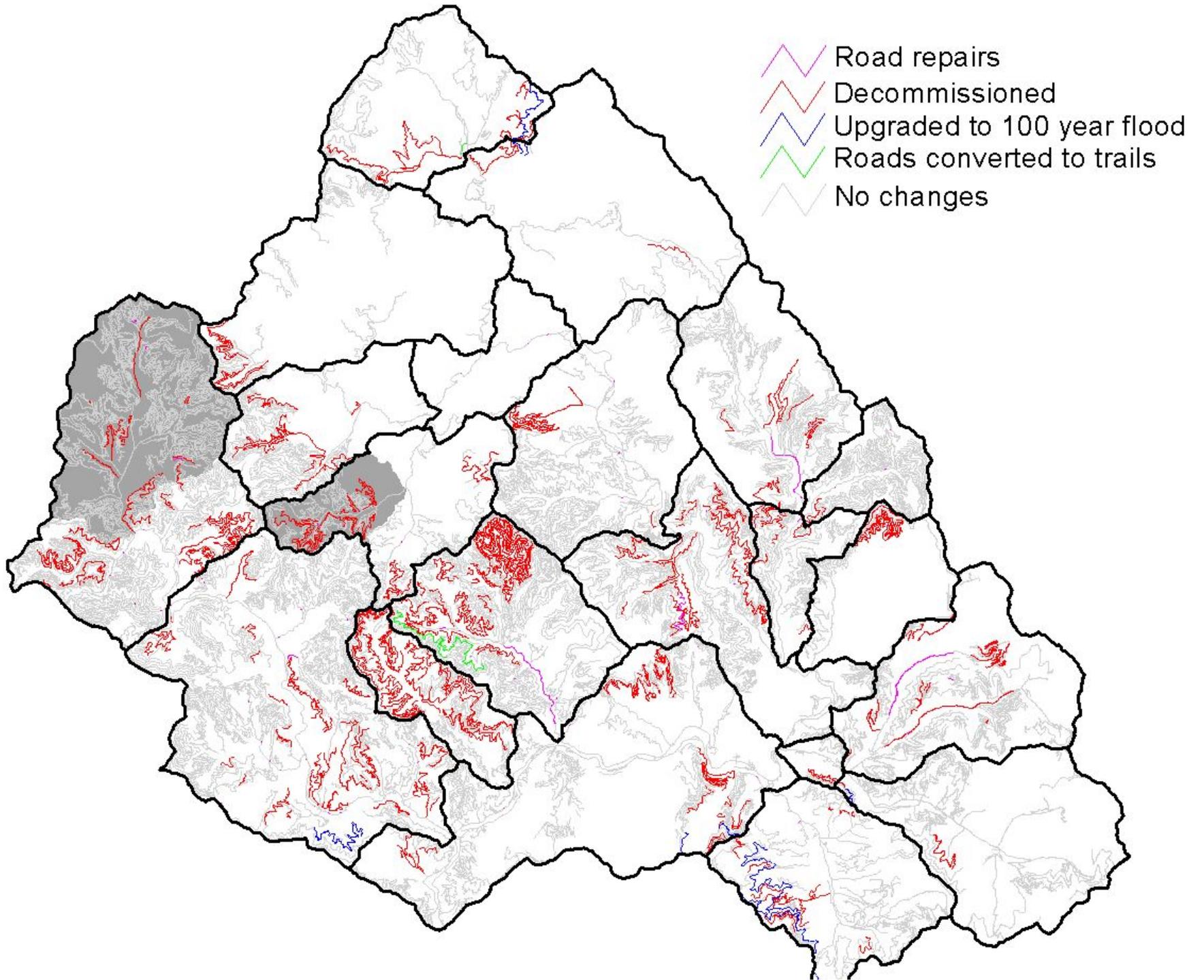


Sediment Sources

**North Fork Coeur d'Alene
River Watershed**

Sediment Sources

- Roads
 - ◆ Gullying/culvert washouts
 - ◆ Road fill encroaching on stream channels
 - ◆ Surface erosion
- Stream entrenchment
- Mining
- Timber Harvest
- Fire
- Landslides
- Grazing/agriculture



Road Gullies and Culvert Washouts

- Episodic input
- Estimated 7% reduction based on road decommissioning, upgrades



