

# **i-MapNJ DEP**

## *Tutorial for New Users*

**New Jersey Department of Environmental Protection**

**Bureau of Geographic Information Systems**

**Trenton, New Jersey**

**August 2007**

# Table of Contents

## [Introduction](#)

## **[Chapter 1: Getting Started with i-MapNJ DEP](#)**

- 1.1 [Getting Started](#)
- 1.2 [User Interface Components](#)
  - 1.2.1 Map View Frame
  - 1.2.2 Data Layers List
  - 1.2.3 Legend
  - 1.2.4 Map Tools Toolbar
  - 1.2.5 Query Frame
  - 1.2.6 Data Descriptions and Help
  - 1.2.7 Status Bar
  - 1.2.8 Query / Selection Results Window

## **[Chapter 2: Using the Query Frame Question](#)**

Query: Find Location of Interest

- 2.1 [by Address](#)
- 2.2 [by Coordinates](#)
- 2.3 [by County](#)
- 2.4 [by Municipality](#)
- 2.5 [by Place Name](#)

## **[Chapter 3: Printing a Map](#)**

## **[Chapter 4: Exercise](#)**

- 4.1 Launching the i-MapNJ DEP Application
- 4.2 Turning on Data Layers
- 4.3 Viewing the Legend
- 4.4 Map Tools
  - 4.4.1 zoom in
  - 4.4.2 print
- 4.5 Using the Query
- 4.6 Printing a Map

## **[Chapter 5: Help Information](#)**

## **[Chapter 6: Frequently Asked Questions](#)**

- 6.1 [Frequently Asked Questions](#)
- 6.2 [GIS Layer Availability at Different Map Scales in i-MapNJ DEP](#)

# Introduction

## *Overview*

NJDEP has regulatory standards and statutory responsibilities to: protect water and natural resources, provide the highest scrutiny in environmentally sensitive regions, and streamline the review of regulated activities. With i-MapNJ DEP, a unique easy-to-use application, users can view and query the best of the NJDEP's Geographic Information System (GIS) data. Homeowners can find out what's in their backyard; environmental organizations, planners, realtors, and builders can identify open space, various regulatory boundaries, sensitive lands, watersheds, and much, much more. The i-MapNJ DEP application updates the GIS layers found in the other NJDEP i-MapNJ applications including, [i-MapNJ NJEMS](#). (The i-MapNJ DEP application does not provide a link to the NJEMS enterprise NJDEP database however.)

Access to i-MapNJ DEP is through the home page of NJDEP BGIS web site at <http://www.nj.gov/dep/gis>. Click on Interactive Mapping and then i-MapNJ DEP to launch the site's splash page.

Desktop GIS software does not need to be installed on the user's PC to run the i-MapNJ DEP application. All that is needed is a web browser. This application performs more reliably in Microsoft's Internet Explorer and it is recommended that users view the application using version 6.x or higher. *Since the application uses popup windows, users should disable any popup blocking software. Users should also remove or disable any Google or Yahoo toolbars in the browser.*

The purpose of this tutorial is to provide an easy to follow guide allowing new users to become familiar with the application's basic capabilities and functionality. Elements of the application to be covered include:

- **Launching the i-MapNJ DEP application**
- **i-MapNJ DEP User Interface Components**
- **Finding a Location (point) of Interest**
- **Printing a Map**
- **Help Information**

The tutorial is divided into sections where these topics are explained, followed by an exercise demonstrating the functionality. Included also are screen shots to provide additional clarity.

For users that wish to explore interactive mapping further, go to the NJDEP GIS website (<http://www.nj.gov/dep/gis>) and click on “**Interactive Mapping**”.

# Chapter 1

## Getting Started with i-MapNJ DEP

### *And the User Interface Components*

### 1.1 Getting Started

The application can be accessed from the i-MapNJ DEP splash page. A link to the splash page can be found on the NJDEP BGIS web site: <http://www.nj.gov/dep/gis> under Interactive Mapping.

The splash page for the i-MapNJ DEP application provides a basic introduction to the application and useful links. Included is a tutorial link, which takes the user to the i-MapNJ DEP tutorials, which includes this document along with a tutorial for Permitting Water Wells. The tutorial documents can be saved or printed to provide guidance for new users.

After launching the application the user should see the i-MapNJ DEP user interface.

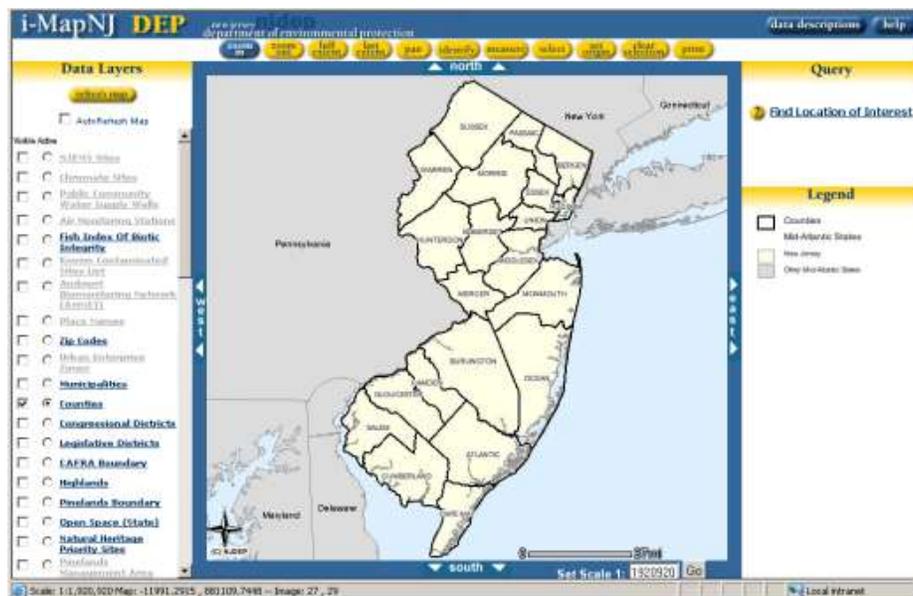


Figure 1-1. i-MapNJ DEP application user interface

The user interface consists of the Map View Frame in the center, the Map Tool Buttons above the Map View Frame, the Data Layers List that lists the data layers to the left of the Map View Frame, and the Query and the Legend Frames to the right of the Map View Frame. Query results are displayed in a separate window. The refresh map button is just under the Data Layers title bar at the top of the Data Layers List.

