

Moose Drool Watershed Restoration

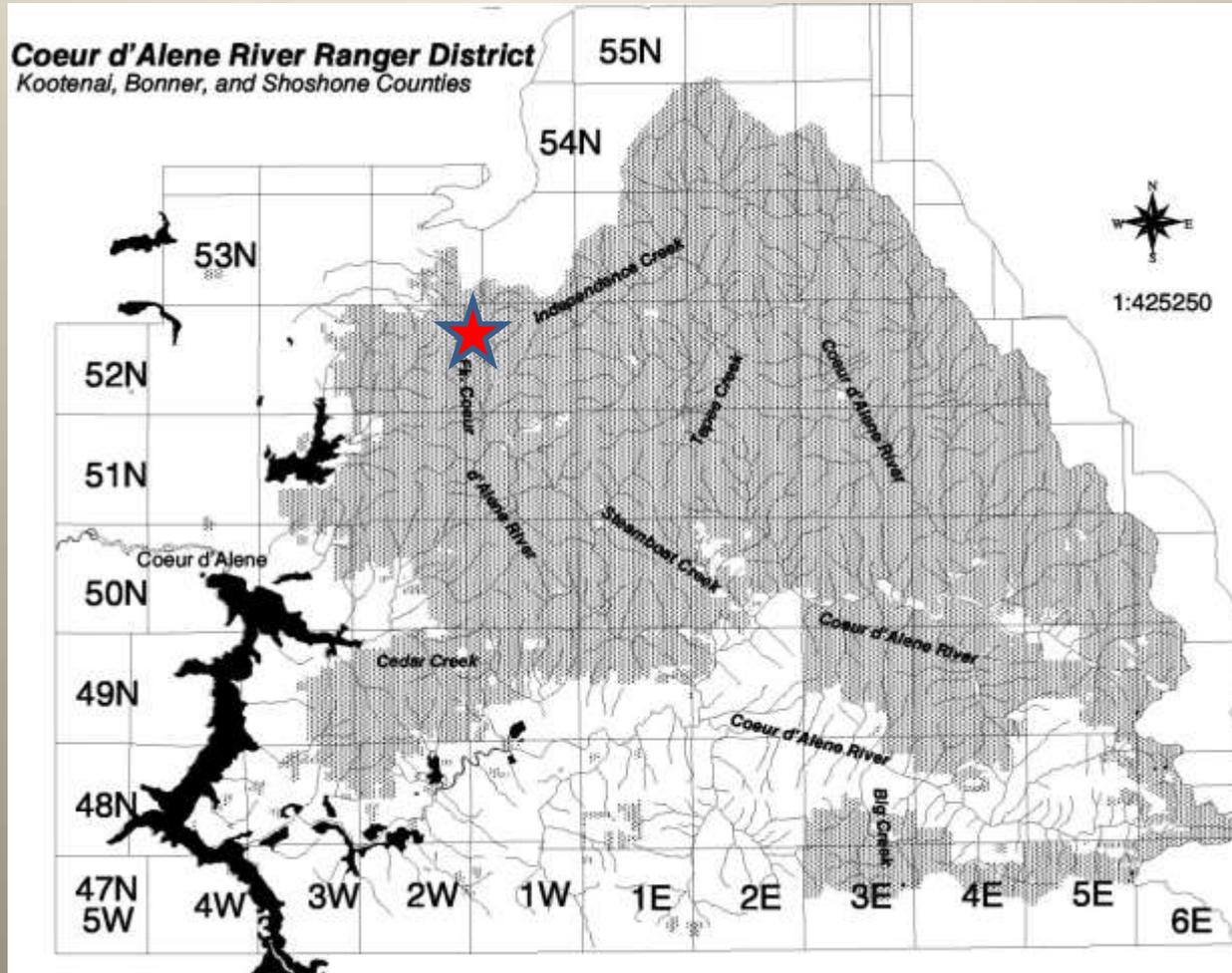


Phase I – III, 2012 - 2015

Restoration

- Reestablishment of the structure and function of an ecosystem, including its natural diversity
- *“...plunges, backwaters, large woody debris and streamside vegetation, cobble, gravel, even sand and silt, shear lines, depth, pockets, undercuts, and an optimal relationship between this diversity and year-long trophic and habitat requirements (Griffith 1993).”*

Where is it?