Steamboat Cr 91 flood MP 4.8

Road/channel Encroachment



Road/channel Encroachment



Road Encroachment

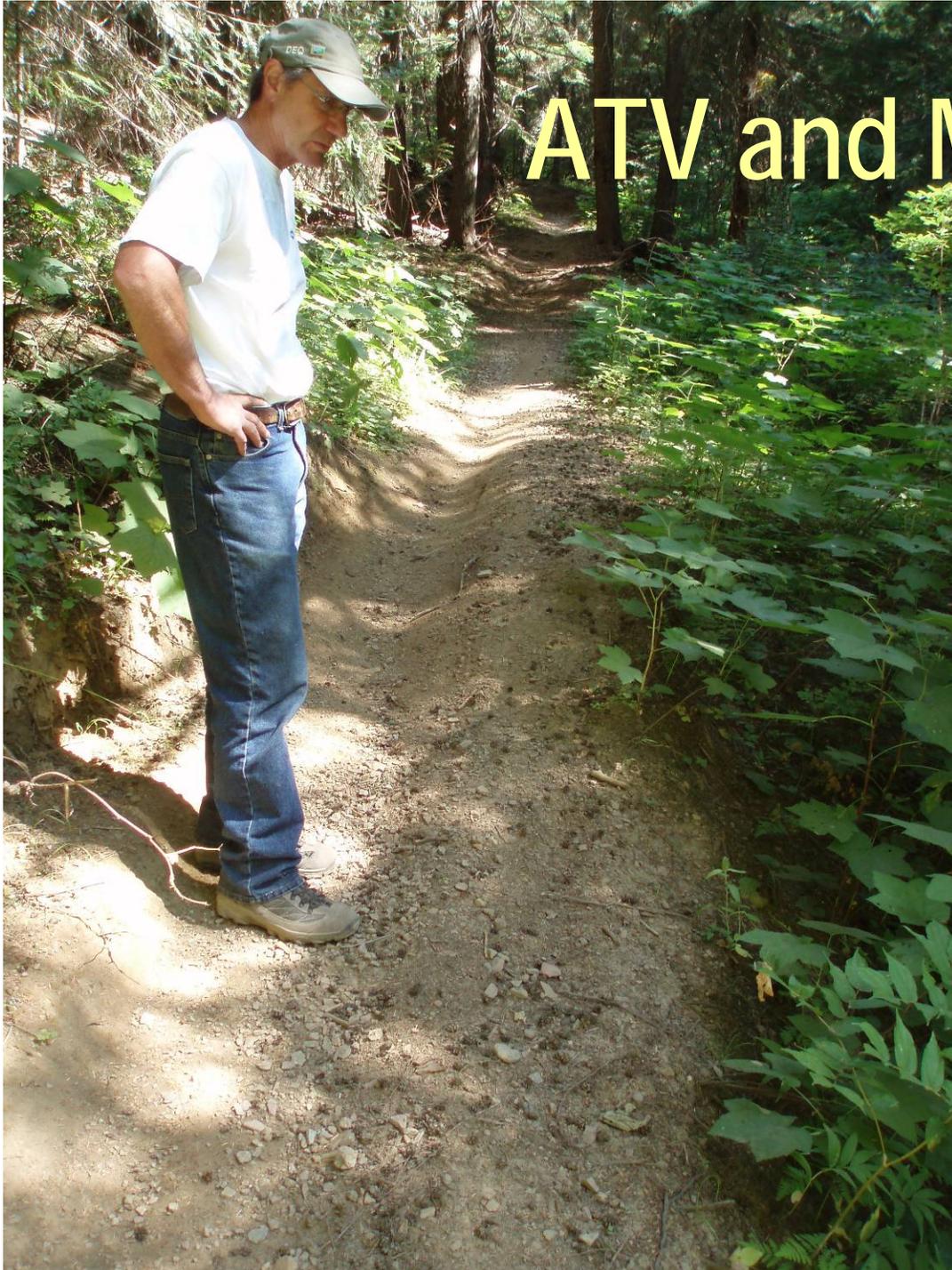
- Very episodic (10-30 year recurrence)
- Affects only roads adjacent to larger streams (energy to erode rip rap)
- Relatively large source (est. 20,000 t/yr)
- Many roads have barbs/large rip rap – lower risk
- Some roads still vulnerable (Old River Road, Little North Fork, Steamboat)



Road Surface Erosion



- Chronic input
- Estimated 70% reduction based on road closures (reduced traffic)