## 1.2 User Interface Components

### 1.2.1 Map View Frame

The Map View Frame contains the view where the map graphics will be rendered. These include the visible GIS data layers, the scale bar, and the north arrow. The application displays any combination of GIS data layers in Map View Frame at a user chosen location and displays the map results of the “Find Location of Interest” query.



Figure 1-2. i-MapNJ DEP application Map View Frame.

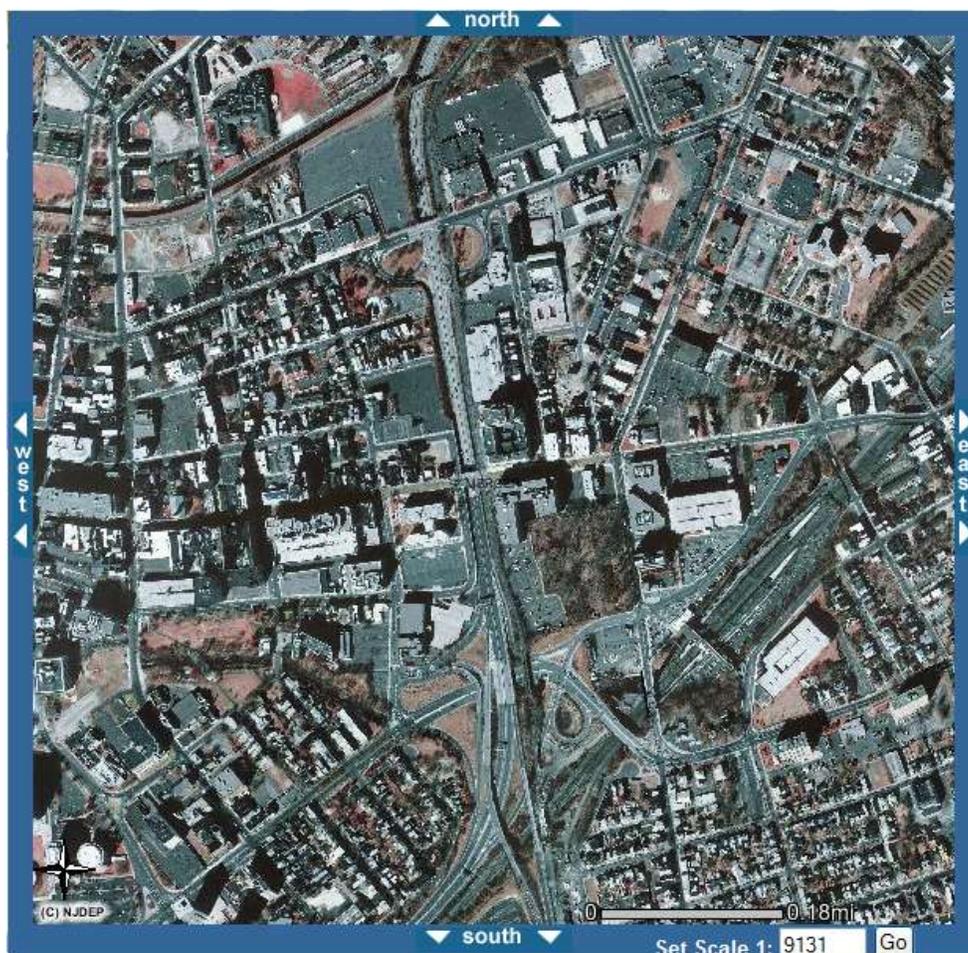
### 1.2.2 Data Layers List

The Data Layers list is along the left side of the Map View Frame. There are 59 GIS data layers available for viewing in this i-MapNJ DEP application. Data layers can be made "visible" in the Map View Frame by checking their respective checkboxes in the Data Layers List and clicking on the “refresh map” button [refresh map](#), found at the top of the Data Layers List. As an option, users can check the *Auto Refresh Map* checkbox. This will enable the layers in the layers list to turn on without the users having to click the refresh map button. Users may turn on as many as 20 data layers at one time, however the map can become difficult to read if too many are visible at the same time.

Data descriptions for each layer may be accessed by clicking on the data layer's name or by clicking on the “data description” button [data descriptions](#) on the upper right banner of the application and then choosing a layer. A hyperlink to the “Full Metadata” is at the end of each description.

Note that not all data layers are available to the user at all times. GIS data layers in the i-MapNJ DEP application have [scale dependencies](#) allowing them to be available for display only at defined scales. Some data layers are available at large scales (zoomed in) but not available at small scales (zoomed out). GIS data layers that are available at the current scale are highlighted (in dark blue) in the Data Layers List. Those layers that are not available for viewing are not highlighted (grayed out). User can see the current scale in the “Set Scale 1: “ tool textbox located near the lower right corner of the map view frame or in the status bar.

As a user zooms into a smaller and smaller area, the highlighted (available) layers and the grayed out (unavailable) layers will change. As the user zooms in and out, these relationships change and hence the layers available for view and query change. Generally, as the user zooms in, more layers are available as in Figure 1-3.



*Figure 1-3. Several layers, such as the Aerial Photos 2002 layer, are only available at larger map scales (i.e., when zoomed to a smaller area).*

While many GIS layers can be displayed at one time, the user can only designate one GIS layer as the **active** layer. A user can set the active layer by clicking on the layer's corresponding radio button. The radio button is next to the listed data layers and is round. To activate it, click in the center of the circle. What is special about the active layer is that some of the GIS toolbar tools act only on the active layer. For instance, if the user wants to use the “identify” tool  to

find out some information on a segment belonging to the Streams data layer, they must first set the Streams layer as the active layer before they use the identify tool.

The list of GIS layers available in the i-MapNJ DEP application includes those listed in Table 1.1.

