

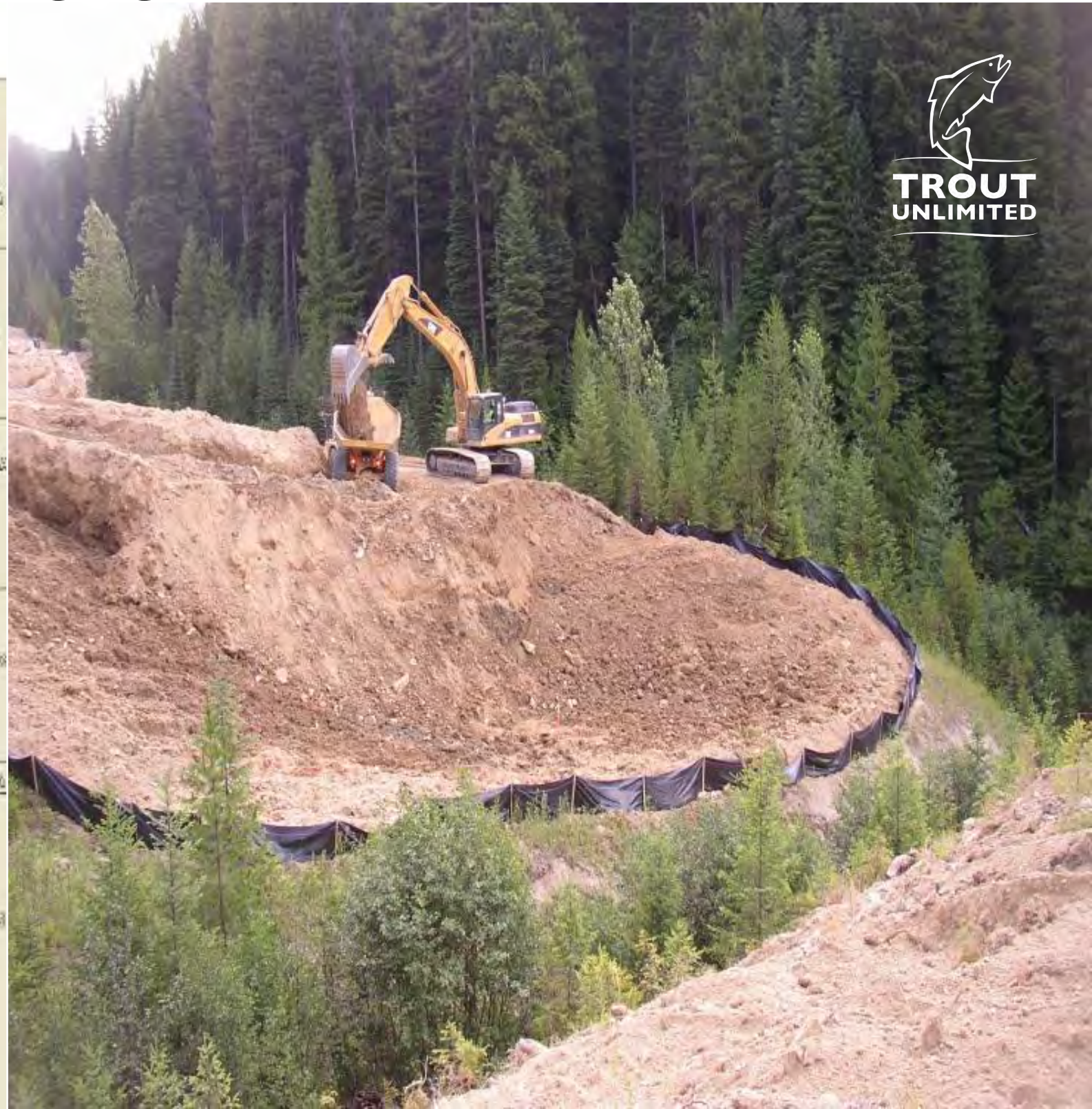
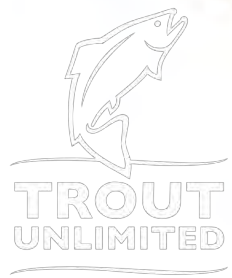
