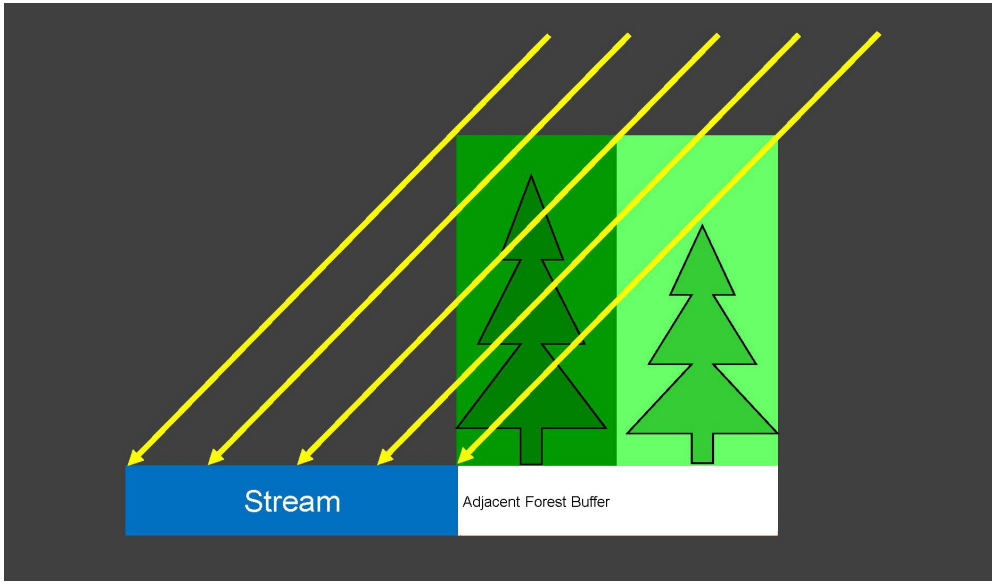
The Forest Practices Act Streamside Tree Retention Rule or "Shade Rule"

Updated June 2014

Retaining trees near fish-bearing streams is an important component of the Idaho Forest Practices Act.

Shade over streams benefits fish habitat in a myriad of ways, primarily by contributing to keeping water cool enough for successful spawning. Also, fish need the stream structures created when trees fall into the stream channel, forming eddies and pools that enhance the ability of fish to feed, spawn, rest, and migrate upstream. Stream structures also slow runoff.

The immediate adjacent buffer of trees next to the stream typically accounts for the majority of the shadow cast by a riparian buffer.



Roles and Authorities

The Idaho Department of Lands (IDL) administers the Idaho Forest Practices Act, which regulates harvest operations in Idaho. The Land Board provides oversight of IDL.

The Forest Practices Act Advisory Committee (FPAAC) provides technical advice to IDL and the Land Board in matters relating to the Idaho Forest Practices Act. FPAAC is comprised of nine voting members appointed by the IDL director for three-year terms. Members include a fisheries biologist; a nonindustrial private forest landowner; two forest landowners, one from northern Idaho and one from southern Idaho; two forest operators, one from northern Idaho and one from southern Idaho; two informed citizens from northern and southern Idaho; and an at-large member.

In accordance with the federal Clean Water Act, the Idaho Department of Environmental Quality (DEQ) administers Idaho's Water Quality Standards.

The corresponding Best Management Practices (BMPs) for protecting water quality during timber harvesting operations are defined in the Idaho Forest Practices Act administrative rules, and IDL is the designated management agency for these BMPs.

DEQ leads an audit every four years on Idaho forestlands to check compliance with the Idaho Forest Practices Act rules (this is called the "Forest Practices/Water Quality Interagency Audit"). DEQ has this responsibility because it administers the Idaho Non-Point Source Management Plan and corresponding silvicultural (forestry) Memorandum of Understanding (MOU). The audit is defined in the MOU.

When DEQ provides post-audit, rule-changing recommendations, then FPAAC works with IDL to develop rule changes to address the DEQ recommendations.

