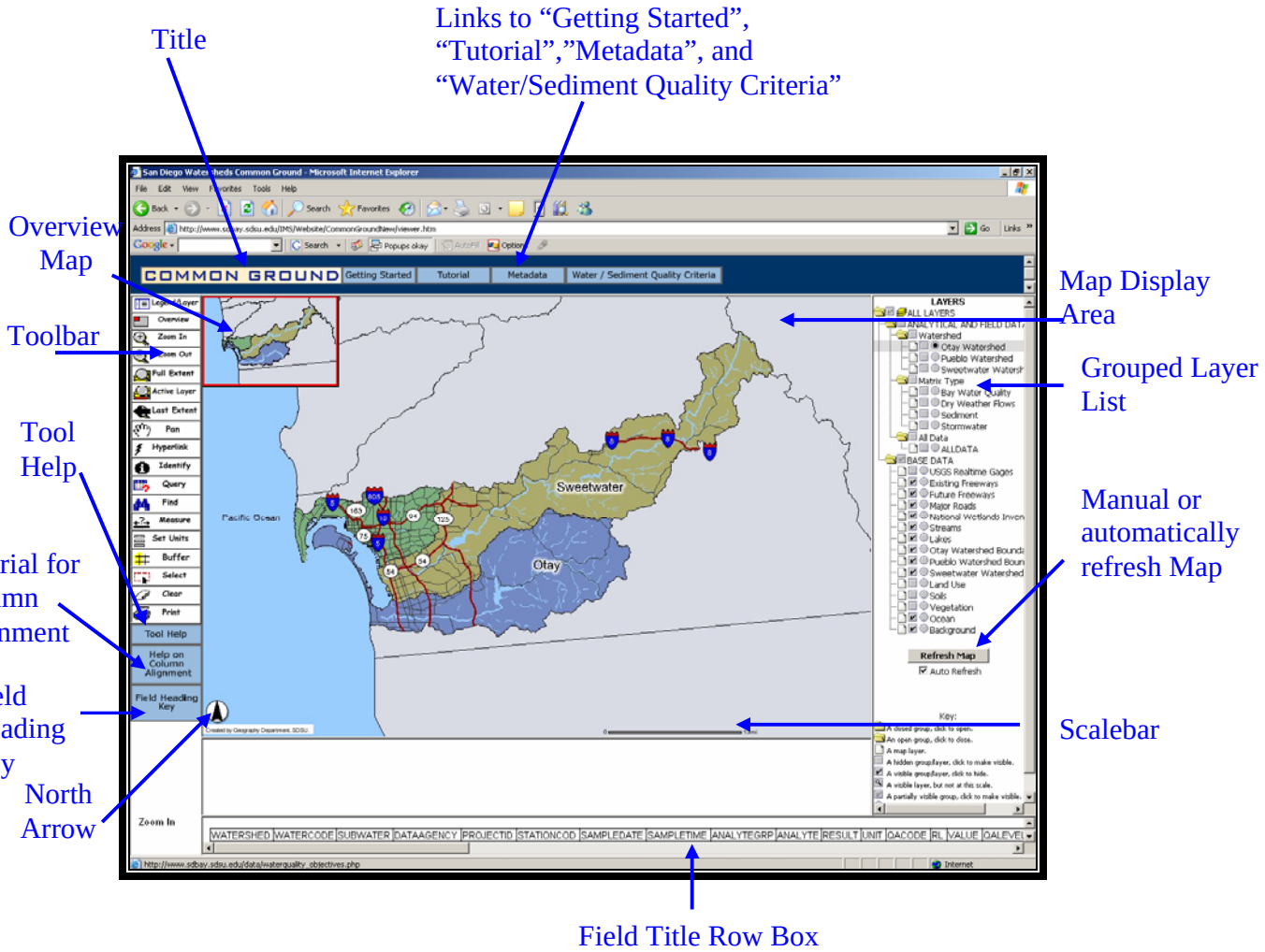
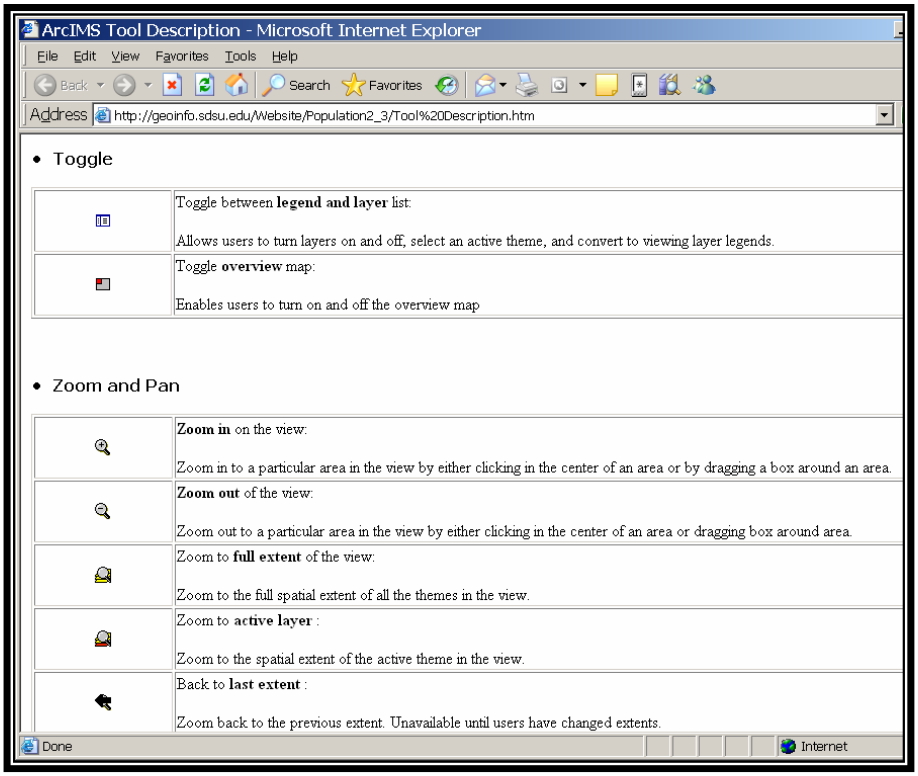
Introduction of ArcIMS HTML Viewer

- User Interface

The ArcIMS HTML Viewer interface includes title, a map display area (mapframe), grouped layer list, toolbar, scalebar, North arrow, overview map, the link of ArcIMS tutorial and tool help, and functions of refreshing map automatically.





The layer list is on the right of the map display area. A layer is "a slice or stratum of the geographic reality in a particular area, and is more or less equivalent to a legend item on a paper map." Layers are grouped based on their characteristics. The boxes and the circles to the left of the layer are used to make the layer visible and/or active. ☑ is used to make the layer **Visible** in the map display area. ◉ is used to make the layer **Active** against the function you are querying (A request that selects features or records from a database. A query is often written as a statement or logical expression.), buffering (A zone around a map feature measured in units of distance or time.), or identifying (In ArcGIS, a tool that, when applied to a feature (by clicking it), opens a window showing that feature's attributes.), so the query will be performed. For more detail, see the **Key** section located at the bottom of LAYERS area. After making every query, ☑ Auto Refresh will automatically refresh map and the new changes will be reflected on the map. (Note: If the layer you want to view is below some active layers, make the active layers above invisible.) (Reference: ArcGIS Desktop Help)

- GIS skills and tools
  1. Toggle

	Toggle between **legend and layer** list: Turn layers on and off, select an active theme, and convert to viewing layer legends.
	Toggle **overview** map: Turn on and off the overview map

2. Zoom and pan

	**Zoom in** on the view: Zoom in to a particular area in the view by either clicking in the center of an area or by dragging a box around an area.
	**Zoom out** of the view: Zoom out to a particular area in the view by either clicking in the center of an area or dragging box around area.
	Zoom to **full extent** of the view: Zoom to the full spatial extent of all the themes (map layers) in the view by clicking this icon.
	Zoom to **active layer**: Zoom to the spatial extent of the active theme in the view by clicking this icon.
	Back to **last extent**: Zoom back to the previous extent. Unavailable until users have changed extents.
	**Pan:** Pan the view by dragging the display in any direction with the mouse.
	**Hyperlink:** Link to other web pages in the new window.

3. Query

	**Identify**: Lists attributes/information on one feature of map by clicking on the lines or polygon for active theme to view the database record.
	**Query**: Search for the map features/information based on a query expression (consisting of at least one operand and one or more operators) on the active theme database and displays the results in a table. Note: the query expression is case sensitive.
	**Find**: Find map features/information with an attribute value matching a string (a series of characters manipulated as a group) that the user types when a theme is active for fields in the database. Notice: the string is case sensitive.
	**Measure**: Measure distances on the map viewer by drawing points.
	**Set units:** Sets the map viewer units from the drop down list for the measure tool, i.e. feet, meters, and kilometers.
	**Buffer:** Selects the features of one map layer that are within the specified buffer distance of selected features of another layer.
	**Select by rectangle**: Select a rectangle area and view the features from the database for the active theme.
	**Clear selection**:

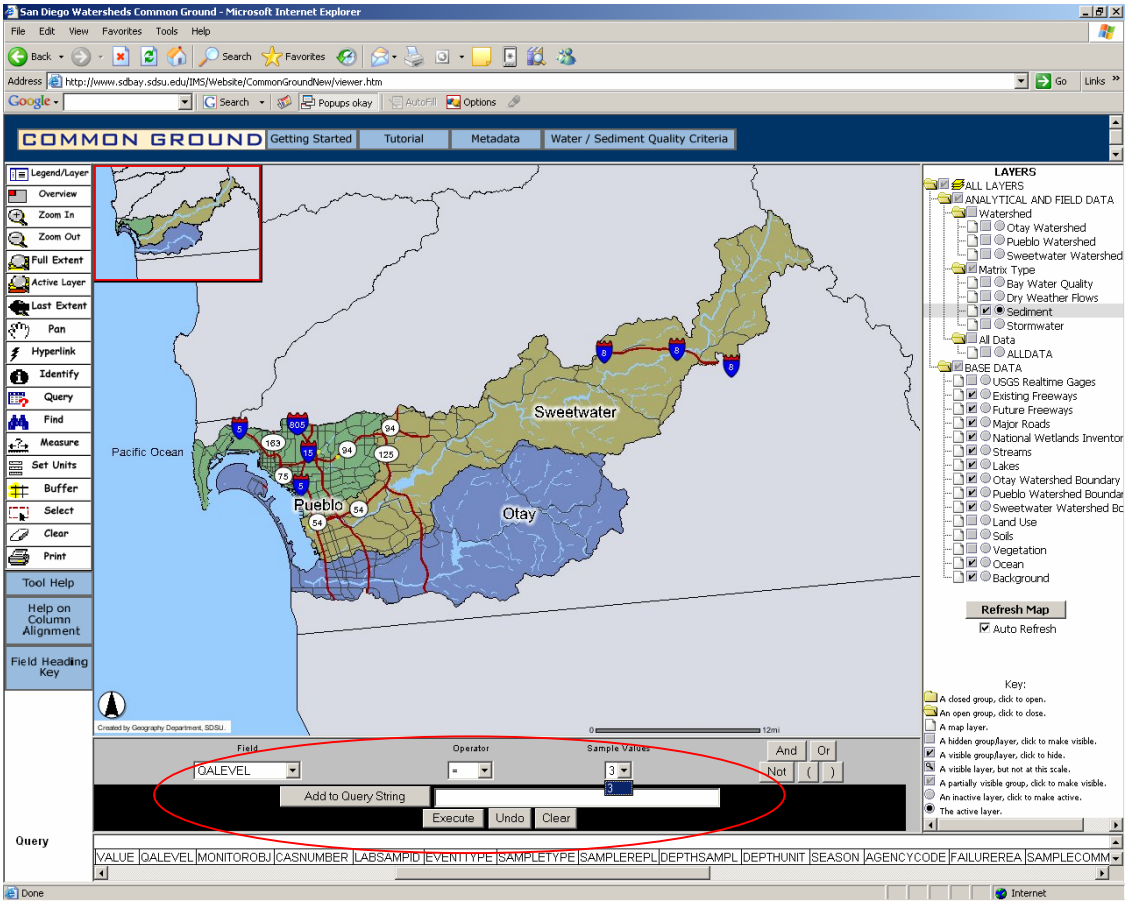
	Clear a rectangle or section from selected region of the active theme.