• Aerial Photos 1930	• Pinelands Boundary
• Aerial Photos 1995/97	• Pinelands Management Area
• Aerial Photos 2002	• Place Names
• Air Monitoring Stations	• Public Community Water Supply Wells
• CAFRA	• Quarter Quad Grid
• Category One Waters	• Roads (Tele Atlas)
• Chromate Sites	• Sewer Service Areas
• Congressional Districts	• Shellfish Classification
• Counties	• Soils (SSURGO)
• Deed Notice Areas	• State Plan Centers
• Delaware and Raritan Canal Commission Review Zones	• State Planning Areas
• Groundwater Contamination Areas (CEA)	• Streams
• Groundwater Contamination Areas (CKE)	• Sub-Watersheds (HUC14)
• Highlands	• Surface Water Quality Standards
• Impervious Surface % (2002)	• Urban Enterprise Zones
• Known Contaminated Sites List	• Water Bodies
• Land Use 1995	• Watershed Management Areas
• Land Use 2002	• Watersheds by Name (HUC11)
• Land Use Change 1995-2002	• Well Head Protection Areas (Community)
• Mid-Atlantic States	• Well Head Protection Areas (Non-Community)
• Municipalities	• Well Program Grid
• Natural Heritage Priority Sites	• Wetlands (2002)
• NJEMS Sites	• Zip Codes
• Open Space (State)	

*Table 1-1. The GIS data layers in the Table of Contents*

### 1.2.3 Legend

The map Legend is always available in the lower right column, below the Query.

The Legend displays the names of any data layers that are turned on (visible) and the symbols or shade patterns associated with the data layers. The symbols and shade patterns associated with the data layers in i-MapNJ DEP cannot be changed by users.

### 1.2.4 Map Tools Toolbar

The Map Tools Toolbar, above the Map View Frame allows users to perform some basic but useful GIS analysis. The following table (Table 1.2) summarizes the function of each tool:

Button	Toolbar Name	Toolbar Description
	<b>Zoom In</b>	Zooms in on the position clicked on or the box dragged on the map.
	<b>Zoom Out</b>	Zooms out on the position clicked on or the box dragged on the map.
	<b>Zoom to Full Extent</b>	Zooms to the full extent of the map.
	<b>Previous Extent</b>	Zooms to the last previous extent. Inactive until user changes extents.
	<b>Pan</b>	Moves the map as the user drags the pointer across the map.
	<b>Identify</b>	Allows the user to click a feature of the active data layer, and see a list of its attributes.
	<b>Measure</b>	Allows a user to measure distances on the rendered map.
	<b>Select by Rectangle</b>	Allows the user to click and drag a rectangle to select group of features on a rendered map.
	<b>Set Origin</b>	Sets a point location on the map view and displays its New Jersey State Plane coordinate in US survey feet (NAD 83).
	<b>Clear Selection</b>	Clears the selected group of features from the active data layer, as well as measure and set origin graphics.
	<b>Print Map</b>	Sends the contents of the map window to a map output page. The "Print Map" window allows the user to enter a title for their map and create a print page at one of three standard sizes, or a custom print size. The map output page gets generated in a separate browser window. Use the browser's File>Print menu to send the map to the printer. Note: The user should change the printer layout to landscape, and select the proper paper size.
	<b>Data Descriptions - Metadata</b>	Brings users to a Data Descriptions page. Users can select a dataset from the listing at the top of the page or scroll down to browse all of the descriptions of the datasets. After the basic data description, a link is provided to the complete metadata.
	<b>User Help</b>	Brings users to a Help Topics page. Users can then select a Help Topic to view.
	<b>Refresh Map</b>	Refresh map redraws the Map View and renders a new map image displaying chosen visible data layers.
<input checked="" type="checkbox"/> AutoRefresh Map	<b>AutoRefresh Map</b>	Refreshes the map display automatically each time a layer is turned on or off.
	<b>Context sensitive Help</b>	Opens a help file related to the page the user is viewing.
	<b>Pan North</b>	Moves the map north.
	<b>Pan South</b>	Moves the map south.

	<b>Pan West</b>	Moves the map west.
	<b>Pan East</b>	Moves the map east.
	<b>Set Scale</b>	Allows the user to zoom to a user specified map scale.

Table 1.2. i-MapNJ DEP Map Tool Functions

### 1.2.5 Query Frame

The Query Frame has one query or question to the right of the Map View Frame. The Query gives the user a quick start to finding an area in the state to zoom into quickly. When the user clicks on, “Find Location of Interest,” a frame pops up with five choices, Address, Coordinates, County, Municipality, and Place Name. To make a choice click the appropriate radio button and proceed.

### 1.2.6 Data Descriptions and Help

The “Data Description” button  is found in the upper right hand corner of the application, just above the Query Frame. By clicking on this button, a separate window appears with a list of all the data layers found in the Data Layers list. Each data layer name is hyperlinked to a paragraph that gives a definition of what each particular data layer represents. This is a limited description. To find out more information about each layer, click on the “full metadata”  hyperlink found at the end of each description.

Full metadata gives a standard Federal Geographic Data Committee (FGDC) description of each layer. The format of each FGDC metadata record is the same and gives the user important information including Identification Information, Data Quality Information, Spatial Data Organization Information, Spatial Reference Information, Entity and Attribute Information, Distribution Information, and Metadata Reference Information. To learn more about FGDC metadata, go to <http://www.fgdc.gov/>.

Click on the  button in the upper right had corner of the application. The i-MapNJ DEP Help Topics window opens, providing a list of topics the user may view. By

selecting among the help topics the user can find information on procedures to perform specific activities and view frequently asked questions. There is also context sensitive help  in strategic places in the application to provide pertinent information to the current window.

Each GIS data layer in the application is generally available for download as a shapefile. If the user wishes to download any of the layers, visit: <http://www.nj.gov/dep/gis> and click on Downloads.

### 1.2.7 Status Bar

The Status Bar can be found at the bottom of the screen below the MapView Frame. If you cannot see the Status Bar then close the application, open a new browser window and use it's menus to turn on the Status Bar option. (In Internet Explorer select the **View** menu and check the **Status Bar** Option). Then re-launch the i-Map application. The Status Bar should now be visible. It shows the **scale** at which you are viewing the map (Scale: 1: 12,423), the **coordinates** on the map at your cursor's location New Jersey State Plane (feet) (Map: 420154.2164, 505485.1754) followed by the **image pixel values** (Image: 417, 417).

The map scale can be set interactively using the “Set Scale” tool in the lower right margin of the Map View Frame. Some organizations need to view data at specific scales. The scale of the map is always reflected as the first reference in the Status Bar. Remember that the scale shows that one inch on the map in the Map View Frame equals, in this example, 12,423 inches on the ground.

