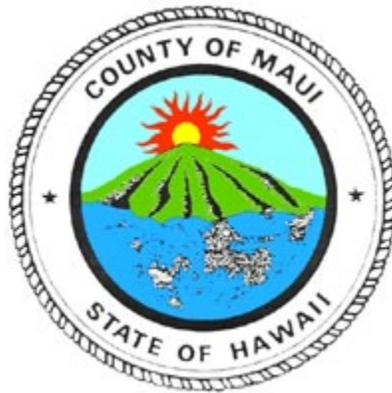


# County of Maui Map Viewer and Export Public User Guide

Rev. March 1, 2006



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## Use the Toolbar

The toolbar is located at the top of the Map Viewer (Figure 1).

Figure 1. Toolbar



It contains all the GIS tools available to you. Refer to the following table for information about each tool:

|   |  |
|---|--|
|    | <b>Print.</b> Lets you print the current view in your map viewer.  |
|    | <b>Save Map.</b> Lets you save a map to a zip file that you can then email to another person.  |
|    | <b>Properties.</b> Lets you modify your viewing options.   |
|    | <b>Selection Arrow.</b> Use this tool to select an object on the map. You can also click this tool to deactivate the last tool that you were using.  |
|    | <b>Hide/View Overview Map.</b> Lets you hide or display the overview map.  |
|   | <b>Hide/View Legend.</b> Lets you hide or display the map key.   |
|  | <b>Home.</b> Allows you to reset the map viewer window to the default state.   |
|  | <b>Previous Extent.</b> This tool is like an undo button for your zooming tool. Click the Previous Extent button to view the map at the extent that you were viewing just previously. For example, if you zoom out, you can click this to zoom back in.                          |
|  | <b>Next Extent.</b> This tool is like a redo button for your zooming tool. After you click the Previous Extent button, you can use this to return to the extent that you were viewing before you used the Previous Extent button   |
|  | <b>Pan.</b> Lets you move across the map horizontally or vertically. This allows you to see areas that are outside of your current map view.   |
|  | <b>Zoom In.</b> Lets you zoom in to a certain area on your map. Use this tool to zoom in to any level. You are not limited to predefined levels. After you click this button, you can drag your cursor to form a rectangular boundary around the area to which you want to zoom. |

|   |   |
|---|---|
|    | <b>Zoom Out.</b> Lets you zoom out to fit the full extent of the map into an area of your choosing. After you click this button, you can drag your cursor to form a rectangular boundary in which you want to fit the full extent of the map.   |
|    | <b>Zoom to Scale Factor.</b> Lets you enter a numeric scale factor that the map will zoom directly to   |
|    | <b>Zoom to Full Extent.</b> Lets you zoom out to view the full extent of your map.  |
|    | <b>Zoom to Active Layer.</b> Lets you zoom out to view the full extent of the active layer to display any and all objects on that layer.  |
|    | <b>Zoom to Selected Objects.</b> Click this button to zoom the map viewer to display the selected objects.  |
|   |   |
|    | <b>Select by Rectangle.</b> Lets you to select all objects on the active layer within a rectangular boundary that you draw.   |
|    | <b>Select by Line.</b> Lets you to select all objects on the active layer along a line that you draw.   |
|    | <b>Select by Area.</b> Lets you to select all objects on the active layer within a polygon that you draw.   |
|    | <b>Clear All.</b> Allows you to deselect all objects on a map. In addition to clearing object selections, this tool lets you erase any alterations you have made to your map, including measurements, buffers, and so forth. When the Clear All button displays, the Clear Selection and Clear buttons are not visible. |
|  | <b>Clear Selection.</b> Allows you to clear selected GIS objects while leaving alterations such as measurements and identify objects on the map viewer window. When the Clear Selection button displays, the Clear All button is not visible.   |
|  | <b>Clear.</b> Allows you to clear alterations to the map such as measurements, identify objects, and buffer objects while leaving selected GIS objects on the map viewer window. If the Clear button displays, the Clear All button is not visible.   |
|  | <b>Identify.</b> Lets you view detailed information about an object after you select the object.  |
|  | <b>Profile by Point Click.</b> Lets you view detailed information about the GIS objects from multiple layers that are at the point where you clicked.   |
|  | <b>Measure.</b> Lets you to measure the distance between two points using a series of line segments.  |
|  | <b>Query.</b> Lets you perform a query for GIS objects.   |
|  | <b>Buffer.</b> Lets you create a buffer to add objects to your original selections.   |

|   |   |
|---|---|
|  | <p><b>Redlining.</b> Lets you add temporary objects to your map.</p>  |
|  | <p><b>Zoom Toolbar.</b> This toolbar appears to the left of the main GIS toolbar. Your system administrator determines if the Zoom Toolbar displays or not. You can use this toolbar to zoom in or out on the map viewer to predefined levels. Each slot on the zoom toolbar represents one level. You can click the plus or minus icons to zoom one level or just click one of the slots directly.</p> |
|  | <p>In addition to providing you with directional orientation, you can use the compass to pan across your map in any direction. Click any of the arrows on the compass to pan in that direction in predefined measured sections.</p>   |

## Map Layer Information (Metadata)

The County of Maui Map Viewer combines information from our “real time” Permit and Land tracking systems with specific GIS map layers. Information regarding these layers can be found on the County of Maui’s website within the Maui County Online Services link.

## Use Map Viewing Options

There are several map viewing options available to you. They are explained below:

### Overview Map

The Overview Map is a small-scale representation of the main map (Figure 2). The overview map appears by default in the upper left-hand corner of the screen. It cannot be moved. There is a blue box in the Overview Map that represents the extent that the main map is being displayed on your screen. For example, as you zoom in on your map, the blue box in the overview map becomes smaller, indicating the smaller visible extent of the map you are viewing. In addition, once you are zoomed in you can click within the Overview Map itself and the map display will automatically pan to where you clicked while maintaining your current zoom settings.

Figure 2. Overview Map

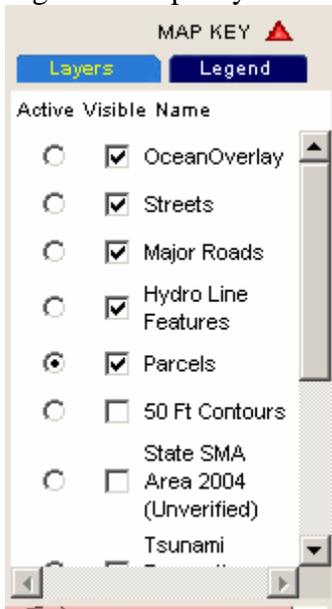


If you would like to hide the Overview Map click the **Hide/View Overview Map**  icon in the toolbar or click on the red triangle in the Overview Map .

### Map Key

The map key (Figure 3) allows you to see which layers in your map are being displayed, which is the active layer, and a legend describing the symbols found on each layer.

Figure 3. Map Key



If you would like to hide the Map Key click on the **Hide/View Legend** icon  in the toolbar or click on the red triangle in the Map Key .

### Activating a Map Layer

When you view a map, the GIS Viewer always has an active layer selected. An active layer is the layer containing the objects that are highlighted when you select an area on the map with one of the selection tools. For example, if you want to highlight a group of parcels, you must first activate the parcels layer; then you can select the parcels using one of the selection tools.

To activate a map layer:

1. Display the map key.
2. Click the option button that appears in the map key next to the name of the layer you want to activate.

## Measure Area and Distance

The GIS Map Viewer displays a scale at the bottom of each map. This scale helps you determine how big an area the map represents. If you want to know the exact distance between two points, you can use the measuring tool. By creating a series of line segments, you can see the length of each segment as well as the total of all line segments.

### To measure distance

1. From the map, use the zoom or pan tools to display the part of the map that you want to measure.
2. Click the **Measure** icon  that appears in the toolbar. The distance counter (Figure 4) will display at the top of the map viewer:

Figure 4. Distance Counter



3. Click a point on the map from where you want to begin measuring. A dot appears to mark the beginning location.
4. Click a point on the map where you want the measurement to end. The GIS viewer connects the two points to form a line segment.
5. Continue adding line segments to the total measurement as necessary.

Note: You cannot make two unconnected measurements. Accela GIS always connects line segments to make a single measurement.

## Determine Map Coordinates and Scale

Map coordinates and map scale are displayed in your browser's status information bar at the bottom left of your browser window when your cursor is over the map display. The map units of the data layer map coordinates are set to meters, while the map projection is defined by Hawaii State Plane, Zone 2 (meters). See the **Information (Metadata) about Data Layers** section for more information.

## Navigate the Map Display

The zooming and panning tools can be used to navigate the map display.

### Zooming In

Select the **Zoom In** button  from the toolbar. Your cursor now appears as a crosshair. Click and drag the cursor around the area to which you want to zoom. As you drag the cursor, GIS outlines the boundaries of the area to which you want to zoom. Release the mouse when you are finished.

## Zooming Out

Select the **Zoom Out** button  from the toolbar. Your cursor now appears as a crosshair. Click and drag the cursor over the area you want to zoom out from. Release the mouse when you are finished.

## Zooming to Active Layer

From the map, make sure the Map Key is displayed. If the Map Key is not displayed, click on the **Hide/Display Legend**  button. Display the **Layers** tab in the Map Key. Click the option button that appears next to the layer you want to make active. Click the **Zoom to Active Layer** icon  that appears in the toolbar.

## Zooming to Full Extent

Zooming to full extent zooms you all the way out. It allows you to maximize your map viewer to display the maximum area of all layers on the map. To zoom to full extent click on the **Zoom to Full Extent** icon  located on the toolbar.

## Zooming to Scale Factor

The map scale specifies the amount of reduction between the real world and the GIS map. Click the **Zoom to Scale Factor** icon  located on the toolbar. Complete the following fields:

### Reference Scale

Enter a number in the text field to set the map scale. The map scale is expressed as a percentage ratio. For example, 100% or 1:1. The larger the second number in the scale ratio is, the more you zoom in. The smaller the second number is, the more you zoom out.

