Rule Intent

To require that ground spraying with power equipment must leave at least 25 feet of buffer when chemicals are applied, or 10 feet when fertilizer is applied, on each side of Class I streams, flowing Class II streams, lakes or open water areas.

Unsatisfactory Condition

See Unsatisfactory Condition under Rule 060.06 above.

Guidance

See Guidance under Rule 060.06 above.

**08. Hand Application. (10-14-75)**

**a. Apply only to specific targets; such as, a stump, burrow, bait, or trap. (10-14-75)**

**b. Keep chemicals out of all water sources or streams. (10-14-75)**

Rule Intent

To prevent indiscriminate hand spraying of chemicals.

### Unsatisfactory Condition

An unsatisfactory condition exists when unspecified targets or any water source are hand-sprayed with chemicals.

### Guidance

Competing vegetation is considered a specific target. Operators should calibrate and spray only the appropriate amounts of chemical. Some chemicals are labeled for over-water application; a variance is not needed to use these chemicals over water. Application of fertilizer within lakeside zones should be addressed in a site-specific prescription (see Rule 070.03.a guidance).

## **09. Limitations on Applications. (10-14-75)**

**a. Chemicals shall be applied in accordance with all limitations and instructions printed on the product registration labels, supplemental labels, and others established by regulation of the director. (7-1-98)**

**b. Do not exceed allowable rates. (7-1-98)**

**c. Prevent direct entry of chemicals into any water source or stream. (8-13-85)**

### Rule Intent

To regulate the way chemicals are applied. The specified limitations and instructions on different registration labels will vary. Only those chemicals registered for specific tasks should be applied and then only in accordance with the directions and specifications on the label. Allowable rates must not be exceeded. In addition, the rule prohibits direct entry of chemicals into any stream, lake or water source.

### Unsatisfactory Condition

An unsatisfactory condition exists when chemicals are not applied according to label instruction and/or registration, rates exceed allowable amounts, or chemicals are allowed to enter a stream or water source.

### Guidance

For any violation of this rule, the operation should cease and be promptly brought into compliance. Short of observing the application, it is difficult to document noncompliance. Review of daily records and applicator interviews should be conducted to determine compliance in questionable cases. If chemicals enter streams or water sources, the DEQ and ISDA should be notified immediately and

a NOV should be issued. Some chemicals are labeled for over-water application; a violation will not be issued for use of these chemicals over water.

**10. Daily Records of Chemical Applications. (10-14-75)**

**a. When pesticides are applied on forestland, the operator shall maintain a daily record of spray operations which includes: (7-1-98)**

**i. Date and time of day of application. (8-13-85)**

**ii. Name and address of owner of property treated. (8-13-85)**

**iii. Purpose of the application (control of vegetation, control of Douglas-fir tussock moth, etc.). (8-13-85)**

**iv. Contractor's name and pilot's name when applied aerially. Contractor's name or applicator's name for ground application. (7-1-96)**

**v. Location of project (section, township, range, and county). (10-14-75)**

**vi. Air temperature (hourly). (10-14-75)**

**vii. Wind velocity and direction (hourly). (10-14-75)**

**viii. Pesticides used including trade or brand name, EPA product registration number, mixture, application rate, carrier used and total amounts applied. (7-1-98)**

**b. Whenever fertilizers or soil amendments are applied, the operator shall maintain a daily record of such application which includes Subsection 060.10. and the name of the fertilizer or soil amendment and application rate. (7-1-98)**

**c. The records required in subsection 060.10. shall be maintained in compliance with the record keeping requirements of IDAPA 20.03.03, "Rules Governing Pesticide Use and Application." (7-1-98)**

**d. All records required in subsections 060.10 shall be retained for three (3) years. (7-1-98)**

### Rule Intent

To require detailed record-keeping of pesticide and fertilizer applications during forest operations. The records must be kept for three years for department use in investigating questionable incidents.

### Unsatisfactory Condition

An unsatisfactory condition exists when detailed records of chemical applications are not made daily and kept for easy access by the department.

### Guidance

The inspection of relevant records can be used to help determine compliance with other Rule 060 requirements.

**11. Container Disposal. Chemical containers shall be: cleaned and removed from the forest and disposed of in a manner approved by the director in accordance with applicable local, state and federal regulations; or removed for reuse in a manner consistent with label directions and applicable regulations of a state or local health department. Open burning of containers is prohibited.**

**(7-1-98)**

### Rule Intent

To require disposal of chemical waste in compliance with applicable waste disposal regulations.

### Unsatisfactory Condition

An unsatisfactory condition exists when applicable regulations are not followed for chemical waste container disposal.

### Guidance

Any violations of this rule should be referred immediately to the Idaho Department of Environmental Quality. If the containers are classified as hazardous waste, then the Idaho Transportation Department (ITD) should also be notified immediately.

In general, a container is no longer hazardous if it has been triple-rinsed and punched with three holes and/or crushed. Under these conditions, containers will be accepted by an ordinary landfill. Make certain the rinsing solution has been disposed of by application over the target area.

**12. Spills. Spills shall be reported and appropriate cleanup action taken in accordance with applicable state and federal laws and rules and regulations. (7-1-98)**

**a. All chemical accidents and spills shall be reported immediately to the director. (7-1-98)**

**b. If chemical is spilled, appropriate procedures shall be taken immediately to control the spill source and contain the released material. (7-1-98)**

**c. It is the applicator's responsibility to collect, remove, and dispose of the spilled material in accordance with applicable local, state and federal rules and regulations and in a manner approved by the director. (7-1-98)**

#### Rule Intent

To require that chemical accidents or spills be reported to the department immediately. Once notified, the department alerts other concerned agencies to formulate a response. When chemicals are spilled, the operator must contain or neutralize the spill as soon as possible. The operator must collect, remove, and dispose of the spilled material in an approved manner.

#### Unsatisfactory Condition

An unsatisfactory condition for this rule exists when a chemical accident or spill is not reported immediately to the department, when control and containment has not occurred, or when the operator has not collected, removed, and disposed of the spilled material in an approved manner.

#### Guidance

When a spill occurs, the operation should cease, cleanup should begin, and the Private Forestry Specialist should contact the Idaho Dept. of Environmental Quality (DEQ) immediately to report the spill. There is no violation for spilling, but a violation exists for not reporting. DEQ is responsible for managing spill incidents. All spills that meet or exceed the "reportable quantity" must be reported to the following groups:

1. The Idaho State Communications Center at 1-800-632-8000, which will notify DEQ, the Idaho Dept. of Agriculture, and other involved agencies
2. The local response agency at 911

Reportable quantities vary by chemical and formulation. DEQ maintains "Material Safety Data Sheets" to identify reportable quantities. The Idaho State Communication Center can verify reportable quantities.

Interpretation of "reported immediately" should make allowance for travel time to a communication source. On-site personnel may choose to take emergency containment actions or lifesaving measures prior to traveling to a location to relay the spill information.

**13. Misapplications. Whenever chemicals are applied to the wrong site or pesticides are applied outside of the directions on the product label, it is the responsibility of the applicator to report these misapplications immediately to the director. (7-1-98)**

#### Rule Intent

To require the person applying chemicals to determine if chemicals have been misapplied and to report any misapplications to the department. This rule is also intended to relieve the department from making such determinations on a routine basis.

#### Unsatisfactory Condition

An unsatisfactory condition exists when an operator or applicator fails to report misapplications to the department.

#### Guidance

If this rule has been violated, other rules may also be violated and should be cited. There is no violation for misapplication, but a violation exists for not reporting.

## 070. SLASH MANAGEMENT

**01. Purpose.** To provide for management of slash and fire hazard resulting from harvesting, forest management, or improvement of forest tree species, or defoliation caused by chemical applications in that manner necessary to protect reproduction and residual stands, reduce risk from fire, insects and disease or optimize the conditions for future regeneration of forest tree species and to maintain air and water quality, fish and wildlife habitat.

