

Running SFWMM Hydrologic Performance Measure (HPM) Graphics

Ken Tarboton, Ph.D., P.E.

Luis G. Cadavid, Ph.D., P.E.

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Running SFWMM PMs

What is a performance Measure Set?

- A PM set compares output from several model runs among themselves and with Natural System Model output

Running SFWMM PMs

Steps to run a PM set

1. Create directory in which to save PM set
e.g. PM_ALT1_ALT2_ALT3_ALT4_ALT5
2. Copy performance measure run control file
(.sfwmrc) into that directory
3. Make changes to .sfwmrc
4. On the command line in PM set directory, type
 - sfwmm_pm.scr grp1 grp2 grp3 grp4 grp5
 - Any combination of groups will work
 - grp2 grp3
 - grp1 grp4 grp3 etc

Running SFWMM PMs

What does `sfwmm_pm.scr` do ?

- Source `.sfwmmrc` file
- Check for successful completion of SFWMM runs (`rundone` file), then starts PM graphics
- Create links for required tapes

tape32 -> `methly_levee_spg.dat`

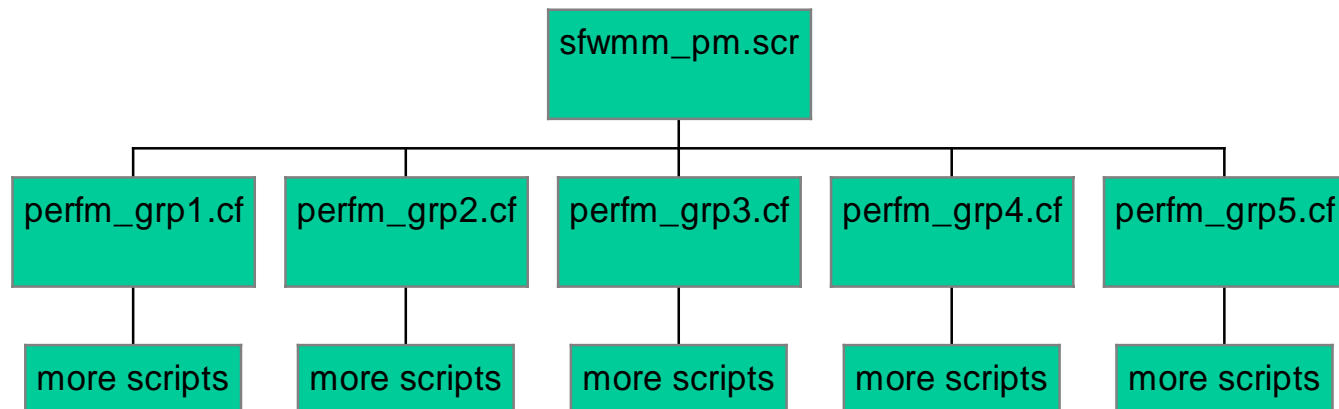
tape76 -> `daily_stg_mon_pts.dat`

tape61 -> `losa_dmnd_runff_supply.dat`

tape78 -> `daily_canal_stg.dat`

- Mail users - starting PM graphics
- Triggers groups of scripts (sequentially)
- Mail users on completion of PM graphics
- Creates error report files (`pm_errout.grp1` etc)

Running SFWMM PMs



See HSM Script Library Table for more details on Scripts

Running SFWMM PMs

The .sfwmmrc file:

Defines all the resources (environment variables) necessary to run any PM script

- unsets environment variables

user updates

- paths to runs
- legends
- axis labels
- current, future or future with reservoirs

Running SFWMM PMs

user updates continued

- current, future or future with reservoirs
- set mode of flow to ENP
- hydroperiod improvement title
- hydroperiod comparisons
- hardcopies
- time frame
- mail list

Running SFWMM PMs

user updates continued

- LOK historical data
- Notes for graphics - disclaimer, version etc
- topo binary files
- input files
- dmdro2x2 files
- EAA water budget control file

Running SFWMM PMs

Running a single script:

- In your own `.login` or `.cshrc` files, have the following
 - `setenv scriptPath /vol/hsm/scripts/solaris/sfwmm-pm-graphics`
- `cd` PM set directory
- `source .sfwmmrc`
- use `/newhomes/cadavid/scripts/f_scr` to find input command line to run script
- copy and paste resulting line from `f_scr` line on command line

Running SFWMM PMs

Other Tips

- Note - all graphics in directory are deleted
- Run in separate directories to speed up process
- Running more than one PM set at a time can cause conflicts with map generation - may need to clear work space

```
/vol/hsm/bin/solaris/sfwmm_pm.scr
```

```
#!/bin/csh -f
```

```
#SCCSID = "@(#)sfwmm_pm.scr 1.10 02/22/02 SFWMD Planning Department, HSM Division"
```

```
# cshell script to start PM graphics.
```

```
# Author: Kris Krishnan, LEC Planning 8/3/94
```

```
# Usage: sfwmm_pm.scr [grp1] [grp2] [grp3] [grp4] [grp5] [wsup] [env]
```

```
# "sfwmm_pm.scr grp1" will start only grp1 PMs.
```

```
# "sfwmm_pm.scr grp1 grp2" will start both grp1 & grp2 PMs.
```

```
# "sfwmm_pm.scr grp1 grp2 grp3 grp4 grp5" will start both grp1, grp2, grp3, grp4 and grp5 PMs sequentially.
```

```
# "sfwmm_pm.scr wsup" will start all water supply PMs.
```

```
# "sfwmm_pm.scr env" will start all environmental PMs.
```

```
# The program gets all the active SFWMM output paths that are to  
# be compared in the PM graphics from the .sfwmmrc file in  
# the current directory. It then tests the existence of the  
# "rundone" file in those output directories (tests every 15 minutes).  
# If "rundone" file exists in all the paths that are active, the PM graphics  
# program is started.
```

```
#  
# THE FOLLOWING SHOULD BE DONE BEFORE RUNNING THE SCRIPT:  
#  
# 1) Create a file space where you want the PM graphics output to be  
# (delete all existing *.out & *.fig files).  
# 2) Copy .sfwmmrc file to this filespace from ~nkrishna/.sfwmmrc  
# 3) Update this file (see directions given in this file).  
# 5) If you execute this script on another host using rlogin,  
# THEN SET THE ENVIRONMENT VARIABLE DISPLAY to the parent host.  
# BEFORE STARTING THIS SCRIPT.  
# 4) run the script (use "at" command if you want to start this  
# script at a later time).
```

```
#temporary addition to retain compatiblity with old .sfwmmrc files
```

```
#added by Dave welter 1/8/97
```

```
unsetenv SFWMM_START_YR  
unsetenv SFWMM_START_MONTH  
unsetenv SFWMM_START_DAY  
unsetenv SFWMM_END_YR  
unsetenv SFWMM_END_MONTH  
unsetenv SFWMM_END_DAY  
unsetenv SFWMM_START_YR_TM  
unsetenv SFWMM_START_MONTH_TM  
unsetenv SFWMM_START_DAY_TM  
unsetenv SFWMM_END_YR_TM  
unsetenv SFWMM_END_MONTH_TM  
unsetenv SFWMM_END_DAY_TM  
unsetenv SFWMM_MIDDLE_YR_TM  
setenv SFWMM_START_YR 1965  
setenv SFWMM_START_MONTH 1
```

```
setenv SFWMM_START_DAY 1
setenv SFWMM_END_YR 1990
setenv SFWMM_END_MONTH 12
setenv SFWMM_END_DAY 31
setenv SFWMM_START_YR 1965
setenv SFWMM_START_YR_TM 1965
setenv SFWMM_START_MONTH_TM 1
setenv SFWMM_START_DAY_TM 1
setenv SFWMM_END_YR_TM 1990
setenv SFWMM_END_MONTH_TM 12
setenv SFWMM_END_DAY_TM 31
setenv SFWMM_MIDDLE_YR_TM 1977

set scriptPath = /vol/hsm/scripts/solaris/sfwmm-pm-graphics

#Only allow scripts to run under solaris
set operating_system = `uname -r | awk -F. '{print $1}'`
set solaris = 5
set sunos = 4
if ( $operating_system == 4 ) then
    echo "The Performance Measure Graphics must be run under Solaris"
    echo "Please rlogin onto a Solaris machine and try again"
    exit
endif
unset operating_system
unset solaris
unset sunos

clear

if( $#argv == 0 ) then
    echo ""
    echo "Usage: sfwmm_pm.scr [grp1] [grp2] [grp3] [grp4] [grp5] [wsup] [env]"
    echo "grp1 is Performance Measure Graphics in group 1"
    echo "grp2 is Performance Measure Graphics in group 2"
    echo "grp3 is Performance Measure Graphics in group 3"
    echo "grp4 is Performance Measure Graphics in group 4"
    echo "grp5 is Performance Measure Graphics in group 5"
    echo "wsup is Performance Measure Graphics for all Water Supply"
    echo "env is Performance Measure Graphics for all Environmental"
    echo "Try again."
    echo ""
    exit
endif

#give a warning
echo ""
echo ""
echo "***** IF YOU ARE EXECUTING THIS SCRIPT FROM ANOTHER MACHINE"
echo "***** USING rlogin, THEN SET THE ENVIRONMENT VARIABLE DISPLAY"
echo "***** TO THE PARENT HOST BEFORE STARTING THIS SCRIPT."
echo ""
```

```

echo ""

# store the argv in a var for mail file
set groups = ($argv)

# if only one argument, set the 2nd,3rd,4th& 5th argument to 0
if ($#argv == 1) then
  set argv = ($argv[1] 0 0 0 0)
endif
if ($#argv == 2) then
  set argv = ($argv[1] $argv[2] 0 0 0)
endif
if ($#argv == 3) then
  set argv = ($argv[1] $argv[2] $argv[3] 0 0)
endif
if ($#argv == 4) then
  set argv = ($argv[1] $argv[2] $argv[3] $argv[4] 0)
endif
if ($#argv == 5) then
  set argv = ($argv[1] $argv[2] $argv[3] $argv[4] $argv[5])
endif
#echo $argv

#chk for the existence of .sfwmmrc file in the cwd
if (! -e .sfwmmrc) then
  echo '.sfwmmrc file NOT FOUND in the current directory.\
For a copy of this file, see /home/kissimnee/nkrishna/.sfwmmrc'.
  echo "*** ABORTING...."
  echo ""
  exit 1
endif

#get the ENVIRONMENT variables from .sfwmmrc file
source .sfwmmrc
#echo $SFWMM_RUN1 $SFWMM_RUN2 $SFWMM_RUN3 $SFWMM_RUN4
#set run1 = `grep -e "SFWMM_RUN1 " .sfwmmrc | awk '{print $3}' | sed -e s/'"'/g`
set run1 = `echo $SFWMM_RUN1 | sed -e s/'"'/g`
set run2 = `echo $SFWMM_RUN2 | sed -e s/'"'/g`
set run3 = `echo $SFWMM_RUN3 | sed -e s/'"'/g`
set run4 = `echo $SFWMM_RUN4 | sed -e s/'"'/g`
set run5 = `echo $SFWMM_RUN5 | sed -e s/'"'/g`

#get the printer name
if(-e ~/.xvgrrc ) goto 1
if(! -e ~/.xvgrrc) goto 2

1:
# get the user defined printer name
set print = ""
grep -n PRINT ~/.xvgrrc > /tmp/print$$
@ line = 1
foreach i (`cat /tmp/print$$`)
  set a = `echo $i | cut -c3`
  if( $a != "#" ) then

