

# CO-WRAP – Professional Viewer

## Table of Contents

What is the Professional Viewer? .....	2
How do I get access to the Professional Viewer? .....	2
How do I navigate the app? .....	2
What are the Getting Started tools?.....	3
How do I navigate the map? .....	3
How do I search for a city or county? .....	3
What is the difference between Reference Base Layers and other Map Themes? .....	4
How do I view Reference Layers? .....	4
How do I view Map Themes?.....	4
How do I change the base map?.....	4
What are Project Areas? .....	5
How do manage my Project Areas?.....	5
How do I create a new Project Area? .....	5
How do I define a Project Area by using the map?.....	6
How do I define a Project Area by Importing a Shapefile?.....	7
How do I create a custom report? .....	8
How do I export data? .....	8
How do I view my exported data? .....	9
Are Project Areas saved between sessions?.....	9
Can I export data for the entire state without creating project areas for each county? .....	9
What map tools are available? .....	9
What are the different tools I can use to identify map features? .....	9
Can I measure an area or distance on the map? .....	11
How do I compare two active layers?.....	11
Can I search by coordinates or view coordinates in a specific location?.....	12
How do I Print a Map? .....	12

## What is the Professional Viewer?

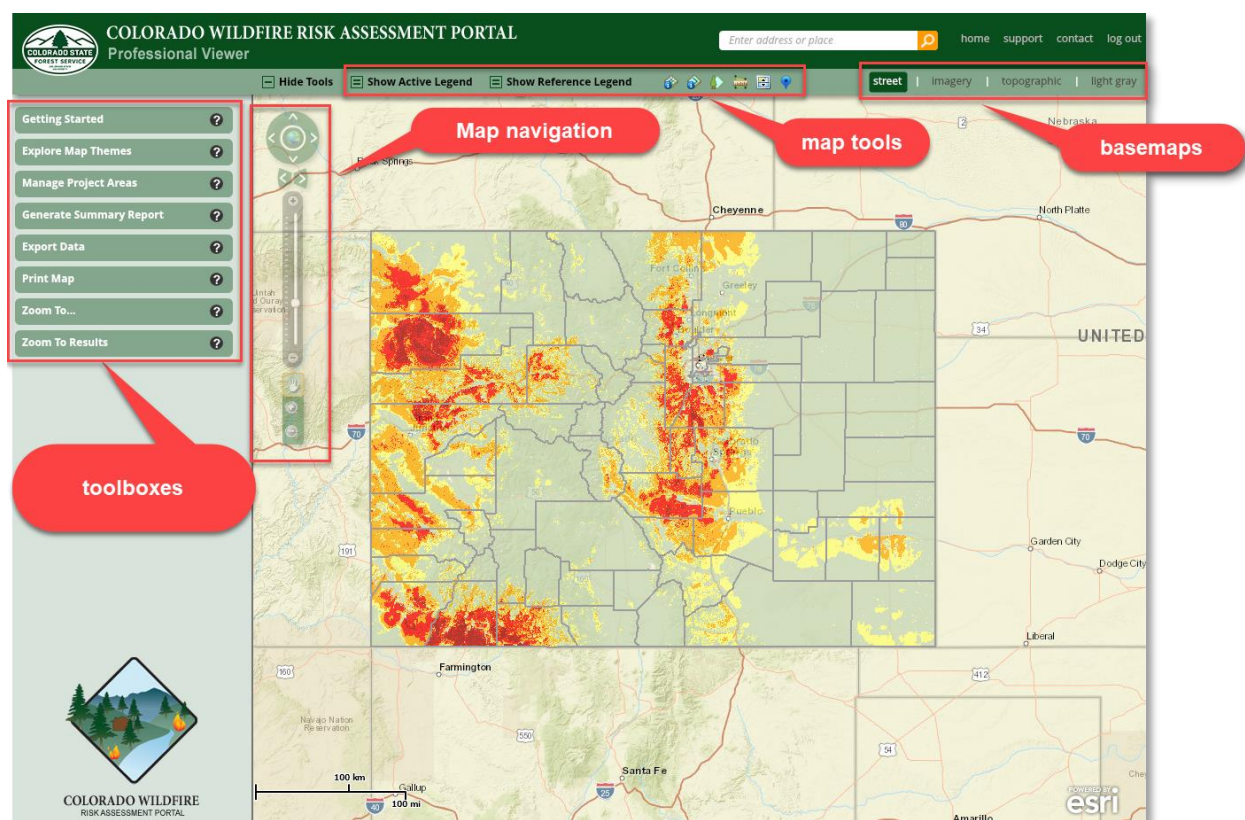
The Professional Viewer is a web-mapping application designed to support the community wildfire protection planning needs of government officials, hazard mitigation planners and wildland fire professionals. This application contains advanced functionality and additional map themes as compared to the Public Viewer. The key features of this application include the capability to define a project area, generate a detailed risk summary report, and export and download wildfire risk GIS data.