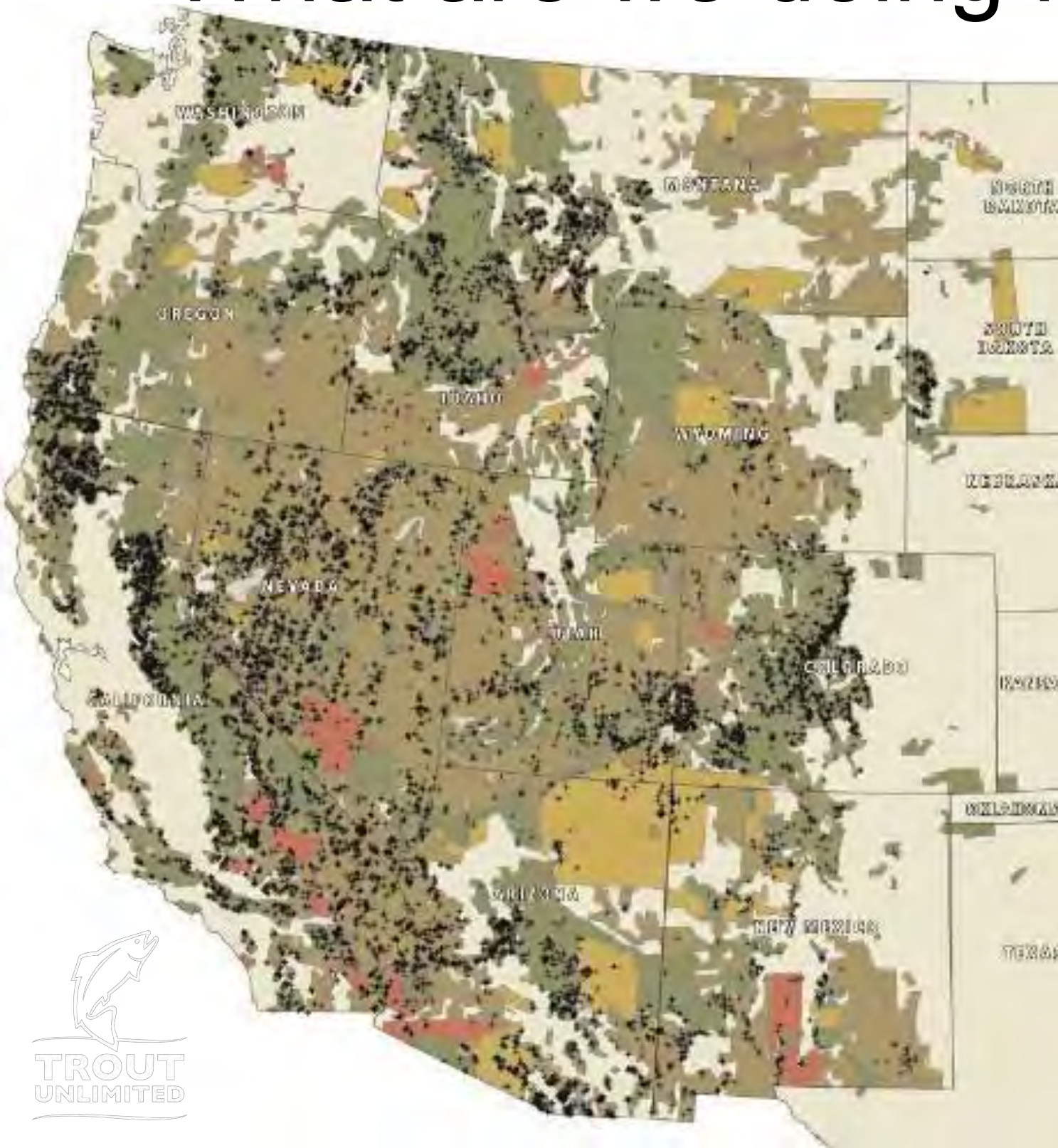
Abandoned Mines and Trout