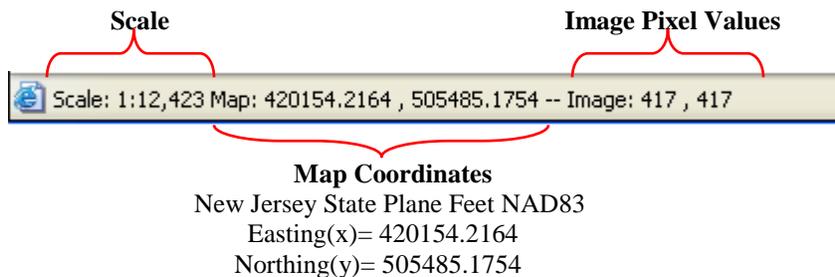


Figure 1-4. Status Bar

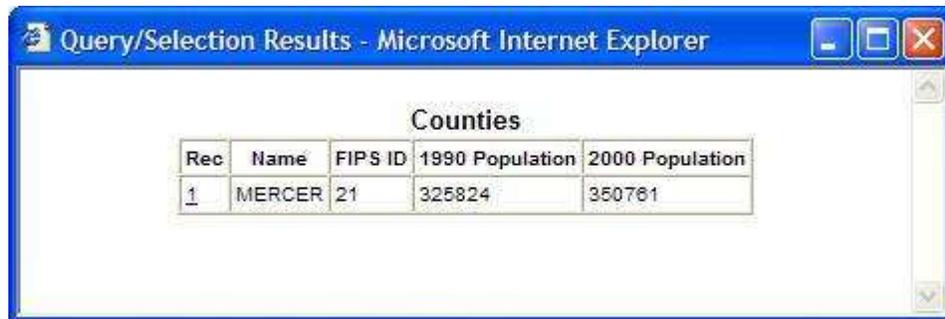
The **Map Coordinates** are always shown in feet and represent the exact location on the ground of where the cursor is on the map. State plane coordinates are very often required by the NJDEP for permits and other documents to give the exact location of a facility or feature on the map. The first coordinate is the Easting or “x” value and the second number is the Northing or “y” value. All coordinates are given in North American Datum, 1983.

Finally the **image pixel values** (Image: 417, 417) are for informational purposes only.

## 1.2.8 Query/Selection Results Window

The Query/Selection Results window is a separate window that displays data records from the active GIS data layer in response to a user query. This window is not visible to the user initially but appears as the result of several user actions. To designate the active layer to query, activate the radio button for that layer by clicking it. Only one GIS layer may be active at a time.

Performing an “identify” tool identify query on a feature belonging to the active layer will open a separate “Query/Selection Results” window that will display data related to the feature. The record(s) displayed will correspond to the features near the location clicked on in the Map View Frame. Tabular data for each GIS data layer will be specific for that layer. A result window may look like Figure 1-5, the result of a query on the GIS layer Counties.



The screenshot shows a window titled "Query/Selection Results - Microsoft Internet Explorer". Inside the window, there is a table titled "Counties". The table has five columns: "Rec", "Name", "FIPS ID", "1990 Population", and "2000 Population". There is one row of data with the following values: "1", "MERCER", "21", "325824", and "350761".

Rec	Name	FIPS ID	1990 Population	2000 Population
1	MERCER	21	325824	350761

Figure 1-5. Tabular Data Window

# Chapter 2

## Using the Query Frame Question

### Query: Find Location of Interest

The defined searches for finding a point to investigate in the i-MapNJ DEP application are found by clicking on the Query “**Find Location of Interest.**” You can find your location of interest by street address, coordinate, county, municipality, or place name. A location of interest can be any point in the state such as a home, a facility, a municipality or any point that you are interested in viewing.

#### 2.1 Find Location of Interest: by Address

The Address Search is designed to retrieve or locate a point representing a single address. The address can be any valid street address that the application can locate in the GIS street file. A user may be very interested in locating where they live or have an interest in a property for which they know the address. Another user might be interested in seeing how close they live to a Category One Water stream. Using the i-MapNJ DEP application, the user can attempt to find this location. The following example demonstrates how to perform this search.

Select Query “**Find Location of Interest**” from the **Query** Frame.

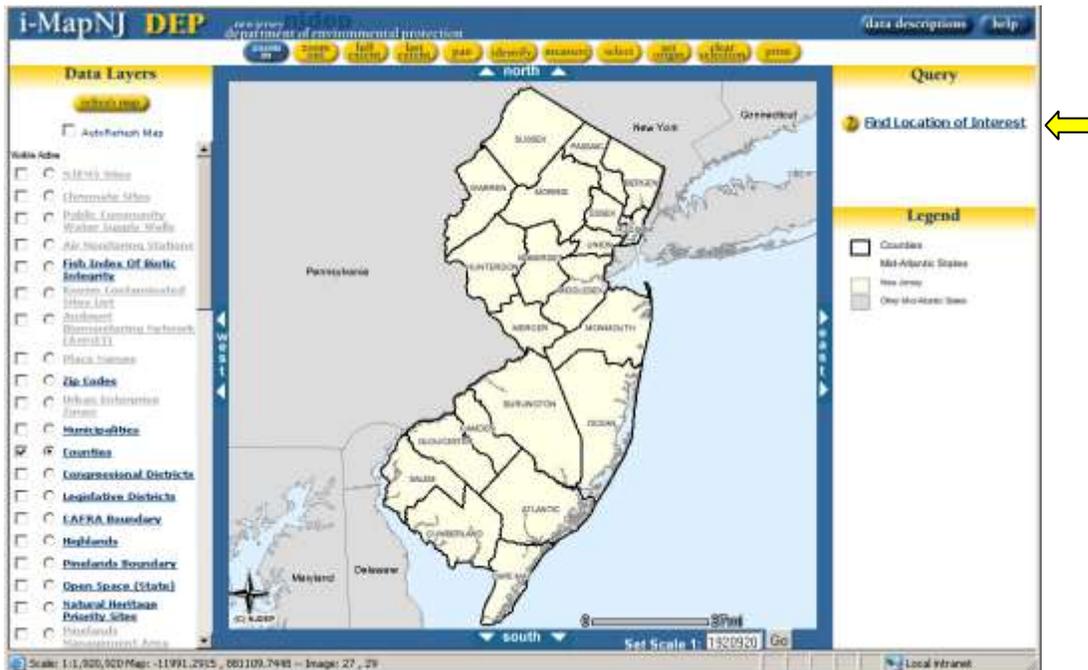


Figure 2.1 Find location of interest

The application provides a window with the five options for finding a location. Select **Address** by clicking the radio button next to it. The window will change and display address fields in which the user may enter an address. Only the house number, street, and zip code are required. When finished click the *find* button.