```

```

    set print = (`sed -n ${line},${line}p /tmp/print$$ | awk '{print $5}' `)
    set print = `echo $print | cut -c3- | sed -e s/' '//`
    set print = $print
    endif
    if($a == "#") then
        @ line ++
    endif
end
goto print

2:
    # default printer is garfield
    set print = "garfield"

print:
if($print == "") set print = "garfield"

set hardcopy = `echo $HARDCOPY_YES_NO | sed -e s/' '//g`
if($hardcopy == "Y") set mail_hardcopy = "Hard copies generated on $print."
if($hardcopy == "N") set mail_hardcopy = "No hard copies generated."
# echo $run1 $run2 $run3 $run4 $run5

#get the cwd
    set curwd = $cwd
jump:

# set default run status
set run1stat = "Done"
set run2stat = "Done"
set run3stat = "Done"
set run4stat = "Done"
set run5stat = "Done"

# if run1 is active, look for the existence of the rundone file
    if ($#run1 != 0) then
        chdir $run1
    # echo $cwd
        if(-e rundone) set run1stat = "Done"
        if(! -e rundone) set run1stat = "Notdone"
        echo RUN $run1 '---' $run1stat
    endif

# if run2 is active, look for the existence of the rundone file
    if ($#run2 != 0) then
        chdir $run2
    # echo $cwd
        if(-e rundone) set run2stat = "Done"
        if(! -e rundone) set run2stat = "Notdone"
        echo RUN $run2 '---' $run2stat
    endif

# if run3 is active, look for the existence of the rundone file
    if ($#run3 != 0) then
        chdir $run3

```

```

# echo $cwd
  if(-e rundone) set run3stat = "Done"
  if(! -e rundone) set run3stat = "Notdone"
  echo RUN $run3 '---' $run3stat
endif

# if run4 is active, look for the existence of the rundone file
if ($#run4 != 0) then
  chdir $run4
# echo $cwd
  if(-e rundone) set run4stat = "Done"
  if(! -e rundone) set run4stat = "Notdone"
  echo RUN $run4 '---' $run4stat
endif

# if run5 is active, look for the existence of the rundone file
if ($#run5 != 0) then
  chdir $run5
# echo $cwd
  if(-e rundone) set run5stat = "Done"
  if(! -e rundone) set run5stat = "Notdone"
  echo RUN $run5 '---' $run5stat
endif

echo ""

#echo $run1stat $run2stat $run3stat $run4stat $run5stat

#get back to original filespace
chdir $curwd

# if all the active runs are done (passive runs are done by
# default) then start the PM graphics
if( $run1stat == "Done" && $run2stat == "Done" && $run3stat == "Done" && $run4stat == "Done" && $run5stat == "Done" ) then
#
#The following revision was made 6/11/97 by mtp
#set up links for newer versions of SFWMM 3.3 and above
#
set SFWMMNAMES = ($SFWMM_RUN1 $SFWMM_RUN2 $SFWMM_RUN3 $SFWMM_RUN4 $SFWMM_RUN5)
set TAPENAMES = (tape32 tape61 tape78 tape76)
set FILENAMES = (mthly_levee_spg.dat losa_dmnd_runff_supply.dat daily_canal_stg.dat daily_stg_mon_pts.dat)
#echo $TAPENAMES[1] $TAPENAMES[2] $TAPENAMES[3] $TAPENAMES[4]
#echo $FILENAMES[1] $FILENAMES[2] $FILENAMES[3] $FILENAMES[4]
#echo $SFWMMNAMES[1] $SFWMMNAMES[2]
@ loopcount = $#SFWMMNAMES - 1
#echo "loopcount is $loopcount"
@ namecount = $#TAPENAMES - 1
#echo "namecount is $namecount"
@ count = 0
#echo $count
while ( $count <= $loopcount )
@ count++
#echo $count
echo $SFWMMNAMES[$count]

```

```

@ names = 0
while ( $names <= $namecount )
  @ names++
  if(! -e $SFWMMNAMES[$count]/$TAPENAMES[$names])then
    echo "DOING..."
    echo $SFWMMNAMES[$count]/$TAPENAMES[$names]
    if( -e $SFWMMNAMES[$count]/$FILENAMES[$names])then
      echo "MAKING symbolic links for ....."
      echo $SFWMMNAMES[$count]/$FILENAMES[$names]
      ln -s $SFWMMNAMES[$count]/$FILENAMES[$names] $SFWMMNAMES[$count]/$TAPENAMES[$names]
    else
      echo "*****"
      echo "$SFWMMNAMES[$count]/$FILENAMES[$names] not available in $SFWMMNAMES[$count]"
      echo " AND $SFWMMNAMES[$count]/$TAPENAMES[$names] does not exist for this run"
#      echo "Aborting this run of PMGRAPHICS"
#      echo "*****"
      exit 1
    endif
  endif
end
#echo $count
end

#end of 6/11/97 update --- mtp

#
# Mail list
#
set mlist = ( $user $SFWMM_ML )

@ i=1

while ( $i <= $#mlist )
  set mlist[$i] = $mlist[$i]"@sfwmd.gov"
  @ i++
end

echo "Starting Performance Measure Graphics Post-Processor..."
echo "All error messages, if any, will be saved in the 'pm_errout.xxxx' file in the CWD."
#delets existing files
echo "First, deleting all existing files..."
/usr/bin/rm -r *
#send mail to guys in the mailing list that PM graphics have been initiated
echo PM graphics program for the group'(s)' $groups has been initiated on `hostname` on `date`\
in the filespace '$curwd'.'. The runs being compared are $run1 $run2 $run3 $run4 $run5. $mail_hardcopy\
| mailx -r $user"@sfwmd.gov" -s "$curwd:t $groups PM graphics started on `hostname`" $mlist
if ( $argv[1] == "grp1" || $argv[2] == "grp1" || $argv[3] == "grp1" || $argv[4] == "grp1" || $argv[5] == "grp1") then
  echo "Starting Group1 Performance Measure Graphics ..."
  ($scriptPath/control_files/exec/perfm_grp1.cf > /dev/null) >&! pm_errout.grp1
endif
if ( $argv[1] == "grp2" || $argv[2] == "grp2" || $argv[3] == "grp2" || $argv[4] == "grp2" || $argv[5] == "grp2") then
  echo "Starting Group2 Performance Measure Graphics ..."
  ($scriptPath/control_files/exec/perfm_grp2.cf > /dev/null) >&! pm_errout.grp2