Partnerships and Projects to Restore Western Montana Watersheds



Casey Hackathorn
Trout Unlimited

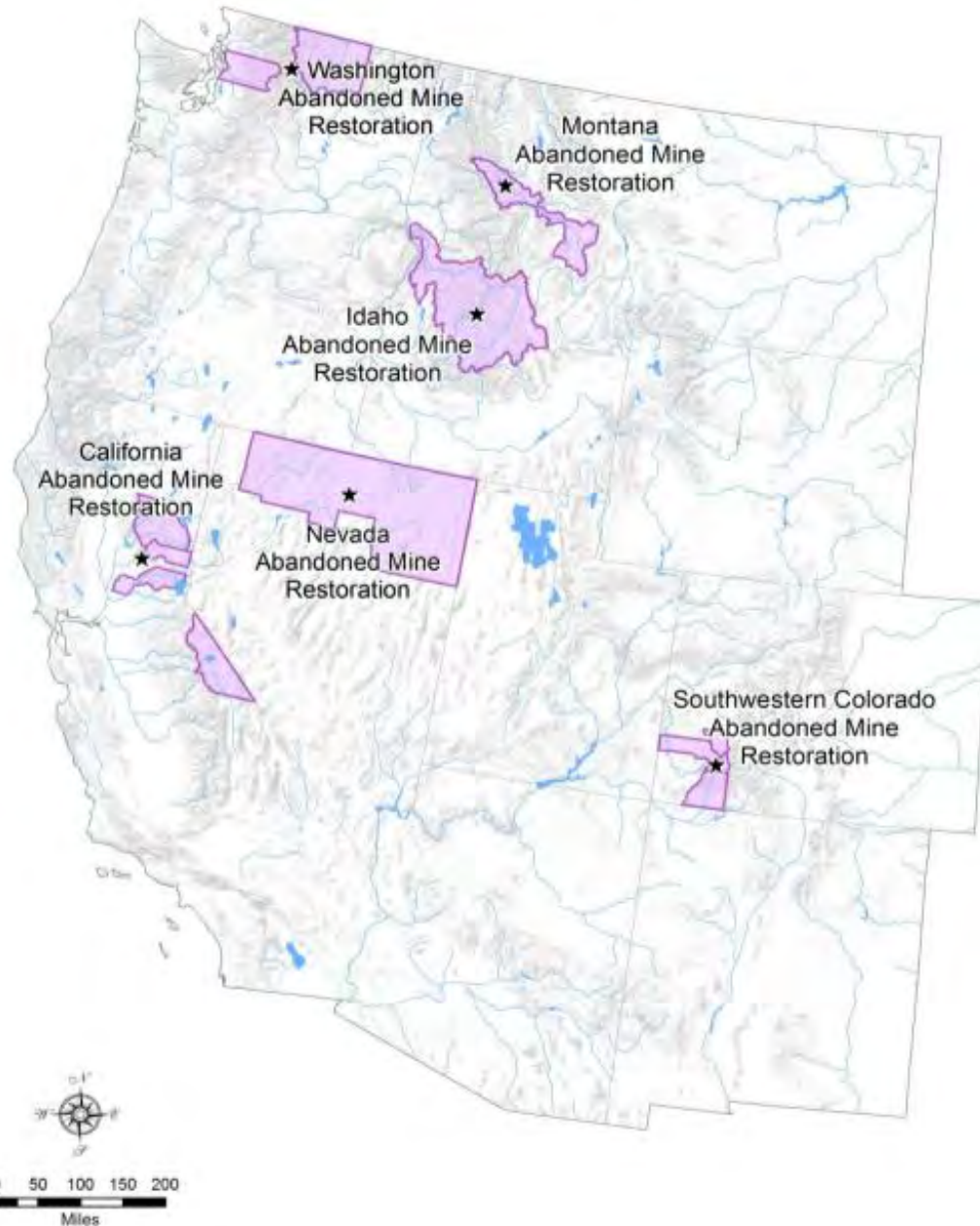
What are we doing here?



American Fork Canyon, UT

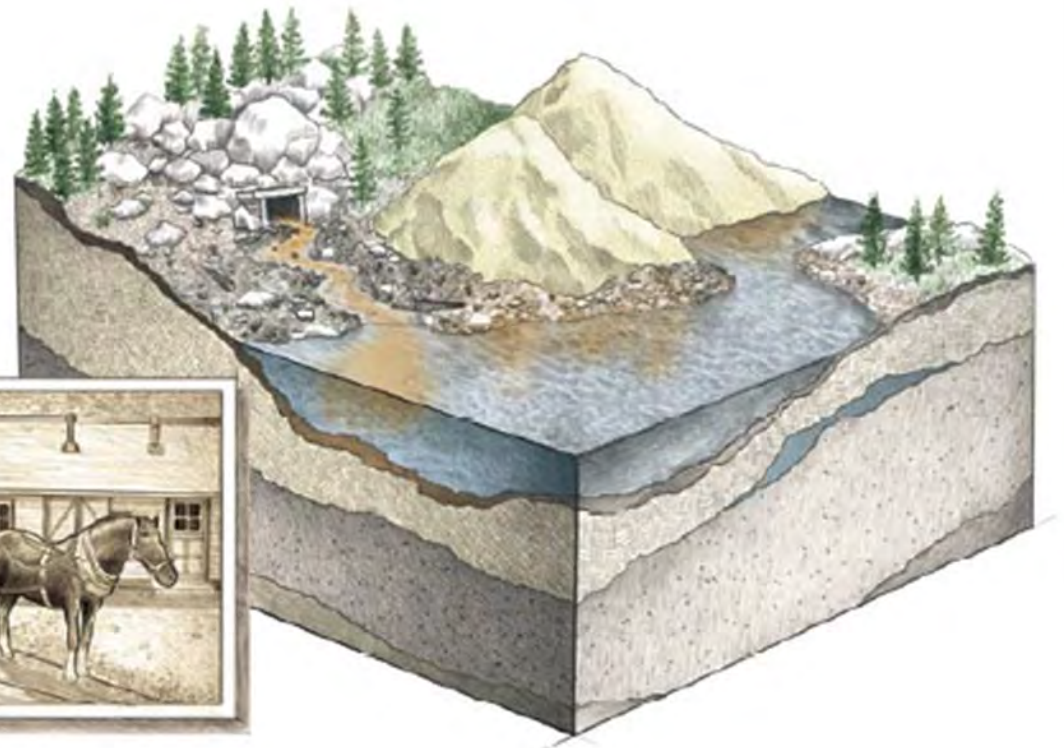
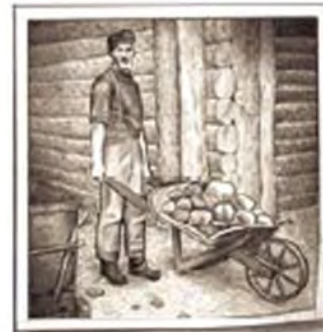


