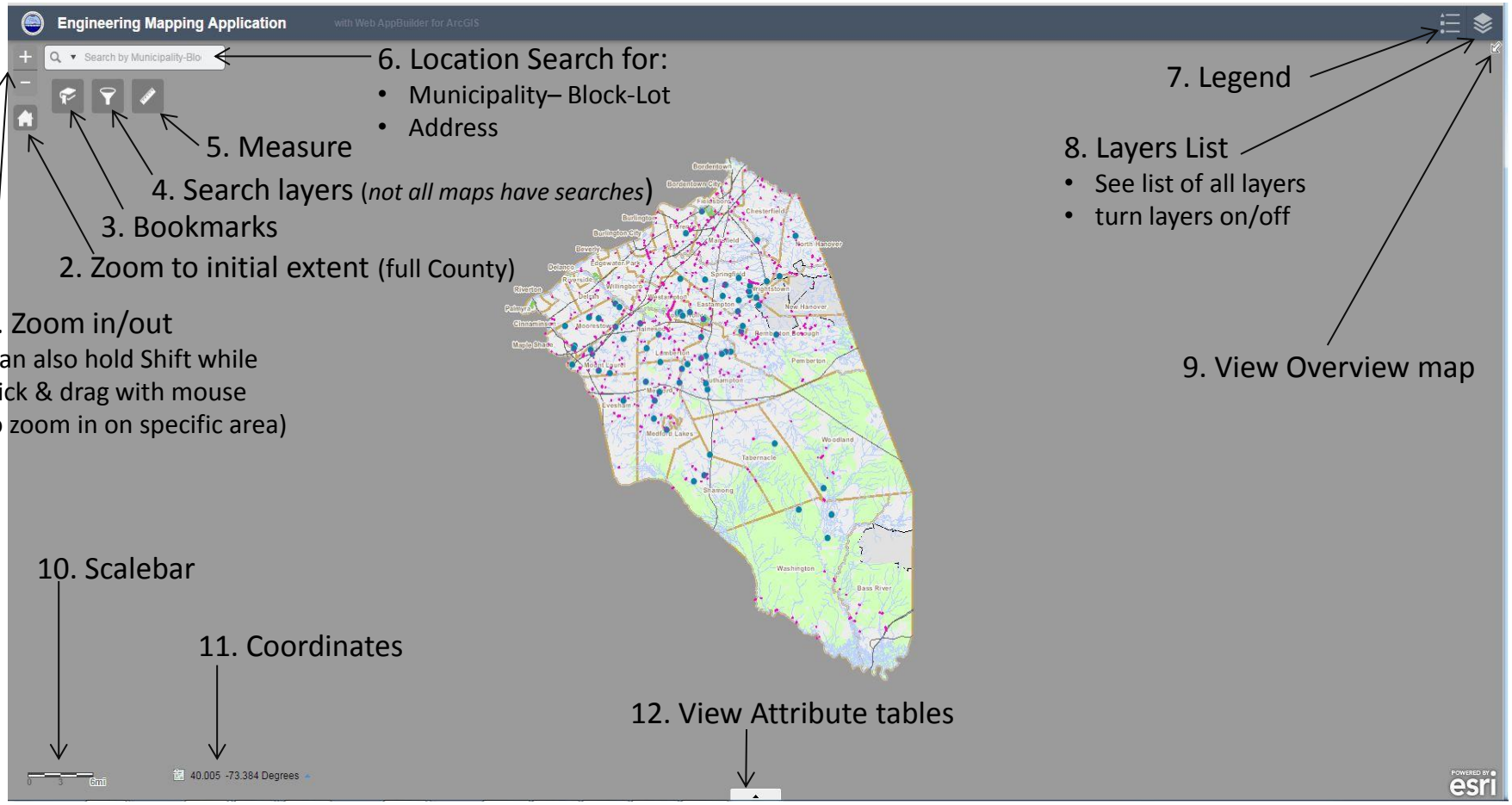
Health Department Mapping Application User Guide

for applications designed with the Web App Builder

Burlington County IT Department,
GIS Section

Overview of Functionality



Tools

1. Zoom in/out

1. Click the + to Zoom In or click the – to Zoom out on the center of the map or use the mouse scroll wheel
2. Define an area to zoom in to by holding the shift key and clicking and dragging a box with the mouse
3. Move around the map at the current scale by clicking and dragging with the mouse or use the arrow keys on the keyboard

2. Zoom to initial extent (full County) 

3. Bookmarks

1. Choose from a predefined list including the County extent and individual municipalities
2. You can also add additional bookmarks by zooming to your desired location and clicking the + icon next to the text box

4. Search layers

1. Click to see a pre-defined set of query searches specific to the application (see the Search Layers by Query section for more details). *Note that not all maps have this tool or query searches.*

5. Measure

1. Click the icon to open the Measurement widget 
2. Point measurements
   - Click the point measurement icon  and click a point on the map. The Measurement widget displays the coordinates for the point in **Degrees** (decimal). You may change the coordinate display format to degrees/minutes/seconds by changing the **Degrees** drop-down to **DMS**.
3. Polyline measurements
   - Click the polyline measurement icon  and draw a polyline on the map by clicking two or more points. Double-click to finish drawing the polyline. The Measurement widget displays the total length of the polyline, using the defined **Default Length Unit**. To change the length unit, select the applicable unit of measure from the drop-down menu.
4. Polygon measurements
   - Click the polygon measurement icon  and draw a polygon on the map by clicking three or more points. Double-click to finish drawing the polygon. The Measurement widget displays the total area of the polygon, using the defined **Default Area Unit**. To change the area unit, select the applicable unit of measure from the drop-down menu

Tools continued

6. Location Search: 3 options- click the drop down arrow to choose one

1. Block and Lot:
    1. Enter in format of CountycodeMunicipalcode-block-lot such as

        0329-823.01-16

        which would be Pemberton Township, block 823.01, lot 16.

    Refer to "Municipal Codes" list below.