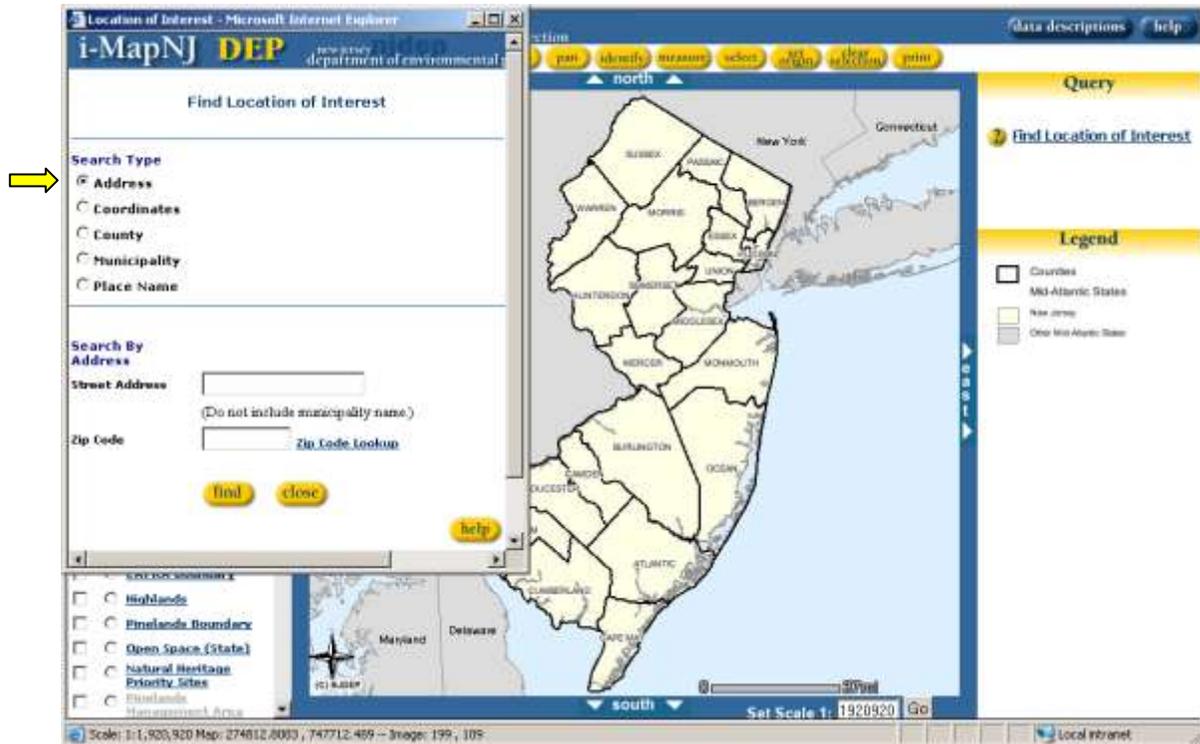


Figure 2.2 Click the radio button for Address and enter the house number, street and zip code.

Number ranges are coded to the road segments that make up the GIS roads layer and are used as the basis to estimate the location of the address entered. A separate *Address Match Candidates* window will appear and indicate to the user whether there was a successful match.

If a single match was found, a single listing will appear in the *Address Match Candidates* window, and an orange star ★ will mark the location on the Map View Frame. Click on the address (blue hyperlink - second column) in the table in the *Address Match Candidates* window to zoom to that location in the Map View Frame.

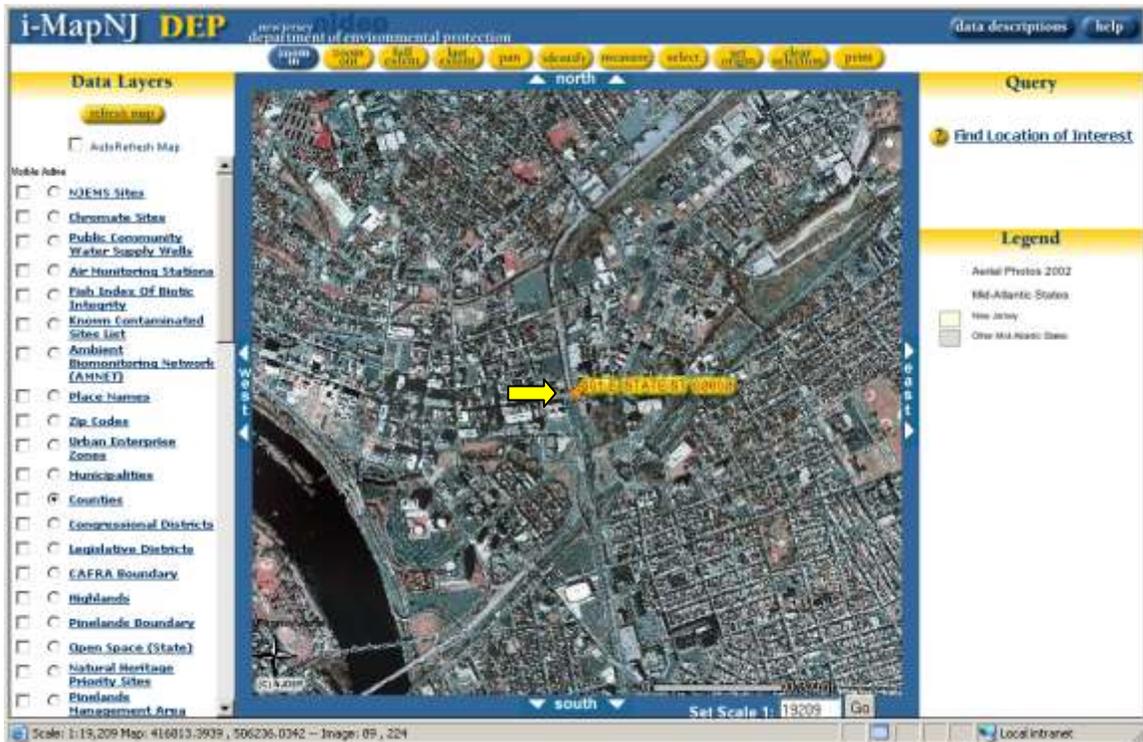


Figure 2.3 Address matched point with aerial imagery.

