

Ashley Creek Riparian Restoration

Riparian Areas Benefit Us All

Riparian areas are the places where land meets water -corridors of shrubs and trees along rivers and lakes. They are vital to the health and beauty of our waters.

Riparian areas benefit everyone by filtering pollution from stormwater and agricultural runoff, maintaining stream flows, keeping water cool, and curbing erosion. The results are clean water and healthy habitats for fish and wildlife.

Ashley Creek Water Quality

Problems

Ashley Creek is impaired. Nutrients and sediments limit fish and other aquatic life; warm water temperatures limit native cold-water fish from thriving. Runoff from agriculture and leaking septic systems are two significant sources of pollution.

Solutions

- Protect existing riparian forests.
- Fence livestock away from the creek and apply fertilizers and pesticides sparingly.
- Plant shrubs and trees in the riparian area.
- Build structures on upland areas.
- Maintain septic systems.

Benefits

- Enhance <u>property values</u> and scenic beauty.
- Keep <u>nutrients out</u> of the water (from livestock).
- Reduce <u>bank erosion</u> and sediment (from trampling).
- Increase shade in the creek which bull trout need to survive.
- Restore riparian habitat for native birds and other wildlife.
- Increase soil <u>organic matter</u> & the soil's water holding capacity
- Protect and recharge the groundwater.

Restoring our rivers



"This is one step to protect the water quality of Flathead Lake. That is a big concern in my mind. And as we get more people living here, it is that much more difficult." -- landowner Dick Siderius

Landowners Dick and Joan Siderius are working with Flathead River Steward Program partners to restore riparian buffers and improve water quality.

The farm has been in the family for several generations and borders a half mile of Ashley Creek.



A livestock fence removes grazing in the riparian area. Over time, new shrubs and trees can grow back.

Ashley Creek Restoration Project

Dick and Joan Siderius partnered with the Flathead River Steward Program to restore the riparian forest along ½ mile of Ashley Creek. Recent restoration work included:

Livestock fence and water gap

We placed a wildlife-friendly fence along a half mile of Ashley Creek to create a 30-40 foot-wide buffer, keep cows and nutrients away from the water, help riparian plants establish, and prevent trampling of creek banks. A water gap in the creek gives cows restricted access to water.

Native trees and shrubs in fenced exclosures

We planted native trees and shrubs to speed recovery of the riparian corridor. We used an experimental approach to evaluate different planting techniques and weed control methods.

- Traditional planting using containerized seedlings, weed mat and mulch for weed control, and deer fencing and vole protection for browse protection.
- Live staking of cottonwood poles and willow stakes (at least 6 feet long, with 2/3 of pole below the ground).



Volunteers plant willow stakes into the ground with water jet stinger. Note the dense woody growth on the opposite stream bank where livestock don't graze. Our actions here are aimed at promoting similar conditions within the protected buffer.



Small fenced area: bark mulch provides weed protection and green tubes eliminate vole damage.



Large fenced area: weed mat reduces weed and grass competition.



Cottonwood poles, planted along an elevation gradient, will be evaluated over time to see if this approach can be used to establish cottonwoods along Ashley Creek.

FOR MORE INFORMATION

Contact the Franz Ingelfinger, Montana Fish, Wildlife, & Parks, Restoration Ecologist, at 751-4580.

