

 UI Extension Forestry Information Series

Maintaining Woodland Water Quality

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Water is vital to Idaho and forests are very important to Idaho's water quality. Forests cover over 41% of Idaho's total land area and receive more rainfall than non-forested areas. Timber harvest is the most critical time for forest water quality, but there are also things you can do between harvests to improve water quality.

- Maintain forest roads. Sediment from newly constructed roads and skid trails presents the greatest risk to forest water quality. But roads are also important after harvest. Maintaining roads lessens erosion and keeps them useful for the future.
- Clean out culverts, water bars (cross ditches), and other water drainage structures. Drainage structures divert water from the road to prevent erosion and saturation, which may lead to road failure. Drainage structures may wear down or fill up with debris, so they should be cleaned out or repaired regularly. If current drainage is inadequate, install additional structures.
- Close roads seasonally or permanently. Roads not in use should be closed to prevent damage, at least during wet seasons when they most are vulnerable. If you want access during fire season or other times of the year, you may want to put in gates.
- Don't overburden roads. If a road was designed for light loads, heavy equipment may stress the road and lead to failure.
- Add rock to roads. Adding rock to heavily used roads reduces erosion, allows use during wet seasons, and increases road efficiency (which may increase the value of your timber).
- Get to know your property. Locate areas on your property which are especially vulnerable to erosion to watch for in future forest activities. Look for landslides or slumps, and check soil survey maps, to help you understand each soil's characteristics.

- Seed grass and legumes. Seeding road cuts, skid trails, and other bare areas hold the soil and benefits wildlife.
- Plant willows or alders along streambanks. Extensive timber harvest may swell stream flows, increasing bank erosion. Woody plantings stabilize streambanks, intercept sediment, slow the stream during high water flows, and provide shade for fish and other wildlife. They also may help filter nutrient from entering the aquifer.

Idaho Department of Lands Forest Practice Advisors inspect harvest operations for compliance with Idaho Forest Practices Act, which specifies minimum best management practices to ensure woodland water quality. They can also provide detailed technical assistance to help you maintain high water quality after harvest.

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