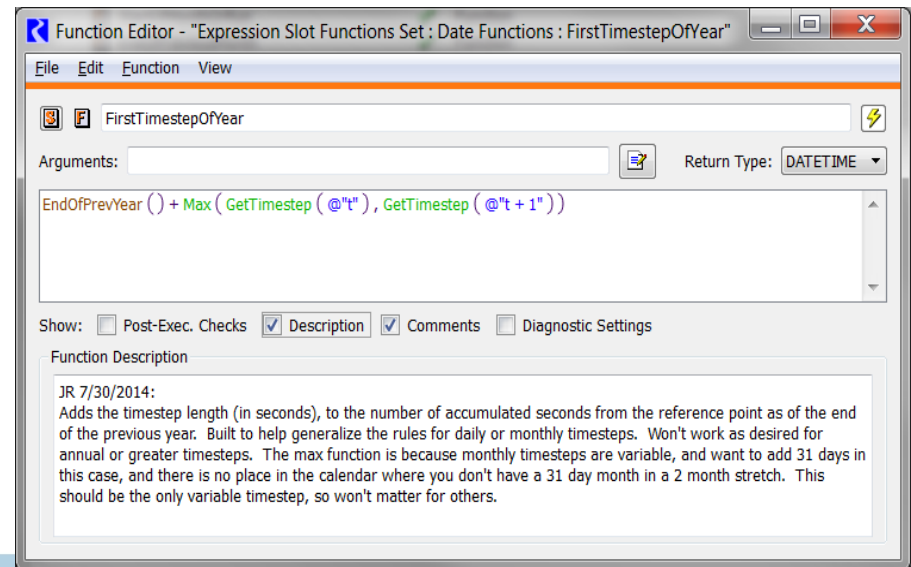


URGWOM Monthly Timestep Modeling



URGWOM Advisory Committee Meeting
 September 9th, 2014

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Steps towards a monthly URGWOM

Who	What	Status
CADSWES	Generalizing/modifying simulation & accounting methods to allow daily or monthly timestep.	Completed June 2013
CADSWES	Input data aggregation methods.	Completed June 2013
Tetra Tech	Review of CADSWES work listed above.	Completed August 2014
Tetra Tech	Getting a monthly timestep URGWOM model to run in Rulebased mode with the URGWOM rule set.	Completed August 2014
Tetra Tech	Sorting URGWOM policy (functions and rules) according to timestep dependence.	Ongoing
??	Incorporating CADSWES timestep generalizing changes to URGWOM initialization rules into current set.	Just recognized
??	Creation of a set of monthly shallow gw parameters that allow gw objects to run at a monthly timestep without instability or oscillations.	Just recognized
??	Create a monthly timestep ruleset, or generalize URGWOM rule set to work for either timestep	Started

CADSWES Development

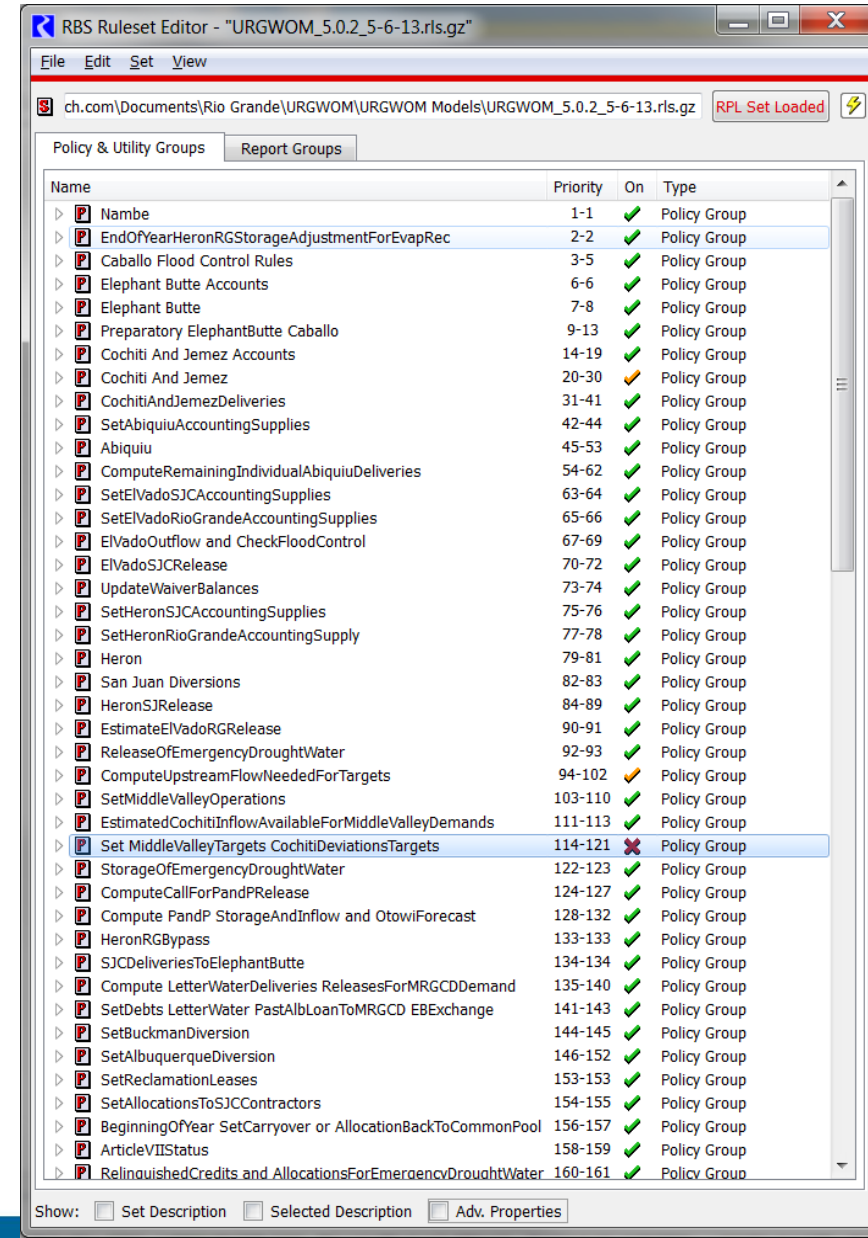
- Object Level Accounting Methodology Changes
- RiverWare enhancements
 - Run Control Parameters dialog box:
 - Data aggregation. **Last, sum, or average** depending on unit.
 - Specific functions changed as necessary to be more general.
- Generalization of URGWOM Initialization Rules
 - New initialization rule and data object to improve initial seepage
- Changes to URGWOM methods or data
- Initial Conditions after Timestep Switch
- Other
 - Monthly specific gw parameter need outlined.