4. Project

	**Print:** Prints the map to user's default printer.

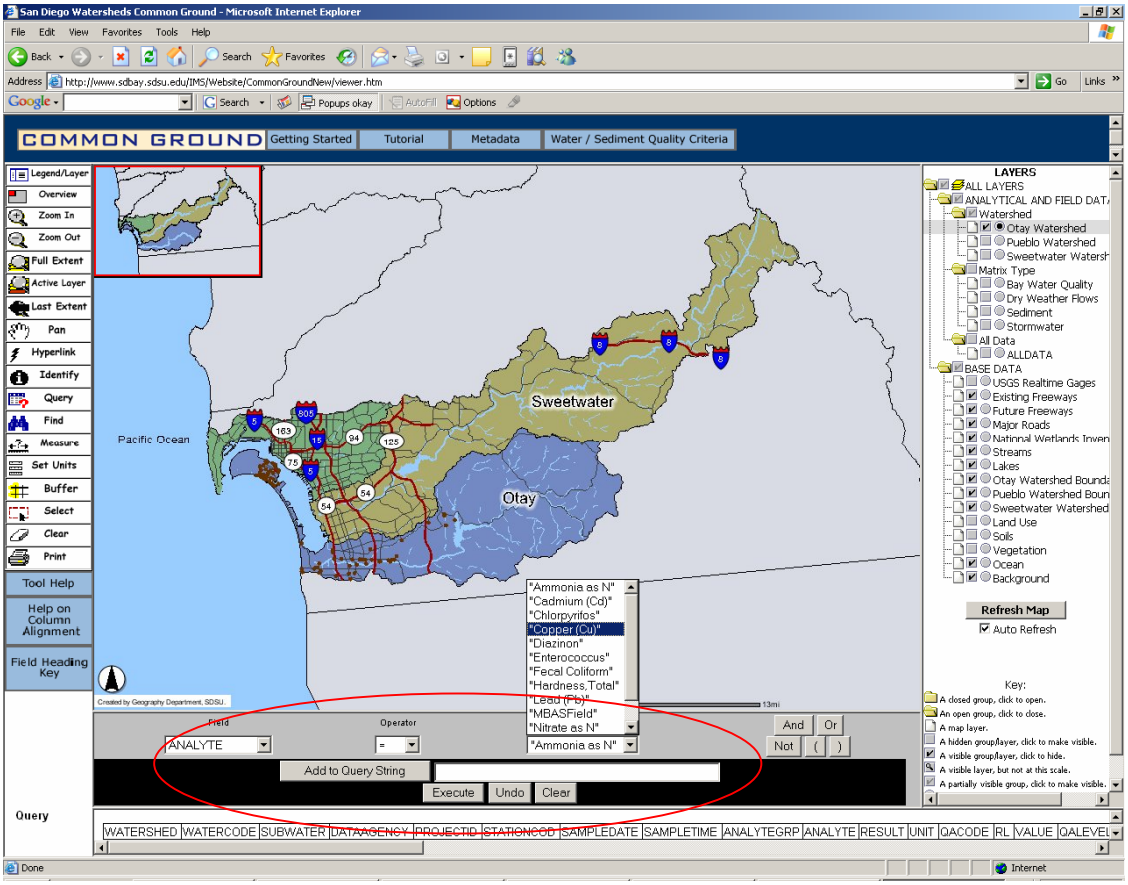
How Do I Find Out the Quality of Data?

- **Query by Quality Assurance (QA)**
  1. Launch the web browser and type http://www.sdbay.sdsu.edu/IMS/Website/CommonGroundNew/viewer.htm. You will see the ArcIMS HTML Viewer named as **San Diego Watersheds Common Ground**.
  2. From the right column, check **Visible** and **Active** for the layer you want to query, such as the "Sediment."
  3. Click and you will see the query frame shown up on the bottom.
  4. In the query frame, select **QALEVEL** in the **Field**, and **=** in the **Operator**.
  5. Click Get Samples to select the level you want to query.
  6. Click Add to Query String.
  7. Click Execute to see the query result. (Note: Remember to click to clear selection after finishing each query.)



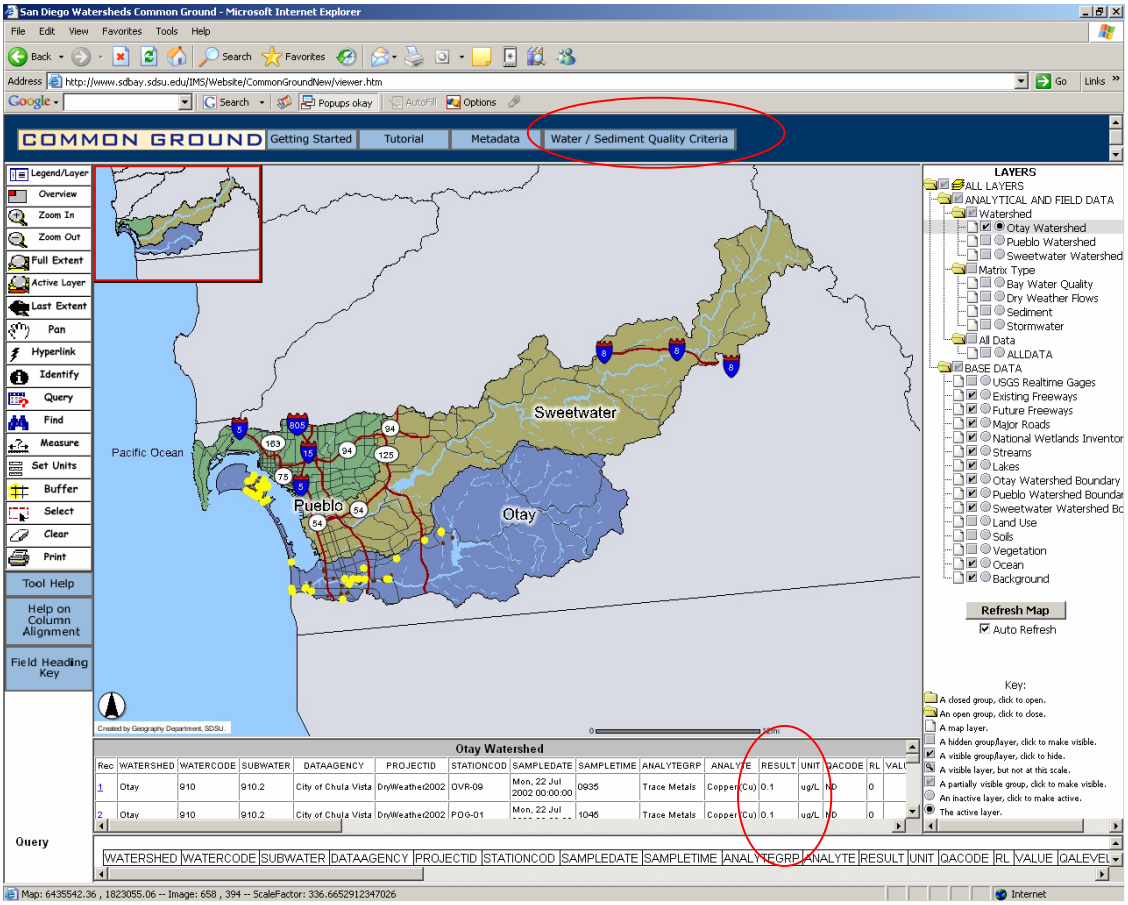
How Do I Find Constituents that Exceed Water Quality and Sediment Quality Objectives in San Diego Bay?

1. Launch the web browser and type http://www.sdbay.sdsu.edu/IMS/Website/CommonGroundNew/viewer.htm and you will see the ArcIMS HTML Viewer named as **San Diego Watersheds Common Ground**.
2. Check **Visible** and **Active** for the layer you want to query, such as the "Otay Watershed".
3. Click and you will see the query frame shown up on the bottom.
4. In the query frame, select **ANALYTE** in the **Field**, and **=** in the **Operator**.
5. Click Get Samples to select the analyte you want to query, such as **Copper (Cu)**.
6. Click Add to Query String.
7. Click Execute to see the query result. (Note: Remember to click to clear selection after finishing each query.)



8. To determine whether these points exceed the sediment standard for copper, please see the **RESULT** field. 270mg/kg is the standard for copper.

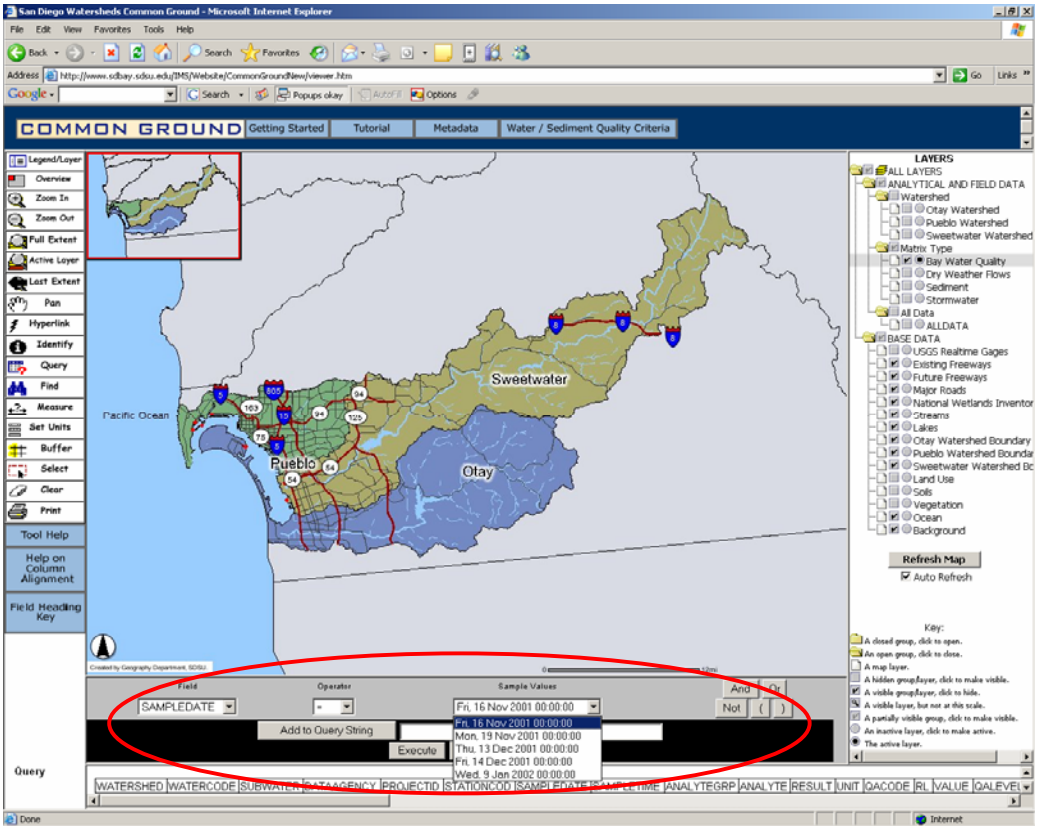
9. For more information of standards, please see the file, click Water / Sediment Quality Criteria.



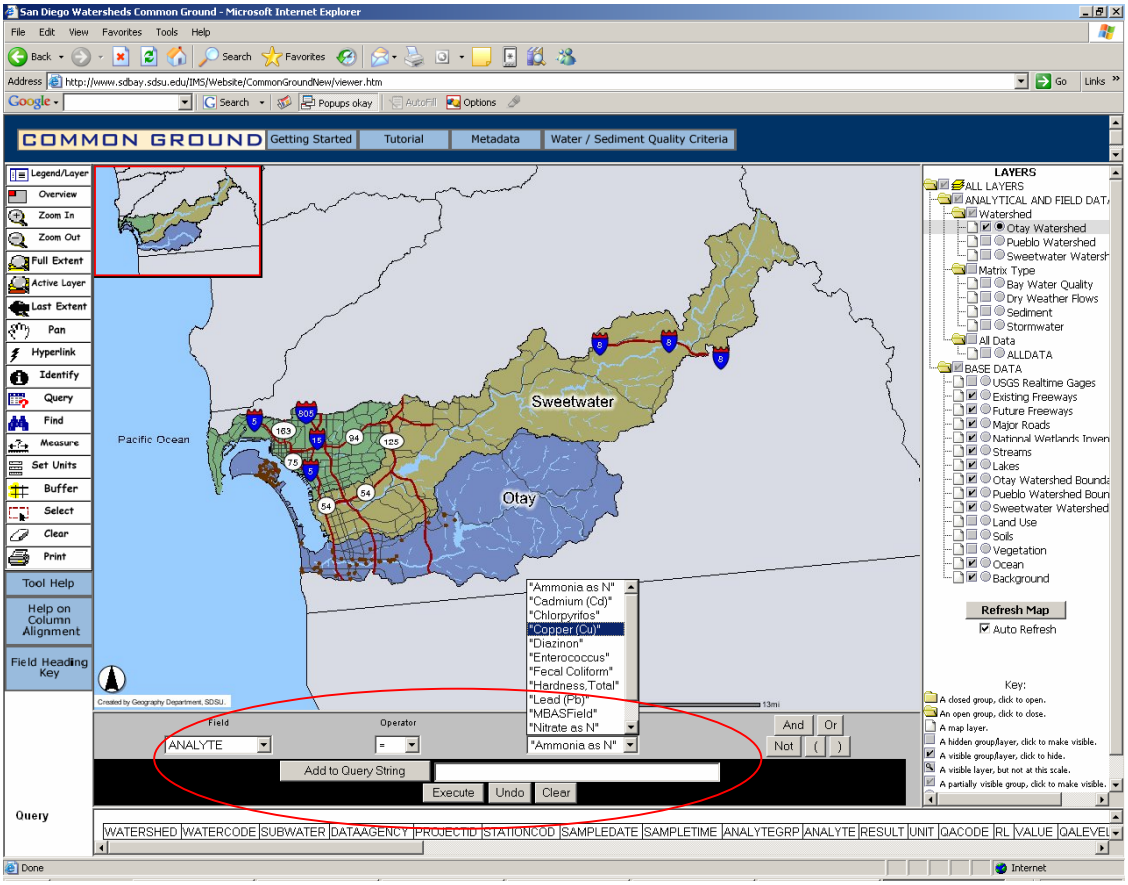
How Do I Find the Results of My Water Quality Monitoring?