Sometimes the application will list several address matching possibilities (ranked by score) in the *Address Match Candidates* window and will leave it up to the user to select one of these by clicking on one of the blue underlined hyperlinks. After selecting one address by clicking on the hyperlink, the application will then zoom the Map View Frame to that address location, with the location symbolized with an orange star ★. To the right of the star will be the address.

Not all addresses will match successfully. This is usually due to missing roads or inaccurate coding of address information in the roads layer. Addresses belonging to homes in newer housing developments or in remote rural areas will most likely not match. A user may in this situation try several nearby addresses of older homes to get a match that would be in the neighborhood.

Keep in mind that the address matches are estimated locations, based on an assumed even distribution of addresses along a road segment in the roads layer. Users may see that the marked location can differ greatly from the true location depicted on the aerial photo image.

## 2.2 Find Location of Interest: by Coordinates

The user may also find a location of interest by entering a location designated by a coordinate.

In the “**Find Location of Interest**” window, choose **Coordinates** by activating the radio button next to Coordinates. The screen prompts the user to designate the type of coordinate values that will be entered. The coordinate values can be either New Jersey State Plane in US survey feet, or in latitude/longitude in degrees, minutes, and seconds (both are referenced to North American Datum 1983). The application will not render an accurate location result if any other type of coordinate is entered. Enter the coordinate values and click the *find* button to execute the search. If the coordinate is valid, the point will be set and the Map View Frame will zoom in and indicate the location with an orange colored star ★ on the digital imagery. Note the NJ State Plane coordinate value appears next to the location.

To learn more about coordinates, go to <http://www.state.nj.us/dep/gis> and click on Standards - Mapping and Digital Data Standards (2002) and read NJDEP Mapping and Digital Data Standards (2002).

## 2.3 Find Location of Interest: by County

By activating the **County** radio button in the “**Find Location of Interest**” window, the user is presented with a “**Search By County**” dropdown pick list. Select a county and click the *find* button to execute the search. The application will zoom to that county and outline the county in yellow.

## 2.4 Find Location of Interest: by Municipality

By activating the **Municipality** radio button in the “**Find Location of Interest**” window, the user is presented with two dropdown pick lists, one for county and one for municipality. If the user first selects a county from the “**Within County**” dropdown pick list, the “**For Municipality**” dropdown list will then be populated with only the municipalities in the selected county. Select one and click the *find* button to execute the search. The application will zoom to that municipality and outline the municipality in yellow.

## 2.5 Find Location of Interest: by Place Name

By activating the **Place Name** radio button in the “**Find Location of Interest**” window, the user is presented with a dropdown pick list with over 2,000 places and locales in New Jersey. The place names listed include the name of the county where they are located. Once selected, the application will zoom to the location referenced by the location name, and highlight the point location in yellow.

## Chapter 3

### Printing a Map

Any map displayed in the Map View Frame can be sent to a user's printer. User should consider whether adding (or removing) GIS data layers would improve the map's clarity before printing. If the map's scale is too small and the Aerial Photos from 2002 or 1995/97 are not available for display, consider adding roads and hydrography (Streams and Water Bodies) from the Data Layers List to provide reference data. There are also considerations if you are sending the map to a color or black and white printer. Map data layers with different colored symbols will stand out when the map is printed using a color printer, but may not be easily distinguished when printed in black and white.

The print page is produced in a separate browser window, and it includes the map, the map legend, map scale bar, map title, north arrow, scale and overview map.

To print, click on the “print”  tool. Change the settings as desired in the print settings dialog. You may choose either a predefined output paper size or enter pixel values for the desired output width and height (96 pixels per inch). The maximum output size is 2 MB (i.e. pixel width times pixel height can not exceed 2,048,000).

Click on "Create Print Page" to open a new Browser window with the Map Image, Overview Map Image, and Legend displayed. Use the browser's Page Setup to set the orientation to Landscape and select the correct paper size. Then use the browser's Print menu to send the display to your printer.

If you wish to change any settings after generating the print preview page, you will need to close the print page, return to the main mapping page and create a new print page.

**NOTE:** Certain data layers in this application are [scale dependent](#), in other words, they only draw within a certain scale range. Depending on your computer's screen resolution and the output print size you select, you might see more or fewer layers in the Print Page than you do in the Map View Frame. If this occurs, you can zoom in or out a little in the Map View Frame, select a different print size or change your computer's screen resolution until you get the desired output map.

# Chapter 4

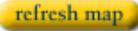
## An Exercise

### 4.1 Launching the i-MapNJ DEP Application

1. The user must first launch their web browser. The i-MapNJ DEP application runs more reliably in Microsoft's Internet Explorer version 6.x and above.
2. Navigate to: <http://www.nj.gov/dep/gis>.
3. Click on the Interactive Mapping link on the left side of the page.
4. Select the i-MapNJ DEP application from the list.
5. The i-MapNJ DEP splash page appears.
6. To launch the application, click on the yellow Launch button near the upper left margin of the page.
7. Click on the Query “Find Location of Interest” and select the Municipality choice from the window. An additional dropdown pick list will then be available for the user to choose a county and then a municipality. Choose your municipality or pick a county first and then pick one of its municipalities. Click the *find* button to execute the search.

### 4.2 Turning on Data Layers

The Data Layers List appears to the left of the Map View Frame. It lists all the layers and highlights in dark blue the currently available GIS layers for display. A GIS data layer may be made visible by clicking the checkbox next to the layer's name, then clicking on the refresh map  tool. Many layers can be made visible at the same time. If more layers are desired, use the zoom in tool and more layers will be highlighted.

*Zoom in using the zoom in  tool, and turn on several layers from the Data Layers List, and then click the refresh map  tool at the top of the Data Layers List.*

There can be problems if too many layers are visible. First, the map becomes harder to understand. Second, the more layers that are visible the longer the map will take to draw. So be discriminating when you click on the layers to make them visible. You may turn on any combination you desire.

If you want to avoid having to click on the **refresh map** tool every time you want to turn a layer on or off, check on the **AutoRefresh Map** checkbox.

Only a single layer can be designated as the active layer. By making a layer the active layer, the user then can perform certain actions using some of the map tools (identify) on that layer (use the radio button to make one layer “active”).

### 4.3 Viewing the Legend

In the i-MapNJ DEP application, the legend is always visible in the right column underneath the Query.

### 4.4 Map Tools

The Map Tools provide some basic GIS functionality to the application.

