

Forest Practices Application Mapping Tool (FPAMT) Release Notes & User Guide

September 2022

Forest Practices Activity Mapping Tool (FPAMT) - Summer 2022

A new version of FPAMT is being released September 1, 2022.

FPAMT is DNR's external web mapping tool, which allows proponents to create the required DNR Forest Practices Activity Map. In addition, it can be used to review potential resources, find the appropriate Region for the activity, as well as print supporting maps for Water Type Modifications, site class maps for riparian management zone information, and resource maps for slope stability information.

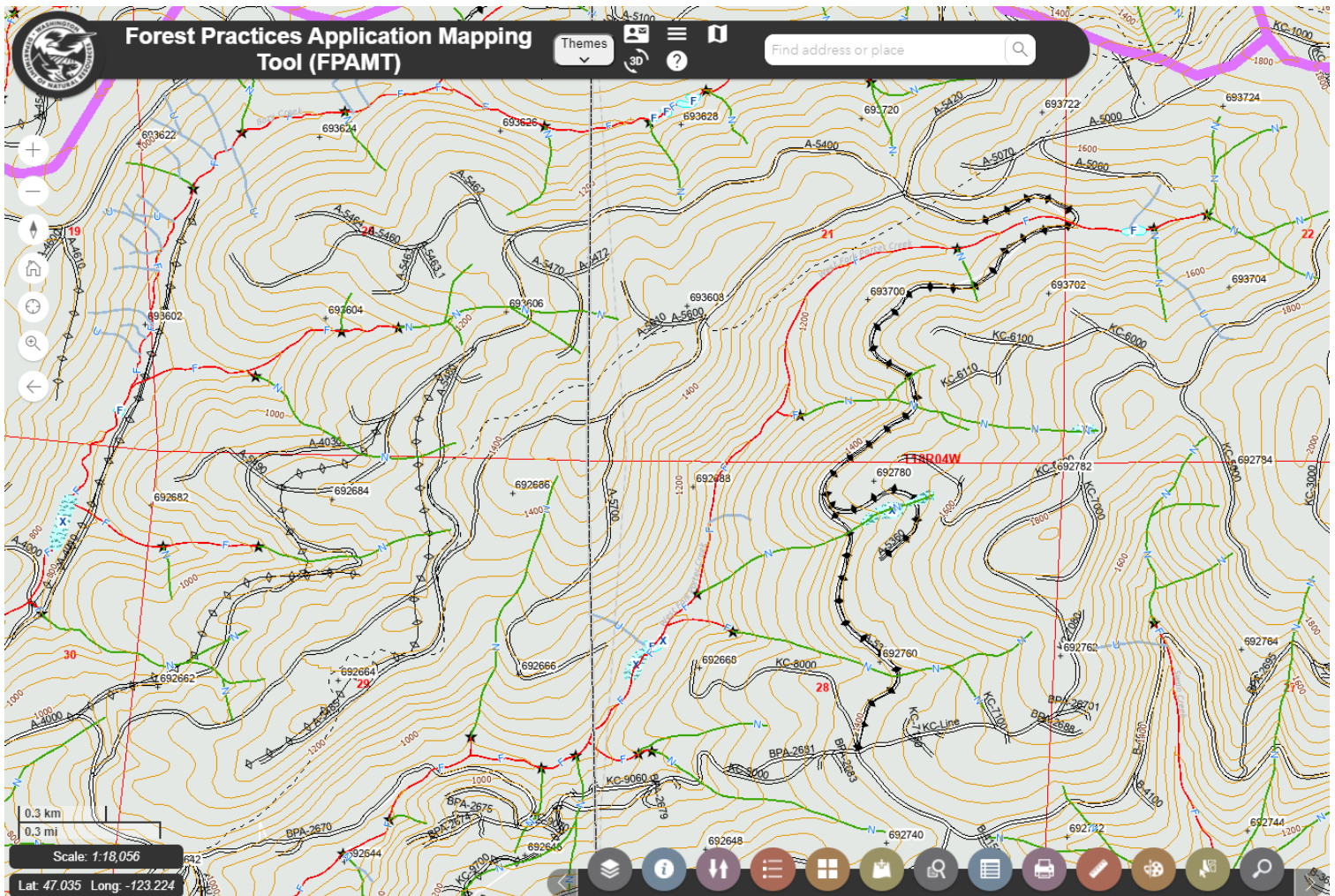
Summary of Changes

- New Look.
- New Widget Bar at the bottom center of the page with the tool buttons.
- Table of Contents can be moved or closed.
- Legal Description search has been moved to the widget bar.
- Search by Address function is now included.
- Ability to add (upload) data to the map.
- Legend and layer reordering tool has been moved to the widget bar.
- Resource and base map themes have been combined.

Note: FPAMT works best in modern internet browsers including Chrome, Microsoft Edge and Safari. Internet Explorer is no longer supported with this version.

