



Technology & Development Status Report

Engineering Program

FY 2009



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PROJECT: **Soil and Water Road
Condition Index**

CENTER: [SDTDC](#)

Number: 6E61L12

**PROGRAM
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SPONSOR: ENG/WSA

Project Leader: [Carolyn Napper](#)

Proposer: John Bell & Keith Similia

PROJECT OBJECTIVES

We need to measure the performance of the road improvements program and the road maintenance program as to how effectively those programs meet our responsibilities for protecting watersheds. Produce:

1. A "soil and water road condition index" for rating unpaved roads. This condition index should be on the same scale as the pavement condition index used for paved roads where 0 is the worst possible score and 100 is the best possible score.
2. A guidebook publication for use by watershed specialists, such as hydrologists, to use in determining the soil and water road condition index while in the course of doing watershed assessments. This guidebook would be modeled after the guidebooks that have been produced for pavement management systems. Pavement management system guidebooks break the pavement condition rating into various subparts and then show glossy pictures for each subpart at conditions varying from bad to good. Users take the guidebooks with them in the field when rating pavements.
3. A training module for training personnel in use of the index and guidebook.

Changes to objectives: -Collect existing inventory and condition ratings used across all regions. Include these forms and their intended use on a webpage for others to utilize.

SIGNIFICANT ACCOMPLISHMENTS

- -Completed outreach to hydrologists and engineers to obtain information on existing inventory and condition rating forms. Collected over 30 data forms currently used across the county.
- - Developed a soil and water and road condition index for rating unpaved roads.
- - Field testing of soil and water road condition index (SWRCI) on forests in R-6, R-5, R-2, R-10, R-9, and R-8 with both hydrologists and engineers from the forests.
- - On-going coordination with research on the development of SWRCI, and contacts with State and Private Forestry, and other groups and agencies to ensure the development builds on the current state of knowledge.
- - Coordination with NRIS and Infra road user board on existing databases.
- - Partially completed photo guide of different road conditions.

Output:

Planned: -Complete photo guide of road conditions by 11/06.

-Finalize SWRCI rating form and complete description of indicators and their use by 11/06.

-Draft complete and ready for editing and publications by 12/06.

Actual: Completed SWRCI rating form.

-Finalizing support document of indicators for condition.

-Web Page developed to provide access to the project.

[Soil and Water Road Condition Index](#)
