

MANAGING STEEP MOUNTAIN PROPERTIES

Forestry solutions where equipment can't reach.

Steep terrain changes how trees are felled, moved, and processed—and how quickly exposed soil can erode. A successful project starts with access, drainage, worker safety, and slash handling before the first cut is made.



On steep ground, treatment design must account for slope, fall lines, drainage, access, and the limits of equipment.

● PLAN FROM THE TERRAIN

MAP CONSTRAINTS FIRST

Topography should shape the prescription and sequence.

- ✓ Identify slope breaks, drainages, rock, unstable soils, utilities, roads, and escape routes.
- ✓ Locate safe work zones, landings, anchor points, and material routes before cutting.
- ✓ Adjust treatment intensity where soil disturbance or access risk is high.

● CHOOSE LOW-IMPACT METHODS

MATCH TOOLS TO THE SITE

The least disruptive workable system is often best.

- ✓ Use hand crews, winches, rigging, or compact equipment only within safe operating limits.
- ✓ Directionally fell and move material to avoid uncontrolled rolling or sliding.
- ✓ Limit repeated travel and keep machinery out of sensitive or saturated ground.

● STABILIZE AS WORK PROCEEDS

PROTECT SOIL AND WATER

Do not wait until the end to address disturbance.

- ✓ Keep drainage paths open and protect streams, seeps, wetlands, and riparian areas.
- ✓ Use slash, mulch, seeding, or other approved measures to slow runoff and cover exposed soil.
- ✓ Inspect after storms and repair ruts, displaced material, and concentrated flow promptly.

✓ START HERE

- ✓ Walk the site from both above and below; map access and consequences.
- ✓ Identify drainage features, erodible soils, rock, targets, and unstable areas.
- ✓ Choose felling, extraction, and slash methods as one coordinated system.
- ✓ Have a qualified contractor review work limits and emergency access.

▲ THE RAVEN WORKS PERSPECTIVE

Steep-ground forestry succeeds through restraint and sequencing. The best plan treats the forest while keeping soil in place, water clean, crews safe, and future maintenance possible.

Respect the slope. Disturb less. Stabilize early.

Sources: Colorado State Forest Service forestry best-management practices for water quality.

◎ IN THE FIELD

Three steep-site realities deserve extra attention:

GRAVITY CONTROLS

Logs, rocks, equipment, water, and loose soil all tend to move downslope.

ACCESS IS A SYSTEM

Crew entry, material handling, emergencies, and future maintenance must work together.

STORMS TEST THE WORK

The first heavy rain often reveals where runoff needs more protection.