FPAMT Toolbars and New Look

Banner Bar

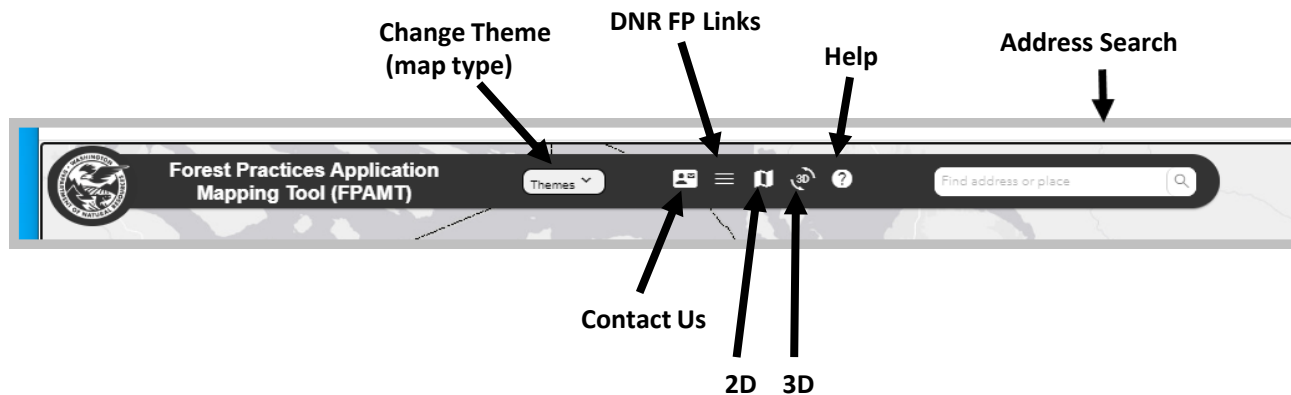


Viewing
Tool
Bar

Scale & Geolocation Display

Widget Bar

Banner Bar - Overview



Banner Bar - Components

Contact Us – Should you have issues with FPAMT let us know using the email or phone number listed here.

DNR Links – Contains links to DNR Forest Practices topics.

? (Help) – standard help on features of FPAMT.

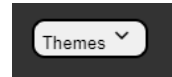
2D and **3D** are not fully functional at this time.

See the following pages for information on **Themes** and **Address Search**.

MAP THEMES

FPAMT opens to the Activity Map View, you can change to other views as listed below.

- Select Themes from the banner at the top left or the button on the table of contents.
- The list of themes appears from the table of contents.
- Select the theme you wish to view.
- Close table of contents.



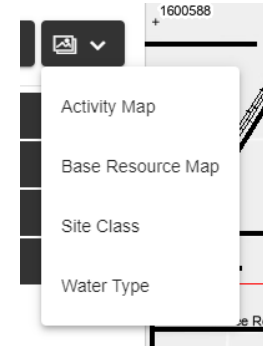
Available map themes include:

Activity Map: To be included with the Forest Practices Application (FPA).

Base Resource Map: Used to view some of the resource information used to complete an FPA.

Site Class: Displays site class needed to complete some FPAs.

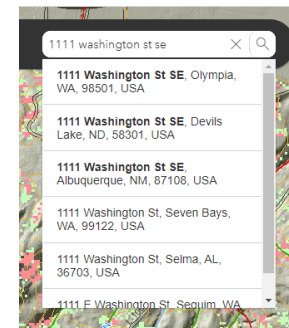
Water Type: To be included in any water type modification form.



ADDRESS SEARCH

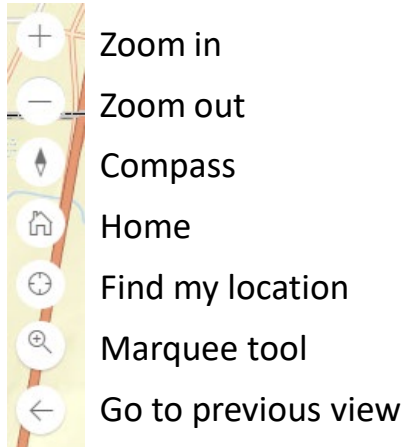
The address search is found at the top of the page.

- Type in address (pause to allow for choices to appear).
- Choices will appear below.
- Select the appropriate address.
- Map will zoom to the selected address.



Viewing Tool Bar

These tools are found on the left side of FPAMT:



- Zoom in – this tool is used to decrease the scale of the viewable map. Likewise, you can use the scroll wheel on your mouse or double click within the map layer to zoom in.
- Zoom out – this tool uses the same concept as the *Zoom in* tool but it will increase the scale of the viewable map. The mouse when can be used to accomplish this also.
- Compass tool – this tool can change the orientation (cardinal direction) of the map view.
- Home – the home option will take you back to the main map of the entire state.
- Find my location – if you allow FPAMT to track your location, this tool will zoom to your current location.
- Marquee Tool – Click this tool and then drag a box on the map to zoom to that area.
- Zoom to previous extent – this tool is similar to an “undo” but takes you back to your previous location.

Notes: To pan the map, hold down the left mouse button while moving the mouse until you find a specific location.