Tech Team Recommendations

- ~~Merge initialization rule changes made by CADSWES into most recent URGWOM model. (Done)~~
- Develop a set of groundwater parameters for the monthly model that yields consistent behavior to daily model.
- Look into setting gw parameters, and lag times using initialization rules, or scripts.
- Fund CADSWES to allow data aggregation default method (last, sum, average) to be over ridden on a case by case basis.
- Replace table series slots requiring initial values with series slots, or add table series slot initial conditions to initial conditions DMI's.
- Change the Date Range Table Slot for Reach GainLoss calculation. Season 1 (January) needs to end on day 31 rather than 30.

Monthly rulebased simulations in URGWOM

- The monthly URGWOM test model can be driven by rules, without runtime errors by turning off the Set MiddleValleyTargets CochitiDeviationsTargets Policy Group
- Current work is beginning the processes necessary to either redo the URGWOM rule set to work for either timestep (ideal), or to create a separate monthly timestep rule set.



RBS Ruleset Editor - "URGWOM_5.0.2_5-6-13.rls.gz"

File Edit Set View

ch.com\Documents\Rio Grande\URGWOM\URGWOM Models\URGWOM_5.0.2_5-6-13.rls.gz RPL Set Loaded

Policy & Utility Groups Report Groups

Name	Priority	On	Type
▶ Nambé	1-1	✓	Policy Group
▶ EndOfYearHeronRGStorageAdjustmentForEvapRec	2-2	✓	Policy Group
▶ Caballo Flood Control Rules	3-5	✓	Policy Group
▶ Elephant Butte Accounts	6-6	✓	Policy Group
▶ Elephant Butte	7-8	✓	Policy Group
▶ Preparatory ElephantButte Caballo	9-13	✓	Policy Group
▶ Cochiti And Jemez Accounts	14-19	✓	Policy Group
▶ Cochiti And Jemez	20-30	✓	Policy Group
▶ CochitiAndJemezDeliveries	31-41	✓	Policy Group
▶ SetAbiquiuAccountingSupplies	42-44	✓	Policy Group
▶ Abiquiu	45-53	✓	Policy Group
▶ ComputeRemainingIndividualAbiquiuDeliveries	54-62	✓	Policy Group
▶ SetElVadoSJCAccountingSupplies	63-64	✓	Policy Group
▶ SetElVadoRioGrandeAccountingSupplies	65-66	✓	Policy Group
▶ ElVadoOutflow and CheckFloodControl	67-69	✓	Policy Group
▶ ElVadoSJRelease	70-72	✓	Policy Group
▶ UpdateWaiverBalances	73-74	✓	Policy Group
▶ SetHeronSJCAccountingSupplies	75-76	✓	Policy Group
▶ SetHeronRioGrandeAccountingSupply	77-78	✓	Policy Group
▶ Heron	79-81	✓	Policy Group
▶ San Juan Diversions	82-83	✓	Policy Group
▶ HeronSJRelease	84-89	✓	Policy Group
▶ EstimateElVadoRGRelease	90-91	✓	Policy Group
▶ ReleaseOfEmergencyDroughtWater	92-93	✓	Policy Group
▶ ComputeUpstreamFlowNeededForTargets	94-102	✓	Policy Group
▶ SetMiddleValleyOperations	103-110	✓	Policy Group
▶ EstimatedCochitiInflowAvailableForMiddleValleyDemands	111-113	✓	Policy Group
▶ Set MiddleValleyTargets CochitiDeviationsTargets	114-121	✗	Policy Group
▶ StorageOfEmergencyDroughtWater	122-123	✓	Policy Group
▶ ComputeCallForPandPRelease	124-127	✓	Policy Group
▶ Compute PandP StorageAndInflow and OtowiForecast	128-132	✓	Policy Group
▶ HeronRGBypass	133-133	✓	Policy Group
▶ SJCDeliveriesToElephantButte	134-134	✓	Policy Group
▶ Compute LetterWaterDeliveries ReleasesForMRGCDDemand	135-140	✓	Policy Group
▶ SetDebts LetterWater PastAlbLoanToMRGCD EBExchange	141-143	✓	Policy Group
▶ SetBuckmanDiversion	144-145	✓	Policy Group
▶ SetAlbuquerqueDiversion	146-152	✓	Policy Group
▶ SetReclamationLeases	153-153	✓	Policy Group
▶ SetAllocationsToSJCCContractors	154-155	✓	Policy Group
▶ BeginningOfYear SetCarryover or AllocationBackToCommonPool	156-157	✓	Policy Group
▶ ArticleVIIStatus	158-159	✓	Policy Group
▶ RelinquishedCredits and AllocationsForEmergencyDroughtWater	160-161	✓	Policy Group

Show: Set Description Selected Description Adv. Properties