What is it?

- 2012 decision
 - assess
 - plan
 - and improve the *ecological conditions* of the upper Little North Fork Coeur d'Alene River (LNFC DAR).



Why do it?

- Restoring resilient ecosystems
- Streams do not meet water quality standards
- *High priority* for watershed restoration
- Forest Plan direction
 - INFS WR-1
 - INFS FW-1

STRESSORS

Roads and Crossings



STRESSORS

Riparian Roads



STRESSORS

Riparian Harvest



STRESSORS

Railway/Dike



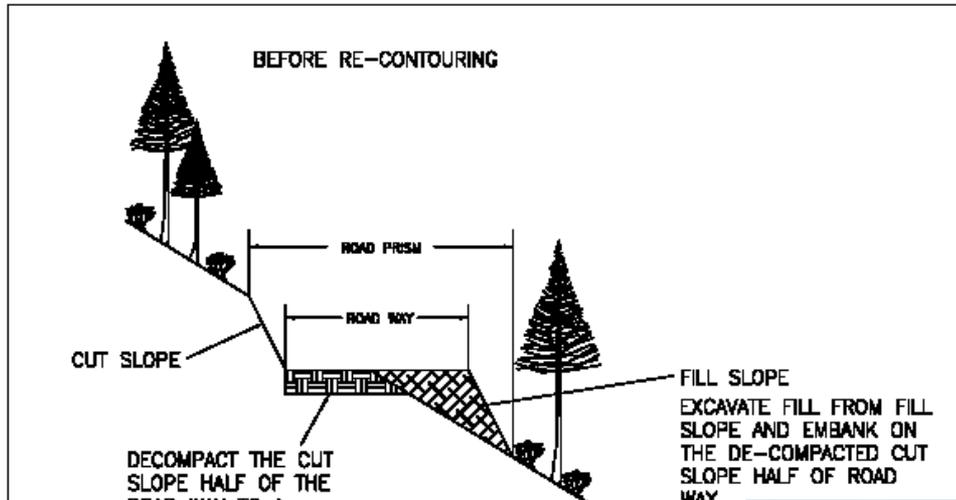
STRESSORS

Dispersed and Illegal Recreation



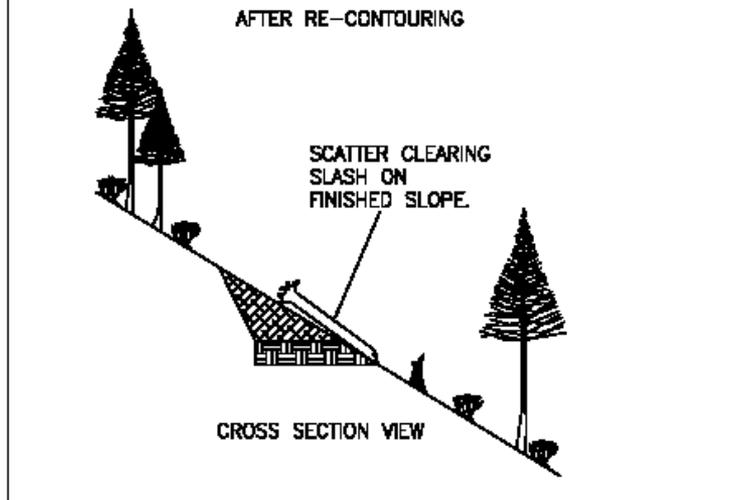
Implementation Methods

- *Method I*
- *Method II*
- *Floodplain restoration*
- *LWD placement*
- *Stream channel modification*



DECOMPACT THE CUT SLOPE HALF OF THE ROAD WAY TO A DEPTH OF 30 INCHES.

