



# USDA Forest Service National Forest System Briefing Paper

Date: September 18, 2009

**Topic:** Forest Soil Disturbance Monitoring Protocol and the Soil Disturbance Field Guide

**Issue:** Publication of the Forest Soil Disturbance Monitoring Protocol Volumes I and II (GTR WO-82a and WO-82b) and the Soil Disturbance Field Guide.

**Background:** Resource managers have been requesting more standardization of field monitoring protocols. Litigation (Iron Honey EIS and Lolo Post-Burn EIS), caused the Northern Region (R-1) Regional Forester to request assistance from the Rocky Mountain Research Station (RMRS) and the Southern Research Station to update and validate the regional soil quality standards. A soil quality standards team (SQS) was formed that included representatives from the RMRS and Southern Research Station, Soil Program Leaders of the Intermountain and Northwest Forest Service (FS) Regions, university professors, and representatives from the British Columbia Ministry of Forests.

## **Key Points:**

After consultation with the other FS Regions, the FS Washington Office partnered with R-1's SQS team on the development of a national forest soil disturbance monitoring protocol using R-1 as the pilot.

The FS Regions and the WO also partnered with the San Dimas Technology and Development Center (SDTDC) to develop the Soil Disturbance Field Guide.

The Forest Soil Disturbance Monitoring Protocol Technical Guide was peer reviewed and published as a FS general technical guide (GTR-WO-82a and 82b). The protocol is due from the publishers in early FY2010. It will be distributed through the RMRS publication distribution center. The Soil Disturbance Field Guide will be distributed by the SDTDC.

**Summary:** Based on research data collected and our collaborative field trials, we developed an assessment form to determine the extent of surface soil disturbance after forest management activities. In addition, soil scientists can classify each sample point they visit into a defined disturbance class using the Soil Disturbance Field Guide. The protocol provides a statistically valid methodology for monitoring forested land management projects (pre- and post-harvest). These standardized protocols also deliver a common language for discussing soil disturbance with our stakeholders.

Based on monitoring data collected and feedback from field soil scientists, this protocol will help us develop status and trends for soil quality regionally and nationally, as well as provided the framework for a national set of protocols that will be technical guides for soil quality monitoring in the FS Soil Management Handbook (FSH 2509.18).

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