## How do I get access to the Professional Viewer?

Access to the Professional Viewer requires a valid user account from the Colorado State Forest Service. You must register for the site using the link on the Sign In page and receive approval from CSFS.

## How do I navigate the app?

The Professional Viewer application consist of a large map screen with a panel of toolboxes on the left side. The toolboxes can be hidden by clicking the Hide Tools link. Press Show Tools to show the toolboxes.



Toolboxes can be toggled open/closed by clicking on the name of the toolbox. Click the question mark (?) icon to view more information about a toolbox.

Application tools are available in the top toolbar of the app. These include identify, identify reference layers, review forest management activities, measure, swipe, and coordinates. Basemaps can be changed using the options in the top right.

To open the Home, Support, or Contact pages for CO-WRAP, click on links in the upper right corner of the page.

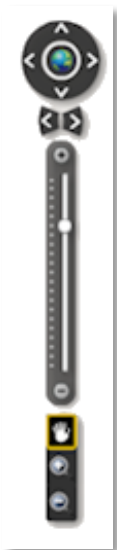
Map navigation tools are in top left portion of the map. These include zoom in/zoom out tools, zoom to default extent, and pan the map.

Use the Show/Hide Active Legend tool to see the legend for the active layer. Use the Show/Hide Reference Legend tool to see the legend for the reference layers.

## What are the Getting Started tools?

The Getting Started tour will introduce you to the basic operation and features of the application. Click the right arrow button to go to the next feature or click the X to close the tour. The Getting Started tour is always available from the Getting Started toolbox.

## How do I navigate the map?

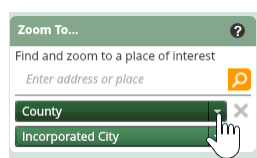


The easiest way to navigate the map is to use your mouse wheel to zoom the map in or out. If you are not using a mouse or do not have a mouse wheel, you can use the + and – buttons in the bottom right corner of the map to incrementally zoom the map in or out. Left click and hold your mouse, then move the mouse to pan the map.

Using the navigation controls, you can:

- Zoom to Colorado – use globe icon to zoom to full extent
- Pan – use four-way arrows to pan map in any direction
- Zoom Previous/Next Extent – use two-way arrows
- Zoom to Scale – simply drag zoom slider to desired scale
- Incremental Zoom – use the +/- on zoom slider

## How do I search for a city or county?



Use the Zoom To... toolbox menus to zoom the map to the extent a particular County or Incorporated City.