### Monitor Screen Width

Enter the width of your monitor's screen. This is required to produce a map on the screen that is true to the map scale entered in the Reference Scale field. Click the **Zoom** button.

## Panning

Panning allows you to move your map view to different parts of the selected map. For example if you zoomed in on a section of your map and an object you want to see is out of the map view, you can use the Pan tool to move your map right, left, up or down, until the desired object is in your map view. When panning, Maui Map Viewer does not refresh the map view until you release the mouse button. The most you can pan at a single time without releasing the mouse is the height or width of the map view.

Click on the **Pan** icon  that appears in the toolbar. Click and drag the map until the object you want to view is visible.

You can also use the pan icon at the left of the screen  to move your map view to different parts of the map.

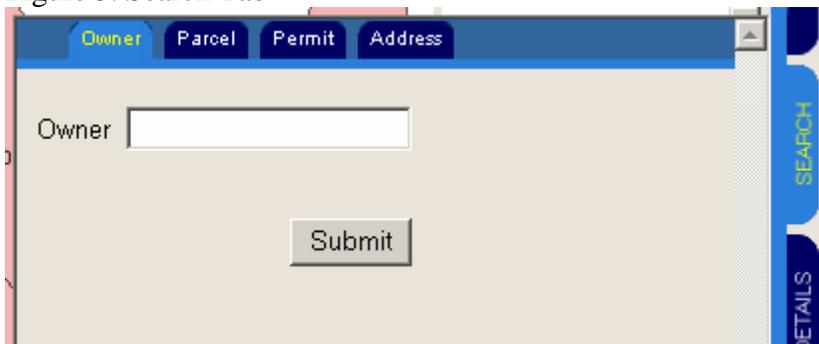
## Locate a Parcel by Querying TMK, Permit, Address or Parcel Owner Using the Search Tab

The Search Tab allows you to search for parcels based on data from the permitting and land systems. Once you have performed the query, you may view details about specific parcels. See the section titled “Viewing Details about a Single Object”.

### To Use the Search Tab

1. From the map, click the **Search** tab. (Figure 5.)

Figure 5. Search Tab



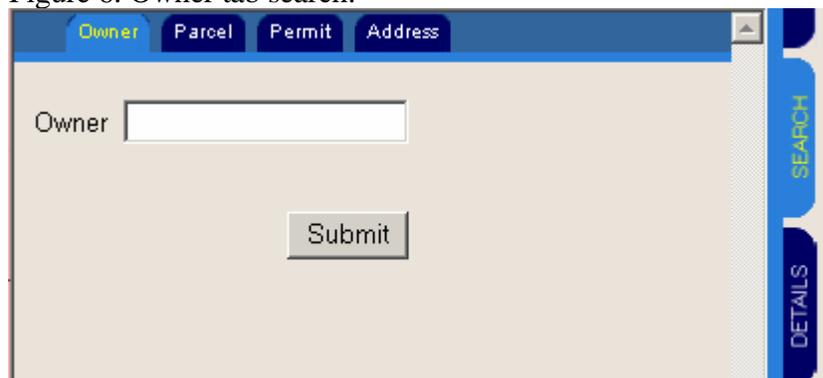
The screenshot shows a web interface with a blue header bar containing four tabs: "Owner", "Parcel", "Permit", and "Address". The "Owner" tab is selected and highlighted in yellow. Below the tabs is a search form with a text input field labeled "Owner" and a "Submit" button. On the right side of the form, there is a vertical sidebar with two buttons: "SEARCH" (highlighted in yellow) and "DETAILS".

2. Complete one or more of the fields that display on a particular tab. The Search window includes the following tabs:

### Owner

Select this tab to search for specific parcel or parcels by owner name. (Figure 6.)

Figure 6. Owner tab search.



The screenshot shows the same web interface as Figure 5, but with the "Owner" tab selected and highlighted in yellow. The search form and sidebar are identical to Figure 5.

Ownership names are stored in the system as follows: “last name,first name middle name”. There is no space between the comma and the last name. There is a space between the first name and the middle name. For example to query an owner named Mary Jane Doe, you would type in “Doe,Mary Jane”. You may substitute a wildcard (%) for any piece of information that you are unsure of or if you want to expand your query results. For instance, if you wanted a list of all parcels owned by someone with the last name of Doe, simply type “DOE%” in the **Owner** box and click submit.

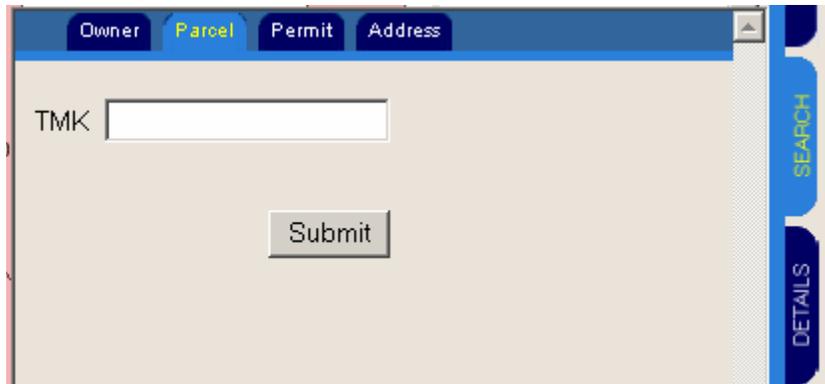
### Parcel

Select this tab to search (see Figure 7) for a specific parcel by TMK number(s). Use the 13 character format for TMK numbers described below:

| Island Code | Zone | Section | Plat | Parcel | HPR or CPR |
|-------------|------|---------|------|--------|------------|
| 2           | X    | X       | XXX  | XXX    | XXXX       |

You may substitute the wildcard symbol % for any unknown character or if you want to expand your search results. For instance, if you wanted to search all parcels for plat 008 in Molokai, you would type 252008%.

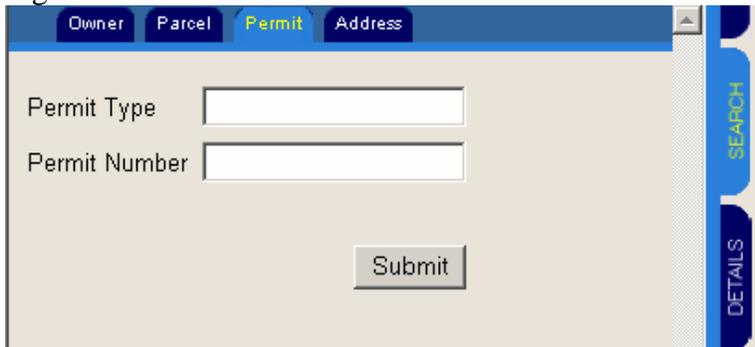
Figure 7. TMK Search Tab



### Permit

Select this tab to search for a specific parcel or parcels by permit type and number. (Figure 8)

Figure 8. Permit tab search



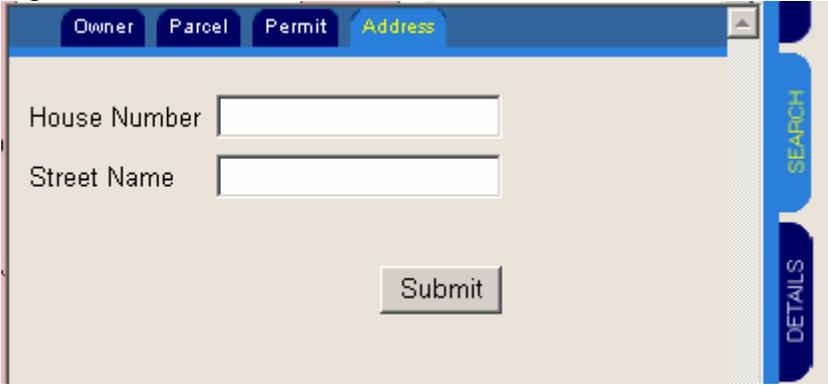
In most cases permit numbers begin with the year in which they were entered into the permitting system. For a list of valid permit types go to the County of Maui website at [www.co.maui.hi.us](http://www.co.maui.hi.us). Click on Maui County Online Services. The Disclaimer will appear. Click “Accept” to move to the next page. Under “Map Based Land and Permit Viewer”, click on the “Permit Type” link.

Input a valid permit type and permit number. Use the % sign as a wildcard. For instance if you wanted to query all SM1 permit types for the year 2004, enter “SM1” in the **Permit Type** box and “2004%” in the **Permit Number box**.

### Address

Select this tab to search by an address. Use the % as a wildcard if you do not know the exact address. For example %Kihei will return street names of “South Kihei” and “Kihei”. If you want to search all parcels on a particular street, you can enter just a Street name without a house number.

Figure 9. Address Tab Search



## Using the Map Tool to Locate a Parcel

The Map Viewer allows you to select parcels on a map in a variety of ways. You can select parcels within a rectangle, along a line, or within a polygon. As you work with the different selection tools, you will learn which tool works best for your particular situation. After selecting one or more parcels you can view details about the parcels. See the section called “Viewing Details about a Single Object” for more information.

### Selecting Parcels Within a Rectangle

Selecting objects within a rectangle is a good way to quickly select a group of parcels that does not require you to make precise boundary lines.

Click the **Select by Rectangle**  icon from the toolbar. Click and drag the cursor over the parcels you want to select. You may find it helpful to drag your cursor from one corner of the rectangle to the opposite corner.

### Selecting Parcels Along a Line

Selecting objects along a line is most useful when you want to select roads or other linear objects that extend over a large section of the map. You just need to intersect these once with the selection line and the Map Viewer select the entire road.

You may select objects using a single line segment, a line with multiple segments, or multiple lines. Here is an example of a street selection using multiple lines.

Figure 10. Selection By Lines.



1. Click the option button that appears next to the layer you want to make active.
2. Click the **Select by Line**  icon that appears in the toolbar.
3. Click the location on the map where you want the line to end.
4. Continue making your line until you cross over all desired objects.
5. Double-click to complete the line.

The Map Viewer selects any objects that are on the active layer and along a line.

### Selecting Objects Within a Polygon

You can select objects within a polygon with any number of sides. When selecting objects within a polygon, you must select at least three points on a map. Each subsequent point that you make will be connected to both the last point you made as well as the original, or “home” point. By forming one or more connected triangles in this manner, you can create a polygon (Figure 11).

Figure 11. Select by Polygon.



1. Click the option button that appears next to the layer you want to make active.
2. Click the **Select by Area** icon  that appears on the toolbar.
3. Click a point on the map that you want you use as the “home” point.
4. Click a second point on the map. A line appears, connecting the two points.
5. Click a third point on the map. The area between the points changes colors (Figure 11)
6. Continue clicking on the map until all the objects that you want to select are “covered” by the colored area.
7. Double click the last point.

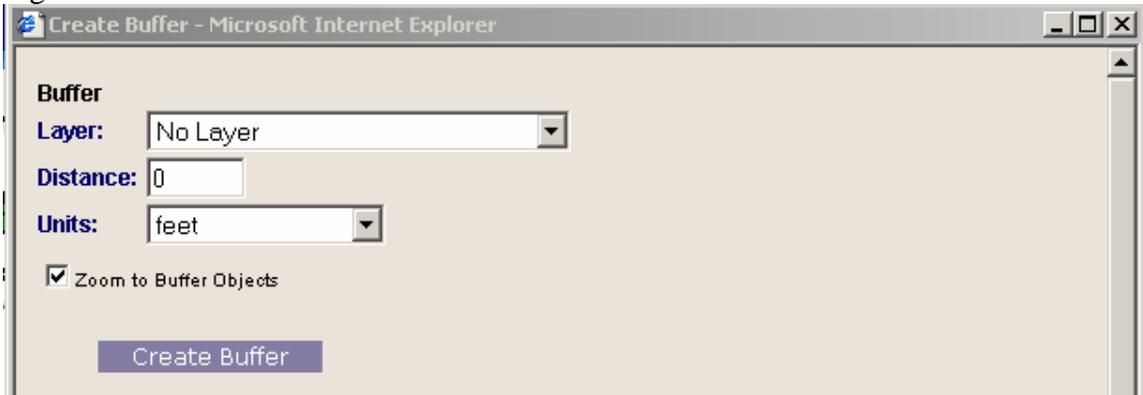
## Perform a Buffer Analysis

A buffer is a way for you to identify objects that exist within a given proximity to another object. For example, if the zoning restrictions for a given parcel change, and you want to inform the property owners that live within 500 feet of the parcel subject to the change, first you can select the parcel and then you can create a buffer to select any others that exist within 500 feet of it.

To create a buffer

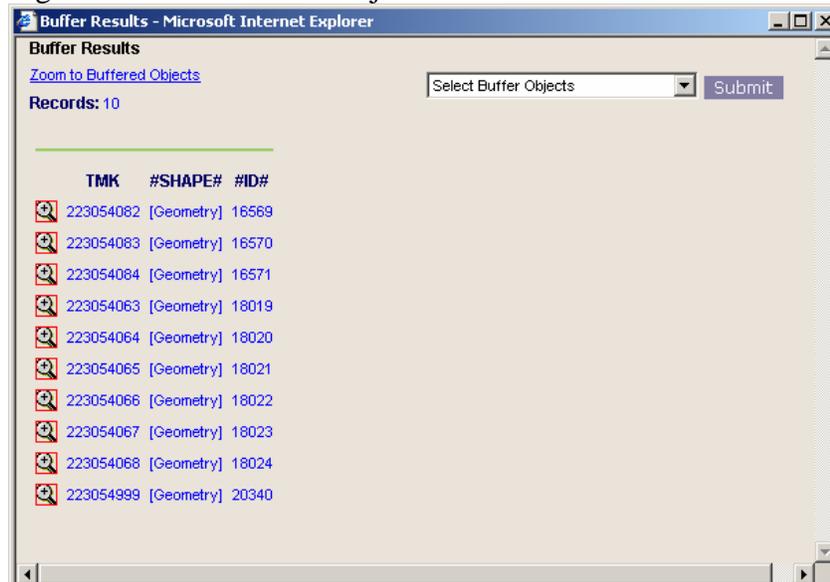
1. From the map, activate the map layer you want.
2. Select one or more objects around which you want to create a buffer. You may choose from any of the selection tools, including select by rectangle, select by line, or select my polygon.
3. Click the **Buffer**  icon from the toolbar. The Buffer box will be displayed (Figure 12).

Figure 12. Buffer Box.



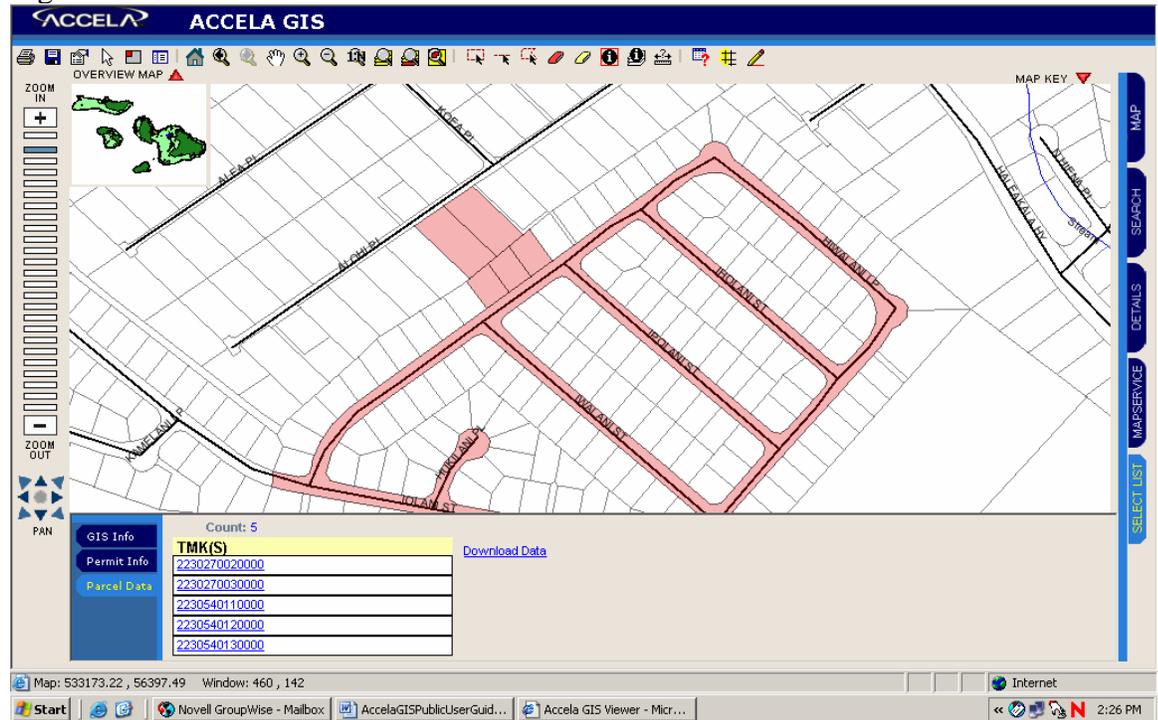
4. Complete the following fields:
  - a. **Layer.** Use the drop down list to choose the map layer that contains the objects that you want to select with your buffer. In most cases the map layer will be the “parcel” layer.
  - b. **Distance.** Manually enter the distance that you want the buffer to extend from the original selection. The buffer follows the contour of the original selection.
  - c. **Units.** Use the drop-down list to choose one of the following values:
    - i. Decimal degrees. Degrees based on the 360 degree circumference of the Earth. As such, one degree covers approximately 69miles.
    - ii. Feet. US standard unit of measure for distance.
    - iii. Kilometers – International standard unit of measure for distance. One kilometer is equal to 1,000 meters.
    - iv. Meters. International standard unit of measure for distance.
5. Click the **Create Buffer** button (Figure 12).
6. The buffer results will display and you can click the Submit button to select the buffered objects (Figure 13)

Figure 13. Select Buffer Objects



7. The parcels selected via the parcel and buffer search will be displayed along with the box at the bottom right (Figure 14). Click the Parcel Data tab as shown to ensure the TMK's are displayed

Figure 14. Buffer selection with Parcel Tab clicked



## View Parcel and Permit Information

The Map Viewer provides various ways you can work with objects that exist in the map you are viewing. The phrase “selecting an object” means that you highlight the desired objects as a means of obtaining detailed information about the objects. Typically the object is a parcel. There are several tools in Accela GIS to help you identify certain objects to get more information about them.

### Viewing Details about a Single Object

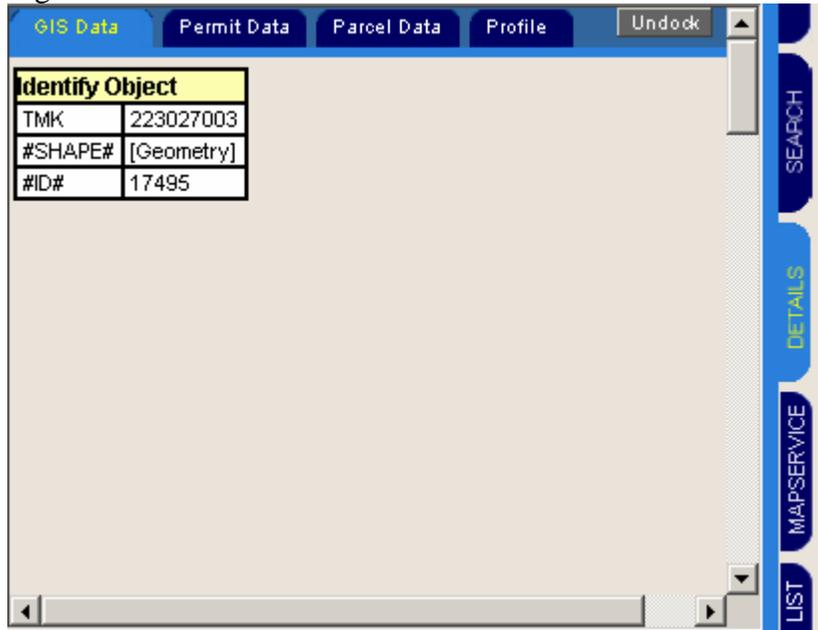
After you select an object on the map, you can retrieve detailed information about the object. For example, information about a “parcel” object may include TMK, address, ownership information, associated permits types, numbers, and issued dates.

