**Revision 692 – November 14, 2023**

NOTE: The following changes were made to this version:

**main.f** - date change of revision;

The following changes were made to fix the rooting depth issue that was found in the HAWQS simulations.

Email notes: We found that the limitation (example 2000.0 printed in the ‘input.std’ file when it was actually 2030.0 in the \*.sol file) was coming from the ‘rdmx’ (max rooting depth; input in meters) in ‘plants.plt’.

Jeff wasn’t satisfied with the original coding of this and has made a few changes in the SWAT code.

**plantop.f -**

These statements were commented:

!nly = sol\_nly(j)

!sol\_zmx(ihru) = sol\_z(nly,j)

!plt\_zmx = 1000. \* rdmx(idplt(j))

!sol\_zmx(ihru) = Min(sol\_zmx(ihru),plt\_zmx)

**readsol.f -**

These statements were comments:

!if (sol\_zmx(ihru) <= 0.001) sol\_zmx(ihru) = sol\_z(nly,ihru)

!plt\_zmx = 0.

!if (idplt(ihru) > 0) then

! if (idc(idplt(ihru)) > 0) then

! plt\_zmx = 1000. \* rdmx(idplt(ihru))

! end if

!end if

!if (sol\_zmx(ihru) > 1. .and. plt\_zmx > 1.) then

! sol\_zmx(ihru) = Min(sol\_zmx(ihru),plt\_zmx)

!else

...

! sol\_zmx(ihru) = Max(sol\_zmx(ihru),plt\_zmx)

!end if

**swu.f –**

This whole section of code edited for the root depth problem;

real :: rdmax

...

if (idplt(j) > 0) then

rdmax = min (sol\_zmx(j), 1000. \* rdmx(idplt(j)))

else

rdmax = sol\_zmx(j)

end if

...

sol\_rd = 2.5 \* phuacc(j) \* rdmax

if (sol\_rd > rdmax) sol\_rd = rdmax

...

sol\_rd = rdmax

**routres.f** - commented line change - misspelled reservoir;