

Principal Investigators: Nutrient and Sediment Loading Predictions for Prescribed Fire Using Optimized WEPP Model

Principal Investigators: Drea Traeumer

Annual Accomplishments Update (October 1, 2008-September 30, 2009)[†]:

Annual accomplishments for Phase I/FY2009 (October 1, 2008 – September 30, 2009) include completion of all Phase I tasks to locally optimize the WEPP (Water Erosion Prediction Project) model, and to predict sediment and nutrient loadings for prescribe pile burning at the hillslope-scale. Phase I tasks completed during FY2009 include Fall and Spring field measurements using rainfall and rill simulators to optimize WEPP's most sensitive erodibility parameters, WEPP simulations using optimized WEPP to predict sediment and nutrient loadings at the hillslope-scale using return period analysis, and field measurements of sediment delivery from burn piles during naturally-occurring snowmelt and rainfall events for Spring and Summer 2009 to validate WEPP erosion predictions.

[†] This document is an intermediate progress report, not a final report; consequently, any results should be considered preliminary and should not be cited. Please contact the principal investigators or the Tahoe SNPLMA Science Program Coordinator if you have questions.