

EROSION PREDICTIONS AND OTHER RESOURCE ASSESSMENT METHODS

I. INTRODUCTION

This subsection is newly developed and is an expansion of the former “Erosion Prediction” subsection of the FOTG to include other prediction, assessment and evaluation tools and methods to address all the natural resources – i.e. soil, water, air, plant and animal resources – plus the human component (SWAPA+H).

The reorganization of USDA in 1994 resulted in an expansion of the mission of the former Soil Conservation Service (SCS) to become the Natural Resources Conservation Service (NRCS). As a result, the agency moved from its initial focus on soil and water resources to an expanded focus on all the natural resources – represented by SWAPA+H. The goals of the agency included addressing all the natural resources in a holistic and integrated way in order to arrive at sustainable conservation management systems, also known as resource management systems (RMSs).

There are numerous equations, models, and other tools available to help in evaluating resource conditions and the impacts of various alternatives developed during the planning process. The contents presented below are organized into three main sections: 1) Erosion Prediction Models, 2) Soil Conditioning Index, and 3) Other Resource Assessment Methods. This is just the beginning of expanding this subsection of the FOTG to provide information on the use of different assessment and evaluation tools and methods. We anticipate in the future, this subsection will contain much more, including water quality models, evaluation tools for rangeland condition, sediment transport models, watershed analysis techniques, and many other decision-support tools.