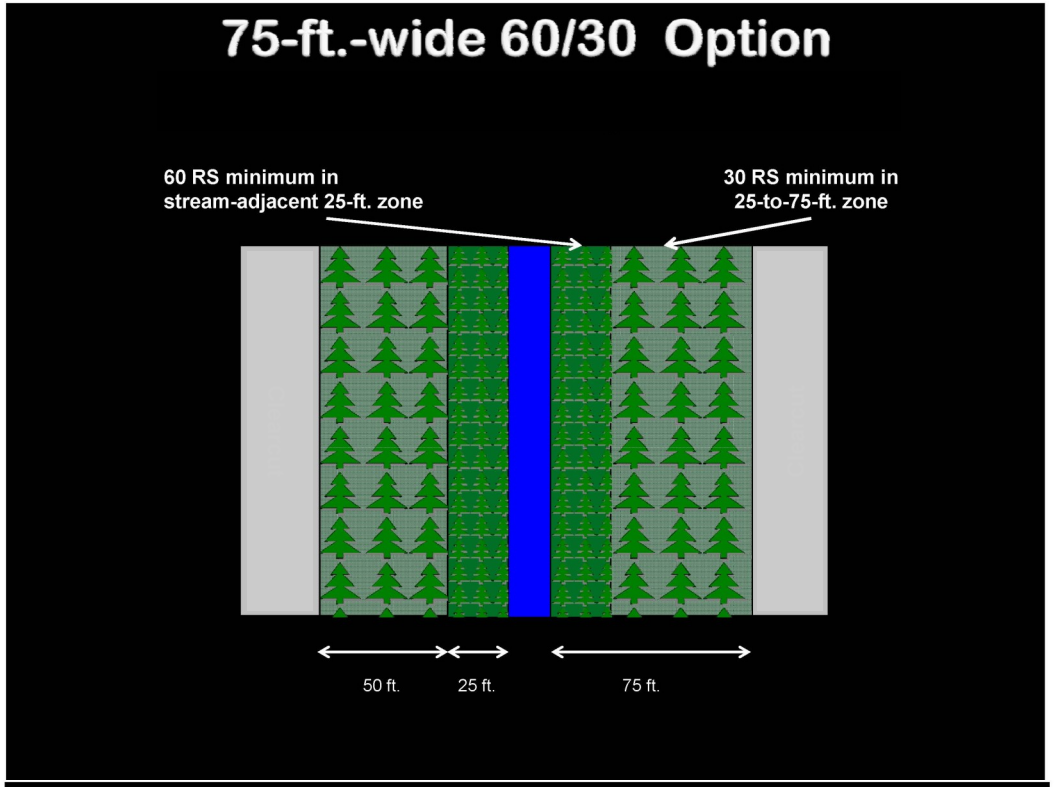
What are the Shade Rule options?

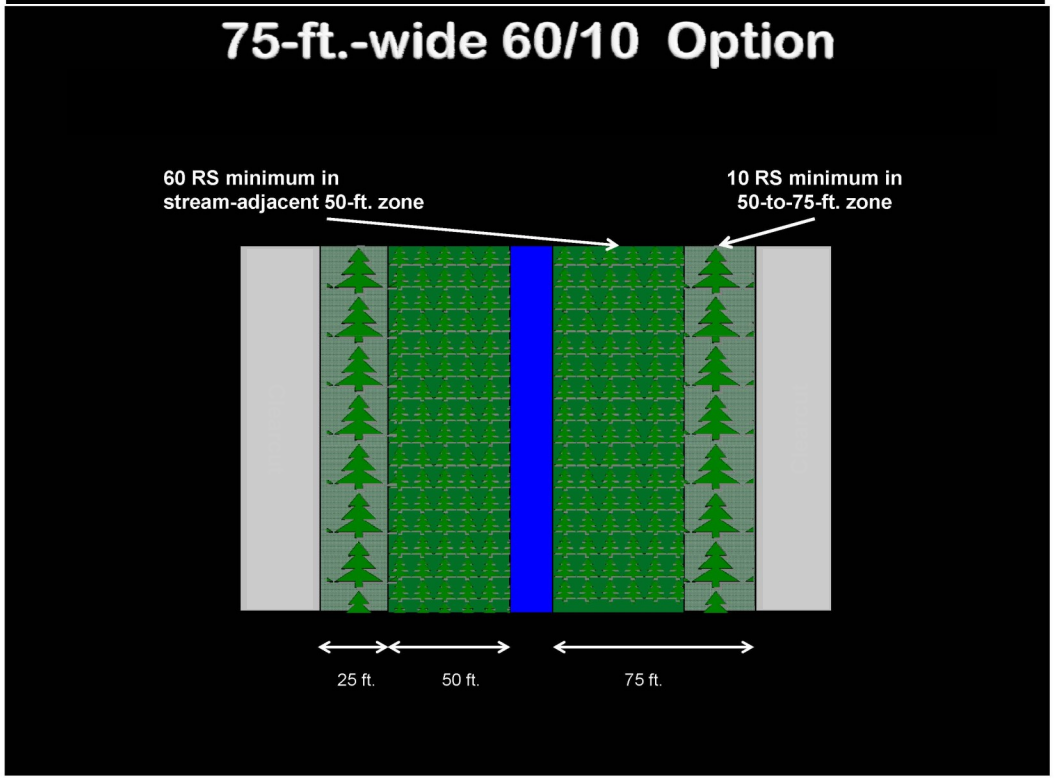
The Shade Rule requires a 75-ft.-wide tree-retention buffer in the Stream Protection Zone.

