AUGUST
2021

Land Resource Protection Web App USER GUIDE

A User Guide for the Land Resource Protection Web Application

Department of Environmental Protection
Division of Watershed Land Management
Bureau of Program Development (GIS)

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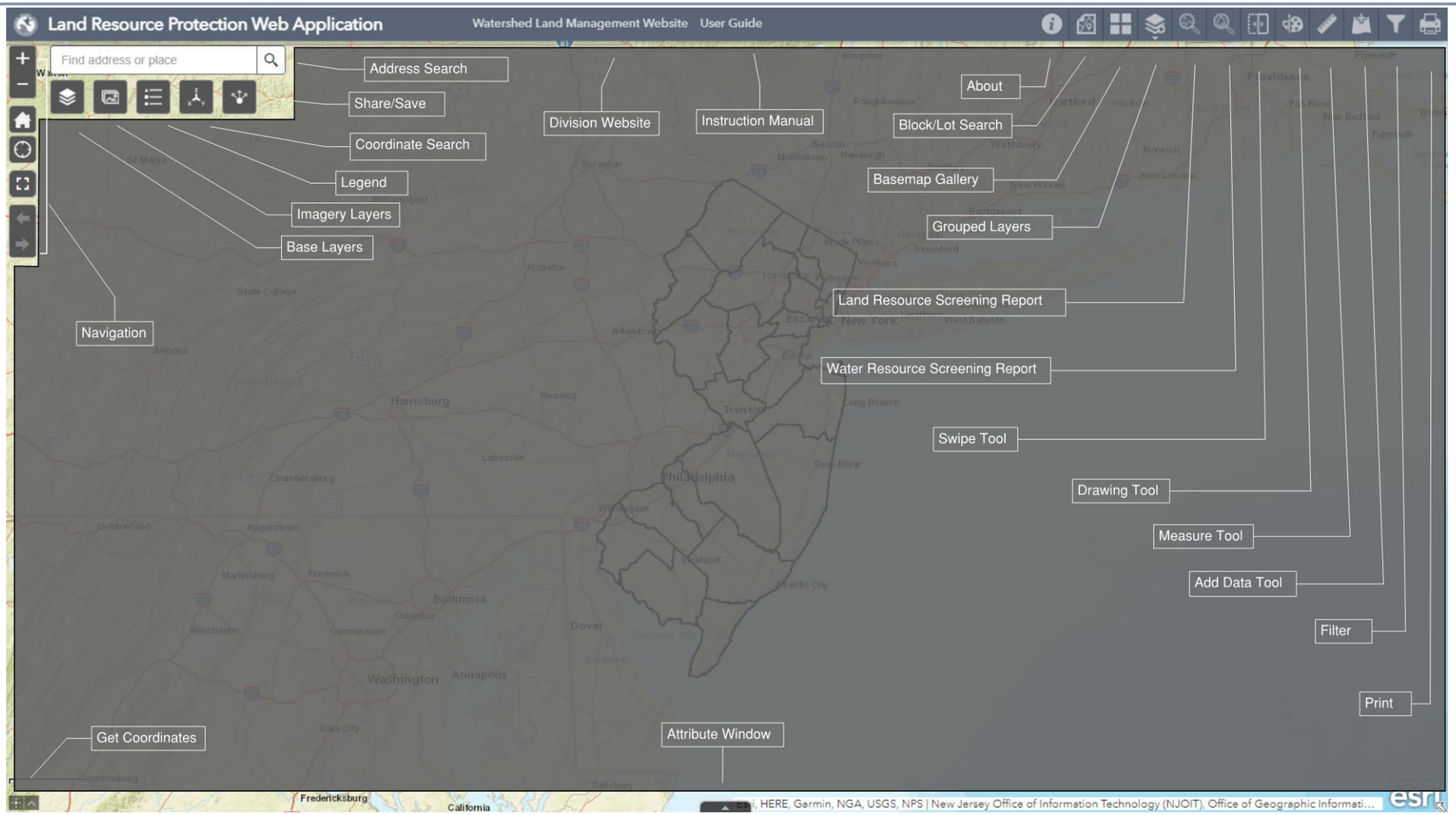
Introduction

Purpose and Tool List

This application is a public web application intended to provide GIS data relevant to a Land Resource Protection Permit Application. Geographic Information System (GIS) layers are grouped in different categories to aid in a desktop evaluation. The following list summarizes the tools available in the application:

- Navigation Tools
- Address Search
- Coordinate Search
- Block/Lot Search
- Layers & Settings
    - Base Layers
    - Imagery Layers
    - Grouped Layers
- Viewing GIS feature Details
    - Pop-Ups
    - Attribute Table
- Legend
- Share/Save Location
- Measurement Tool
- Drawing Tool
- Swipe Tool
- Basemap Gallery
- Land Resource Screening Tool
- Water Resource Screening Tool
- Add Data
- Print

Menu Bar


Land Resource Protection Web Application
Watershed Land Management Website
User Guide
Find address or place
Address Search
Share/Save
Coordinate Search
Legend
Imagery Layers
Base Layers
Navigation
Division Website
Instruction Manual
About
Block/Lot Search
Basemap Gallery
Grouped Layers
Land Resource Screening Report
Water Resource Screening Report
Swipe Tool
Drawing Tool
Measure Tool
Add Data Tool
Filter
Print
Get Coordinates
Attribute Window
HERE, Garmin, NGA, USGS, NPS | New Jersey Office of Information Technology (NJOIT), Office of Geographic Informati...
esri

Navigation

The following tools are available to help the user in moving or panning around the map:

Zoom in/Zoom out

Use the *plus* or *minus* button located on the top left of the application to *zoom in* or *out* of the map. Or use a scroll wheel on a mouse to zoom in/out of the map.

Default Extent

This button is located under the *zoom in/*out button. It will bring the map view back to the extent of New Jersey.

My Location

This button is located under the *default extent* button. If a device is location enabled (such as a tablet or a cell phone), this will bring you to the physical location of the device you are using to access the application.

Previous/Next Extent

This button is located under *my location* button. This enables the user to view the previous extent (or scale) of the map. This may be useful to go to previous or next extents when panning though an area of interest.

Address Search

The address search bar is located on the top left of the application. Type in a full address and the results will start to auto-populate with possible matches. Click on the address or the magnifying glass to bring the extent of the map to the location.

Address Search Window

When selecting the address, the map will zoom to the location by placing a point where the address was mapped. This point is temporary and will be removed once other layers are turned on.

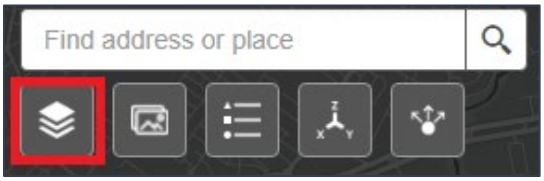
Accessing/Viewing Layers, Transparency, Visibility

The following examples show where to find layers, how to turn on/off layers in different groups and how to adjust transparency:

Accessing Layers

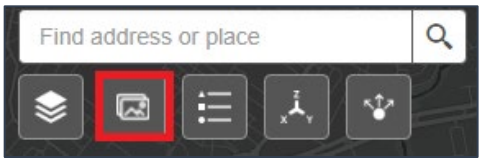
Some layers can be accessed through the buttons below the address search bar for quick access, while other layers can be found in the group layer list on the main menu bar.

Base Layers



The base layers consist of administrative boundaries and transportation features such as county, municipal boundaries, parcels, road centerlines, rail stations and rail lines, as well as NJEMS Sites.

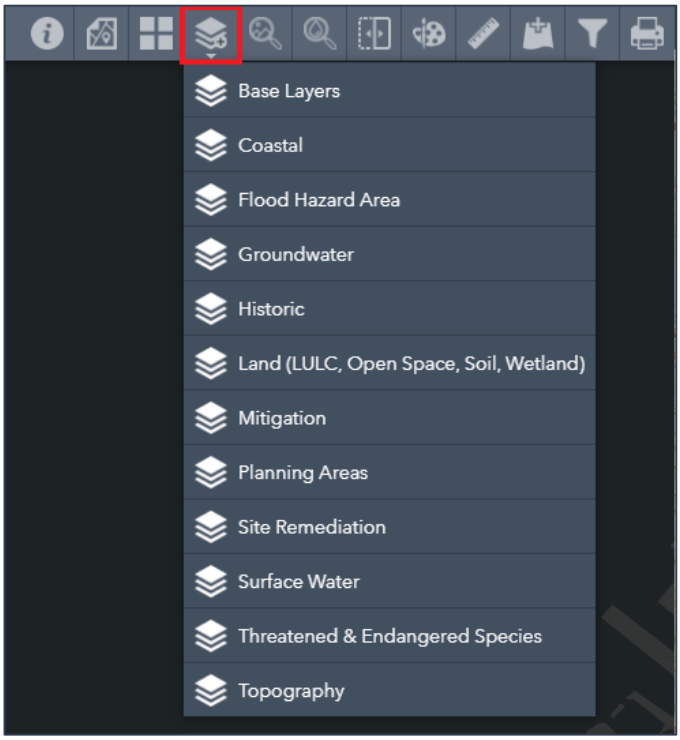
Imagery List



The imagery list located under the address search bar contains aerial images from the 1930s to 2020, as well as Vermeule maps (NJ Color Historical Maps) and Color/Black & White Topographical Maps.

Most layers can be found in the *grouped layer lists* on the top right of the menu as shown below. To see a full list of layers available, click here.

Group Layer Dropdown Menu



Turning layers on/off

Layers can be turned on and off individually or by groups. Navigate to the *Group Layers* on the top right side of the application.

Group Layer List

Option 1 | Select a group of layers from the drop-down list (i.e. Base Layer). To expand or collapse the list of layers click the double arrow outlined in yellow in the figure below.

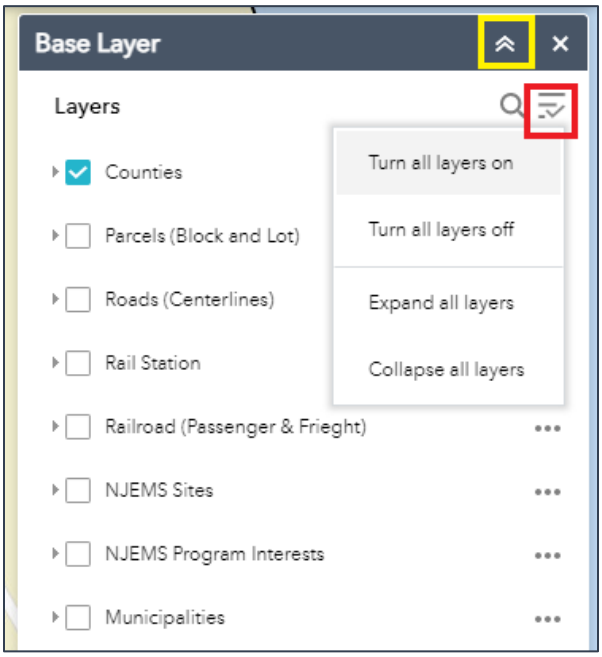
Option 2 | To close the layer list click on the *X* symbol. To turn individual layers on/off check the box to the left of the layer.

Option 3 | To see the symbology of the layer, click on the little gray arrow to the left of the layer. The layer will be on if the box is checked (see *County* in the example below).

Option 4 | To expand all layers in the group on/off click on the symbol outlined in red (a list with a check) and select *Turn all layers on* or *Turn all layers off*. To expand or collapse all layers (to see the legend/symbology), click *Expand All Layers* or *Collapse All Layers*.

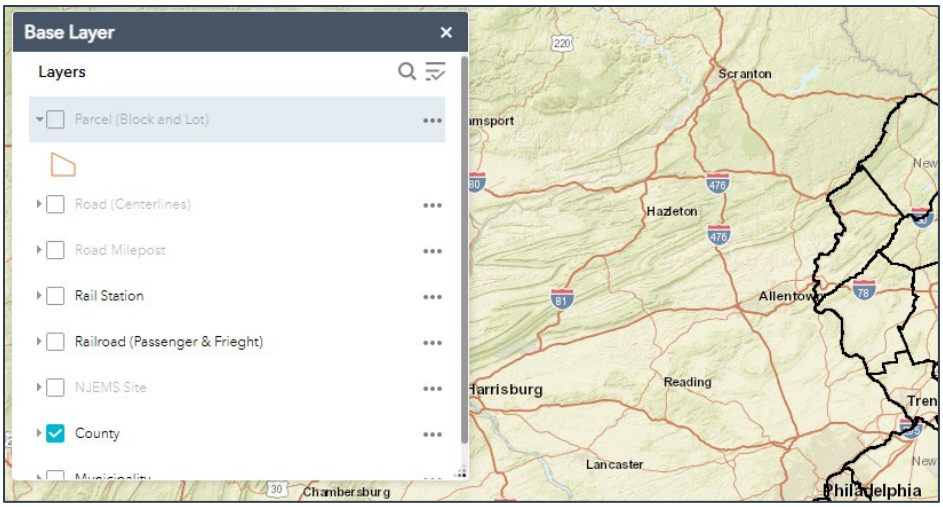
Layer Visibility

Layer Visibility Options

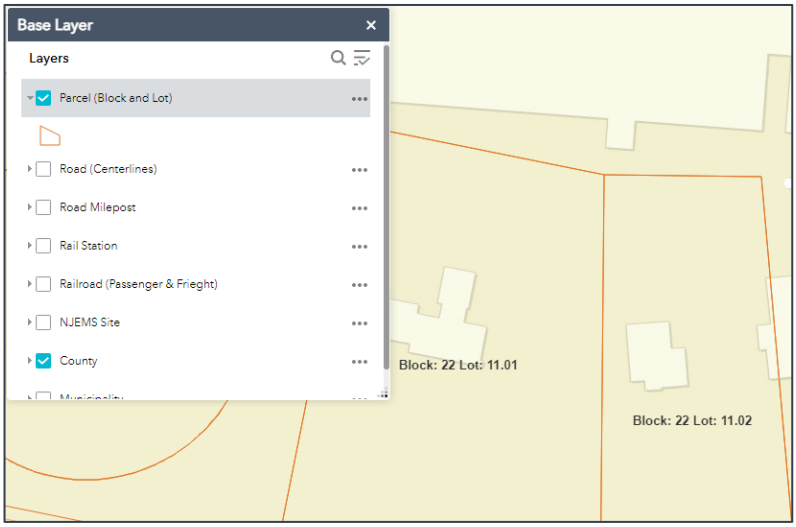


The layers that are checked on are visible in the map view frame. The County layer is the only one that is visible when the user first opens the application. Layer names that appear gray indicate that they are not visible at the current map scale. For example, the Parcel layer will appear gray until you zoom in close enough to a site for the parcel layer to become available. This is to help the application run faster as displaying layers with numerous records at a state wide level will slow down the application.

Parcel Layer not available at a small scale



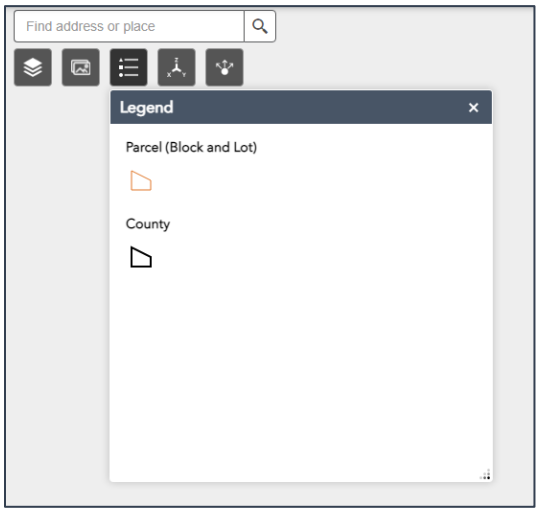
Parcel Layer available at a larger scale after zooming in



View Legend

When a layer is turned on the symbology will appear in the legend window located below the address search bar.