You can also zoom in to a location by holding down the shift key and the left mouse button. Then draw a box around the area you want to zoom into and release the mouse button.

Widget (tool) Bar

All widgets:

1. Opens up an overlay window to enable a set of features.
2. Has a hover-over tool tip identifying the tool or feature set.
3. The widget / window can be toggled on and off using a mouse click on the widget icon.
4. When a widget is active, it will be displayed “up” in the toolbar, as shown here with tool #9.




- | | |
|---------------------------|---------------------------------------------------------------------------|
| 1. Open Table of Contents | Displays layers used and turn on/off layers. |
| 2. Identify Tool | Provides information about layers present in viewer (click and identify). |
| 3. Reorder Layers | Drawing order change. Click & drag to reorder layers. |
| 4. Legend | Display of symbols that denote layers on the map. |
| 5. Base Map Gallery | Change the displayed base map. |
| 6. Add Data | Temporarily add your own data to the map. |
| 7. Query | Search for a map feature based on it's attributes. |
| 8. Attribute Table | Display of the attribute table for features on the map. |
| 9. Print | Creates pdf file of the area in the center of the screen. |
| 10. Measure | Measurement tool to find a distance or area. |
| 11. Draw | Temporarily draw lines or shapes on the map. |
| 12. Select by Geometry | Use a line/shape to display data about features on the map. |
| 13. Find Location | Search for legal description, County, WAU or WRIA. |

TABLE OF CONTENTS

This tool opens the table of contents tab that contains a list of available layers within FPAMT.

- This table of contents can be closed and opened later and moved.
- The map theme can be changed here.
- Each category (group) shown can be expanded by clicking on the title to show multiple available layers. Note: The data categories may change depending on the map theme used.
- Layers can be turned on/off by checking the box to the left of the layer name.
- Additional options within each layer are available by clicking the symbol that looks like 3 horizontal lines to the right of the layer name. Once clicked, an option menu will allow you to:
 - Set the transparency of the layer.
 - View the description of the layer.
 - Display labels when applicable.
 - Review metadata information about the layer.
 - View data tables of each point and their related data fields.
- You can also read text about recently added features or bugs that were resolved by using the New button.

Note: Some layers will not be visible on the map until you zoom in (scale dependency). If a layer name is grayed out and in italics that means you need to zoom in more for that layer to appear on the map. Here is an example 

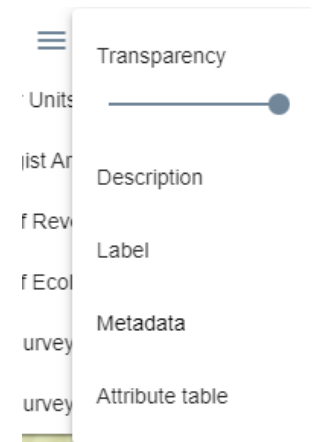
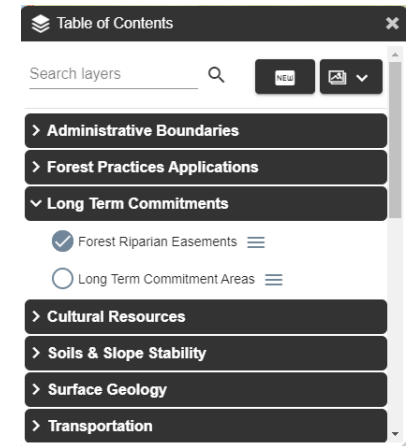
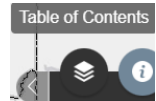


TABLE OF CONTENTS - PARCELS

A parcel layer is available on each map theme.

- The parcel layer is turned off by default so it needs to be turned on.
- To turn on the parcel layer, go to the table of contents and scroll to the bottom of the first folder (Activity Folder in the screen shot to the right).
- The map view must also be zoomed into a scale of at least 1:18056.