## What is the difference between Reference Base Layers and other Map Themes?

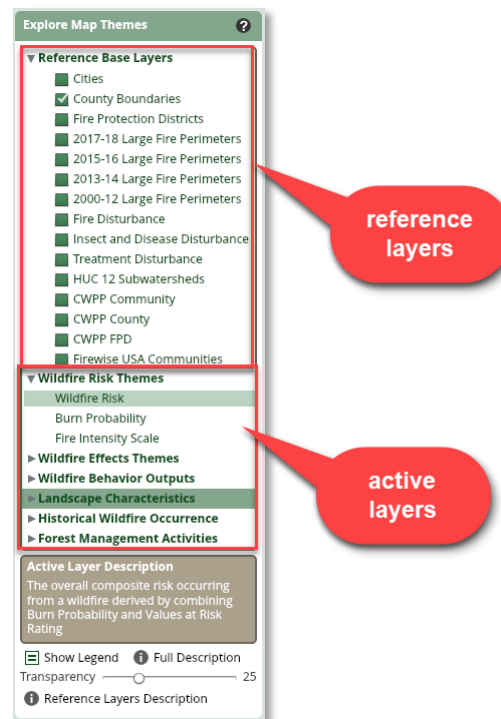
Reference Layers are supporting map layers or reference information for viewing in conjunction with other risk assessment maps. More than one reference layer can be displayed on the map at the same time.

Map Themes are considered “active” map layers and can only be viewed one at a time. The one that is selected is “active”.

## How do I view Reference Layers?

To view the reference layers, click the Explore Map Themes toolbox to expand, and click the boxes next to the reference layers you wish to view.

Click on Show Reference Legend/Hide Reference Legend icon to toggle the legend for the reference layers on and off. Click Reference Layers Description at the bottom of the toolbox to find more information about the reference layers.

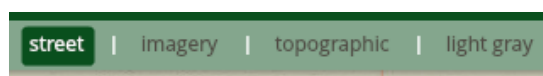


## How do I view Map Themes?

To view map themes, click the Explore Map Themes toolbox to expand, click to expand a theme group, then use the toggle buttons to toggle map themes on/off. When you click another toggle on, the last toggle will automatically toggle off. A short description of the active layer is available at the bottom of the toolbox. Click Full Description to see more information about the active layer. Adjust transparency using the slide bar. Click Show Active Legend/Hide Active Legend to toggle the active layer legend on and off.

## How do I change the base map?

Use the basemap tool to change the basemap shown in the application. Options are Street (default), Imagery, Topographic, or Light Gray.



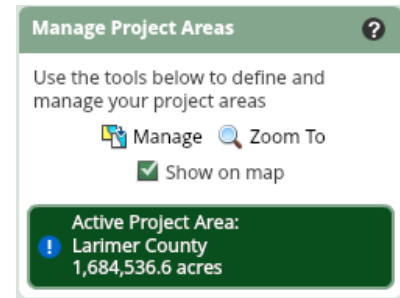
## What are Project Areas?

The primary CO-WRAP Professional Viewer tools require the creation of a project area prior to using them. You must create a project area if you want to generate a risk summary report or export data. Project areas have a maximum size limit of about 3 million acres.

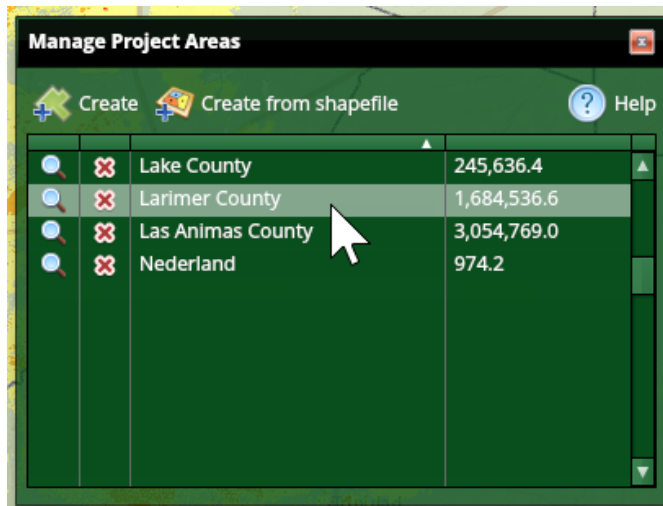
## How do manage my Project Areas?

The Manage Project Areas tool allows you to create, delete, zoom to, and select a project area. Only one project area can be selected or “active” at a time. Multiple project areas can be created and saved across sessions.

The Manage Project Areas toolbox will tell you what project area is “active”. Check “Show on map” if you want to draw the project area boundary on the map. Click “Zoom To” to zoom the map to the project area boundary. Click “Manage” to open the Manage Project Areas dialog.



