# 10.11 Input Data Editor

1. Click this button to begin populating all input parameter fields in the "NPSM Input Data Editor" (Screen 10.11.1). In this window, you can access and edit each model parameter and corresponding value including the default parameter values from the default data file. The procedure for accessing and editing the model parameters is described in this section.

   The "Input Data Editor" window displays two sections. The upper section contains a hierarchical list of the module sections and parameters of the HSPF model. In this screen (screen 10.11.1), the three major modeling segments used to subdivide the watershed are shown—pervious land units (PERLND), impervious land units (IMPLND), and stream reaches (RCHRES). The lower section is a status box that displays the definition of the highlighted module or parameter. PERLND (Pervious land) contains all simulation modules associated with pervious land, IMPLND (Impervious land) contains all the simulation modules associated with impervious land units, and RCHRES (stream reaches and reservoirs) contains all the in-stream simulation modules.
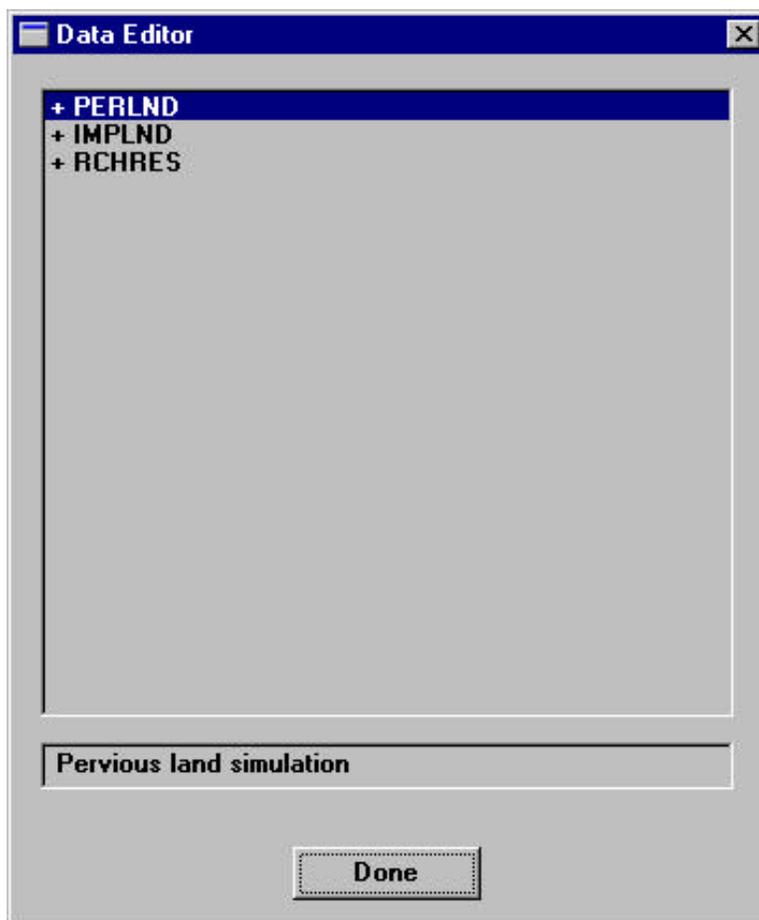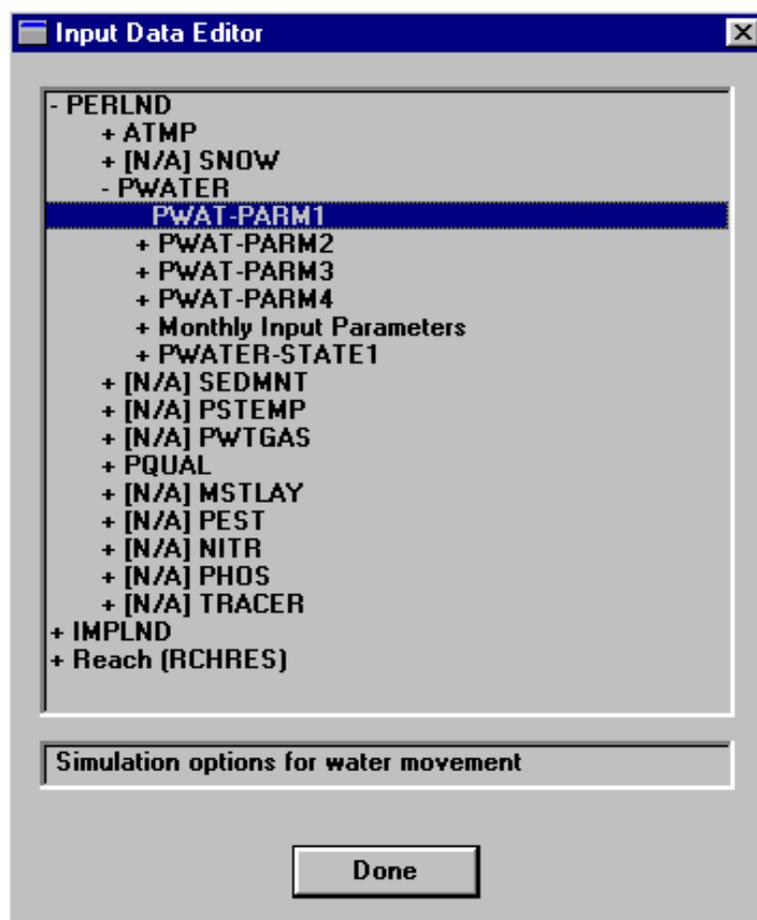

Screen 10.11.1

2. To view data for each of these model segments, double-click on a segment name. Notice that the "+" symbol next to the segment name becomes a "-" symbol and a list appears below the segment name.
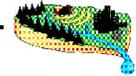
A "+" sign indicates that the item is expandable and more options are hidden under it. A "-" sign indicates that the item is already fully expanded. Double-click on an expanded item to hide the options under it.