    2. This searches against data downloaded from the NJ Tax Board and will find the associated property boundary.
2. County Parcel Address:
    1. Enter an address and choose from the list of possible addresses.
    2. Note that this tries to find a match in data downloaded from the NJ Tax Board and tries to match the spelling /abbreviations used when the assessor entered the address.
    3. Successful searches will show the property boundary
3. Esri World Geocoder:
    1. Enter an address, city and state. This will find a location along the roadway.
    2. In general the location may not be as good as the County Parcel Address Search option but may have a higher success rate of finding a location for difficult addresses

Municipal Codes
(County code is 03)

BASS RIVER TWP	01	FLORENCE TWP	15	PEMBERTON TWP	29
BEVERLY CITY	02	HAINESPORT TWP	16	RIVERSIDE TWP	30
BORDENTOWN CITY	03	LUMBERTON TWP	17	RIVERTON BORO	31
BORDENTOWN TWP	04	MANSFIELD TWP	18	SHAMONG TWP	32
BURLINGTON CITY	05	MAPLE SHADE TWP	19	SOUTHAMPTON TWP	33
BURLINGTON TWP	06	MEDFORD TWP	20	SPRINGFIELD TWP	34
CHESTERFIELD TWP	07	MEDFORD LAKES BORO	21	TABERNACLE TWP	35
CINNAMINSON TWP	08	MOORESTOWN TWP	22	WASHINGTON TWP	36
DELANCO TWP	09	MOUNT HOLLY TWP	23	WESTAMPTON TWP	37
DELRAN TWP	10	MOUNT LAUREL TWP	24	WILLINGBORO TWP	38
EASTAMPTON TWP	11	NEW HANOVER TWP	25	WOODLAND TWP	39
EDGEWATER PARK TWP	12	NORTH HANOVER TWP	26	WRIGHTSTOWN BORO	40
EVESHAM TWP	13	PALMYRA BORO	27		
FIELDSBORO BORO	14	PEMBERTON BORO	28		

Tools continued

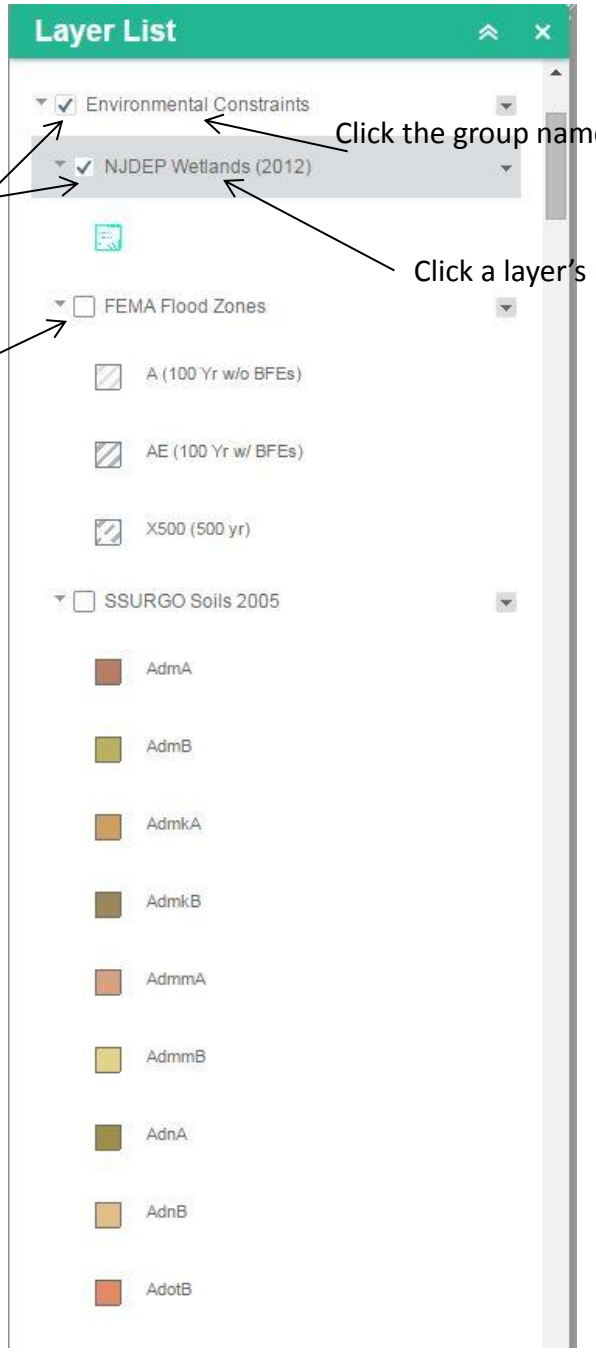
7. Legend

1. Clicking the Legend widget displays the Legend window. To close it, click the **X.**
2. Clicking the  arrows, will minimize the Legend window, clicking the  arrows will display it again.
3. The Legend window displays only the layers that are actually drawn. To see optional layers to draw or turn off drawn layers, you need to use the Layers List widget 
4. Descriptions of layers included in the application can be found in the Application Layers section.

8. Layers List

7. Clicking the Layer List widget displays a list of available layers
8. Draw a layer by clicking the box next to the name/ stop a layer from being drawn by click the checked box
9. Click a layer's name to expand groups of layers or see the map symbols for the layer
10. Note that the group's name will need to be drawn in addition to the layer within the group in order to display the layer
11. Descriptions of layers included in the application can be found in the Application Layers section of this document
12. Clicking the down arrow on the right side of a layer displays the layer menu, **which will include some or all of the following functions depending on the application**:
    - Zoom to—Sets the map extent to the extent of the layer.
    - Transparency--Sets the transparence for the layer.
    - Enable Pop-up / Remove Pop-up — Enables or disables Pop-up for the feature layer. If a feature layer does not have pop-up configured in the map, clicking **Enable Pop-up** shows all field values from the feature layer.
    - Move up—Moves the layer one level up.
    - Move down—Moves the layer one level down.
    - Open attribute table—Opens the attribute table for the feature layer.
    - Description / Show Item Details—Opens the service description or the item details page for the service or the item associated with the layer, if available.