```



```

endif
if ( $argv[1] == "grp3" || $argv[2] == "grp3" || $argv[3] == "grp3" || $argv[4] == "grp3" || $argv[5] == "grp3") then
    echo "Starting Group3 Performance Measure Graphics ..."
    ($scriptPath/control_files/exec/perfm_grp3.cf > /dev/null) >&! pm_errout.grp3
endif
if ( $argv[1] == "grp4" || $argv[2] == "grp4" || $argv[3] == "grp4" || $argv[4] == "grp4" || $argv[5] == "grp4") then
    echo "Starting Group4 Performance Measure Graphics ..."
    ($scriptPath/control_files/exec/perfm_grp4.cf > /dev/null) >&! pm_errout.grp4
endif
if ( $argv[1] == "grp5" || $argv[2] == "grp5" || $argv[3] == "grp5" || $argv[4] == "grp5" || $argv[5] == "grp5") then
    echo "Starting Group5 Performance Measure Graphics ..."
    ($scriptPath/control_files/exec/perfm_grp5.cf > /dev/null) >&! pm_errout.grp5
endif
if ( $argv[1] == "wsup" || $argv[2] == "wsup" || $argv[3] == "wsup" || $argv[4] == "wsup" || $argv[5] == "wsup") then
    echo "Starting WaterSupply Performance Measure Graphics ..."
    ($scriptPath/control_files/exec/perfm_ws.cf > /dev/null) >&! pm_errout.ws
endif
if ( $argv[1] == "env" || $argv[2] == "env" || $argv[3] == "env" || $argv[4] == "env" || $argv[5] == "env") then
    echo "Starting Environmental Performance Measure Graphics ..."
    ($scriptPath/control_files/exec/perfm_env.cf > /dev/null) >&! pm_errout.env
endif
else
# sleep for 15 minutes
    echo `date`.
    echo Next loop to look for the '"rundone"' file'(s)' 15 min later.
    sleep 900
    goto jump
endif

#send mail to guys in the mailing list after PM are completed
    echo PM graphics program for the group'(s)' $groups completed on `hostname` on `date`\
in the filespace "'$curwd'". The runs compared were $run1 $run2 $run3 $run4 $run5. $mail_hardcopy\
Error messages, if any, have been saved in the '"pm_errout.xxxx"' file in the CWD.\
| mailx -r $user"@sfwmd.gov" -s "$curwd:t $groups PM graphics done on `hostname`" $mlist

```

Original Script

Grp 1

```

1  $scriptPath/env/exec/lok_stghydrograph.scr < $scriptPath/env/exec/env3.paths
2  $scriptPath/env/exec/lok_stg_freq.scr < $scriptPath/env/exec/env3.paths
3  $scriptPath/env/exec/lk_stghyd_hist.scr < $scriptPath/env/exec/env3.paths
4  $scriptPath/env/exec/lake_regdisch.scr < $scriptPath/env/exec/env3.paths
5  $scriptPath/env/exec/lok_minlvl.scr < $scriptPath/env/exec/env1.paths
6  $scriptPath/wsupply/exec/ssm_4inl.scr < $scriptPath/wsupply/exec/water_supply.paths
7  $scriptPath/wsupply/exec/ssm_4inl_drought.scr < $scriptPath/wsupply/exec/water_supply.paths
8  $scriptPath/env/exec/wsupp2sa.scr < $scriptPath/env/exec/env1.paths
9  $scriptPath/env/exec/wsupp2sa_comp.scr < $scriptPath/env/exec/env1.paths
10 $scriptPath/env/exec/ws_str.scr < $scriptPath/env/exec/env1.paths
11 $scriptPath/env/exec/lok_WsDelv2Lecsa.scr < $scriptPath/env/exec/env1.paths
12 $scriptPath/env/exec/wsupp2sa_droughts.scr < $scriptPath/env/exec/env1.paths
13 $scriptPath/env/exec/wsupp2sa_droughts_comp.scr < $scriptPath/env/exec/env1.paths
14 $scriptPath/wsupply/exec/water_shortage.scr < $scriptPath/wsupply/exec/water_supply.paths
15 $scriptPath/wsupply/exec/water_shortage_losa.scr < $scriptPath/wsupply/exec/water_supply.paths
16 $scriptPath/wsupply/exec/urban_ag_cutbacks.scr < $scriptPath/wsupply/exec/water_supply.paths
17a $scriptPath/env/exec/estuaries6590.scr < $scriptPath/env/exec/prot_estuaries.paths
17b $scriptPath/env/exec/estuaries.scr < $scriptPath/env/exec/prot-DMDRO_estuaries.paths
18 $scriptPath/env/exec/biscaynel.scr < $scriptPath/env/exec/env1.paths
19 $scriptPath/env/exec/biscayne.scr < $scriptPath/env/exec/env1.paths
20 $scriptPath/env/exec/lecsa_sw_disch.scr < $scriptPath/env/exec/env1.paths
21 $scriptPath/env/exec/lok_watbud.scr < $scriptPath/env/exec/env1.paths
22 $scriptPath/env/exec/lok_watbud_droughts.scr < $scriptPath/env/exec/env1.paths
23 $scriptPath/env/exec/levspg.scr < $scriptPath/env/exec/env1_lvsp.paths
24 $scriptPath/env/exec/levspg123.scr < $scriptPath/env/exec/env1_lvsp.paths
25 $scriptPath/env/exec/levspg_wet.scr < $scriptPath/env/exec/env1_lvsp.paths
26 $scriptPath/env/exec/levspg_dry.scr < $scriptPath/env/exec/env1_lvsp.paths
27 $scriptPath/env/exec/enp_deliveries.scr < $scriptPath/env/exec/env4.paths
28 $scriptPath/env/exec/flbay_sw_deliveries.scr < $scriptPath/env/exec/env2.paths
29 $scriptPath/env/exec/craig_taylor_panhandle.scr < $scriptPath/env/exec/env2.paths
30 $scriptPath/env/exec/hydroperiod_geo_areas.scr < $scriptPath/env/exec/env1.paths
31 $scriptPath/env/exec/hydroperiod_distrib.scr < $scriptPath/env/exec/env2.paths
32 $scriptPath/env/exec/hpimp_geo_areas_nomatch.scr < $scriptPath/env/exec/hpimp.paths
33 $scriptPath/env/exec/hpimp_vegtype.scr < $scriptPath/env/exec/hpimp.paths
34 $scriptPath/env/exec/ponding_geo_areas.scr < $scriptPath/env/exec/env1.paths
35 $scriptPath/env/exec/estuary7000cfs.pl
36 $scriptPath/wsupply/exec/trigger_report.scr < $scriptPath/wsupply/exec/trigger_report.paths
37 $scriptPath/wsupply/exec/freq_water_restr.scr < $scriptPath/wsupply/exec/water_supply.paths
38 $scriptPath/wsupply/exec/freq_water_restr_losa.scr < $scriptPath/wsupply/exec/water_supply.paths
39 $scriptPath/env/exec/peak_stage_maps.scr < $scriptPath/env/exec/peak_stage_maps.paths

```

Grp 2

```

1  $scriptPath/wsupply/exec/aaa_totloss.scr < $scriptPath/wsupply/exec/water_supply.paths
2  $scriptPath/wsupply/exec/lec_totloss.scr < $scriptPath/wsupply/exec/water_supply.paths
3  $scriptPath/env/exec/wca3_regdisch.scr < $scriptPath/env/exec/wca3_regdisch.paths
4  $scriptPath/env/exec/flbay_gw_deliveries.scr < $scriptPath/env/exec/env2.paths
5  $scriptPath/env/exec/lkworth.scr < $scriptPath/env/exec/env1.paths
6  $scriptPath/env/exec/enp_east_delv.scr < $scriptPath/env/exec/env4.paths
7  $scriptPath/env/exec/enp_west_delv.scr < $scriptPath/env/exec/env4.paths
8  $scriptPath/env/exec/wca_import.scr < $scriptPath/env/exec/env3.paths
9  $scriptPath/env/exec/enp_import.scr < $scriptPath/env/exec/env3.paths
10 $scriptPath/env/exec/hly_normal_stg_hydrographs.scr < $scriptPath/env/exec/env21.paths
11 $scriptPath/env/exec/hly_stg_dur_curves_normal.scr < $scriptPath/env/exec/env21.paths
12 $scriptPath/env/exec/hly_longterm_mon_avgstg.scr < $scriptPath/env/exec/env21.paths
13 $scriptPath/env/exec/rotenb_2gagavg_stg_hyd_normal.scr < $scriptPath/env/exec/env2.paths
14 $scriptPath/env/exec/rotenb_2gagavg_stg_dur_curves_normalized.scr < $scriptPath/env/exec/env2.paths
15 $scriptPath/env/exec/rotenb_2gagavg_longterm_mon_avgstg.scr < $scriptPath/env/exec/env2.paths
16 $scriptPath/env/exec/wca_minlvls1.scr < $scriptPath/env/exec/env1.paths
17 $scriptPath/env/exec/wca_hydroperiod.scr < $scriptPath/env/exec/env4.paths
18 $scriptPath/env/exec/enp_hydroperiod.scr < $scriptPath/env/exec/env41.paths
19 $scriptPath/env/exec/wca_enp_normalised_hydrographs.scr < $scriptPath/env/exec/env4.paths
20 $scriptPath/wsupply/exec/seminole_ssm.scr < $scriptPath/env/exec/prot_estuaries.paths
21 $scriptPath/env/exec/bcnp_ovlndflow.scr < $scriptPath/env/exec/env2.paths
22 $scriptPath/env/exec/bcnp_mon_ovlndflow.scr < $scriptPath/env/exec/env2.paths
23 $scriptPath/wsupply/exec/c43c44_dem_not_met.scr < $scriptPath/env/exec/env1.paths
24 $scriptPath/wsupply/exec/losa_dem_not_met.scr < $scriptPath/wsupply/exec/water_supply.paths
25 $scriptPath/wsupply/exec/demand_not_met_annual.scr < $scriptPath/wsupply/exec/water_supply.paths
26 $scriptPath/env/exec/seasonal_flow.scr < $scriptPath/env/exec/env1.paths
27 $scriptPath/wsupply/exec/aaa_watbud.scr < $scriptPath/wsupply/exec/aaa_watb.paths
28 $scriptPath/env/exec/lk_worth_salinity.scr < $scriptPath/env/exec/env1.paths
29 $scriptPath/env/exec/wca_swflows.scr < $scriptPath/env/exec/env2.paths
30 $scriptPath/env/exec/wca_flowlines.scr < $scriptPath/env/exec/env2.paths
31 $scriptPath/env/exec/csrs_flow_hyd1.scr < $scriptPath/env/exec/env2.paths
32 $scriptPath/env/exec/mwd_pm_CII4.6.scr < $scriptPath/env/exec/env2.paths
33 $scriptPath/env/exec/mwd_pm_CII4.9.scr < $scriptPath/env/exec/env2.paths

