

## Special Inventory and Monitoring Projects for FY 2013

### *Ashland Forest Resiliency Project Monitoring – Siskiyou Mountains Ranger District*

#### MONITORING ITEM: *EFFECTIVE GROUND COVER*

**GOAL(S), MONITORING QUESTION(S):** Ashland Forest Resiliency stakeholders elevated the importance of securing data to inform the Project design and compare observed impacts to planned changes, in accordance to these questions:

1. **Were treatments implemented according to design criteria, including appropriate mitigation measures and management constraints, outlined in the plans for the Project and the subsequent decision?**
2. **Were fire hazard reduction treatments implemented according to the schedule outlined in the decision document?**
3. **Did the treatments meet or exceed key land use plan *standards and guidelines* for direct effects?**
4. **Did the resultant vegetation and fuels conform to conditions intended in the plans for the Project?**

Question 1 and 3 are particularly relevant to effective ground cover and are the focus for this monitoring.

#### **FINDINGS and EVALUATION:**

##### Effective Ground Cover (EGC)

Effective ground cover data were collected in cooperation with The Nature Conservancy, utilizing the Soil Cover Protocol in *Roadside revegetation: An integrated approach to establishing native plants* (Steinfeld et al., 2008). Grid points were systematically placed across the units and at each point 3.75 ft<sup>2</sup> was photographed. Ground cover presence or absence at 20 random points in each photograph was then analyzed using the Cover Monitoring Assistant Program. Sample size was scaled by variance for each unit. More information about methods can found in the detailed monitoring reports located in the Rogue River-Siskiyou National Forest Soils Program Files.

Effective ground cover standards and guidelines were met on all units before and after skidder-yarding and helicopter activities (Table 1) and are well within the requirements for both the Record of Decision for the AFR Project, and the Rogue River National Forest Land and Resource Management Plan as amended by the Northwest Forest Plan. Utilizing slash over bare soils was shown to be effective at protecting the soil surface from rain splash soil particle displacement and sheet wash erosion, as well as effectively preventing rill erosion.

**RECOMMENDATIONS:** Continue with monitoring of new units as implementation progresses.

**Table 1. Ashland Forest Resiliency implementation monitoring results for Effective Ground Cover (EGC). Minimum requirements are from the AFR Record of Decision (ROD) and the Rogue River-Siskiyou National Forest Land and Resource Management Plan (LRMP).**

<b>AFR Unit (acres)</b>	<b>Yarding System</b>	<b>Sample Size (Pre / Post)</b>	<b>Mean Effective Ground Cover (Pre / Post %)</b>	<b>Standard Deviation (Pre / Post)</b>	<b>Most limiting Erosion Hazard Class in Unit</b>	<b>Minimum EGC required per ROD &amp; LRMP</b>
281 (73 ac.)	Skidder	70 / 68	98 / 95	9 / 14	Moderate	>60%
282 (16 ac.)	Skidder	32 / 41	99 / 97	3 / 11	Moderate	>60%
283 (5 ac.)	Skidder	44 / 47	99 / 98	3 / 7	Moderate	>60%
67F (26 ac.)	Skidder	40 / 40	99 / 97	4 / 8	Moderate	>60%
67E (54 ac.)	Helicopter	71 / 71	98 / 97	9 / 8	Severe/V.Severe	>85%
65 (68 ac.)	Skidder	60 / 60	97 / 94	6 / 13	Moderate	>60%