TU Western Abandoned Mine Restoration Programs



Settled, Mined & Left Behind

The Legacy of Abandoned Hardrock Mines for the Rivers and Fish of the American West, and Solutions for Cleaning Them Up



A Report Produced by Trout Unlimited's
Public Lands Initiative



Clark Fork River Programs

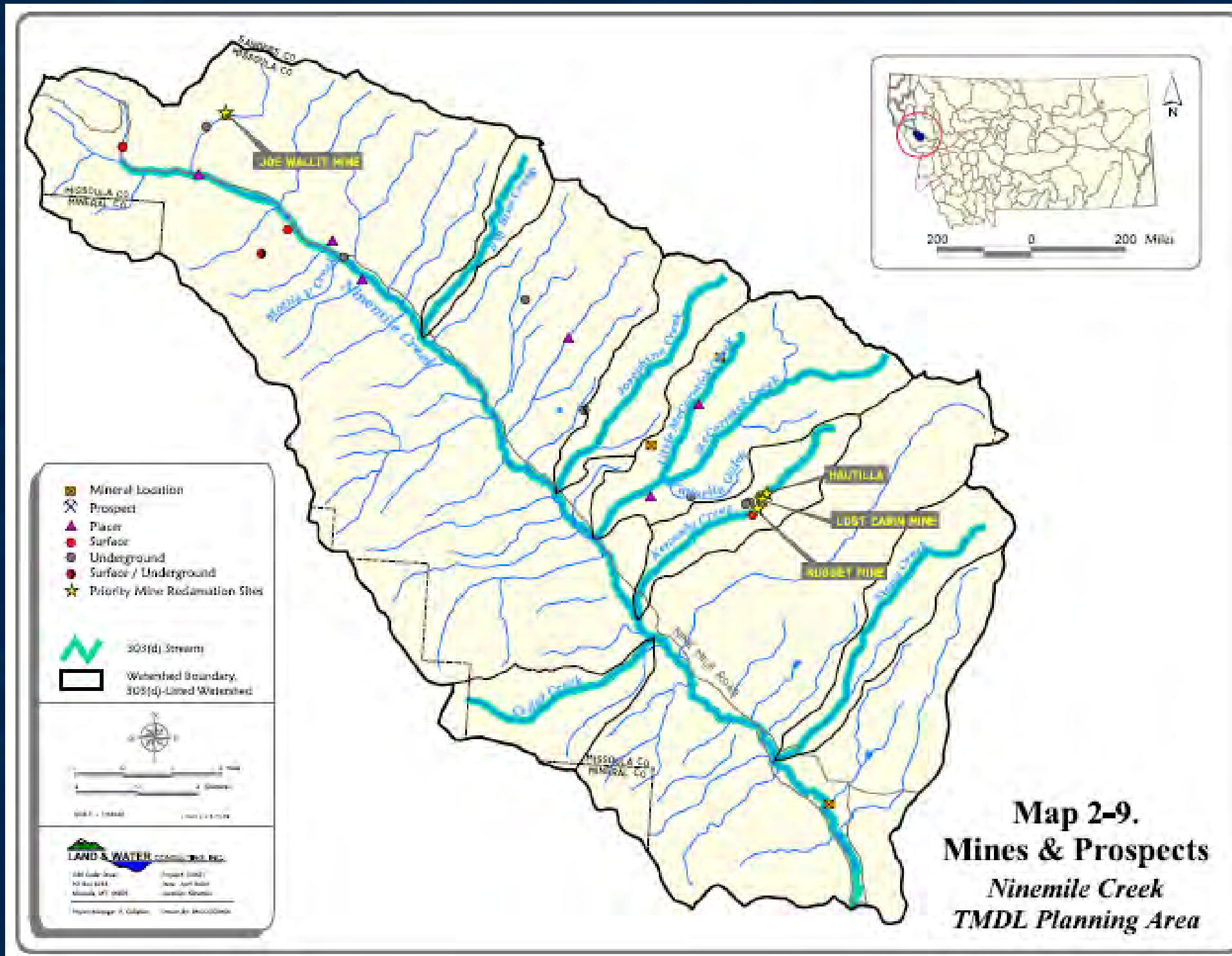
Legend

- Stream
- Little Blackfoot River Subbasin
- Lower Clark Fork River Basin
- Upper Clark Fork River Basin
- Rock Creek Subbasin
- Middle Clark Fork River Basin
- Blackfoot River Basin
- Bitterroot River Basin