### Manage Project Areas dialog



The Manage Project Areas dialog lists the project areas you have created and allows you to create new or delete existing project areas. This dialog can stay open while you work with the map. Drag the window to the side of the browser window if it is in the way. To zoom to a project area boundary, click the magnifying glass. To delete an existing project area, click the red “X”. You will be asked to confirm your decision.

## How do I create a new Project Area?

There are two primary workflows to create a project area –

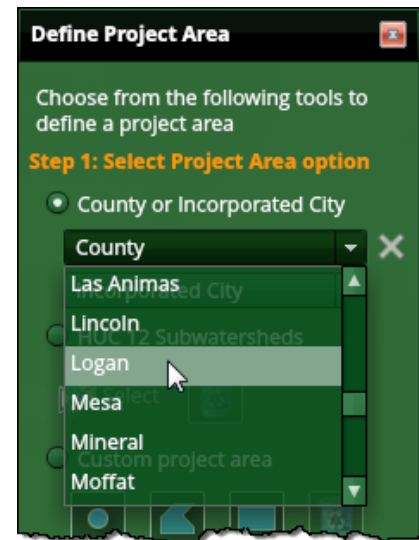
- 1) Create on Map
  - a. Choose a County or Incorporated City boundary from a menu
  - b. Select Reference layer polygons on the map
  - c. Draw custom shape on the map
- 2) Create from Shapefile.

### How do I define a Project Area by using the map?

Press the *Create* button on the Manage Project Areas dialog and follow these steps:

#### Step 1: Select Project Area Option

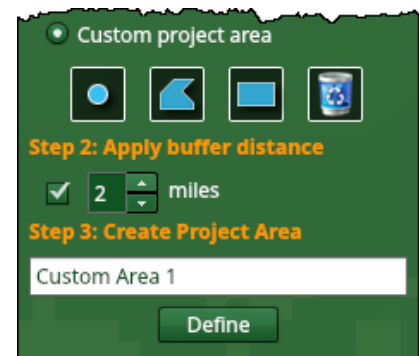
- “County or Incorporated City”  
This option requires you to select an existing county or city from the dropdown lists. Once you select a name, the map will zoom automatically to that area and the boundary will be drawn.  
**Tip**—When you select a county, only the incorporated cities in that county will be shown in the incorporated city dropdown list.
- “Reference Layers”  
This option will allow you to select a reference layer from a dropdown list and select one or more polygons from the map to use as your project area. Choose a Reference Layer from the dropdown list. Click the *Select* tool and click on the map to select polygons. Click a selected polygon again to deselect it. If you make a mistake, use the *Clear Graphics* button to start over. Click the *Select* tool again to deactivate the tool and proceed to Step 2.
- “Custom project area”  
This option will allow you to draw a custom boundary on the map. To do so, follow these steps:



#### Step 1a: Digitize Project Area

You can draw a boundary on the map using the following options:

- Draw a point and define a buffer in Step 2
- Draw a polygon boundary – Use single left-mouse clicks to digitize points and a double left-mouse click to finish the polygon boundary
- Draw a rectangle – Press down on the map with the left-mouse button and drag the mouse to create a rectangle. Let go to finish.





If you make a mistake, use the *Clear Graphics* button to start over.

### Step 2: Apply buffer distance (optional)

You can use this option to define a buffer distance around the point or polygon you digitized. Check the box and define the number of miles you want as a buffer. A buffer is required if a point was drawn using the Custom project area option in Step 1a.

### Step 3: Create Project Area

Once you have defined the boundary for your Project Area, enter a name for the area and press the Define button. The Project Area feature will be created and drawn on the map. The map will zoom automatically to your new Project Area and the name and acreage of your area will be shown in the Manage Project Area dialog.