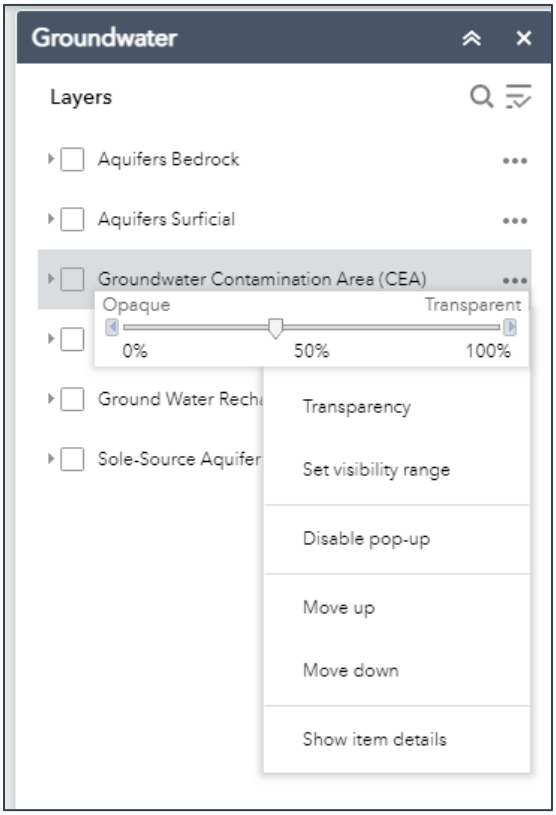
Legend Tool



Changing visibility range, transparency, and order

A User can temporarily change the transparency, visibility range, labels, and order while working in the application. To change the transparency, click on the three dots to the right of the layer of interest and select transparency. A menu will appear, slide the bar to change the level of transparency desired. Other features include:

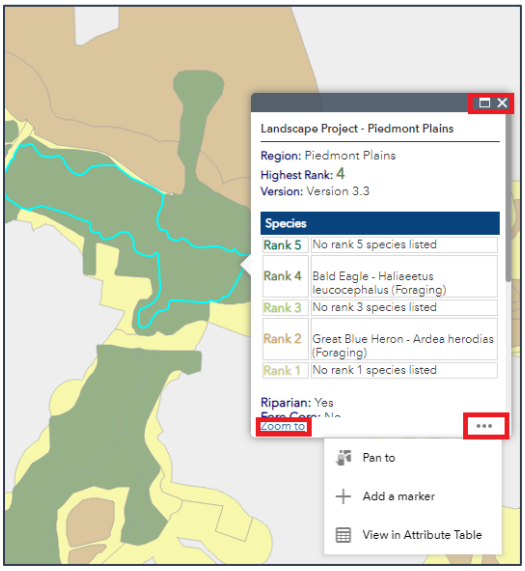
- Setting the visibility range
  - If a layer needs to be viewed at a different scale, then the visibility range can be changed.
- Disable pop-up
  - To temporarily hide the pop-up associated to the GIS layer the user can disable it.
- Hiding labels
  - If the labels of the layer are distracting, they can be temporarily turned on/off.
- Moving the layer up or down
  - Controlling if a layer will be displayed on top or on bottom of other layers.
- View the attribute table
  - See a detailed view of the information associated to the GIS layer. However, it is recommended to use the pop-up to view the details of the feature in interest.
- Show item details
  - View metadata associated to the GIS layer.



View details of GIS feature

Associated information to the GIS layers can be viewed through a Pop-Up window. It is possible that a pop was disabled if there was no pertinent information in the GIS layer.

Pop up Window



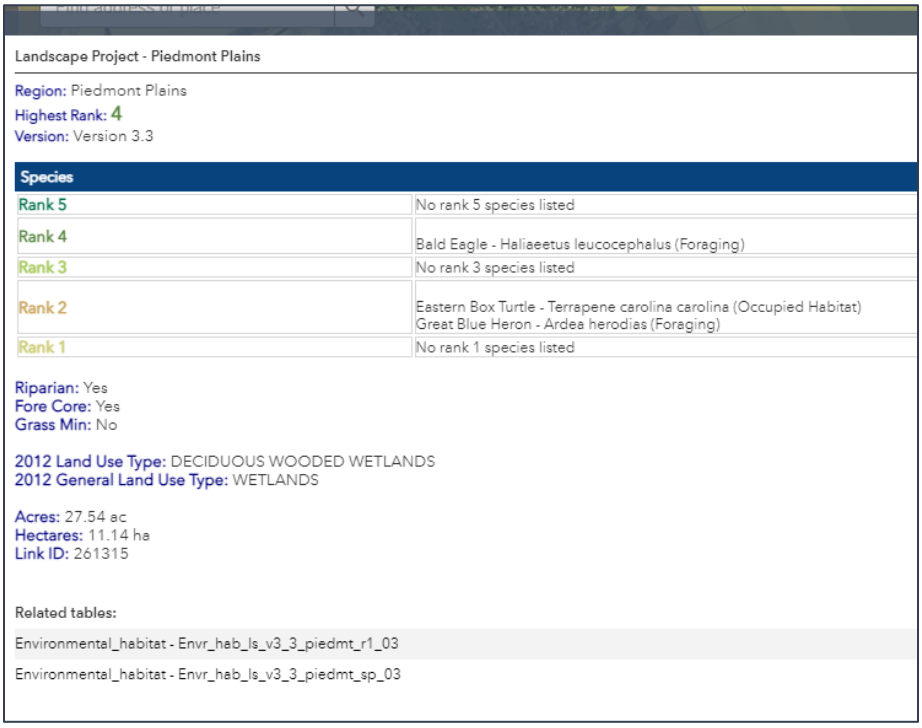
To view the pop-up simply click on the layer in an area of interest. The information will show up in the pop-up. There may be links to other sites that can provide more information.

To maximize the pop-up, click on the small box in the top right of the pop-up as outlined in red. To close the pop-up click on the *X*.

More options are available by clicking on the three dots located on the bottom right as outlined in red. Options include:

Pan to | Moving the map to the center of the GIS Feature.
Add a Marker |A marker will be placed that shows lat/long
View in Attribute Table |View GIS information in a table
Zoom to |Zoom to the feature selected

Pop-Up Window Maximized

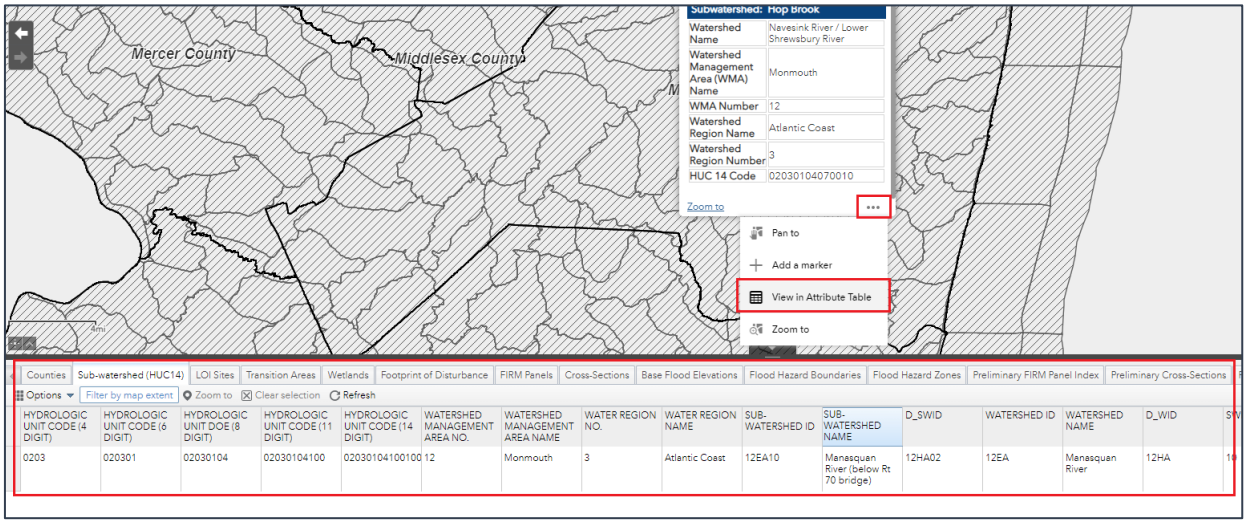


Attribute Table

Most pertinent information can be viewed from the pop-up window. If there is interest in viewing the full details of the GIS feature of interest, this information can be viewed from the attribute table display. There are a couple ways to access the display:

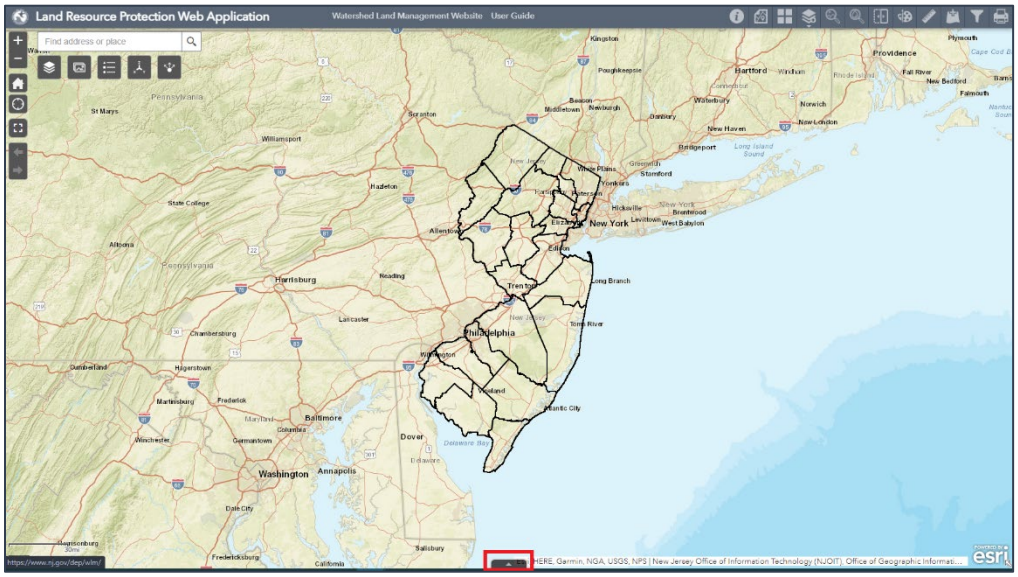
Option 1 | Through the pop-up window, click on the three dots located on the bottom right-hand side of the window and select *view in attribute table*. This will bring up the attribute table with the selection on the map.

View Attribute Table from Pop-Up



Option 2 | Access the attribute table by clicking on the arrow on the bottom of the application.

Attribute Table Button



Tools

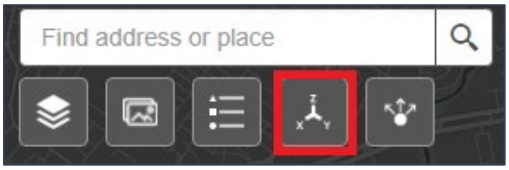
Location

The following tools will help navigate to a location based on coordinates or parcel search (Block and Lot).

Coordinate Search

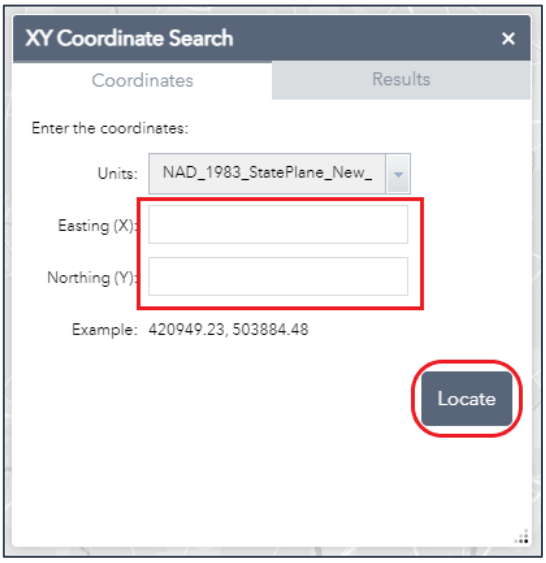
The *coordinate search tool* is located under the address search bar.

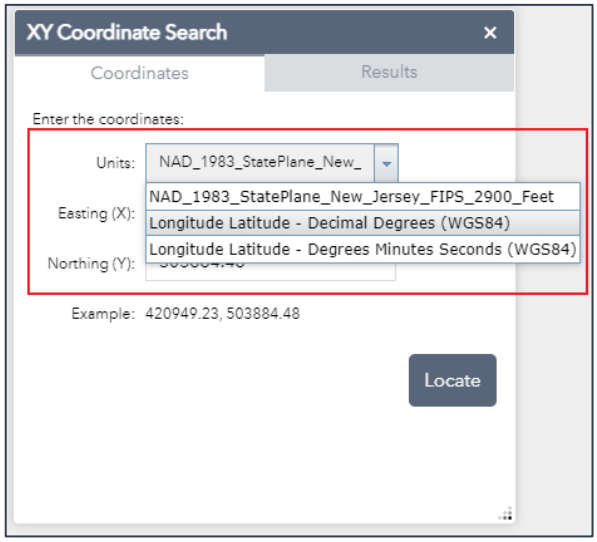
Coordinate Search Tool



Step 1 | In the search window enter the X/Y coordinate in NAD 1983 State Plane. If the coordinates are in WGS click on the drop-down arrow next to the units and change the coordinate system.

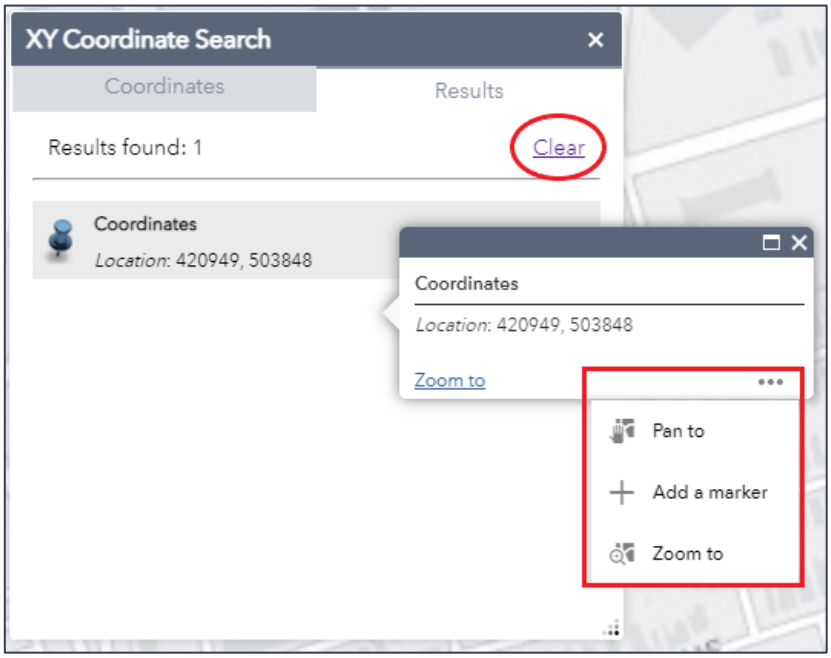
XY Coordinate Search Window Options





Step 2 | Click locate when ready. The map will zoom to the location and a temporary marker will appear to show the location of the coordinates. Once a result is found, clear the results if a new search is required. Other options include clicking on the three dots and panning (moving) to the location in the current scale, adding a marker on the map (this will only stay there for the duration of one session – it will not be saved once the application is closed), and zooming to the location.