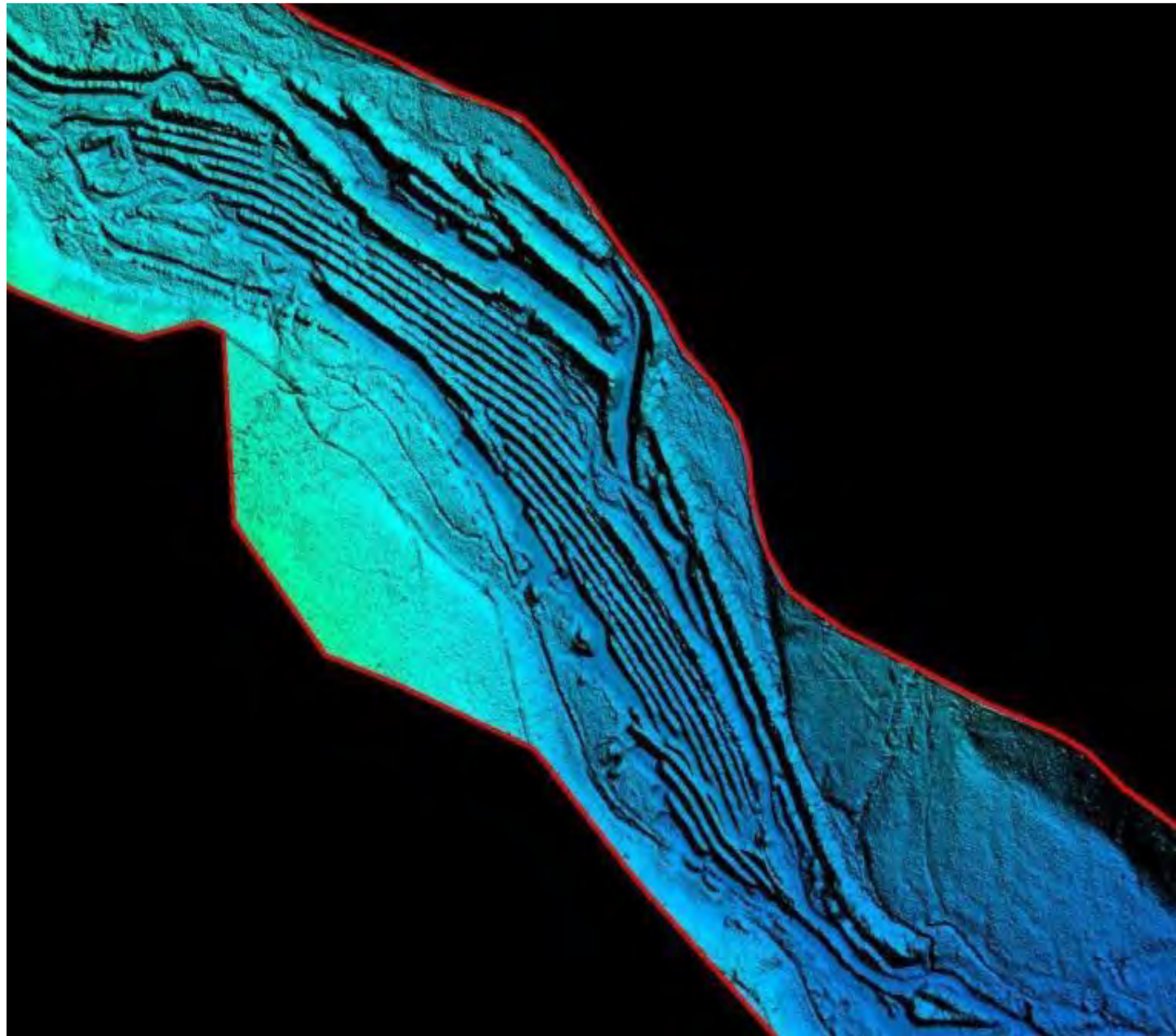
0 62.5 125 250 375 500 Miles



Ninemile Creek



Placer Mine Restoration



Physical Damage – Restored



Physical Damage – Reconnected and Restored



St Louis Creek

Frances Copper Mine - 2011

- Project Lead – TU
- Design – FS/TU
- Mine Equip Contract – FS
- Stream Contract – TU
- Monitoring – TU/FS
- Budget – \$518K
- Partners – MT DNRC, DEQ, FWP, USFS, T&S Foundation
- Volume – 20,000 CY
- Contaminants – Cu, Pb, Zn



