Idaho Forest Practices Act Rule Summaries IFPA – Shade

Shade is very important to the health of stream environments, and BMPs focus on retaining trees and shrubs to provide shade.

Rule 030.07. 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.

- e. Provide for large organic debris (LOD), shading, soil stabilization, wildlife cover and water filtering effects of vegetation along streams.
 - i. Leave shrubs, grasses, and rocks wherever they afford shade over a stream or maintain the integrity of the soil near a stream.
 - 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 in Subsection 030.07.e.ii. (below).
 - (1) 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.
 - (2) 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) 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.

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	0.590	0.797	1.024	1.270
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	0.870	1.117	1.385
DFPP (Douglas-fir Ponderosa Pine)	0.151	0.326	0.540	0.787	1.063	1.366	1.693

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. (IFPA - Residual Stocking and Reforestation).

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. (below).

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

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. (IFPA - Harvesting in Stream Protection Zones)

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.

viii. Stream width shall be measured as average between ordinary high water marks.

Rule 010.35. 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 twenty (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.

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