(10-14-75)

### Rule Intent

To provide a framework for the slashing management rules. This rule may be used for enforcement purposes. The rules cover management and disposal of logging slash and woody debris to reduce fire, insect and disease risks and to optimize regeneration conditions. Slash management practices must optimize conditions for reforestation and/or protect residual stocking. During slash management activities, air and water quality and fish and wildlife habitat must be maintained.

### Unsatisfactory Condition

An unsatisfactory condition exists when slash management practices violate any aspect of the *Idaho Forestry Act*, the *Fire Hazard Reduction Law*, or FPA Rules 070.02. or .03. An unsatisfactory condition exists if residual stocking, air and water quality, and/or fish and wildlife habitat is impacted, or other rules are violated, during slash management practices.

### Guidance

Fire hazard reduction practices must comply with all rules concerning construction and stabilization of fire trails, maintenance of forest roads used for fire management, protection of residual stands, site preparation, and stream protection requirements. If hazard management activities violate any other FPA rules, the inspection report should cite this rule and the other applicable rules (i.e., dozer piling, or a prescribed burn within an SPZ that does not maintain adequate filtering effects of vegetation constitute unsatisfactory conditions for rules 070.01 and 030.07.)

If fire hazard resulting from slash and debris is not managed in accordance with the *Idaho Forestry Act*, the *Fire Hazard Reduction Law*, or FPA Rule 070.02. or 03., enforcement should take place as described in Rule 070.02. or 03.

**02. Commercial Slash.** Fuels and debris resulting from a forest practice involving removal of a commercial product shall be managed as set forth in the



**Idaho Forestry Act, Idaho Code, title 38, chapters 1 and 4, and the rules and regulations pertaining to forest fire protection. (7-1-96)**

Rule Intent

To require commercial harvest activity involving fuel and debris management to comply with the *Idaho Forestry Act* and the *Fire Hazard Reduction Law*.

Unsatisfactory Condition

An unsatisfactory condition exists when fuel and debris are not managed in accordance with the *Idaho Forestry Act* and *Fire Hazard Reduction Law*.

Guidance

For enforcement purposes, a distinction needs to be made between commercial fire hazard reduction requirements and requirements limiting impacts on residual stocking, air and water quality, and fish and wildlife habitat. Compliance with fire hazard requirements of the *Idaho Forestry Act* and the *Fire Hazard Reduction Law* must be referred to the Fire Warden for enforcement.

**03. Noncommercial Slash. Fuels and debris resulting from a forest practice where no commercial product is removed shall be managed in a manner as hereinafter designated under authority of the Idaho Forest Practices Act, title 38, chapter 13, Idaho Code. (7-1-96)**

Rule Intent

Noncommercial activities that involve fuel and debris management must comply with the Forest Practices Act. To prescribe specific conditions and requirements to reduce fire hazards to acceptable levels.

Guidance

For enforcement purposes, a distinction must be made between noncommercial fire hazard reduction requirements and requirements limiting impacts on residual stocking, air and water quality, and fish and wildlife habitat. For hazard reduction purposes, this rule states that compliance is required for practices in subparagraphs. Rule 070.03.d. is the only subparagraph in this rule used in enforcement for noncommercial hazard reduction activities.

Fuel and debris management of slash may include personal use harvest, pre-commercial thinning operations or cull tree removals. Slash treatment on forest roads, utility corridors, trails, railroads, etc., where commercial products are not removed, is managed in accordance with the *Idaho Forestry Act*, Idaho Code 38-125.

Any evaluation, required offset, or release of obligation under Rule 070.03. should be completed jointly by the fire warden and PFS's. Rule 070.03.a. requires the department to evaluate within 10 days, using a point system, potential fire hazard and hazard reductions so as not to exceed 80 hazard points. The noncommercial *Hazard Points Worksheet* (Attachment 4) integrates the three hazard tables in Rule 070.03.e. into one form that determines the hazard characteristics and, if necessary, how to reduce points to less than 80.