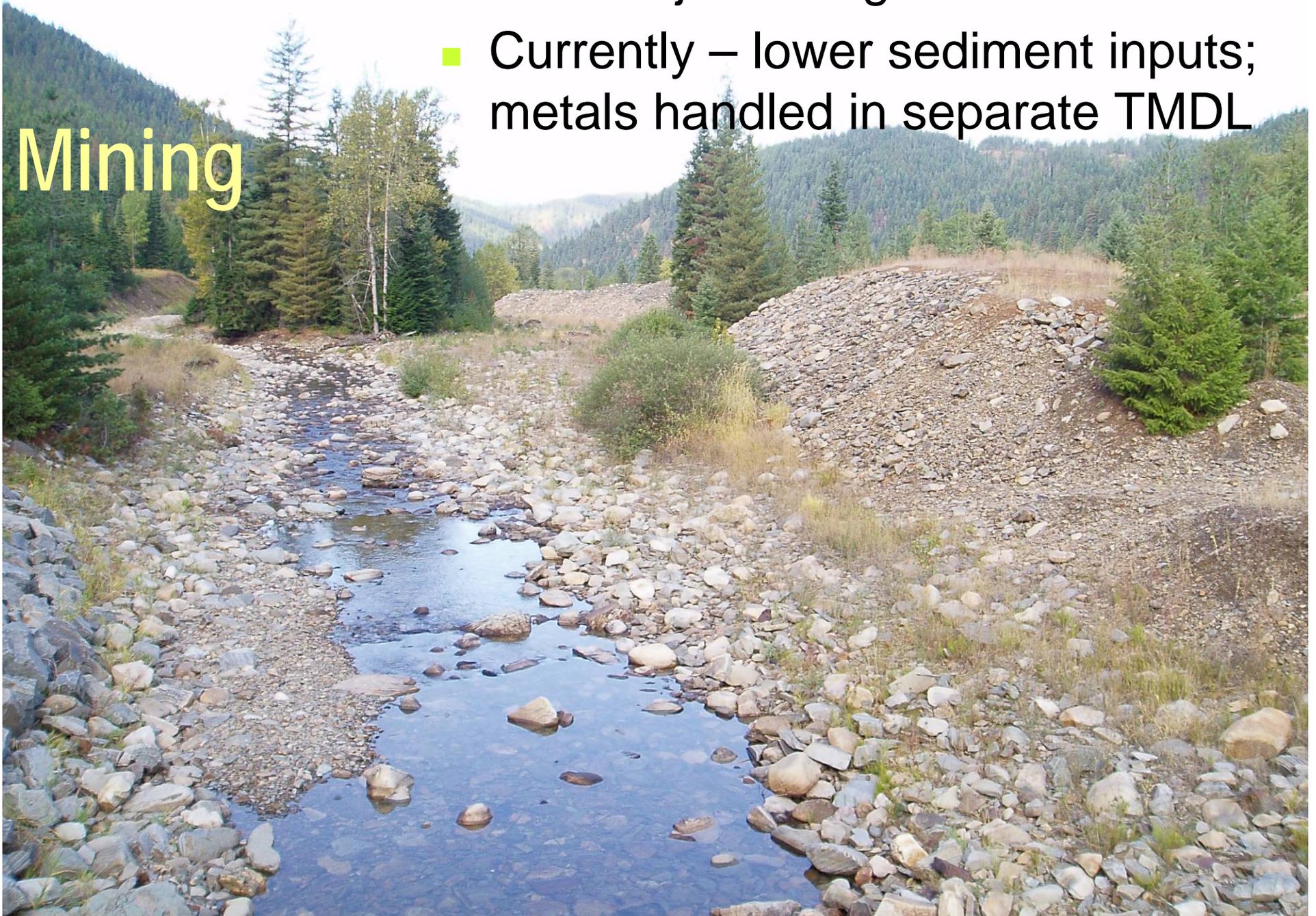


ATV and Motorcycle Use

- Trail/streambank erosion
- Localized
- Little delivery except for driving in streams

Mining

- Past major in Eagle/Beaver Creeks
- Currently – lower sediment inputs; metals handled in separate TMDL



Timber Harvest

A photograph of a forest landscape. In the foreground, a young, slender pine tree stands prominently. The background shows a steep hillside with a clear-cut area, where the ground is a mix of green grass and brown soil, indicating recent timber harvest. The surrounding forest consists of dense, tall evergreen trees under a bright, overcast sky.

- Historically large sediment source
- Now minor under current regulations/harvest rate

Landslides

- Very minor
- Only 5-10 slides in entire watershed



Grazing/ Agriculture



- Very minor
- Estimated 17 t/yr

Next Steps

- Finalize/synthesize sediment input budget
- Compare to USGS measured sediment transport
- Compare to original TMDL sediment budget
- Recommendations to reduce sediment inputs