CROSS SECTION VIEW



CROSS SECTION VIEW





Before



After



Before



After



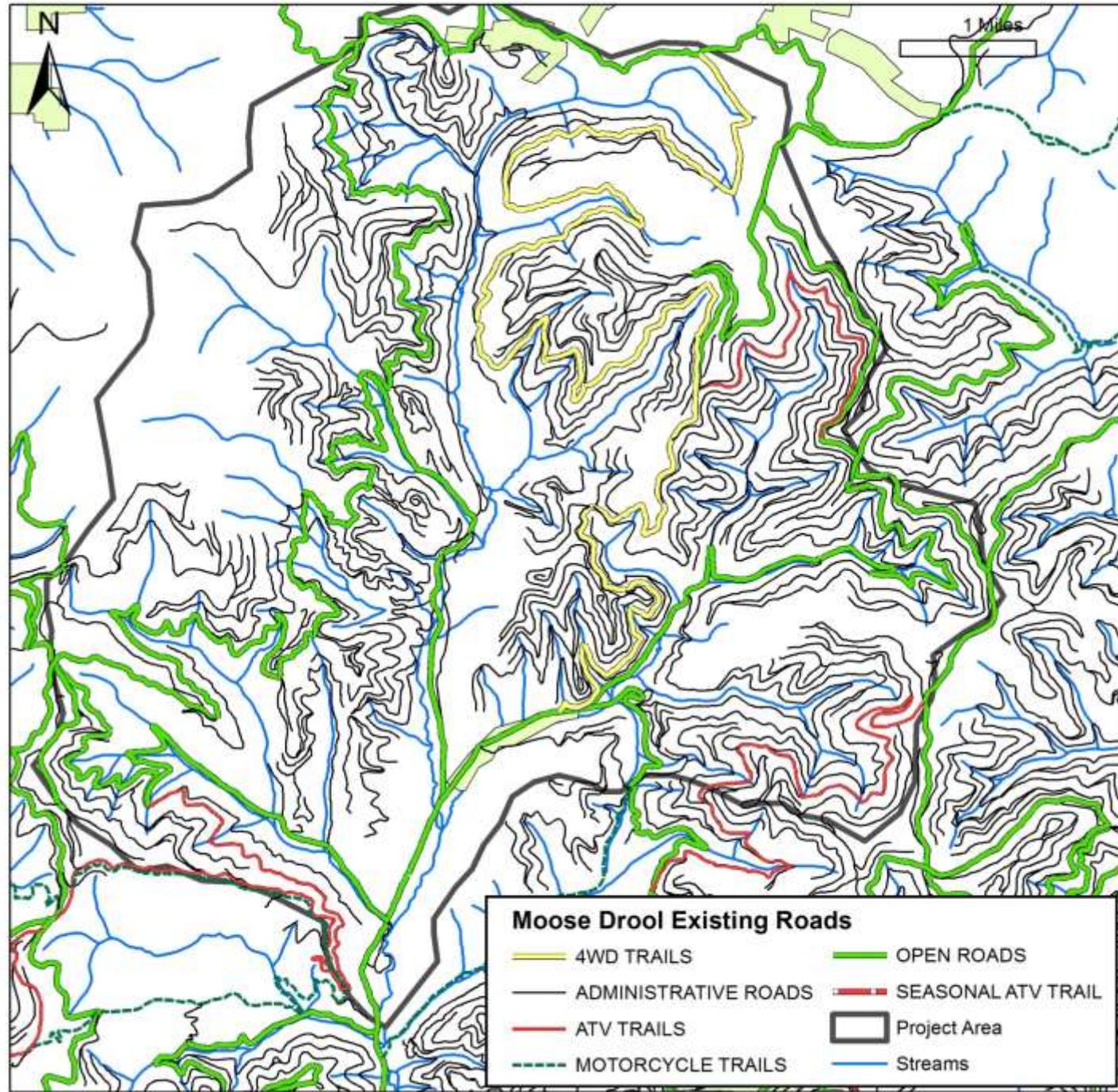
After