St Louis Creek

Frances Copper Mine - 2011

St Louis Creek— removing mine waste

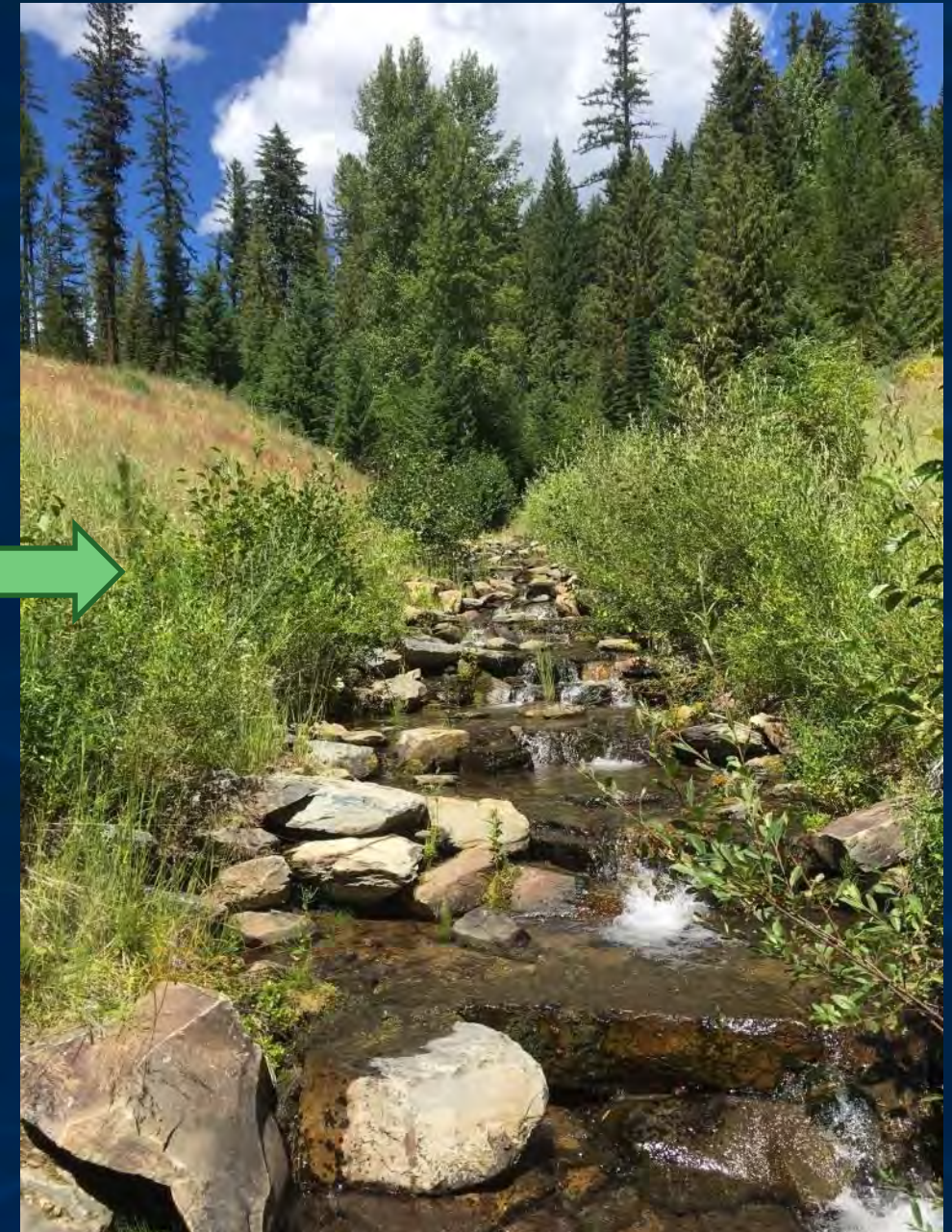
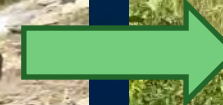
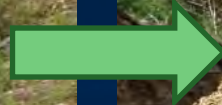