Layers List continued



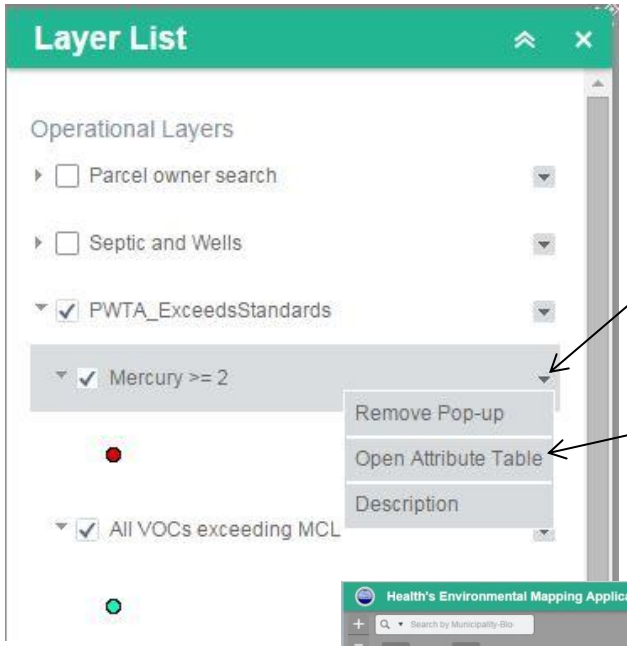
In order for a layer in the group to draw (such as the wetlands) the group name must also be checked

Toggle a layer to draw/stop drawing by clicking the box next to it's name

Click the group name to see the layers within the group.

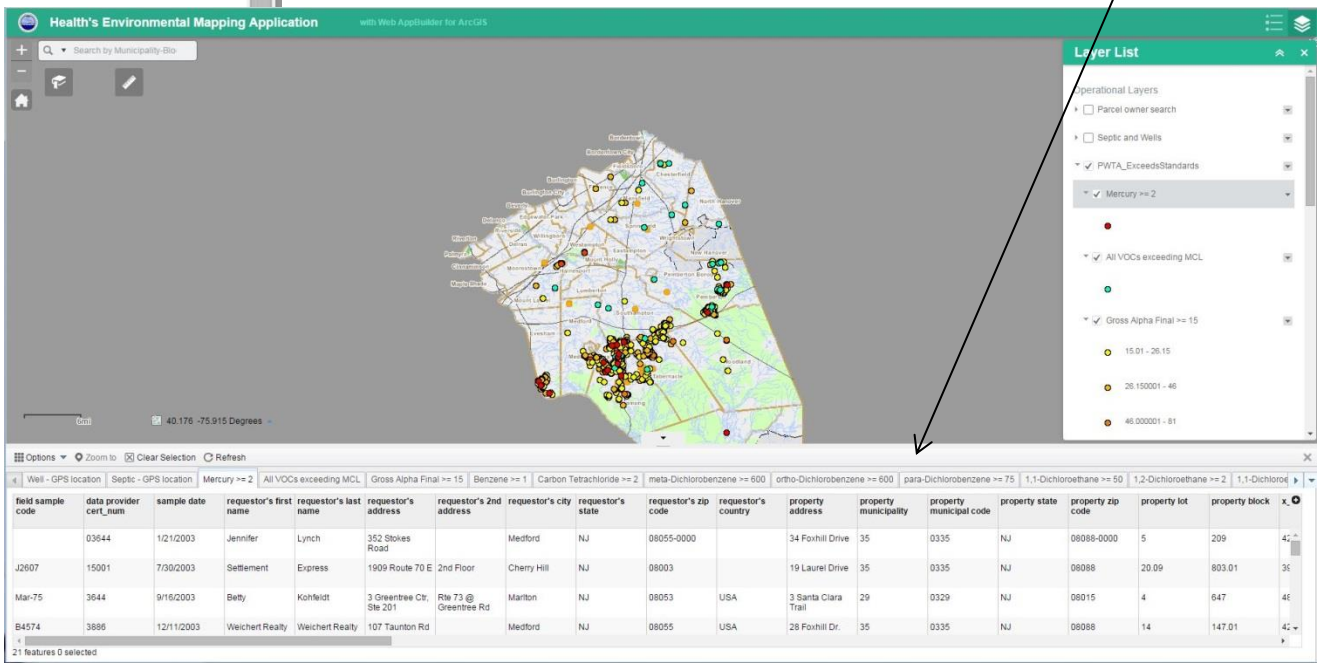
Click a layer's name to see the map symbols

Layers List continued; menu



Click the arrow to see available menu options
(options will vary based on layer and application)

Clicking **Open Attribute Table** will display the attribute table below the map



Tools continued

9. Overview map

1. Click the expansion arrow  to see the Overview map
2. The Overview map displays the current extent of the map within the context of a larger area. It updates when the map extent changes.
3. The current extent is represented by a gray rectangle. Drag the gray rectangle to change the extent of the map being displayed in the main window.
4. When expanded, click the maximize icon  to temporarily maximized the overview map.
5. Exit the Overview window by clicking the  arrow, to minimize it or, when maximized, click the Maximize icon  again or drag the grey rectangle to another location and release.

