

Appendix I

Webmap Overview

The Webmap produced as part of this assessment contains all the vital GIS information to accompany the reports. During the plan’s development, the Webmap was hosted by Anchor QEA and this appendix describes the functionality of that Webmap format. It is the intention that the Webmap will be available publicly after the final report development and can be found at the Snake River Salmon Recovery Board website: <https://snakeriverboard.org/reports/tucannon-river-documents/>

Layer Overview

Each project area cut sheet refers extensively to the data displayed on the GIS layers provided as part of this assessment. In general, the GIS layers display all the data used to determine the analysis results and prioritization metrics. Table I-1 provides an inventory of the GIS layer, its significance to the project area evaluations, and whether the data on the layer are used for prioritization. Some layers, such as valley miles and valley centerline, are not directly used for prioritization but play an integral part in the calculations of other metrics. It should be noted that layers that are self-explanatory, such as the 2017 aerial imagery and 2017 river miles, are not listed below but are provided as part of the GIS layer package for this assessment.

Table I-1
Inventory of GIS Data used in Project Area Cut Sheets

GIS Layer	Description of Layer	Contributes to Prioritization?
Pools > Pools	These areas were the final areas counted towards the pool frequency analysis.	No
Pools > Depth Range	These areas show whether the pool classification was generated based on void data or meeting the depth threshold.	No
Islands > 1-year Islands and Water Surface	These layers show the islands that drive the 1-year complexity and the water inundation shape they are derived from.	Yes
Islands > Mean-Winter Flow Islands and Water Surface	These layers show the islands that drive the mean-winter flow complexity and the water inundation shape they are derived from.	Yes
Islands > Low-Winter Flow Islands and Water Surface	These layers show the islands that drive the low-winter flow complexity and the water inundation shape they are derived from.	Yes
Floodplain Connectivity > Unobtainable 2-year and 5-year	The unobtainable floodplain layer shows areas that would have been available or disconnected, but were deemed “unobtainable,” mostly due to the presence of pivot irrigation infrastructure.	Not Directly
Floodplain Connectivity > Available at 2-year	This area minus the disconnected at 2-year represents the floodplain currently connect at the 2-year event.	Yes

GIS Layer	Description of Layer	Contributes to Prioritization?
Floodplain Connectivity >Available at 5-year	This layer shows all areas connected or disconnected at the 5-year event. It represents the total potential for the floodplain. All of the analysis results are shown as a percentage of this area. This area minus the available at 2-year and both disconnected areas represents the Channel Aggradation Potential analysis result.	Yes
Floodplain Connectivity >Disconnected at 2-year	This layer shows the areas that contribute to the Encroachment Removal Floodplain Potential analysis result.	Yes
Floodplain Connectivity > Disconnected at 5-year	The area in this layer, minus the disconnected at 2-year, represents the portion of the Total Floodplain Potential that is in addition to the Channel Aggradation Potential and Encroachment Removal Potential.	Yes
Change Analysis > Channel Trace Comparison	This layer shows the channel trace from the previous assessment based on the 2011 aerial imagery, as well as the channel trace from the 2017 aerial imagery. Areas where these overlap are hatched so channel avulsions and migrations are easy to see. It should be noted that the 2017 aerial imagery was flow at a higher flow event than the 2011 aerial imagery and accounts for some of the non-overlapping channels.	No
Change Analysis > Topographic Difference	This layer shows the areas of positive or negative differences in the 2017 and 2010 LiDAR data sets.	No
Change Analysis > Narrative Highlights	This layer puts boxes around areas of geomorphic change seen with the Topographic difference and highlighted for discussion in the Geomorphic Change Analysis narrative for each project area.	No
Relative Elevation > All	These layers show the elevation of the floodplain relative to the nearest point on the river thalweg.	No
Prior Phase>All	These layers were produced as part of the 2011 Tucannon Geomorphic Assessment and Conceptual restoration plan. Includes levees and low-lying floodplain area.	No
Aerial Imagery>All	Aerial imagery from 2017 and 2010.	No
Conceptual Restoration Opportunities>All	Conceptual Restoration opportunities as discussed in the Project Area Cuts sheets (Appendix J).	No
Other Flood Events	Inundation extents from the 1D HEC-RAS model for the 10-year, 25-year, 50-year, and 100-year events. The 1D hydraulic model was intended for the habitat assessment at the 2- and 5-year events and was not calibrated specifically for the 10+ year events. The higher flow event results from this hydraulic model are provided for reference only.	No

Notes:

Other GIS layers are provided as part of this assessment but are either self-explanatory or do not affect either the evaluation or prioritization.