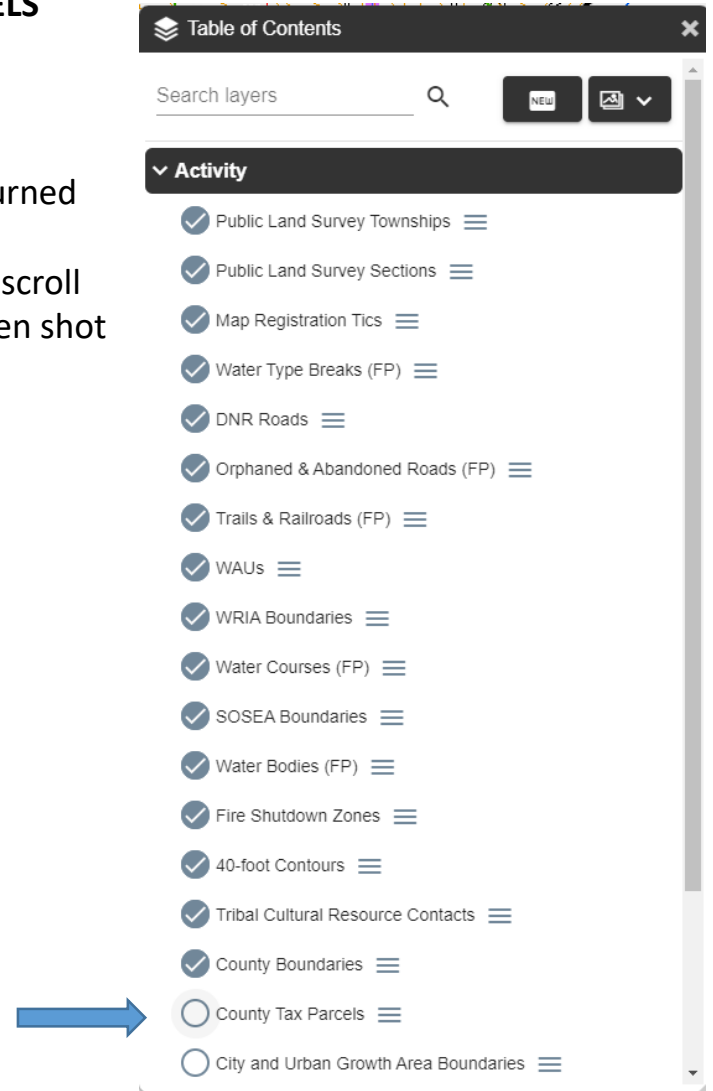
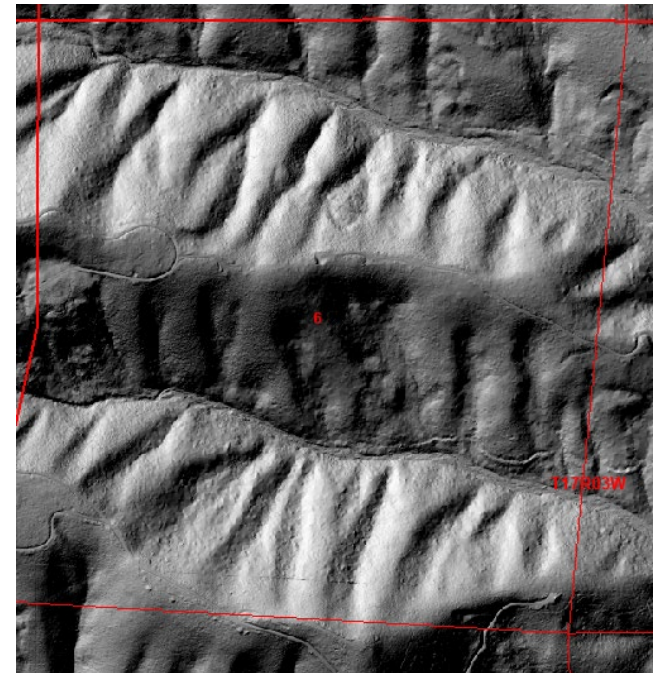
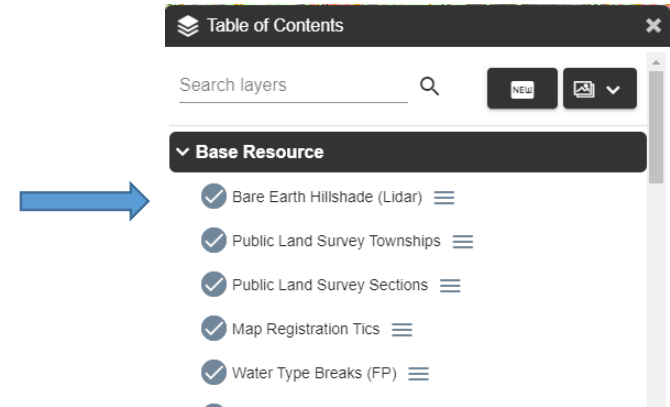


TABLE OF CONTENTS - LIDAR

The Base Resource map theme includes a Bare Earth Hillshade (Lidar) layer that is a highly accurate representation of the earth's surface.

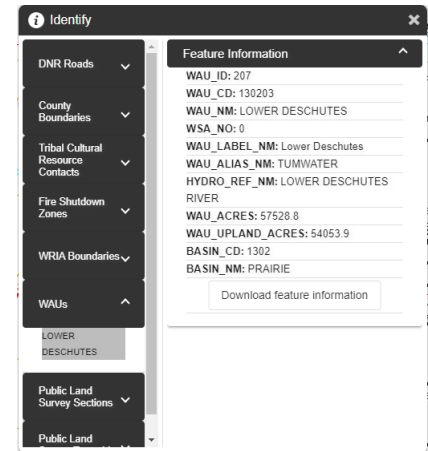
- To access it, go to the Base Resource map theme and open the Base Resource folder in the table of contents (pictured to the right).
- The Bare Earth Hillshade layer will be on by default but may be hard to see so you may need to turn off other layers.
- To the right is an example of what lidar might look like. You can see road locations and where streams are located as well.