If hazard characteristics sum up to 80 points or less, the inspection report reflects that no additional hazard reductions or offsets are needed.

If hazard offsets are needed to lower the total points to 80 or less, Rule 070.03.b. requires the department to notify the involved parties of required hazard offsets. Use the *Hazard Offset* form (Attachment 5), or note offsets in the narrative portion of the inspection report.

Once hazard reduction obligations have been met, Rule 070.03.c. requires the department, within 7 days, to release the operator from any further obligations. Note the release on a *Notification of Release* form (example in Attachment 6) or inspection report.

**a. Within ten (10) days or a time mutually agreed upon following receipt by the department of the "Notification of Forest Practice" as provided in Subsection 020.05., the department shall make a determination of the potential fire hazard and hazard reduction and/or hazard offsets, if any, needed to reduce, abate, or offset the fire hazard. Such determination shall be based on a point system found in Subsection 070.03.e. (7-1-96)**

#### Rule Intent

After being informed of a forest practice, the department should determine the fire hazard potential within 10 days of notification and inform the operator of ways to reduce, offset, or abate that hazard.

#### Guidance

This rule cannot be violated, since it contains no specific requirements for the operator. The department, however, is charged with determining ways to reduce, abate, or offset fire hazard.

**b. The operator, timber owner and landowner shall be notified in writing of the determination made in Subsection 070.03.a. above (on forms provided by the department) and of the hazard reductions and/or hazard offsets, if any, that must be accomplished by the operator, timber owner or landowner. The notification shall specify a reasonable time period not to exceed twelve (12)**

**months from the date the forest practice commenced in which to complete the hazard reduction and shall specify the number of succeeding years that on site improvements or extra protection must be provided. (7-1-96)**

Rule Intent

The department will notify the operator, timber owner and landowner of specific fire hazard treatments and other improvements and protection work which can be accomplished within one year.

Guidance

This rule contains no requirements for the operator, timber owner, or landowner and therefore cannot be violated. The department must provide information on hazard reduction that can be accomplished within a year

**c. A release of all obligations under Subsection 070.03. shall be granted in writing on forms provided by the department when the hazard reduction and/or hazard offsets have been accomplished. When hazard offsets are to be accomplished during succeeding years, the release shall be conditioned upon the completion of the required hazard offsets. Notification of release shall be mailed to the operator, timber owner, and landowner within seven (7) days of the inspection by the department. Inspections by the department shall be made within ten (10) days of notification by the operator, timber owner, or landowner unless otherwise mutually agreed upon. (7-1-96)**

Rule Intent

After the operator has notified the department that prescribed hazard reduction treatments have been accomplished, an inspection is conducted within 10 days. Within 7 days of the inspection, the department must send a written release to the operator, landowner, and timber owner.

Guidance

This rule contains no operator requirements, so violations cannot be issued.

**d. If the department determines upon inspection that the hazard reduction and/or hazard offsets have not been accomplished within the time limit specified in Subsection 070.03.b., extensions of time, each not to exceed three months, may be granted if the director determines that a diligent effort has been made and that conditions beyond the control of the party performing the hazard reduction and/or hazard offsets prevented completion. If an extension is not granted, the department shall proceed as required in Section 38-1307, Idaho Code (Idaho Forest Practices Act). (7-1-96)**

Rule Intent

Under this rule, the department may allow the operator an extension of up to three months for hazard reduction activities. If an extension is not granted, standard enforcement procedures apply.

Unsatisfactory Condition

An unsatisfactory condition exists when the operator fails to complete all hazard reduction and hazard offset activities satisfactorily within the designated time.

Guidance

This is the only subparagraph under Rule 070.03. with enforcement authority.