```

Original Script

Grp 3

```

1  $scriptPath/env/exec/hydroperiod.scr < $scriptPath/env/exec/env1.paths
2  $scriptPath/env/exec/ponding_annave.scr < $scriptPath/env/exec/env1.paths
3  $scriptPath/env/exec/sta.scr < $scriptPath/env/exec/env3.paths
4  $scriptPath/env/exec/wca_regsch.scr < $scriptPath/env/exec/env3.paths
5  /vol/hsm/scripts/solaris/sfwmm-pm-graphics/budget/exec/watbud_ann.scr <
   /vol/hsm/scripts/solaris/sfwmm-pm-graphics/budget/exec/watbud.paths
6  $scriptPath/env/exec/lok_littoral.scr < $scriptPath/env/exec/lok_littoral.paths
7  $scriptPath/env/exec/marsh_mfl_stg_graphs.scr < $scriptPath/env/exec/env4.paths
8  $scriptPath/env/exec/marsh_mfl_normalized_stg_graphs.scr < $scriptPath/env/exec/env4.paths
9  $scriptPath/env/exec/canal_stghyd.scr < $scriptPath/env/exec/lok_littoral.paths
10 $scriptPath/env/exec/canal_mfl_lect.scr < $scriptPath/env/exec/lok_littoral.paths
11 $scriptPath/env/exec/loxahatchee.scr < $scriptPath/env/exec/env3.paths
12 $scriptPath/env/exec/lox_monmean.scr < $scriptPath/env/exec/env2.paths
13 $scriptPath/wsupply/exec/other_losa_ssm_annual_cutbacks.scr < $scriptPath/wsupply/exec/eea_watb.paths
14 $scriptPath/wsupply/exec/urban_ag_cutbacks_annual.scr < $scriptPath/wsupply/exec/water_supply.paths
15 $scriptPath/env/exec/epa_flows.scr < $scriptPath/env/exec/epa_flows.paths
16 $scriptPath/env/exec/sta_phosp.scr < $scriptPath/env/exec/prot_estuaries.paths
17 $scriptPath/Lok/exec/graph_gen.scr
18 $scriptPath/env/exec/lect_stages.scr < $scriptPath/env/exec/env41.paths
19 $scriptPath/env/exec/lect8393.scr < $scriptPath/env/exec/env83.paths
20 $scriptPath/env/exec/lect8393_daily.scr < $scriptPath/env/exec/env83.paths
21 $scriptPath/env/exec/mfl_ind_regions.scr < $scriptPath/env/exec/env4.paths

```

Grp 4

```

1  $hsmBin/pm_script indicator      (Indicator Regions)
2  $hsmBin/pm_script continuity     (Continuity Regions)
3  $scriptPath/Inundation/exec/mwdp1_2 5 10 (Seasonal and Interannual Variability)
4  $scriptPath/Inundation/exec/mwdp1_3 0.2 (Duration of Uninterrupted Flooding)
5  $scriptPath/Tree_Islands/exec/mwdp5_8 (Tree Islands ...)
6  $scriptPath/S_Dade/exec/mwd_Pk_stg.cfg (Peak Stage Indicators in C-111 Basin)
7  $scriptPath/Recreational/exec/mwdp2_5_1 (L-67A Fisheries)
8  $scriptPath/Recreational/exec/mwdp2_5_2 (Deer Herd)
9  $scriptPath/S_Dade/exec/mwdp2_1 (Model Lands/C-111 Performance Measure Suite)
10 $scriptPath/S_Dade/exec/mwdp12_3 (Flows through S331 and S173 in C-111 Basin: Interbasin exchar)

```

Grp 5

```

1  $hsmBin/pm_script salinity
2  $hsmBin/pm_script alligator

```

Hydrologic Systems Modeling Script Library

/vol/hsm/scripts/solaris/sfwmm-pm-graphics *

September 10, 1999

Script Name & Input Files	P-M Grp	Figure(s) and/or Report(s) Produced Output Directory is Local to PM Graphics Execution Directory	Run Path * (local to /vol/hsm/scripts/solaris/sfwmm-pm-graphics)
bcnp_mon_ovlndflow.scr	2	Env_Other/ bcnp_west_mon_ovlndflow.fig bcnp_east_mon_ovlndflow.fig bcnp_lmans_mon_ovlndflow.fig	*/env/exec/bcnp_mon_ovlndflow.scr < */env/exec/env2.paths
bcnp_ovlndflow.scr	2	Env_Other/ bcnp_south_flows.fig	*/env/exec/bcnp_ovlndflow.scr < */env/exec/env2.paths
biscayne.scr	1	Env_Other/ biscayne_orig.fig	*/env/exec/biscayne.scr < */env/exec/env1.paths
biscayne1.scr	1	Env_Other/ biscayne.fig	*/env/exec/biscayne1.scr < */env/exec/env1.paths
c43c44_dem_not_met.scr	2	Wsupply/ C43.dem_not_met.fig C44.dem_not_met.fig	*/wsupply/exec/c43c44_dem_not_met.scr < */env/exec/env1.paths
craig_taylor_panhandle.scr	1	Enp/ swflows_craig_taylor_panhandle.fig	*/env/exec/craig_taylor_panhandle.scr < */env/exec/env2.paths
csrs_flow_hyd1.scr	2	Env_Other/ csrs_rsc_hyd_nsm.fig csrs_rsc_hyd_runs.fig	*/env/exec/csrs_flow_hyd1.scr < */env/exec/env2.paths
canal_stghyd.scr	3	Canals/	*/env/exec/canal_stghyd.scr < */env/exec/lok_littoral.paths

