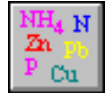
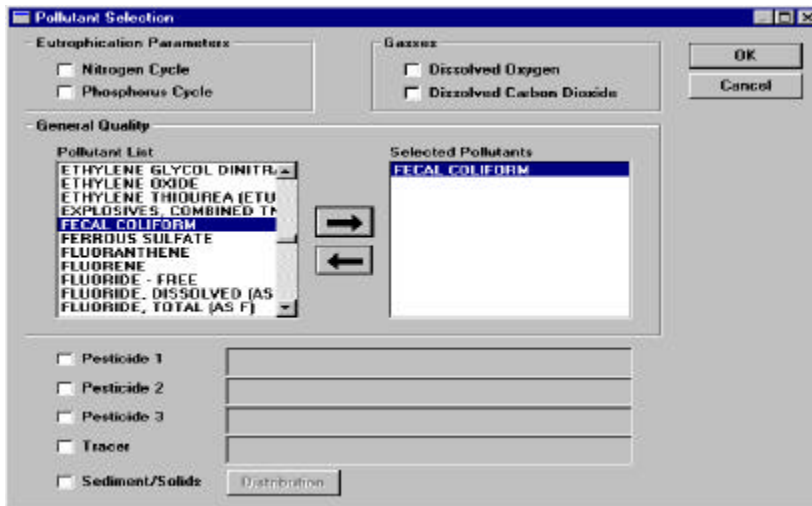


10.8 Pollutant Selection Screen



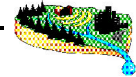
1. Click this button to open the “Pollutant Selection Screen” (Screen 10.8.1) and select the pollutants for modeling. This window is divided into the following sections: Eutrophication Parameters; Gasses; General Quality; Pesticides 1, 2, 3; Tracer; and Sediment/Solids.



Screen 10.8.1

2. In the “Eutrophication Parameters” section, the Nitrogen Cycle and/or the Phosphorus Cycle can be selected for simulation. If you select either of these, the appropriate HSPF modules for Pervious Land, Impervious Land, and Reaches must be selected and the appropriate parameter values must be developed in the default data set. Refer to Section 10.15 for how to create and edit default data files.
3. In the “Gasses” section, Dissolved Oxygen and/or Dissolved Carbon Dioxide can be selected. If you select either of these, the appropriate HSPF modules for Pervious Land, Impervious Land, and Reaches must be selected and the appropriate parameter values must be present in your default data set.
4. In the “General Quality” section, up to three parameters from the Pollutant List can be selected for a single simulation. A pollutant is selected by highlighting its name in the “Pollutant list” and clicking on the right arrow button or by simply double-clicking on the pollutant name. Once selected, the pollutant will appear in the “Selected Pollutants” box. If you wish to unselect a selected pollutant, highlight the pollutant name in the “Selected Pollutants” box and click on the left arrow. If any General Quality pollutants are selected, the appropriate HSPF modules must be selected for Pervious Land, Impervious Land, and Reaches. Additionally, required parameters must be defined for the pollutant in a default data set.

Tip: Clicking the mouse on any name in the Pollutant List and typing any letter of the alphabet will move you to the list of pollutants beginning with that letter.



- Up to three pesticides and one tracer can be simulated by clicking the box next to the name and entering a user-specified pesticide or tracer name. Once again, the appropriate HSPF modules must be selected for Pervious Land, Impervious Land, and Reaches and required parameters must be defined for the pesticide(s) and/or tracer in a default data set.
- Sediment and solids can be simulated by checking the “Sediment/Solids” box. If this selection is made, you must click the **Distribution** button and populate the “Sediment/Solids Distribution” table (Screen 10.8.2).

This screen requires you to enter Sand, Silt, and Clay fractions for sediment in each land unit in each watershed being modeled. This is done by clicking on a cell and entering a value between 0 and 1. The Sand, Silt, and Clay fractions must add up to 1 for each land unit. The appropriate HSPF modules must be selected for Pervious Land, Impervious Land, and Reaches and required parameters must be defined for sediment modules in a default data set. Click **OK** to save any changes and leave this window or **Cancel** to leave the window without saving changes.

	Land Use Name	Watershed ID	Sand	Silt	Clay
1	Urban or Built-up Land	05010007014	0.00	0.00	0.00
2	Agricultural Land	05010007014	0.00	0.00	0.00
3	Forest Land	05010007014	0.00	0.00	0.00
4	Barren Land	05010007014	0.00	0.00	0.00
5	Urban or Built-up Land	05010007012	0.00	0.00	0.00
6	Agricultural Land	05010007012	0.00	0.00	0.00
7	Forest Land	05010007012	0.00	0.00	0.00
8	Barren Land	05010007012	0.00	0.00	0.00
9	Urban or Built-up Land	05010007013	0.00	0.00	0.00
10	Agricultural Land	05010007013	0.00	0.00	0.00
11	Forest Land	05010007013	0.00	0.00	0.00
12	Barren Land	05010007013	0.00	0.00	0.00
13	Urban or Built-up Land	05010007014	0.00	0.00	0.00
14	Urban or Built-up Land	05010007012	0.00	0.00	0.00

Fraction (0.00 - 1.00) of sediment/solids that are Sand

Screen 10.8.2

- Once all pollutants have been selected for the simulation, click **OK** to save any changes and leave this window or **Cancel** to leave the window without saving changes.

Tip: To model a pollutant, the appropriate HSPF modules for Pervious Land, Impervious Land, or Reaches must be selected and an NPSM default file containing required pollutant parameter values must be developed. A starter default file packaged with BASINS contains uncalibrated parameter values for a number of General Quality parameters. The parameters for these pollutants have been defined for the BASINS default land use classification (the lumped Anderson Level II classification). Note that to simulate additional pollutants, it is necessary to set up and populate a default data set for appropriate pollutants, land use types, and reaches. Procedures for developing a default data set are defined in Section 10.15.

TUTORIAL

- *Select FECAL COLIFORM as the General Quality pollutant to model.*