**e. For the purpose of determining the potential fire hazard and the appropriate hazard reduction and/or hazard offsets, a point system using the following rating guides will be used by the department. A value of eighty (80) points or less for any individual forest practice under Subsection 070.03., as determined by the department, will be sufficient to release the operator, timber owner, and landowner of all further obligations under Subsection 070.03. Total points of the proposed forest practice will be determined from Tables I and II. If the total points are greater than eighty (80), modification of the thinning practice to reduce points may be made as determined by Tables 1 and 2, slash hazard offsets may be scheduled to reduce points as determined by Table 3, or a combination of these options may be used to reduce the hazards to a point total of eighty (80) or less. Consideration will be given to the operator's, timber owner's, and landowner's preference in selecting the options to reduce the points to eighty (80) or less.**

**Table 1  
HAZARD POINTS**

**Hazard Points for Ponderosa Pine, Western Red Cedar or Western Hemlock  
Ave. Thinned Stems Per Acre**

DBH	250	500	750	1000	1250	1500	1750	2000	2500	3000	4000
1	1	2	3	3	4	5	6	7	9	10	16
2	3	6	9	13	16	22	25	30	36	42	51
3	7	16	25	32	38	46	51	52	56	59	
4	9	22	32	40	50	52	54	56	60		
5	13	28	40	51	54	56	59	60			
6	19	36	51	54	58	60	60				

**Hazard Points for Douglas Fir, Grand Fir or Engelmann Spruce  
Ave. Thinned Stems Per Acre**

DBH	250	500	750	1000	1250	1500	1750	2000	2500	3000	4000
1	1	2	3	4	6	7	8	9	13	16	22

2	4	7	13	16	22	28	32	36	42	50	54
3	8	19	28	36	44	51	53	54	58	60	
4	10	25	36	46	51	54	57	59	60		
5	16	62	46	52	56	59	60				
6	22	40	52	56	60	60	60				

**Hazard Points for Western Larch, Lodgepole Pine or Western White Pine  
Ave. Thinned Stems Per Acre**

DBH	250	500	750	1000	1250	1500	1750	2000	2500	3000	4000
1	1	2	2	3	4	4	5	6	8	9	13
2	3	6	8	11	16	19	22	28	32	38	48
3	6	16	25	32	38	46	51	52	56	59	
4	8	16	28	36	44	50	52	54	58		
5	9	22	32	42	50	53	55	57			
6	13	28	40	80	83	86	59				

**Table II  
HAZARD POINTS WORKSHEET**

**HAZARD CHARACTERISTICS**

**HAZARD POINTS**

**Fuel Quantity**

Hazard points from Slash Hazard Table 1 1/ \_\_\_\_\_

Record number of trees/acre to be cut \_\_\_\_\_

Average DBH \_\_\_\_\_

Predominant species \_\_\_\_\_

**Size of thinning block**

Points 0 – 15 16 – 30 31 – 45 46 – 60 1/ \_\_\_\_\_

Acres 20 20 - 40 40 – 80 80 \_\_\_\_\_

**Site Factor**

Record Slope \_\_\_\_\_ % Aspect \_\_\_\_\_

Determine points from table below 1/

**ASPECT**

**PERCENT SLOPE**

	0 - 19	20 – 39	40 – 59	60+
E or NE	0	5	10	20
E or NW	0	5	10	30
W or SE	0	10	30	40
S or SW	0	30	50	60

1/ MAX. 60 points

Other Factors

Condition of operating area before forest  
practice commences 0 – 20 points \_\_\_\_\_

<b>Condition of adjoining area</b>	1 – 20 points	_____
<b>Presence of snags and culls</b>	0 – 5 points	_____
<b>Deterioration rate of slash</b>	0 – 5 points	_____
<b>Time of year forest practice operation</b>	0 – 10 points	_____
<b>October thru December</b>	– 2 points	
<b>August thru September</b>	– 4 points	
<b>January thru April</b>	– 7 points	
<b>May thru July</b>	– 10 points	
<b>TOTAL FOREST PRACTICE AREA POINTS</b>		_____
		<b>(Max. 240 pts.)</b>