To view details about a single object

1. From the desired map, click the **Identify** icon  that appears in the toolbar.
2. Activate the layer with the object that you want to identify. By default the Parcel is activated.

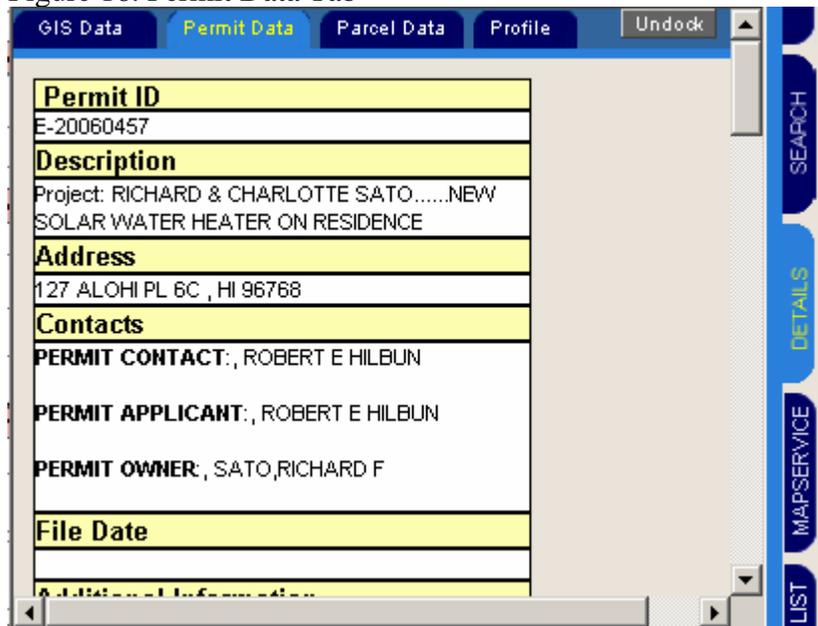
- Click the object whose information you want to view. The Map Viewer displays the Details tab with the GIS data tab selected. (Figure 15)

Figure 15. Details Tab



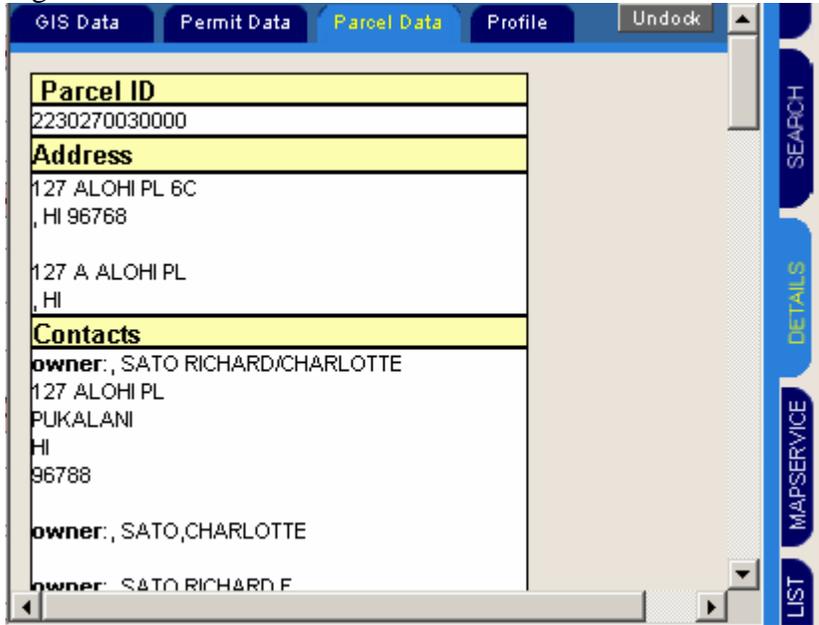
- After you finish viewing the GIS data, click the **Permit Data** tab to view information about permits associated with the select parcel object. (Figure 16)

Figure 16. Permit Data Tab



- After you finish viewing the Permit Data, click the **Parcel Data** tab to view information about the parcel. (Figure17)

Figure 17. Parcel Tab



6. Click the **Clear selection icon**  located in the toolbar to go back to the standard map viewer.

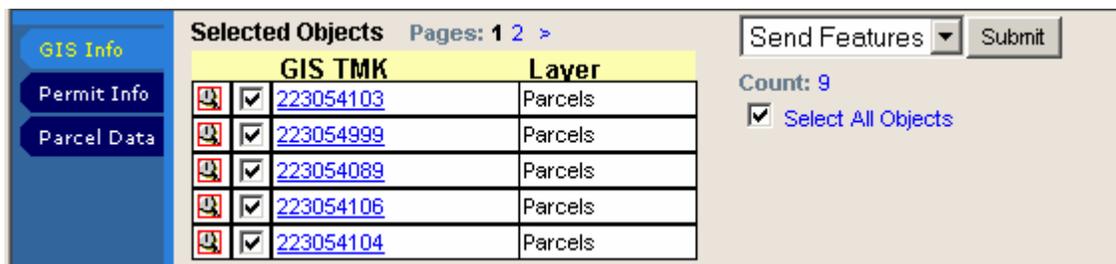
### View Details About a Group of Objects

After selecting a group of objects on your map, the Map Viewer allows you to review a summary of information about your selection. You then have the option to magnify your selection or view detailed information about a single object within your selection.

To view details about a group of objects

1. Activate the layer with the object that you want to identify. By default the Parcel layer is activated.
2. Select the objects you want to identify. You may need to pan or zoom before you can see the object that you want to select. The Map Viewer displays the Selected Features list at the bottom of the map viewer.(Figure 18). The Map Viewer displays only 5 objects per page in the Selected Features list. If there are multiple pages, you can click the page number that you want to view to see additional objects.

Figure 18. Selected Objects



3. If you want to view detailed information about a single object in the Selected Features list, double-click the object ID that appears in the list. Depending on which tab is selected at left (GIS, Permit Info, or Parcel Data), a box as shown previously in Figures 15-17.
4. If you want to zoom to one of the objects in the Selected Features list, click the magnify icon  that appears to the left of the object ID.
5. Click the **Clear selection icon**  located in the toolbar to go back to the standard map viewer.

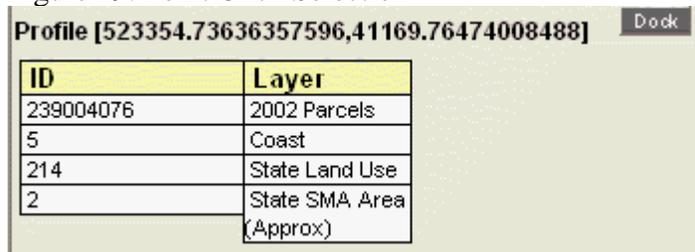
### Retrieving Object Information by Point and Click Tool

The Profile by Point Click tool allows you to retrieve detailed information about an object or group of objects located on multiple layers, rather than just objects on the active layer alone.

To retrieve object information with the profile by point click tool

1. Click the **Profile by Point Click icon**  that appears in the toolbar.
2. Click the area where you want to retrieve GIS object information. You may need to pan or zoom before you can see the object that you want to select. (Figure 19).

Figure 19. Point Click Selection

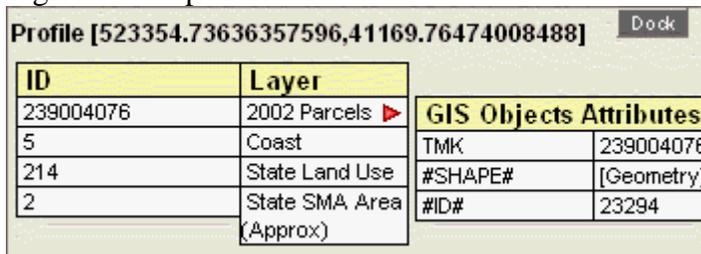


Profile [523354.73636357596,41169.76474008488] Dock

| ID        | Layer                   |
|-----------|-------------------------|
| 239004076 | 2002 Parcels            |
| 5         | Coast                   |
| 214       | State Land Use          |
| 2         | State SMA Area (Approx) |

3. Click the layer label to display that layer's GIS object attributes. A red arrow  appears next to the GIS object to inform you which GIS object data is displayed. (Figure 20)

Figure 20. Expanded GIS attribute information.



Profile [523354.73636357596,41169.76474008488] Dock

| ID        | Layer  | GIS Objects Attributes |            |
|-----------|--|------------------------|------------|
| 239004076 | 2002 Parcels  | TMK                    | 239004076  |
| 5         | Coast  | #SHAPE#                | [Geometry] |
| 214       | State Land Use   | #ID#                   | 23294      |
| 2         | State SMA Area (Approx)  |                        |            |

4. Click the **Clear selection icon**  located in the toolbar to go back to the standard map viewer.

## Download Parcel or Permit Information to an Excel File

You can download permit and parcel data to your workstation. The Map Viewer exports the data displayed on the Selected Features list into a CSV (comma separated values) file and then downloads it to your computer. You can then open the CSV file in Excel or other applications that support CSV file type.

1. If you want to download parcel data, make sure the Parcel Data tab on the left is selected. If you want to download permit data, make sure the Permit Info tab on the left is selected. See Figure 21. Click Download Data on right.