For example, when "+PERLND" is double-clicked, it becomes "-PERLND" and the following list is shown: ATMP, SNOW, PWATER, SEDMNT, PSTEMP, PWTGAS, PQUAL, MSTLAY, PEST, NITR, PHOS, and TRACER. This list contains all of the HSPF modules associated with the segment name (PERLND, in this case). Each HSPF module that was not previously selected in the "NPSM Control Cards" window is designated with an "[N/A]". If, for example, you did not select to simulate snow in the "NPSM Control Cards" window, it appears as "+[N/A] SNOW" in this window. Observe also that these module names are designated with "+" symbols, meaning options are hidden.

3. Make sure "PWATER" has been selected in the "NPSM Control Card" window (i.e. "PWATER is preceded by a "+" rather than a "+[N/A]"). Double-click on "+PWATER" to expand the module/parameter list. The list under "PWATER" contains PWAT-PARM1, +PWAT-PARM2, +PWAT-PARM3, +PWAT-PARM4, +Monthly Input Parameters, and +PWATER-STATE1 (Screen 10.11.2). These are the major HSPF groups associated with the PWATER module. Notice that the first HSPF group, "PWAT-PARM1", is not designated with a "+" sign. Any item without a "+" or "-" designation is a data item. Double-clicking on a data item opens its editor window.
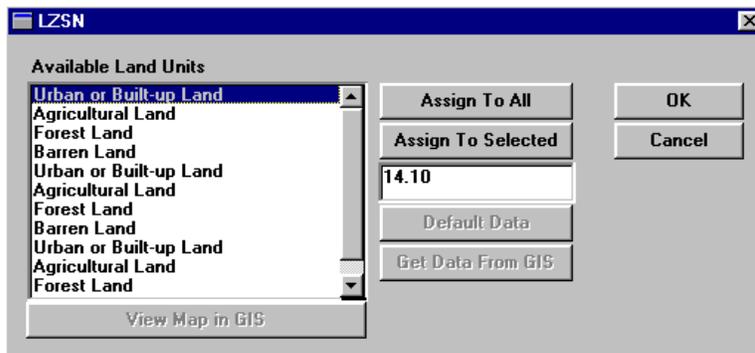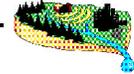

Screen 10.11.2

4. Double-clicking the "PWAT-PARM1" data item opens the "Simulation and Input Options (PWATER)" window (Screen 10.11.3). All current assignments on this window were made previously through default data assignment. Additional changes to any of these assignments can be made directly on the screen. Any changes made to these settings will be saved for the current project only. Click **OK** to save changes and exit the screen or **Cancel** to exit the screen without saving changes.

Tip: *Changes made to one parameter screen may require changes in another screen. For example, if a parameter is represented in the model as constant over time and you decide to convert its time-varying option to monthly, it is also necessary to provide the monthly values. Refer to* Hydrological Simulation Program - Fortran, User's Manual for Release 11.0 (Bicknell et al., 1996) *for a more detailed explanation of the model structure, data needs, and review of the simulation options.*

Screen 10.11.3

5. Note that the remaining HSPF group names under "PWAT-PARM1" are designated with "+" signs and therefore have more information hidden. Double-click on "+PWAT-PARM2". Notice that a list containing FOREST, LZSN, INFILT, LSUR, SLSUR, KVARY, and AGWRC appears. These are actual variable names that fall into the "PWAT-PARM2" HSPF group. They are data items and can be edited by double-clicking on the appropriate name.

6. Double-click on "LZSN" to open its editor window (Screen 10.11.4). Note that every land unit being simulated is listed in the "Available Land Units" box (only pervious land units, because this is the PERLND section). Highlighting each land unit name displays the assigned parameter value. These parameter values can be edited directly into this window for each land unit. Clicking **Assign to All** will assign the current value to all land units being simulated. Clicking **Assign to Selected** will assign the current value to the highlighted land unit. Click **OK** to save changes and exit the screen or **Cancel** to exit the screen without saving changes.

Screen 10.11.4

7. A similar procedure can be performed for every HSPF parameter in the PERLND, IMPLND, and RCHRES segments. To exit the "Input Data Editor", click **Done.**

Tip: *Individual data editor windows vary, but the functionality remains consistent. For pollutant-related variables, keep in mind that "Assign to All" assigns the current value for the selected pollutant to every possible land unit or reach, as well as every possible pollutant. "Assign to All Constituents" assigns the current value to the selected pollutant and all other pollutants for only the selected land unit or reach and all other land uses or reaches for the selected pollutant. "Assign to All Lands" assigns the current parameter value to the selected land units or reach and all other land units and reaches.*

Tip: *Appendix B of this manual contains an HSPF data dictionary that includes HSPF parameter names, definitions, units, and minimum and maximum acceptable values. This is a valuable resource for populating the "Input Data Editor". However, remember that the appropriate values for one land unit or a given pollutant might not be appropriate for another land unit or pollutant.*

Tip: *Any changes made within the "Input Data Editor" apply to only the current project. If you wish to make permanent changes, it is necessary to edit the default data file.*

Tip: *Beware of reassigning default data in the "Default Data Assignment" window after editing parameter values in the "Input Data Editor" window. Doing so will negate changes made in the "Input Data Editor". That is, changes made to land units, reaches, or pollutants in the "Default Data Assignment" screen will be saved over prior changes made in the "Input Data Editor" window.*

TUTORIAL

- *All data required for the current project are contained within the starter.def file. No changes need to be made in the "Input Data Editor".*