Script Name & Input Files	P-M Grp	Figure(s) and/or Report(s) Produced Output Directory is Local to PM Graphics Execution Directory	Run Path * (local to /vol/hsm/scripts/solaris/sfwmm-pm-graphics)																																				
<p><i>*/env/exec/canals.list</i> is input file containing list of elements for which graphs are produced</p>		<p><canal>.<structure>.canal_stg.fig <canal>.<structure>.canal_stgdur.fig <canal>.<structure>.minlvl_barchart.fig</p> <p>For the following combinations of <canals> and <structures> in file <i>canals.list</i> :</p> <table border="0"> <tr> <td>C-1.S-148</td> <td>C-1.S-21</td> <td>C-100A.S-123</td> <td></td> </tr> <tr> <td>C-102.S-165</td> <td>C-102N.S-21A</td> <td>C-103.S-20F</td> <td></td> </tr> <tr> <td>C-103S.S-167</td> <td>C-11.S-13</td> <td>C-11.S-13A</td> <td></td> </tr> <tr> <td>C-111.S-197</td> <td>C-12.S-33</td> <td>C-13.S-36</td> <td></td> </tr> <tr> <td>C-14.S-37B</td> <td>C-15.S-40</td> <td>C-16.S-41</td> <td>C-18.S-46</td> </tr> <tr> <td>C-2.S-22</td> <td>C-4.S-25B</td> <td></td> <td></td> </tr> <tr> <td>C-51.S-155</td> <td>C-6.S-26</td> <td>C-9.S-29</td> <td></td> </tr> <tr> <td>Hillsboro.G-56</td> <td>L-31N.S-174</td> <td>L-31W.S-175</td> <td></td> </tr> <tr> <td>NNRiver.G-54</td> <td></td> <td></td> <td></td> </tr> </table> <p>Examples below: for <i>C-103S.S-167</i> <i>C-103S.S-167</i>.canal_stg.fig <i>C-103S.S-167</i>.canal_stgdur.fig <i>C-103S.S-167</i>.canal_minlvl_barchart.fig <i>Barcharts (minlvl.figs are only produced for Salt Water Intrusion Criteria)</i></p>	C-1.S-148	C-1.S-21	C-100A.S-123		C-102.S-165	C-102N.S-21A	C-103.S-20F		C-103S.S-167	C-11.S-13	C-11.S-13A		C-111.S-197	C-12.S-33	C-13.S-36		C-14.S-37B	C-15.S-40	C-16.S-41	C-18.S-46	C-2.S-22	C-4.S-25B			C-51.S-155	C-6.S-26	C-9.S-29		Hillsboro.G-56	L-31N.S-174	L-31W.S-175		NNRiver.G-54				
C-1.S-148	C-1.S-21	C-100A.S-123																																					
C-102.S-165	C-102N.S-21A	C-103.S-20F																																					
C-103S.S-167	C-11.S-13	C-11.S-13A																																					
C-111.S-197	C-12.S-33	C-13.S-36																																					
C-14.S-37B	C-15.S-40	C-16.S-41	C-18.S-46																																				
C-2.S-22	C-4.S-25B																																						
C-51.S-155	C-6.S-26	C-9.S-29																																					
Hillsboro.G-56	L-31N.S-174	L-31W.S-175																																					
NNRiver.G-54																																							
demand_not_met_annual.scr	2	<p>Wsupply/Annual/ sa1.<legend>.dem_not_met_by_trigger.fig sa2.<legend>.dem_not_met_by_trigger.fig sa3.<legend>.dem_not_met_by_trigger.fig sa4.<legend>.dem_not_met_by_trigger.fig</p> <p><legend> points to a particular Run legend example below where <legend> = <i>ALTD</i> sa4.<i>ALTD</i>.dem_not_met_by_trigger.fig</p>	<p>*/wsupply/exec/demand_not_met_annual.scr < */wsupply/exec/water_supply.paths</p>																																				
eaa_totloss.scr	2	<p>Wsupply/ eaa_totloss.fig</p>	<p>*/wsupply/exec/eaa_totloss.scr < */wsupply/exec/water_supply.paths</p>																																				

Script Name & Input Files	P-M Grp	Figure(s) and/or Report(s) Produced Output Directory is Local to PM Graphics Execution Directory	Run Path * (local to /vol/hsm/scripts/solaris/sfwmm-pm-graphics)
		other_losa_tot_dmd_cutback.report	
eaa_watbud.scr	2	Wsupply /eaa_AnnAvg_watbud.report	*/wsupply/exec/eaa_watbud.scr < */wsupply/exec/eaa_watb.paths
enp_deliveries.scr	1	Enp / tam_trail_longterm_monavg.fig tam_trail_wetdryswflows.fig	*/env/exec/enp_deliveries.scr < */env/exec/env4.paths
enp_hydroperiod.scr list of cells in the file */env/exec/env_9enp.cells	2	Enp / enp_p33duration.fig enp_p33pct.fig enp_stg_graph.<cell>.fig enp_stg_dur_curves.<cell>.fig for the following list of <cell> locations: BCNP-A9.2313 Big_Cyp.2013 C111_G1251.724 G-620.1918 NESRS_2.2124 NP-34.1713 NP-38.916 NP_201.2119 NP_207.620 NP_33.1720 NP_36.1417 THSO.923 examples of stage and stage-duration graphs below: enp_stg_graph.G-620.1918.fig <cell> =G-620.1918 enp_stg_dur_curves.THSO.923.fig <cell> =THSO.923	
enp_import.scr	2	Enp / nwsrs_2gageavg_import_stghydrograph.fig nesrs_2gageavg_import_stgdur_curves.fig	*/env/exec/enp_import.scr < */env/exec/env3.paths

Script Name & Input Files	P-M Grp	Figure(s) and/or Report(s) Produced Output Directory is Local to PM Graphics Execution Directory	Run Path * (local to /vol/hsm/scripts/solaris/sfwmm-pm-graphics)
		nwsrs_2gageavg_import_stgdur_curves.fig nesrs_2gageavg_import_stghydrograph.fig	
enp_east_delv.scr	2	Enp/ tam_trail_east_longterm_monavg.fig	*/env/exec/enp_east_delv.scr < */env/exec/env4.paths
enp_west_delv.scr	2	Enp/ tam_trail_west_longterm_monavg.fig	*/env/exec/enp_west_delv.scr < */env/exec/env4.paths
epa_flows.scr	3	Env_Other/ epa_flows.fig epa_flows.report	*/env/exec/epa_flows.scr < */env/exec/epa_flows.paths
estuaries.scr	1	Estuary/ stluc1600_2500cfs.fig caloos_2800_4500cfs.fig stluc.fig caloos.fig	*/env/exec/estuaries.scr < */env/exec/prot_estuaries.paths
estuaries6590.scr	1	Estuary/ stluc1600_2500cfs.fig caloos_2800_4500cfs.fig stluc.fig caloos.fig	*/env/exec/estuaries6590.scr < */env/exec/prot_DMDRO_estuaries.paths
flbay_gw_deliveries.scr	2	Enp/ gwflows_flbay.fig	*/env/exec/flbay_gw_deliveries.scr < */env/exec/env2.paths

Script Name & Input Files	P-M Grp	Figure(s) and/or Report(s) Produced Output Directory is Local to PM Graphics Execution Directory	Run Path * (local to /vol/hsm/scripts/solaris/sfwmm-pm-graphics)
flbay_sw_deliveries.scr	1	Enp/ tam_trail_east_west_swflows.fig swflows_srs_craig_taylor_pan.fig	*/env/exec/flbay_sw_deliveries.scr < */env/exec/env2.paths
freq_water_restr_losa.scr	1	Wsupply/Freq/ freq_restr_losa_<legend>.report freq_restr_<legend>.fig <legend> points to a particular Run legend <i>example below where <legend> = ALTB</i> freq_restr_ALTB_losa.fig freq_restr_losa_ALTB.report	*/wsupply/exec/freq_water_restr_losa.scr < */wsupply/exec/water_supply.paths
freq_water_restr.scr	1	Wsupply/Freq/ freq_restr_<legend>_sa_1.fig freq_restr_<legend>_sa_2.fig freq_restr_<legend>_sa_3.fig freq_restr_<legend>_sa_4.fig <legend> points to a particular Run legend <i>example below where <legend> = ALTB</i> freq_restr_ALTB_sa_1.fig freq_restr_ALTB_sa_2.fig freq_restr_ALTB_sa_3.fig freq_restr_ALTB_sa_4.fig	*/wsupply/exec/freq_water_restr.scr < */wsupply/exec/water_supply.paths
graph_gen.scr	3	Lok/ combo.fig all.fig duration11-12.fig duration11.fig	*/Lok/exec/graph_gen.scr

Script Name & Input Files	P-M Grp	Figure(s) and/or Report(s) Produced Output Directory is Local to PM Graphics Execution Directory	Run Path * (local to /vol/hsm/scripts/solaris/sfwmm-pm-graphics)
		duration12.fig duration15.fig	
hly_longterm_mon_avgstg.scr	2	Wca/ hly_normalized_longterm_avgstg.4320.fig	*/env/exec/hly_longterm_mon_avgstg.scr < */env/exec/env21.paths
hly_normal_stg_hydrographs.scr	2	Wca/ hly_normal_stg_hydrographs.4320.fig	*/env/exec/hly_normal_stg_hydrographs.scr < */env/exec/env21.paths
hly_stg_dur_curves_normal.scr	2	Wca/ hly_normal_stgdur_curves.4320.fig	*/env/exec/hly_stg_dur_curves_normal.scr < */env/exec/env21.paths
hpimp_geo_areas_nomatch.scr cell list input files located in: */env/exec/	1	Hpimp/ wca1.fig wca2a.fig wca2b.fig	*/env/exec/hpimp_geo_areas_nomatch.scr < */env/exec/hpimp.paths

Script Name & Input Files	P-M Grp	Figure(s) and/or Report(s) Produced Output Directory is Local to PM Graphics Execution Directory	Run Path * (local to /vol/hsm/scripts/solaris/sfwmm-pm-graphics)
wca1.lst wca2a.lst wca2b.lst wca3b.lst wca3a_above_allig.lst wca3a_below_allig.lst1 wca3a_below_allig.lst2 wca_system.lst enp.lst1 enp.lst2 bcnp_north.lst bcnp_south.lst1 bcnp_south.lst2 pennsuco.lst rotenberger.lst holeyland.lst		wca3b.fig wca3a_above_allig.fig wca3a_below_allig.fig wca_system.fig enp.fig bcnp_north.fig bcnp_south.fig pennsuco.fig rotenberger.fig holeyland.fig	