Figure 21. Download Parcel Data

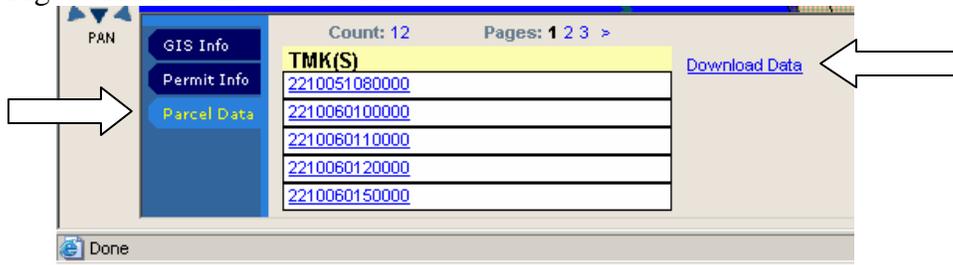
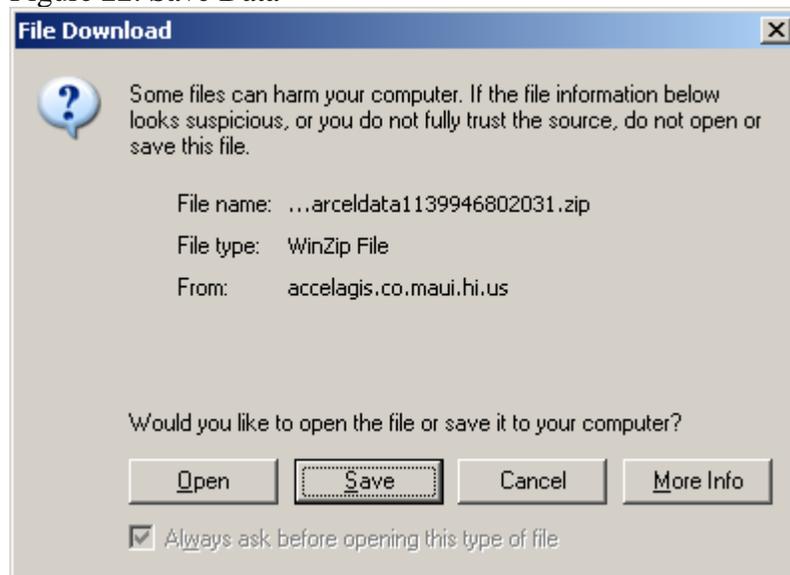


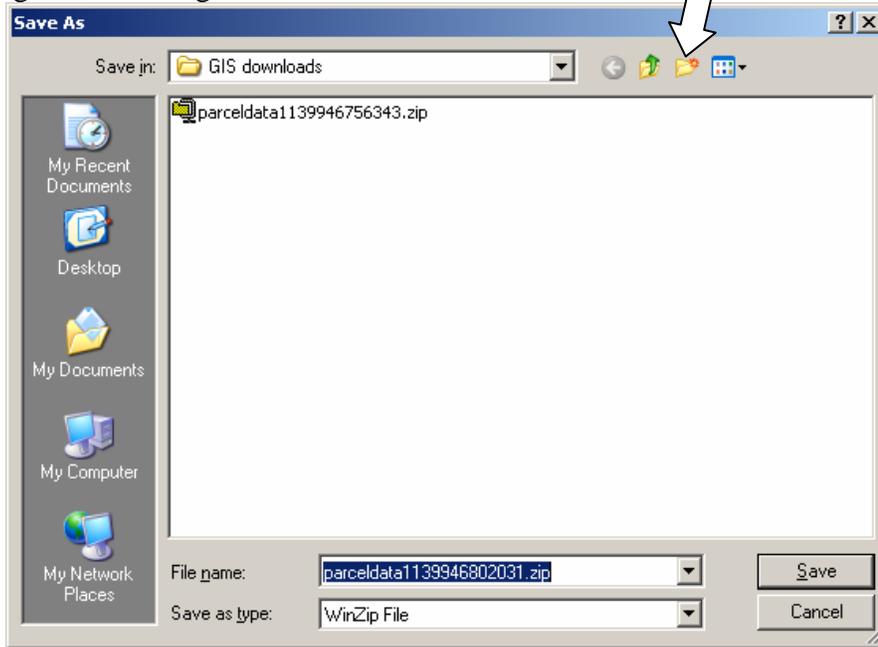
Figure 22. Save Data



2. Click Save above.

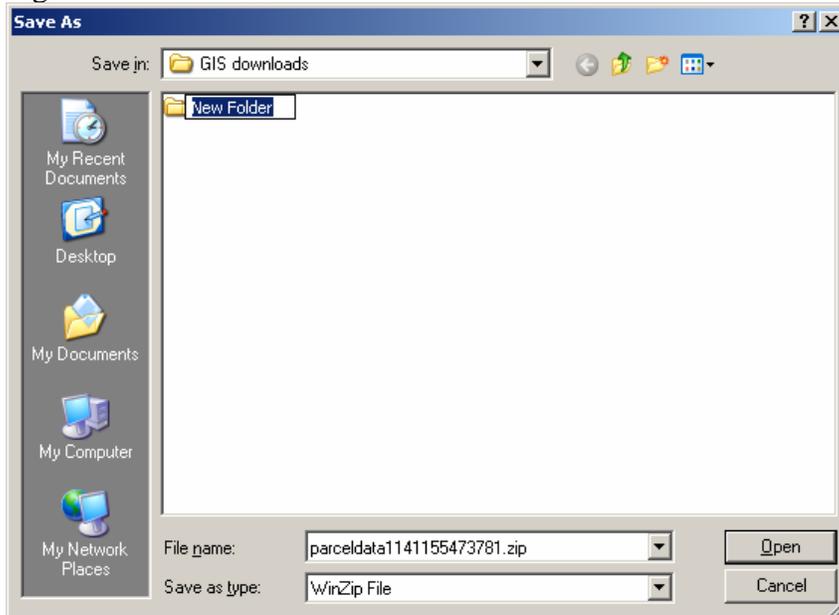
3. Navigate to the folder in which you wish to save the data. Create a new folder with either the numbered name that WinZip gives the file or with a name that identifies the file.

Figure 23. Navigate and Create New Folder



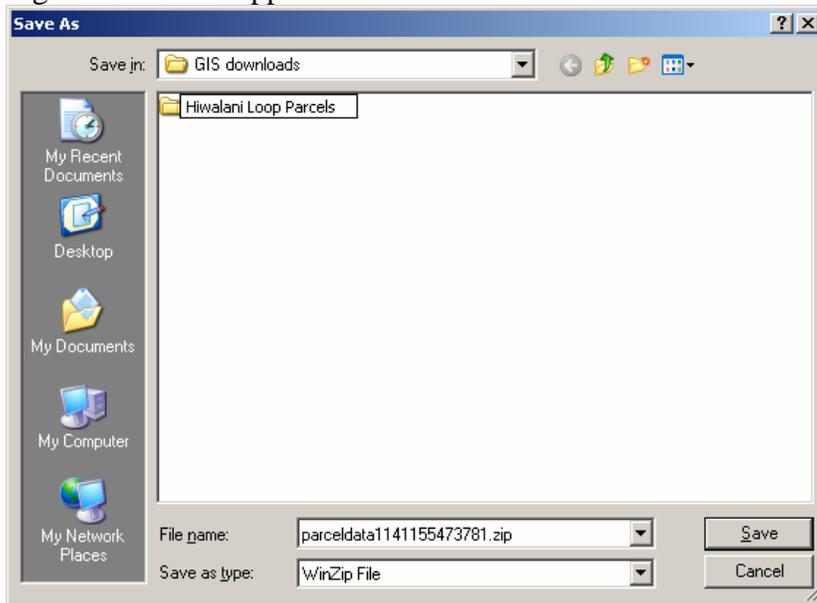
4. Type over the words New Folder in Figure 24 with whatever name you have chosen for the file and then click Open to open the new folder.

Figure 24. Name the new folder



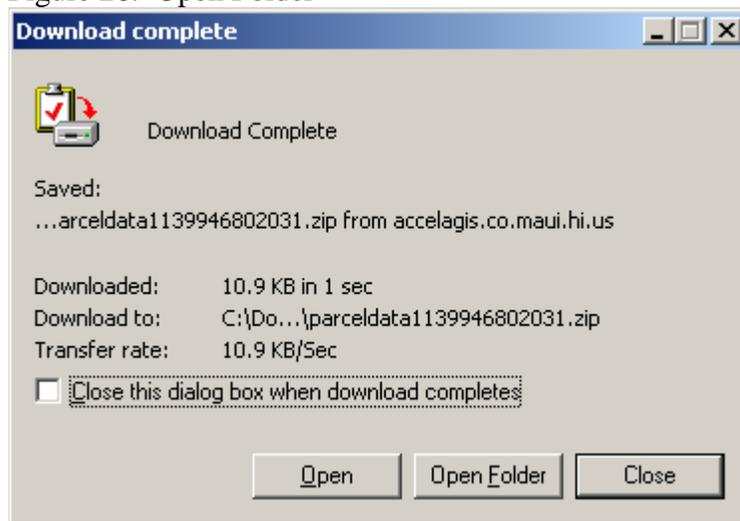
5. Click Save to save the zipped file in the new folder.

Figure 25. Save Zipped File



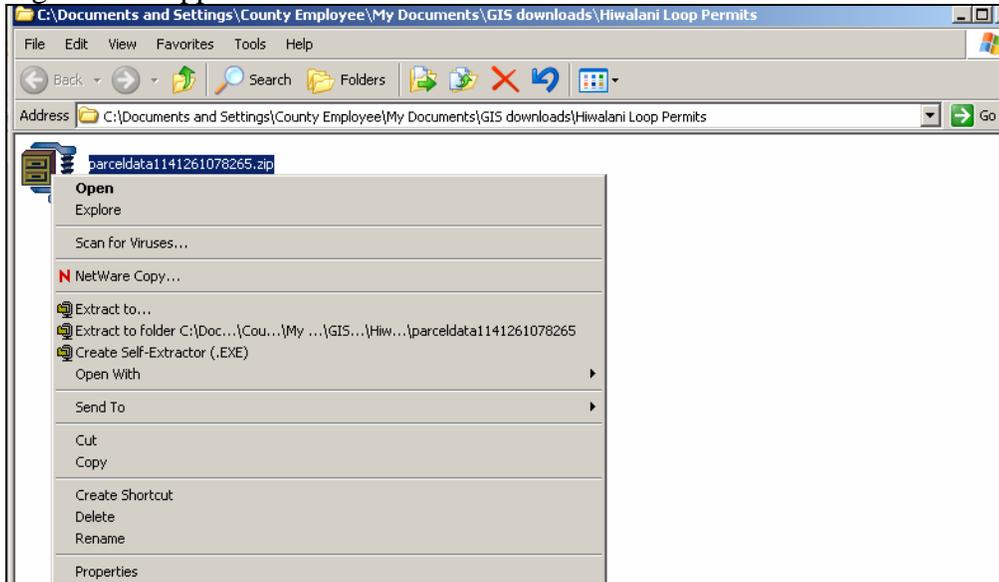
6. Click Open Folder to open the folder you previously created or selected. This will also close the Download Complete dialog box.