I. Find the results of my water quality monitoring by using **Data Query** tool?

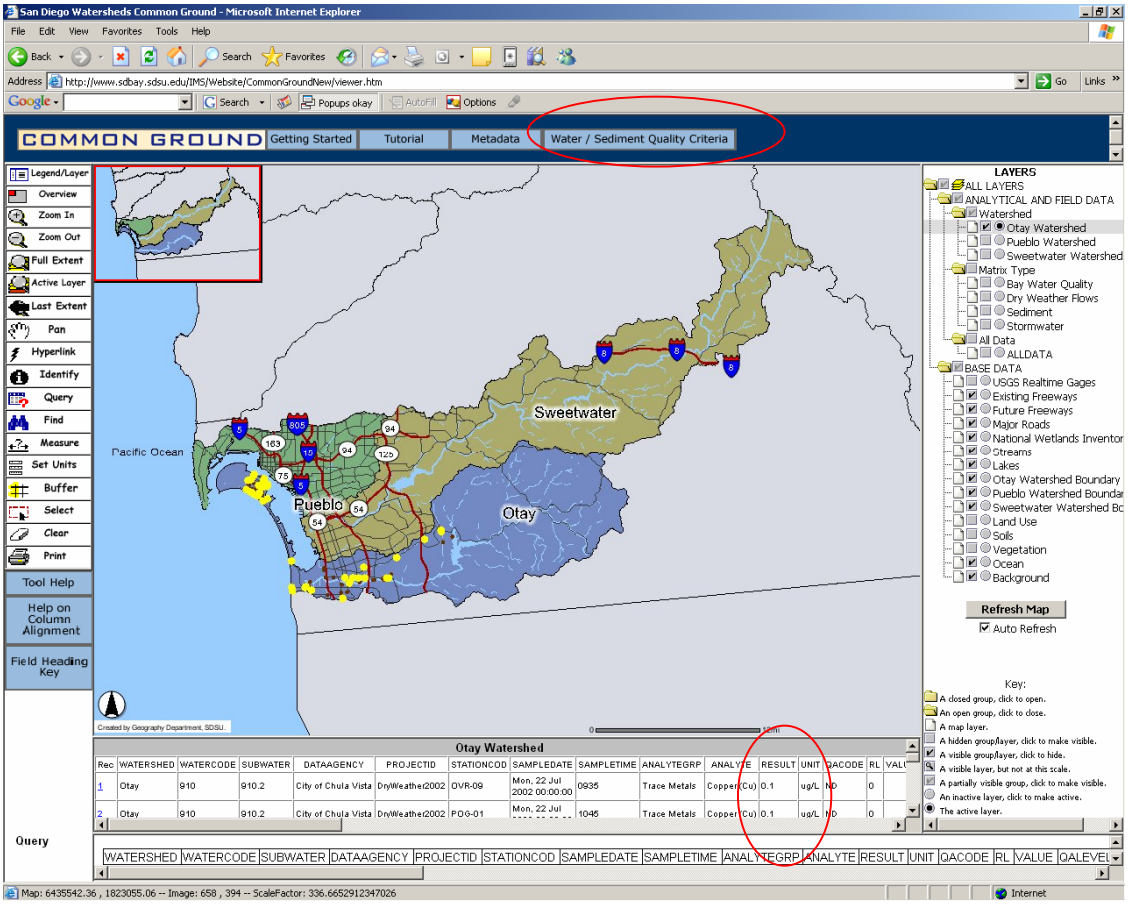
- **Query by DATE**
  1. Launch the web browser and type http://www.sdbay.sdsu.edu/IMS/Website/CommonGroundNew/viewer.htm and you will see the ArcIMS HTML Viewer named as **San Diego Watersheds Common Ground**.
  2. Check **Visible** and **Active** for the layer you want to query, such as the "Bay Water Quality".
  3. Click and you will see the query frame shown up on the bottom.
  4. In the query frame, select **SAMPLEDATE** in the **Field**, and **=** in the **Operator**.
  5. Click Get Samples to select the date you want to query.
  6. Click Add to Query String.
  7. Click Execute to see the query result. (Note: Remember to click to clear selection after finishing each query.)



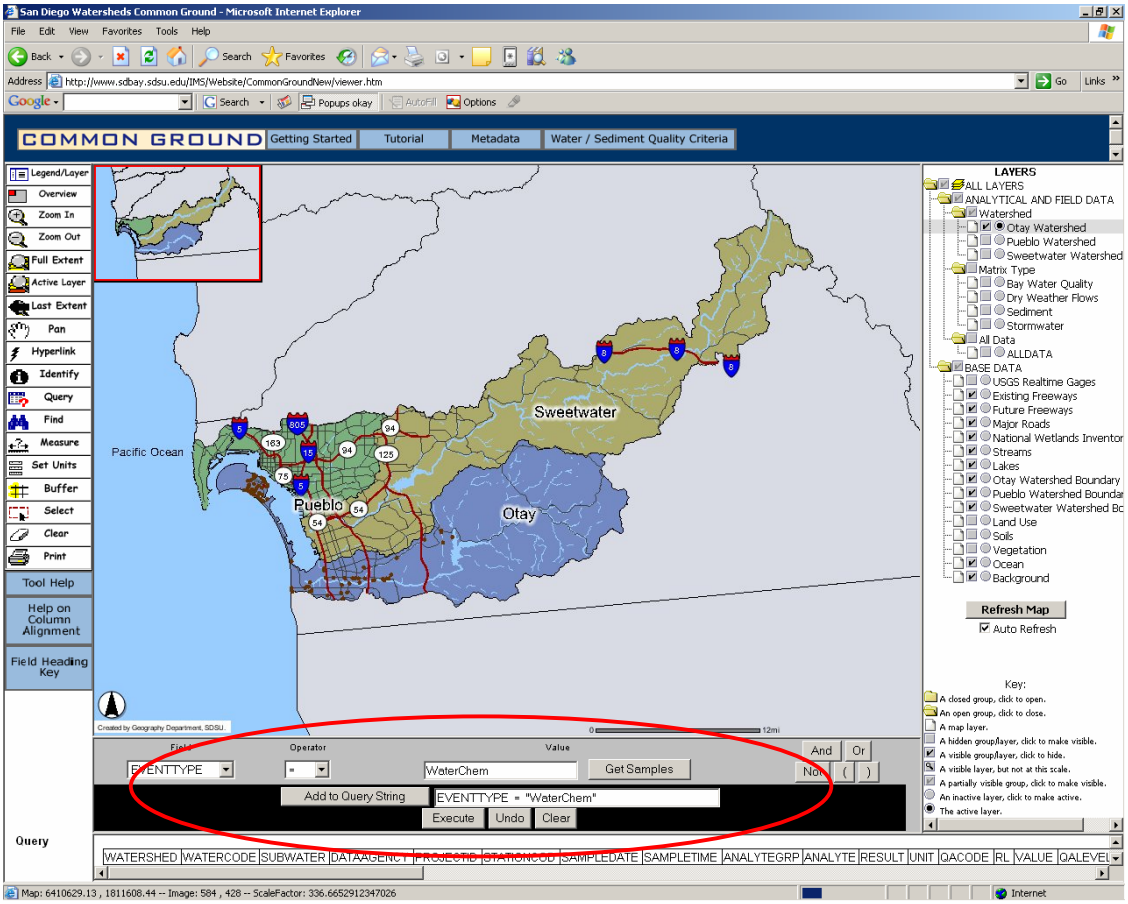
- **Query by CONSTITUENT**
  1. Launch the web browser and type http://www.sdbay.sdsu.edu/IMS/Website/CommonGroundNew/viewer.htm and you will see the ArcIMS HTML Viewer named as **San Diego Watersheds Common Ground**.
  2. Check **Visible** and **Active** for the layer you want to query, such as the "Otay Watershed".
  3. Click and you will see the query frame shown up on the bottom.
  4. In the query frame, select **ANALYTE** in the **Field**, and **=** in the **Operator**.
  5. Click Get Samples to select the analyte you want to query, such as **Copper (Cu)**.
  6. Click Add to Query String.
  7. Click Execute to see the query result. (Note: Remember to click to clear selection after finishing each query.)



8. To determine whether these points exceed the sediment standard for copper, please see the **RESULT** field. 270mg/kg is the standard for copper.
9. For more information of standards, please see the file, click Water / Sediment Quality Criteria.

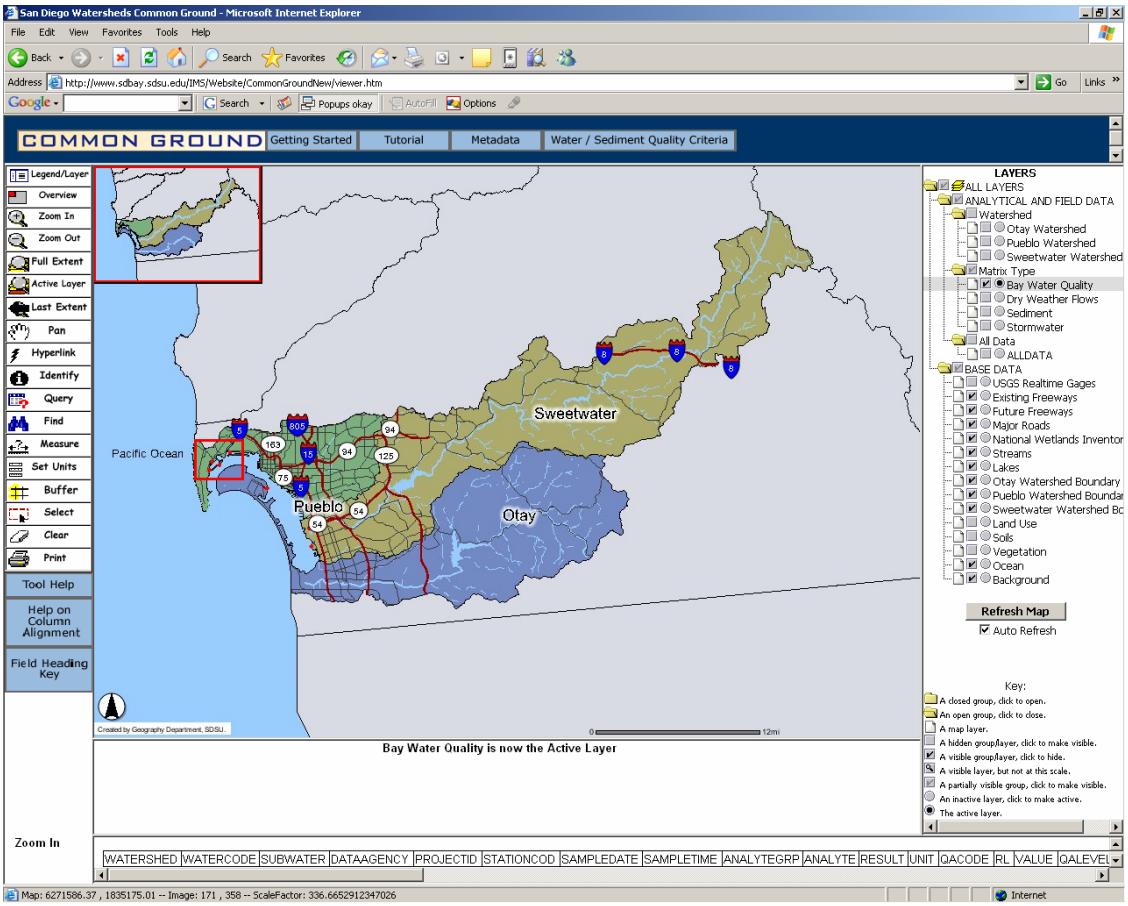


- **Query by EVENT**
  1. Check **Visible** and **Active** for the layer you want to query, such as the "Otay Watershed".
  2. Click and select **EVENTYPE** in the **Field**, and = in the **Operator**.
  3. Type **WaterChem** in the **Value** and click Add to Query String.
  4. Click Execute to see the query result. (Note: Remember to click to clear selection after finishing each query.)