**Table III  
HAZARD OFFSETS**

<b>OFFSETS</b>	<b>HAZARD POINT DEDUCTIONS</b>
<b>Physical Changes to the Hazard<sup>1</sup></b>	
Disposal by burning or removal.	0 - 160
Modification by reducing depth through crushing, chipping, or lopping.	0 - 60
<b>On Site Improvements</b>	
Condition of main access road to forest practice area should allow movement of heavy trucks without difficulty.	0 - 5
Access control to forest practice area provided by closure to public traffic.	0 - 5
Availability of water for tankers within one mile of forest practice or within three miles for helicopter bucket use. Water supply to be sufficient to supply at least 50,000 gallons.	0 - 15
Buffer zones of unthinned areas at least two chains in width between roadways and thinned areas.	0 - 10

**Fuel breaks with slash hazard removal around and/or through forest practice area, located so as to provide optimum fire control effect and of two to four chains in width.** 0 - 25

**Fire trails with fuel removed to expose mineral soil to a width of 12 feet. Maximum points allowed if combined with a fuel break.** 0 - 15

<sup>1</sup> Points will be proportional to the amount of hazard disposed of or modified.

### Extra Protection

**Increased attack capability such as retardant availability, increased attack manpower and equipment. Must be in addition to regular forces normally available during the fire season.** 0 - 40

**Fire detection and prevention increased beyond that normally available for lands in the fire protection district.** 0 - 15

**Initial attack time based on proximity of forest practice area to initial attack forces.** 0 - 5

**Landowner protection plan which would provide extra fire protection on a voluntary basis such as extra equipment and/or manpower.** 0 - 5

### Rule Intent

To describe the point system for determining on-site fire hazards and options to reduce those hazards. Hazard points, a hazard points worksheet, and hazard offset worksheet are presented in Tables I, II, and III.

### Guidance

This point system determines compliance and enforcement with Rule 070.03.d.

If a conflict arises over total allowable hazard points for commercial versus noncommercial management, the Private Forestry Specialist and Fire Warden should establish the number of points (within the “80 points or less” parameters) needed to meet hazard reduction requirements over the entire practice area. The *Hazard Reduction Law* or *Forest Practices Act*, whichever provides the greatest protection (the fewest points), should apply.



## 071. PRESCRIBED FIRE

**01. Purpose.** Prescribed fire is a tool with application in land management. Smoke from prescribed fires can have adverse impacts on ambient air quality or public health. It is the purpose of these rules to establish a management system for smoke from prescribed fires that will protect air quality. (7-1-96)

### Rule Intent

To provide a framework for prescribed fire rules by recognizing a “management system” is needed to avoid adverse effects on air quality. Section 38-1302(2) of the FPA requires that “air” quality be maintained and protected while conducting forest practices. The use of prescribed fire is recognized as a forest practice in rule 010.22.e. Rules addressing smoke management are contained in the forest practices rules and not the *Idaho Forestry Act* or *Hazard Reduction Law*; those laws are concerned with fire hazards and not smoke.

Section 38-1302(3), Idaho Code, states local government is precluded from regulating forest practices. Including prescribed fire provisions in the forest practice rules helps ensure the use of prescribed fire can continue to be a viable forest management tool. These provisions also ensure IDL (not DEQ, EPA, or local health districts) retains responsibility for administering forest practices smoke management programs.

### Unsatisfactory Condition

To preclude other agencies from regulating prescribed fire. Since it may conflict with local ordinances or the Uniform Fire Code in certain jurisdictions, it is best to avoid agency conflict through cooperative agreements. To address smoke issues, agreements should first recognize individual agency responsibilities then identify specific tasks each agency should undertake to avoid jurisdictional conflict.

Unless otherwise agreed to at the district level, the Fire Warden and Private Forestry Specialist have joint administrative responsibility for this rule. The Fire Warden and Private Forestry Specialist need to coordinate efforts on this rule to ensure it is properly administered.

**02. Notification.** The use of prescribed fire requires a valid notification in accordance with Subsection 020.05 to maintain air quality and to protect public health. Possession of a valid notification will not preclude meeting the fire safety requirements specified in Idaho Code, Section 38-115. (7-1-96)

### Rule Intent

To provide for notification and authorization, by acceptance of the notification, the use of prescribed fire as a forest practice. Notification must be provided to the department whenever using prescribed fire, even though implementation of any recommended practices are voluntary.