Figure 26. Open Folder



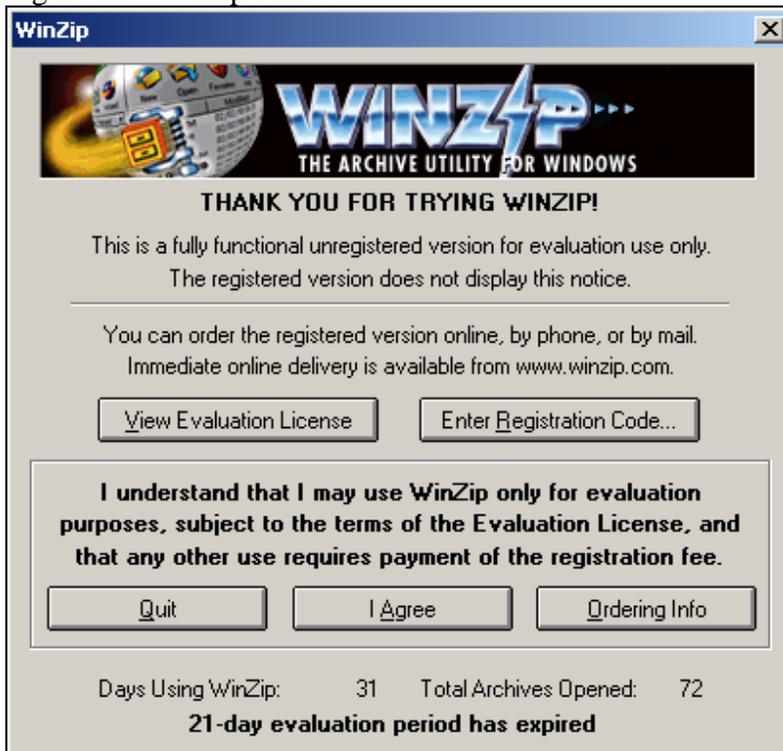
7. The folder in which you placed the zipped file will be displayed. Each time you download data, a new zipped file will be created. Right click on the zipped file and then click on Extract to Folder to unzip it and place it in the folder you previously identified. The folder you previously identified will be shown after the Extract To Folder. See Figure 27

Figure 27. Zipped File Extraction



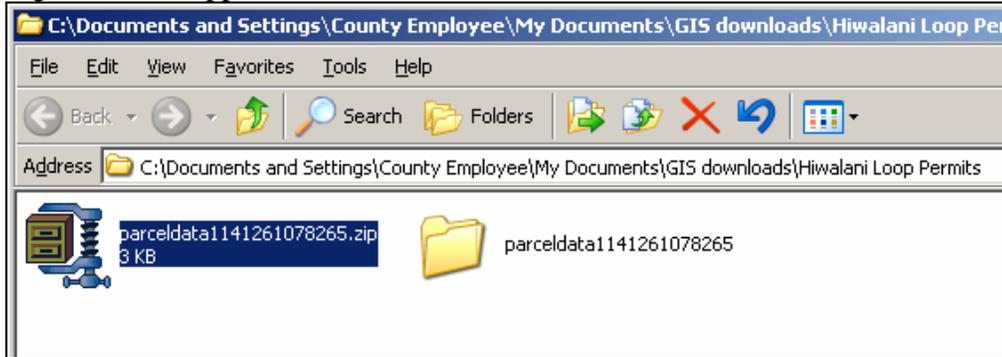
8. The WinZip box will be displayed. Click on I Agree.

Figure 28. Winzip Window



WinZip will unzip the files and place them in a folder with a name identical to the zipped folder.

Figure 29 Unzipped Folder



9. Double click on the folder that WinZip created to open it. There will be two folders within it. The .csv files will be placed in the csv folder. The .xml file will be placed in the xml folder. Double click to open the desired folder.

Figure 30. .csv and .xml folders



## PARCEL DATA

If you have downloaded parcel data, the following files will be available in the CSV folder:

**Address.csv** – contains City, ParcelID, State, Street1, Street2, and Zip Code for the parcel

**ContactPersons.csv** – contains parcel ownership City, First Name, ParcelID (TMK), State, Street1, Street2, and Zip Code for the owner. This information is updated weekly via an import into Accela from the Real property Tax system.

**ParcelId.csv** – contains Description, IdentifyDisplay, Keys, and Text

The file below will be available in the XML folder:

**GovXML.xml** – contains the xml code for the selected parcels

## PERMIT DATA

If you have downloaded permit data, the following files will be available in the CSV folder:

**AdditionalInformation.csv** – contains the columns CAPid, Name, and Value.

**Addresses.csv** – contains the columns CAPid, City, State, Street1, Street2, and Zip Code.

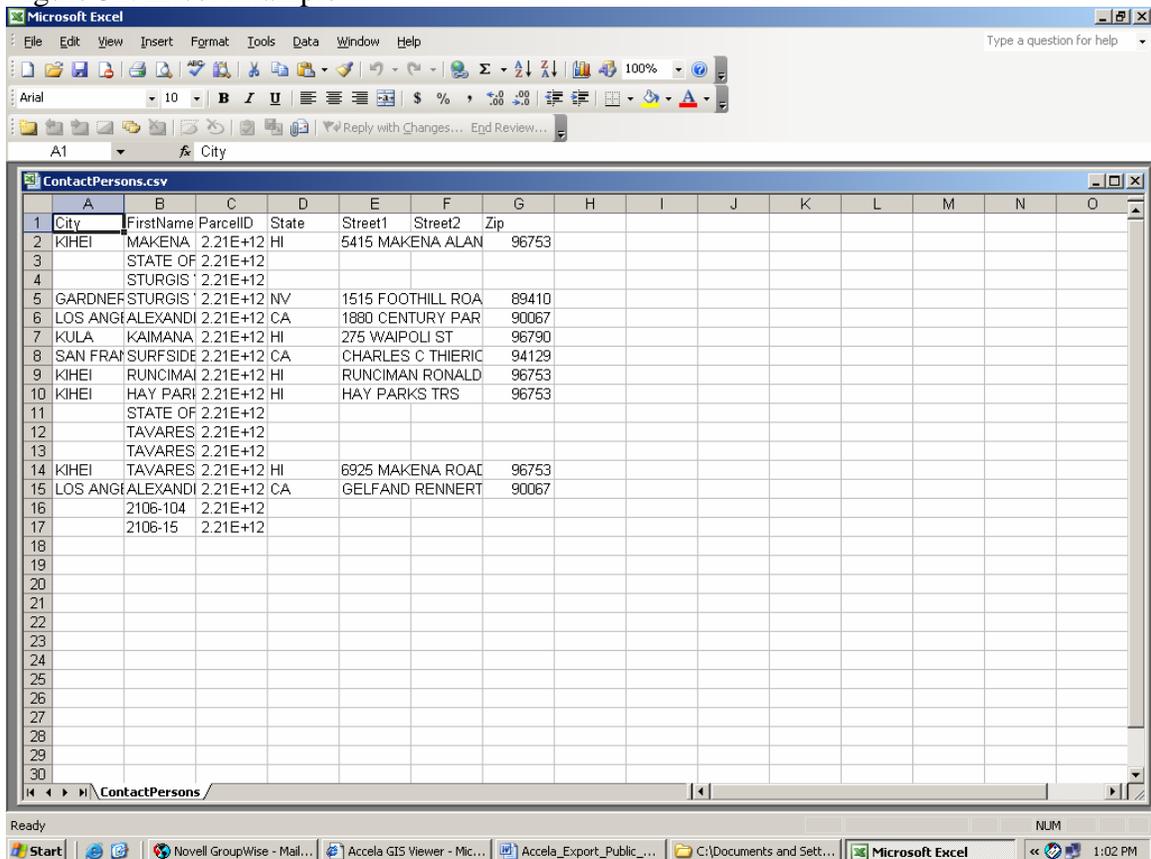
**CAPId.csv** – contains the columns Approval Date, Description, Effective Date, Expiration Date, File Date, Identify Display, Keys, Status Date, Status Name, Status Value, and Type.

The following file is available in the XML folder:

**GovXML.xml** – contains the xml code for the selected parcels

10. Use Microsoft Excel to open any of the above csv files. The example below shows an example of the parcel Address.csv file.

