Water Transaction Tool Tutorial

Idaho | Native Salmonids | Data Visualization

About

TU's science program has assembled fish distribution, USFS Climate Shield data, land status, and dams and diversions data within a data visualization tool to help Idaho staff identify project opportunities. The purpose of this tutorial is to help the user get oriented with the Tableau and ArcGIS Online web applications.

Contact

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Notes on Use

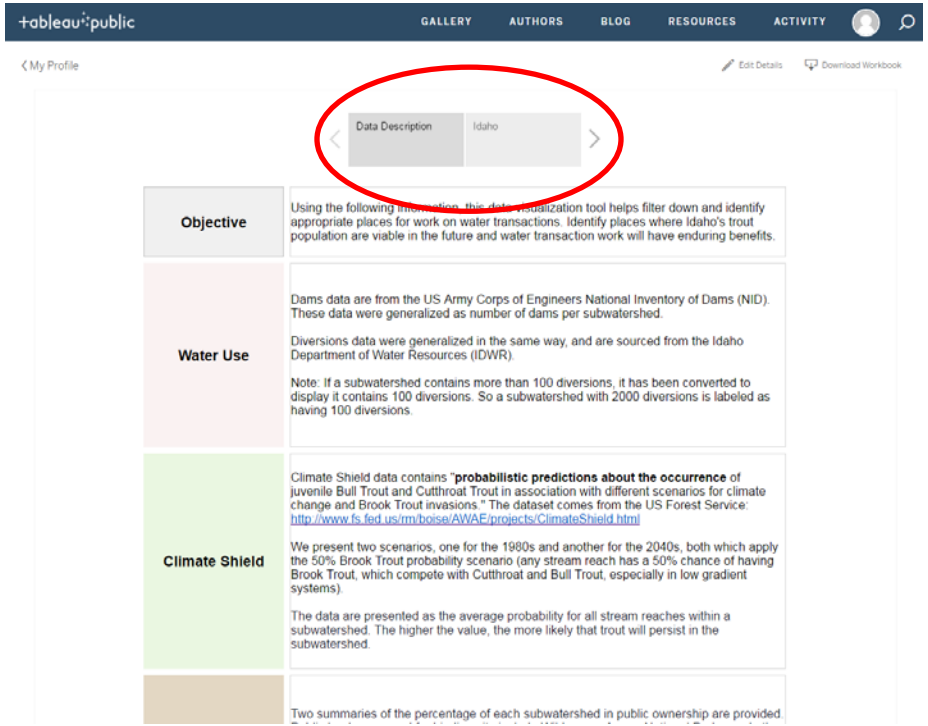
Important Links

Tableau Data Visualization

ArcGIS Online Web Application

Tableau resets on an automatic timer, so be aware your filters may reset if you discontinue use of the visualization for a time.

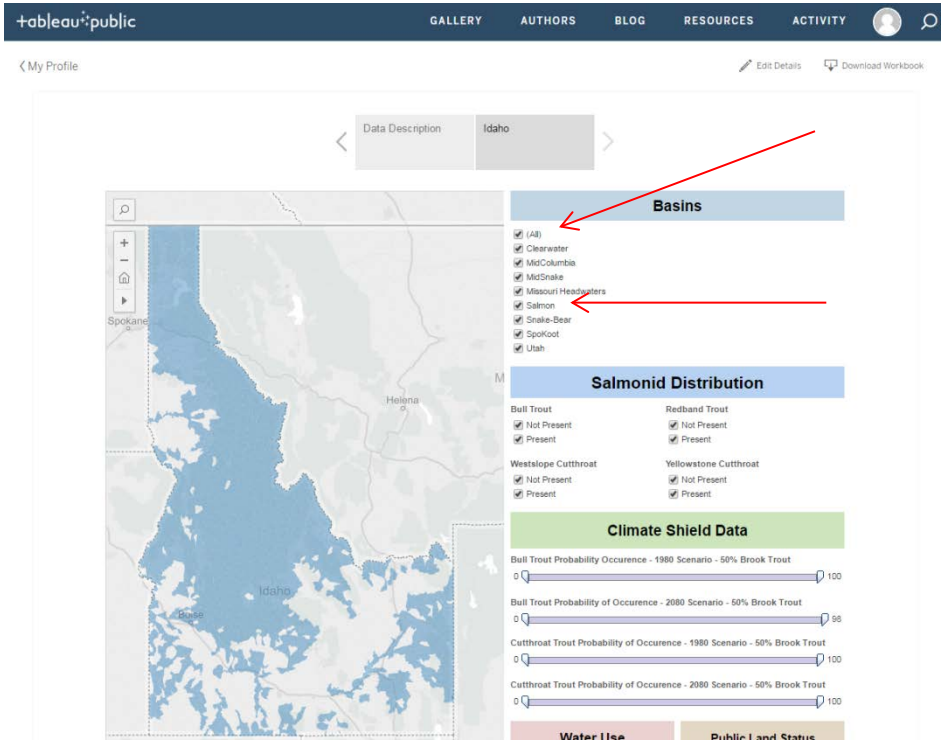
Step 0. Locate the Tableau Data Visualization



The data visualization launches with two tabs – one describing the data used in the tool and a second presenting the tool.