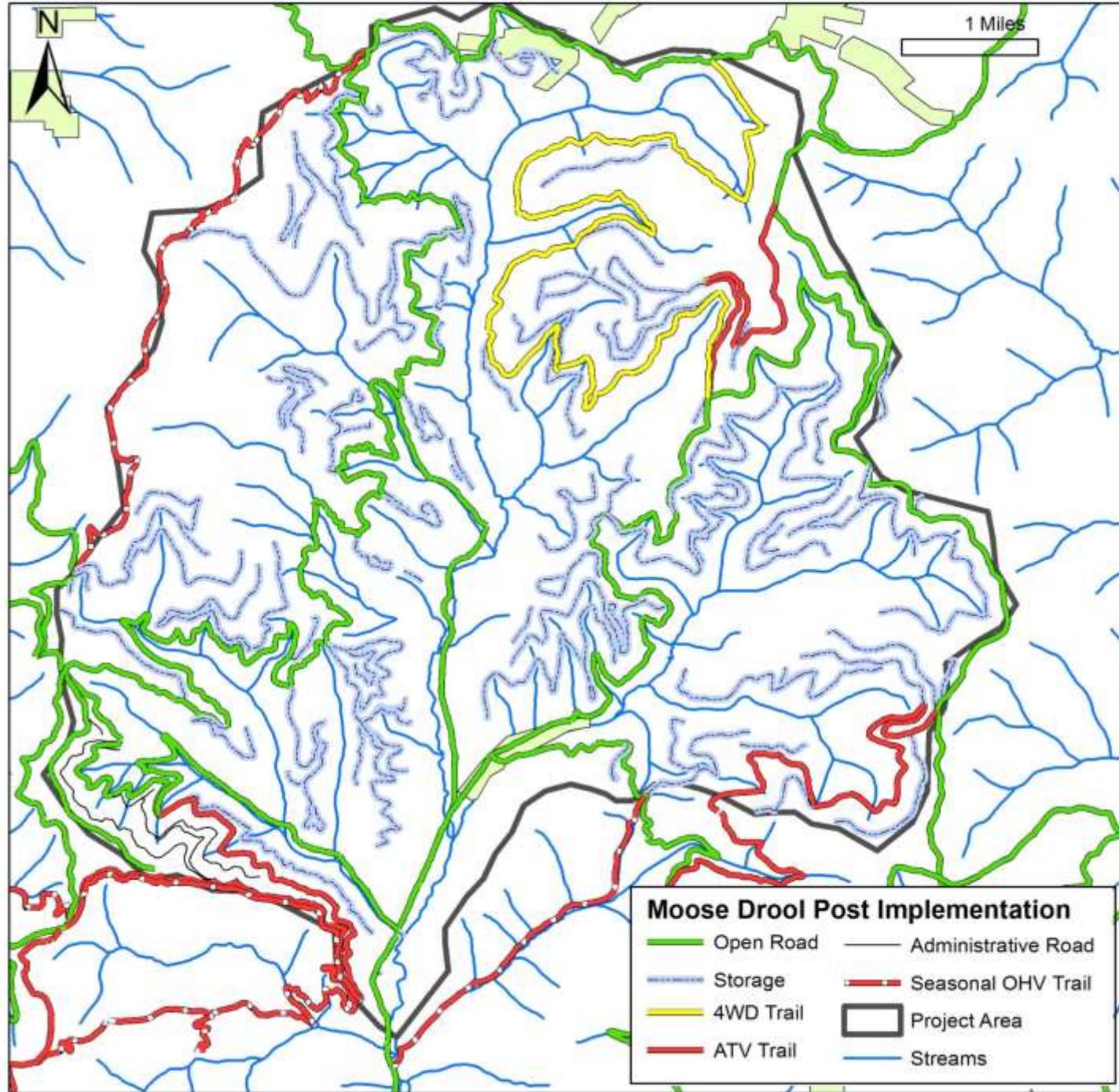
Before



Moose Drool –
Pre-Implementation



Moose Drool – Post-Implementation



By the Numbers...