10. Scalebar

1. The Scalebar appears in the lower left corner of the map and updates as the map scale changes

11. Coordinates

1. By default the coordinates are shown in Decimal Degrees and will change as the cursor moves over the map
2. You can obtain the coordinates for a specific location by clicking  and then clicking the map. You can copy the resulting coordinate display to paste into another program or document.
3. Optionally, you can click the up arrow to choose to capture coordinates for a specified location in NAD 1983 New Jersey Stateplane Feet.
4. To resume coordinates changing as the cursor moves, either click the arrow and click WGS84 Web Mercator

12. Attribute tables

7. Click the attribute table widget  to display attributes for layers in the application (*note, not all layers will have a table available)*
8. Draw a layer by clicking the box next to the name/ stop a layer from being drawn by click the checked box
9. Click a layer's name to expand groups of layers or see the map symbols for the layer

Tools continued

12. Attribute tables

1. Click the attribute table widget  to toggle showing/hiding attributes tables for layers in the application (*note, not all layers will have a table available)*
2. An attribute table for a specific layer can be opened by clicking the arrow to the right of the layer's name in the Layers List

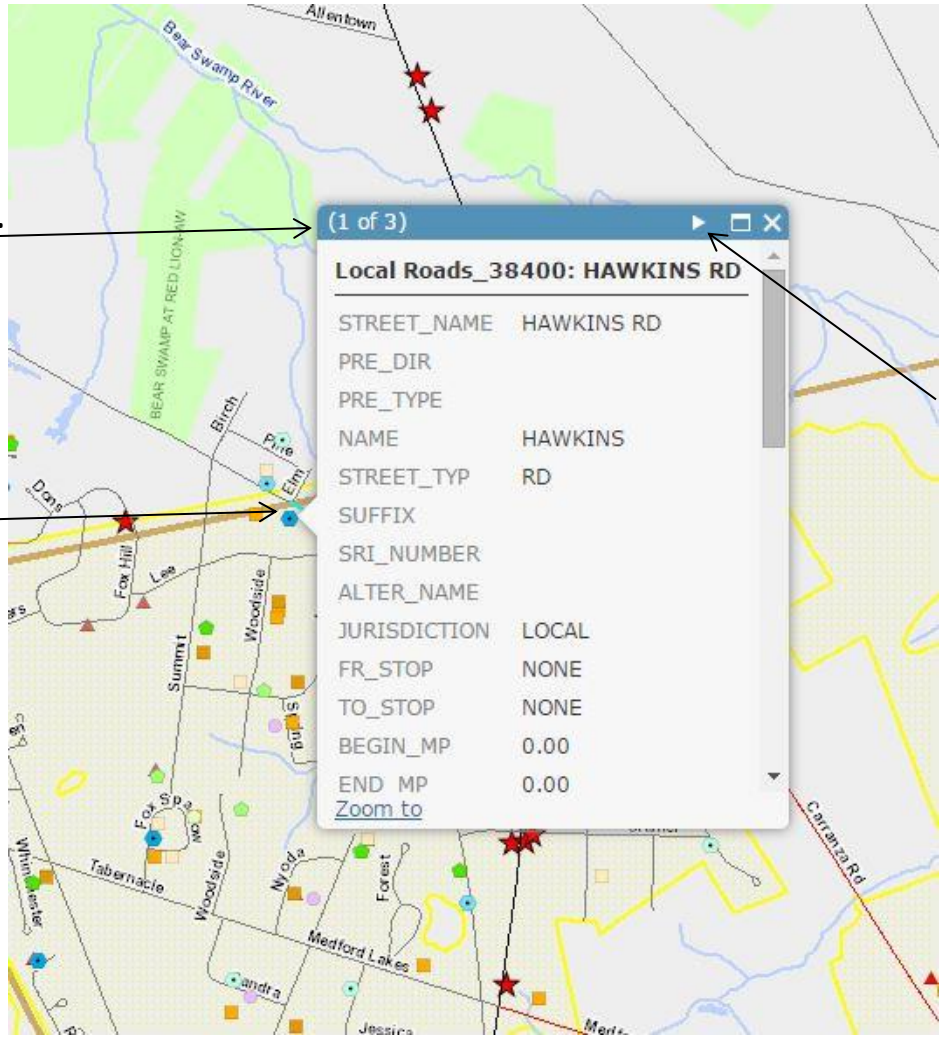
3. In the Attribute Table window, scroll left/right and use arrow keys to see available tables. Click a table name to display it
4. Select a record by clicking it – the corresponding feature will be selected on the map
5. Clear your selections by clicking the **Clear Selection** button
6. Click the **Zoom to** button to zoom to the selected features
7. Click a field name to sort the table by that field
8. Show/hide fields by clicking + on right side of Attribute Table window
9. Number of selected records is shown at lower left of table
10. Click **Options** menu to see list of options including
    - Show selected records
    - Show related records (if the table has related data)
    - Filter by map extent – will display only the selected records that are in the current map extent
    - Show/Hide columns
    - Export to CSV – will export the selected attributes to a .CSV file. If no records are selected, will export entire table up to the maximum number of records allowed by the application.

Pop-ups

Clicking most features on the map will cause a pop-up window to appear containing attributes about the features in that area. More than 1 feature may be detected. Use the arrows to scroll through the Pop-ups

More than 1 feature may be detected. Here, 1 of 3 is displayed.

As you move through the Pop-ups with the arrows, the corresponding feature will be highlighted on the map



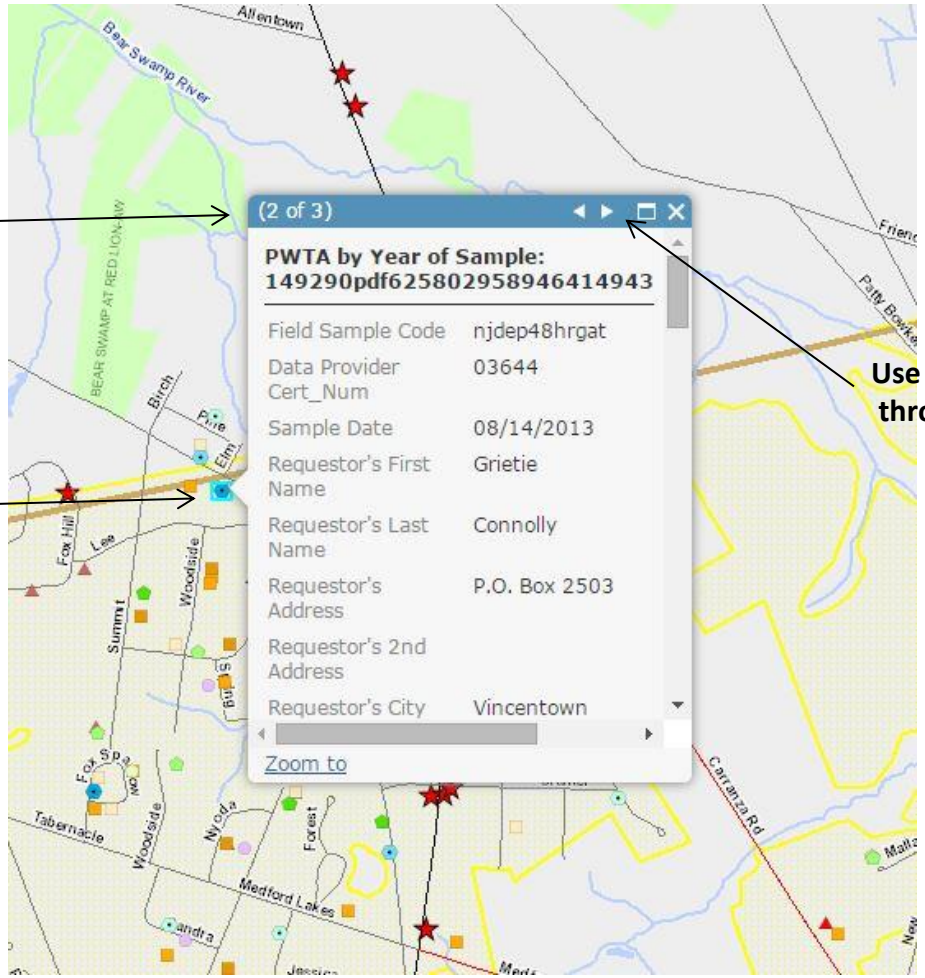
Use the arrows to scroll through the Pop-ups

Pop-ups

Clicking most features on the map will cause a pop-up window to appear containing attributes about the features in that area. More than 1 feature may be detected. Use the arrows to scroll through the Pop-ups

More than 1 feature may be detected. Here, 2 of 3 is displayed.

As you move through the Pop-ups with the arrows, the corresponding feature will be highlighted on the map



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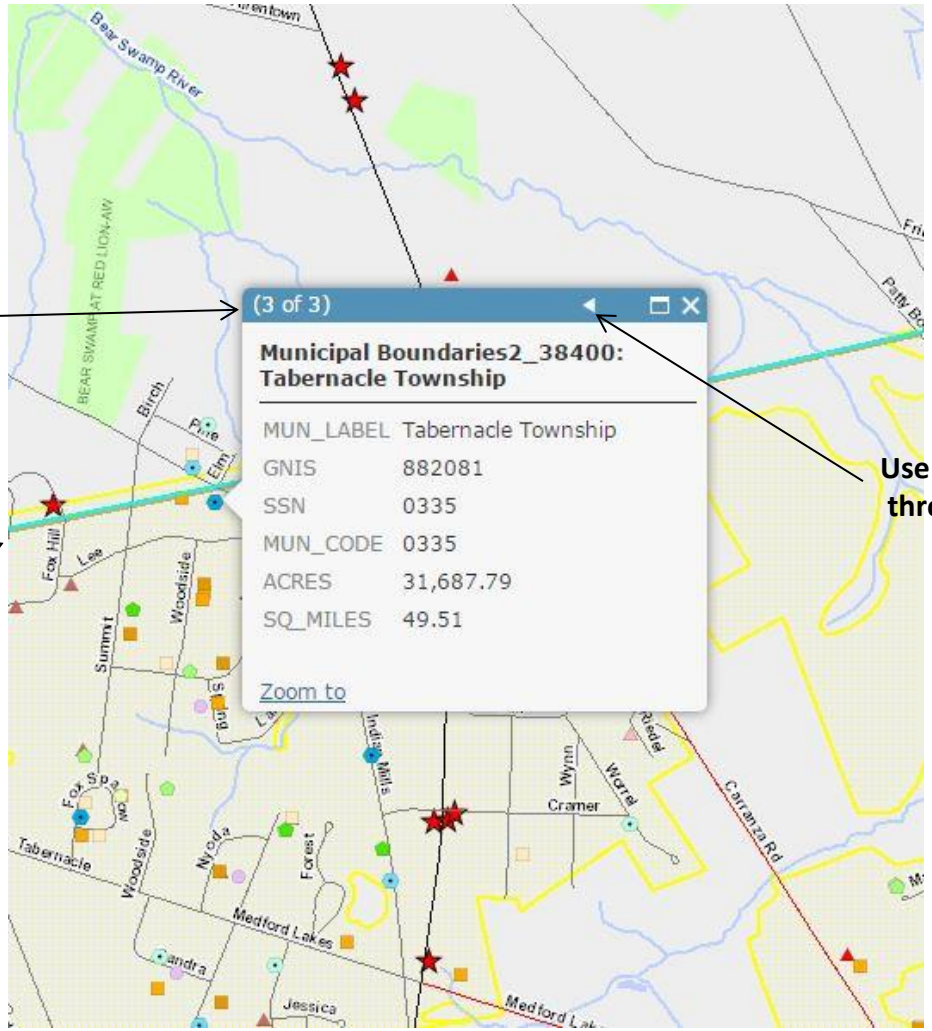

Use the arrows to scroll through the Pop-ups

Health's Environmental Mapping Application Layers List:

http://bit.ly/1JtgFzw

- **Septic and Wells group** – locations were collected by Health using GPS. Expand to see individual layers
  - **Wells**
  - **Septic**
- **PWTA Exceeds Standards Group –** contains layers that display the PWTA data based on different attributes. Expand to see individual layers and sub-groups of layers. Data is created based on PWTA test results provided to IT, GIS Secton where they are mapped by address/ block and lot.
  - **Mercury**
  - **All VOCs exceeding MCL**
  - **Gross Alpha Final**
  - **VOCs by Individual Contaminant Group** – contains layers displaying PWTA locations based on individual VOC exceedance
    - Benzene, Carbon Tetrachloride, meta-Dichlorobenzene, ortho-Dichlorobenzen, para-Dichlorobenzene, 1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, 1,2-Dichloropropane, Ethlybenzene, Methyl tertiary Butyl Ether, Methylene Chloride, Monochlorobenzene, Napthalene, Styrene, 1,1,2,2-Tetrachloroethane, Tetrachloroethene, Toluene, 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethene, Vinyl Chloride, Xylenes
  - **Well Exceeded MCL for PWTA** – displays all wells that exceeded any parameter tested
  - **PWTA by Year of Sample** – displays all wells that exceeded any parameter tested by the year in which they were tested
- **Basemap Layers Group –** contains numerous layers from basemap. Can all be turned on/off by turning group on/off. Useful for displaying roads, streams, parcels over soils layers. Expand to see individual layers and sub-groups of layers

