# Entering Project Areas and Resources into the HICRIS Map



Figure 1: Map Window as it appears in HICRIS

There are two different ways to enter a polygon feature into the HICRIS Map Window:

- 1. Upload a shapefile
- 2. Draw by hand.

Before going over that we will discuss the buttons and options of the Map Window to make the polygon feature creation easier.

## **Map Window Buttons**

#### **Find Address Button**



Enter an address or place and click the Find icon to zoom to the location. This uses the ArcGIS World Geocoding Service so you need to be very specific or it may zoom to a location outside of Hawai'i.

### **Zoom In and Zoom Out Buttons**



These buttons are self-explanatory. The plus will zoom in, the minus will zoom out. You can also scroll using the mouse scroll button to zoom in and out. Make sure your cursor is within the Map Window when you scroll or your might scroll up or down the submission page.

### **Default Map View Button**



This button will take you to the original map extent. If you've submitted a project area, survey, or resource polygon and navigate away from those features you can click on this button to return to their location.

## **Google Maps Button**



When you click this button and select any point in the map, a Google Maps browser window will appear with information on that location.

### **Bing Maps Button**



When you click this button and select any point in the map, a Bing Maps browser window will appear with information on that location.

## **Measuring Buttons**



The <u>top button</u> is a trash can icon to clear any measurements you've made so you can make new measurements.

The <u>middle button</u> is the Distance Measurement Tool. When you click on this you can measure between two features and create multiple vertices and measure between multiple features. The label in the map will show you the distance of the current line, the output in the popup will show you the total length. You can select different units of measurement. Double-click the mouse to end the measurement.

The <u>bottom button</u> is the Polygon Measurement Tool that allows you to measure the perimeter and the area of a polygon. You can select different units of measurement. Double-click the mouse to end the measurement.

#### **Fullscreen Button**



Use this button to expand the map window to fit your entire screen, this makes it easier to see the entire map without seeing the rest of HICRIS.

#### **Change Basemap Button**



Click on this button to select from several different basemap types available through ArcGIS Online. Options include: Imagery, Imagery Hybrid (street names and other labels), OpenStreetMap, National Geographic, Topographic, Streets, Community Map, etc.)

## **Layer Visibility Button**



This button opens up a list of all the layers available in the Map Window. You can turn off and on any layers. Layers include: Ahupua'a, TMK, DOD Parcels, SMAs, USGS Quads, and Soils.

## **Expand Legend Button**



Click on this to see a legend for all layers that are visible in the map window. You may need to zoom in to activate certain layers that are only visible at larger scales.

## **Print a Map Button**

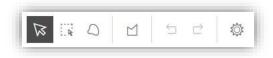


You can print out a map using a preset Layout or the Map Only using several different options. You can choose the file format, a landscape or portrait orientation, and the resolution. A new window will appear where you can download the image.

### **Draw Features Button**



When you are ready to draw your project area or resource boundary into the map, click on this button. Before you can draw any feature you need to make sure you have filled in all the information in the "Required Information" section. Once you click on this button it will open up a set of tools to help you select and draw features in the map:



### **Select feature Button**



Click anywhere on the map and the layer attributes will pop up. Scroll through the different layer types at the top of the pop-up.

### **Select by Rectangle or Lasso Buttons**



The Select by Rectangle and Select by Lasso button are two different ways you can select features within the map.

### **Draw Polygon Button**



The Draw Polygon tool is what you will use to draw your project area or site boundary. Start by clicking on one point in the map, then click on another point along your boundary and a line will appear between the two vertices. Continue adding vertices (points) until your polygon is finished. Double click to finish drawing.

## Important:

- You can only draw polygons, no points or lines.
- You can draw multiple, discontiguous polygons. When you are done drawing your first polygon, double-click to close that polygon, the map window will zoom into it. You can zoom back out and draw another polygon somewhere else then double-click to close that polygon. You can do this multiple times.
- Notice when you double-click and close the polygon, it automatically populated the geographic information for the tables below: Ahupua'a, District, Island, TMK, County, USGS Quad, and Census Designated Places.
- Your polygon cannot have sides that overlap itself. An error will happen when the Intake Specialist goes to create the project or process the resource and you will need to redo this part. Make sure there are no overlapping sides to save time!

#### **Undo and Redo Buttons**



The Undo and Redo buttons let you undo or redo your last move.

## **Sketch Settings Button**



The Sketch Settings button has one option: Enable Snapping. This will allow you to "snap" or connect the vertices of your polygon to other layers in the map window. So if you want your polygon to match a TMK boundary, you can enable this setting and click on the corners of the TMK boundary to create your polygon.

Once you are done drawing your polygon click on "Save and Continue" to continue entering in the information about your project or resource.

## **Upload Shapefile Button**



When you have a shapefile for your project area or resource boundary you can upload it here.

## **Important**:

- Your shapefile needs to be wrapped in a **ZIP file**. Make sure all of the files that comprise a "shapefile" are included in the ZIP file.
- You will need Esri's <u>ArcGIS Pro or ArcMap</u> to create a shapefile. You can draw your polygon in Google Earth and save it as a kml or kmz file, but you will need to run the KML to Layer geoprocessing tool in ArcGIS to create the shapefile.
- No point or line features will work in HICRIS, only polygons will be accepted.
- Only single features per shapefile. You can have multi-part or discontiguous polygons but they need to be in one feature. HICRIS will not accept shapefiles that have more than one feature. You can only enter one resource or project area at a time so if you have more than one you will need to separate them into separate shapefiles.

## To upload a shapefile:

- 1. Click on the **Upload Shapefile** button.
- 2. Click "Choose File"
- 3. Navigate to your **ZIP file** and double-click on it.
- 4. You should see a "Success!" dialog pop up.



After uploading the shapefile, notice that it automatically populates the geographic information for the tables below: Ahupua'a, District, Island, TMK, County, USGS Quad, and Census Designated Places.

Click Save and Continue to continue entering in the information about your project or resource.