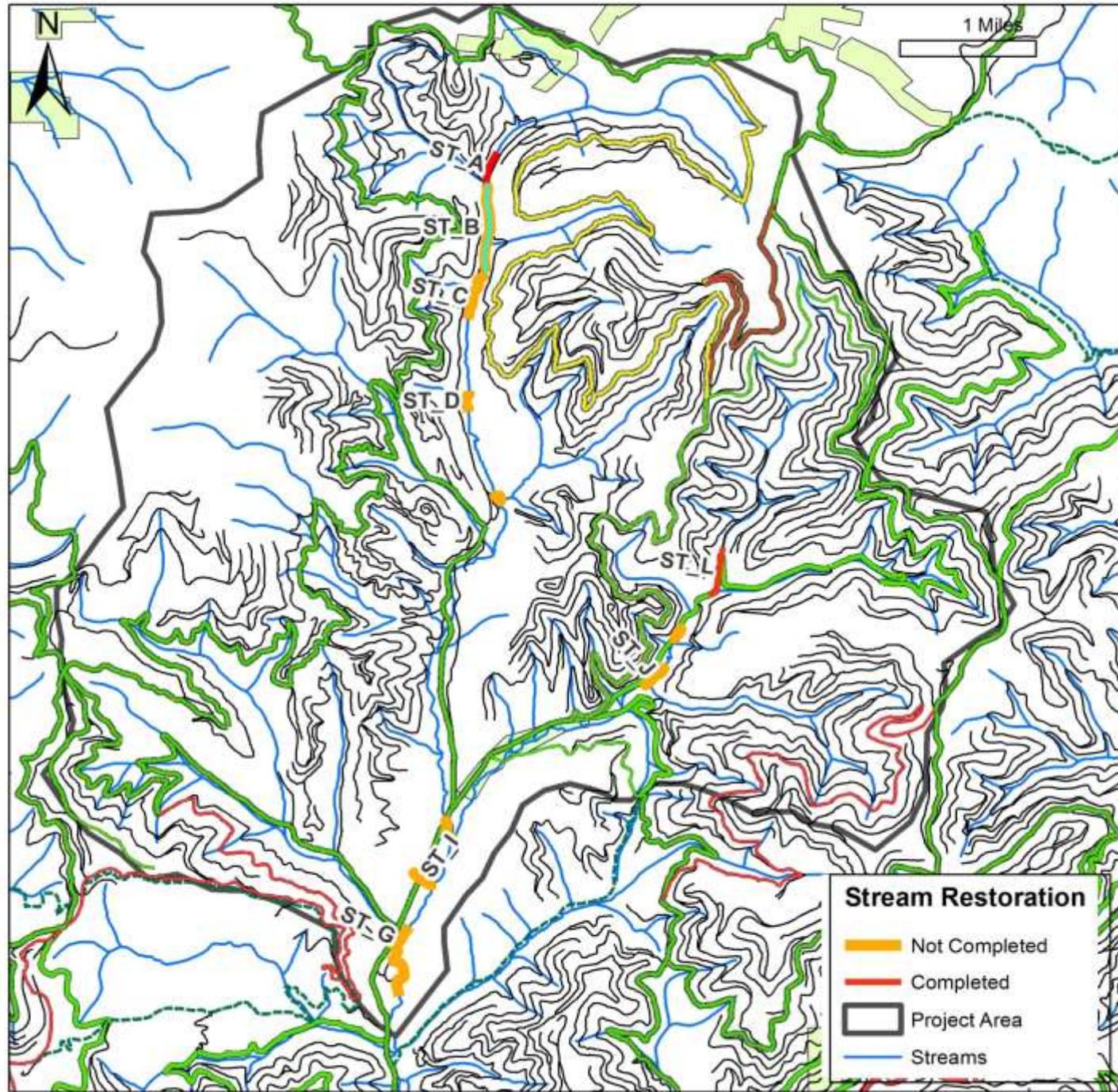
Project Metrics for 2012 - 2015

Miles of Road Decommissioned	97 miles
Miles of Road Fully Recontoured	51 miles
Miles of Stream Habitat Enhanced (2014 only)	26 miles
Miles of Floodplain Restored (2014 only)	3.4 miles
Large Woody Debris Pieces	>1800
Excavated Channel Crossings	141
Recontoured Headwater Swales	123
Local jobs (2014 only)	65 contractors on site
Pieces of Heavy Equipment Rented Locally (2014)	26 (~\$468,000)
Overall Contract Costs	\$2,048,900

Video Time!

- <http://youtu.be/mIQXfgjrg8E>

Work Still Needed:
Stream Restoration



Work Still Needed: Relocation of the 1532

