CHAPTER 21

SWAT INPUT DATA: .WUS

Consumptive water use is a management tool that removes water from the basin. This file is used to simulate removal of water for irrigation outside the watershed or removal of water for urban/industrial use. Water removed for consumptive use is considered to be lost from the system. SWAT allows water to be removed from the shallow aquifer, the deep aquifer, the reach or the pond within any subbasin in the watershed. Water also may be removed from reservoirs for consumptive use (see .res file, Chapter 29).

Consumptive water use is allowed to vary from month to month. For each month in the year, an average daily volume of water removed from the source is specified.

Following is a brief description of the variables in the water use input file. They are listed in the order they appear within the file.

Variable name	Definition
TITLE	The first three lines of the .wus file are reserved for user comments. The comments may take up to 80 spaces on each line. The title lines are not processed by the model and may be left blank. Optional.
WUPND(mon)	Average daily water removal from the pond for the month (10^4 m^3/day). Optional.
WURCH(mon)	Average daily water removal from the reach for the month (10^4 m^3/day). Optional.
WUSHAL(mon)	Average daily water removal from the shallow aquifer for the month (10^4 m^3/day). Optional.
WUDEEP(mon)	Average daily water removal from the deep aquifer for the month (10^4 m^3/day). Optional.

The format of the water use file is:

Variable name	Line #	Position	Format	F90 Format
TITLE	1-3	space 1-80	character	a80
WUPND(1)	4	space 1-10	decimal (xxxxxxxx.x)	f10.1
WUPND(2)	4	space 11-20	decimal (xxxxxxxx.x)	f10.1
WUPND(3)	4	space 21-30	decimal (xxxxxxxx.x)	f10.1
WUPND(4:)	4	space 31-40	decimal (xxxxxxxx.x)	f10.1
WUPND(5)	4	space 41-50	decimal (xxxxxxxx.x)	f10.1
WUPND(6)	4	space 51-60	decimal (xxxxxxxx.x)	f10.1

Variable name	Line #	Position	Format	F90 Format
WUPND(7)	5	space 1-10	decimal (xxxxxxxx.x)	f10.1
WUPND(8)	5	space 11-20	decimal (xxxxxxxx.x)	f10.1
WUPND(9)	5	space 21-30	decimal (xxxxxxxx.x)	f10.1
WUPND(10)	5	space 31-40	decimal (xxxxxxxx.x)	f10.1
WUPND(11)	5	space 41-50	decimal (xxxxxxxx.x)	f10.1
WUPND(12)	5	space 51-60	decimal (xxxxxxxx.x)	f10.1
WURCH(1)	6	space 1-10	decimal (xxxxxxxx.x)	f10.1
WURCH(2)	6	space 11-20	decimal (xxxxxxxx.x)	f10.1
WURCH(3)	6	space 21-30	decimal (xxxxxxxx.x)	f10.1
WURCH(4)	6	space 31-40	decimal (xxxxxxxx.x)	f10.1
WURCH(5)	6	space 41-50	decimal (xxxxxxxx.x)	f10.1
WURCH(6)	6	space 51-60	decimal (xxxxxxxx.x)	f10.1
WURCH(7)	7	space 1-10	decimal (xxxxxxxx.x)	f10.1
WURCH(8)	7	space 11-20	decimal (xxxxxxxx.x)	f10.1
WURCH(9)	7	space 21-30	decimal (xxxxxxxx.x)	f10.1
WURCH(10)	7	space 31-40	decimal (xxxxxxxx.x)	f10.1
WURCH(11)	7	space 41-50	decimal (xxxxxxxx.x)	f10.1
WURCH(12)	7	space 51-60	decimal (xxxxxxxx.x)	f10.1
WUSHAL(1)	8	space 1-10	decimal (xxxxxxxx.x)	f10.1
WUSHAL(2)	8	space 11-20	decimal (xxxxxxxx.x)	f10.1
WUSHAL(3)	8	space 21-30	decimal (xxxxxxxx.x)	f10.1
WUSHAL(4)	8	space 31-40	decimal (xxxxxxxx.x)	f10.1
WUSHAL(5)	8	space 41-50	decimal (xxxxxxxx.x)	f10.1
WUSHAL(6)	8	space 51-60	decimal (xxxxxxxx.x)	f10.1
WUSHAL(7)	9	space 1-10	decimal (xxxxxxxx.x)	f10.1
WUSHAL(8)	9	space 11-20	decimal (xxxxxxxx.x)	f10.1
WUSHAL(9)	9	space 21-30	decimal (xxxxxxxx.x)	f10.1
WUSHAL(10)	9	space 31-40	decimal (xxxxxxxx.x)	f10.1
WUSHAL(11)	9	space 41-50	decimal (xxxxxxxx.x)	f10.1
WUSHAL(12)	9	space 51-60	decimal (xxxxxxxx.x)	f10.1
WUDEEP(1)	10	space 1-10	decimal (xxxxxxxx.x)	f10.1
WUDEEP(2)	10	space 11-20	decimal (xxxxxxxx.x)	f10.1
WUDEEP(3)	10	space 21-30	decimal (xxxxxxxx.x)	f10.1
WUDEEP(4)	10	space 31-40	decimal (xxxxxxxx.x)	f10.1

Variable name	Line #	Position	Format	F90 Format
WUDEEP(5)	10	space 41-50	decimal (xxxxxxxx.x)	f10.1
WUDEEP(6)	10	space 51-60	decimal (xxxxxxxx.x)	f10.1
WUDEEP(7)	11	space 1-10	decimal (xxxxxxxx.x)	f10.1
WUDEEP(8)	11	space 11-20	decimal (xxxxxxxx.x)	f10.1
WUDEEP(9)	11	space 21-30	decimal (xxxxxxxx.x)	f10.1
WUDEEP(10)	11	space 31-40	decimal (xxxxxxxx.x)	f10.1
WUDEEP(11)	11	space 41-50	decimal (xxxxxxxx.x)	f10.1
WUDEEP(12)	11	space 51-60	decimal (xxxxxxxx.x)	f10.1