Health's Environmental Mapping Application Layers List, cont.:

http://bit.ly/1JtgFzw

- **NJDEP Environmental Data Group** – contains various layers of data downloaded from NJDEP. Expand to see individual layers.
  - **Superfund sites** (2009 – is subset of Known Contaminated Sites List where NPL-Status = 'Final')
  - **Known contaminated sites list** (2009)
  - **Public community water supply wells** (2010)
  - **Well head protection areas (community wells)** (2010)
  - **Well head protection areas (community wells-confined)** (2010)
  - **Ground water contamination areas (CEA)** (2005)
  - **Sewer service areas** (2009)
- **Environmental constraints Group** – contains individual layers for wetlands, floodplains and soils. Expand to see individual layers
  - **NJDEP Wetlands (2012)**
  - **FEMA Flood Zones**
  - **SSURGO Soils 2005**
- **NJ 2013 Natural Color** – aerial imagery from NAIP (National Agriculture Imagery Program), 1 meter resolution, leaf on
- **NJ 2012 Natural Color –** aerial from NJ OGIS, 1 foot resolution, leaf off
- **NJ 2012 Infrared–** aerial from NJ OGIS, 1 foot resolution, leaf off
- **NJ 2007 Natural Color –** aerial from NJ OGIS, 1 foot resolution, leaf off
- **NJ 2007 Infrared–** aerial from NJ OGIS, 1 foot resolution, leaf off
- **NJ 2006 Natural Color** – aerial imagery from NAIP (National Agriculture Imagery Program), 1 meter resolution, leaf on
- **NJ 2002 Infrared–** aerial from NJ OGIS, 1 foot resolution, leaf off
- **NJ 1995 Infrared–** aerial from NJ OGIS, 1 meter resolution, leaf off
- **NJ 1930 Black White** – black and white aerials from 1930s, low resolution, leaf on
- **NJ Historical Maps**
- **NJ Color Topo 24K**
- **NJ Topo 24K**
- **NJ Topo 100K**

Health's Lake Inspection Mapping Application Layers List

http://bit.ly/1RKYtv2

- **2014 Lake Bathing Group –** contains pass/fail layers for each month in 2014. Expand to see sub-groups.
  - **Lake Results: September 2014 Group** – contains pass/fail layers for September 2014
    - **Fail (September 2014 – 2 or more)**
    - **Fail (September 2014 – 1st)**
    - **Pass (September 2014)**
  - **Lake Results: August 2014 Group** – contains pass/fail layers for August 2014
    - **Fail (August 2014 – 2 or more)**
    - **Fail (August 2014 – 1st)**
    - **Pass (August 2014)**
  - **Lake Results: July 2014 Group** – contains pass/fail layers for July 2014
    - **Fail (July 2014 – 2 or more)**
    - **Fail (July 2014 – 1st)**
    - **Pass (July 2014)**
  - **Lake Results: June 2014 Group** – contains pass/fail layers for June 2014
    - **Fail (June 2014 – 2 or more)**
    - **Fail (June 2014 – 1st)**
    - **Pass (June 2014)**
  - **Lake Results: May 2014 Group** – contains pass/fail layers for May 2014
    - **Fail (May 2014 – 2 or more)**
    - **Fail (May 2014 – 1st)**
    - **Pass (May 2014)**

- *Note – Group layers must be checked to draw in order to draw sub-groups or layers*

Health's Lake Inspection Mapping Application Layers List, cont.

http://bit.ly/1RKYtv2

- **2013 Lake Bathing Group – contains pass/fail layers for each month in 2013. Expand to see sub-groups.**
  - **Lake Results: August 2013 Group** – contains pass/fail layers for August 2013
    - **Fail (August 2013 – 2 or more)**
    - **Fail (August 2013 – 1st)**
    - **Pass (August 2013)**
  - **Lake Results: July 2013 Group** – contains pass/fail layers for July 2013
    - **Fail (July 2013 – 2 or more)**
    - **Fail (July 2013 – 1st)**
    - **Pass (July 2013)**
  - **Lake Results: June 2013 Group** – contains pass/fail layers for June 2013
    - **Fail (June 2013 – 2 or more)**
    - **Fail (June 2013 – 1st)**
    - **Pass (June 2013)**
  - **Lake Results: May 2013 Group** – contains pass/fail layers for May 2013
    - **Fail (May 2013 – 2 or more)**
    - **Fail (May 2013 – 1st)**
    - **Pass (May 2013)**

- *Note – Group layers must be checked to draw in order to draw sub-groups or layers*

Health's Lake Inspection Mapping Application Layers List, cont.

http://bit.ly/1RKYtv2

- **2012 Lake Bathing Group –** contains pass/fail layers for each month in 2012. Expand to see sub-groups.
  - **Lake Results: September 2012 Group** – contains pass/fail layers for September 2012
    - **Fail (September 2012 – 2 or more)**
    - **Fail (September 2012 – 1st)**
    - **Pass (September 2012)**
  - **Lake Results: August 2012 Group** – contains pass/fail layers for August 2012
    - **Fail (August 2012 – 2 or more)**
    - **Fail (August 2012 – 1st)**
    - **Pass (August 2012)**
  - **Lake Results: July 2012 Group** – contains pass/fail layers for July 2012
    - **Fail (July 2012 – 2 or more)**
    - **Fail (July 2012 – 1st)**
    - **Pass (July 2012)**
  - **Lake Results: June 2012 Group** – contains pass/fail layers for June 2012
    - **Fail (June 2012 – 2 or more)**
    - **Fail (June 2012 – 1st)**
    - **Pass (June 2012)**
  - **Lake Results: May 2012 Group** – contains pass/fail layers for May 2012
    - **Fail (May 2012 – 2 or more)**
    - **Fail (May 2012 – 1st)**
    - **Pass (May 2012)**

