

GIS Landscape Area Measurement Tool User Manual

Before You Begin

- **Set your screen resolution:** For optimal viewing change your screen resolution to 1024 x n
- **Select one of the following browsers:** Internet Explorer 6.0 or higher (7 recommended)
- **Read this entire manual BEFORE using the tool.**

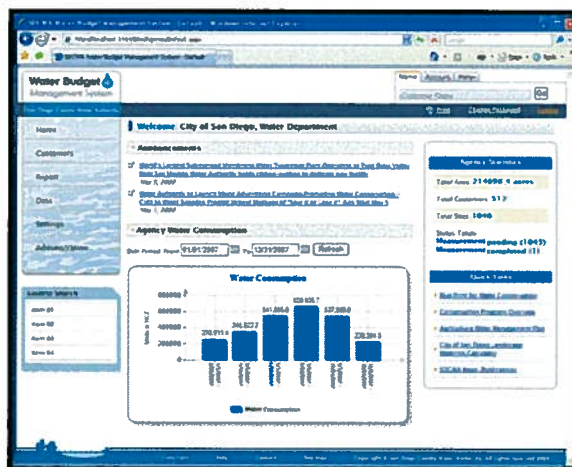
Quick Walkthrough

Note: The screenshots provided in this document are taken from a sample/dummy login account. No real account numbers or customer information is displayed at any time.

1. Go to the Water Budget Management System Login Page and enter your login information.



2. On successful login, you will see the Water Budget Management System homepage



3. Click on the "Customers" link on left hand navigation menu.

- The Customer section contains a directory of customer sites (based on data provided to the system)

The screenshot shows the 'Customer Search' page of the SDCWA Water Budget Management System. The page includes a search form with fields for Customer Name, Account Number, Meter Number, Account Type, Account Class, Status, Address, City, Zip Code, and Site Area. Below the search form, a table lists search results with columns for Customer, Account, Type, Class, Report, and Measure Tool. Callouts provide details on search filters and table actions.

Customer	Account	Type	Class	Report	Measure Tool
Palomar Family YMCA 1090-C N Broadway, Escondido, CA	000000000	Irrigation	Institutional		
City of Escondido 1120 I 2 W 9th Ave, Escondido, CA	000000000	Irrigation	Institutional		
1393 Stanley Way, Escondido, CA	000000000	Irrigation	Institutional		
1556 S Escondido Blvd, Escondido, CA	000000000	Irrigation	Institutional		
2045 S Escondido Blvd, Escondido, CA	000000000	Irrigation	Institutional		
2245 E Valley Pkwy, Escondido, CA	000000000	Irrigation	Institutional		
3333 Bear Valley Pkwy, Escondido, CA	000000000	Irrigation	Institutional		

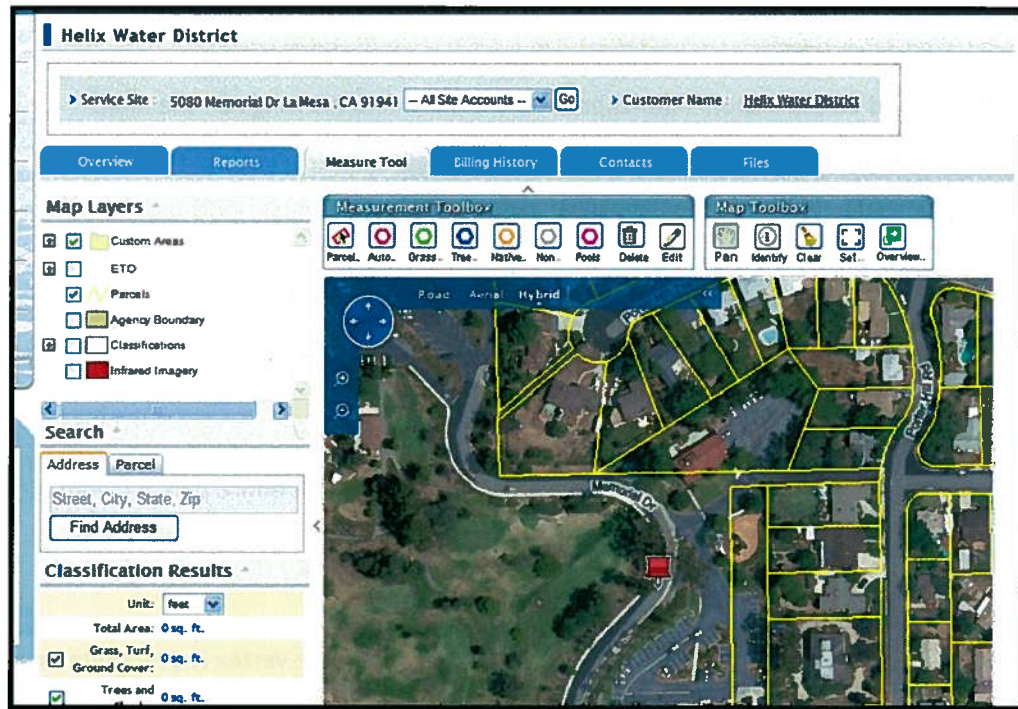
Search for a site by Customer Name, Account Number, Address, City and/or Zip Code. Filter by Measurement Status, Account Type, Account Class, Site Area Size

Quick Link to site Water Budget Report

Quick Link to Landscape Area Measurement Tool

- Click on the Landscape Area Measurement Tool icon next to the site/account of interest.

You will be taken to the GIS Landscape Area Measurement Tool to create a landscape area measurement for the selected customer site/account.



6. Please get familiar with ALL of the GIS Landscape Area Measurement features detailed in the following section before using the measurement tool.

GIS Landscape Area Measurement Tool Features

Please review ALL of the map features before using the GIS Landscape Area Measurement tool.


Measurement Toolbox

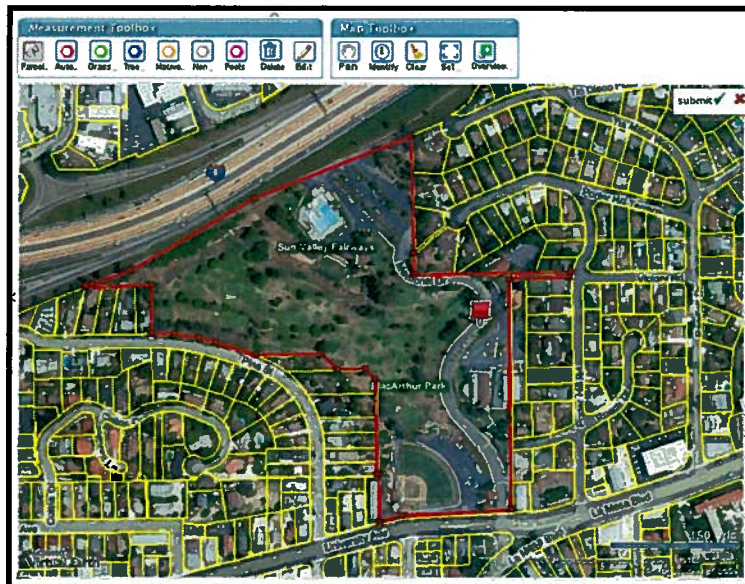
Create, edit and delete custom landscape area measurement drawings on the map.



1. **Parcel Auto Classification Tool:** Easily create an automatic classification measurement of an entire parcel.

How to use:

- a. First, adjust your map view so you can see the entire parcel (zoom in/out, pan)
- b. Click on Parcel Auto Classification Tool from the toolbox
 - 
 - Parcel..
- c. Click on a parcel on the map
- d. Adjust polygon as needed: click on red square vertex (turns white on hover), hold down mouse and move vertex to desired location.
- e. Click the **Submit** button (located in upper right hand corner of the map) when finished (or the red X to cancel).
- f. Repeat steps as necessary (create multiple parcel measurements)



2. Measurement Drawing Tools: Draw custom landscape area measurements for a site.



- Auto Classification (automatically calculates vegetation areas within the polygon based on the underlying classification layer)
- Grass, Turf & Ground Cover
- Trees & Shrubs
- Native Vegetation
- Non-Vegetation
- Pools

How to Use:

- a. Click on desired drawing tool from the toolbox
- b. Click on the map and create the polygon by clicking your left mouse button to create each vertex.
- c. Adjust polygon as needed: click on red square vertex (turns white on hover), hold down mouse and move vertex to desired location.
- d. Click the Submit Button (located in upper right hand corner of the map) when finished (or the red X to cancel).



3. Measurement Delete/Edit Tools: Easily delete or edit custom polygons.



How to Use:

- a. Click on delete or edit tool from the toolbox
- b. Click on existing custom polygon shape
- c. If selected delete tool, the polygon will be highlighted after you click the shape—click the delete submit button to remove shape entirely.

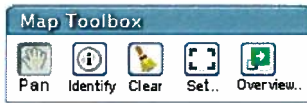


- d. If selected edit tool, you will see the shape vertices after click—adjust polygon as needed: click the red square vertex (turns white on hover), hold down mouse and move to desired location. Click the submit button when finished.



Map Toolbox

In the map toolbox you will find additional tools you can use to interact with the map.



1. **Pan:** Click on the pan tool and then click on map to pan. If you select any measurement tool you can use this tool to return to map pan and zoom mode.



Pan

2. **Identify:** Click on identify tool and then click on a parcel to view parcel data (in pop up box).



Identify

3. **Clear:** Click on the clear tool to clear selected parcels



Clear

4. **Set Extent:** Click on the set extent tool to save the zoom extent of the current site. When you return to this site your zoom extent will be saved. Note: The map will re-center based on the location of the pushpin that identifies your site.



Set..

5. **Overview Map:** Click on the overview map tool to view a small overview map on top of the main map. Pan the overview map to rapidly move map to the correct location. Click again to hide the overview map.

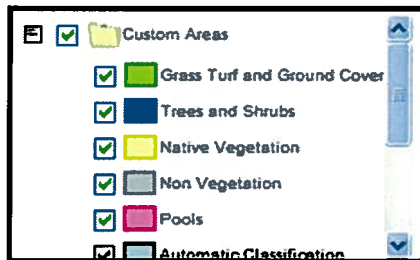


Overview..

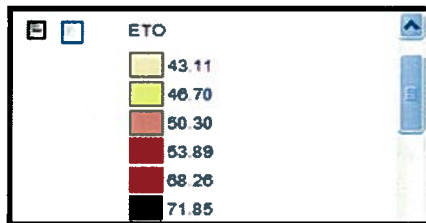
Map Layers

You may click on the check boxes next to a map layer to toggle the layer on/off in order to change which layers are displayed on the map.

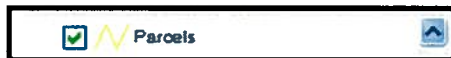
- **Custom Areas:** This grouped layer contains all of the custom measurement polygon layers you create using the measurement tools. Expand this grouped layer to view each individual layer. You may toggle each custom polygon layers on/off to view on the map.



- **ETo:** This layer displays the ETo zones in San Diego County. Expand this layer to view the color code ETo rate legend. Toggle this layer on to view a semi transparent view of this layer overlaid on the map.



- **Parcels:** This layer displays the parcel boundaries lines for properties in San Diego County. This layer is **ONLY** available at zoom levels of 150 yards or less. You may toggle this layer on/off as desired (toggle this layer off to increase map performance).



- **Agency Boundary:** This layer displays a shaded polygon of your agency boundary. Toggle this layer on to view a semi transparent view of this layer overlaid on the map.



- Classifications:** This layer displays the classification layer that the Auto Classification tool uses to calculate the areas of various vegetation types in a custom automatic classification polygon. Expand this layer to see a color coded legend of the vegetation classification types. This layer is **ONLY** available at zoom levels of 150 yards or less. You may toggle this layer on/off as desired (toggle this layer off to increase map performance). Note: this layer does not have to be turned on to create an automatic classification measurement.



- Infrared Imagery:** This layer displays the infrared imagery. Currently only the infrared imagery for the Alpha Group agency areas is displayed. You may toggle this layer on/off as desired.



Classification Results

Review classification area measurements result immediately after a measurement is created (results are automatically generated and displayed.)

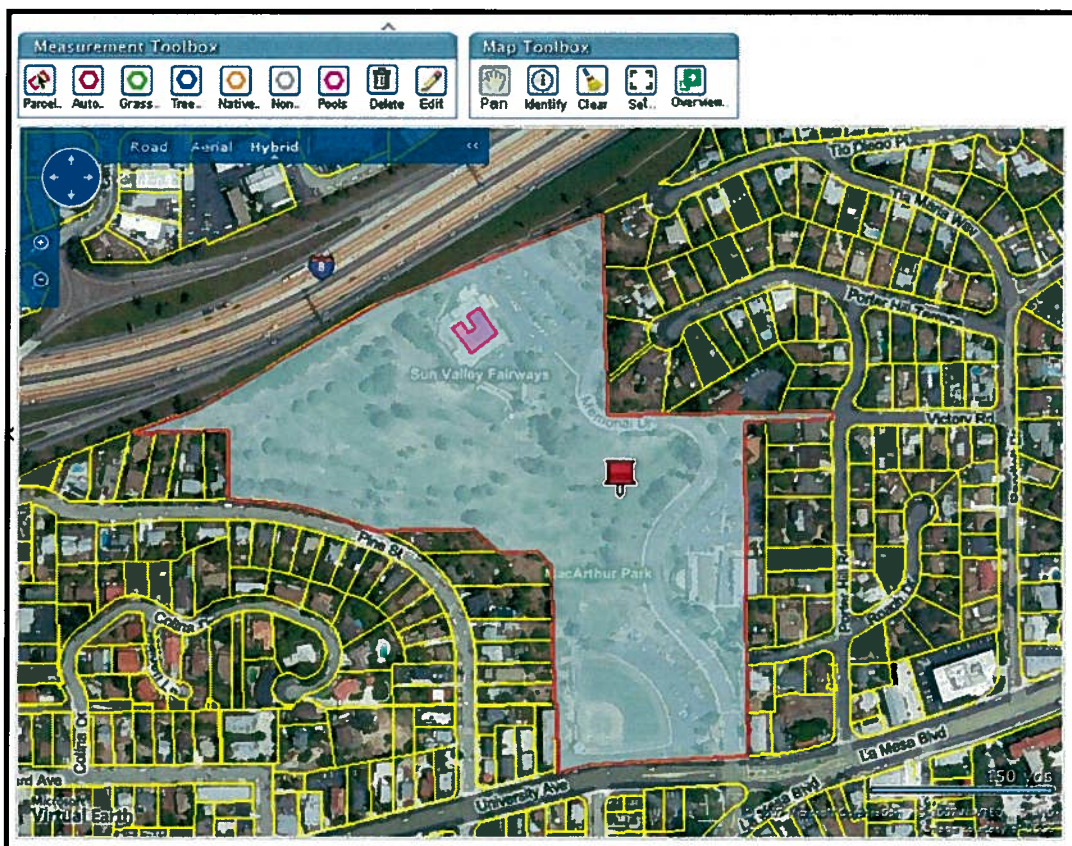
Classification Results	
Unit:	feet
Total Area:	5424 sq. ft.
<input checked="" type="checkbox"/> Grass, Turf, Ground Cover:	0 sq. ft.
<input checked="" type="checkbox"/> Trees and Shrubs:	0 sq. ft.
<input checked="" type="checkbox"/> Native Vegetation:	0 sq. ft.
<input checked="" type="checkbox"/> Non Vegetation:	0 sq. ft.
<input checked="" type="checkbox"/> Pools:	5424 sq. ft.
Total:	5424 sq. ft.

Annotations:

- View area results in desired measurement units. (points to the unit dropdown)
- Toggle checkboxes to view a custom total (points to the checkboxes)

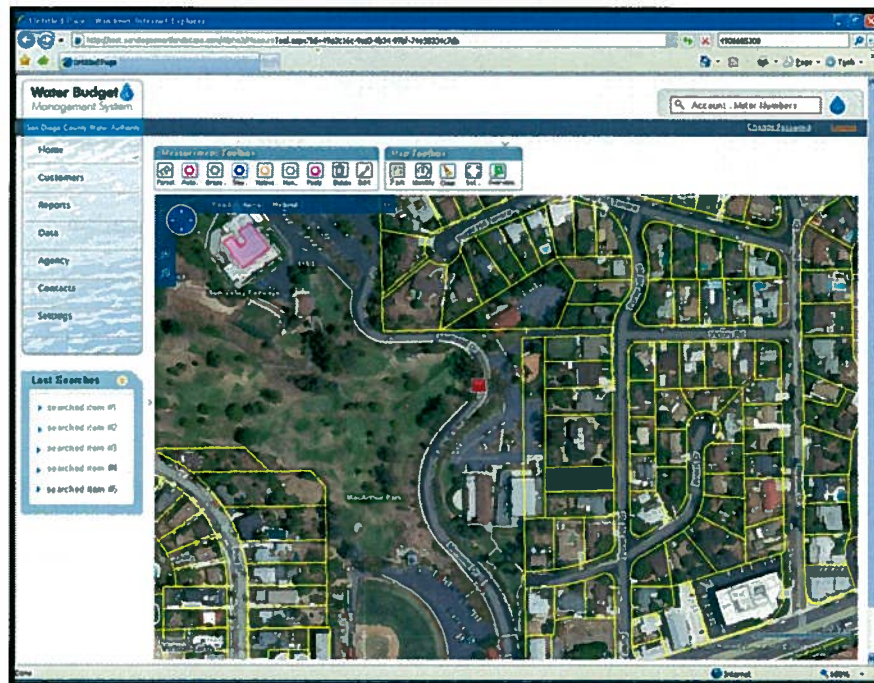
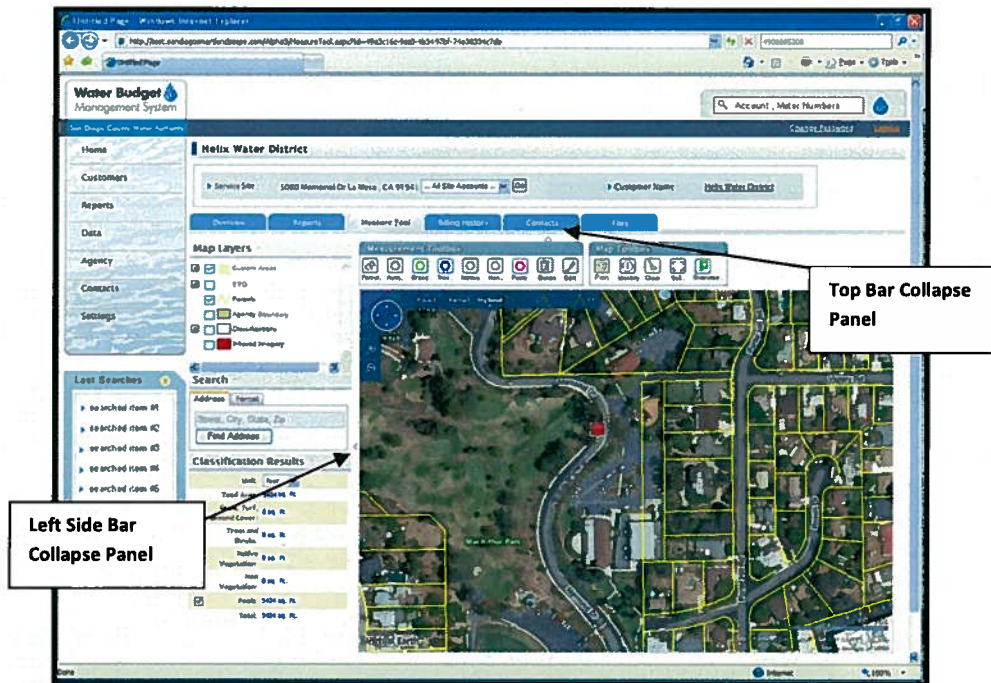
Additional Features

1. **Correct Auto Classification Layer:** Draw Custom Classification measurements inside an Auto Classification polygon to correct misclassified areas.