When the page loads, familiarize yourself with the objectives and data sources used in the tool, then select the gray 'Idaho' button to launch the data filtering tool.

Step 1. Filter for basin of interest (here: Salmon Basin)

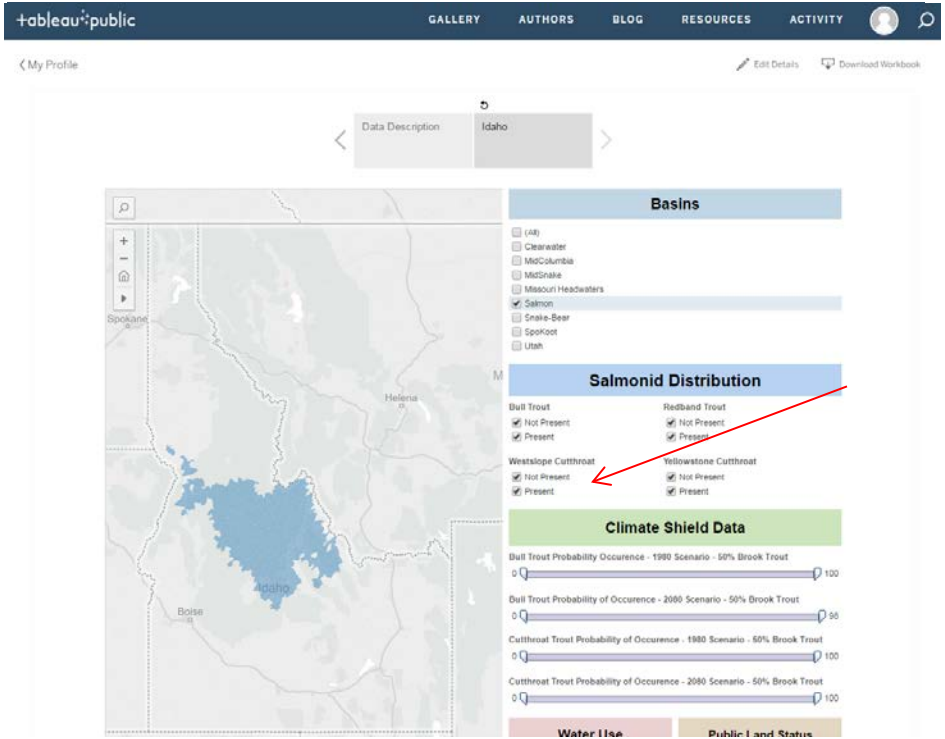


Deselect the '(All)' option under the 'Basins' section.

Next select the 'Salmon' basin.

These two actions filter down all subwatersheds to just those that are within the Salmon basin.

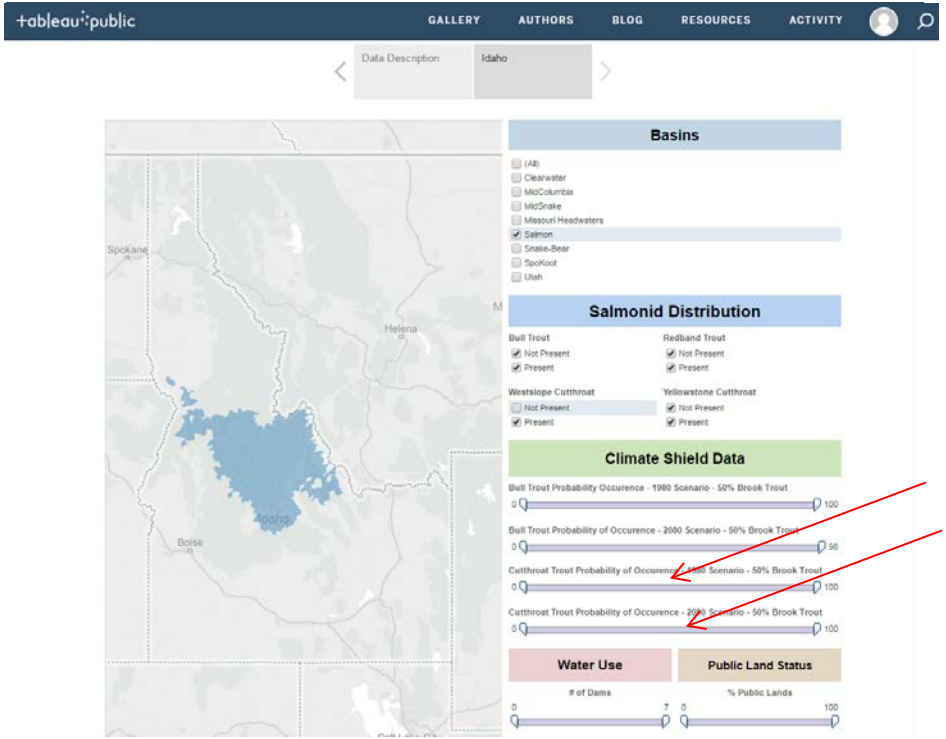
Step 2. Select areas with species of interest (here: Cutthroat)