### How do I define a Project Area by Importing a Shapefile?

You can also create a project area using the Create from Shapefile tool. This tool allows you to upload an existing shapefile from your computer. **The shapefile must meet the following requirements:**

- Shapefile must be in the *NAD 1983 Universal Transverse Mercator (UTM) Zone 13N* coordinate system
- Shapefile must be uploaded as a ZIP file that contains the following file types: SHP, DBF, and PRJ
- ZIP file must be 2MB or less
- Shapefiles may have multiple polygons, however you will need to select a single polygon to define your Project Area
- Multi-part polygons can be used to create a project area

To use a shapefile as your Project Area, follow these steps:

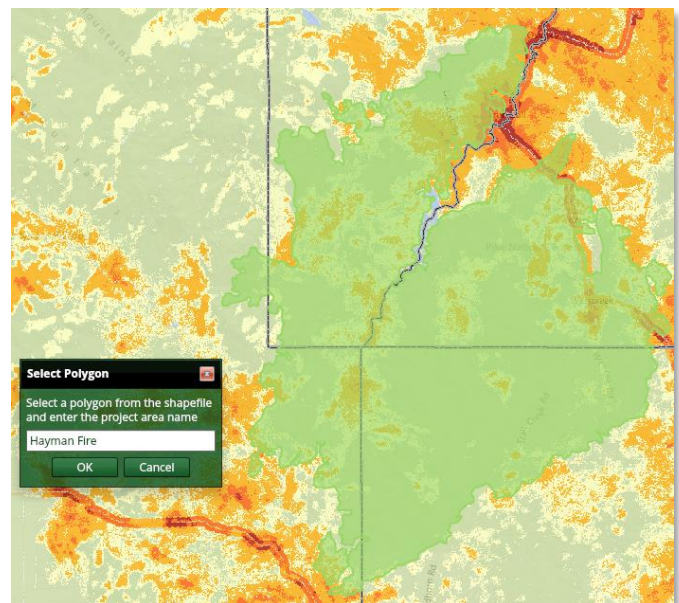
#### Step 1: Select Shapefile ZIP file

Press the *Create from Shapefile* button and navigate to your zipped shapefile. Select the file and click *Open*. The application will unzip your shapefile and zoom to the full extent of all polygons within.

#### Step 2: Select Polygon and enter name

Use the mouse to click and select the polygon you want to use for your Project Area. Enter the Project Area name and click OK.

Valid characters for Project Area names are A-Z, a-z, 0-9, comma, and space.



## How do I create a custom report?

The Generate Summary Report tool will generate a comprehensive risk summary report for the active Project Area. You must define a Project Area before you can create a report. The Manage Project Areas toolbox will show you what project area is active. The risk summary report includes statistics, maps and charts of all key risk assessment input and output datasets.

To create a report:

1. Select the project area you want to use
2. Enter your email address (if different than the one you registered with)
3. Click Create

You will receive an email when the report is ready to download. You can continue to use the application or exit the application without interrupting the report creation process.

The report is provided in Microsoft Word .docx format.

## How do I export data?

The Export Data tool will create a zip file with the GIS datasets for the active Project Area. You must define a Project Area before you can create the zip file. The Manage Project Areas toolbox will show you what project area is active. The zip file will contain all key input and output assessment data as well as layer files and a default ArcMap mxd document. Note that to properly view the data you MUST unzip the data to a folder on your computer. Attempting to open the ZIP file mxd without unzipping will result in broken data links in the ArcMap document.

To export data:

1. Select the project area you want to use
2. Enter your email address (if different than the one you registered with)
3. Click Export

You will receive an email when the exported data is ready to download. You can continue to use the application or exit the application without interrupting the export data process.

The GIS data are provided in ESRI ArcGIS 10 file geodatabase format. An mxd with correct symbology is included.



## How do I view my exported data?

After you submit a request to export GIS data for your project area, you will receive an email message from the system with a link to download. Click the link to download your data. It will be in zip file format. You must extract the data from the zip file to see the data.

1. Right-click the downloaded zip file and select Extract All
2. Confirm the extract location and press extract
3. Navigate to the extract location and open CO-WRAP.mxd with ArcMap

Extracted data are in the *NAD 1983 Universal Transverse Mercator (UTM) Zone 13N* coordinate system

## Are Project Areas saved between sessions?

Yes, your project areas are saved to your user account. This means you can access your project areas from any computer.