IDENTIFY TOOL

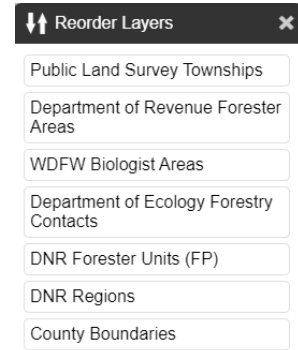
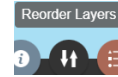
This tool is used to view information about a feature on the map view.

- Select Identify tool on the Widget Bar.
- Click on the feature you want information about (a stream or parcel for example).
- A new window appears that lists all the GIS layers found in that location.
- In the left (dark colored) column of the Identify pop up window, find the layer you want information about and click the arrow pointing down to the right of layer name.
- Click on the text that appears below the layer name.
- The right column should change to display information.
- Close the Identify tool.



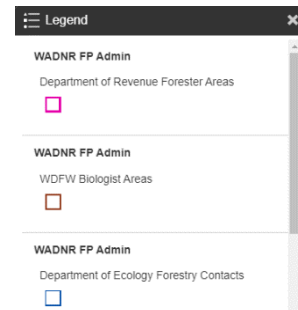
ORDER LAYERS TOOL

- This tool is used to reorder layers on the map.
- Click on the layer and hold the layer you want to move up or down and drag the layer to the desired location.



LEGEND TOOL

- The legend tab shows symbology for each of the active (currently drawn) layers.



BASEMAP GALLERY

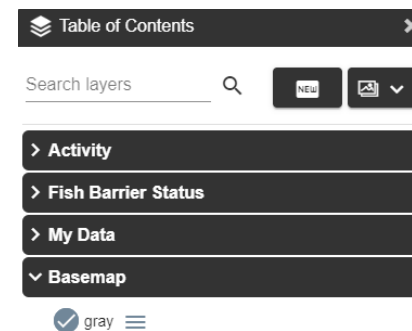
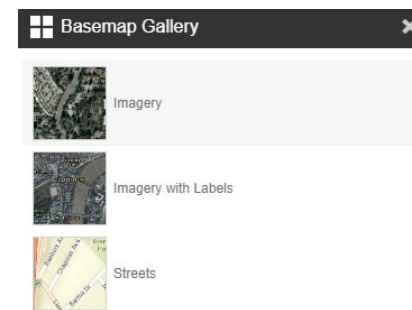
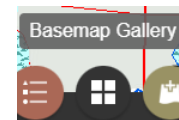
The base layer can be changed to display imagery, topographic maps, etc.

- Select the Basemap Gallery tool on the Widget Bar.
- In the Basemap Gallery window, click on the desired type of map.
- The map view changes to display the type of map selected.

To turn off the Basemap:

- Open the Table of Contents.
- Click on the Basemap folder name to open it.
- Uncheck the circle next to the basemap name (“gray” in the example to the right).

Note: Basemaps in the gallery are ESRI products and not under DNR control. The maps may contain geographic features such as roads and streams that are not accurate or differ in location from the DNR layers. DNR layers are the official layers that need to be addressed when filing a forest practices application.



ADD DATA TOOL

You can add your own GIS data to the map. The data must be in the shapefile format AND be saved in a zip file.

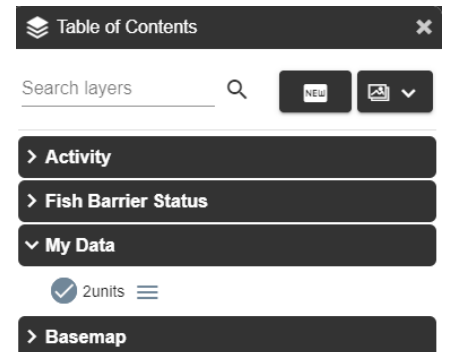
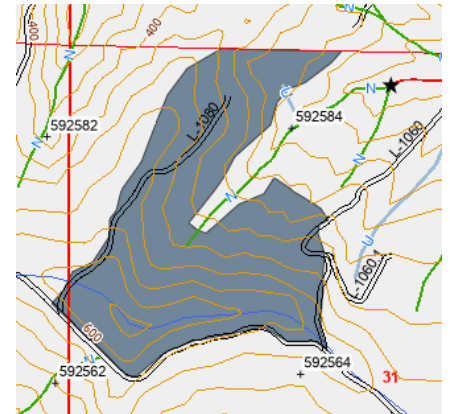
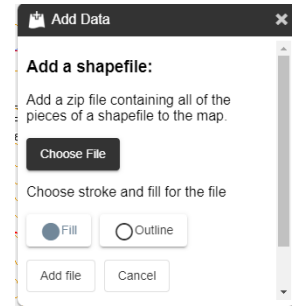
- Select the Add Data tool on the Widget Bar.
- In the window that appears, click Choose File and pick the zip file from your computer.
- If you wish, to change the fill or outline color click those buttons and then clicking on a color.
- Click the Add File button.
- The GIS data is added to the map view as seen in the lower right portion of this page.

To turn off layers added through the Add Data tool:

- Open the Table of Contents.
- Click on the My Data folder name to open it.
- Uncheck the circle next to the name of the layer you uploaded.

Notes: The uploaded data will appear when you print the map.

The data is not saved and will be removed if FPAMT is closed or you change map themes.



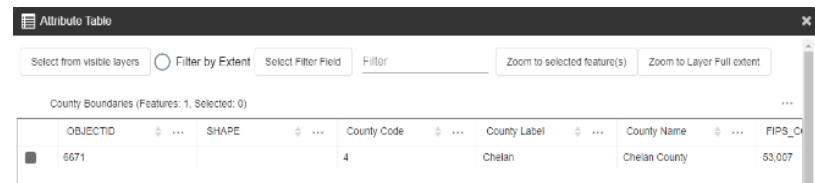
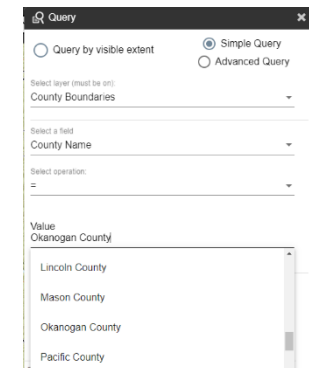
QUERY AND ATTRIBUTE TABLE TOOLS

These tools work together to find information about a layer (attributes). The query tool lets you build a complete query expression including the ability to pick an operator (=, >, <, etc.) and select from a list of possible answers. The attribute table lets you pick from a list of all possible values or enter a specific value and then zoom to that feature.

QUERY TOOL

After a query is built in this tool and run, the attribute table tool opens where you can zoom to a selected feature.

- After the query tool opens, pick the layer you want to find a feature in.
- Then pick the field the value is found in and the operator (usually =).
- Next pick the value from the list found by clicking under the word Value.
- Click Run or Clear to start over.
- The Attribute table tool opens.
- Click the check box to the left of the tabular data.
- Click the Zoom to selected feature(s) button in the upper right.
- The map zooms to the feature.
- Close the Attribute table tool.

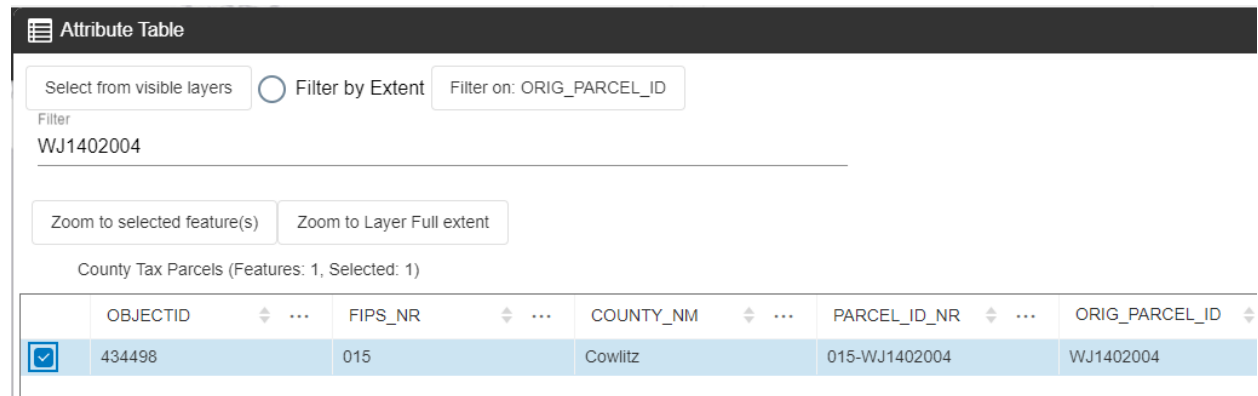
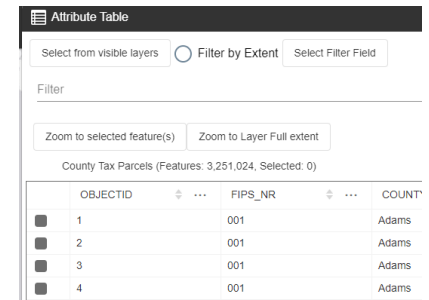
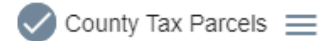


ATTRIBUTE TABLE – Search for Parcel Number Example

- Turn on the County Tax Parcels layer in the table of contents (all 4 themes).
- Zoom in to the general area where the parcel is if possible.
- Click the Attribute Table tool.
- In the window that appears, uncheck Filter by Extent.
- Click the Select from visible layers button and pick County Tax Parcels.

If the map view displays a large area this step could take a few minutes.

- Click the Select Filter Field button and pick ORIG_PARCEL_ID.
- On the line below or to the side of those buttons type the parcel number and then press enter.
- The parcel should appear in the table below.
- Click the check box to the left of the row with the parcel number.
- Click the zoom to selected feature(s) button.



PRINT MAP (or save to a file) TOOLS

Please be sure to configure your web browser to allow pop ups from the FPAMT web site before proceeding. Instructions for doing that can be found [here](#).

The printed map will be centered on the location displayed in the center of your screen. You can use your mouse to adjust the map view (pan) in any direction or zoom in or out using the mouse wheel or the + or – buttons on the left side of the screen.

- Select Print Map tool.
- New window pop up will appear and the area that would be printed using the default settings is identified on the map view. The area that will not be included in the map is darkened.
- Change the page size if needed.
- Change the scale if needed, the preferred scale is 1:12,000 however 1:4,800 and 1:24,000 are also available.
- Enter any notes you would like to appear on the map.
- You can adjust area to be printed by holding the left mouse button Down and dragging the map view.
- Delete any legal descriptions that are not included in your project.
- Select Generate file. You will see a moving graphic that indicates your map is processing.
- When the graphic disappears click the link in the Download Map box.
- The map will open in your web browser, print or save it.
- Close Print tool.

A screenshot of the 'Print Map' dialog box. It has a title bar with a printer icon and the text 'Print Map'. The settings include: 'Page size and orientation' set to 'Letter Portrait (8.5 in x 11 in)', 'Output format' set to 'PDF', and 'Print Scale' with radio buttons for '1:4,800', '1:12,000' (selected), and '1:24,000'. There is a 'Notes' section with a text input field containing 'This is property 23-2323566|'.A screenshot of the 'Print Map' dialog box showing the 'Legal Description' section. It has a title bar with a printer icon and the text 'Print Map'. The settings include: 'Preview ON/OFF' (checked) and 'Include legend' (unchecked). The 'Legal Description (6) items' section contains a list of legal descriptions: 'S01 T17.0N R03.0W', 'S14 T17.0N R03.0W', 'S12 T17.0N R03.0W', 'S11 T17.0N R03.0W', and 'S13 T17.0N R03.0W'. Below the list is a 'Generate file' button. At the bottom, there is a 'Download Map' section with a link: '1. FPAMT Letter Portrait (8.5 in x 11 in)' and a PDF icon.

Notes About Printing A Map

- On the Activity Map, Site Class Map and Water Type Map, if you have turned layers off, some may be turned back on automatically in the printed map. The only exceptions are the County Tax Parcels and the City and Urban Growth Area Boundaries. The Base Resource Map will print what appears on the map view.
- After you print the activity map, if you need a site class map or water type map, you will need to change themes and print those individually.
- At least 4 map registration tics must be visible on the map. These are represented by the “+” symbol with a 7 digit number next to it. This will only be an issue when using the 1:4800 map scale. If there are not 4 tics visible, please move the map view until there are.

MEASURE TOOL

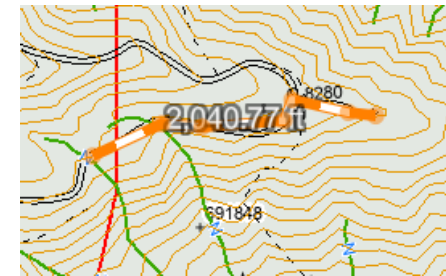
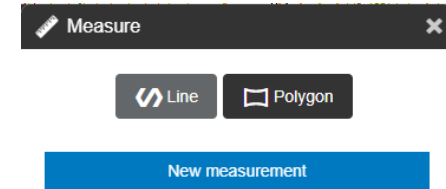
This tool is used to measure distance or area.

- Select Measure tool on the Widget Bar.
- In the Measure tool window pick the type of measurement you wish to use. Choose line for distance and polygon for area.
- If you pick line, click once to start your measurement and then click as many times as needed along the path to be measured.

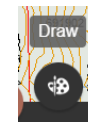
Note: Be sure to click slowly for each point of the measure.

- Double click to finish.
- The distance will be displayed as you go.

- Pick New measurement.
- For a polygon (area), click once to start and then click along the perimeter of the area to be measured.
- Double click to finish.
- The area is displayed as you go.
- Closing the tool will remove the measurement graphic.



DRAW TOOL



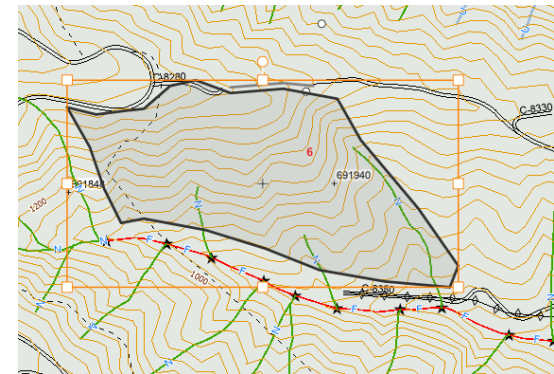
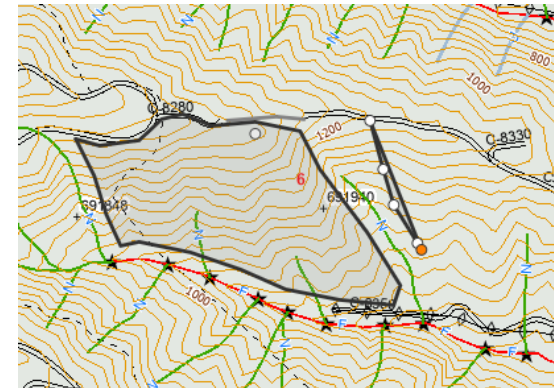
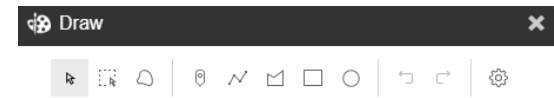
You can create points, lines and polygons on the map using the Draw Tool.

