



Technology & Development Status Report

Engineering Program

FY 2009



Date Last Edited: 7-16-2004

PROJECT: **Rehabilitation & Stabilization of Forest Roads** **CENTER:** [SDTDC](#)

Number: 4E41L48 **PROGRAM LEADER:** [Alan Yamada](#)

SPONSOR: [WO-ENG](#) **Project Leader:** Charles Aldrich

Proposer: Sandra Wilson-Musser

PROJECT OBJECTIVES

Many Forest Service Roads are past their design lives and are showing the effects of poor construction methods. These include methods such as improper subgrade preparation, sliver fills; woody debris in fills, lack of keys and benches, and paving over poorly prepared subgrades. As fill materials deteriorate, fills settle and creep, sometimes slide, pavements crack, and culverts corrode, leak or separate. Forests try to decommission unneeded roads, but many are still required for access. Most forests now work independently trying to stabilize and rehabilitate the roads. This project is to prepare a handbook listing typical situations/problems, various measures to handle them, evaluation procedures, design and construction complexity, relative cost, and comparative advantages and disadvantages of the rehab procedures. Many stabilization/rehab methods would be considered, including launched soil nails, deep patches, fill slope pullback, drain dips, water bars, AC pulverization, road re-alignment, geosynthetics, and other previously compiled Water-Road series material. The emphasis will be on lower cost alternatives. Information would be obtained from forests across US and contain methodologies and project specific data.

Changes to objectives:

SIGNIFICANT ACCOMPLISHMENTS

- Meeting held with project proposer and preliminary outline of report drafted. Request made to R5 and R6 engineers and geologists for possible applicable case studies. Other engineers will be queried.

Output:

Planned: Handbook summarizing useful and economical methods to rehabilitate and stabilize forest roads will be prepared.

Actual: