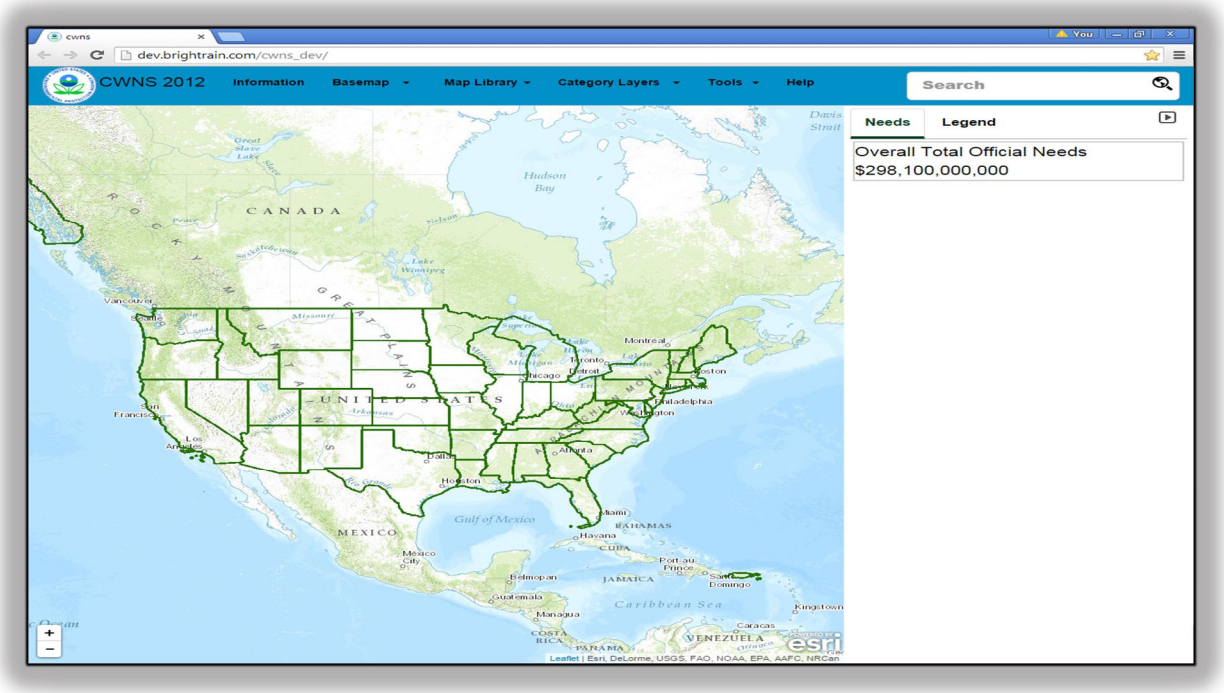
The *new* CWNS 2012 Mapping Tool

Welcome to the new CWNS 2012 Mapping Tool. This mapping tool is part of the new CWNS 2012 Online Data and Mapping Visualization Tools. This tool was developed as an online companion piece to accompany the hard copy of the *CWNS 2012 Report to Congress*.



Important Information:

Current Map Data

This map was developed using CWNS 2012 data.

Browsers and Viewing on various size monitors

This mapping tool was developed to be viewable on most monitor screen sizes. Due to that fact, viewing the mapping tool on larger screens may make some of the header fonts a little smaller. This tool also works faster when using the *Google Chrome* browser.

Please note that all the facility level, this map application displays only data for publically owned treatment plants, lagoons or ponds that were submitted for CWNS 2012. Therefore, the total of the displayed facilities needs within a geographic area will not match the total needs

displayed.
The CWNS 2012 Data Dashboard (tab) provides details on all facilities with needs by geographic area. CWNS 2012 data is summarized nationally and by state in the CWNS 2012 Report to Congress

For additional assistance using this tool, contact cwns@epa.gov.

Map Navigation Instructions

The opening map of the contiguous 48 states will contain an information panel to the right of the map with a Needs and Legend tab. The Needs tab will only show the needs for the location that you have placed your cursor on and clicked to show the yellow circle . For instance since you are on the opening map with no location selected, you will only see the overall (national) CWNS 2012 Needs figure of $271.0 billion dollars.

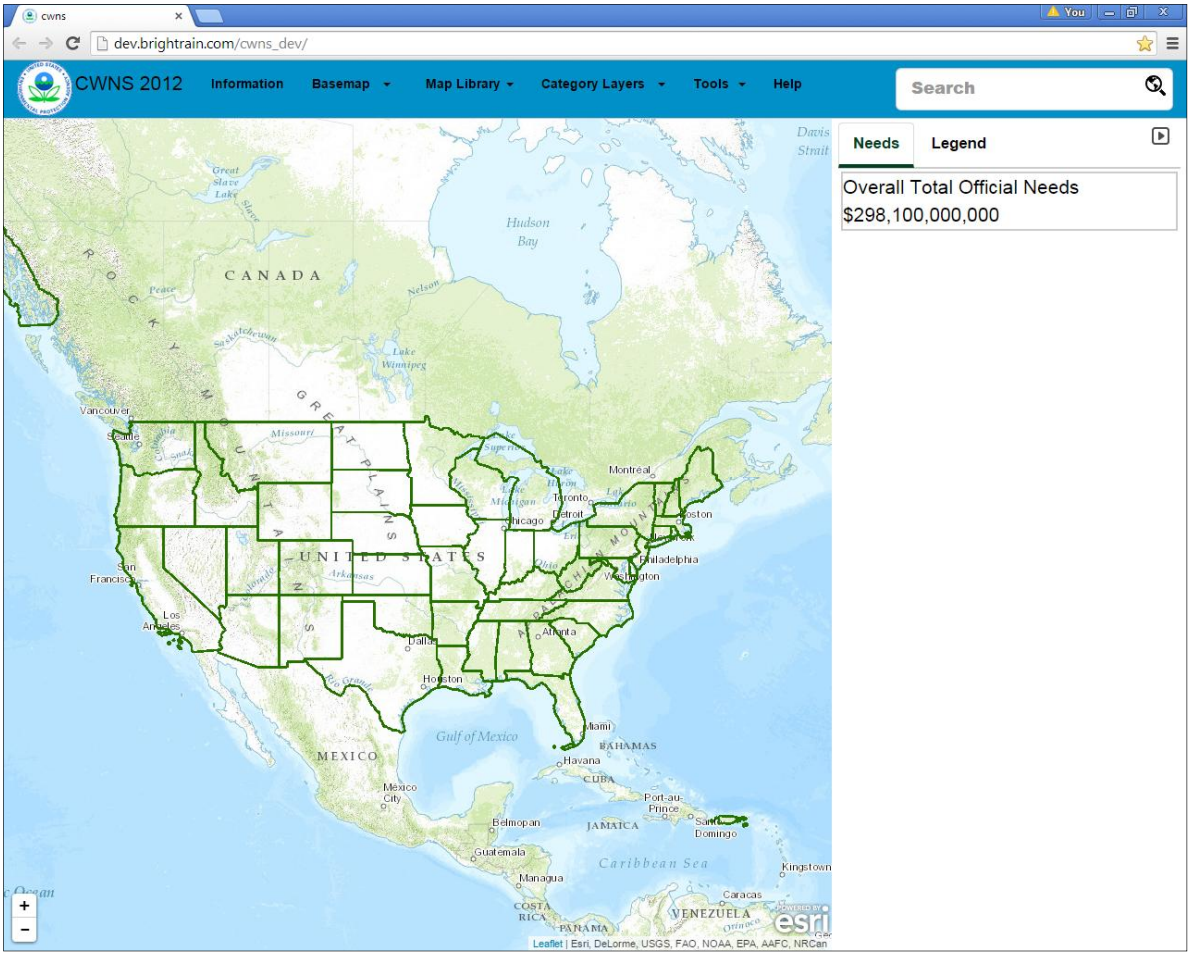


Figure 1

As you see there are various headings in the tool's top banner (Information, Basemap, Map Library etc.)

These headers will highlight in white when you roll your cursor across them. Once you place your cursor over header you want just click on it. The headers with a down arrow to the right of them will provide a drop down with more choices to choose from.

How to Navigate around the Maps

Zoom Function

This map tool works similarly to other computer or online applications for maneuvering around the page and viewing.

If you wish to center an area of interest that you wish to view simply place your cursor over that area and hold down the left tab on your mouse and drag it to the center of your screen. You can then zoom in on it if you choose by to by using the Zoom icon on the lower left of your map  that will let you zoom in (+) or zoom out (-) by clicking on either of those tabs while anywhere on the map.

You can also zoom in by double clicking your left mouse tab on that location, or by scrolling the wheel forward on your mouse (if your mouse has one).

Topographic and Satellite Views

You also have the option in this mapping tool to view the map in Topographic (Topo) or Satellite views. It is always easier to navigate around the map using the Topo view because it has a much lighter background and shows the roads and other discernable landmarks to better zero in on a location. The Satellite view is helpful when you are zoomed in closer and want to better identify the location or see a aerial view of a facility.

To use these functions just put your cursor over the Basemap in the blue banner at the top of the map and you will get a drop down letting you choose which view you want by clicking on it.

Figure 2

If at any time using this tool you wish to go back to the opening screen you can simply hit the *Refresh* or *Reload Page* icon located in the Mapping Tool's tab. This will take you back to start over again with a fresh new map.

Figure 3

Viewing the Needs data

No matter what zoom level you are on (besides the opening screen), you can access the needs by category by simply clicking on the State, Congressional District or County that you move your cursor on to highlight in the panel to the right of the map. Once you click on one, a detailed list of needs by category will pop down.

Figure 4

To go back to the map simply click on the back arrow.

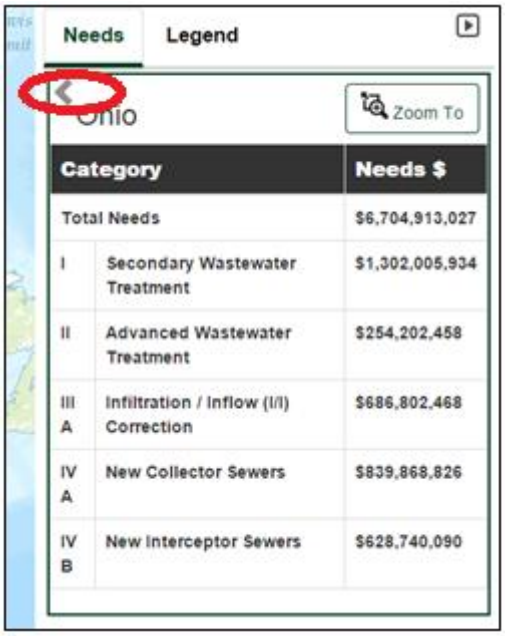


Figure 5

You will also notice in the upper right hand corner of this box that there is a "Zoom To" function that once you click on it, It will take you to a zoomed in polygon of whatever polygon selection you click on (county, congressional district or state).

Using the Legend tab

The Legend tab in the information panel lets you see when the various data layers that are turned on when you are zoomed in close enough. It also lets you unselect layers as well. You will notice that the state layer is always on and cannot be toggled on or off.

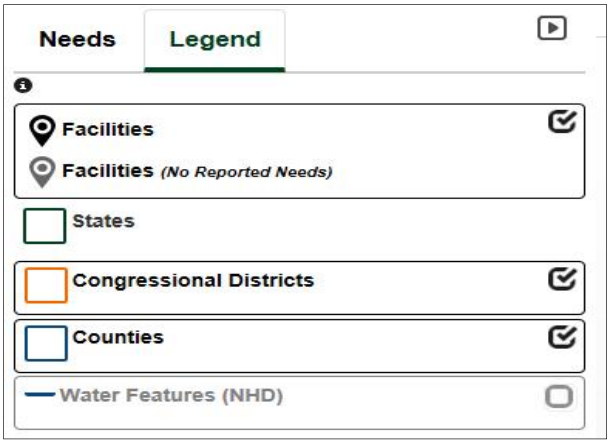


Figure 6

If a feature box is bold and that item is checked then that feature is now visible on your screen. When a feature box is grayed out and is checked then you are not zoomed in close enough and that feature is not visible to you. If the box is bold and not checked then that feature is within the proper viewing zoom level but you need to click on the box to view that feature. And if the box is grayed out and is unchecked then you need to zoom in until the box turns black and then check the box to view that feature.

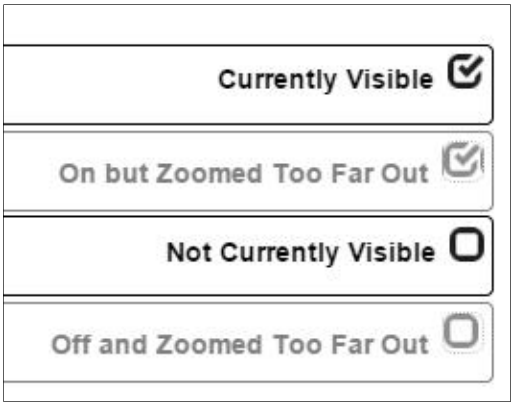


Figure 7

The National Hydrography Dataset (NHD) data layer

You will also notice an additional data layer in the Legend tab for water features called the National Hydrography Dataset (NHD). The National Hydrography Dataset (NHD) is a database that interconnects and uniquely identifies the millions of stream segments or reaches that comprise the Nation's surface water drainage system. This was added to help further identify location and could aid in emergency response efforts for spills or other purposes.
The NHD is a large dataset so it may take a little time to load.

Here is a link for the NHDPlus website
http://water.epa.gov/scitech/datait/tools/waters/docs/nhd_model.cfm

State Level Needs Information

If you click inside of any green state polygon, a yellow circle ○ will show up on the map inside of that state. You will also notice that the figure in the needs tab to the right of the map will change to just the needs for that state.

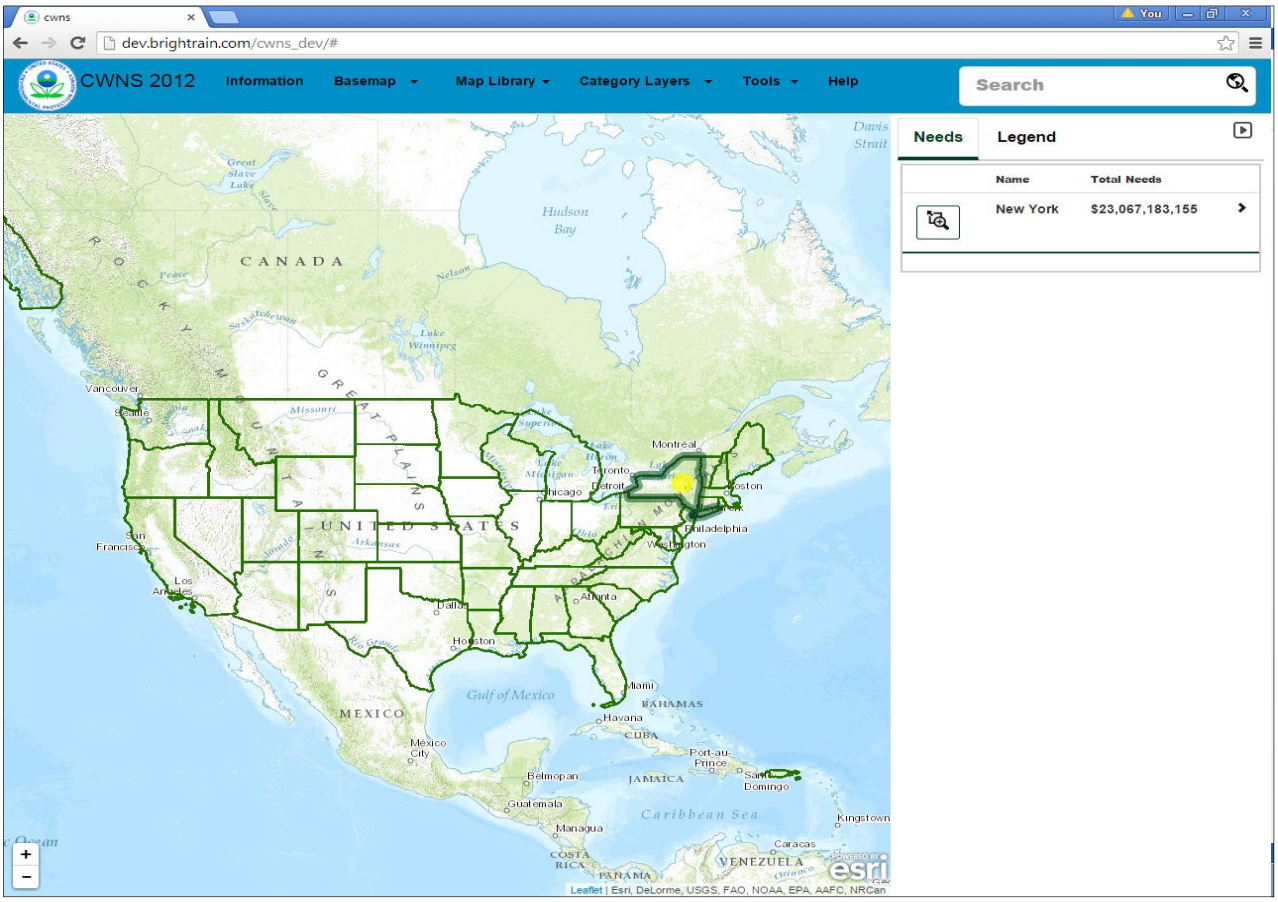


Figure 8

Figure 9: Close up view of the State

Congressional District Needs Information

If you zoom in two levels you will notice orange colored polygons. These orange polygons indicate the Congressional Districts. If you click your mouse once inside of one of the polygons, the needs will show up in the panel to the right for the congressional district and the state.

Figure 10

County District Needs Information

If you zoom in one more level you will notice smaller blue polygons. These blue polygons indicate the County delineations. If you click your mouse once inside one of these polygons, the needs will show up in the panel to the right for the county, congressional district and the state.

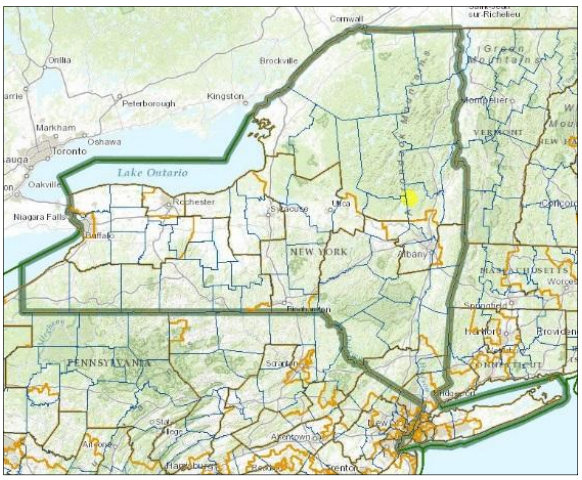


Figure 11

If you zoom in two more levels, you will notice that the name of the county's will pop up for better identification. (This example is Essex County)

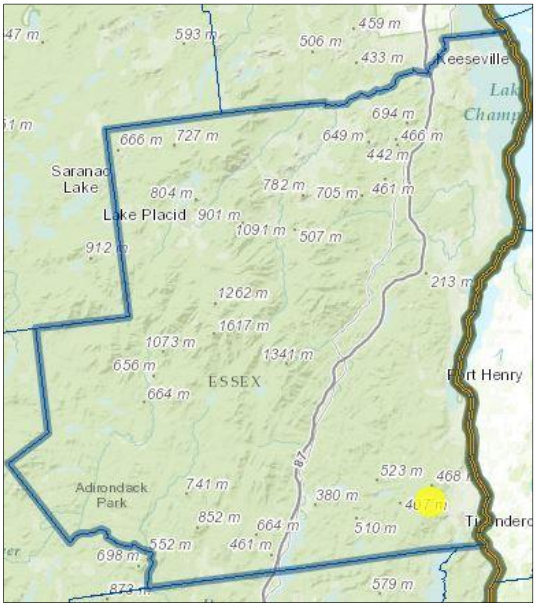


Figure 12

Facility Level View

When you zoom in one more level you will see the icons for all of the treatment plant, lagoon or pond facilities pop up.

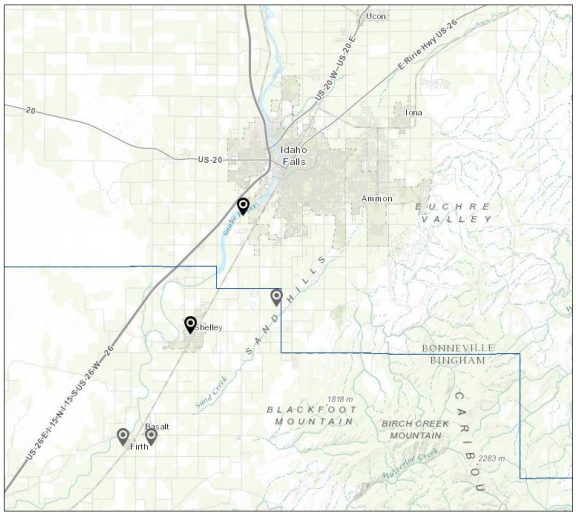


Figure 13

Facility Level Needs Information

The black (darker) icons are systems that have reported needs. They gray (lighter) icons are treatment plant, lagoon or pond facilities with no reported needs. If you click directly on any of the facility icons, an information bubble will pop-up with that facility's name as well as its needs broken down by the individual categories. If you clicked on a facility incorrectly or wanted information on another facility just close out of that bubble by clicking the "X" in the upper right of the bubble. Then you can simply click on another facility icon to get that facility's information.

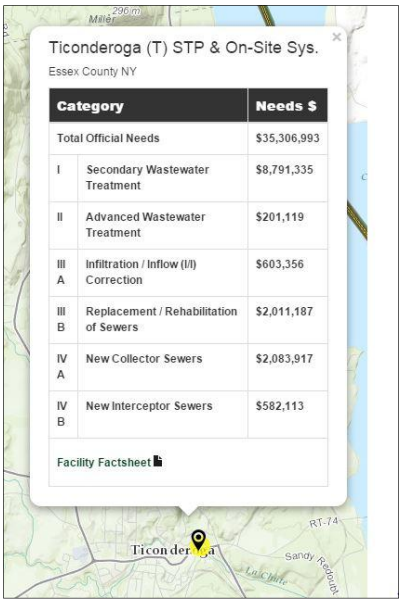


Figure 14

Figure 15 below shows the same map information after switching to Satellite View.

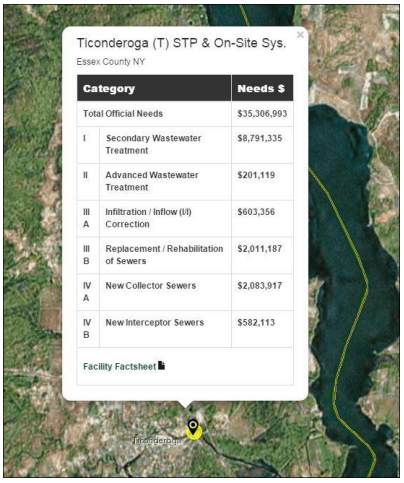


Figure 15

Facility Factsheet access

You can click near the bottom of that bubble where it says *Facility Factsheet* and another page will open that will brings up that facility's factsheet that will list more technical information about that wastewater facility (it may take a few seconds for it to show). You can scroll down the document to read it. You can also "right click" on your mouse if you want to print a copy of the factsheet. When you're ready to return to the map tool simply click the "X" on the panel (if you

are using *Internet Explorer*) to get back to the map. If you are using *Google Chrome*, just click on the "x" on the white tab that is above usually right above the factsheet.

Zoomed in facility Level Satellite View (zoomed all the way in)

When you are zoomed all the way in on a facility and are in the Satellite view, then you should be able to see that facility easily. You may see the facility with primary and or secondary clarifiers or you may view lagoons depending on what type of system it is.

Figure 16

Using the "Map Library" Function

The Map Library function can be used to access the Hawaii and Alaska maps as well as all of the territories. When you click on the Map Library the menu will pop down and you can hover over the small maps for an indication of what state or territory it represents and then just click on the one you want to view.

There is also a small map for the contiguous 48 states but this will not totally refresh the view just take you back to the map that you may have previously been on before. To refresh the map you will need to click on the Refresh button at the top left of the map.

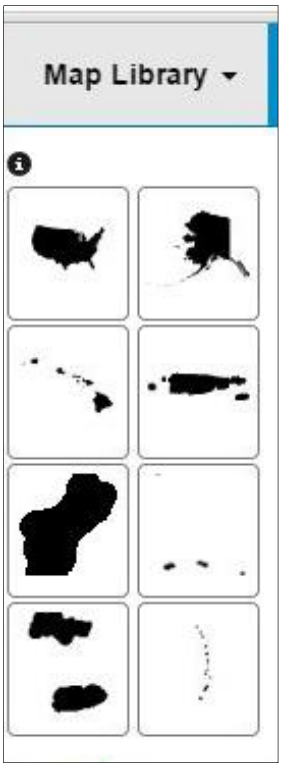


Figure 17

Using the “Category Layers” Function

The Category Layers function is for access to the same needs category maps that were in the CWNS 2008 Report to Congress. These include Total Documented Needs, National Per Capita Need, Total Categories I through IV Needs, Total Categories I and II Needs, Total Categories III and IV Needs, Total Category X Needs, Total CSO Needs, Total Stormwater Management Needs and Total SmallI Community Needs.

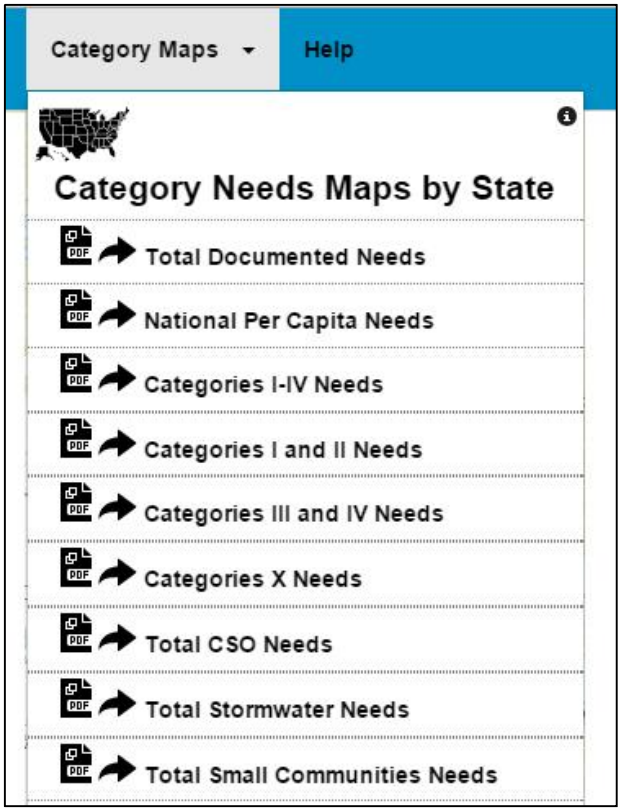


Figure 18

Using the "Search" Function

The Search function on this mapping tool is fairly robust. You can find a location using a number of entry types. The search will suggest facility names as well as addresses and places as you type with Facilities being listed first.