The Shade Rule offers landowners two options for management next to fish-bearing streams:

1. **"60-30 option"** - Requires more trees to be left (60 Relative Stocking) in the inner 25-ft.-wide zone right next to the stream. As long as the 60 Relative Stocking is maintained in the inner 25-ft. zone, trees can still be harvested. Fewer trees (30 Relative Stocking) are required to be left in the outer 50-ft. riparian zone (25-to-75 feet away from the stream edge).

2. **"60-10 option"** - Requires more trees (60 Relative Stocking) to be retained in the inner 50-ft.-wide zone next to the stream edge. Fewer trees (10 Relative Stocking) are required in the outer 25-ft. riparian zone (50-to-75 feet away from the stream edge).





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DEQ Recommendations

Following the 2000 and 2004 DEQ-led Forest Practices/Water Quality Interagency Audits, DEQ came to FPAAC with recommendations for changing the streamside tree retention rule standards. FPAAC and IDL worked for nearly a decade (since 2004) to modify the streamside retention rules to reflect the DEQ recommendations.

The Work Since 2004

Although IDL worked with FPAAC since 2004 on a Shade Rule, it was in 2009 that the intensity of work on the proposed changes ramped up. At that time FPAAC and IDL contracted with a forest hydrology consultant and modeling scientist to use real Idaho stand data to simulate (model) over-stream shade and large woody debris contributions for multiple forest types and harvest prescriptions. The work was done to develop a science-based rule that addressed shade and large-wood recruitment, and that forest landowners could implement on the ground.

FPAAC used the outcomes of these modeling efforts to evaluate trade-offs among different "Stream Protection Zone" thinning prescriptions and develop implementable rule standards.

Key Issues Addressed

By 2012, FPAAC proposed a new Shade Rule, starting the process of negotiated rulemaking and presenting the science behind the proposed changes to many interested parties including forest industries, the Idaho Forest Owners Association, loggers, Environmental Protection Agency (EPA) and DEQ managers, and multiple tribal organizations.

Some parties expressed the following concerns about the proposed shade rule, and after further deliberation FPAAC and IDL decided more analysis was warranted and discontinued the 2012 rule promulgation process. The Shade Rule options were revised after completing the additional analysis to address the concerns expressed below:

⇒ EPA sent comments stating the initial modeling efforts underestimated shade loss. IDL contracted an independent validation study to address this comment and found there was some under-prediction of shade loss in the initial modeled outputs. Therefore, tree retention levels were adjusted in the shade rule options to address this concern.

⇒ Tribes and environmental organizations sent comments stating that the rule was too lax and would not be compliant with Idaho Water Quality Standards or with existing TMDL's. After extensive modeling and model validation efforts, the Shade Rule (as revised) will be an effective BMP for water quality and fish habitat protection.

⇒ The Idaho Forest Owners Association (non-industrial private forestland owners) was concerned about the infringement on private property owner rights. Therefore, the Shade Rule options were revised to eliminate the no-harvest zone and tree retention levels adjusted in each zone before harvest can occur.

After additional analysis and modeling efforts, rule promulgation moved forward in 2013.

The Shade Rule is scientifically sound and strikes the right balance of input received from a variety of interested parties.

2000 & 2004: IDEQ Quadrennial Audits determine current rule does not adequately address Large Organic Debris recruitment or shade retention

April 2012: Negotiated Rulemaking begins; Two meetings held and written comments received

September 2012: Proposed Rulemaking begins; Two meetings held and written comments received

October 2012: FPAAC recommends IDL pull proposed Shade Rule for further testing and modification based on testimony received

April 2013: Land Board authorizes IDL to move forward with rulemaking again

June 2013: Negotiated rulemaking begins; Two meetings held and public comments received

September 2013: Proposed rulemaking begins; Two meetings held and public comments received

November 2013: Land Board approves adoption of proposed rule

December 2013: Pending rules published in Idaho administrative bulletin

January 2014: Rules approved by Legislature

July 2014: Shade Rule goes into effect

SUMMARY

The work that has been done to address issues with the Shade Rule demonstrates that Idaho's adaptive management process has been implemented exactly as it was designed to work.

The FPAAC and IDL began to look at ways to address concerns with the current rules identified in the DEQ quadrennial audit. Then a method to address the concerns was developed and tested, and the public was invited to comment on its merits and deficiencies. When the rule change was proposed in 2012 stakeholders expressed concerns so FPAAC recommended that IDL pull the rule in order to conduct additional analysis. Then the rule was re-evaluated, re-tested, and revised.

The "two options approach" is unique in the West and demonstrates Idaho's leadership in developing solutions that balance landowner rights, provide flexibility, and protect Idaho's forest and water resources.

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