Deselect the 'Cutthroat Trout' 'Not Present' selection under 'Salmonid Distribution'.

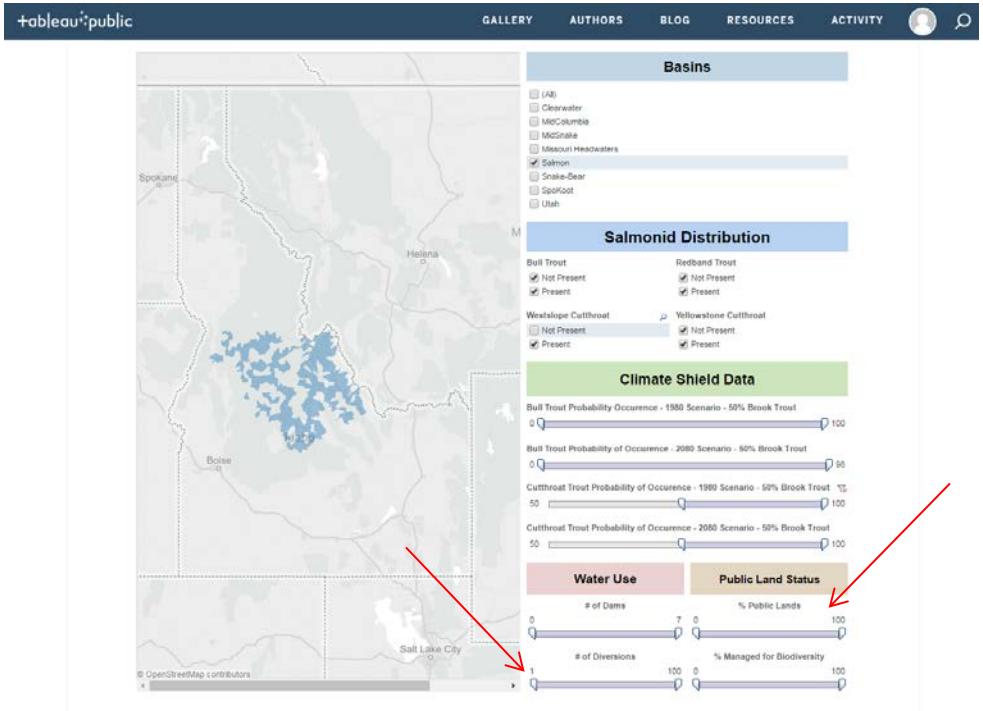
This will display all subwatersheds with Cutthroat Trout currently present in them, while removing any subwatersheds where they are not.

Step 3. Apply a filter based on Climate Shield data



Apply a filter on the data by clicking and dragging the left gray wedge under the third and fourth sections under 'Climate Shield Data' so that the left number is shown as 50 – this updates the map to only show those subwatersheds where the average probability of cutthroat occurrence for modeled stream reaches within the subwatershed is 50%. The Climate Shield scenarios are presented for 1980 and 2080, with the assumption that brook trout occur in 50% of locations.