**4.4.1** Click on the **zoom in**  tool. The user can use the tool in two ways. A single mouse click on the map view frame will zoom the map an incremental amount, centered on the point entered. The user can alternatively define a box using the mouse (click and drag), the limits defining the extent of the zoomed view.

*Zoom in on an area repeatedly, until you see the Aerial Photos 2002 highlighted in **dark blue** in the Data Layers List. The photos are automatically visible at large scales.*

Notice as you are zooming in that more data layers become **dark blue** in the layers list and therefore are available to be made visible, however you must turn them on (click on their visible check box) and click on the “refresh map” button to see them in the Map View Frame. If you zoom in too far, use the last extent  tool to bring you back to the last map view image.

**4.4.2** Click on the **print**  tool. The Print Map window opens. The user may enter a custom title for the map, and the frame provides a “Create Print Page” button that when clicked on will produce a print page of the map graphics (including title and legend) which can be sent to the user’s printer.

### 4.5 Using the Find Location of Interest Query

Click on Query button . For an address, enter the number, street name and then the zip code and click **find**. If successful the application will present an address results window with a hyperlinked address. The address point location will appear in the Map View Frame with an orange star . Click on the hyperlink in the “Address Match Candidates” window and the application will zoom to the address. Dismiss the Address Match Candidates window.

Sometimes multiple listings of the address will appear in the “Address Match Candidates” window. There may be two addresses that are the same in the area. The user

may have to click one or two addresses to get the appropriate one, although usually the first address is the best.

If an address is not found, try using a coordinate, or search by county and municipality. When using the county (or municipality) option, the application zooms to a county (or municipality) and highlights it.

## 4.6 Printing a Map

1. *If desired, add data layers, making **Roads (Tele Atlas)** and/or **Streams and Water Bodies** visible by clicking on the checkboxes next to their names in the Data Layers list.*

Different layers may be used if more appropriate. Note that if the Map View Frame is displaying too large an area (small scale), the Roads, Streams and Water Bodies layers will be grayed out in the Data Layers list. If possible, the user may want to zoom to a larger scale.

2. *Click on the refresh map  button at the top of the Data Layers List. The map will redraw with the added layers.*

When the user is satisfied with the map's appearance they can follow these print steps.

3. *Click on the print  button on the toolbar. A print map window opens.*
4. *Replace the default 'New Jersey Map' title with something that indicates what the map is about. The title could include wording describing the search used to produce the map result, if appropriate. Next, designate the size of the map you wish to produce. Then click on the **Create Print Page** button.*
5. *Use your web-browser's print menu to send the print page to your printer. Use the page setup option to set the print page to landscape orientation.*

## Chapter 5

### Help Information

To access help information and Frequently Asked Questions (FAQs) click on the “Help”  button from the main toolbar. Help has these as main topics:

- About the Tools
- Address Search
- Coordinate Search
- County Search
- Data Layers
- Find location of Interest
- Frequently Asked Questions
- Legend
- Municipality Search
- Place Name Search
- Printing Maps
- Query
- Query / Selection Results

Each help topic opens a text file based on the topic that is chosen.

# Chapter 6

## Frequently Asked Questions

### 6.1 Frequently Asked Questions

<b>FREQUENTLY ASKED QUESTIONS</b>	<b>ANSWERS</b>
<b>What versions of web browsers work with i-MapNJ DEP?</b>	i-MapNJ DEP performs most reliably in Microsoft's Internet Explorer, version 6.0 or higher. It may run to some degree, though less reliably, in other web browsers. i-MapNJ DEP utilizes POPUP windows for display of query results. You may need to disable POPUP blocking software you have running on your computer to ensure proper functionality of this application.
<b>Why does the i-MapNJ DEP application's performance vary throughout the day?</b>	The i-MapNJ DEP application is a web application whose performance is subject to a number of factors including the user's connection to the Internet (broadband vs. dial-up), the amount of data that is being requested from the application's servers, and how many concurrent requests to those servers are being made by all of the users at any given time.
<b>Why won't the mapped information come into the field of view when I launch i-MapNJ DEP?</b>	Cancel out and try again, or wait for 20 minutes or so and try again. If the application will still not load, email the NJDEP at Contact Us on the Splash Page.
<b>Why can't I find the address I am interested in?</b>	Achieving success when address matching an entered address is dependent on a few factors. If your address is in a more recently developed area, the roads layer that contains the address range information may not be current enough, preventing a successful match. There can also be address range coding errors in the roads layer. If searching for a specific address does not seem to work, try another (if known) close to the original address. With the aid of the orthophotography (aerial photo image) users can often times find their location of interest after recognizing familiar features such as major roads, streams and water bodies, building structures, parks, etc.

<p><b>Why am I having trouble getting the aerial photos to become visible in the map view frame?</b></p>	<p>The aerial photos are <a href="#">scale dependent</a> and are only available after the user has zoomed into a municipality or small study area. They also have a minimum scale so they won't be available if you zoom in too far. This application works best with screen resolution of 1024x768 or 1152x864. (Right click on your computer's desktop, select Properties, and then select Settings from the Display Properties menu.)</p>
<p><b>Why aren't all of the layers in the data layers list available?</b></p>	<p>If a layer's name in the layers list is displayed in blue, then it is available for display at the current scale. If the layer's name is displayed in gray, then it is unavailable at the current scale. Most layers will be available for display if the user is zoomed to a municipality or small study area (large scale). NJDEP has classified each layer in i-MapNJ DEP to be available at specific scales (<a href="#">scale dependent</a>), so as users zoom in to larger and larger scales, generally more layers become available for display. See the "GIS Layer Availability at Different Map Scales in i-MapNJ DEP" table at the end of this document.</p>
<p><b>Why can't I see the C1 streams statewide?</b></p>	<p>NJDEP has classified each layer in i-MapNJ DEP to be available at specific scales. Because of its level of detail, the Category One Waters layer becomes available only after the user has zoomed in to a municipality or small study area.</p>
<p><b>How can I buffer a C1 stream by 300 feet to determine if it is regulated?</b></p>	<p>Use the <b>measure</b> tool to measure out from a watercourse to 300 feet or any other distance. In the next release, 300 foot buffers to the C1 watercourses will be available.</p>
<p><b>Why did my map retrieval fail?</b></p>	<p>When executing a query, or zoom, or pan, you must let the process complete (indicated by the Retrieving Map message) or you will disrupt the data flow (request/response cycle) that the application must complete before additional user interaction. For this reason, it is recommended that users not click on the map or initiate other viewer actions while data transfer is in progress.</p>
<p><b>Where do I get information on the mapped data used in i-MapNJ DEP?</b></p>	<p>This information is available by clicking on the <i>data descriptions</i> button above the Map Tools toolbar. This opens a window that lists all map layers. A brief description of the data is provided when a user clicks on the name of a layer. If a user wants to see further information, they may click on the full metadata button to view FGDC compliant metadata. The user can also get to this information by clicking on a layer name in the Data Layers list.</p>