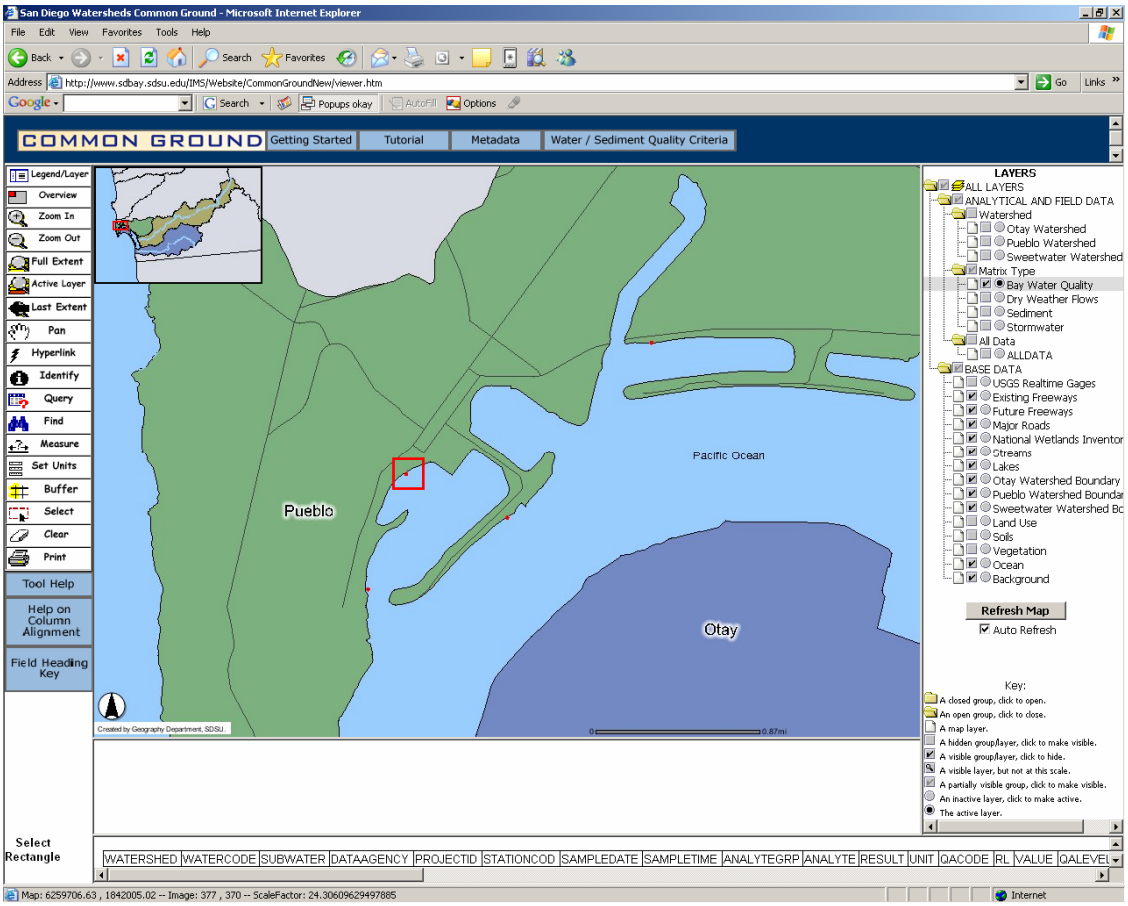


II. Find the results of my water quality monitoring by using **Select** tool?

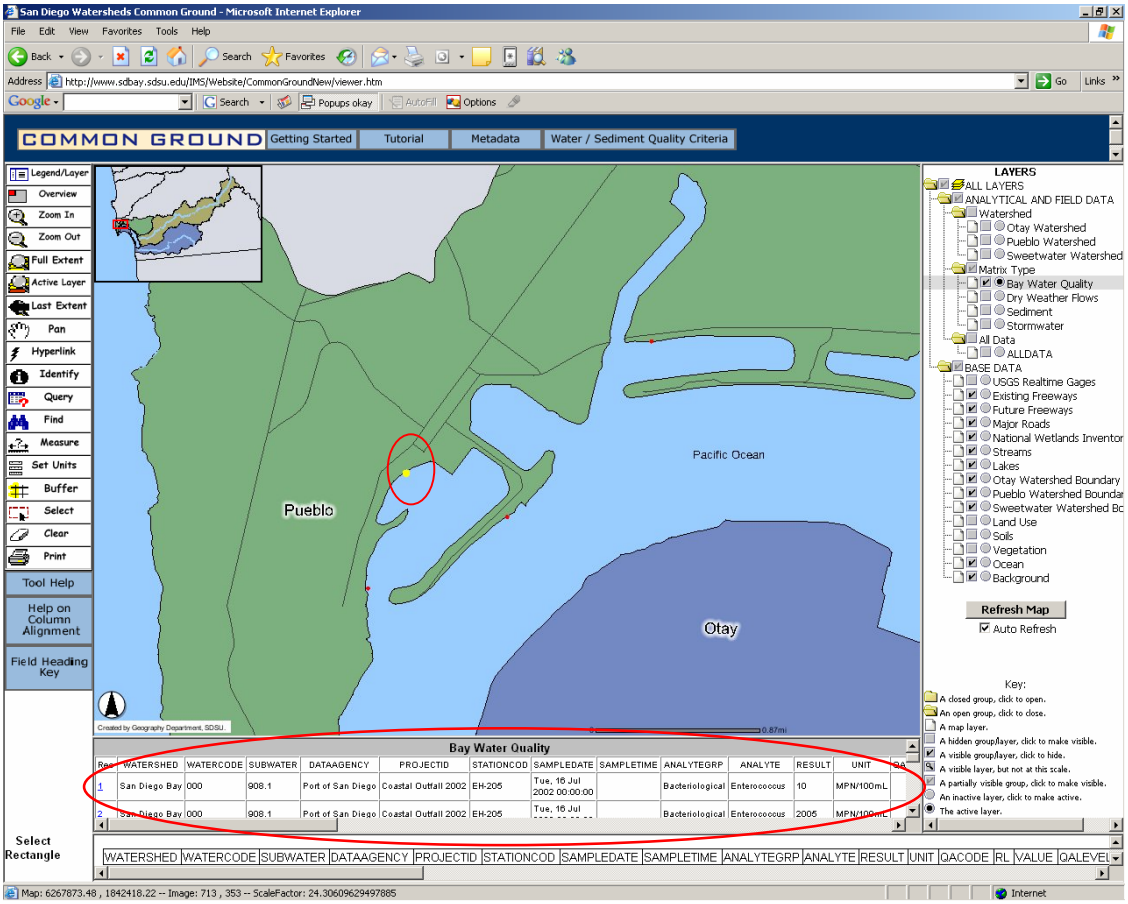
1. Check **Visible** and **Active** for the layer you want to query, such as the “Bay Water Quality”.
2. If you want to see the legend of “Bay Water Quality” or grouped layer list, switch .
3. Many point data layers are overlaid in this viewer so make point data layers which are above the layer you want to select invisible if necessary.
4. If you need to zoom in the points you want to query, click and draw a rectangle around the area you want to zoom in.



5. Click and draw a rectangle around the point of “Bay Water Quality” you want to identify.



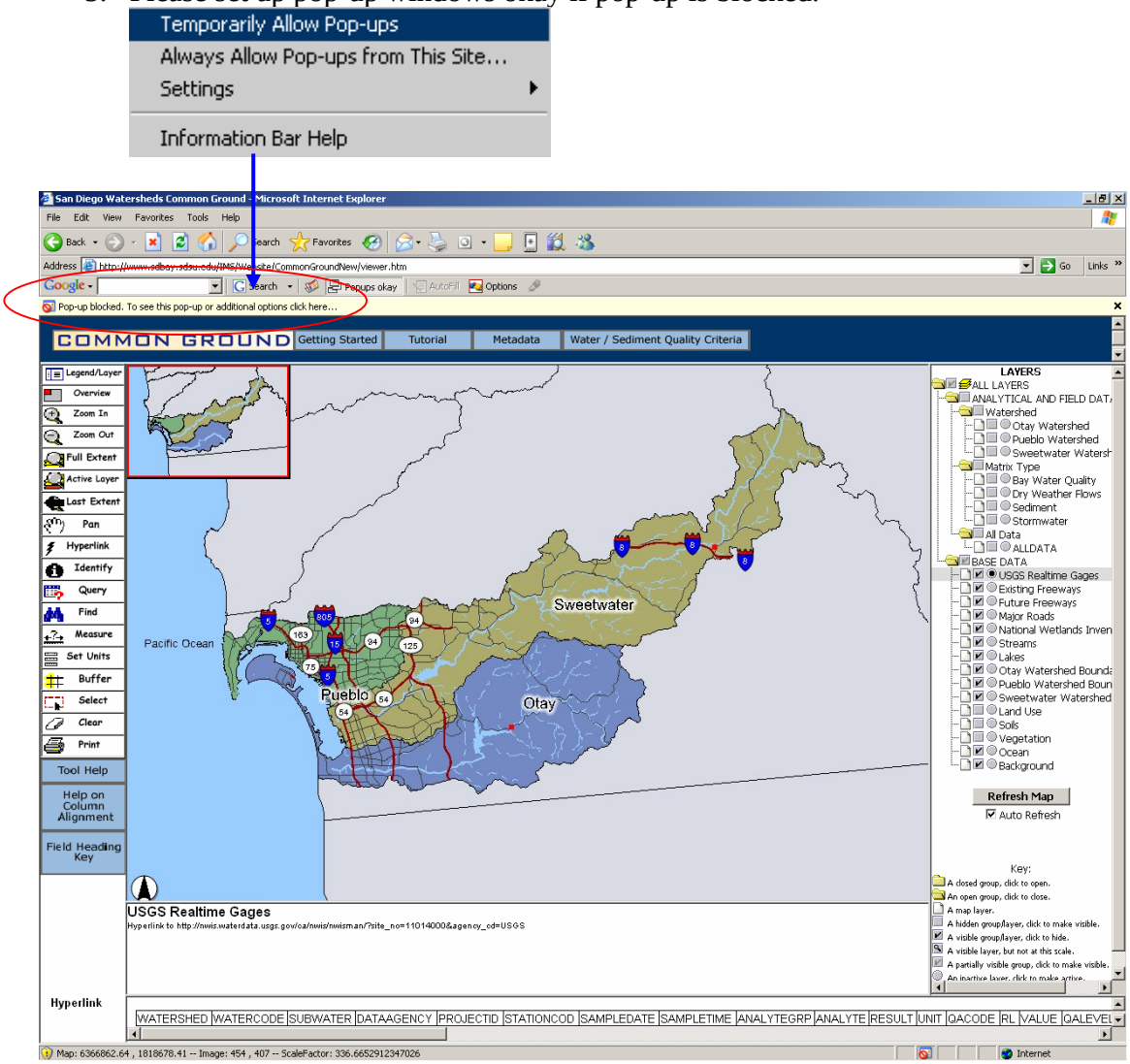
6. The selected point is shown in yellow in the map display area and the results are shown in the bottom table. Every point you see include many rows so you can see how many elements have been measured at this test point.



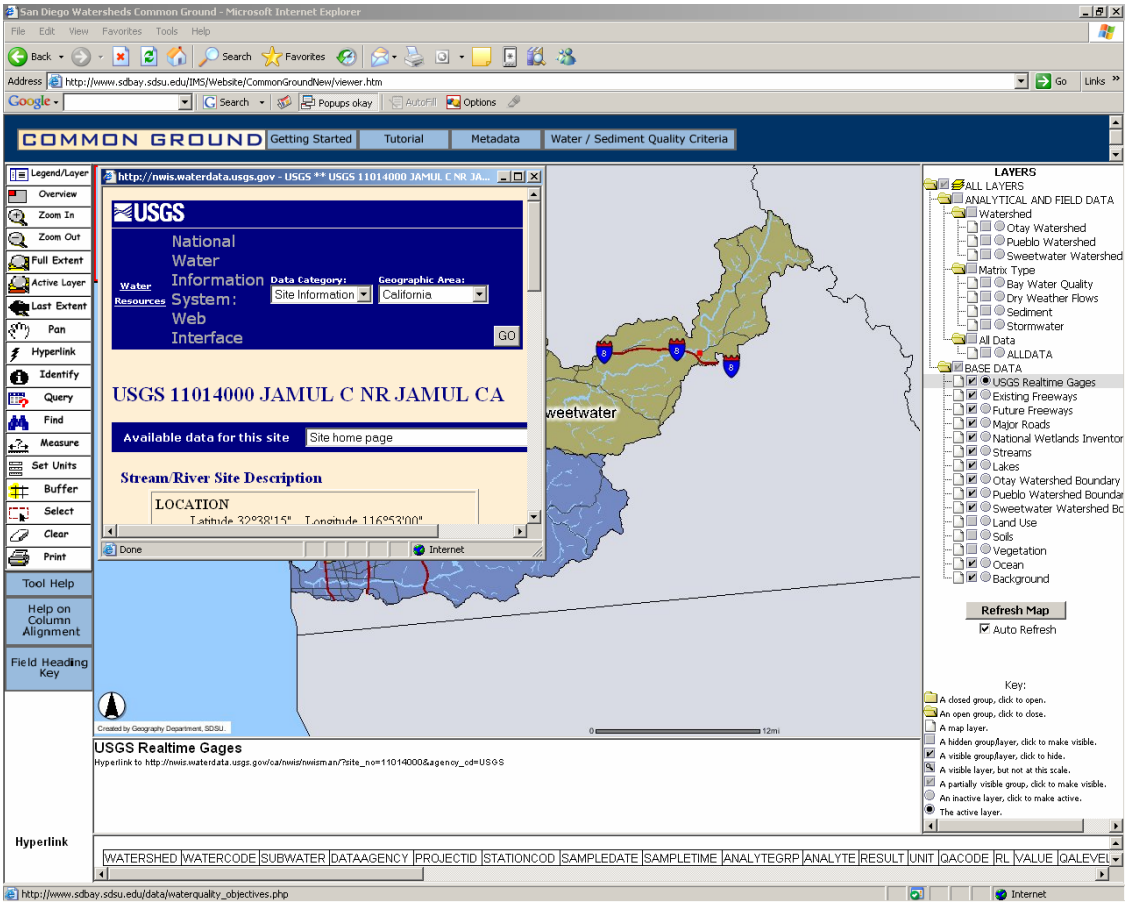
How Do I Find Flow Data in Streams

I. Find the results of flow data in streams by using **Hyperlink** tool?

1. Launch the web browser and type http://www.sdbay.sdsu.edu/IMS/Website/CommonGroundNew/viewer.htm and you will see the ArcIMS HTML Viewer named as **San Diego Watersheds Common Ground**.
2. Check **Visible** and **Active** for the layer "USGS Realtime Gages".
3. Click to see the legend of "USGS Realtime Gages".
4. Click and one of the realtime gage points.
5. Please set up pop-up windows okay if pop-up is blocked.