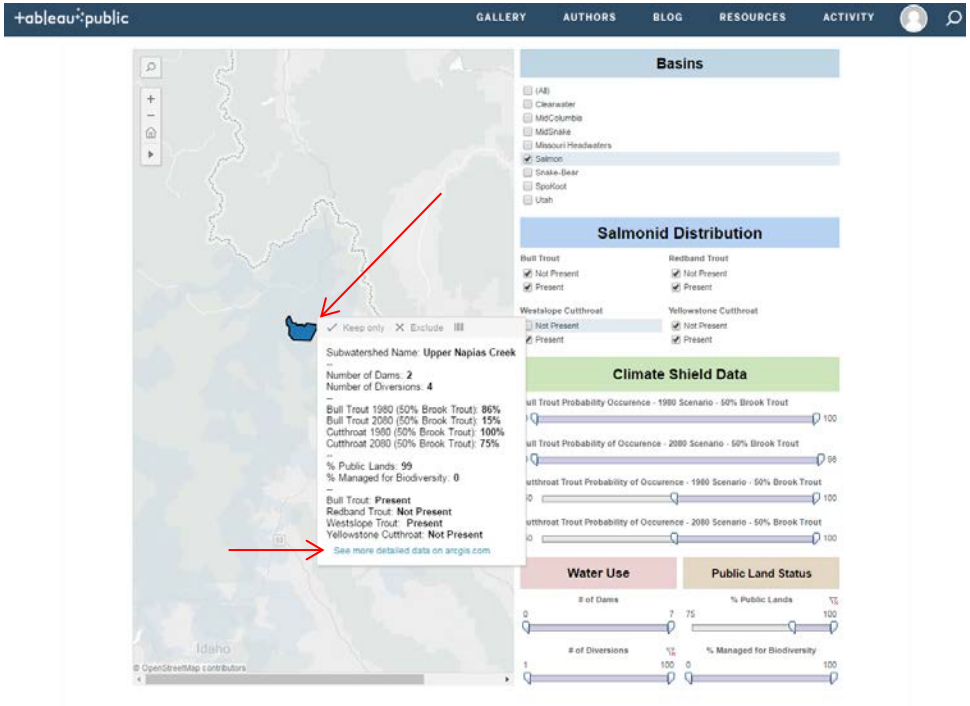
Step 4. Water Use and Public Land Status filtering



Under the 'Water Use' section, filter for subwatersheds that have at least one diversion. So take the left gray wedge under the '# of Diversions' section, drag it to the right until the number one appears.

Do the same for the '% Public Lands' filter so that we filter for subwatersheds that are comprised of at least 75% public lands.

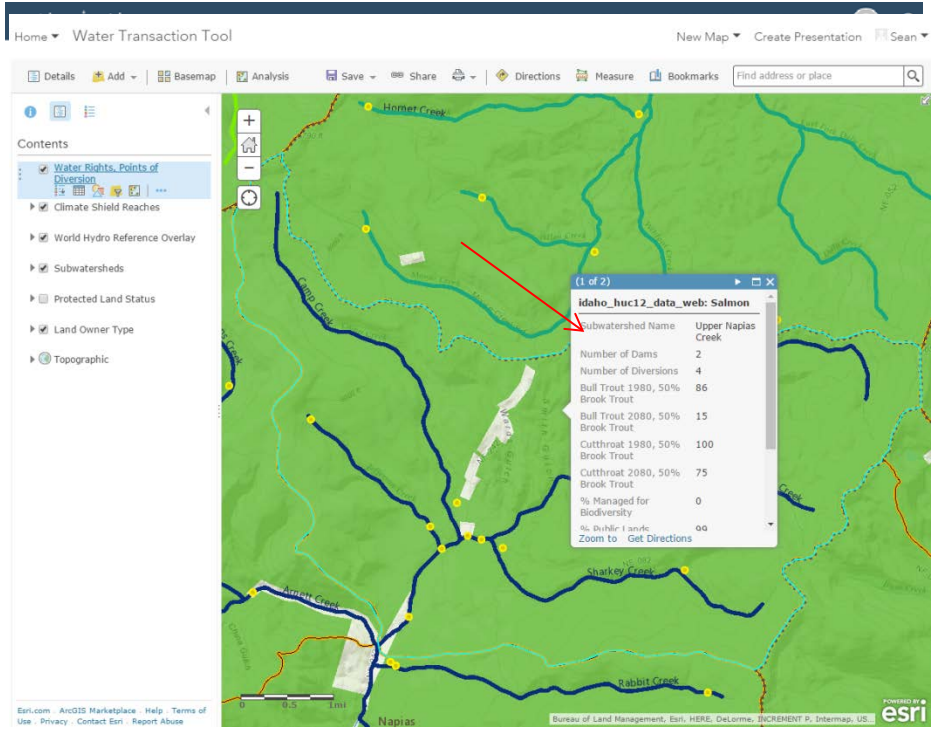
Step 5. Continue onto the ArcGIS Online application



Click the map to zoom in and explore the results. Hover over subwatersheds for more information. Note the information that appears, as it matches the filters you have set up to this point.