Note: Do not hit enter after you put in your search name or address in the search box, the application will automatically use a logic process in trying to figure out what you are typing. If you do hit Enter it will kick you back to the main screen.

There are 3 main ways to access your facility;

- You can type in Ticonderoga and the Ticonderoga STP will show up first (you may need to wait several seconds while the search compiles and orders the data. Do not hit enter after you put in your search name or address in the search box. This will kick you back to the main screen
- You can type in the facility's address and it will find it

- You can also search for a facility by using it's CWNS number, you can input that number into the search box and it will find it that way

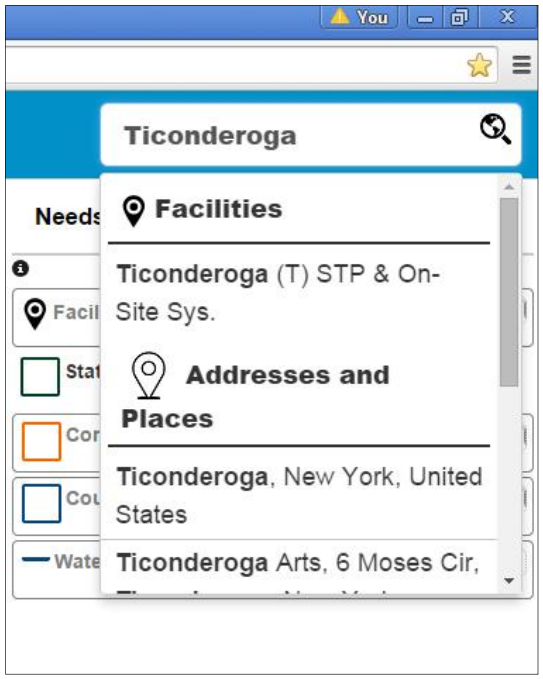
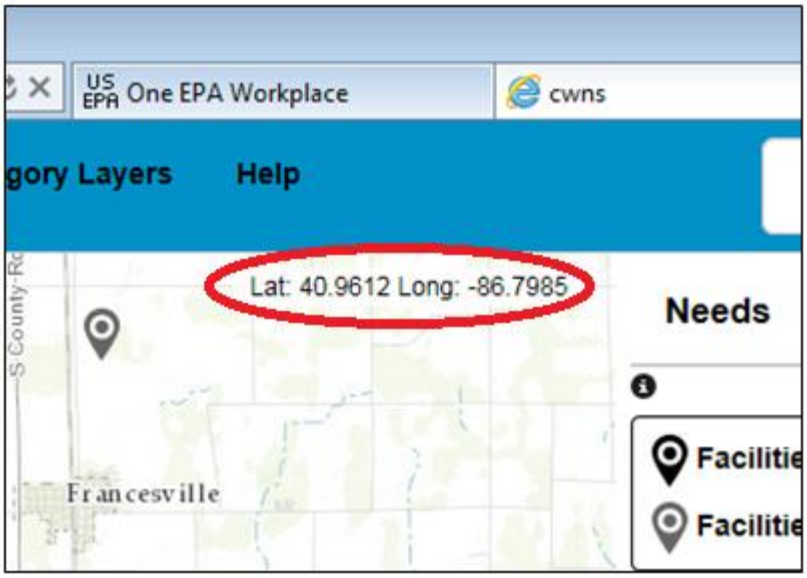


Figure 19

Lat / Long Indicator

In the top right corner of the Map block (left of the Needs and Legend tabs) you will see the Lat/Long indicator which is a tool that will give you the *lattitude and longitude* of wherever you place your cursor. This can be used to improve your system's locational data for future surveys.


US EPA One EPA Workplace
cwns
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Help
Lat: 40.9612 Long: -86.7985
Needs
Francesville
Facilitie
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Figure 20