Figure 31. Excel Example

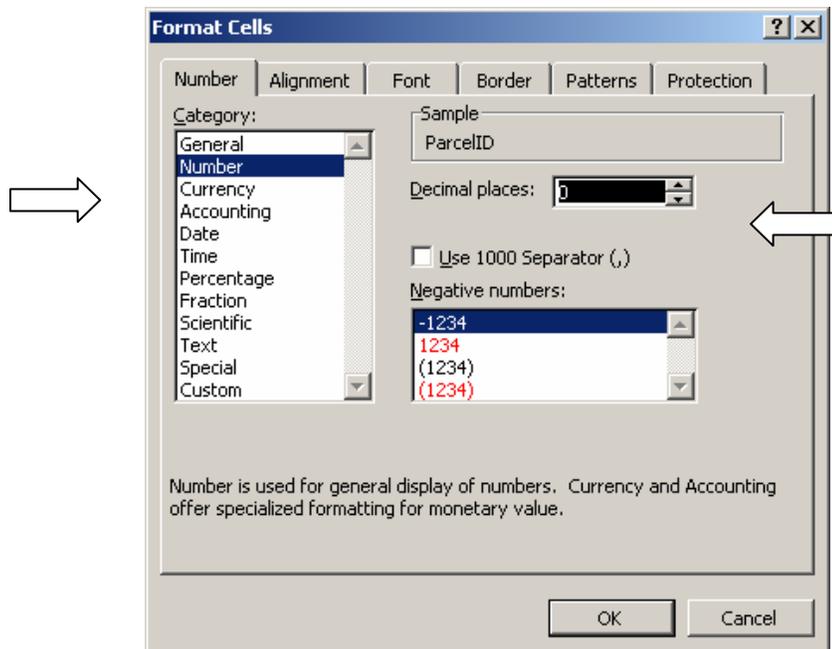
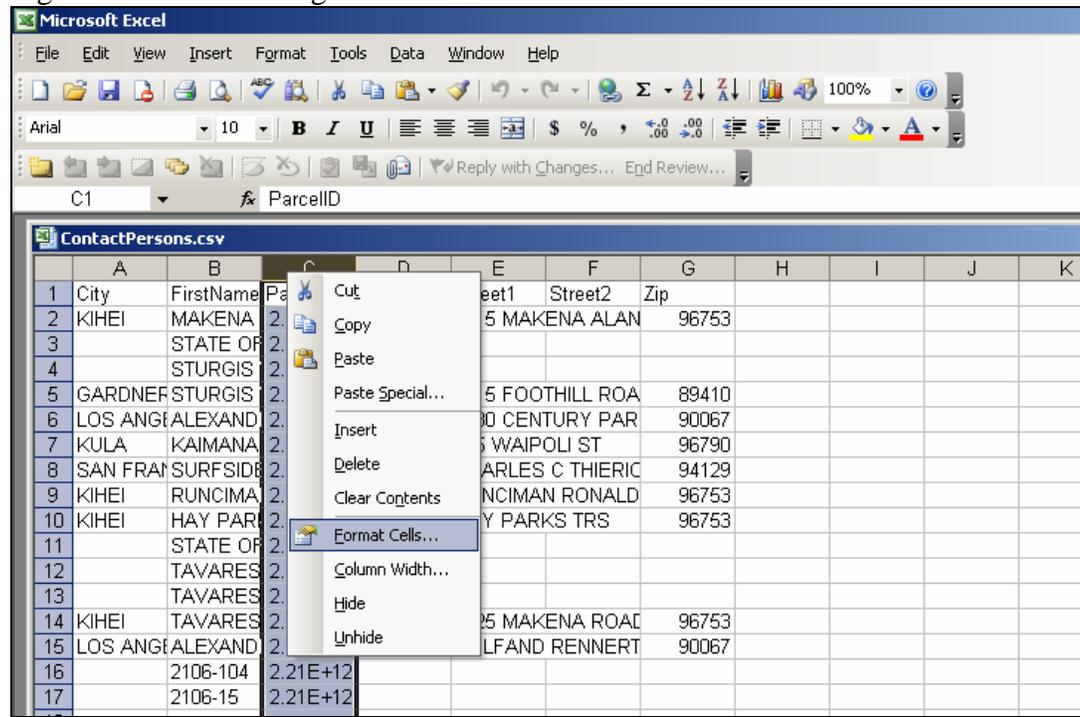


The screenshot shows a Microsoft Excel spreadsheet with the following data:

|    | A             | B         | C         | D     | E                 | F       | G     | H | I | J | K | L | M | N | O |
|----|---------------|-----------|-----------|-------|-------------------|---------|-------|---|---|---|---|---|---|---|---|
| 1  | City          | FirstName | ParcellID | State | Street1           | Street2 | Zip   |   |   |   |   |   |   |   |   |
| 2  | KIHEI         | MAKENA    | 2.21E+12  | HI    | 5415 MAKENA ALAN  |         | 96753 |   |   |   |   |   |   |   |   |
| 3  |               | STATE OF  | 2.21E+12  |       |                   |         |       |   |   |   |   |   |   |   |   |
| 4  |               | STURGIS   | 2.21E+12  |       |                   |         |       |   |   |   |   |   |   |   |   |
| 5  | GARDNER       | STURGIS   | 2.21E+12  | NV    | 1515 FOOTHILL ROA |         | 89410 |   |   |   |   |   |   |   |   |
| 6  | LOS ANGELES   | ALEXANDI  | 2.21E+12  | CA    | 1880 CENTURY PAR  |         | 90067 |   |   |   |   |   |   |   |   |
| 7  | KULA          | KAIMANA   | 2.21E+12  | HI    | 275 WAIPOLO ST    |         | 96790 |   |   |   |   |   |   |   |   |
| 8  | SAN FRANCISCO | SURFSIDE  | 2.21E+12  | CA    | CHARLES C THERIC  |         | 94129 |   |   |   |   |   |   |   |   |
| 9  | KIHEI         | RUNCIMAI  | 2.21E+12  | HI    | RUNCIMAN RONALD   |         | 96753 |   |   |   |   |   |   |   |   |
| 10 | KIHEI         | HAY PARI  | 2.21E+12  | HI    | HAY PARKS TRS     |         | 96753 |   |   |   |   |   |   |   |   |
| 11 |               | STATE OF  | 2.21E+12  |       |                   |         |       |   |   |   |   |   |   |   |   |
| 12 |               | TAVARES   | 2.21E+12  |       |                   |         |       |   |   |   |   |   |   |   |   |
| 13 |               | TAVARES   | 2.21E+12  |       |                   |         |       |   |   |   |   |   |   |   |   |
| 14 | KIHEI         | TAVARES   | 2.21E+12  | HI    | 6925 MAKENA ROAD  |         | 96753 |   |   |   |   |   |   |   |   |
| 15 | LOS ANGELES   | ALEXANDI  | 2.21E+12  | CA    | GELFAND RENNERT   |         | 90067 |   |   |   |   |   |   |   |   |
| 16 |               | 2106-104  | 2.21E+12  |       |                   |         |       |   |   |   |   |   |   |   |   |
| 17 |               | 2106-15   | 2.21E+12  |       |                   |         |       |   |   |   |   |   |   |   |   |
| 18 |               |           |           |       |                   |         |       |   |   |   |   |   |   |   |   |
| 19 |               |           |           |       |                   |         |       |   |   |   |   |   |   |   |   |
| 20 |               |           |           |       |                   |         |       |   |   |   |   |   |   |   |   |
| 21 |               |           |           |       |                   |         |       |   |   |   |   |   |   |   |   |
| 22 |               |           |           |       |                   |         |       |   |   |   |   |   |   |   |   |
| 23 |               |           |           |       |                   |         |       |   |   |   |   |   |   |   |   |
| 24 |               |           |           |       |                   |         |       |   |   |   |   |   |   |   |   |
| 25 |               |           |           |       |                   |         |       |   |   |   |   |   |   |   |   |
| 26 |               |           |           |       |                   |         |       |   |   |   |   |   |   |   |   |
| 27 |               |           |           |       |                   |         |       |   |   |   |   |   |   |   |   |
| 28 |               |           |           |       |                   |         |       |   |   |   |   |   |   |   |   |
| 29 |               |           |           |       |                   |         |       |   |   |   |   |   |   |   |   |
| 30 |               |           |           |       |                   |         |       |   |   |   |   |   |   |   |   |

- You'll need to use excel formatting to modify the spreadsheet into a usable format for mailing labels. Column C, the ParcelID, needs to be formatted so that it shows the tax map key (TMK). To do this, right click on column C and select Format Cells to modify the way the TMK is presented.

Figure 32. Reformatting TMK



- Under the Number tab above, change the category to Number and the decimal places to 0. Click OK, go back to the spreadsheet and lengthen the other columns.

The TMK will then be displayed in its correct format and the entire contents of the other columns will be displayed as shown below.

Figure 33. Reformatted TMK

|    | A             | B                                | C             | D     | E                             | F       | G     | H | I |
|----|---------------|----------------------------------|---------------|-------|-------------------------------|---------|-------|---|---|
| 1  | City          | FirstName                        | ParcelID      | State | Street1                       | Street2 | Zip   |   |   |
| 2  | KIHEI         | MAKENA GOLF CORP                 | 2210051080000 | HI    | 5415 MAKENA ALANUI RD         |         | 96753 |   |   |
| 3  |               | STATE OF HAWAII                  | 2210060100000 |       |                               |         |       |   |   |
| 4  |               | STURGIS WILLIAM T TRUSTEE        | 2210060110000 |       |                               |         |       |   |   |
| 5  | GARDNERVILLE  | STURGIS WILLIAM T                | 2210060110000 | NV    | 1515 FOOTHILL ROAD            |         | 89410 |   |   |
| 6  | LOS ANGELES   | ALEXANDER COURT LLC              | 2210060120000 | CA    | 1880 CENTURY PARK EAST #1600  |         | 90067 |   |   |
| 7  | KULA          | KAIMANA KAI LIMITED              | 2210060150000 | HI    | 275 WAIPOI ST                 |         | 96790 |   |   |
| 8  | SAN FRANCISCO | SURFSIDE INVESTMENTS LLC         | 2210060160000 | CA    | CHARLES C THIERIOT            |         | 94129 |   |   |
| 9  | KIHEI         | RUNCIMAN RONALD H & JOAN P TRUST | 2210060880000 | HI    | RUNCIMAN RONALD TTEE          |         | 96753 |   |   |
| 10 | KIHEI         | HAY PARKS TR                     | 2210060900000 | HI    | HAY PARKS TRS                 |         | 96753 |   |   |
| 11 |               | STATE OF HAWAII                  | 2210060990000 |       |                               |         |       |   |   |
| 12 |               | TAVARES CLARENCE                 | 2210061010000 |       |                               |         |       |   |   |
| 13 |               | TAVARES HARRIET                  | 2210061010000 |       |                               |         |       |   |   |
| 14 | KIHEI         | TAVARES CLARENCE/HARRIET         | 2210061010000 | HI    | 6925 MAKENA ROAD              |         | 96753 |   |   |
| 15 | LOS ANGELES   | ALEXANDER COURT L L C            | 2210061030000 | CA    | GELFAND RENNERT & FELDMAN LLP |         | 90067 |   |   |
| 16 |               | 2106-104                         | 2210061050000 |       |                               |         |       |   |   |
| 17 |               | 2106-15                          | 2210061050000 |       |                               |         |       |   |   |
| 18 |               |                                  |               |       |                               |         |       |   |   |
| 19 |               |                                  |               |       |                               |         |       |   |   |
| 20 |               |                                  |               |       |                               |         |       |   |   |
| 21 |               |                                  |               |       |                               |         |       |   |   |
| 22 |               |                                  |               |       |                               |         |       |   |   |
| 23 |               |                                  |               |       |                               |         |       |   |   |
| 24 |               |                                  |               |       |                               |         |       |   |   |
| 25 |               |                                  |               |       |                               |         |       |   |   |
| 26 |               |                                  |               |       |                               |         |       |   |   |
| 27 |               |                                  |               |       |                               |         |       |   |   |
| 28 |               |                                  |               |       |                               |         |       |   |   |
| 29 |               |                                  |               |       |                               |         |       |   |   |
| 30 |               |                                  |               |       |                               |         |       |   |   |