Functionality

Once logged into the Webmap there are several functions available for viewing the data. Figure I-1 shows the four main areas where functionality is available:

- Box A: Zoom in and out with the +/- buttons. This can also be done with the mouse scroll wheel. The Home button will bring you to the extents of the Tucannon assessment area. The location button will zoom to your current location if using mobile.
- Box B: The first button provides a legend showing the symbology for all currently active data. The second button brings up the list of available data layers to add to the Webmap. Figure I-2 shows more details on available layers.
- Box C: The first button gives a variety of base maps that will be displayed under the selected data. The second button provides bookmarks to zoom to project areas. The third button brings up a measurement tool for length, path, or area. Finally, the last button is used for editing the Webmap and has been temporarily disabled.
- Box D: This box brings up a panel that provides in-depth information on the layers currently active on the screen. Figure I-3 shows more details on this functionality.

When the layer button in the top right of the screen is selected, as shown in Figure I-2, all the layer groups available will be displayed. By checking or unchecking the box next to the layer group, all layers in that group can be turned on or off. By selecting the arrow next to the layer group, the list of layers in that group is displayed, and individual layers can be turned on or off by checking the box next to the layer. Selecting the arrow next to any layer will show the symbology used for that layer on the Webmap. Table I-1 describes all of the layers available.

Using the arrow at the bottom of the screen (box D in Figure I-1), more detailed data about the layers currently on the screen can be found. Figure I-3 shows the detailed data for the "Reach Groups" layer. This will only show information for the layers on the screen, so in Figure I-3 only project areas 38 to 43 are shown. Using the "zoom to" button and selecting a data layer will bring that data layer to the center of the Webmap.