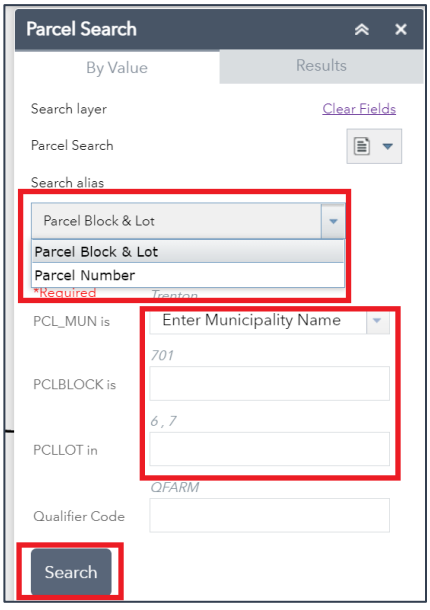
Coordinate Search Window Results



Block & Lot Search

Find a location through a *Block/Lot query* finder. This tool is location on the main menu bar on the top of the application.

Parcel (Block & Lot) Search



Step 1 | In the parcel window, select search by parcel or by parcel ID number. All fields do not have to be populated to get a result.

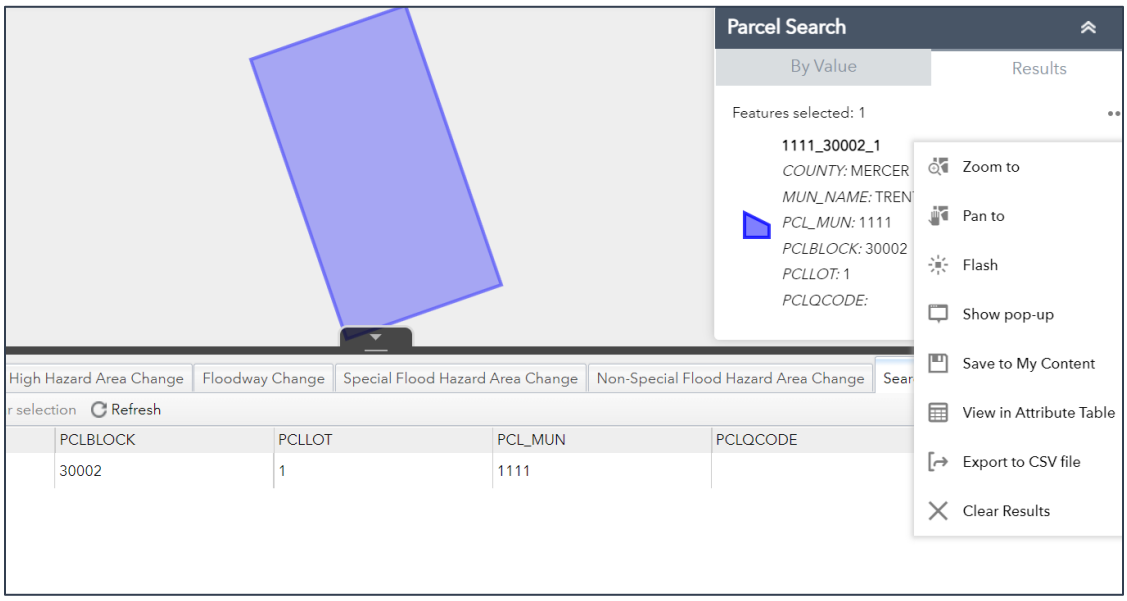
If searching by lot and block enter the municipality, block & lot, and click search. All fields to do not have to be populated to get a result.

If searching by Parcel Number, select the parcel number option in the drop-down menu and type in the parcel number in the format shown in the window. *Note: Use all CAPS if there is a qualifier code.*

Step 2 | Click search when ready.

The results will populate in the *results window.* If there are multiple matches, several results will appear. If there are no matches, the results window will say *no results found*. Some options include zooming to, pan to, flash, show pop-up, view in attribute table, export to CSV file. All results are are temporary, they will not be saved when closing the application. To save locations check out the *save/share tool*. To start a new search, click clear results and go back to the parcel search window. To mimize the attribute table press on the button (pointing down) on the bar on the bottom.

Parcel Search Winow Results

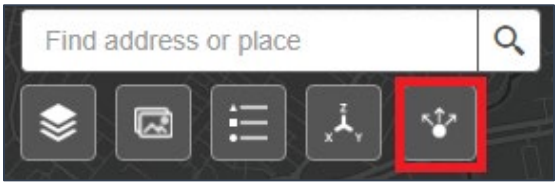


Share Tool

The *share tool* creates a weblink that can be shared with someone via email or saved for quick links in trackers such as word documents or excel files. Please note the web link needs to be opened through the NJDEP network either via Citrix, GTMPC, or in the office.

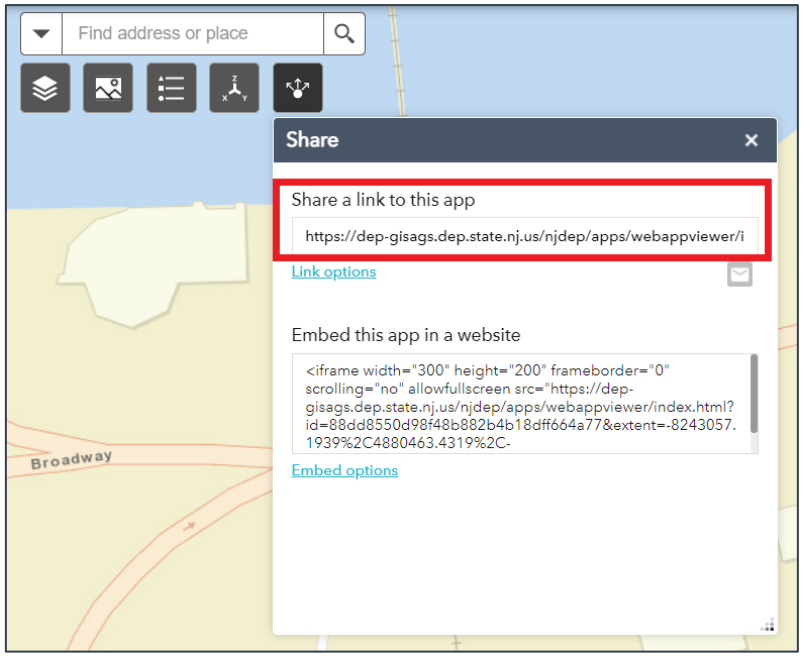
The *share tool* is located on the left-hand side of the application under the address search bar.

Share Tool Location



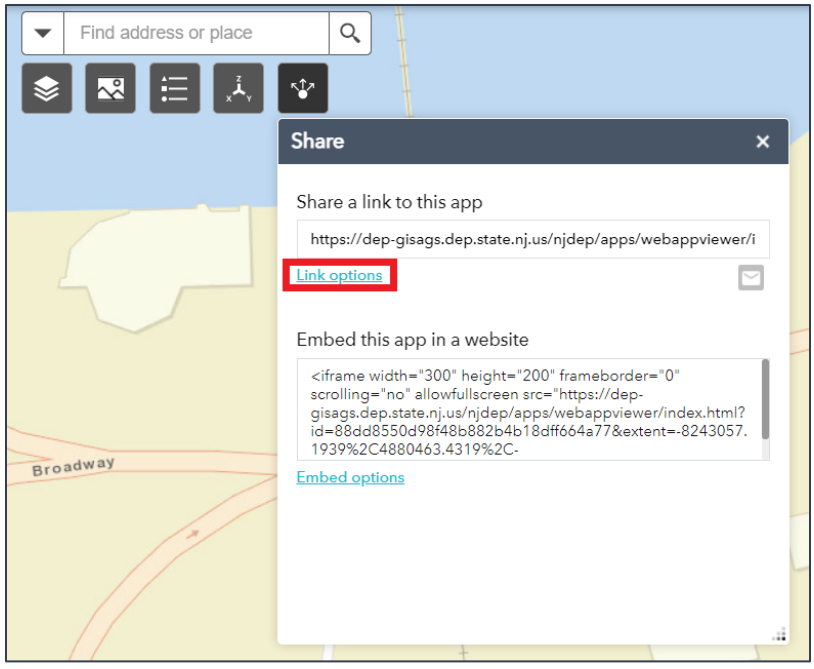
There are two options to save a link, **Option 1** is to save the location and extent and **Option 2** is to save the layer visibility and add a marker. Follow the instructions below to save a location.

Share Tool Option 1



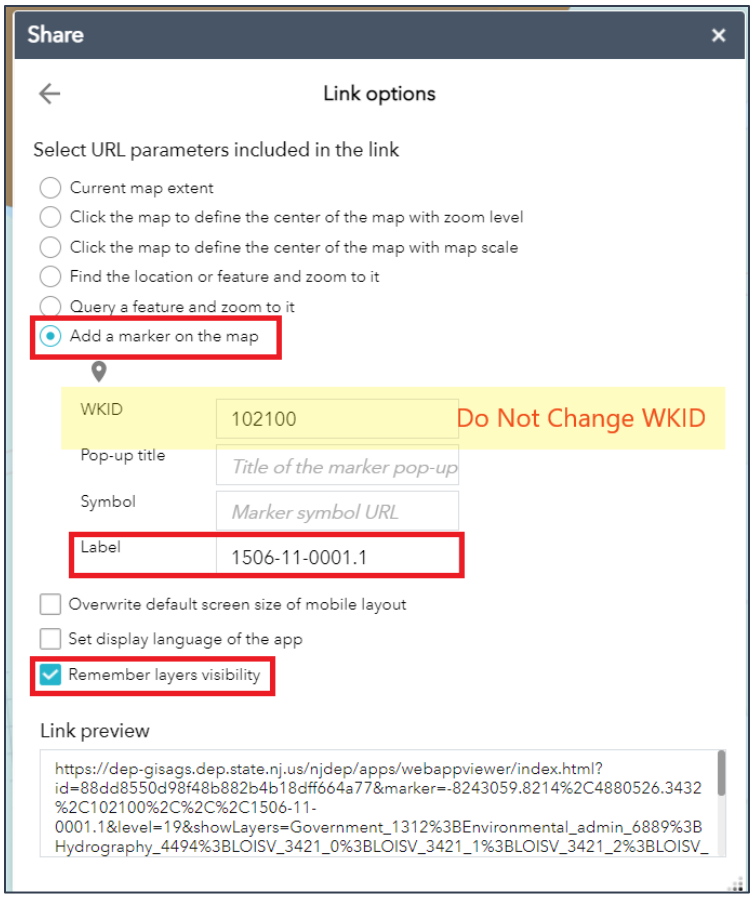
Option 1 | Click the *share tool* button and copy the link, paste the link into an email, excel file, or word document to keep track and save the location. The link will bring the maps to the saved location when copying the link from the share tool.

Share Tool Option 2- Step 1



Option 2 | **Step 1** Click the *share tool* button and click on link options.

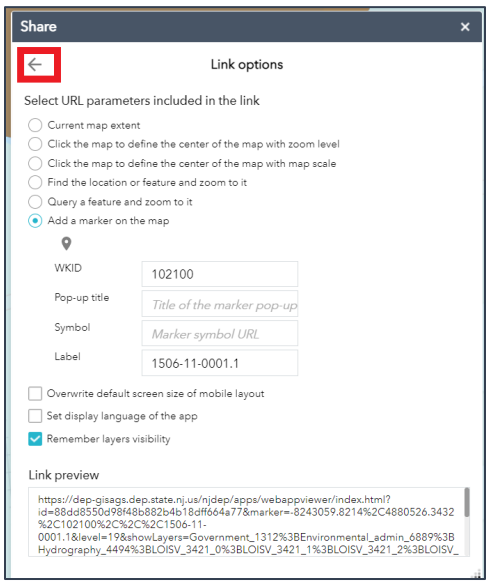
Share Tool Option 2- Step 2



Option 2 | Step 2 Click the *Add a marker on the map* button and add a desired label in the label section ***Note: Do not change the WKID, leave it as it is.***

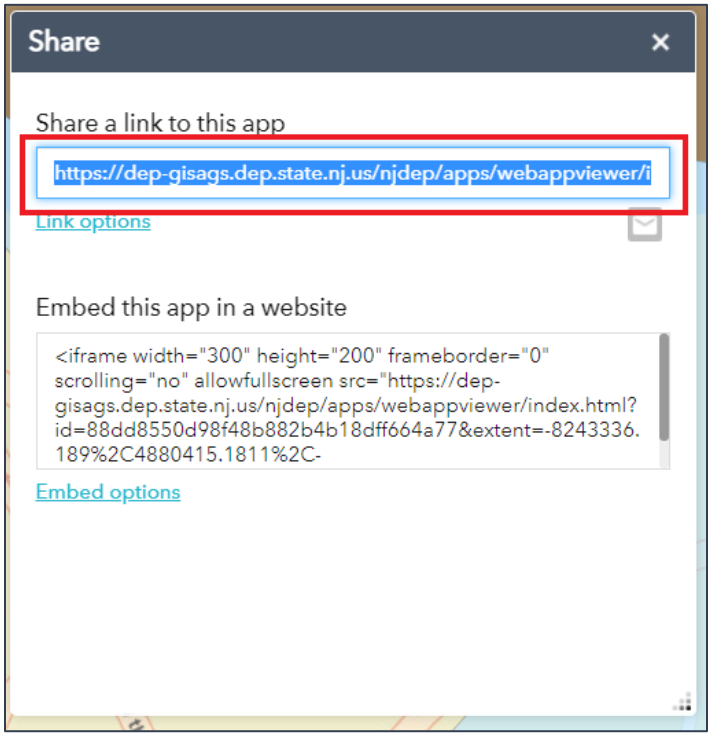
Check the *remember layers visibility* button to save the layers that were turned on. Remember to turn on the GIS layers that should be displayed before saving the link.

Share Tool Option 2- Step 3



Option 2 | Step 3 Click the back button on in the tool window.

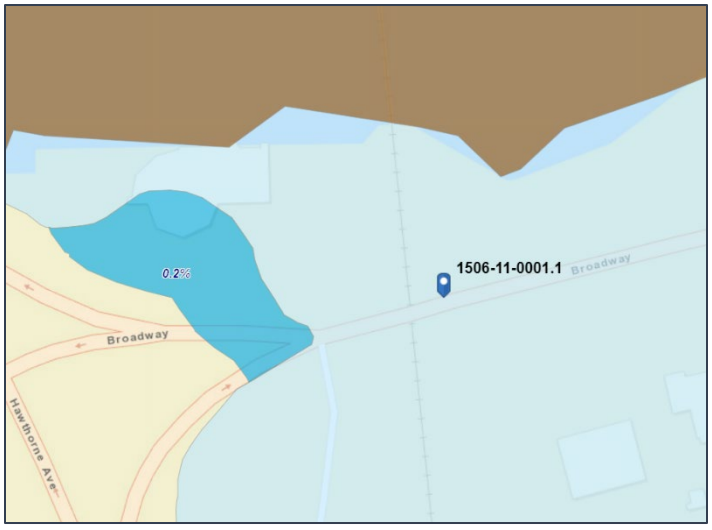
Share Tool Option 2- Step 4



Option 2 | Step 4 Copy the link and email it or save it to a document where it is easily accessible.

When the link is opened, it should have the marker with the label as well as the layers that were turned on before clicking on the share tool.