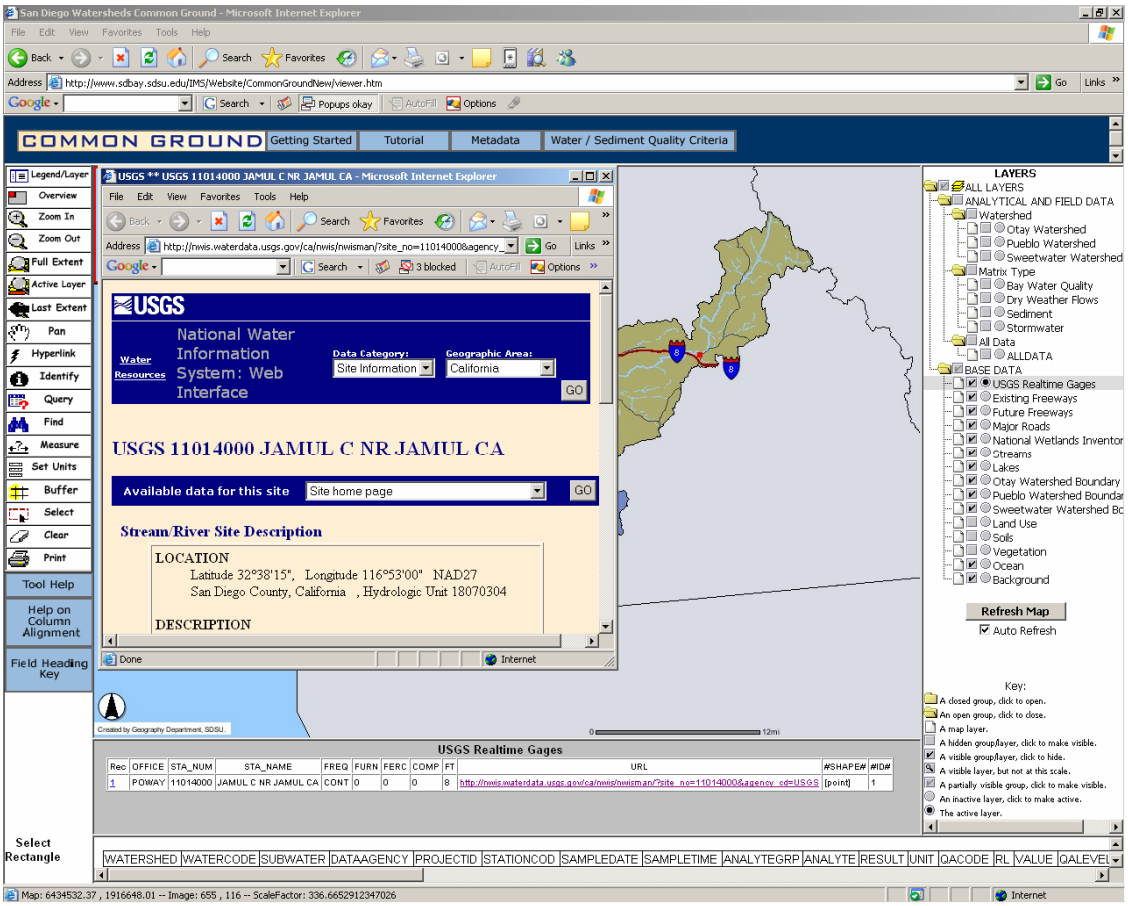


6. The USGS web page will pop up.



II. Find the results of flow data in streams by using **Select** tool?

1. Make sure the layer “USGS Realtime Gages” is **Visible** and **Active**.
2. Click to see the legend of “USGS Realtime Gages”.
3. Click to draw a rectangle around one of the “USGS Reatime Gages” points.
4. Click the URL of the table, the USGS web page will pop up.



Map Access Tutorial

Introduction of Map Types:

- ArcIMS Map: **ArcIMS** (standing for ArcInternet Map Server) is a Web Map Server produced by ESRI. It is a GIS that is designed to serve maps across the Internet. ArcIMS maps could be static images allowing simple panning and zooming or more complex and interactive pages. Examples of interactive maps served with ArcIMS include maps with layers that can be turned on and off, or with features containing attributes that can be queried. A visitor to a site driven by ArcIMS needs nothing more than a web browser: the GIS and database are maintained on the server side. (http://www.answers.com/)

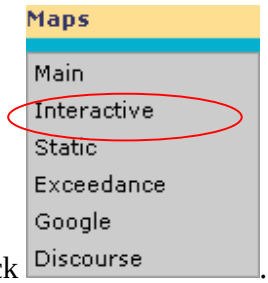
- PDF Map: PDF is a file extension used in Adobe Acrobat. PDF map allows users to zoom in, zoom out and pan the map.

- JPEG Map: JPEG is the standard algorithm for the compression of digital images. (http://www.answers.com/) JPEG only displays map in images rather than providing other interactive functions.

Among ArcIMS, PDF, and JPEG maps, ArcIMS map is the most powerful and interactive map.

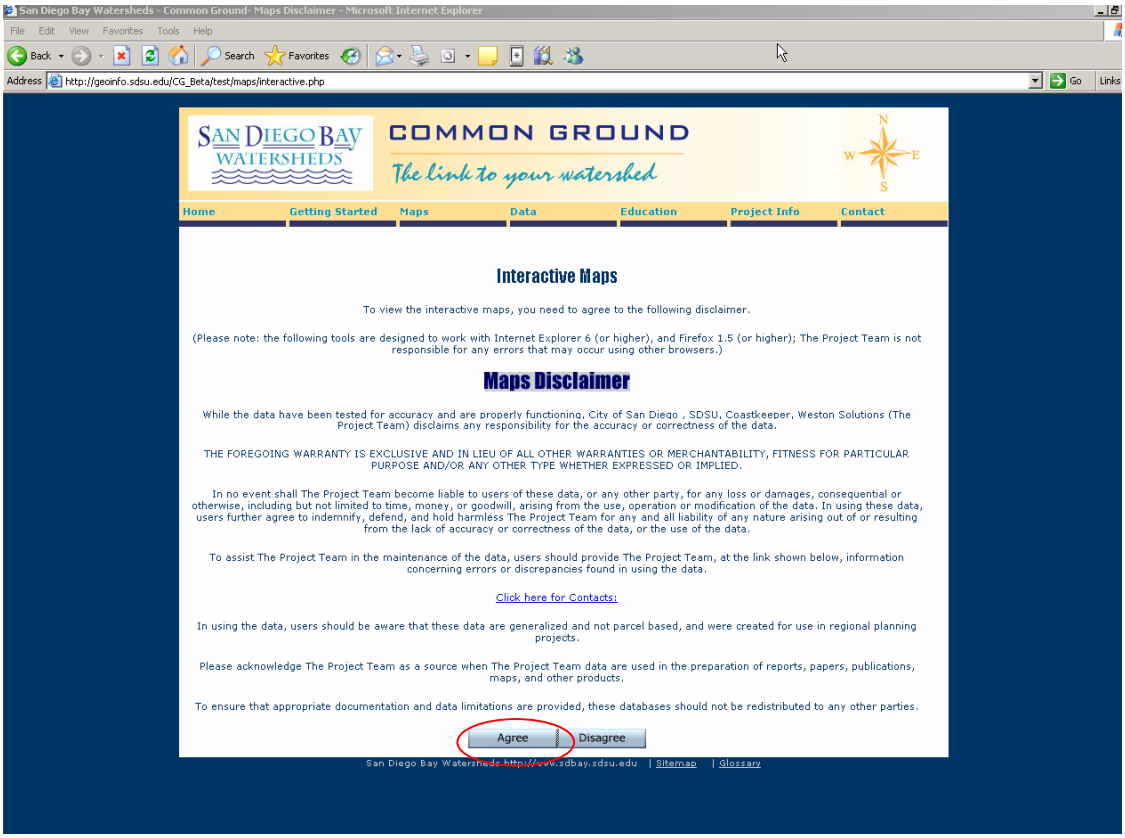
Steps for Map Access:

ArcIMS Maps

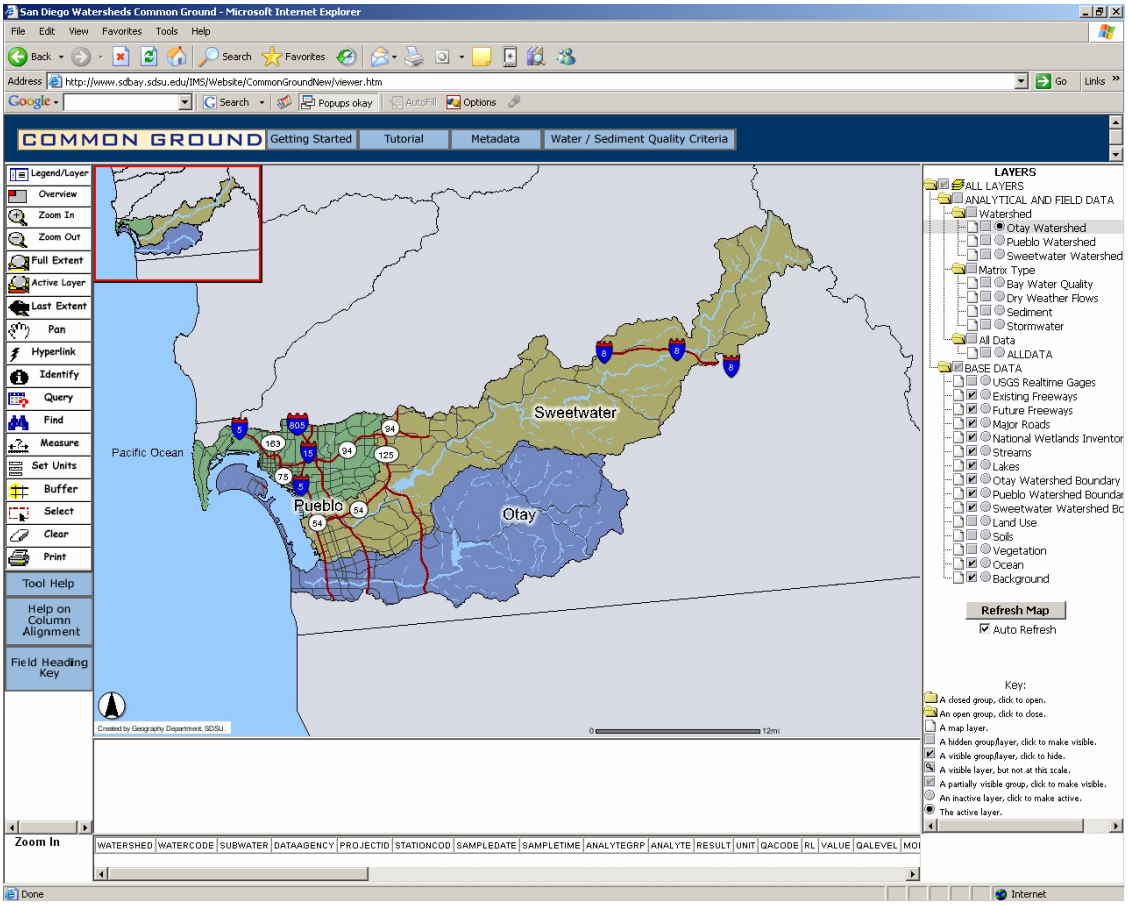
1. Launch the web browser and type http://www.sdbay.sdsu.edu/ .
2. Click 

.
3. Go through the maps disclaimer and click 

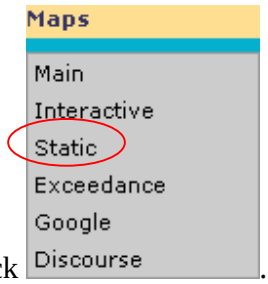
to access the interactive map.



