A large amount of data are being collected as part of the soil survey on the Wallowa-Whitman National Forest in northeast Oregon. Field work for the soil survey is being accomplished by a private contractor with Forest Service oversight and quality control. The contractor is required to collect numerous soil descriptions for each map unit within the contracted survey area. A detailed soil description for some of the timber inventory and ecology plots is also being collected. Soil and foliar samples are being collected at various points around the forest and laboratory analyses are being performed. During winter, the soil survey party leader and staff are responsible for managing, retrieving, and analyzing soil data.

In 1987, we began developing a user-friendly relational database, called Soils Resource Inventory Data System (SRIDS) to help manage the large amounts of soil information being collected and developed during the soil survey. This was done with assistance from the Pacific Northwest Region (R-6) Watershed Management Staff and contract computer programming support.

The database was designed to help in management of information required by the National Cooperative Soil Survey (NCSS) and promote sound management of National Forest System lands. This paper will describe SRIDS as it was developed on the Wallowa-Whitman National Forest and will provide examples of its use and application.

Database Description

The SRIDS database was designed to be user friendly. All levels of computer skills are found among Forest Service employees, so the system was developed with this in mind. The database consists of 17 different tables that comprise 11 primary data sets. It is estimated that there will be 4000 or more complete soil descriptions collected during the course of the survey. Additional information can be added to SRIDS at any time.

Field information is collected on FS Form 2500 (Rev. 2/86), SCS-Soils-232F Form, and on the Erosion Hazard Rating Form (EHR). Chemical and mechanical soils data are obtained from analyses completed at labs that meet NCSS Standards. Soil and foliar fertility data are also obtained from lab analysis of soil samples taken from each of the seed orchards located on the forest. Productivity data are obtained from forest timber in-