- *Note – Group layers must be checked to draw in order to draw sub-groups or layers*

Health's Lake Inspection Mapping Application Layers List, cont.

http://bit.ly/1RKYtv2

- **2011 Lake Bathing Group** – contains pass/fail layers for each month in 2011. Expand to see sub-groups.
  - **Lake Results: October 2011 Group – contains pass/fail layers for October 2011**
    - **Fail (October 2011 – 2 or more)**
    - **Fail (October 2011 – 1st)**
    - **Pass (October 2011)**
  - **Lake Results: September 2011 Group** – contains pass/fail layers for September 2011
    - **Fail (September 2011 – 2 or more)**
    - **Fail (September 2011 – 1st)**
    - **Pass (September 2011)**
  - **Lake Results: August 2011 Group** – contains pass/fail layers for August 2011
    - **Fail (August 2011 – 2 or more)**
    - **Fail (August 2011 – 1st)**
    - **Pass (August 2011)**
  - **Lake Results: July 2011 Group** – contains pass/fail layers for July 2011
    - **Fail (July 2011 – 2 or more)**
    - **Fail (July 2011 – 1st)**
    - **Pass (July 2011)**
  - **Lake Results: June 2011 Group** – contains pass/fail layers for June 2011
    - **Fail (June 2011 – 2 or more)**
    - **Fail (June 2011 – 1st)**
    - **Pass (June 2011)**

- *Note – Group layers must be checked to draw in order to draw sub-groups or layers*

Health's Lake Inspection Mapping Application Layers List, cont.

http://bit.ly/1RKYtv2

- **NJDEP Environmental Data Group** – contains various layers of data downloaded from NJDEP. Expand to see individual layers.
  - **Superfund sites** (2009 – is subset of Known Contaminated Sites List where NPL-Status = 'Final')
  - **Known contaminated sites list** (2009)
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Health's Lake Inspection Mapping Search Layer Options

http://bit.ly/1RKYtv2

- The Lake Inspection Mapping Application contains multiple layer search/query options in 2 categories:
  - **Search for lake testing fail status for each year**
  - **Search for a Lake Name or Station for each year**

- Each search has 2 additional options
  - **Use spatial filter to limit features** – checking this option will apply the search to only features that are within the current map extent
  - **Add result as operational layer**- checking this option will add the selected features to the Layers List.
    - Clicking the down arrow on the right side of a layer displays the layer menu, **which will include some or all of the following functions depending on the application/Layer**:
      - Zoom to—Sets the map extent to the extent of the layer.
      - Transparency--Sets the transparence for the layer.
      - Enable Pop-up / Remove Pop-up — Enables or disables Pop-up for the feature layer. If a feature layer does not have pop-up configured in the map, clicking **Enable Pop-up** shows all field values from the feature layer.
      - Move up—Moves the layer one level up.
      - Move down—Moves the layer one level down.
      - Open attribute table—Opens the attribute table for the feature layer.
      - Description / Show Item Details—Opens the service description or the item details page for the service or the item associated with the layer, if available.

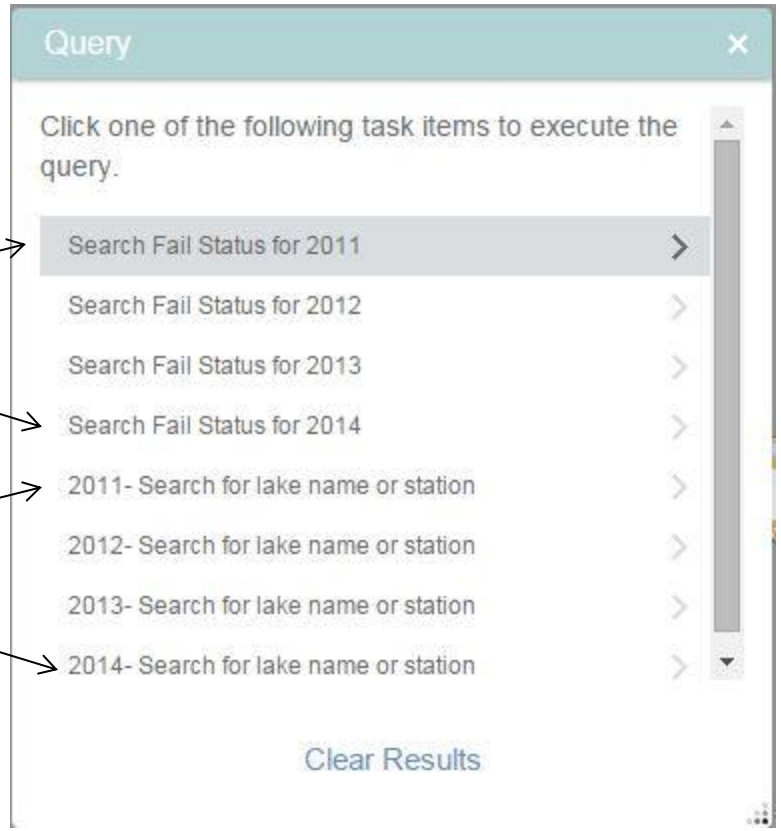
*Note – before running an additional **Search,** be sure to **Clear Results**.*

Health's Lake Inspection Mapping Search Layer Options, cont.