Result



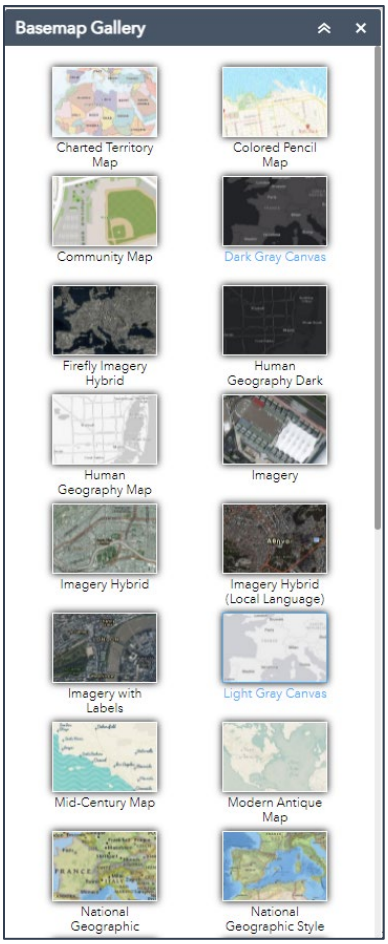
Basemap Gallery

To change the basemap or background layer from streets to imagery, or topographical relief, select the *basemap gallery tool on* the main menu bar on the top right of the application.

Basemap Gallery Tool Location

The basemap can be changed at any time. However, in order to compare aerial imagery side by side use the imagery list icon to select the imagery and the swipe tool to compare. *Note: Some basemaps may not be available (based on ESRI production).*

Basemap Gallery Window



Land Resource Screening Report

The *Land Resource Screening Report tool* is a tool that scans an area of interest (a point, polygon, or line) and generates a report that summarizes all GIS layers that were scanned and some details from the

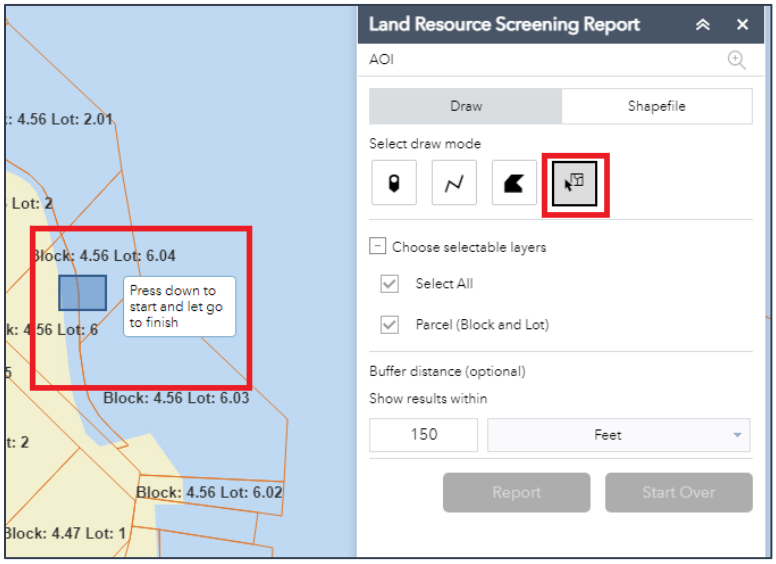
attribute table. This report is specific to land resources such as potential wetlands, historic areas of interest, threatened and endangered species, etc. Use the *Water Resource Screening Report* to analyze the area of interest for streams, watersheds, and flood hazard areas. The tool should only be used for small areas such as a few parcels to optimize performance. It is meant to help for a site analysis and not a municipal, watershed, or county-wide level analysis.

The *screening tool* is located on the main menu bar on the top right.

Screening Tool Location

Screening Tool – Selecting or Drawing an Area of Interest

Step 1| To activate the window, click on the button shown above. Options for an area of interest include drawing a point on the map, a line, a polygon, or selecting a GIS feature (the parcel layer). In this example, the select option was used by clicking on the select by feature button and clicking on the map to drag over the parcel of interest.



Screening Tool- Finalize the AOI & Click Report

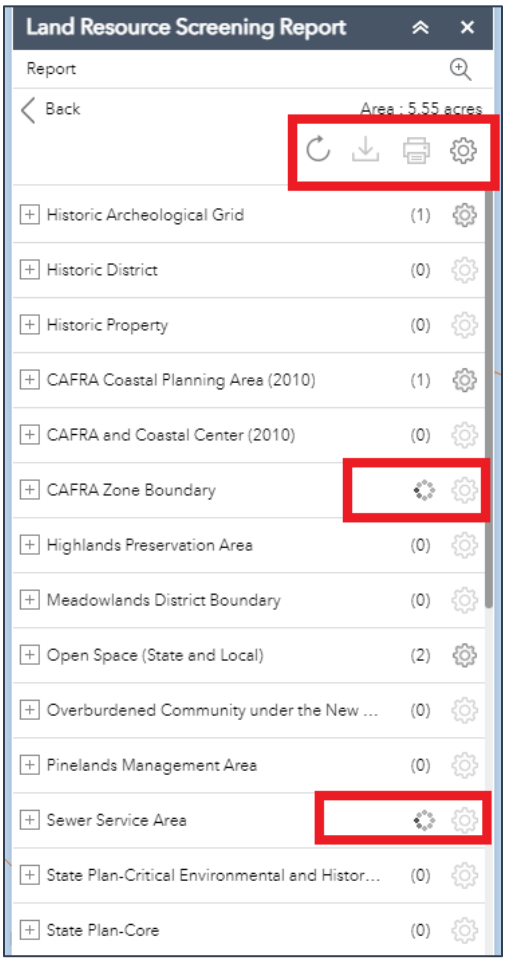
Step 2| After the box is dragged over the parcel, the tool will select the parcel that intersects the box. If needed, click start over to re-select either by parcel, or to re-draw a polygon, a line, or a point. Click on *Report* when you are ready to search the Area of Interest (AOI).

Screening Tool- Finalize the AOI & Click Report

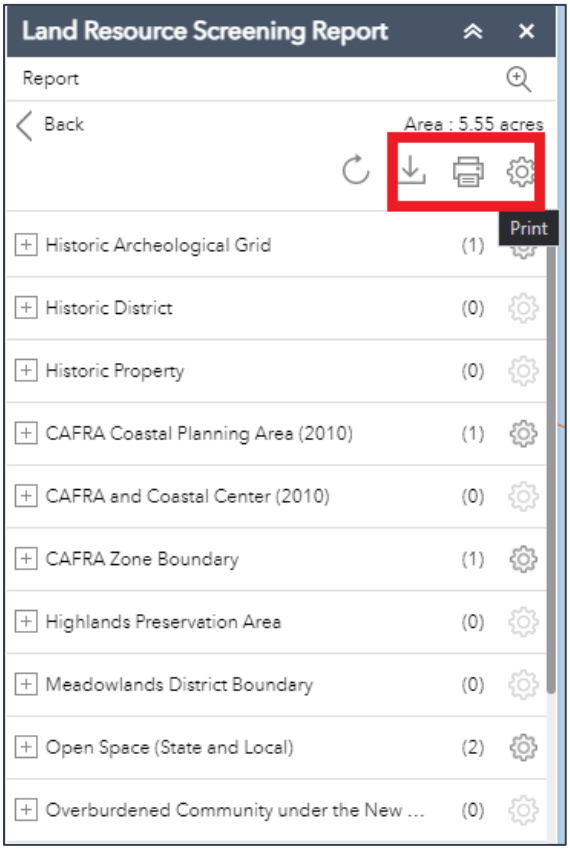
Step 3| Please be patient as the tool searches all the layers. There are over 40 layers to search and depending on the size of the area it can take a couple minutes. Wait for all pending searches to finish (it will change from the swirling circle shown on the bottom left to a result such as *(1)*). Additionally, the print button will change from **light gray** to **dark gray** when it is ready.

*Note: Sometimes when the system is working "too hard" a **wait or cancel** message will appear in the chrome browser. Click wait and give it a minute to let the tool run before restarting the application.*

Screening Tool- Pending



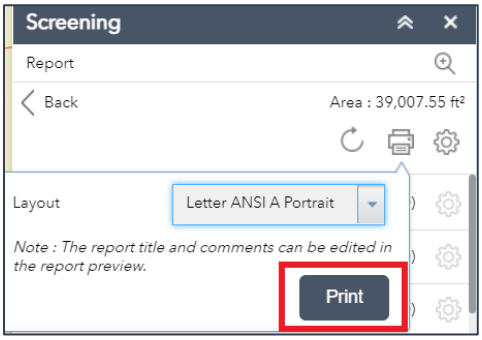
Screening Tool- Click Print



Step 4| Once the tool is complete explore the data by clicking on the *+* button next to the layer to see the results. If the layer has *(0)* this indicates there are no features within the AOI. Explore by clicking on the features that have *(1)* or more features that are within the AOI.

Click on the *Print* button when to receive a PDF summary report of the AOI. Select the layout of the PDF.

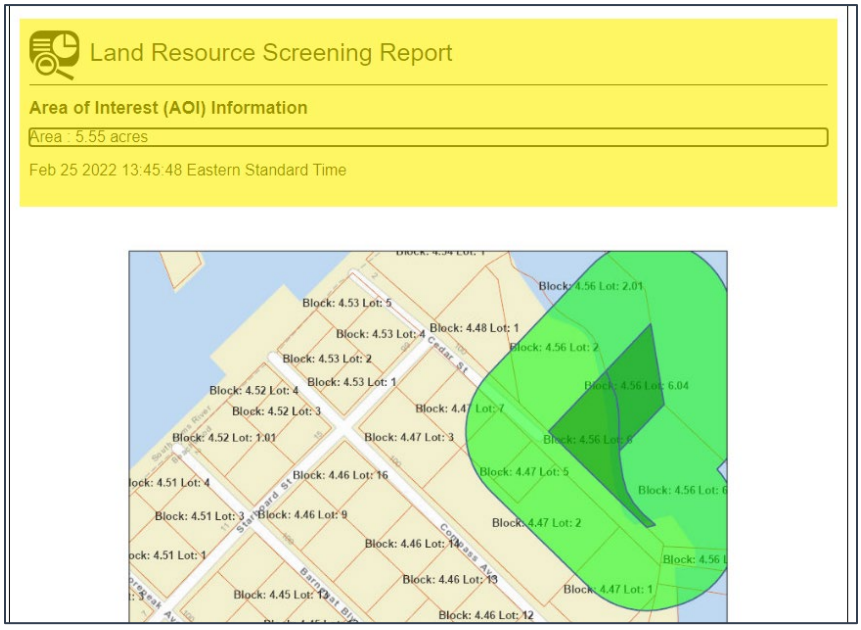
Screening Tool- Select layout and click print.



Customizing & Reading the Screening Tool Report

Screening Tool Report

Customizing the Report| A new window will appear with the results of the screening tool. The first portion of the report is customizable. The area shown in yellow (on the right) can be customized to write any notes or labels for an AOI such as name, location, file number etc.



Reading the Report| The first section of the report provides a summary of all the layers that were scanned in the screening tool. The count indicates how many GIS features intersected the area of interest (AOI). If there are zero that means there are no features in the AOI; if there are more than zero, that indicates there are GIS features within the AOI. Do not focus on the exact number since the GIS layer may be split into multiple polygons. The area or the length columns indicate the total area of the polygons that intersect the AOI. This is not the total area within the AOI, but rather the total area of the polygon.

Screening Tool Report – Summary Section

Summary

Name	Count	Area(acres)	Length(ft)
Historic Archeological Grid	1	5.55	N/A
Historic District	0	0	N/A
Historic Property	0	0	N/A
CAFRA Coastal Planning Area (2010)	1	2.63	N/A
CAFRA and Coastal Center (2010)	0	0	N/A
CAFRA Zone Boundary	1	2.63	N/A
Highlands Preservation Area	0	0	N/A
Meadowlands District Boundary	0	0	N/A
Open Space (State and Local)	2	0.35	N/A
Overburdened Community under the New Jersey Environmental Justice Law	0	0	N/A
Pinelands Management Area	0	0	N/A
Sewer Service Area	1	2.47	N/A
State Plan-Critical Environmental and Historical Site	0	0	N/A
State Plan-Core	0	0	N/A
State Plan-Planning Area	1	2.63	N/A
State Plan-Endorsed Plan	1	1.21	N/A
State Plan-Node	0	0	N/A
Shellfish Classification	1	2.91	N/A
Tidelands Claim	1	3.42	N/A
EPA Priority Wetland	1	5.55	N/A
Land Use 2015	3	5.55	N/A
Landscape Region	1	5.55	N/A

Reading the Report| The second section of the report provides the details of the attribute information from the GIS layers that did intersect the AOI. If there are multiple polygons with the same information, it may be repeated in the detail window.

Screening Tool Report – Detail Section

CAFRA Zone Boundary

#	Zone	Area(acres)
1	CAFRA zone	2.63

Open Space (State and Local)

#	Owner Type	Owner	Name	Use	Alt Name	Area(acres)
1	Municipal	Beachwood Borough	*No Data*	*No Data*	*No Data*	0.04
2	Municipal	Beachwood Borough	*No Data*	*No Data*	Beachwood Community Center	0.31

Sewer Service Area

#	Type	Facility Name	Date Adopted	Area(acres)
1	SW	OCUA Central	*No Data*	2.47

State Plan-Planning Area

#	Type	Detail	Area(acres)
1	SUBURBAN	SUBURBAN	2.63

State Plan-Endorsed Plan

#	Type	Name	Date	End Date	Area(acres)
1	EN	Berkeley Township	7/5/2012	7/5/2022	1.21

Shellfish Classification

#	Status	Area(acres)
1	Prohibited	2.91

Tidelands Claim

#	Map Number	Claim Type	TRC Adoption Date	Claim Status	Area(acres)
1	399-2130	Tidally Flowed	9/7/1982	CLAIMED	3.42

Water Resource Screening Report

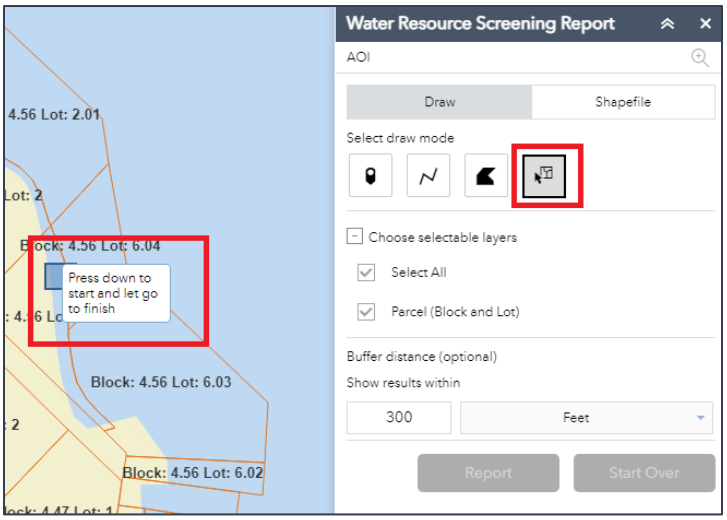
The *Water Resource Screening Report tool* is a tool that scans an area of interest (a point, polygon, or line) and generates a report that summarizes all GIS layers that were scanned and some details from the attribute table. This report is specific to water resources such as Flood Hazard Areas, streams, and watersheds, etc. Use the *Land Resource Screening Report Tool* to analyze an area of interest for wetlands, historic areas of interest, land use classification, etc. The tool should only be used for small areas such as a few parcels to optimize performance. It is meant to help for a site analysis and not a municipal, watershed, or county-wide level analysis.

The *screening tool* is located on the main menu bar on the top right.