4. If you want to learn more about ArcIMS functions, click Tutorial to access ArcIMS tutorials.

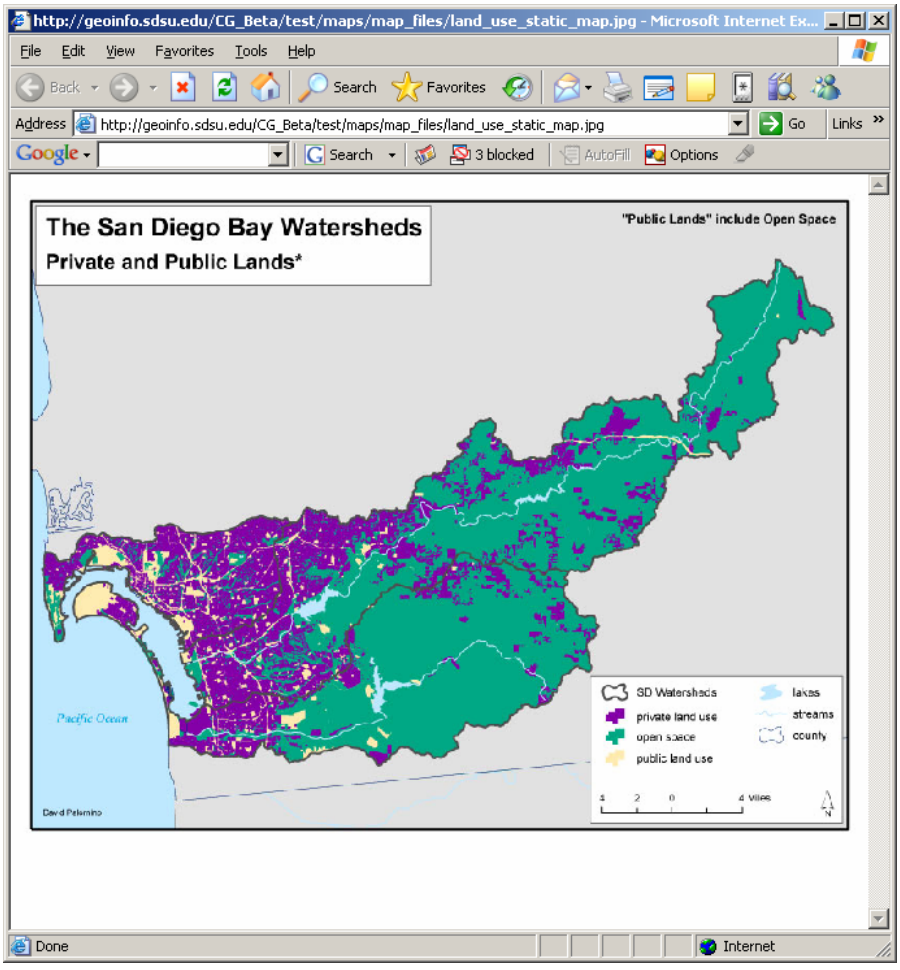


JPEG Maps

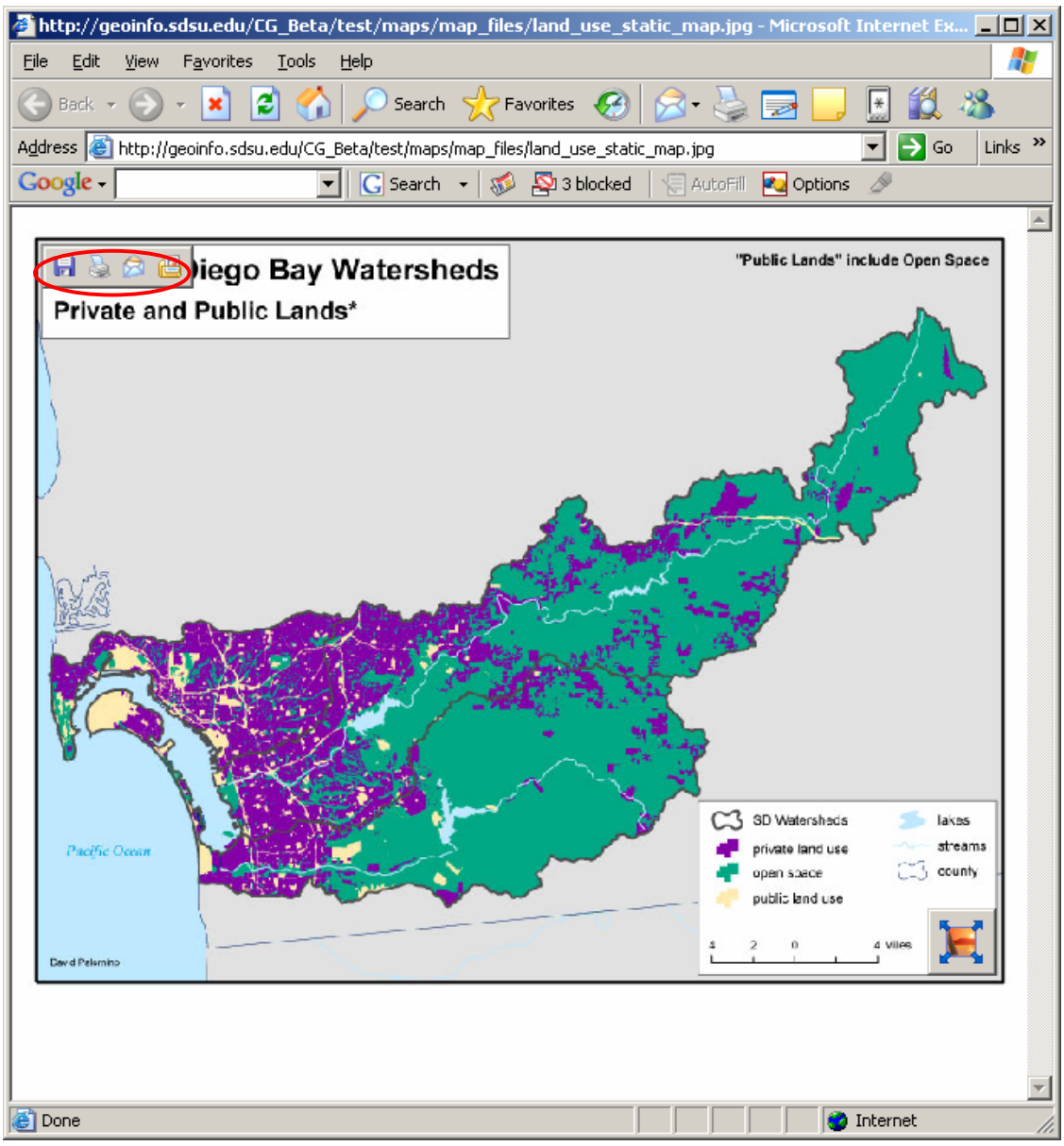
1. Launch the web browser and type http://www.sdbay.sdsu.edu/ .
2. Click 

.
3. Click the JPEG map you want. For example, click 

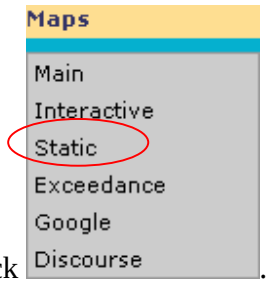
and get the following JPEG map.



4. If you want to print the map, select  .
5. If you want to save the map, select  .

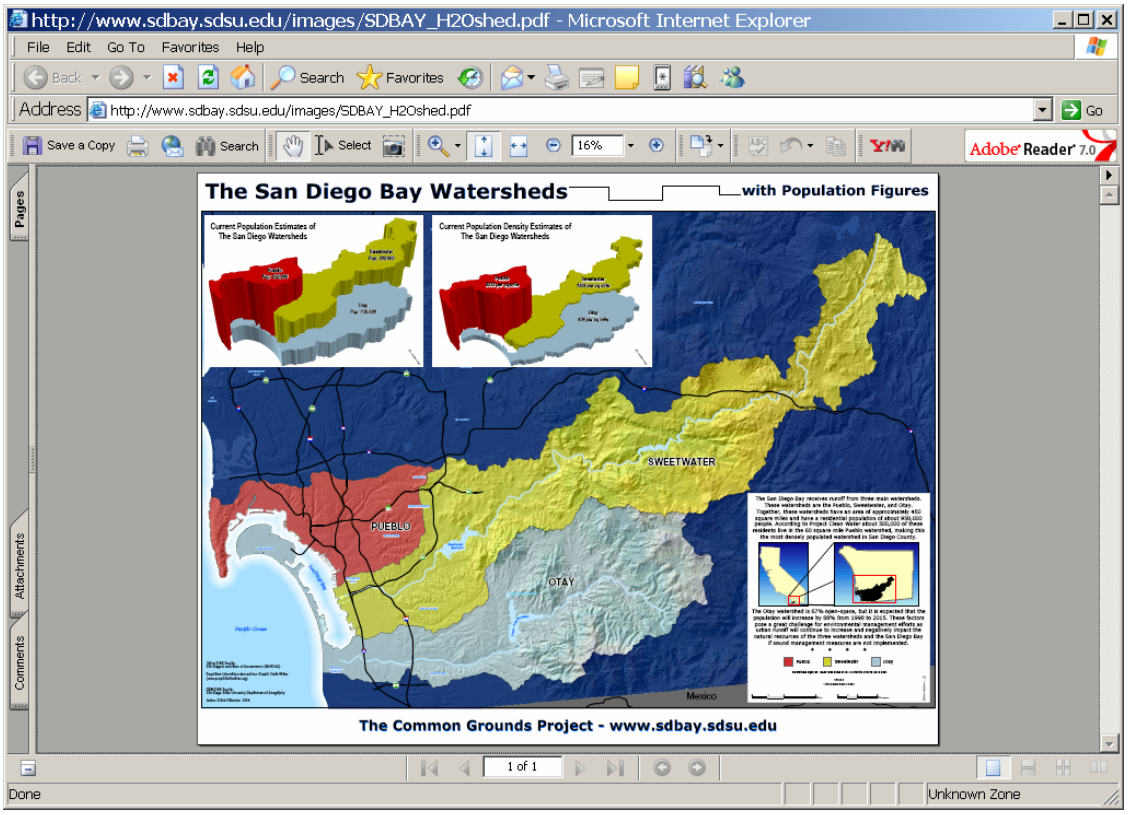


PDF Maps

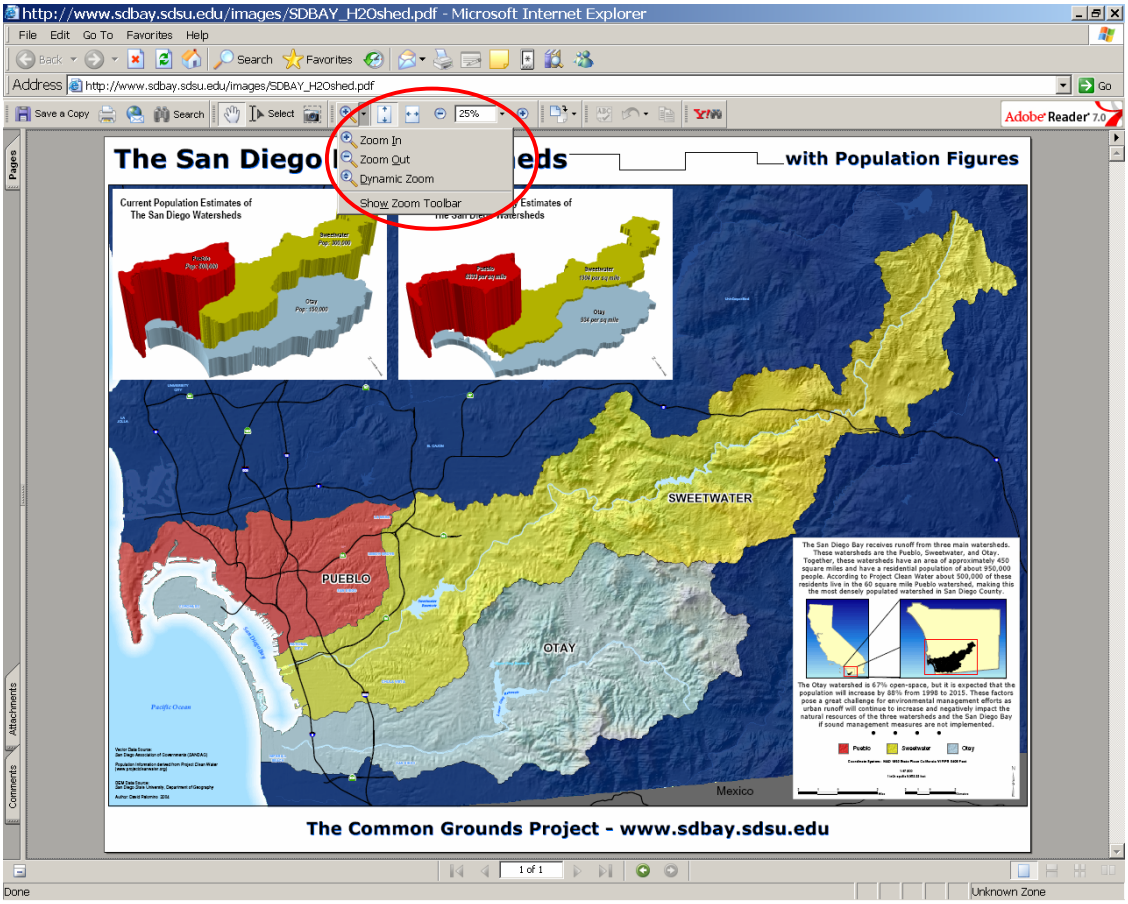
1. Launch the web browser and type http://www.sdbay.sdsu.edu/ .
2. Click 

.
3. Click the PDF map you want. For example, click 

and get the following PDF map.

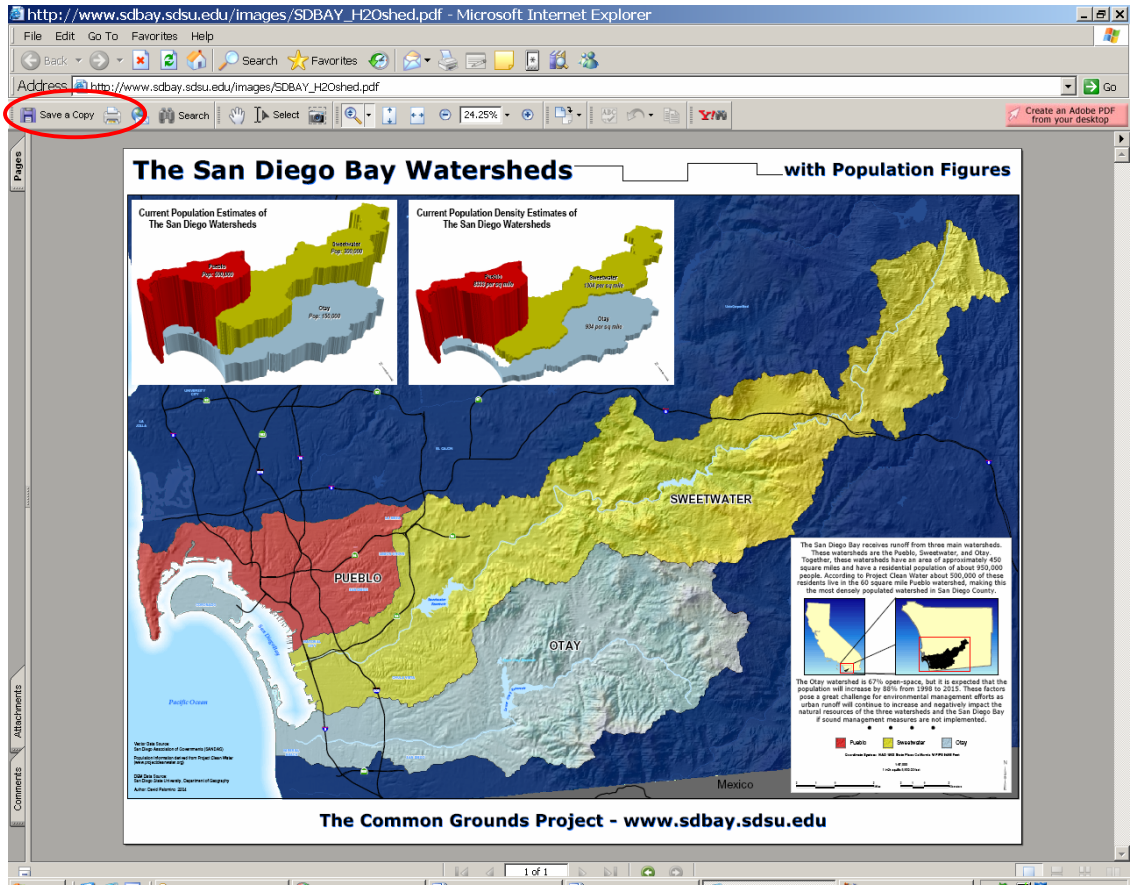


4. Select the zoom function you want to use from the drop down list. You also can select the percentage of display for displaying the map.



5. If you select the **Zoom In** or **Zoom Out** function, draw a rectangle near the location you want to zoom in or zoom out.
6. If you select the **Dynamic Zoom**, drag the cursor up for zoom in and down for zoom out.
7. If you want to print the map, select  .
8. If you want to save the map, select 

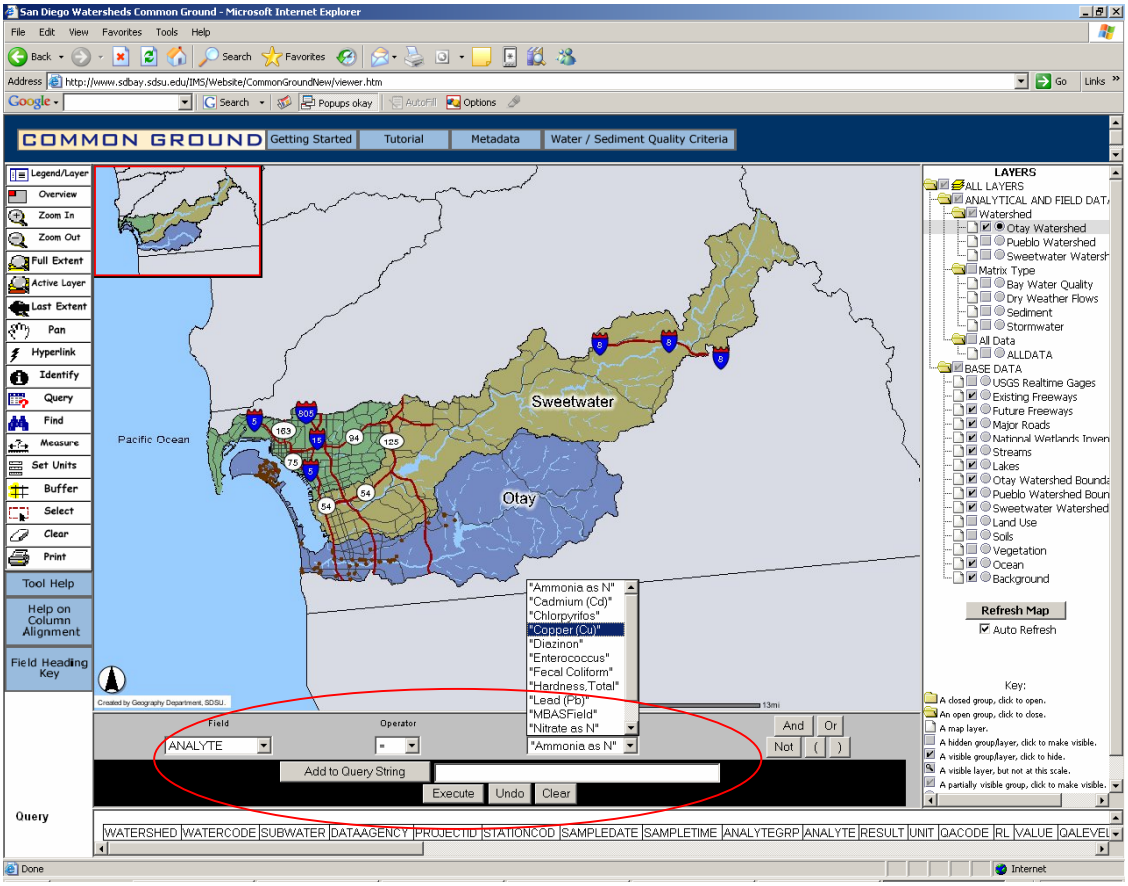
.


http://www.sdbay.sdsu.edu/images/SDBAY_H2Oshed.pdf - Microsoft Internet Explorer
File Edit Go To Favorites Help
Address http://www.sdbay.sdsu.edu/images/SDBAY_H2Oshed.pdf
Save a Copy
Create an Adobe PDF from your desktop
The San Diego Bay Watersheds
with Population Figures
Current Population Estimates of The San Diego Watersheds
Current Population Density Estimates of The San Diego Watersheds
SWEETWATER
PUEBLO
OTAY
Mexico
Pacific Ocean
The San Diego Bay receives runoff from three main watersheds. These watersheds are the Pueblo, Sweetwater, and Otay. Together, these watersheds have an area of approximately 450 square miles and have a residential population of about 950,000 people. According to Project Clean Water about 500,000 of these residents live in the 60 square mile Pueblo watershed, making this the most densely populated watershed in San Diego County.
The Otay watershed is 67% open-space, but it is expected that the population will increase by 80% from 1998 to 2015. These factors pose a great challenge for environmental management efforts as urban runoff will continue to increase and negatively impact the natural resources of the three watersheds and the San Diego Bay if sound management measures are not implemented.
Pueblo
Sweetwater
Otay
The Common Grounds Project - www.sdbay.sdsu.edu
Pages
Attachments
Comments
1 of 1

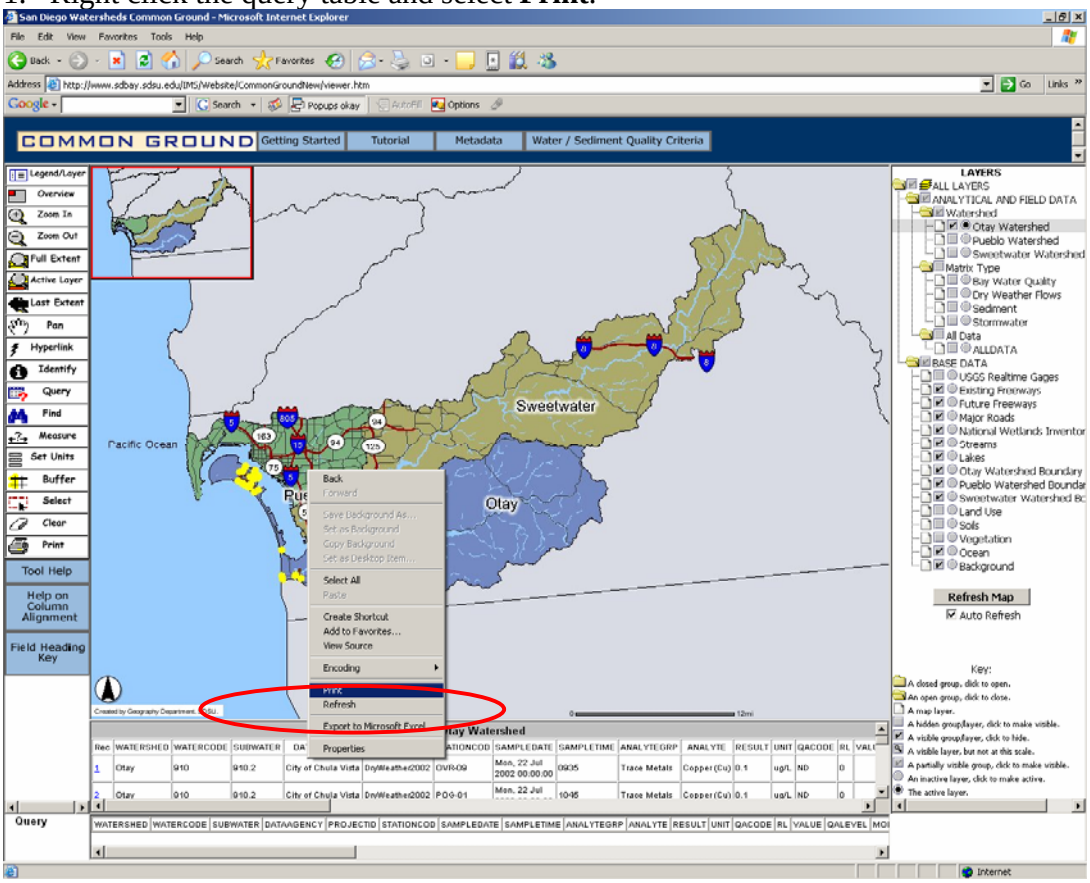
Printout of Query Results and the Map

I. Get a printout of water quality results.

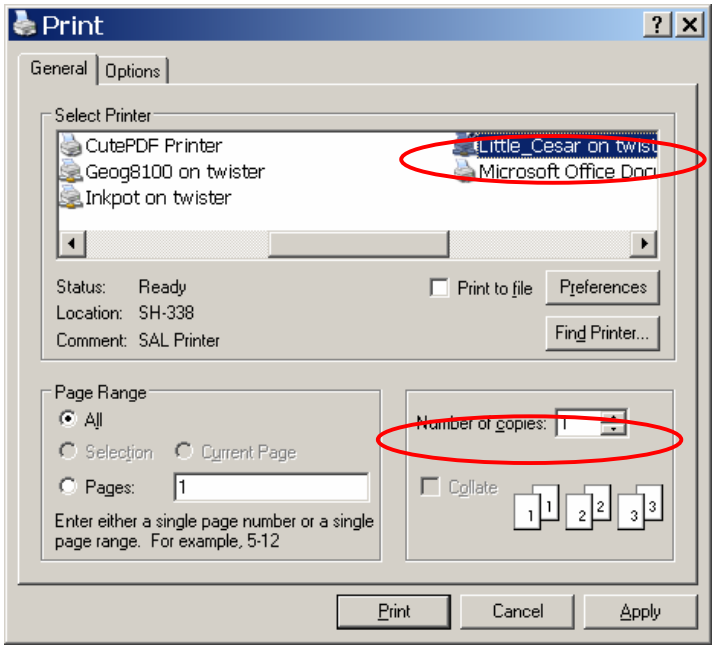
1. Launch the web browser and type http://www.sdbay.sdsu.edu/IMS/Website/CommonGroundNew/viewer.htm and you will see the ArcIMS HTML Viewer named as **San Diego Watersheds Common Ground**.
2. Check **Visible** and **Active** for the layer you want to query, such as the "Otay Watershed".
3. Click and you will see the query frame shown up on the bottom.
4. In the query frame, select **ANALYTE** in the **Field**, and **=** in the **Operator**.
5. Click Get Samples to select the analyte you want to query, such as **Copper (Cu)**.
6. Click Add to Query String.
7. Click Execute to see the query result. (Note: Remember to click to clear selection after finishing each query.)



