

Soil Moisture Monitoring –

The current condition is that there is a table in NASIS called the Site Observation Table and a child table called the Site Soil Moisture Table. These tables are designed to record multiple observations of soil moisture by layer rather than by horizon. These tables are designed to store moisture state information and percent moisture by volume and weight.

These tables have been under utilized to date. The following is a summary of observations in these and related tables to date (June 1, 2007):

168,805	Observed Moisture State (Site Soil Moisture Table)
608	Percent Soil Moisture by Volume (Site Soil Moisture Table)
0	Graviometric Soil Moisture (Site Soil Moisture Table)
12	Soil Moisture Tension (Site Soil Moisture Table)
87,261	Permeability (Pedon Horizon Table)
14,169	Ksat (Pedon Horizon Table)
667	Ksat Standard Deviation (Pedon Horizon Table)
32	Ksat Rep Value (Pedon Horizon Table)
491	Surface Water Depth (Site Observation Table)

Recommendation:

1. To provide training in the use of these tables.
2. Evaluate the current structure to determine which data elements may not be accommodated by the current structure
3. Evaluate the business requirements for storing these data elements
4. Evaluate the business requirements for storing methods, and models
5. Evaluate the inter-relationships between the raw data, the methods for extrapolation and the models for aggregation

Set up a working group to act upon the recommendations.

Forward the evaluations and recommendations to the Soil Business Analysis Group for consideration.