Script Name & Input Files	P-M Grp	Figure(s) and/or Report(s) Produced Output Directory is Local to PM Graphics Execution Directory	Run Path * (local to /vol/hsm/scripts/solaris/sfwmm-pm-graphics)
<p>hpimp_vegtype.scr</p> <p>input file lists located in: */env/exec/</p> <p>sawgrass.lst1 sawgrass.lst2 west_marl.lst east_marl.lst freshmarsh_sawgrass.lst1 freshmarsh_sawgrass.lst2 hillsborough.lst</p> <p>Remaining_Glades defined by the sum following:</p> <p>wca1.lst wca2a.lst wca2b.lst wca3b.lst wca3a_above_allig.lst wca3a_below_allig.lst1 wca3a_below_allig.lst2 wca_system.lst enp.lst1 enp.lst2 bcnp_north.lst bcnp_south.lst1 bcnp_south.lst2 pennsuco.lst rotenberger.lst holeyland.lst</p>	1	<p>Hpimp/ sawgrass.fig west_marl.fig east_marl.fig freshmarsh_sawgrass.fig sawgrass.fig shark.fig hillsborough.fig Remaining_Glades.fig</p>	*/env/exec/hpimp_vegtype.scr < */env/exec/hpimp.paths

Script Name & Input Files	P-M Grp	Figure(s) and/or Report(s) Produced Output Directory is Local to PM Graphics Execution Directory	Run Path * (local to /vol/hsm/scripts/solaris/sfwmm-pm-graphics)
<p>hydroperiod.scr</p> <p>input files located in: */env/exec/</p> <p>sawgrass.lst1 sawgrass.lst2 west_marl.lst east_marl.lst shark.lst hillsborough.lst freshmarsh_sawgrass.lst1 freshmarsh_sawgrass.lst2</p> <p>Remaining Glades defined by the sum following:</p> <p>wca1.lst wca2a.lst wca2b.lst wca3b.lst wca3a_above_allig.lst wca3a_below_allig.lst1 wca3a_below_allig.lst2 wca_system.lst enp.lst1 enp.lst2 bcnp_north.lst bcnp_south.lst1 bcnp_south.lst2 pennsuco.lst rotenberger.lst holeyland.lst</p>	3	<p>Hydroperiod/ Remaining_Glades.fig east_marl.fig freshmarsh_sawgrass.fig sawgrass.fig shark.fig west_marl.fig hillsborough.fig</p>	*/env/exec/hydroperiod.scr < */env/exec/env1.paths

Script Name & Input Files	P-M Grp	Figure(s) and/or Report(s) Produced Output Directory is Local to PM Graphics Execution Directory	Run Path * (local to /vol/hsm/scripts/solaris/sfwmm-pm-graphics)
<p>hydroperiod_distrib.scr</p> <p>input files located in: */env/exec/</p> <p>sawgrass.lst1 sawgrass.lst2 west_marl.lst east_marl.lst shark.lst hillsborough.lst freshmarsh_sawgrass.lst1 freshmarsh_sawgrass.lst2</p> <p>Remaining Glades defined by the sum following:</p> <p>wca1.lst wca2a.lst wca2b.lst wca3b.lst wca3a_above_allig.lst wca3a_below_allig.lst1 wca3a_below_allig.lst2 wca_system.lst enp.lst1 enp.lst2 bcnp_north.lst bcnp_south.lst1 bcnp_south.lst2 pennsuco.lst rotenberger.lst holeyland.lst</p>	1	<p>Hydroperiod/ Remaining_Glades_HpDistrib.fig east_marl_HpDistrib.fig freshmarsh_sawgrass_HpDistrib.fig hillsborough_HpDistrib.fig sawgrass_HpDistrib.fig shark_HpDistrib.fig west_marl_HpDistrib.fig</p>	*/env/exec/hydroperiod_distrib.scr < */env/exec/env2.paths

Script Name & Input Files	P-M Grp	Figure(s) and/or Report(s) Produced Output Directory is Local to PM Graphics Execution Directory	Run Path * (local to /vol/hsm/scripts/solaris/sfwmm-pm-graphics)
hydroperiod_geo_areas.scr input file lists are located in: */env/exec/ wca1.lst wca2a.lst wca2b.lst wca3b.lst wca3a_above_allig.lst wca3a_below_allig.lst1 wca3a_below_allig.lst2 wca_system.lst enp.lst1 enp.lst2 bcnp_north.lst bcnp_south.lst1 bcnp_south.lst2 pennsuco.lst rotenberger.lst holeyland.lst	1	Hydroperiod/ wca1.fig wca2a.fig wca2b.fig wca3a_above_allig.fig wca3a_below_allig.fig wca3b.fig wca_system.fig bcnp_north.fig bcnp_south.fig enp.fig rotenberger.fig holeyland.fig pennsuco.fig	*/env/exec/hydroperiod_geo_areas.scr < */env/exec/env1.paths
lake_regdisch.scr	1	Lok/ lok_reg.fig lok_reg.report	*/env/exec/lake_regdisch.scr < */env/exec/env3.paths
lecsa_sw_disch.scr	1	Env_Other/ lecsa_sw_disch.fig	*/env/exec/lecsa_sw_disch.scr < */env/exec/env1.paths
lec_totloss.scr	2	Wsupply/ tot_lecloss_allsa.fig	*/wsupply/exec/lec_totloss.scr < */wsupply/exec/water_supply.paths

Script Name & Input Files	P-M Grp	Figure(s) and/or Report(s) Produced Output Directory is Local to PM Graphics Execution Directory	Run Path * (local to /vol/hsm/scripts/solaris/sfwmm-pm-graphics)
lec8393.scr cells listed in: */env/exec/lec.cells	3	Enp/ lec_stg_dur_8393.<cell>.fig lec.cells listed below: 19 27 17 27 15 26 13 25 10 25 41 37 40 34 37 36 36 35 35 33 34 35 33 30 29 31 29 33 30 36 12 28 25 29 25 30 20 27 example where <cell> = 1228 lec_stg_dur_8393. 1228 .fig	*/env/exec/lec8393.scr < */env/exec/env83.paths
lec_stages.scr cells listed in: */env/exec/lec.cells	3	Enp/ lec_stg_hyd.<cell>.fig lec_stg_dur_<cell>.fig lec.cells listed below: 19 27 17 27 15 26 13 25 10 25 41 37 40 34 37 36 36 35 35 33 34 35 33 30 29 31 29 33 30 36 12 28 25 29 25 30 20 27 examples where <cell> = 1025 lec_stg_hyd. 1025 .fig lec_stg_dur_ 1025 .fig	*/env/exec/lec_stages.scr < */env/exec/env41.paths

Script Name & Input Files	P-M Grp	Figure(s) and/or Report(s) Produced Output Directory is Local to PM Graphics Execution Directory	Run Path * (local to /vol/hsm/scripts/solaris/sfwmm-pm-graphics)
levspg.scr	1	Env_Other/ gw_levspg.fig	*/env/exec/levspg.scr < */env/exec/env1.paths
levspg_dry.scr	1	Env_Other/ gw_levspg_dry.fig	*/env/exec/levspg_dry.scr < */env/exec/env1.paths
levspg_wet.scr	1	Env_Other /gw_levspg_wet.fig	*/env/exec/levspg_wet.scr < */env/exec/env1.paths
lk_stghyd_hist.scr	1	Lok/ lkstg2.fig	*/env/exec/lk_stghyd_hist.scr < */env/exec/env3.paths
lk_worth_salinity.scr	2	Estuary/ lkworth_salinity.fig	*/env/exec/lk_worth_salinity.scr < */env/exec/env1.paths
lkworth.scr	2	Env_Other/ lkworth_wetdryflows.fig	*/env/exec/lkworth.scr < */env/exec/env1.paths
lok_littoral.scr	3	Lok/ spring_recession.fig lok_15ftcriteria.fig lok_12ftcriteria.fig lok_melaleuca_willow.fig lok_melaleuca.fig lok_willow.fig lok_15ftfreq.fig lok_12ftfreq.fig lok_algal.fig	*/env/exec/lok_littoral.scr < */env/exec/lok_littoral.paths
lok_minlvl.sc	1	Lok/ lok_minlvl.fig lok_floodprot.fig	*/env/exec/lok_minlvl.scr < */env/exec/env1.paths

Script Name & Input Files	P-M Grp	Figure(s) and/or Report(s) Produced Output Directory is Local to PM Graphics Execution Directory	Run Path * (local to /vol/hsm/scripts/solaris/sfwmm-pm-graphics)
lok_stg_freq.scr	1	Lok/ lkstg_freq.fig	*/env/exec/lok_stg_freq.scr < */env/exec/env3.paths
lok_stghydrograph.scr	1	Lok/ lkstg.fig	*/env/exec/lok_stghydrograph.scr < */env/exec/env3.paths
lok_watbud.scr	1	Lok/ lok_AnnAvg_flows.report	*/env/exec/lok_watbud.scr < */env/exec/env1.paths
lok_watbud_droughts.scr	1	Lok/ lok_DroutAnnAvg_flows.report	*/env/exec/lok_watbud_droughts.scr < */env/exec/env1.paths
lok_WsDelv2Lecsa.scr	1	Wsupply/ lok_wsdeliv2lecsa_count.fig	*/env/exec/lok_WsDelv2Lecsa.scr < */env/exec/env1.paths
losa_dem_not_met.scr	2	Wsupply/ losa_dem_not_met.fig	*/wsupply/exec/losa_dem_not_met.scr < */wsupply/exec/water_supply.paths
lox_monmean.scr	3	Env_Other/ loxa_meanmon.5936.fig loxa_meanmon.6036.fig	*/env/exec/lox_monmean.scr < */env/exec/env2.paths
loxahatchee.scr	3	Env_Other/ loxa_stgdur.5936.fig loxa_stghyd.5936.fig loxa_stgdur.6036.fig loxa_stghyd.6036.fig	*/env/exec/loxahatchee.scr < */env/exec/env3.paths