http://bit.ly/1RKYtv2

Search for lake testing fail status for each year

Search for a Lake Name or Station for each year



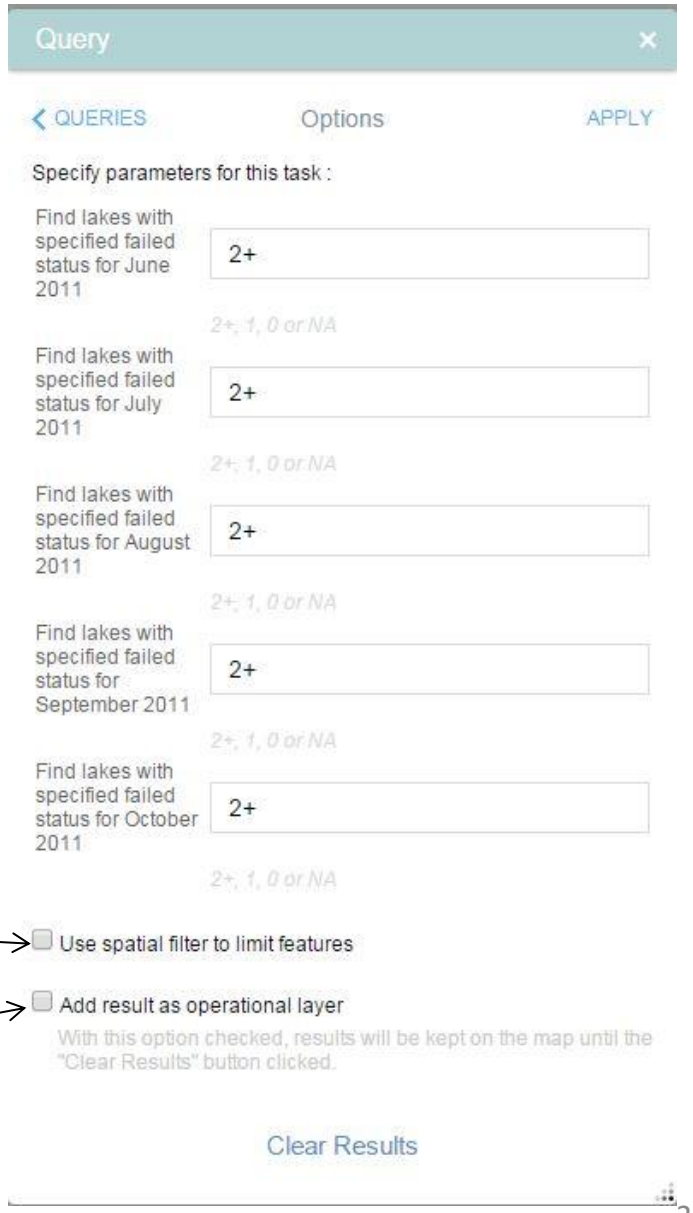
Health's Lake Inspection Mapping Search Layer Options, cont.

http://bit.ly/1RKYtv2

Example of Searching for lake testing fail status for year 2011

This search allows the user to search for a specific fail status for each month:

- **2+** = failed 2 or more times
- **1** = first time failed
- **0** = passed
- **NA** = A value must be entered into each search parameter. If you do not want to include a specific month in the search, enter '**NA**' into the box.



Checking this option will apply the search to only features that are within the current map extent

Checking this option will add the selected features to the Layers List. The attribute table could then be opened for viewing and optionally exported as a .CSV file which can be opened in Excel.

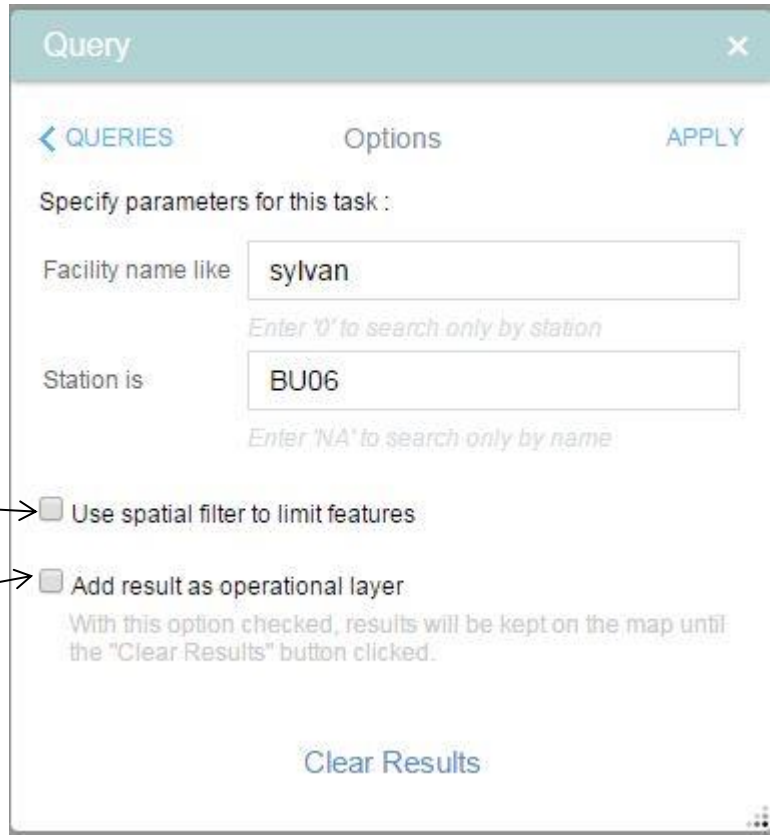
Health's Lake Inspection Mapping Search Layer Options, cont.

http://bit.ly/1RKYtv2

Example of Searching for lake name or station number for year 2011

This search allows the user to search for a specific lake by name or number for the selected year:

- **Facility name**: enter part of the name (*note – if you will be searching by Station Number, enter* '**0**' *into this box)*
- **Station**: enter the station number (*note – if you will be searching by Lake Name, enter* '**NA**' *into this box)*



Checking this option will apply the search to only features that are within the current map extent

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Health's Lake Inspection Mapping Search Layer Options, cont.

http://bit.ly/1RKYtv2

Example of Search query result:

- The results of the Search query will be displayed in the search window
- The feature(s) on the map will be highlighted
- The map will center on the selected feature(s)
- If multiple features were found, the list can be scrolled to view the results. Clicking any one will cause the map to center on it.