<p><b>What coordinate system is the information mapped in?</b></p>	<p>The mapped data in the application is in the New Jersey State Plane Coordinate System (NJSPCS), in units of US Survey Feet, referenced to the North American Datum of 1983 (NAD 83) horizontal geodetic datum.</p>
<p><b>How can I find the New Jersey State Plane Coordinates for a point of interest using i-MapNJ?</b></p>	<p>First, locate the site on the map by using any of the methods found in the <b>Find Location of Interest</b> query (upper right corner) or by simply locating the site by zooming in on the Aerial Photos. Move your cursor over the point of interest in the map. You will see the coordinates in the <b>Status Bar</b> below the map view frame e.g. (Map: 420154.2164, 505485.1754). The first coordinate is the <b>Easting</b> or “x” value and the second number is the <b>Northing</b> or “y” value. In reporting these coordinate values to the NJDEP, they may be rounded to the nearest foot.</p> <p>Or, click on the <b>Set Origin</b> button and click on the site or point of interest in the map view. The application will add a <b>Star</b> on the map view and display the coordinates for that site next to the <b>Star</b> in New Jersey State Plane, US survey feet, NAD83.</p> <p><b>If you are a new user or trying to find coordinates for an NJDEP regulated facility, please call the GIS Help Desk Phone: (609) 777-0672</b></p>
<p><b>Can I print the tabular data from the Query / Selection Results window?</b></p>	<p>Yes. If you wish to print the tabular data results click your right mouse button on the contents of the table and select print. Some of the tabular data windows also have a print button.</p>
<p><b>Can I export the tabular data from the Query / Selection Results window to a spreadsheet?</b></p>	<p>It can be done. However, if a user executes a search that retrieves more than 25 feature records, the exporting of the data has to be done in steps since the window only displays 25 records at a time. The user can highlight the data to export by passing the mouse pointer over the data while holding down the left mouse button. Release the left mouse button and press the right mouse button. Select Copy from the menu, this will copy the data to Windows Clipboard. Next open a blank Excel spreadsheet, right click on the sheet, and select Paste from the menu.</p>
<p><b>Can I add a GIS data layer that I have stored locally on my computer to the i-MapNJ DEP application?</b></p>	<p>Not currently. NJDEP is planning on providing such capabilities in the next release. The future release should provide this, as well as the capability of the submission of user created map features (points, lines, polygons - delineated on-screen) and associated attribute data.</p>

<b>Can I change the symbology of the layers or the order in which they overlay?</b>	No. Unlike GIS desktop applications like ArcView and ArcExplorer, you can not alter the colors and symbols nor alter the layer drawing order that are presently set in i-MapNJ DEP.
<b>Can I select an area of interest by parcel number (lot and block)?</b>	At this point in time, there are only a few counties with digital parcel data (the NJDEP does not yet have this data). When parcel data becomes available from the counties, it will be integrated into this application.

## 6.2 GIS Layer Availability at Different Map Scales in i-MapNJ DEP

The following table lists the map scales at which the various layers in i-MapNJ DEP can be viewed. The map's current scale is displayed in the lower right portion of the map view frame (the number after "Set Scale 1:"). As an example, the Aerial Photos 1995/97 can be viewed when the current map scale is between 1:30,000 and 1:5,000. If the current map's scale falls within this range, the layer name will appear in blue text in the layers list (not grayed out), and can be made visible by checking the Visible checkbox next to the layer name. Air Monitoring Stations, which only has a 1:500,000 maximum scale, can be viewed when the current map scale is greater than 1:500,000 (greater map scale has a lower number, i.e., 1:400,000). Those layers with no values for maximum or minimum can be viewed at any map scale. Map scale will change when users use zoom tools (zoom in, zoom out, full extent, last extent) or when using the "Find Location of Interest" query.

Layer Name	Maximum Scale	Minimum Scale
Aerial Photos 1930	1:30,000	1:2,000
Aerial Photos 1995/97	1:30,000	1:5,000
Aerial Photos 2002	1:30,000	1:1,000
Air Monitoring Stations	1:500,000	None
CAFRA	None	None
Category One Waters	1:100,000	None
Chromate Sites	1:100,000	None
Congressional Districts	None	None
Counties	None	None
Deed Notice Areas	1:250,000	None
Delaware and Raritan Canal Commission Review Zones	1:500,000	None
Groundwater Contamination Areas (CEA)	1:250,000	None
Groundwater Contamination Areas (CKE)	1:250,000	None
Highlands	None	None
Impervious Surface % (2002)	1:50,000	None
Known Contaminated Sites List	1:100,000	None
Land Use 1995	1:50,000	None
Land Use 2002	1:50,000	None
Land Use Change 1995-2002	1:50,000	None
Mid-Atlantic States	None	None
Municipalities	1:500,000	None
Natural Heritage Priority Sites	1:500,000	None
NJEMS Sites	1:75,000	None
Open Space (State)	1:500,000	None
Pinelands Boundary	None	None
Pinelands Management Area	1:200,000	None
Place Names	1:250,000	None
Public Community Water Supply Wells	1:250,000	None

Quarter Quad Grid	None	None
Roads (Tele Atlas)	1:50,000	None
Sewer Service Areas	1:500,000	None
Shellfish Classification	None	None
Soils (SSURGO)	1:50,000	None
State Plan Centers	1:500,000	None
State Planning Areas	1:500,000	None
Streams	1:100,000	None
Sub-Watersheds (HUC14)	1:250,000	None
Surface Water Quality Standards	1:100,000	None
Urban Enterprise Zones	1:500,000	None
Water Bodies	1:100,000	None
Watershed Management Areas	None	None
Watersheds by Name (HUC11)	1:250,000	None
Well Head Protection Areas (Community)	1:100,000	None
Well Head Protection Areas (Non-Community)	1:100,000	None
Well Program Grid	1:15,000	None
Wetlands (2002)	1:100,000	None
Zip Codes	1:500,000	None