### Unsatisfactory Condition

An unsatisfactory condition exists if the use of prescribed fire occurs without a valid notification. This is the only prescribed fire rule that can be violated.

### Guidance

This rule applies to the use of fire on forestland. Use of fire on nonforestland is not a forest practice. The use of prescribed fire is included with the slash management practice on the notification form.

Complying with this rule should generally not be an issue as most prescribed fire use stems from slash burning associated with commercial harvest. An exception may be where a landowner desires to underburn, habitat burn, or otherwise use fire to clean up forestland. Where burning is occurring without a valid notification, the Private Forestry Specialist or Fire Warden should explain the rules, their intent, and provide technical advice to help the burner meet their prescribed fire goals. If the burning is essentially complete, remind the operator to provide notice, if not associated with harvest, before burning the next time. If ignition and burning is to continue into the next day, the operator should be asked to provide notice.

If the burner, operator or landowner refuses to notify the department and public health is or will be compromised, the Private Forestry Specialist or Fire Warden can use the enforcement tools contained in the FPA to mitigate the threat to air quality. This can include suppression of the fire. If time is critical, the department can enjoin the operator in accordance with Section 38-1307(4) without having to go through the standard NOV procedures. This situation will occur rarely and enforcement action should only be taken upon consultation with the Area Supervisor, the Regulatory Program Manager and the Fire and Fuels Management Specialist.

IDL manages burn permits for burning forest practice waste. Burn permits are available at <https://burnpermits.idaho.gov/Home.aspx>

**03. Recommended Practices. To maintain air quality and protect public health the following practices are recommended: (7-1-96)**

**a. Slash and large woody debris piles should be compact and free of stumps, soil, snow and nonwoody organic material. (7-1-96)**

**b. Piles should be fully cured, dried at least two (2) months, prior to ignition. Piles should be at least partially covered with a water resistant material so they can be ignited after enough precipitation to lower the fire danger. (7-1-96)**

**c. Broadcast burns should be conducted within a prescription that minimizes adverse effects on air quality. (7-1-96)**

**d. Membership in good standing in a recognized Airshed Group is encouraged. (7-1-96)**

### Rule Intent

To provide recommendations, not requirements, for conducting prescribed burns that will not adversely impact air quality. Forest landowners feel that mandated approaches to managing forest smoke impacts are unnecessary and that voluntary compliance can achieve desired results.

### Guidance

As these practices are recommendations, they are not subject to enforcement. To foster voluntary compliance, the department must be proactive in informing and advising landowners and operators of specific techniques that can be used to burn cleanly and safely. Working with landowners to help develop a prescription and identify a burn window can go a long way to meeting the goal of this rule.

The Montana/Idaho Airshed Group

<https://mi.airshedgroup.org/>

and Idaho DEQ

<http://airquality.deq.idaho.gov/>

<http://www.deq.idaho.gov/air-quality/monitoring/daily-reports-and-forecasts/>

each provide very useful information on air quality and burning.

Broadcast burning for an accepted Certificate of Compliance – Fire Hazard Management Agreement/Notification of Forest Practice also requires a burn plan be submitted to the Warden for the Fire Protection District in which the burning will occur, in accordance with IDAPA 20.04.02 Fire Hazard Reduction. Any burning without a burn plan, outside city limits during closed burning season, generally from May 10 through October 20, requires a burn permit

<https://burnpermits.idaho.gov/Home.aspx>.

In the event a legal, prescribed, fire becomes a nuisance or noticeably impacts air quality, the Private Forestry Specialist or Fire Warden should recommend the operator halt ignition and wait for favorable conditions. If the operator refuses, explain the consequences of continued ignition (e.g., the voluntary rules may become mandatory and administered by DEQ, EPA or a local health district). Most citizens will cease burning at this point. Any comments or suggestions relative to this rule should be noted on an inspection report.

**072. – 999. (RESERVED)**