Figure I-1
Webmap Functionality Options

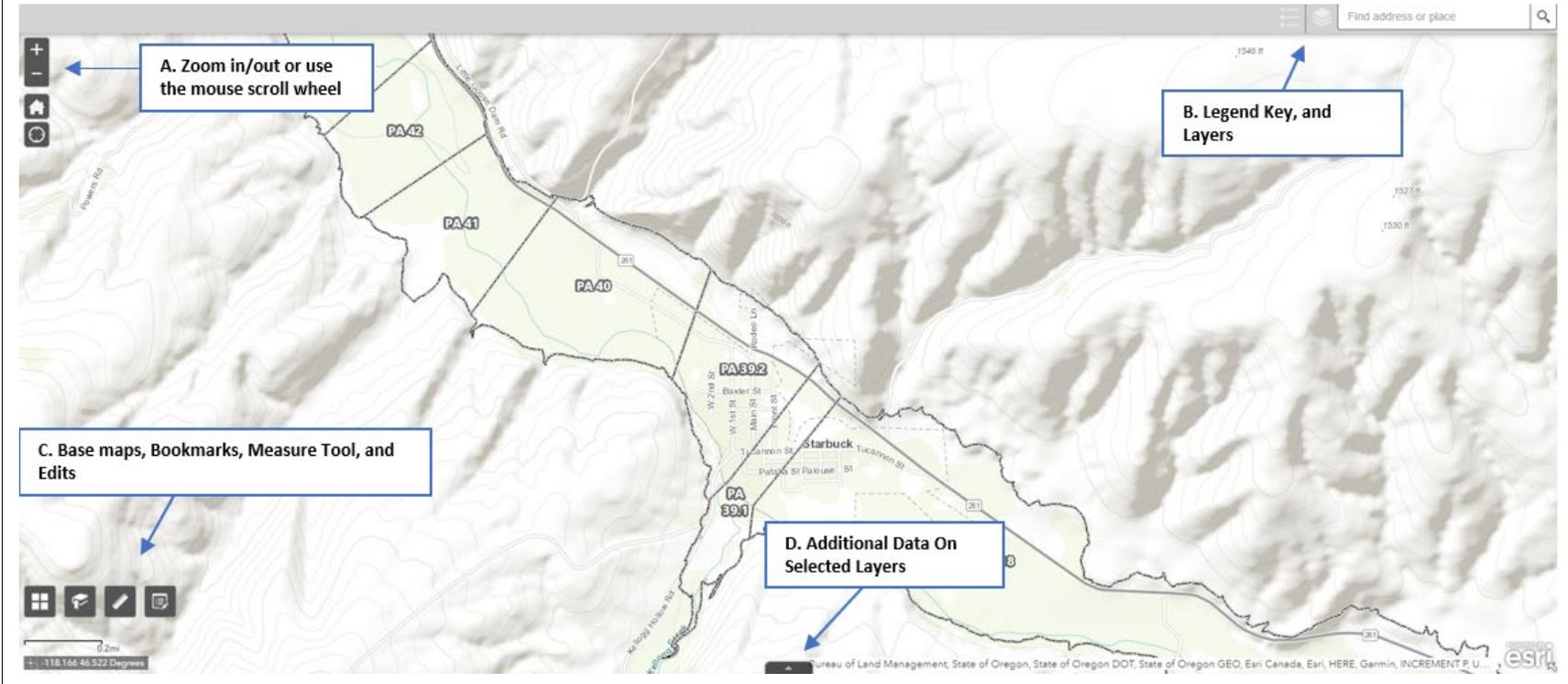


Figure I-2
Webmap Layer Options

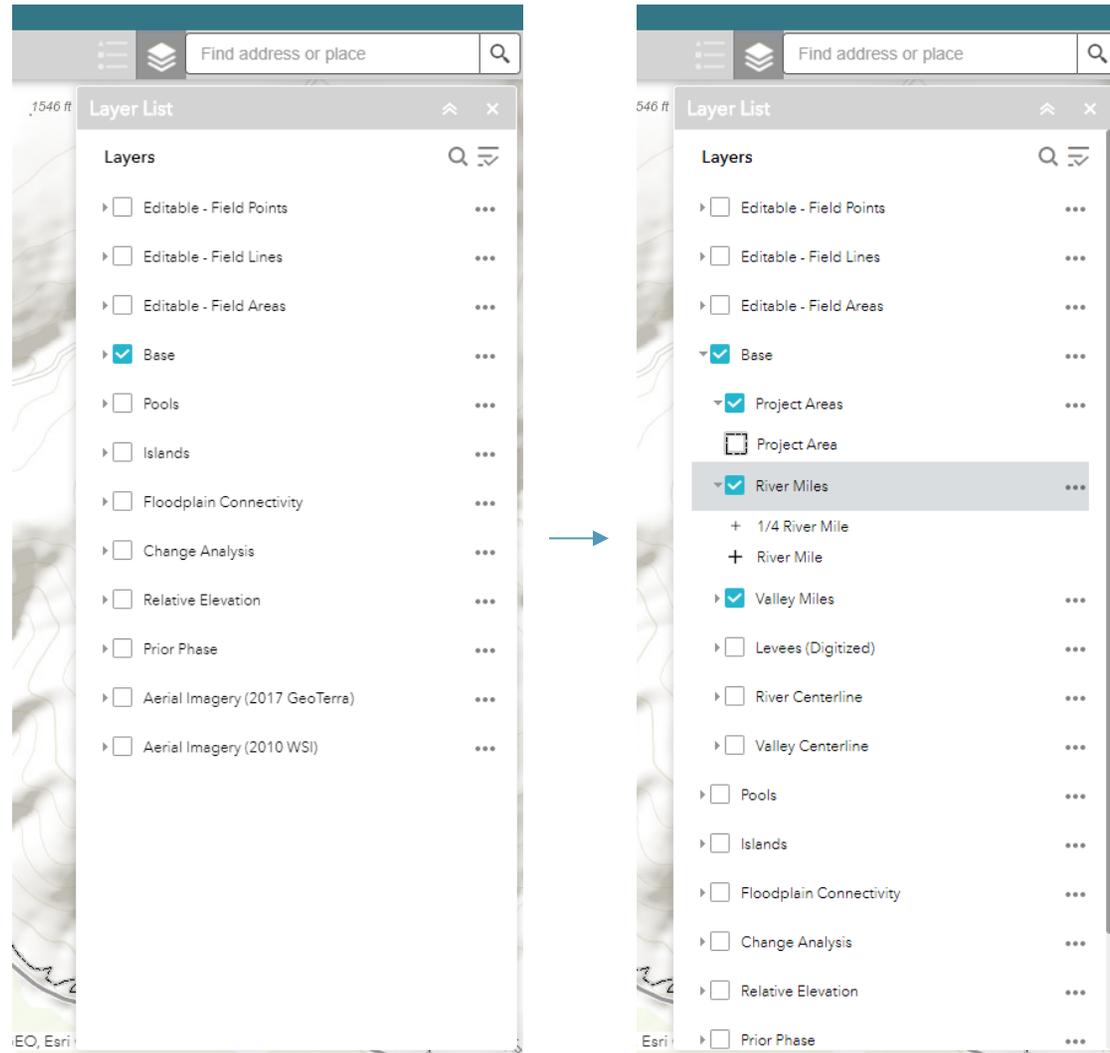


Figure I-3
Webmap Detailed Layer Data