The total area for the landscape area measurement will remain the same (the previously misclassified vegetation area will be subtracted and replaced with the custom classification area totals.)

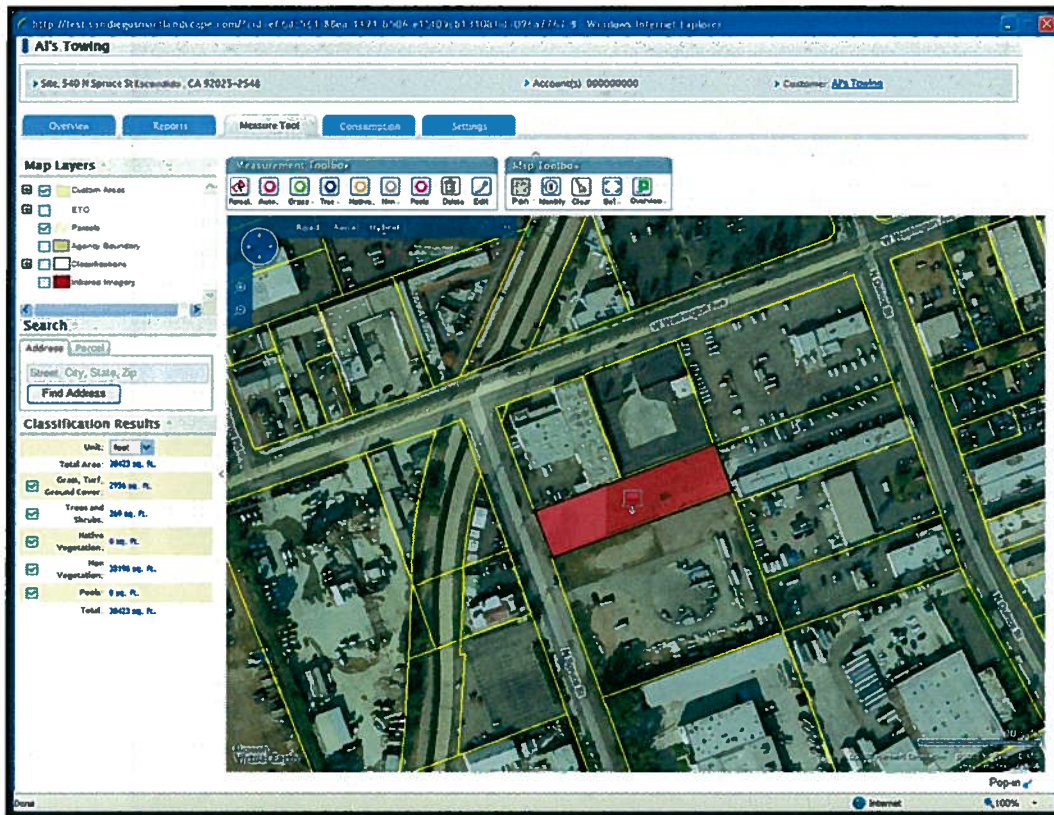
- Increase Map Size Tools:** Click left and top collapse panels (marked with arrows) to collapse additional areas on the page to increase map size. Click panels again to show hidden areas.




To increase map size even further, click the “Pop-out” icon beneath the map.

Pop-out 

This will open up a new window with just the measurement tool.



Once finished, click the “Pop-in” icon beneath the map to return to the application.

Pop-in 

3. **Address & Parcel Search:** If the customer site cannot be located by default (or is incorrectly mapped), then search for the site using the easy to use Address or Parcel search tools. Note: You must enter a 10 digit APN number for the Parcel search.

When you return to view this site in the future, the map view of the last searched location will be saved.

4. **Move Pushpin Location:** If desired, you may move the location of the mapped pushpin at anytime. To move the pushpin, hover your cursor over the pushpin icon, **RIGHT** click mouse, hold down click and move mouse. Release click to drop pushpin in desired location.



The new location of the pushpin will be saved when you return to this site in the future.