The number of rows required to display information about each parcel depends on the number of owners. For each parcel, the data will need to be reviewed to determine exactly what is needed. Cutting and pasting will be required to get the spreadsheet into a format that will allow mailing labels to be created.

13. Save the spreadsheet as an excel file and then use Word Mail Merge (or another mail merge application) to create mailing labels.

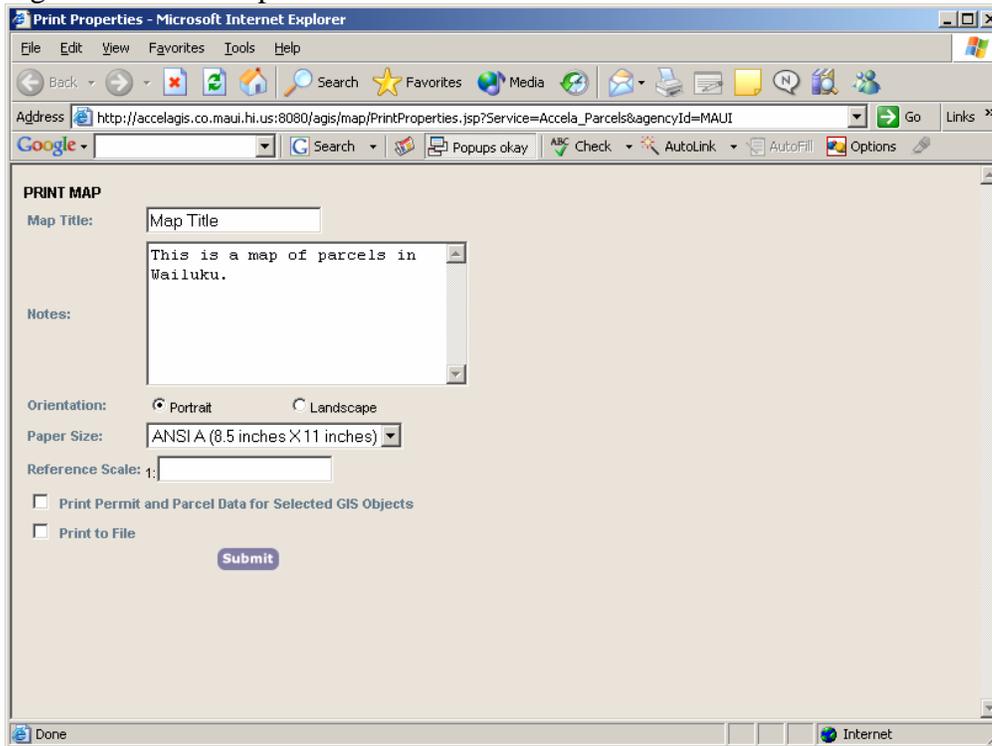
## Print a Map

The Map Viewer allows you to print any map from the map viewer. You can include any buffers, along with any objects that you have selected. If you are using a color printer, your printout will preserve the color properties. When you choose to print, the Map Viewer prints the extent of the map as you have it displayed in the viewer. Depending on your printer, you can print your map on standard letter size paper or on tabloid size paper. You can also determine the map's orientation to print as portrait or landscape.

To print a map

1. Perform the tasks you want to before printing the map (such as create a buffer, select objects, and so forth).
2. Zoom in or out as appropriate.
3. Click the **Print** icon  that appears on the toolbar. The Map Viewer displays the Print Map window (Figure 34.)

Figure 34. Print Map Window



4. Complete the following fields:
  - a. **Map Title.** Enter a self-explanatory name for the map. The name is printed at the top of the printout.
  - b. **Notes.** Enter notes or comments about the map you are printing. The Map Viewer prints these notes in a text box above the disclaimer on the printed copy.
  - c. **Orientation.** Click the **Portrait** (vertical) or **Landscape** (horizontal) option.
  - d. **Paper Size.** Use the drop-down list to choose the paper size.
  - e. **Reference Scale.** Enter a number in the text field if you want to set the printed map scale. The map scale is expressed as a percentage ratio. For example, 100% or 1:1e. The larger the second number in the scale ratio is, the more you zoom in. The smaller the second number is, the more you zoom out. The Map Viewer prints the map at the current viewing scale if the Reference Scale field is left blank.
  - f. Check the box for Print Permit and Parcel Data for Selected GIS Objects if you want the permit and parcel data to print.

- g. Check the box for Print to File if you wish to save the information in a file on the computer rather than print it out.
5. Click the Submit button. The print preview window opens.
6. Do one of the following:
  - a. Click the **Print** icon on your browser toolbar.
  - b. Select **File>Print** from your browser menu bar.

## Save Map to a File

You can use the Save Map tool to save the map to a file. You can then email this file to any user with access to an ArcIMS viewer.

To email a map

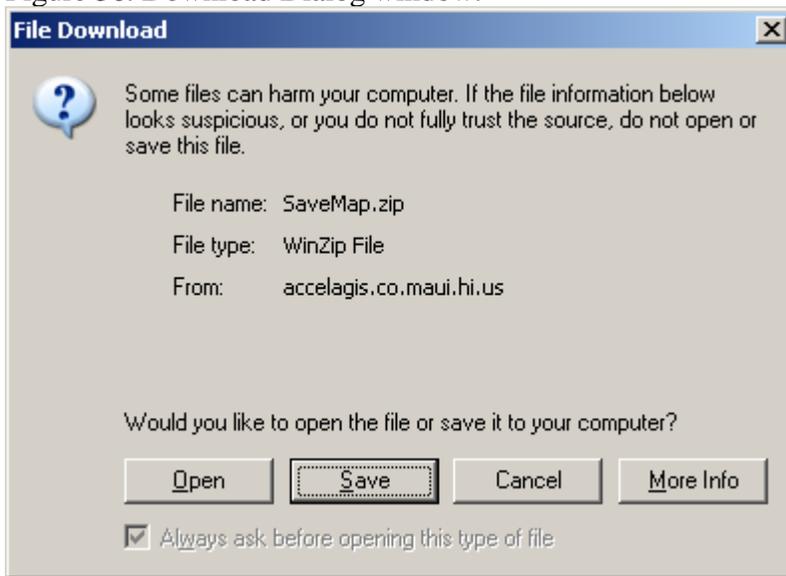
1. Display the map you want to save.
2. Click the **Save Map** icon  that appears on the GIS toolbar. The Save Map window appears (Figure 35).

Figure 35. Save Map Window

3. Complete the following fields:
  - a. **Map Title.** Enter a self-explanatory name for the map. The name is printed at the top of the printout.
  - b. **Notes.** Enter notes or comments about the map you are printing. The Map Viewer prints these notes in a text box above the disclaimer on the printed copy.

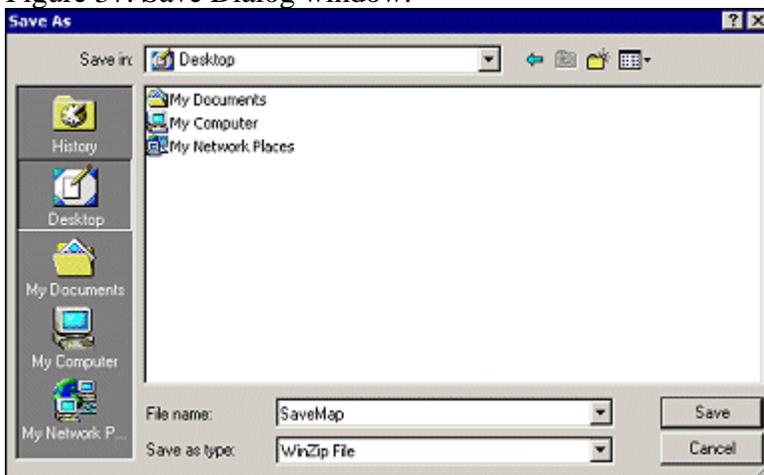
- c. **Orientation.** Click the **Portrait** (vertical) or **Landscape** (horizontal) option.
  - d. **Paper Size.** Use the drop –down list to choose the paper size.
  - e. Check the Save Permit and Parcel Data for Selected GIS Objects if you want to save permit and parcel data.
4. Click the **Submit** button. The file download dialog similar to the following appears (Figure 36).

Figure 36. Download Dialog window.



5. Click **Save** to save the file to your machine. A dialog similar to the following appears (Figure 37).

Figure 37. Save Dialog window.



6. Browse to the location where you want to save the file.
7. In the **File Name** field, enter a description name for the zip file.

8. Click **Save** to save the file to the location you specified.
9. After you have saved the file, you may email it to anyone with an ArcIMS viewer, using an email program of your choice.