St Louis Creek— site covered with topsoil and reseeded



St Louis Creek

Frances Copper Mine - 2011



Kennedy Creek

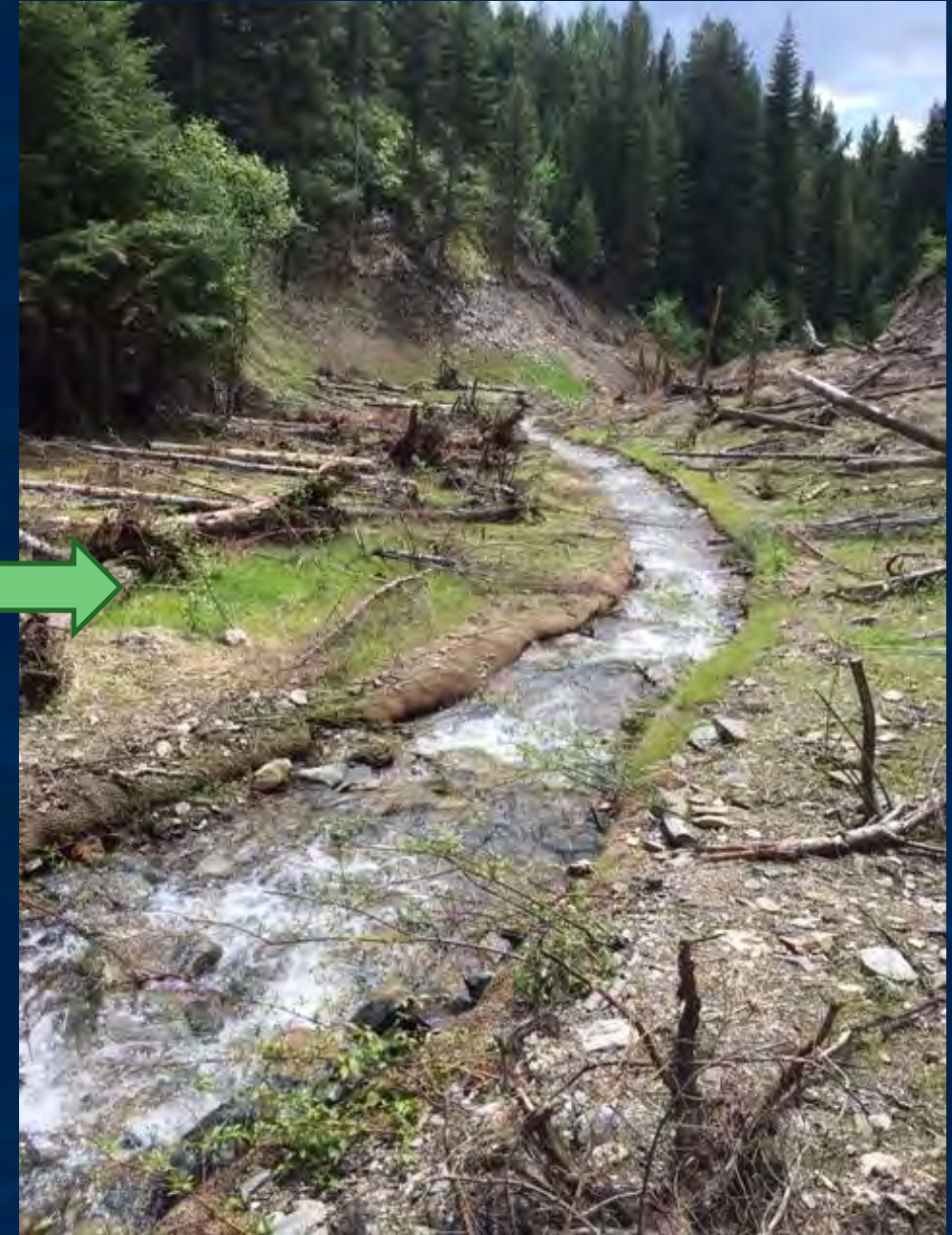
Lost Cabin and Nugget Mines – 2015

- Project Lead – TU
- Design – FS/TU
- Mine Equip Contract – FS
- Stream Contract – TU
- Monitoring – TU/FS
- Partners – USFS, MT DNRC, DEQ and FWP
- Volume – 6,000 CY
- Contaminants – Pb, As, Cu, Zn