Screening Tool Location

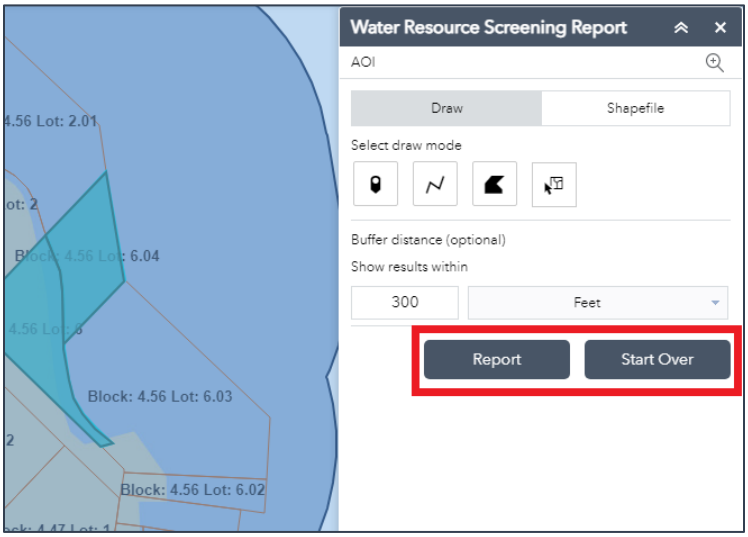
Step 1| To activate the window, click on the button shown above. Draw a point on the map, a line, a polygon, or select a GIS feature (the parcel layer). In this example, the select option was used by clicking on the select by feature button and clicking on the map to drag over the parcel of interest.

Screening Tool – Selecting or Drawing an Area of Interest



Step 2| When the box is dragged over the parcel, the tool will select the parcel that intersects the box. If needed, click start over to change the selection either by parcel, drawing a polygon, a line, or a point. Click on *Report* to start the search the Area of Interest (AOI).

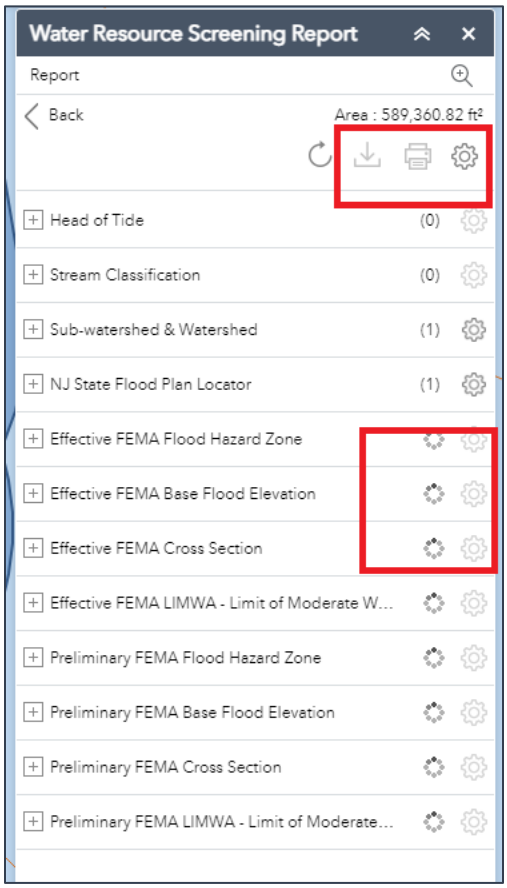
Screening Tool- Finalize the AOI & Click Report



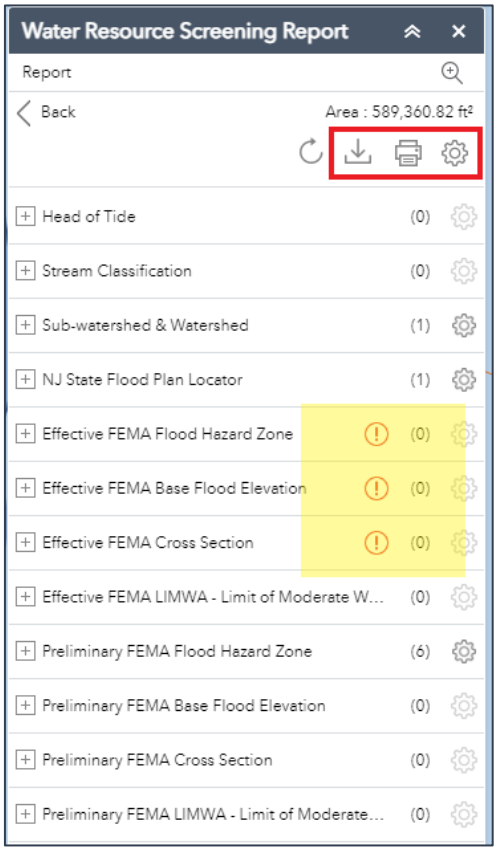
Step 3| Please be patient as the tool searches all the layers. There are over 40 layers to search and depending on the size of the area it can take a couple minutes. Wait for all pending searches to finish (it will change from the swirling circle shown on the bottom left to a result such as *(1)*). Additionally, the print button will change from **light gray** to **dark gray** when it is ready.

*Note: Sometimes when the system is working "too hard" a **wait or cancel** message will appear in the chrome browser. Click wait and give it a minute to let the tool run before restarting the application.*

Screening Tool- Pending



Screening Tool- Click Print

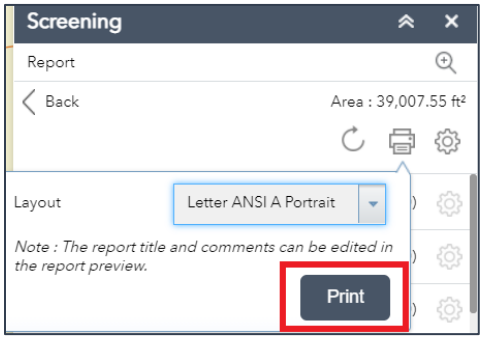


***Note:** If there is a red exclamation mark ! next to a layer, this means the screening report was not able to process this layer. This may happen with the Effective or Preliminary Flood Hazard Area Layers from FEMA. NJDEP does not host or maintain these layers. It is always best to turn the layer on under the flood hazard area grouped layer list or check the FEMA Map Service Center if this does not work within the report. You can try refreshing the screening tool (several times) or re-selecting the parcel and re-running the report to see if the result changes.*

Step 4| Once the tool is complete you can explore the data by clicking on the *+* button next to the layer to see the results. If the layer has *(0)* this indicates there are no features within the AOI. Explore by clicking on the features that have *(1)* or more features that are within the AOI.

Click on the *Print* button when you are ready to receive a PDF summary report of the AOI. Select the layout of the PDF.

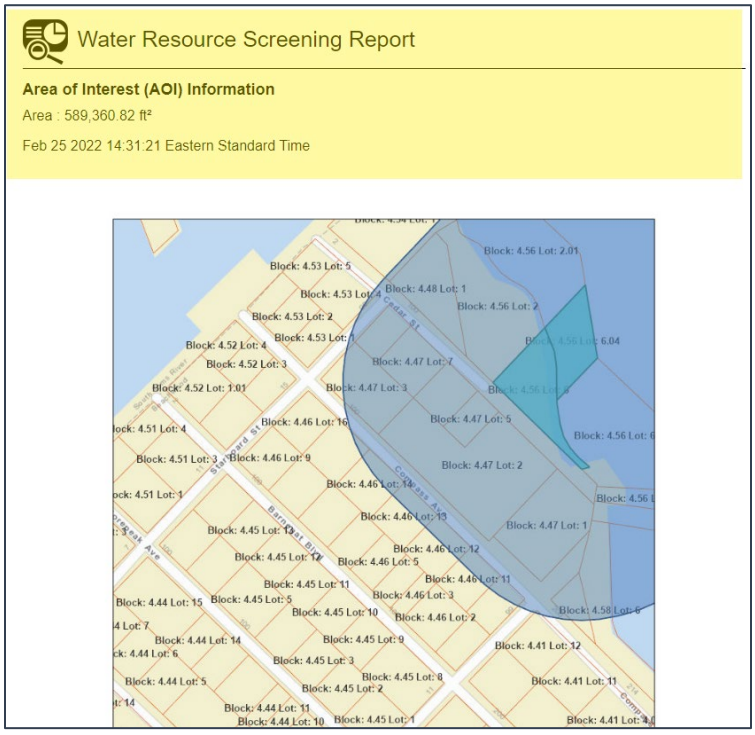
Screening Tool- Select layout and click print.



Customizing & Reading the Screening Tool Report

Screening Tool Report

Customizing the Report| A new window will appear with the results of the screening tool. The first portion of the report is customizable. The area shown in yellow (on the right) can be customized to write any notes or labels for an AOI such as name, location, file number etc.



Reading the Report| The first section of the report provides a summary of all the layers that were scanned in the screening tool. The count indicates how many GIS features intersected the area of interest (AOI). If there are zero that means there are no features in the AOI; if there are more than zero, that indicates there are GIS features within the AOI. Do not focus on the exact number since the GIS layer may be split into multiple polygons. The area or the length columns indicate the total area of the polygons that intersect the AOI. This is not the total area within the AOI, but rather the total area of the polygon.

Screening Tool Report – Summary Section

Summary

Name	Count	Area(ft²)	Length(ft)
Head of Tide	0	N/A	N/A
Stream Classification	0	N/A	0
Sub-watershed & Watershed	1	589,360.82	N/A
NJ State Flood Plan Locator	1	589,360.82	N/A
Effective FEMA Flood Hazard Zone	3	589,359.41	N/A
Effective FEMA Base Flood Elevation	0	N/A	0
Effective FEMA Cross Section	0	N/A	0
Effective FEMA LIMWA - Limit of Moderate Wave Action	0	N/A	0
Preliminary FEMA Flood Hazard Zone	6	1,178,721.44	N/A
Preliminary FEMA Base Flood Elevation	0	N/A	0
Preliminary FEMA Cross Section	0	N/A	0
Preliminary FEMA LIMWA - Limit of Moderate Wave Action	0	N/A	0

Reading the Report| The second section of the report provides the details of the attribute information from the GIS layers that did intersect the AOI. If there are multiple polygons with the same information, it may be repeated in the detail window. Related records such as T&E species will not show up in this report, however you will be able to see what rank species it is.

Screening Tool Report – Detail Section

Sub-watershed & Watershed

#	Sub-watershed Name	Watershed Name	Watershed Management Area No.	Watershed Management Area Name	Watershed Region No.	Watershed Region Name	Area(ft²)
1	Toms R Lwr (below Rt 166)	Toms River (below Oak Ridge Parkway)	13	Barnegat Bay	Atlantic Coast	3	589,360.82

NJ State Flood Plan Locator

#	Map No.	Stream	Municipality	County	Sheet Number	Area(ft²)
1	V0000088	Jakes Branch, Tom's Rv	S Tom's Rv	Ocean	Sheet 10	589,360.82

Effective FEMA Flood Hazard Zone

#	DFIRM ID	Flood Zone	Zone of Suitability	Static BFE	Vertical Datum	Depth	Area(ft²)
1	34029C	X	0.2 PCT ANNUAL CHANCE FLOOD HAZARD	-9,999.00	*No Data*	-9,999.00	11,976.26
2	34029C	AE	*No Data*	5.00	NAVD88	-9,999.00	577,383.16

Preliminary FEMA Flood Hazard Zone

#	DFIRM ID	Flood Zone	Zone of Suitability	Static BFE	Vertical Datum
1	34029C	AE	*No Data*	8.00	NAVD88
2	34029C	AE	*No Data*	9.00	NAVD88
3	34029C	VE	*No Data*	10.00	NAVD88

#	Depth	Unit	Area(ft²)
1	-9,999.00	Feet	224,937.18
2	-9,999.00	Feet	260,427.47
3	-9,999.00	Feet	693,356.78

Swipe Tool

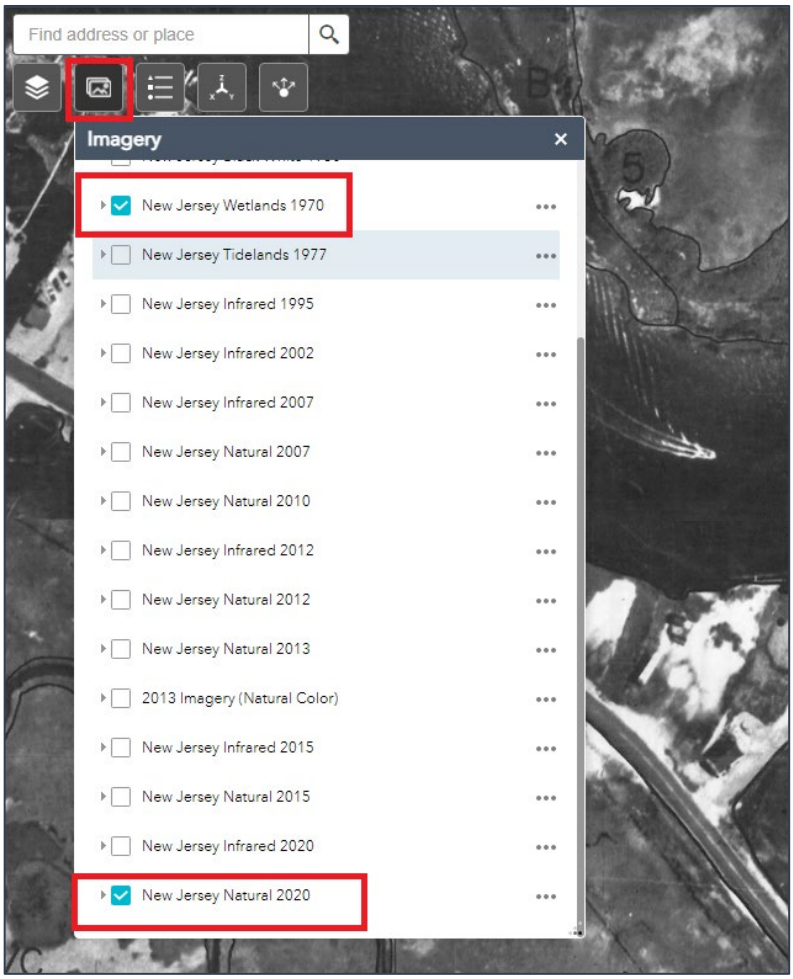
The Swipe tool enables the user to compare layers to one another. The tool is located at the main menu bar on the top of the application.

Swipe Tool Location

To activate the *Swipe tool*, click on the button shown above and turn on the layers that you would like to compare. In this example, we are comparing the 2020 aerials to the 1970 aerials. To compare aerial imagery, select the imagery from the *imagery group layers* (located under the address search bar) and select the two aerials that need comparison.

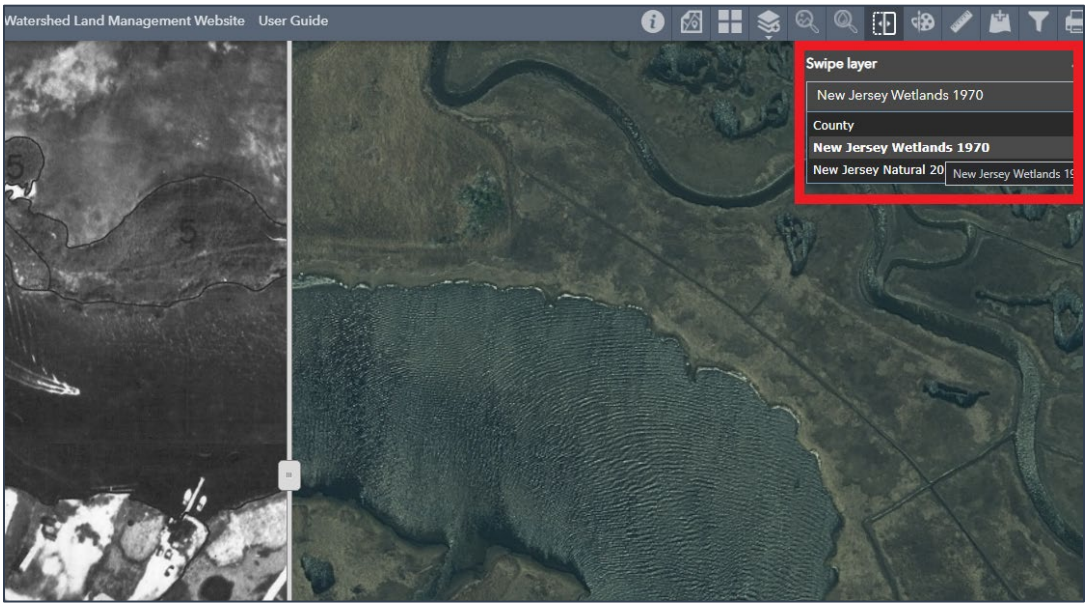
Step 1 | Turn on the layers for comparison.

