

Effectiveness of Native Plant Material for Revegetation of Decommissioned Roads

FY2009 Accomplishments

This project involved a partnership between the USFS Northern Region and the University of Montana, Department of Forestry and Conservation to investigate the effectiveness of different native plant materials and revegetation techniques on newly decommissioned forest roads in the inland Northwest. The research project was designed and initiated in 2007, with field data collection occurring in FY07-FY09.

Research accomplishments during FY09 included:

- Finishing analyses of one-year post treatment vegetative establishment and soil physical properties at 13 field sites on the Kootenai (MT) and Clearwater (ID) National Forests. Seed mix factors tested with experimental treatments included:
 - Seed mix ~ three levels: 1) non-native species mix, 2) native graminoid mix; and 3) high-diversity native mix that included forb, shrub and graminoid species; and
 - Density of seed application ~ two levels: 1) high (30lbs/acre) and 2) low (15lbs/acre).
- Submitting an article summarizing one-year post-treatment responses to the journal, *Restoration Ecology* (Accepted pending revision). Primary findings included that the native seed mix outperformed the nonnative mix after road decommissioning.
- Meeting with Forest Service personnel to inform agency of findings.
- Collecting two-year post-treatment data on vegetative establishment and soil physical properties at 13 field sites on the Kootenai (MT) and Clearwater (ID) National Forests. These data are currently being analyzed. Results will be documented in a second scientific article and communicated to the agency.



Vegetation sampling: percent cover (above), biomass collection (below).



Year awarded: initial award in 2007

Project completion: 2009

Report number: 3 of 3

Expenditures:

- FY07/08 funding: \$70,000
- FY09 expenditures: \$19,962
- Remaining: \$0

Partners/contractors/coop:

- Univ. of Montana, Missoula, MT
- Wildlands CPR, Missoula, MT

Contact persons & phone number:

- Susan Rinehart, USFS (406) 329-3669
- Dr. Cara Nelson, University of Montana (406) 243-6066
- Adam Switalski, Wildlands CPR (406) 543-9551



USFS Northern Region
200 East Broadway
Missoula, MT 59807