d:\swatplus\_javaforge\Rev31\_docs

**REVISION 31 – March 6, 2017**

1. NEW\_INPUT\_FILES

Contains a list of new input files that are being tested.

1. NEW\_OUTPUT\_FILES

Contains a list of new output files being review.

1. Existing output files

List of changes in output files

1. Existing input files

List of changes in input files

1. Other

Other files that were modified in this revision.

1. **NEW INPUT FILES**

codes.cal

cal\_parms.cal

calibration.cal

ls\_parms.cal

ls\_regions.cal

ch\_orders.cal

ch\_parms.cal

ls\_catunit.ele

ls\_catunit.def

ls\_reg.def

ls\_cal.reg

ch\_catunit.ele

ch\_catunit.def

ch\_reg.def

aqu\_catunit.ele

aqu\_catunit.def

aqu\_reg.def

res\_catunit.ele

res\_catunit.def

res\_reg\_def

rec\_catunit.ele

rec\_catunit.def

rec\_reg.def

1. **NEW OUTPUT FILES**

hru-out.cal

hru-new.cal

hru-lte-out.cal

hru-lte-new.cal

bsn\_aqu.out

bsn\_aqu\_aa.out

bsn\_res.out

bsn\_res\_aa.out

bsn\_chan.out

bsn\_chan\_aa.out

bsn\_rec.out

bsn\_rec\_aa.out

bsn\_chan.out

bsn\_sd\_chan.out

bsn\_res.out

1. **EXISTING OUTPUT FILES**

None

1. **EXISTING INPUT FILES**

**FILE.CIO:**

The FILE.CIO file has had some minor changes and additions.

1. INPUT\_ SCH (SCH) Section:

Added **STRUCTURAL.SCH** file to list of filenames:

EX: SCH management.sch structural.sch

1. INPUT\_CHG (CHG – Renamed to UPDATE) Section:

Added files to the UPDATE section

EX: UPDATE

codes.cal cal\_parms.cal calibration.cal ls\_parms.cal ls\_regions.cal ch\_orders.cal ch\_parms.cal

(Previously file included LS\_REGIONS\_LTE.CAL, which has been deleted)

1. INPUT\_REGIONS (REGIONS) added at the end of file:

EX: REGIONS (on one line)

ls\_catunit.ele ls\_catunit.def ls\_reg.def ls\_cal.reg ch\_catunit.ele ch\_catunit.def ch\_reg.def aqu\_catunit.ele aqu\_catunit.def aqu\_reg.def res\_catunit.ele res\_catunit.def res\_reg\_def rec\_catunit.ele rec\_catunit.def rec\_reg.def

**PRINT.PRT:**

The PRINT.PRT file has a new look, previously reading all variables 0-3 codes on a single line. The new file is read in as characters (‘avann’, ‘year’, ‘mon’, ‘day’ and ‘no’, ‘yes’ for CSVOUT/FDCOUT ONLY) and by sections making it easier to read and understand.

An example of the new print.prt file is as follows and DESCRIPTIONS of all the inputs in the files are listed below:

print.prt: Output print settings

NYSKIP JD\_START JD\_END YR\_START YR\_END INTERVAL

0 1 366 1988 2012 1

AA\_NUMINT

3 1900 1940 1975

OBJECTS WATBAL NUTBAL LOSSES PL/WEAT AQU RES CHAN PTSRC

basin year avann avann year avann avann avann null

region null null null null null null null null

subbasin mon avann avann mon

hru mon avann avann mon

hru-lte null null null null

chan avann

aqu avann

res avann

hyd null

HYDCON null

SOLOUT null

MGTOUT null

CSVOUT no

FDCOUT no

DESCRIPTIONS OF INPUT VARIABLES IN PRINT.PRT:

!! PRINT CODES: 'avann' = average annual (always print)

!! 'year' = yearly

!! 'mon' = monthly

!! 'day' = daily

nyskip !! number of years to skip output summarization

**! DAILY START/END AND INTERVAL**

jd\_start !! julian day to start printing output

jd\_end !! julian day to end printing output

yr\_start !! calendar year to start printing output

yr\_end !! calendar year to end printing output

interval !! interval between daily printing within period

**! AVE ANNUAL END YEARS**

aa\_numint !! number of print intervals for ave annual output

aa\_yrs !! end years for ave annual output

wb\_bsn !! water balance BASIN output

nb\_bsn !! nutrient balance BASIN output

ls\_bsn !! losses BASIN output

pw\_bsn !! plant weather BASIN output

aqu\_bsn !! aquifer BASIN output

res\_bsn !! reservoir BASIN output

chan\_bsn !! channel BASIN output

recall\_bsn !! recall (point source) BASIN output

sd\_chan\_bsn !! swat deg (lte) BASIN output

**! REGION**

wb\_reg !! water balance REGION output

nb\_reg !! nutrient balance REGION output

ls\_reg !! losses REGION output

pw\_reg !! plant weather REGION output

aqu\_reg !! aquifer REGION output

res\_reg !! reservoir REGION output

chan\_reg !! channel REGION output

recall\_reg !! recall (point source) REGION output

sd\_chan\_reg !! swat deg (lte) REGION output

**! SUBBASIN**

wb\_sub !! water balance SUBBASIN output

nb\_sub !! nutrient balance SUBBASIN output

ls\_sub !! losses SUBBASIN output

pw\_sub !! plant weather SUBBASIN output

**! HRU**

wb\_hru !! water balance HRU output

nb\_hru !! nutrient balance HRU output

ls\_hru !! losses HRU output

pw\_hru !! plant weather HRU output

**! HRU-LTE**

wb\_sd !! water balance SWAT-DEG output

nb\_sd !! nutrient balance SWAT-DEG output

ls\_sd !! losses SWAT-DEG output

pw\_sd !! plant weather SWAT-DEG output

**! CHANNEL**

chan !! channel output

**! AQUIFER**

aqu !! aqufier output

**! RESERVOIR**

res !! reservoir output

**! RECALL**

recall !! recall output

**! HYDIN AND HYDOUT**

hyd !! hydin\_output and hydout\_output

**! HYD CONNECT OUTPUT**

hydcon !! hydrograph connect output file (hydcon.out)

solout !! soils output file (soils.out)

mgtout !! management output file (mgt.out)

csvout !! code to print .csv files no=no print; yes=print;

fdcout !! flow duration curve output null=no print; avann=print;

1. **OTHER**