Imagery Selection



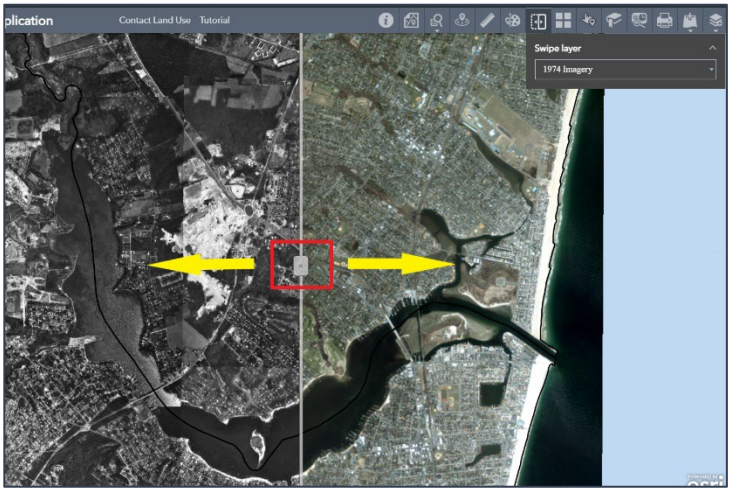
Step 2 | Open Swipe Tool & select the Swipe layer(s) for comparison that should be overlaid on the underlying base layer on the right-hand side of the swipe bar. In this example, by selecting the *1974 aerial imagery* in the *Swipe Tool window*, the County layer and 2015 imagery will remain to the right-hand side of the swipe bar while any layers turned on in the *Swipe Tool Window* will remain to the left-hand side of the swipe bar.

Swipe Window



Swipe Window

Step 3 | Use the slider located in the middle of the application to compare the imagery. Drag the slider to the left or right.



Step 4 | To change layers turn on/off other layers and repeat step 2.

To stop using the *Swipe Tool*, click again on the Swipe button on the main menu on the top to close it and return to the map.

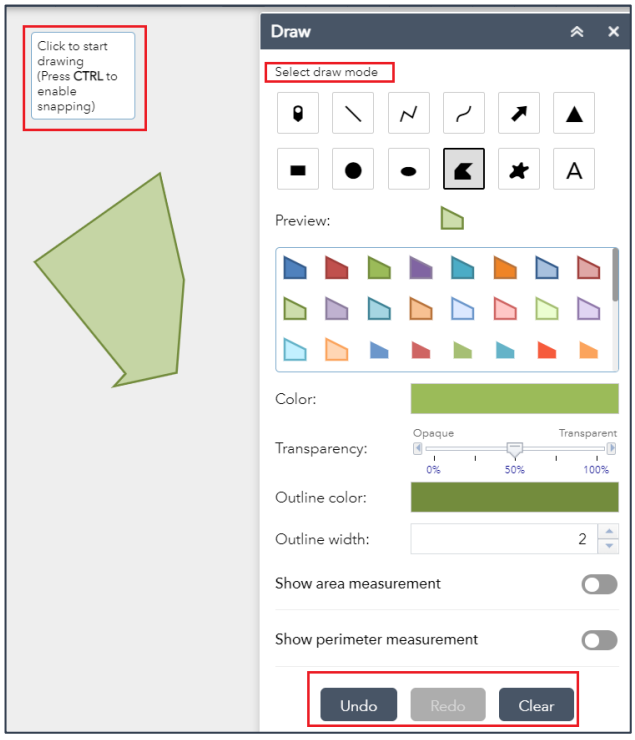
Draw

To temporarily mark up the map and draw a point, polygon, shape of text, use the draw tool found on the main menu on the top right.

Draw Tool Location

To activate the Draw Tool, click on the draw button shown above and the window will appear. Select the shape desired, customize the color and transparency. Click on the map to start drawing. Double click to finish. Press CTRL to enable snapping to boundaries on the map. There are options to undo, redo, or clear on the bottom of the draw window. *Note: The color and line width must be changed before drawing on the map and cannot be revised once placed on the map.*

Draw Window



Measure

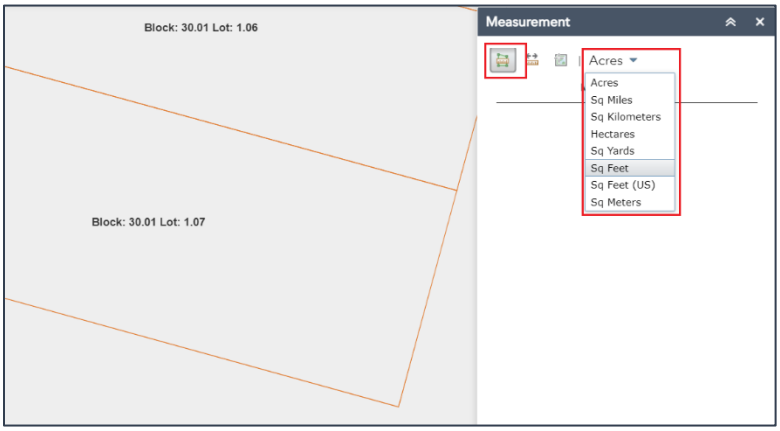
The measuring tool can be used to find the distance, area, or coordinate points of a feature on the map. It is located on the main toolbar at the top of the application.

Measurement Tool

Measure Area

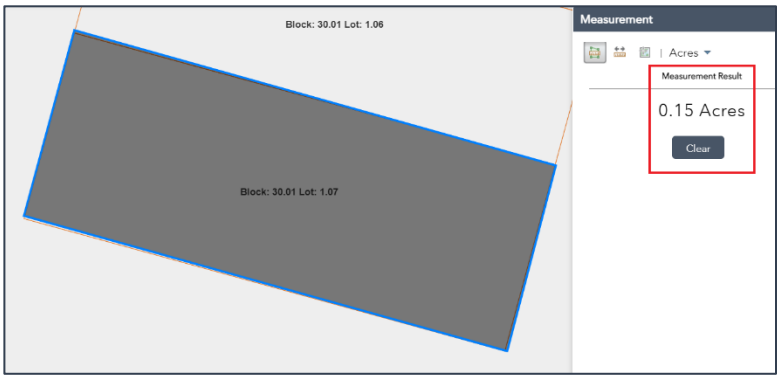
Step 1 | To measure the area of a feature on the map click on the area button and select the units on the right-hand side.

Measurement Tool – Acres



Step 2 | Select the area button and click on the map to begin measuring. Continue drawing the polygon and double click on the at the last point. The results will display in the window. To start a new polygon, click on the *clear* button and the *area* button and start again.

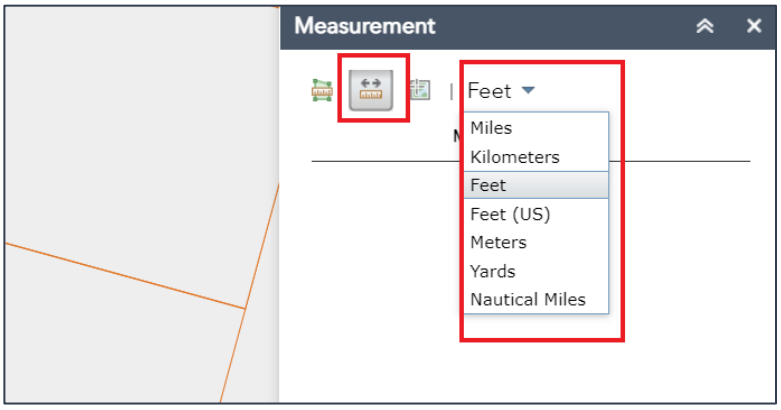
Measurement Tool Results



Measure Distance

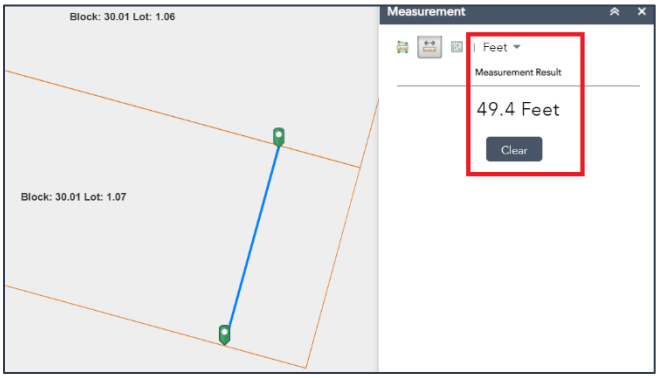
Step 1 | To measure the distance of a feature on the map click on the *distance* button and select the units on the right-hand side.

Measurement Tool – Distance



Step 2 | Select the *distance* button and click on the map to begin measuring. Continue drawing the line and double click on the at the last point. The results will display in the window. To start a new line, click on the *clear* button and the *distance* button and start again.

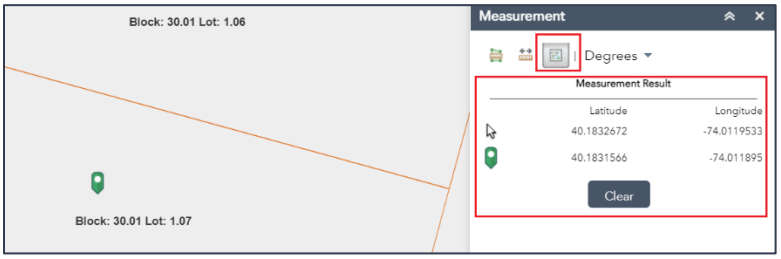
Measurement Tool Results



Get Location (XY Coordinates)

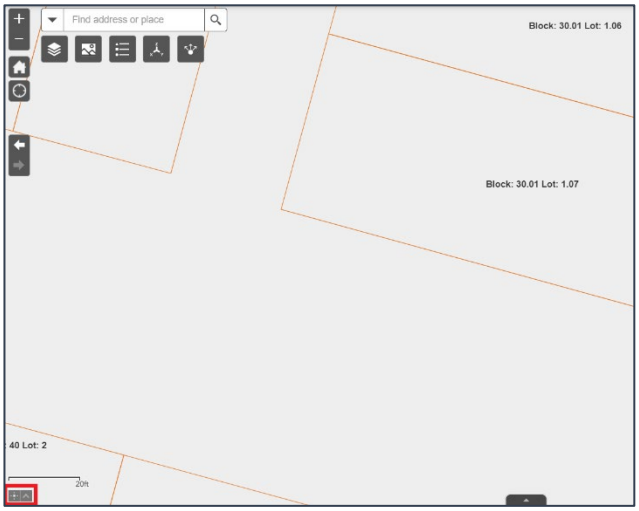
To obtain the XY coordinate on the map, can use the *measurement tool* or the *coordinate tool*.

Measurement Tool – Location (XY Coordinates)



Option 1 | Select the *location* button and click on the map to obtain the XY Coordinates. The results will display in the window. The green marker displays the XY coordinates on the map and the cursor changes as the mouse moves on the map. Select **clear** to start over and place a different point. The *measurement tool* will give location coordinates in WGS 1984 (Decimal Degrees), there is an option to change the coordinate system to NJ State Plane by clicking on the tool on the bottom left of the application.

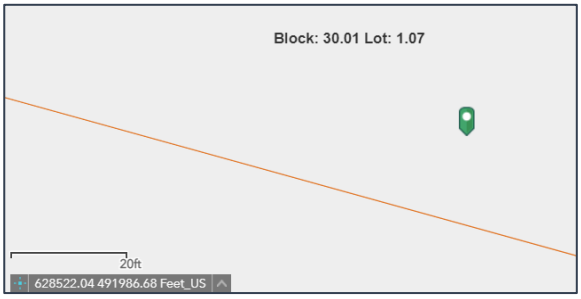
Coordinate Finder



Option 2 | Click on the icon on the bottom left of the application and select the coordinate system desired.

Select Coordinate System

Click on the map to create a marker. The coordinates will be displayed on the bottom left-hand side of the application.



Add Data Tool

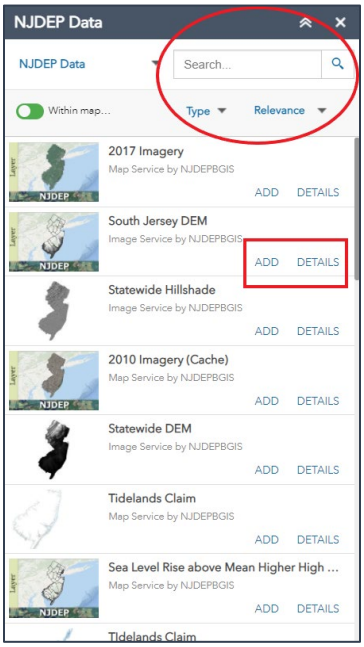
The *Add Data Tool* is a tool that can be used to add other GIS layers to your map. This data can be from NJDEP, ArcGIS Online, other GIS data from another web map service, or local data of your own (i.e. a shapefile). Note that there are some limitations of bringing in a local GIS dataset: It cannot be more than 1,000 features or items inside a shapefile. Additionally, if adding a shapefile, it must be zipped.

Any extra data layers added in the application will be temporary and will not stay in the application when the application is closed and reopened.

The *Add Data Tool* is located on the main menu bar on the top right.

Add Data Tool Location

Add NJDEP Data

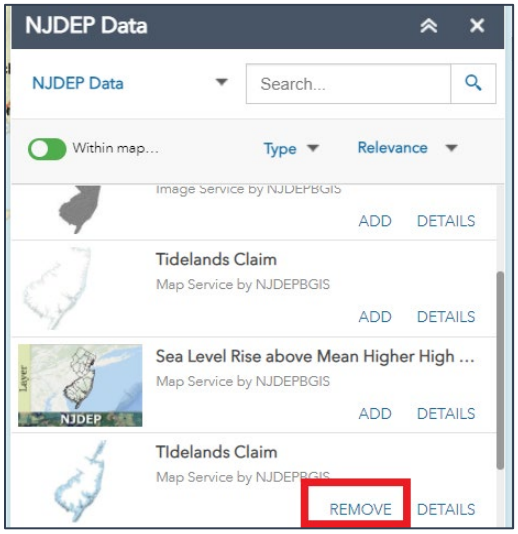


Option 1|Step 1 *Add DEP Data* To activate the window, click on the button shown above and select *add DEP data*. This will enable the search window to appear for any data within the NJDEP Enterprise.

Search by typing in the name or keywork in the search bar on the top right. Sort the results by type or relevance.

Click the 'ADD' button to bring it into the map or the 'DETAILS' button to view the metadata.

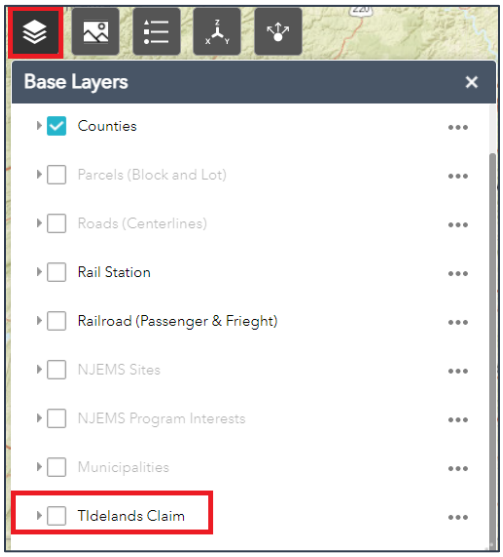
Remove NJDEP Data



Option 1|Step 2 Once added, the layer will be placed in the map. Click on the 'REMOVE' button in the NJDEP Data Window next to the layer if the layer is no longer needed in the map (see figure on the left).