Script Name & Input Files	P-M Grp	Figure(s) and/or Report(s) Produced Output Directory is Local to PM Graphics Execution Directory	Run Path * (local to /vol/hsm/scripts/solaris/sfwmm-pm-graphics)
<p>marsh_mfl_normalized_stg_graphs.scr</p> <p>*/env/exec/ env_9wca.cells mfl_marsh_diffelev.cells contain the lists of <name>.<cell> elements for which graphs are produced</p>	3	<p>Minflowlvl/ marsh_minlvl_barchart.<name>.<cell>.fig normalized_marsh_stg_graph.<name>.<cell>.fig normalized_marsh_stg_dur_curves.<name>.<cell>.fig</p> <p>list of <name>.<cell> elements: CA1_N.5230 CA1_S.4432 3A_28.2419 MODEL_LAND.0829 WPBWCA.5636 2B_21.3530 2B_Central.3731 3A_3.3725 3A_3new.3725 3A_NWnew.4018 3A_NEnew.4023 2A_17.4029 3A_2:3A-2.3618 3A_2new.3618 3A_4.2921 3B_S.2326 CA1_7.4831</p> <p>example where <name>.<cell> = 2A_17.4029 marsh_minlvl_barchart.2A_17.4029.fig normalized_marsh_stg_graph.2A_17.4029.fig normalized_marsh_stg_dur_curves.2A_17.4029.fig</p>	<p>*/env/exec/marsh_mfl_normalized_stg_graphs.scr < */env/exec/env4.paths</p>

Script Name & Input Files	P-M Grp	Figure(s) and/or Report(s) Produced Output Directory is Local to PM Graphics Execution Directory	Run Path * (local to /vol/hsm/scripts/solaris/sfwmm-pm-graphics)
marsh_mfl_stg_graphs.scr */env/exec/ env_9wca.cells mfl_marsh.cells contain the lists of <name>.<cell> elements for which graphs are produced	3	Minflowlv/ marsh_minlvl_barchart.<name>.<cell>.fig marsh_stg_graph.<name>.<cell>.fig marsh_stg_dur_curves.<name>.<cell>.fig list of <name>.<cell> elements NP_201.2119 NESRS_2.2124 Big_Cyp.2013 BCNP-A9.2313 NP_33.1720 NP_36.1417 C111_G1251.724 NP_207.620 NP-34.1713 NP-38. 916 G-620.1918 THSO.923 G-1502.1724 Rocky_Gld_G-596.1826 TaySlu_NP_207.620 example: <name>.<cell> = <i>TaySlu_NP_207.620</i> marsh_minlvl_barchart. <i>TaySlu_NP_207.620</i> .fig marsh_stg_graph. <i>TaySlu_NP_207.620</i> .fig marsh_stg_dur_curves. <i>TaySlu_NP_207.620</i> .fig	*/env/exec/marsh_mfl_stg_graphs.scr < */env/exec/env4.paths
other_losa_ssm_annual_	3	Wsupply/ other_losa_tot_dmd_cutback.report	*/wsupply/exec/other_losa_ssm_annual_cutbacks.scr <

Script Name & Input Files	P-M Grp	Figure(s) and/or Report(s) Produced Output Directory is Local to PM Graphics Execution Directory	Run Path * (local to /vol/hsm/scripts/solaris/sfwmm-pm-graphics)
cutbacks.scr		<p>Wsupply/Annual/ s236.annual_report l8ag.annual_report caloos.annual_report stluc.annual_report s4bsn.annual_report semindian.annual_report</p>	*/wsupply/exec/eea_watb.paths
<p>peak_stage_maps.scr</p> <p>Maps are produced for stage differences listed in file: */env/exec/pk_stg_diff.lst</p>	1	<p><u>Peak Stage Difference Maps</u> Annual maximum stage difference-duration maps, between the highest (last) run specified in the .sfwmmrc file and the other runs listed in the same file, including the NSM.</p> <p>.</p> <p>Maps are saved in the directory: MAPS/STAGE/FREQ, local to the highest run SFWMM output directory. Maps are saved as postscript files. The names of output postscript files depend on the runs being compared and the stage differences being analyzed.</p> <p>File names are of the form: map_<legend>_wrt_<legend (highest run)>_stgdif_gt <stage difference value>.ps</p> <p>Example: map_nsm4sg_altd.stgdir_gt0.25.ps</p>	*/env/exec/peak_stage_maps.scr < */env/exec/peak_stage_maps.paths
<p>ponding_geo_areas.scr</p> <p>input file lists located in */env/exec/</p>	1	<p>Ponding/ Remaining_Glades.fig east_marl.fig</p>	*/env/exec/ponding_geo_areas.scr < */env/exec/env1.paths

Script Name & Input Files	P-M Grp	Figure(s) and/or Report(s) Produced Output Directory is Local to PM Graphics Execution Directory	Run Path * (local to /vol/hsm/scripts/solaris/sfwmm-pm-graphics)
<p><i>Remaining_Glades</i> defined by the sum of the list below:</p> <p>wca1.lst wca2a.lst wca2b.lst wca3b.lst wca3a_above_allig.lst wca3a_below_allig.lst1 wca3a_below_allig.lst2 wca_system.lst enp.lst1 enp.lst2 bcnp_north.lst bcnp_south.lst1 bcnp_south.lst2 pennsuco.lst rotenberger.lst holeyland.lst</p>		<p>enp.fig freshmarsh_sawgrass.fig hillsborough.fig holeyland.fig pennsuco.fig rotenberger.fig sawgrass.fig shark.fig wca1.fig wca2a.fig wca2b.fig wca3a_above_allig.fig wca3a_below_allig.fig wca3b.fig wca_system.fig west_marl.fig</p>	
<p>ponding_annave.scr</p> <p>input file lists located in:</p> <p>*/env/exec/</p> <p>sawgrass.lst1 sawgrass.lst2</p>	3	<p>Ponding/</p> <p>east_marl.fig freshmarsh_sawgrass.fig hillsborough.fig sawgrass.fig shark.fig west_marl.fig</p>	<p>*/env/exec/ponding_annave.scr < */env/exec/env1.paths</p>

Script Name & Input Files	P-M Grp	Figure(s) and/or Report(s) Produced Output Directory is Local to PM Graphics Execution Directory	Run Path * (local to /vol/hsm/scripts/solaris/sfwmm-pm-graphics)
west_marl.lst east_marl.lst shark.lst hillsborough.lst freshmarsh_sawgrass.lst1 freshmarsh_sawgrass.lst2			
rotenb_2gageavg_ longterm_mon_avgstg.scr	2	Wca/ rotenb_longterm_2cellavgstg.fig	*/env/exec/rotenb_2gageavg_longterm_mon_avgstg.scr < */env/exec/env2.paths
rotenb_2gageavg_ stg_dur_curves_normalized.scr	2	Wca/ rotenb_2gageavg_stg_dur_curves_normalized.fig	*/env/exec/rotenb_2gageavg_stg_dur_curves_normalized.scr < */env/exec/env2.paths
rotenb_2gageavg_ stg_hyd_normal.scr	2	Wca/ rotenb_2gageavg_normal_stg_hydrographs.fig	*/env/exec/rotenb_2gageavg_stg_hyd_normal.scr < */env/exec/env2.paths
seasonal_flow.scr structure name list in file */env/exec/ seasonal_flow_structures.lst	2	Env_Other/ <struc>_seas_flow.fig Structures listed : S46 S44 S155 S41 S40 G56 G57 S37A S36	*/env/exec/seasonal_flow.scr < */env/exec/env1.paths