Double click on a subwatershed and a link to the ArcGIS Online web map will appear on the bottom. Click on that link to launch an ArcGIS Online session for further data exploration at a finer scale.

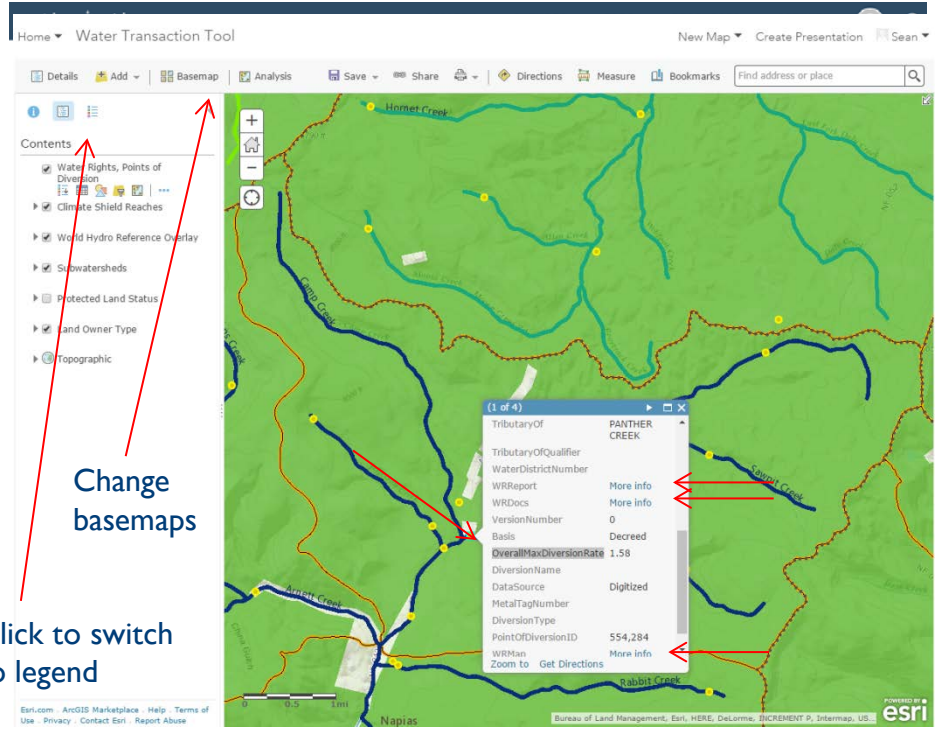
Step 6. Explore the data



Note we are now zoomed into the same subwatershed.

If you click the subwatershed on the map, a window will appear with more specific information than found on the Tableau visualization.

Step 6. Locate a water diversion



The yellow dots are points of water diversion (as shown in the map legend).

If we select one, we can look at specific information for it.

Note the 'OverallMaxDiversionRate' near the bottom.

Finally, observe that you can look at the documentation related to the selected water diversion using the links from the 'WRReport' and 'WRDocs' attributes.

Step 7. IDWR water rights documentation

Close

IDAHO DEPARTMENT OF WATER RESOURCES
Water Right Report

4/21/2016

WATER RIGHT NO. 75-7062

Owner Type	Name and Address
Current Owner	MERIDIAN BEARTRACK CO PO BOX 749 SALMON, ID 83467 (208)756-6300
Attorney	HOLLAND & HART LLP 101 SOUTH CAPITOL BLVD STE 1400 BOISE, ID 83702-7714 (208)342-5000
Original Owner	HARRY I JOHNSON 3380 HANDLY AVE IDAHO FALLS, ID 83401

Priority Date: 05/30/1975
Basis: Decreed
Status: Active

Source	Tributary
NAPIAS CREEK	PANTHER CREEK

Beneficial Use	From	To	Diversion Rate	Volume
MINING	03/15	12/01	1.58 CFS	408.9 AFA
Total Diversion			1.58 CFS	

Location of Point(s) of Diversion:

NAPIAS CREEK	NESE	Sec. 20	Township 22N	Range 20E LEMHI County
NAPIAS CREEK	SWNW	Sec. 21	Township 22N	Range 20E LEMHI County
NAPIAS CREEK	NESW	Sec. 21	Township 22N	Range 20E LEMHI County

On the left is what the WRReport contains.

On the right is what the WRMap link generates, a PDF of where the water is diverted to.