



UI Extension Forestry Information Series

Are Your Streams Healthy?

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Indicators of Healthy Streams

- Relatively narrow deep, stable channels.
- Well-vegetated streambanks.
- Stream power at high flow does not erode banks.
- Meandering channel with lots of S-shaped curves.
- The stream drops in steps where the channel narrows rather than all at once.
- Flows greater than mean annual peak flows spread out over floodplain, dissipating energy and depositing sediment on floodplains and banks.
- Diversity of pools, runs, and riffles in channels.

Indicators of Damaged Streams

- Trampled streambanks.
- Eroded, collapsed, or collapsing streambanks.
- Even-aged or older trees with no young replacements.
- Streamside plants few and scattered or absent.
- Stream wide and shallow.
- Stream mostly riffles; few pools and deep runs.
- Heavy siltation of stream bottoms (turbid clouds of sediment stirred up when walking across a riffle).
- Little or no animal life in the stream or along its banks.
- Stream animals predominantly snails and worms rather than mayflies, caddisflies, and stoneflies.

Recommended Stream Management Practices

- Protect or establish shrubs, trees, grass or other vegetation along streams to help prevent bank erosion and sloughing and to trap sediment and debris.
- Manage livestock grazing in streamside areas or uplands to obtain optimal grass utilization but also to avoid bank trampling and tree damage.

- Plan forestry activities using Best Management Practices (contact Idaho Department of Lands).
- Inspect streams to detect potential problem areas *before* extensive (and expensive) damage and property loss occur.

Stream Practices to Avoid

- Straightening sections of stream thereby increasing stream velocities, causing erosion, flooding, and severe impacts to upstream and downstream property owners.
- Removing streamside shrubs, trees, and other vegetation that provide bank stability, reduce flood scour, and contribute to bank water storage.
- Farming up to the edge of the stream thereby removing important vegetation filter strips adjacent to streams, increasing sedimentation, accelerating siltation of irrigation canals and reservoirs, and shortening irrigation pump life.
- Concentrating livestock use in riparian areas for long time periods thereby reducing forage productivity, damaging streambanks, and degrading water quality.
- Operating heavy equipment in streamside areas thereby damaging streambanks and compacting soil.

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