Script Name & Input Files	P-M Grp	Figure(s) and/or Report(s) Produced Output Directory is Local to PM Graphics Execution Directory	Run Path * (local to /vol/hsm/scripts/solaris/sfwmm-pm-graphics)
		S33 S13A S13 G54 example for structure = <i>G54</i> <i>G54_seas_flow.fig</i>	
sta.scr list of <names> in the file: */env/exec/ sta.dat	3	Sta/ stage_hydrograph_<name>.fig stg_duration_<name>.fig names listed: INTRL_RES EAA_RES_EAA EAA_RES_GLADES_A EAA_RES_GLADES_B SITE1 LKBLT C9RES C11RES BRDDR_RES North_Storage Taylor_Creek_Nubbin_Slough Central_PBC Southern_L8_Reservoir example where <name> = <i>BRDDR_RES</i> stg_duration_<name>.fig stage_hydrograph_<name>.fig	*/env/exec/sta.scr < */env/exec/env3.paths
sta_phosp.scr	3	Sta/ sta_phosp_loads.fig	*/env/exec/sta_phosp.scr < */env/exec/prot_estuaries.paths
seminole_ssm.scr	2	Wsupply/ ssm_seminole.fig	*/wsupply/exec/seminole_ssm.scr < */env/exec/prot_estuaries.paths
ssm_4in1.scr	1	Wsupply/ losa_4in1.fig	*/wsupply/exec/ssm_4in1.scr < */wsupply/exec/water_supply.paths

Script Name & Input Files	P-M Grp	Figure(s) and/or Report(s) Produced Output Directory is Local to PM Graphics Execution Directory	Run Path * (local to /vol/hsm/scripts/solaris/sfwmm-pm-graphics)
ssm_4in1_drought.scr	1	Wsupply /losa_4in1_drought.fig	*/wsupply/exec/ssm_4in1_drought.scr < */wsupply/exec/water_supply.paths
trigger_report.scr	1	Wsupply/ trigger_report.out	*/wsupply/exec/trigger_report.scr < */wsupply/exec/trigger_report.paths
urban_ag_cutbacks.scr	1	Wsupply/ totshortvol_allsa.fig totshortpct_allsa.fig	*/wsupply/exec/urban_ag_cutbacks.scr < */wsupply/exec/water_supply.paths
urban_ag_cutbacks_annual.scr	3	Wsupply/Annual/ shortvol_sa<legend>.fig shortpct_sa<legend>.fig <legend> points to a particular Run legend example below where <legend> = ALTB shortpct_sa1. ALTB .fig shortvol_sa1. ALTB .fig	*/wsupply/exec/urban_ag_cutbacks_annual.scr < */wsupply/exec/water_supply.paths
watbud_ann.scr */budget/exec/	3	Wbudget/ wbud.lok.fig wbud.eaa.fig wbud.lec.fig wbud.wca1.fig wbud.wca2a.fig wbud.wca2b.fig wbud.wca3.fig wbud.wca3b.fig wbud.enp.fig wbud.enp.fig	*/budget/exec/watbud_ann.scr < */budget/exec/watbud.paths */control_files/exec/perfm_grp3.cf: *

Script Name & Input Files	P-M Grp	Figure(s) and/or Report(s) Produced Output Directory is Local to PM Graphics Execution Directory	Run Path * (local to /vol/hsm/scripts/solaris/sfwmm-pm-graphics)
water_shortage.scr	1	Wsupply/ totshortmon_allsa.fig	*/wsupply/exec/water_shortage.scr < */wsupply/exec/water_supply.paths
water_shortage_losa.scr	1	Wsupply/ totshortmon_losa.fig	*/wsupply/exec/water_shortage_losa.scr < */wsupply/exec/water_supply.paths
wca3_regdisch.scr	2	Wca/ wca3_regdisch.fig wca3_reg_disch.report	*/env/exec/wca3_regdisch.scr < */env/exec/wca3_regdisch.paths
wca_enp_normalised_ hydrographs.scr elements for <name>.<cells> are in the file: */env/exec/ diff_elev.cells	2	Wca/ normal_stg_graph.<name>.<cell>.fig normal_stg_dur_curves.<name>.<cell>.fig Listing of elements <name>.<cell>: 2A_2_17.4029 2A_north.4528 2B_21.3530 3A_2.3618 3A_3.3725 3A_4. 2921 3A_Central.3326 3A_NE.4023	*/env/exec/wca_enp_normalised_hydrographs.scr < */env/exec/env4.paths

Script Name & Input Files	P-M Grp	Figure(s) and/or Report(s) Produced Output Directory is Local to PM Graphics Execution Directory	Run Path * (local to /vol/hsm/scripts/solaris/sfwmm-pm-graphics)
		3A_NW.4017 3A_NW.4018 3A_NW.4116 3B_2.2624 3B_29.2626 3B_N_Central.2725 3B_North.3027 3B_S.2425 3B_SE.2326 3B_S_Central.2525 CA1_7.4831 NP205.2015 NP206.1521 NP44.1119 NTS-1. 1023 Pensucco.2627 R3110.1122 downStream_hol.4119 downStream_rot.4117 downStream_sta1E+W 5230 downStream_sta1E 5131 downStream_sta1W 5129 downStream_sta2a 4327 downStream_sta2b 4226 downStream_sta3+4a 4122 downStream_sta3+4b 4124 holeyland 4419 rotenberg 4416 example where <name> and <rowcol> = <i>NP44</i> and <i>1119</i> normal_stg_graph.NP44.1119.fig normal_stg_dur_curves.NP44.1119.fig	
wca_flowlines.scr	2	Enp/ tamiami_1_flowlines.fig srs_cb_ts_ep_shark_#_flowlines.fig	*/env/exec/wca_flowlines.scr < */env/exec/env2.paths

Script Name & Input Files	P-M Grp	Figure(s) and/or Report(s) Produced Output Directory is Local to PM Graphics Execution Directory	Run Path * (local to /vol/hsm/scripts/solaris/sfwm-pm-graphics)
		tam_trail_wetdryswflows.fig # = 1, 2, or 3	
wca_hydroperiod.scr elements for which graphs are produced are in the file: */env/exec/env_9wca.cells	2	Wca/ wca_usfws_obj.fig wca_stg_dur_curves.<name>.<cell>.fig wca_stg_graph.<name>.<cell>.fig list of <name>.<cell> elements CA1_N.5230 CA1_S.4432 3A_28.2419 MODEL_LAND.0829 WPBWCA.5636 example where <name>.<cell> = CA1_N.5230 wca_stg_dur_curves.CA1_N.5230.fig wca_stg_graph.CA1_N.5230.fig	*/env/exec/wca_hydroperiod.scr < */env/exec/env4.paths
wca_minlvls1.scr	2	Wca/ wca_minlvls.fig	*/env/exec/wca_minlvls1.scr < */env/exec/env1.paths
wca_import.scr	2	Wca/ wca3a_3gageavg_import_stghydrograph.fig wca3a_3gageavg_import_stgdur_curves.fig wca2a_import_stghydrograph.fig wca2a_import_stgdur_curves.fig wca1_import_stghydrograph.fig wca1_import_stgdur_curves.fig wca1_north_import_stghydrograph.fig wca1_north_import_stgdur_curves.fig	*/env/exec/wca_import.scr < */env/exec/env3.paths
wca_swflows.scr	2	Enp/ swflows_wca2a.fig swflows_tamiami.fig swflows_wca3aW.fig swflows_wca3b.fig swflows_wca3aS.fig swflows_wca3aC.fig	*/env/exec/wca_swflows.scr < */env/exec/env2.paths

Script Name & Input Files	P-M Grp	Figure(s) and/or Report(s) Produced Output Directory is Local to PM Graphics Execution Directory	Run Path * (local to /vol/hsm/scripts/solaris/sfwmm-pm-graphics)
		swflows_wca3aN.fig swflows_wca2b.fig swflows_wca1.fig swflows_ENP.fig swflows_srs_cb_ts_ep_shark.fig	
wsupp2sa.scr	1	Wsupply/ wsupp2sa.fig	*/env/exec/wsupp2sa.scr < */env/exec/env1.paths
wca_regsch.scr	3	Wca/ wca3a_3gageavg_S12HWcanal_stage_hydrograph.fig wca2a_gage_S11HWcanal_stage_hydrograph.fig wca1_3gageavg_S10HWcanal_stage_hydrograph.fig	*/env/exec/wca_regsch.scr < */env/exec/env3.paths
wsupp2sa_droughts.scr	1	Wsupply/ wsupp2sa_droughts.fig	*/env/exec/wsupp2sa_droughts.scr < */env/exec/env1.paths

Assignment

Create a performance measure set comparing the Restudy 95 Base and 50 Base with D13R.

Steps to follow

1. In /vol/hsm1/data/sfwmm/TRAINING create a directory with your own name. Under this directory create a directory for the PM set.
2. Copy the .sfwmmrc file from the /vol/hsm1/data/sfwmm/TRAINING directory into your PM set directory and **modify as needed**.
Note: Make sure you have the correct dmdro2x2 files specified – check using model input !
3. Run the PM set
4. Did all the groups run? If not why not?
5. Check pm_errout.grp*
6. Check PMs and evaluate
 - a. What is wrong with the wsupply2sa.fig ?
 - b. Rerun the wsupply2sa.fig individually using the script wsupp2sa_v1.14.scr

Information you will need

- Location of Restudy 95 base:
/vol/hsm1/data/sfwmm/RESTUDY/95BASE/OUT_95BS_V3.5
- 95 Base is a Current run, 50 Base is a future run, D13R is a future run with reservoirs
- 95 Base uses Rainfall plan to import water to SRS, 50 Base and D13R use rainfall based deliveries, i.e. import stage hydrographs