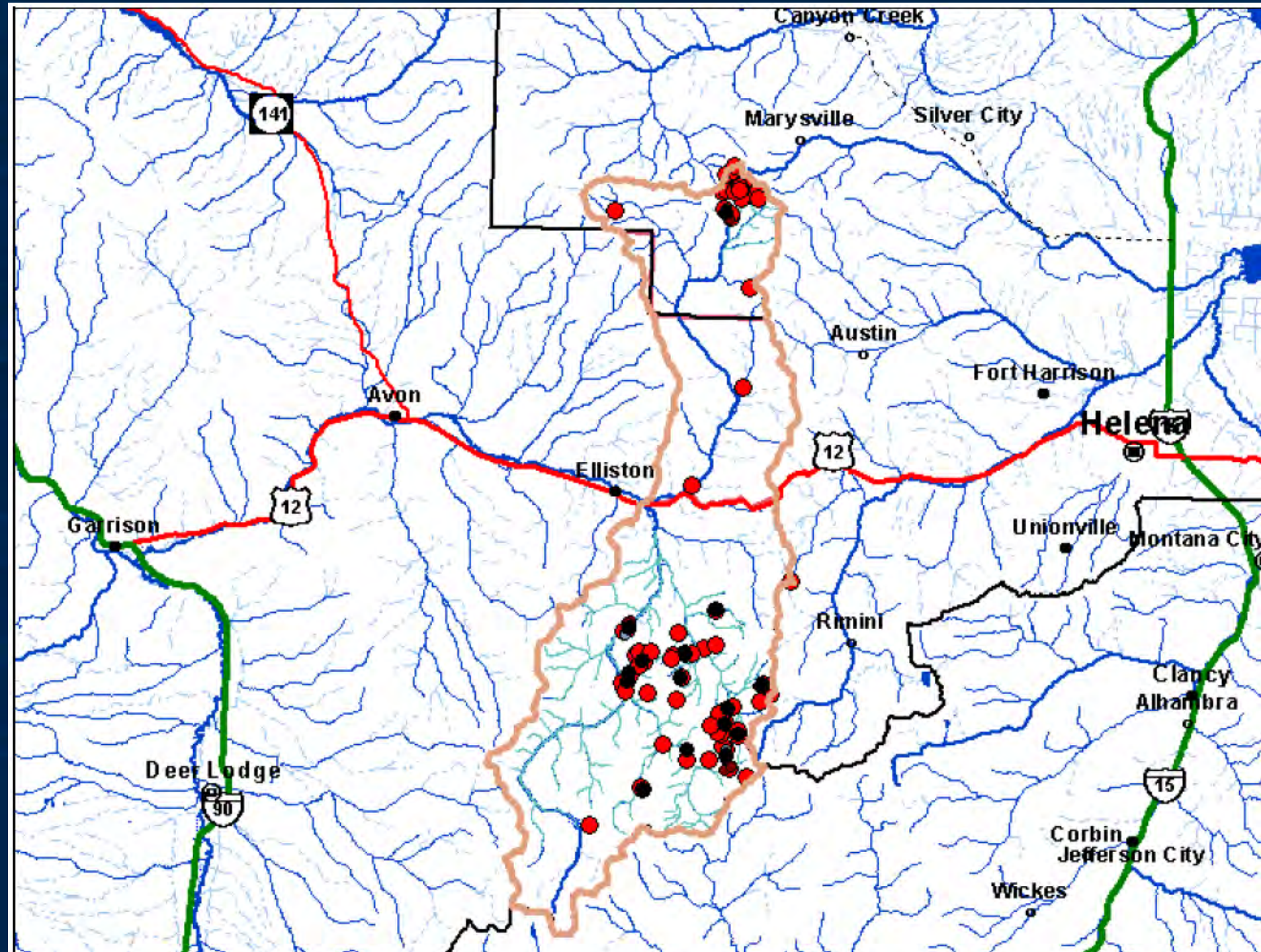


Kennedy Creek

Lost Cabin and Nugget Mines – 2015



Little Blackfoot Sites



Telegraph Creek

Lilly/Orphan Boy Mine - 2016



- Project Lead – TU/DEQ
- Design – TU/DEQ
- Mine Reclamation – DEQ
- Stream Restoration – TU
- Partners – USFS, MT DEQ, DNRC, Powell County
- Volume – 9,000 CY
- Contaminants – As, Cu, Pb, Zn



Telegraph Creek

Lilly/Orphan Boy Mine - 2016



Tramway Creek

2021/2025

- Project Lead – TU/DEQ
- Design – TU/DEQ
- Mine Reclamation – DEQ
- Stream Restoration – TU
- Partners – USFS, MT DEQ, DNRC, Powell County
- Volume – 2,000/20,000 CY
- Contaminants – As, Cd, Cu, Pb, Cyanide



Sluice Gulch

Silver King Mine - 2020

- Project Lead – BLM/TU
- Design – BLM/TU
- Mine Reclamation – BLM
- Stream Restoration – TU
- Budget – \$900K
- Partners – BLM, Granite CD, DNRC, DEQ
- Volume – 9,000 CY
- COCs – Sb, As, Cd, Cu, Fe, Pb, Hg, Ag



Chemical Pollution – Adits



Montana Partners



- U.S. Forest Service
- MT DEQ
- MT DNRC
- U.S. Fish and Wildlife Service
- National Fish and Wildlife Fndn.
- Tiffany and Company Fndn.
- MT Fish, Wildlife & Parks
- BLM
- U.S. EPA
- National Forest Fndn.
- TU Chapters
- Missoula County
- Powell County
- Granite Conservation District
- Watershed Groups
- Many more!



Thank You!



Casey Hackathorn



Upper Clark Fork Program Manger



(406)546-5680



casey.hackathorn@tu.org

www.tu.org

