UPDATES TO IFP

By: Randy Rieman

UPDATES TO IFP

- Items currently on the Requirements List
- High ranked unassigned bugs (within the top 20)
- Bugs currently assigned
- NWSRFS Release 25 Updates
- Upcoming NWSRFS Release 26 Updates
- The new UHGCHNG MOD
- Any questions

Requirements

- IFP 1: Add to plot in IFP an ICP like capability to display the model states.
- IFP 2: Allow ts_plot for IFP, where more than one type of data can be plotted (i.e., mat.. map.. and Q).
- IFP 4: Develop LAG/K MOD for changing timing in IFP.
- IFP 5: 180 day contiguous hydrographs supported by the full capabilities of NWSRFS/IFP

IFP Requirements Cont'd

- IFP 6: In IFP, the topology window shall have a way to indicate segments with active Run-Time mods.

- IFP 8: Requirement: Modify the Tulsa Table operation to include plotting of the action, flood, and flood of record stages when not using the rating curve option and display of flood stages to at least one decimal place, preferably two decimal places (currently only available to nearest foot if not using rating curve option).

TOP 20 Unassigned Bugs

- LX - FCST/IFP: When running IFP or batch if a IGNORETS Mod is in effect it will not ignore all of the data during the specified period. #12

- LX - IFP: When making a mod when you bring up the mods viewer or other mods the window is pinned up to the upper left hand corner. You have to move the window out of the way so that you can click on file then re-run. #19

- LX - IFP: When directing the HOME variable to other than the home directory the java display for the SACSMA and SACSNOW will not come up. The message that comes up is an error that it can't read the directory or file. #20

IFP Bugs Currently Assigned

- None

R25 Updates

- LX-- IFP---If you have a SETQMEAN mod that starts prior to your current simulation window, then it seems to be missing a value once it enters the simulation window.

- LX --IFP-- There seems to be an issue when you are running ifp and go to display the operations table. If there is snow cover, the last numerical value shows up as *****.

- HP & LX - IFP: If all the mods from a FGROUP are removed then IFP will not write zero mods back to OFS.

- LX-- IFP--The areal snow cover plot (ASEC) in the SnowDisplay is not being plotted all of the time when there is snow cover on the ground.

R25 Updates Cont'd

- HP -- When making a unit hydrograph mod for the entire run there's a dip in the simulation at the beginning of the run. This can be seen during low flow situations. If you switch to R22 there is no dip in the simulation.

- HP-- IFP--When a UHGCHNG mod is made for more than one basin, values from the first UHGCHNG mod are also used for the second basin and the original values for the second UHGCHNG are ignored.

- HP --Fcst, IFP--When using the TSADD mod if you specify a constant value for mat's to be increased or decreased the model output shows a multiple of the constant value.

R25 Updates Cont’d

- LX-- IFP--If any of the time series data is missing for a period, the PLOT-TS display plots it at a point equal to the first observed data point.

- HP -- IFP-- If you use the "other mods" viewer and select the RAINSNOW Mod but don't select any dates, IFP will create the mod without any dates. When you rerun the segment the mod is ignored because no dates were specified. An error check should be performed when you select create and let the user know that no dates were selected and the mod is incomplete.

R25 Updates Cont'd

- LX-- IFP--The SnowDisplay in IFP is plotting the LIQW > then the PLWHC. The scale also needs to be fixed so that a more reasonable range of values is plotted on the left x axis.

- HP & LX-- FCST and IFP--When there is a rain/snow elevation specified, you get the output for that day twice.

- LX – IFP—Parse_mod_by_segment appears to parse range mods from the Fgroup file incorrectly.

R26 Updates

- LX - IFP: The fcinit output has different values for dam characteristics than defined in the input and fcinit punch.

- LX - IFP: When you display the RES-SNGL operation from the "DISPLAY" ¬ "Operation Table" menu the carryover in the RULEADJ utility at the end of the window is incorrect.

UHGCHNG MOD

- The new UHG mod shall have the following capabilities:
  - Ability to use either the multiple UHG mod or the single UHG mod
  - Ability of the multiple UHG mod to handle more than one basin
  - Ability to display the latest multiple date Unit-HG change mod
  - Ability to handle a dip occurring at the beginning of the UHG mod

UHGCHNG MOD

- The following represent possible scenarios under which a user may operate the new UHGCHNG Mod in IFP and FCST programs.

UHGCHNG MOD

- 1. UHGCHNG(unit hydrograph change mod with single date) and UHGCDATE (mod UHGCHNG with start date and end date) will be available for the user to select
  - The current UHGCHNG (single date UHGCHNG mod) will remain the same as the existing one except that the calculation for a valid mod will be changed to: ”The UHGCHNG mod is valid for any date less than or equal to the LSTCMPDY”

UHGCHNG MOD Cont'd

- 2. UHGCDATE mod (start date, end date and valid date required) - When selecting UHGCDATE, there will be a UHGCDATE display in the regular Mods window. In this display, the user can select which basin to make a mod, if there is more than one basin in a segment, and if UHGCDATE mods already exists, select which one to display.

UHGCHNG MOD Cont'd

- 2. UHGCDATE mod features:
  - There will be a scroll list of start/end dates of previous UHGCDATE mods made available for the user to select for editing/modifying to create a new mod. Only one UHGCDATE mod can be selected for displaying at a time. By default, the latest mod in the UHGCDATE list will be displayed.
  - Range mods and FGroup mods will not be permitted.
  - The user can select time series basin for the mod.
  - Within the mod Viewer window, the user can manually make a new mod or delete the old mod as is currently done.