1. Right click the query table and select **Print**.

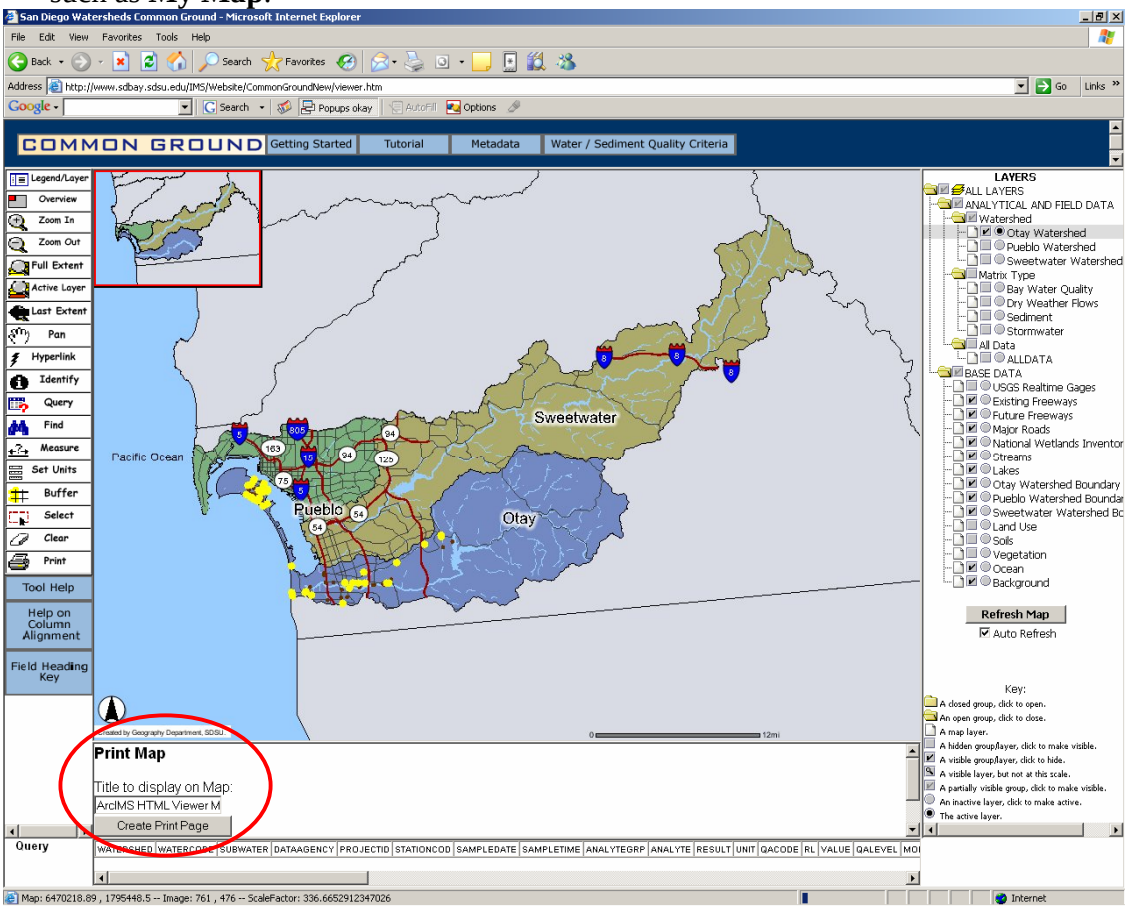


2. Select the printer you want to use and copies.

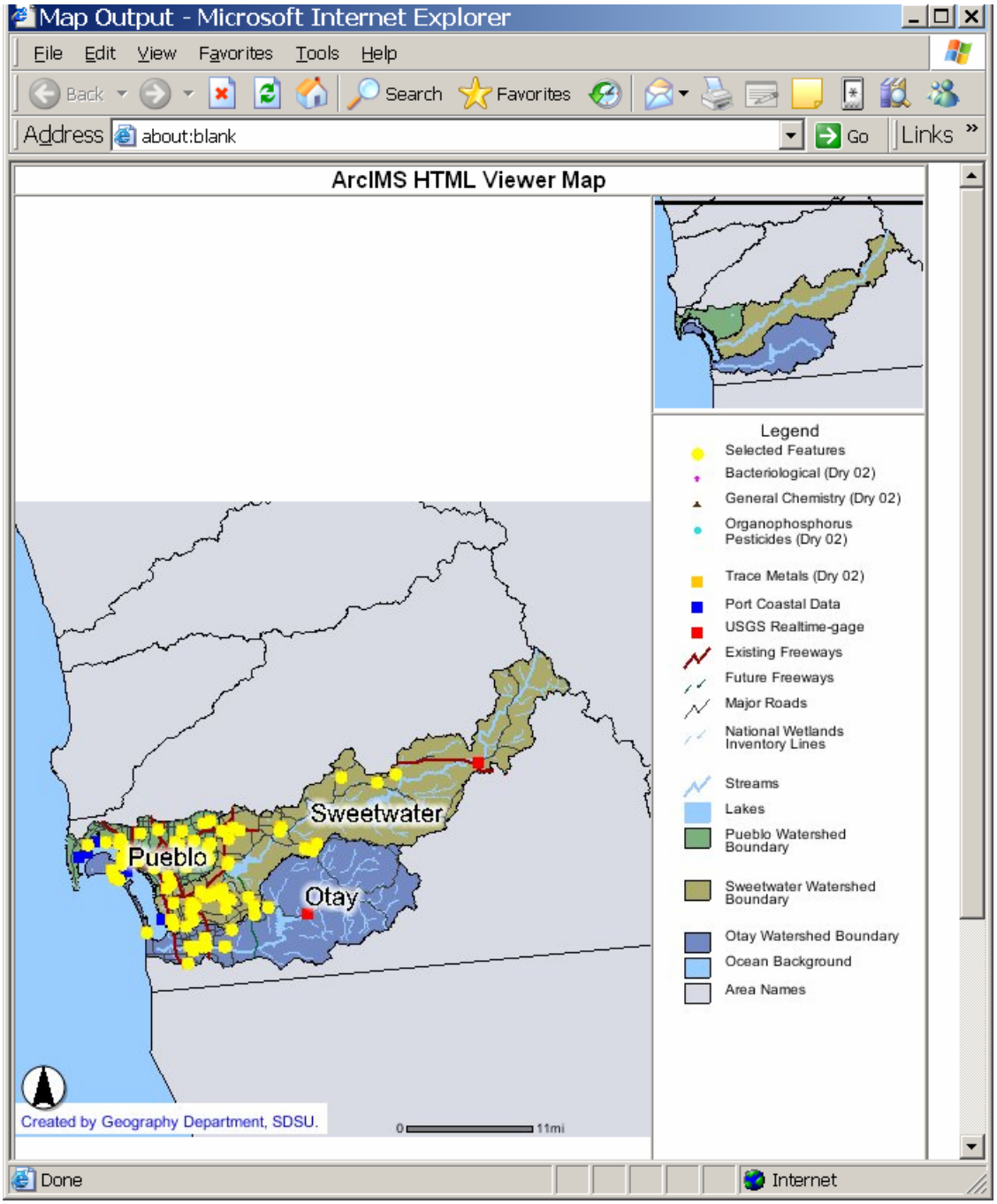


II. Get a printout of the Map.

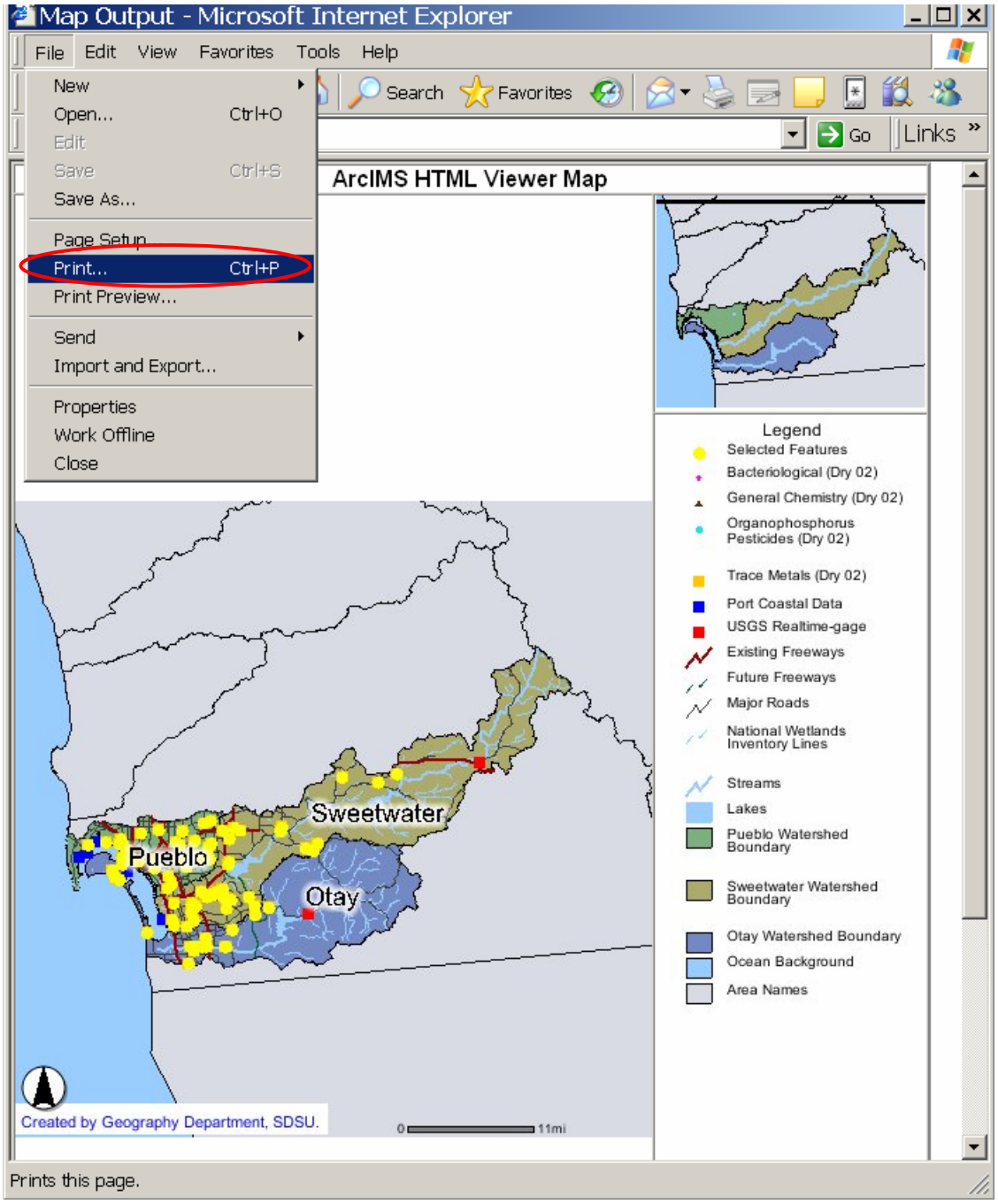
1. After getting your map, click  and you will see a print frame shown on the bottom.
2. Keep the original map title, **ArcIMS HTML Viewer Map** or type your map title, such as **My Map**.



3. Click Create Print Page.



4. Click **Print** from the **File** drop down list.



5. Select the printer you want to use and copies.