## Can I export data for the entire state without creating project areas for each county?

Use the Contact Us form to send this request to the Colorado State Forest Service. Access is evaluated on a case by case basis. You may be required to sign a data sharing agreement.

## What map tools are available?



**Identify** – use this tool to show the values of several map layers for a specific user defined location



**Identify Reference Layers** – use this tool to show the values of several reference map layers for a specific user defined location



**Review Forest Management Activities** – select a Forest Management Activity polygon and review the activities conducted on that stand



**Measure** – use this tool to measure distance or area/perimeter on the map



**Swipe** – use this tool to visually compare two layers by choosing a layer to swipe over the top of the active layer



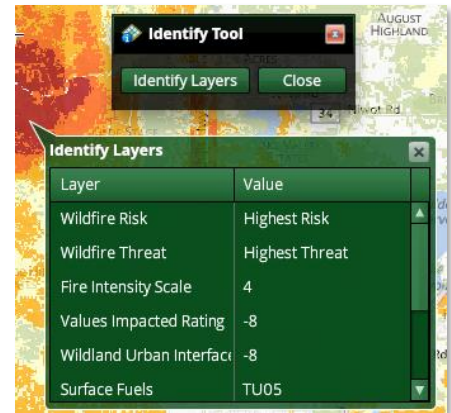
**Coordinates** – use this tool to show the current coordinates of the mouse pointer, show coordinates of a user-defined point on the map, or enter coordinates to search for a specific location

## What are the different tools I can use to identify map features?

The following tools can be used to identify features on the map:

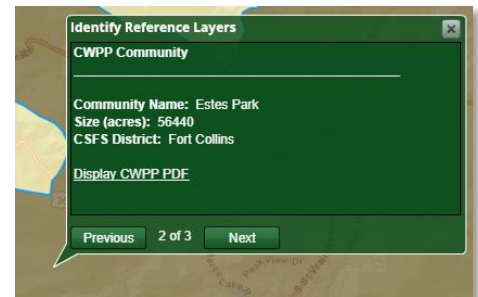
### Identify Map Theme

Click the Identify button to activate the tool. This tool can be used to show the values of several map layers for a specific location. Click *Identify Layers* and click a location on the map. A pop-up window will appear with names and values for each layer in the map. The pop-up window cannot be resized, but you can resize the columns or re-order the rows. Drag the column edge to resize or click the column header to re-order. Click *Close* on Identify Tool to dismiss both windows.



### Identify Reference Layers (CWPP Identification)

Click the Identify Reference button to activate the tool. This tool can be used to show the values of CWPP Community, County, or Fire Protection District boundaries at a specific location. This tool is useful for identifying overlapping reference layer features. Click the *Identify Reference Layer* button and click on one or more large fire perimeter polygons on the map. A pop-up window will appear showing information available about the identified polygon(s). If more than one polygon exists at that location, the buttons *Next* and *Previous* will guide you through each record. Click *Close* on Identify Reference Tool to dismiss both windows.



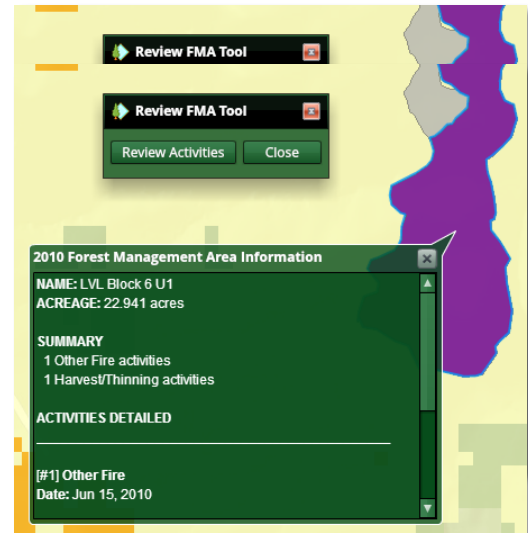
### Identify other Reference Layers

To identify non-CWPP reference layers, such as Large Fire Perimeters, deactivate any active identify tools, then click on a reference layer feature on the map.



