Step 4: Create scenarios and edit input data in OpenAgua

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Create new WEAP Scenarios in OpenAgua

I updated these instructions to make it easy for you. No action is needed here but to view the new scenarios and look into how adding a new scenario works in OpenAgua

- In OpenAgua, Go to the Bear River Network (2017) in the WEAP model project.
- Click at the Scenario Icon on the left bar.

The previous step has simplified this work and already uploaded the scenarios and their results to OpenAgua.

• Click "Add Uncertainty to add a dummy scenario. Define a new scenario to the parent scenario "Bear River WEAP Model 2017 (Figure 1) and you can call it "Test".

You will see these two scenarios are already there:) Cons25PercCacheUrbWaterUse

- Incr25PercCacheUrbWaterUse
 - Check out the WASH model. You'll see these scenarios: ConsDemand and IncrDemand
 - Next, you will edit input data for each scenario that changes the demand for conservation and growth cases.(see below)

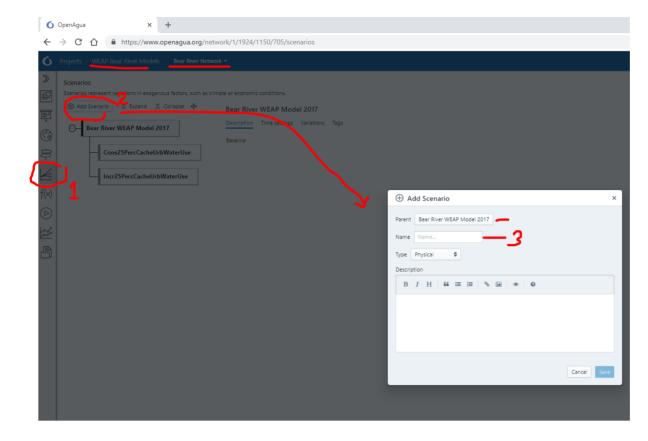


Figure 1: Add new scenarios

View input data to WEAP model new scenarios within OpenAgua • In the WEAP Model (Bear River WEAP Model 2017), we will view input data for three demand sites: Logan Potable, North Cache

- Potable, and South Cache Potable which are for Cache County urban demand. Its attribute called: Monthly Demand_Se
- Use the drop down menu in OpenAgua to the right top corner to switch between scenarios.
- For the Cons Demand scenario, we reduced demand by 25%. The easiest way to do it is to copy the Bear River WEAP Model 2017 base scenario demand into excel for all the months. Then create a formula to reduce demand by 25%. One way to do it is to get the 75% of the base demand which is like (=A1*.75). I already did that and you can copy and paste the values for you for both scenarios. So no action is needed here. But feel free to do the same on the "Test" scenario that you defined above.
- Logan Potable

O

- North Cache Potable
- South Cache Potable

WEAP Bear River > Bear River Network >

North Cache Potable

South Blacksmith Irr

Wasatch Front Project

Preston Irr

>>

Notice the autogenerated plot to the right and how the new scenarios are shifted up or down from the base scenario.

Do the same for the other scenario (Incr25PercCacheUrbWaterUse). But this time, increase it by 25% (like =A1*1.25)

Note: This screenshot is from an older OpenAgua version. Now it only shows the data and plot for one scenario at-a-time.

Cons25PercCacheUrbWater... Logan Potable Water Use Advanced Loss and Reuse Priority Demand Management Water Quality Cost Annual Water Use Rate_Nu Monthly Demand_Nu Monthly Demand_Se Monthly Demand_TS Annual Activity Level_Nu Consumption_Fr Consumption_Nu Consumption_Se Monthly Variation_Nu ✓ Demand Site Annual Water Use Rate_Fr Annual Water Use Rate_Fr_b 181 Bench B Cons25PercCacheUrbWaterUse Box Elder County Mandl 239.6562 田 348.8445 503.960625 Cub River Irr 834.99075 Mar 1106.22829 Gentile Valley 1106.22825 Harris Irr Highline Canal 10 503.960625 Hyrum Canal 101 Unit: ac-ft (Volume / periodic timeseries) Logan Irr Notes Metadata

View input data to WASH model new scenarios within OpenAgua • In the WASH Model, I changed change input data for the demand site called "j3" which is for Cache County urban demand. Its

Figure 2: Edit demand data for each new scenario in WEAP

attribute called : dReqBase. Use the drop down menu in OpenAgua to the right top corner to switch between scenarios.

For the Cons Demand scenario, we reduce demand by 25%. The easiest way to do it is to copy the OneYear base scenario demand into

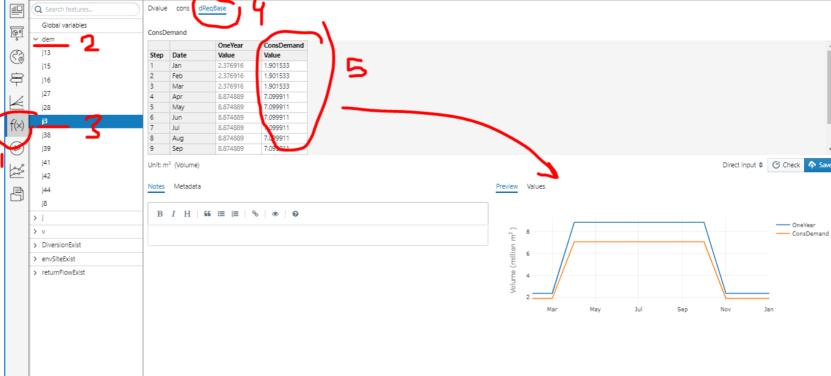
excel for all the months. Then create a formula to reduce demand by 25%. One way to do it is to get the 75% of the base demand which is like (=A1*.75)

No action is needed here as I already copied the new demand values and paste them into the ConsDemand column. (Figure 3).

Then I did the same for the other scenario (IncrDemand). But this time, increase it by 25% (like =A1*1.25)

← → C 🖒 🔓 https://www.openagua.org/network/1/1925/1152/706/input/node/79517/type/57999/attr/1753/scen/2485?scope=parent

Notice the autogenerated plot to the right and how the new scenarios are shifted up or down from the base scenario.



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Figure 3: Edit demand data for each new scenario in WASH

- **Congratulations!**
 - Now you have both WEAP and WASH models with two new scenarios each.
 - Next, we will use the WaMDaM Wizard to download them into a WaMDaM Excel Workbook and then into a SQLite database
 - We will also download a third model that is publicly available in OpenAgua for Monterrey Mexico