To turn the layer off (but not remove it) the layer will be at the bottom of any grouped layer such as base layers (see figure on the right).

Layer Location



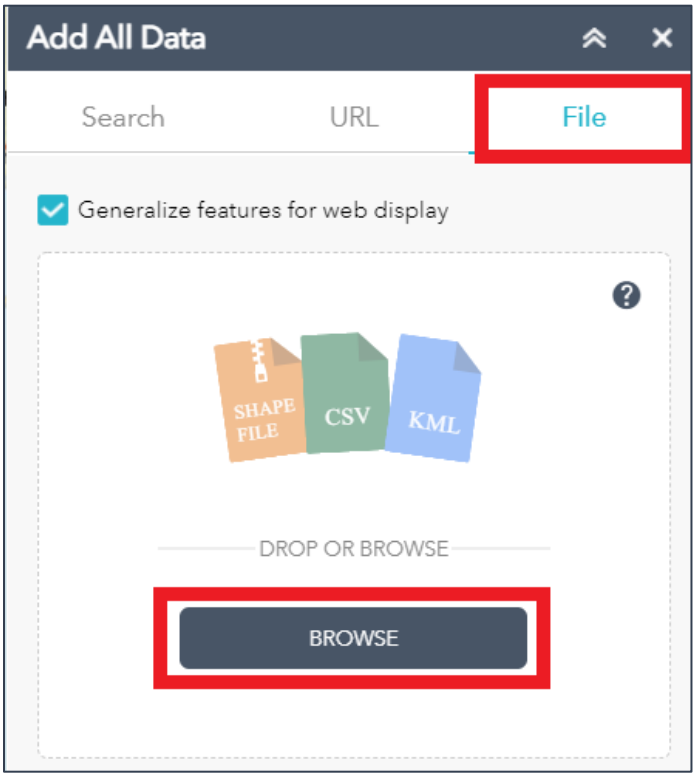
Add All Data

Option 2| ***Add all Data*** To activate the window, click on the button shown above and select *add all data*. Search for data within the NJDEP Enterprise, ArcGIS Online, or add a local dataset.

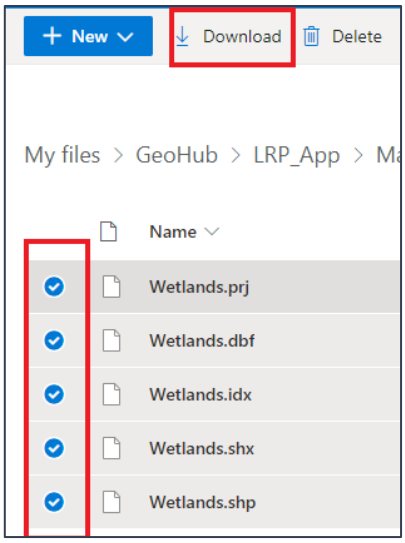
- Searching by NJDEP enterprise or ArcGIS Online can be achieved by the same steps as option 1.
- Insert a link to a GIS rest service, by copying and pasting it into the *URL* tab in the window options.

In this example we will focus on the third option: Add a local dataset.

To add a local dataset, the GIS file must be a zipped shapefile (with under 1,000 features), a CSV, or KML file.



Folder Location



Option 2|Step 1

Let's practice. **Save a shapefile to any location and zip the file**. A Shapefile consists of multiple files as shown on the left. Select all the files and click download.

Note: A KML file (from google Maps) or a CSV file does not have to be zipped. A CSV file has to have a column with an address or latitude and longitude.

Add Data Tool Shapefile

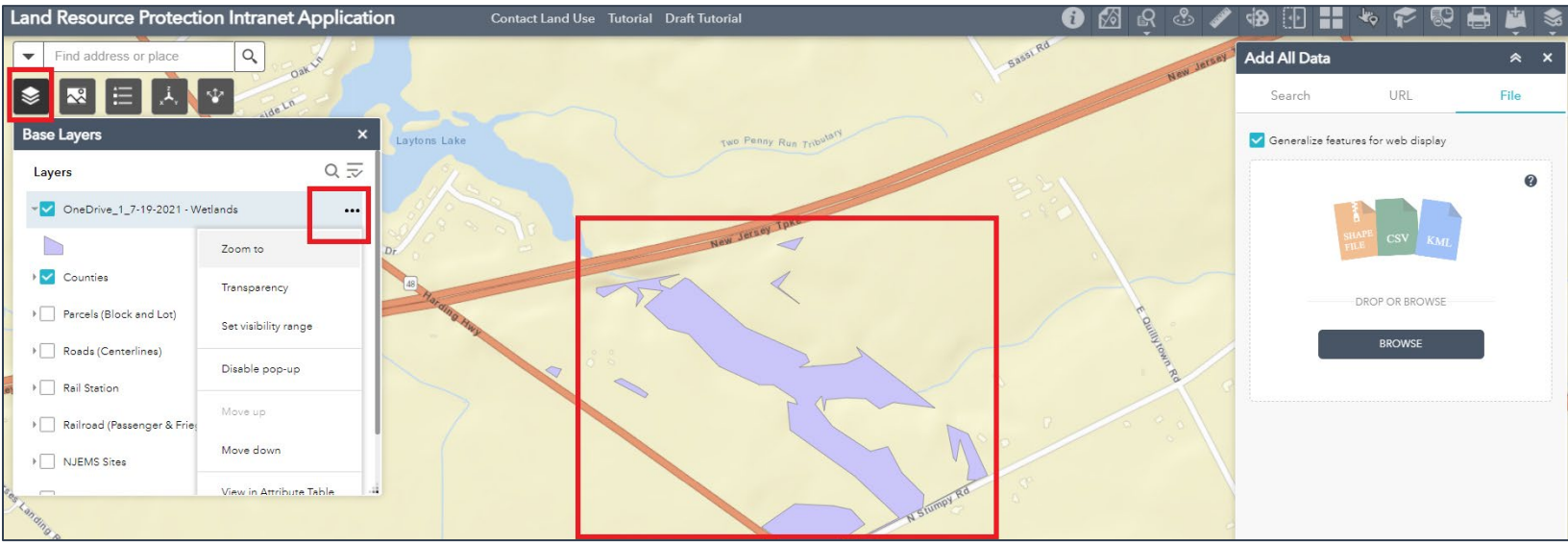
Option 2|Step 2

Open the *Add All Data* window and click on file. Click browse and choose the **zipped** shapefile saved to a local PC or drag the file into the window.

Option 2|Step 3

Once the data is added (if there were no issues with the shapefile, KML, or CSV) the shapefile will automatically show up on the map. Find it in any of the group layers such as *base layers* to turn it on/off and click on the three dots to the right of the layer to change transparency or the order of the layer.

Add Data Tool Results



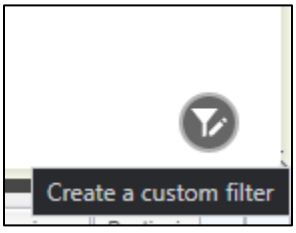
Turn the layer on/off in the grouped layer list by checking/unchecking the box next to the layer. Once the application is closed the data will not remain in the application the next time it is opened.

Custom Filter Tool

The Filter tool allows users to limit visibility of features in a layer. Only features that meet the set criteria will be visible in the map.

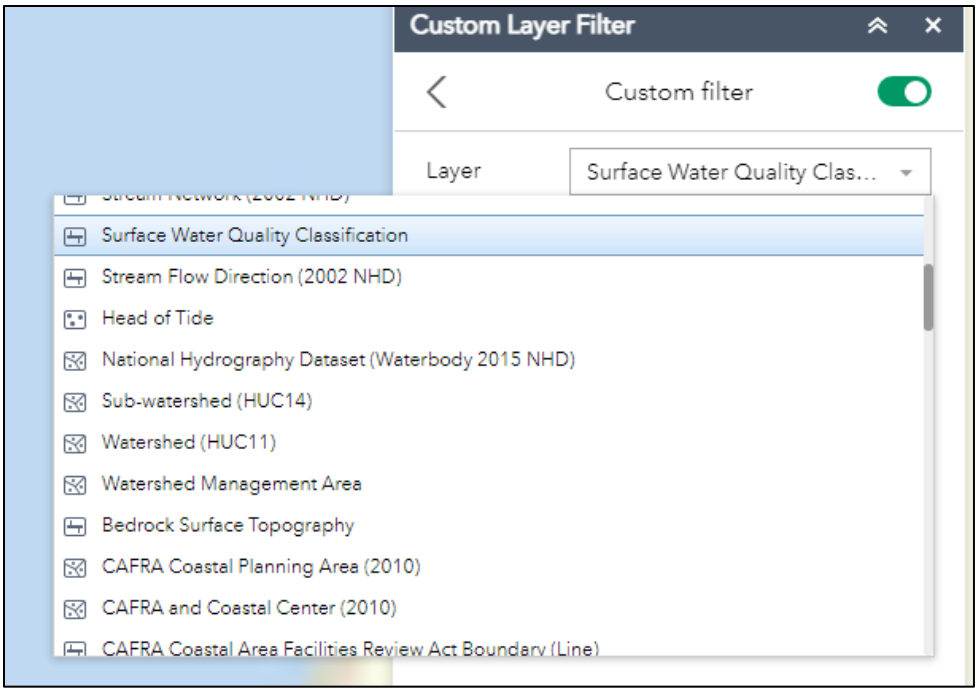
Print Tool Location

Step 1 | Open the *custom filter tool* and select the filter button on the bottom right of the tool window.



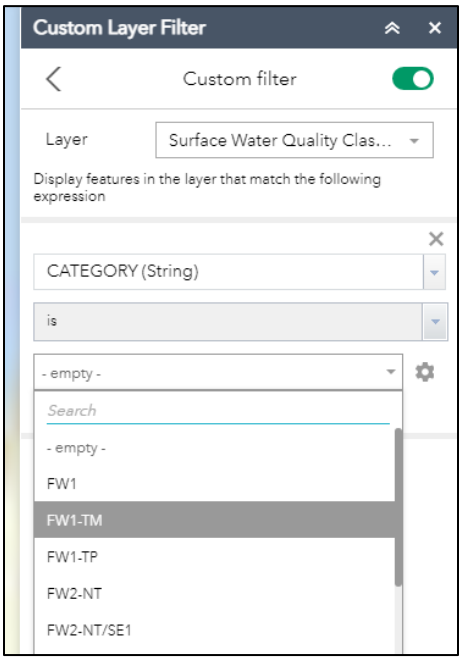
Step 2 | Select the layer of interest from the drop-down menu. In this example, we will use the *Surface Water Quality Classification Layer*.

Layer Selection



Building an Expression

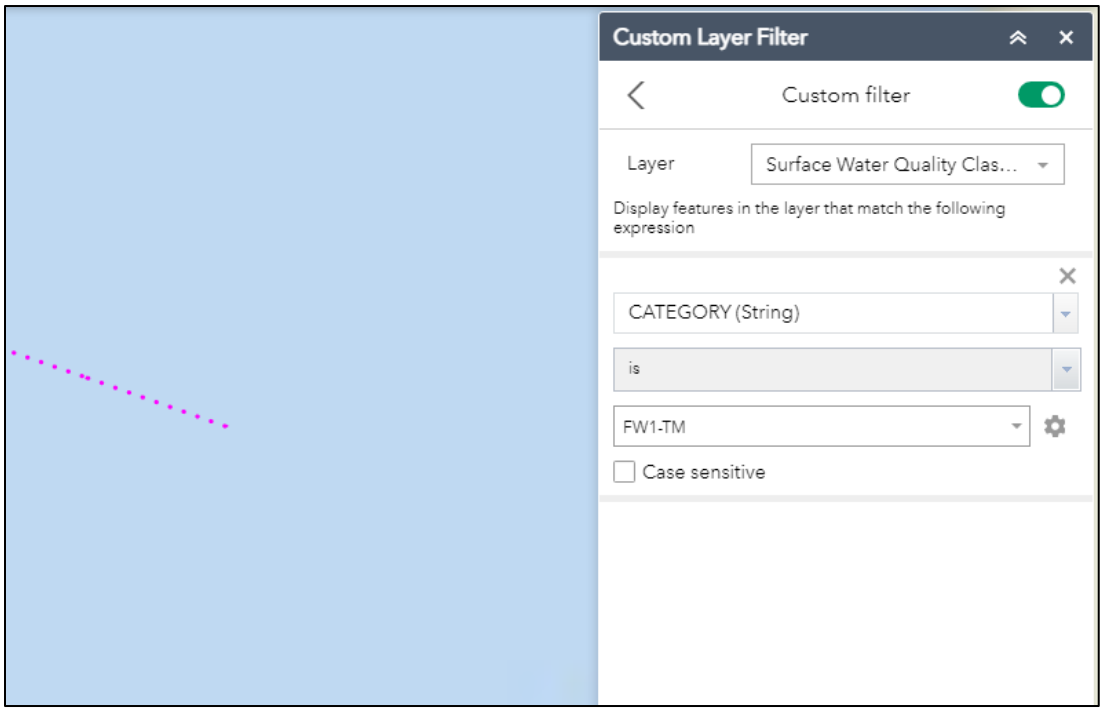
Step 3 | Select *Add expression* or *Add Set* (to select multiple parameters).



Step 4 | Select *Add expression* or *Add Set* (if you need to select multiple parameters). Select the field of interest and use the *unique value* option (located in the gear icon) to select from a drop-down list or type in the desired information.

Step 5 | The map will now only show what was filtered by the expression.

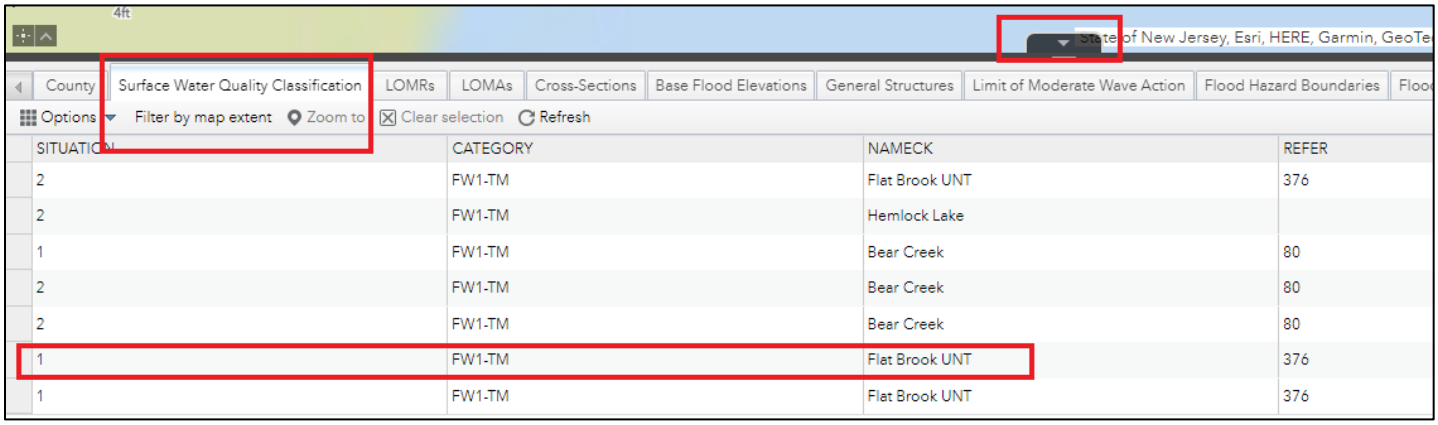
Filtered Layer



Step 6 | To see the results of the filter, open the attribute table on the bottom of the application and

select the layer of interest. A list of filtered data will appear. To zoom into a feature, double click on the item in the list.