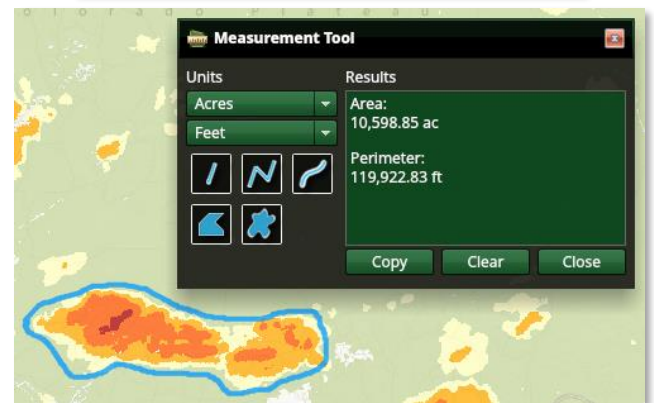
## Review Forest Management Activities

Click the Review Forest Manage Activities button to activate the tool. This tool can be used to review forest management activities on conducted on specific stands. Select an activity year from the Forest Management Activities group in Explore Map Themes. The stands will appear on top of the current active theme. Click Review Activities and click on a stand to get a summary of activities. Click another stand to refresh the summary window or click X to dismiss it. Click *Close* on Review FMA Tool to dismiss the tool.



## Can I measure an area or distance on the map?

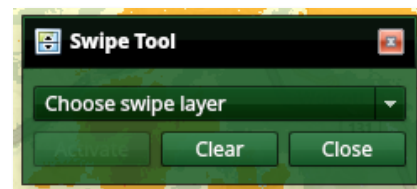
Click the Measure button to activate the tool. The measure ment tools allow you to measure distance or area on the map. Three distance and two area tools are available. You may specify units using the dropdown menus. Units may be specified before or after measuring. Use the *Copy* button to copy measurement results. After pressing *Copy*, you may paste this information into another application, such as a text editor. Click *Close* to dismiss the window.



## How do I compare two active layers?

Click the Swipe button to activate the tool. The Swipe Tool can be used to compare one layer with another. The “bottom” layer is the active layer selected in Explore Map Themes. The “swipe” layer is selected from the Swipe Tool dropdown menu.

When the Swipe Tool is first initiated the *Deactivate/Activate* button is disabled. Selecting the “swipe” layer will enable this button. Your cursor will change into an arrow. Using your mouse, click somewhere on the map and hold the mouse button down. Next drag your mouse in the direction of the cursor arrows. You may swipe horizontally, vertically, and diagonally. Transparency is not available when the Swipe Tool is active. Some of the nagivation tools are also not available while the Swipe Tool is active. Click the *Deactivate* to pause swiping and use the navigation tools. Click *Close* to dismiss the window and disable swiping.



## Can I search by coordinates or view coordinates in a specific location?

Click the Coordinates button to activate the tool. There are three ways to use the Coordinates Tool.

- Use the Mouse tab to determine coordinates for the location of your mouse on the map. Use the dropdown menu to change the format of the mouse coordinates.
- Use the Point tab to determine coordinates for a specific location on the map. Simply click the point tool to activate and click on the map. The coordinate format can be changed with the dropdown menu. Use the Copy tool to copy the coordinates and paste in another application, such as a text editor.
- Use the Search tab to enter your own coordinates. The map will zoom to the coordinates entered. You may change the format required for coordinates by using the dropdown menu. Press *Search* to zoom the map to the location of your coordinates.



Click *Close* to dismiss the window.

## How do I Print a Map?

The Print Map tool allows you to create a simple map matching the contents of your browser. First, zoom the map to your location of interest and turn on any map layers you want to show. Adjust their transparency and change base map if desired.

The map is created as a PDF and is available for download. To print a map, follow the steps below:

1. Expand the Print Map tool
2. Enter Map Title and Subtitle info (optional)
3. Press Print

After a few seconds, you will receive a notification to download the map. Choose the file location and the PDF map will be saved there.