- Select the Draw tool on the Widget Bar.
- In the tool window that opens, the 5 buttons in the middle are for creating points, lines or various polygon shapes on the map.
- Click one of the tools.
 - Click once on the map if creating a point.
 - Click a series of locations to create a line or polygon.
 - Double click to finish.
 - Points appear as white dots, lines are gray and polygons are gray inside with a black outline as seen to the right.

Note: Click slowly for each point along your drawing.

The first 3 buttons on the left are for selecting something you drew and reshaping it, moving it, or deleting it.

- Pick the best tool for selecting the graphic in your situation (usually the arrow on the left).
 - Click on the shape you drew and want to change and a orange box appears around it with squares.
 - Use the Delete key to remove the shape.
 - Reshape by dragging the squares.
 - Use the mouse to move it by holding down the left mouse button.



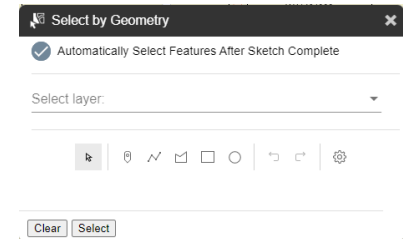
SELECT BY GEOMETRY TOOL

This selection tool allows you to draw a rectangle, circle, line or polygon around an area.

- First pick the layer that you want to select features from (the layer must be turned on in the table of contents),
- Next pick the kind of shape you want to use to select features on the map using one of these buttons.

Note: to use the line or polygon tool, click once to start and double click to finish. To use the rectangle or circle tool click once, drag the mouse and release to finish.

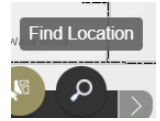
- Once a shape is drawn around the area, an attribute table for that layer will pop up.



	OBJECTID	FIPS_NR	COUNTY_NM	PARCEL_ID_NR	ORIG
■	431553	015	CowItz	015-WJ1401010	WJ14
■	434497	015	CowItz	015-WJ1401009	WJ14
■	434998	015	CowItz	015-WJ1401002	WJ14
■	439986	015	CowItz	015-WJ1401001	WJ14

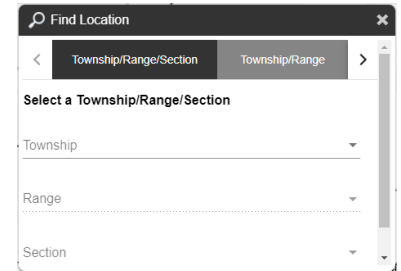
FIND LOCATION TOOL

Previously this tool was located in the upper right corner of the page and was a tool on the tool bar. It can now be found in the widget bar at the bottom of the page.



FPAMT opens to a full view of Washington state.

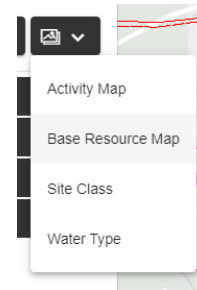
- Select Find Location tool.
- New window pop up will appear.
- Select the tab of the type of geographic location you want to zoom to including Township, Range and Section, County, WAU, WRIA, Lat/Long and Township/Range.
- Pick the name of the place you want to zoom to or enter the lat/long.
- The map will zoom to the location you've selected.
- Close the Find Location tool.



RESOURCE CONCERNS

Some resource concerns are listed for a particular township, range and section.

- Pick the Base Resource Map theme from the table of contents.
- The Find Location – Township/Range/Section tool opens.
- Select the township, range and section of the location.
- After you select the section, the map zooms to that location and the Traxs Report window opens where concerns are listed, an agency to contact and their phone number.



Note: This is not a complete list of resource concerns for that section. Please also use the other GIS layers in the map theme and other mapping tools such as those at WDFW and the NRSC.

If you do not wish to see the list of concerns, you can close the Find Location window and find your desired location using any of the navigation tools.

This window displays resource information not shown on the map, but is found within this section: **T03N R03E Section: 3**. For information on the identified resource, contact the agency listed.

<u>Agency</u>	<u>Issue of Concern</u>	<u>Phone Number</u>
Dept. of Ecology - SW	Ground Water	(360) 407-6300
Dept. of Ecology - SW	Surface Water	(360) 407-6300