

SOILPREP VERSION 4.1 USERS GUIDE

Program Documentation

The program documentation is included in the SOILPREP.DOC file . More detailed information concerning the SOILPREP output data is included in the DRAINMOD Reference Report.

Program Purpose and Description

The SOILPREP program takes the values of saturated hydraulic conductivity and water content versus tension for each layer and creates the following data necessary as an input for the DRAINMOD computer program.

Green-Ampt infiltration parameters versus water table depth.

Volume drained versus water table depth.

Upward flux versus water table depth.

The program was written to simplify the soils data input into the DRAINMOD model. The output from SOILPREP is <filename>.sin which is input directly into the DRAINMOD model.

See the SOILPREP.DOC file for more information.

Hardware Requirements

The program requires an *IBM* or compatible computer.

Installing the Program

This program can be obtained by contacting the State Conservation Engineer. Copy the following files into the directory for DRAINMOD 5.1.

DMINPUT	EXE	39981	5-18-89	11:39a
FORTLEM	BAT	52	5-18-89	11:37a
FTLEM	BAT	60	2-14-89	4:41p
GILFORDS		2687	3-17-88	2:51p
GILSAMP	MQ	7489	2-14-89	4:07p
GILSAMP	SIN	1252	2-14-89	4:01p
GILSAMP	UPQ	4285	2-14-89	4:07p
GILSAMP	WTD	10013	2-14-89	4:06p
GRNAMPT	EXE	39015	5-18-89	11 :41a
MILNQRK	EXE	45617	5-18-89	11:42a
SOILPREP	BAT	2138	5-17-89	4:44p
SOILPREP	DOC	13109	8-03-89	2:12p
UPFLUX	EXE	42493	5-18-89	11:45a
WTVOLDRN	EXE	45153	5-18-89	11:45a

Input Data

Input data will need to be prepared as described in the file SOILPREP.DOC prior to running SOILPREP. This can be done, using a text editor such as COED. Data for preparing the soil input data can be obtained from the publications "Characterization Data for Selected Florida Soils," University of Florida - Institute of Food and Agricultural Sciences, Soil Science

Department - Soil Characterization Laboratory in Cooperation with U. S. Department of Agriculture - Natural Resources Conservation Service.

Soil input data have been prepared from the above publications and stored in SOILPREP input format in five books titled "Soil Characterization Data SOILPREP Format Book #." The required soils data for high water table soils for five of the six publications is included. Some soils included are not contained in the books. Some soil layers have been combined because data were missing for the moisture release curve. Information has been added which can be used when using DMSOIL program, such as clay activity. Data files can be copied from the diskette and input directly into SOILPREP or edited to suit on-site conditions.

The file naming convention for the soil data files is as follows:

Example file name: PINFSL49

[PIN] [FSL] [49]

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| county number as listed in soil characterization books

| abbreviated texture (Fine Sandy Loam)

| list three characters soils name (Pineda)

Running the Program

Prepare a dataset as described above. Do not put an extension on the filename. The dataset should be in the \DM51\INPUT51 directory. From the DM51\INPUT51 directory, type SOILPREP <filename>.

The program creates the necessary soils data for use in the DRAINMOD model.