Filtered Layer in the Attribute Viewer



Print Tool

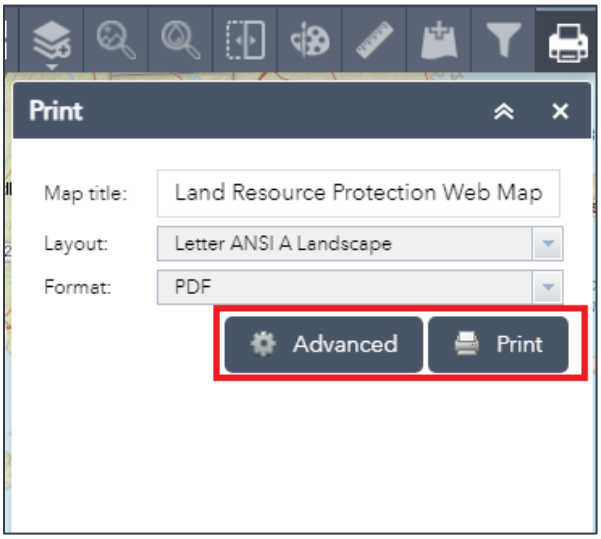
The *print tool* will generate a PDF of the current extent and visibility of layers that are currently turned on.

Find the location of the *print tool* on the top of the application in main tool bar.

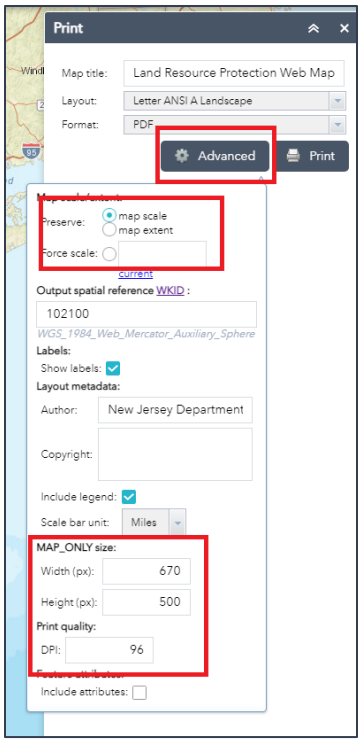
Print Tool Location

Step 1 | Open the *print tool*. Change the title of the map name in the map title area. Change the layout of PDF by selecting the layout options.

Print Tool Window



Advanced Printer Options

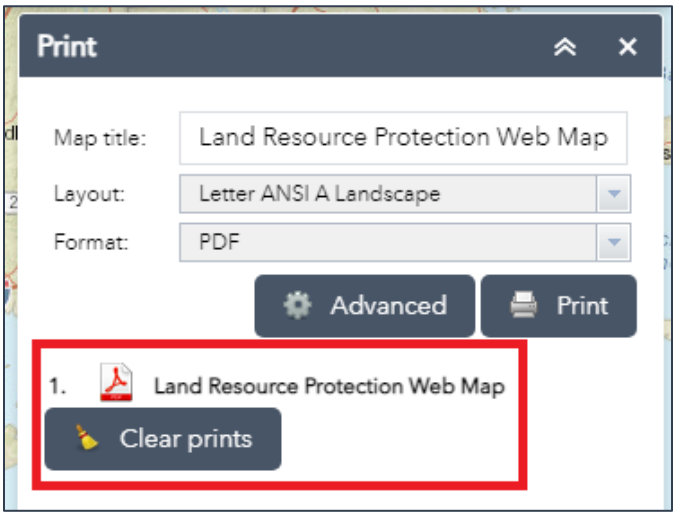


Step 2 | Either customize setting in the PDF by clicked *Advanced* or click print when ready.

Some options include:

- Changing the map scale or extent
- Showing labels on the map
- Scale Bar
- Map size (this will only change in the Map_ONlY layout)
    - DPI (resolution)
- *Attributes **this function does not currently work in the tool.*

Printer Options



Step 3 | Click Print when ready. The PDF will show up when ready for download. Click on the icon and save the PDF or Print it.

Click *Clear prints* if the PDFs that were created are no longer needed or saved to another location.

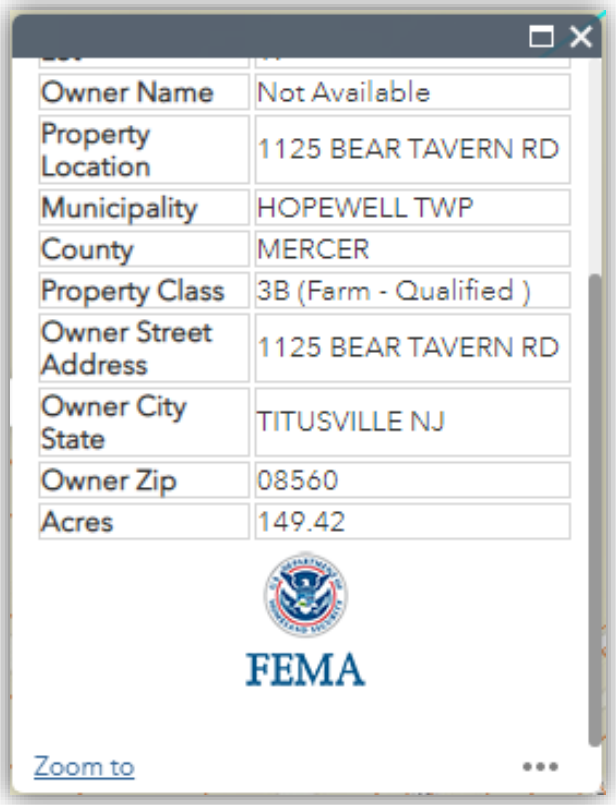
Tips, Tricks, & Quick Links

Saving a Site Location

While you cannot maintain a personal GIS layer, you can create a link to a site, create a marker label, and save layer visibility. You can save the link in an excel or word document where you keep track of files. See the *Share Tool* for step-by-step instructions.

Links to FEMA in Pop-Ups

There is a link to the FEMA Map Service Center located the pop-up in the parcel layer. Click on icon under the parcel information and the link will open the FEMA Map Service Center website to the location of the parcel.

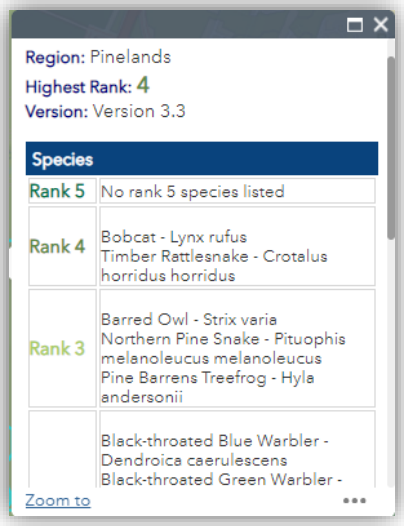


Customized Pop-Ups

There are many customized pop-ups in this application, however, here are a few that provide additional information:

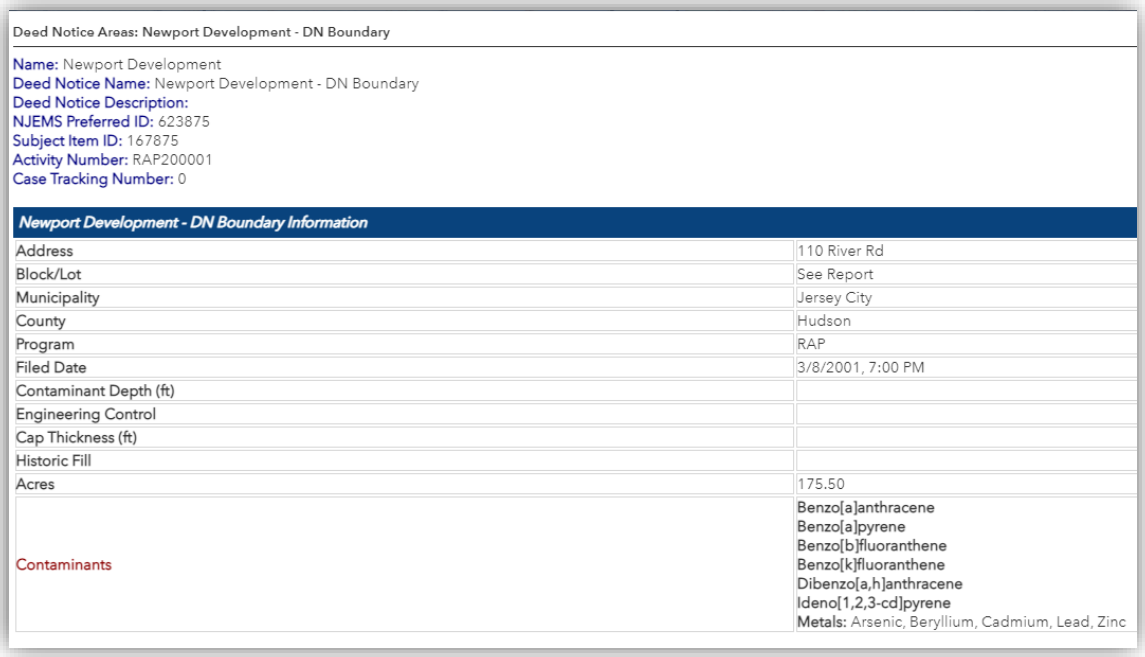
Landscape Project 3.3 (T&E)

This pop-up contains the rank and species listed in the landscape project layer.



Deed Notice Areas

This layer has a pop-up with information associated with deed notices included the contaminants that can be found onsite.



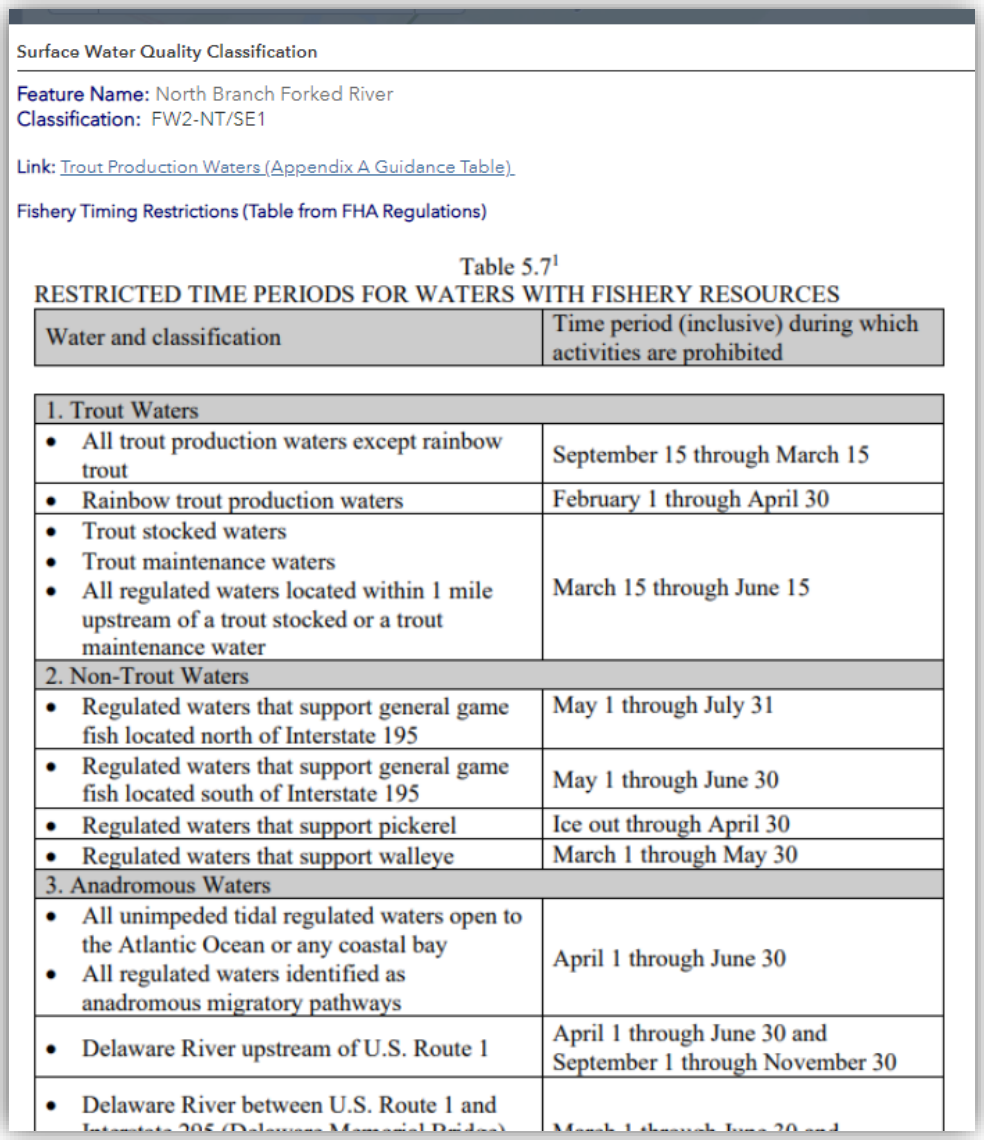
Deed Notice Areas: Newport Development - DN Boundary

Name: Newport Development
Deed Notice Name: Newport Development - DN Boundary
Deed Notice Description:
NJEMS Preferred ID: 623875
Subject Item ID: 167875
Activity Number: RAP200001
Case Tracking Number: 0

Newport Development - DN Boundary Information	
Address	110 River Rd
Block/Lot	See Report
Municipality	Jersey City
County	Hudson
Program	RAP
Filed Date	3/8/2001, 7:00 PM
Contaminant Depth (ft)	
Engineering Control	
Cap Thickness (ft)	
Historic Fill	
Acres	175.50
Contaminants	Benzo[a]anthracene Benzo[a]pyrene Benzo[b]fluoranthene Benzo[k]fluoranthene Dibenzo[a,h]anthracene Ideno[1,2,3-cd]pyrene **Metals:** Arsenic, Beryllium, Cadmium, Lead, Zinc

Surface Water Quality Classification (SWQC) & Fisheries Restrictions

This layer shows the associated information to the SWQC layer but also provides tables and links to fishery timing restrictions.



Surface Water Quality Classification

Feature Name: North Branch Forked River
Classification: FW2-NT/SE1

Link: Trout Production Waters (Appendix A Guidance Table)

Fishery Timing Restrictions (Table from FHA Regulations)

Table 5.7[1]
RESTRICTED TIME PERIODS FOR WATERS WITH FISHERY RESOURCES

Water and classification	Time period (inclusive) during which activities are prohibited
1. Trout Waters	
• All trout production waters except rainbow trout	September 15 through March 15
• Rainbow trout production waters	February 1 through April 30
• Trout stocked waters • Trout maintenance waters • All regulated waters located within 1 mile upstream of a trout stocked or a trout maintenance water	March 15 through June 15
2. Non-Trout Waters	
• Regulated waters that support general game fish located north of Interstate 195	May 1 through July 31
• Regulated waters that support general game fish located south of Interstate 195	May 1 through June 30
• Regulated waters that support pickerel	Ice out through April 30
• Regulated waters that support walleye	March 1 through May 30
3. Anadromous Waters	
• All unimpeded tidal regulated waters open to the Atlantic Ocean or any coastal bay • All regulated waters identified as anadromous migratory pathways	April 1 through June 30
• Delaware River upstream of U.S. Route 1	April 1 through June 30 and September 1 through November 30
• Delaware River between U.S. Route 1 and	