



Door County Greenprint – Mapping Site Tutorial and Training Guide

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Getting There

- **Web Link**
 - Use the following link to connect to the Door County Greenprint mapping site:
http://tplgis.org/DoorCounty_Greenprint/
 - Note: Microsoft Internet Explorer Versions 7 and 8 work best for this mapping site.
 - Note: This mapping site is data intensive. If you are on a dial-up connection, you will experience slow loading and refresh delays. You may want to consider going to the local library for better performance.

The Basic Moves

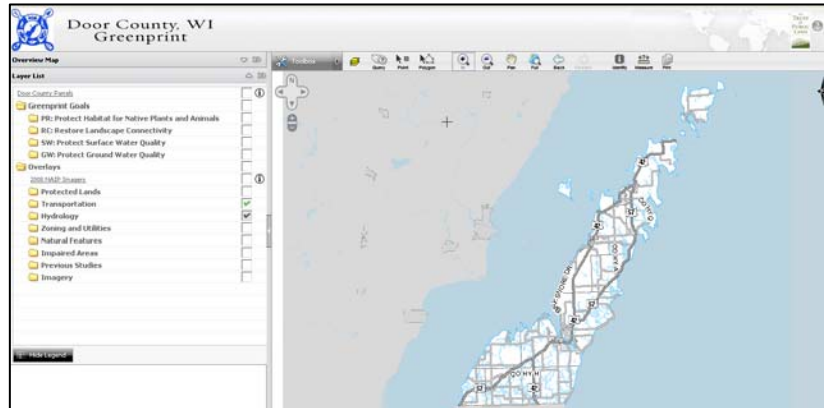
- **Explore website tools and resources**
 - The navigation tabs across the top of the website page will guide you in accessing the information and tools provided on the website.



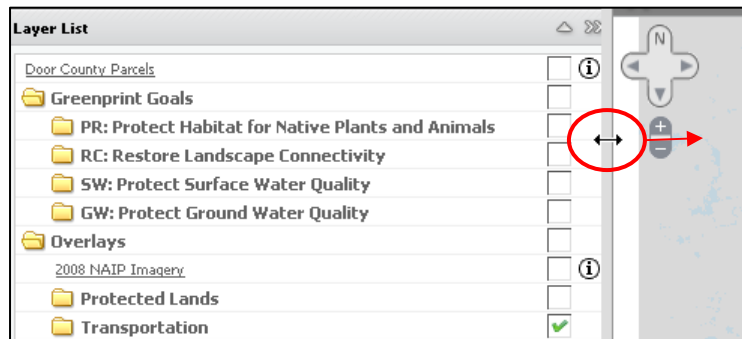
- Interactive Mapping – provides interactive investigation and mapping of Greenprint Goals.
 - Training Guide – provides an online link to the Door County Greenprint – Interactive Mapping Site Tutorial and Training Guide.
 - Sample Maps & Reports – provides overview maps of Greenprint results. For more detailed, customized maps use the Interactive Mapping tool or the Contact Us tab.
 - Data Sources – describes the data and methodology behind the maps and reports.
 - FAQs – provides answers to frequently asked questions about this site.
 - Contact Us – provides contact information for Door County for additional information on this project.
- **Sample Maps & Reports** Click on the Sample Maps & Reports navigation tab.
 - Click on any of the overview map links provided.
 - Note: maps are in 8½x11 PDF format, and can be printed directly to your local computer printer.

- **Access the Interactive Mapping tool**

- **Interactive Mapping** Click on the Interactive Mapping tab.



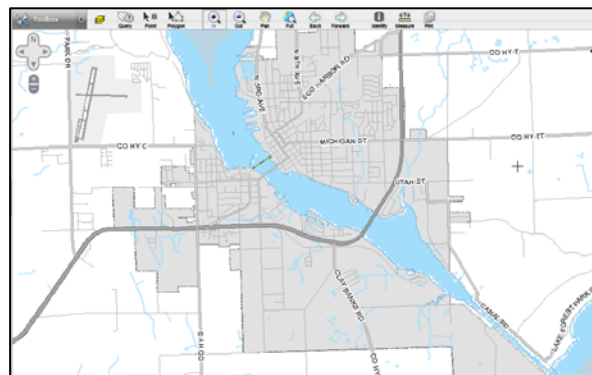
- Depending on your web browser, you may need to make the legend area wider to see all of the text. Hover your mouse over the bar between the legend and the map until a double arrow appears as your cursor. Drag the bar to the right to expand the legend area.



- **Zoom in on the map**



- Click the zoom in button (Tools and buttons are along the top of your map).
 - Use your mouse to drag a box around Sturgeon Bay
 - Notice that detail road information appears



- **Take a closer look**



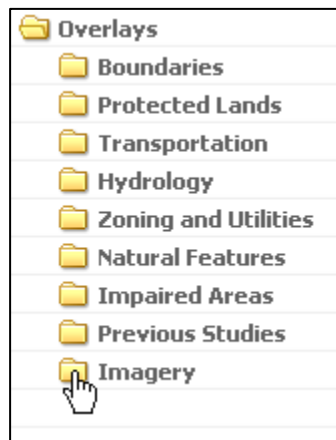
- Click the zoom in button again
- Use your mouse to zoom in even closer



- Click the pan button
- Drag your mouse to the right or left to adjust the view

- **Select map layers for display**

- Optional backgrounds and overlays can be added to your map to provide context and reference. Click the folder icon next to **Imagery** folder within the Overlays section of the legend. (Map layers are listed to the left of your map. Use the scrollbar to get to the bottom of the list if necessary.)



- Click the check box to the right of the Imagery layer



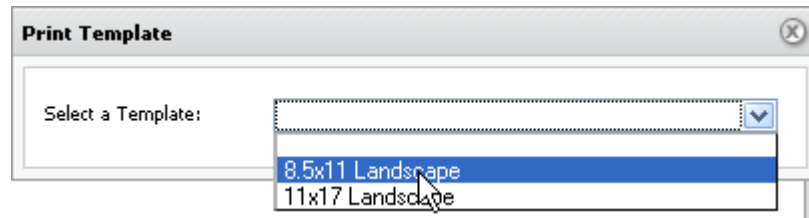
- Clicking a checkbox next to a layer will display it on the map
- High resolution imagery is now displayed (it may take some time to refresh your screen)
- Try zooming in even closer

- **Print a custom map**

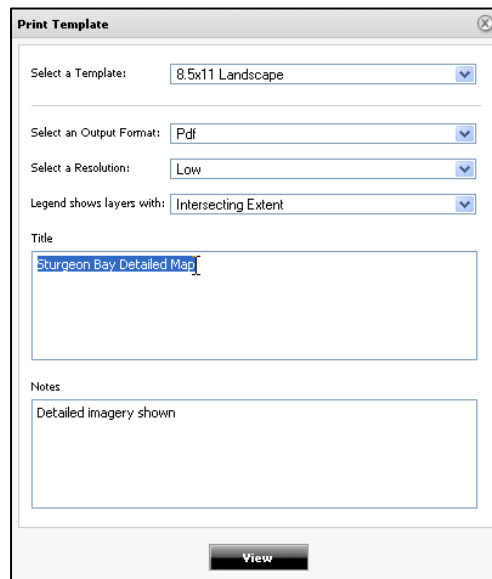


- Click the print button (at the far right, at the top of your screen)

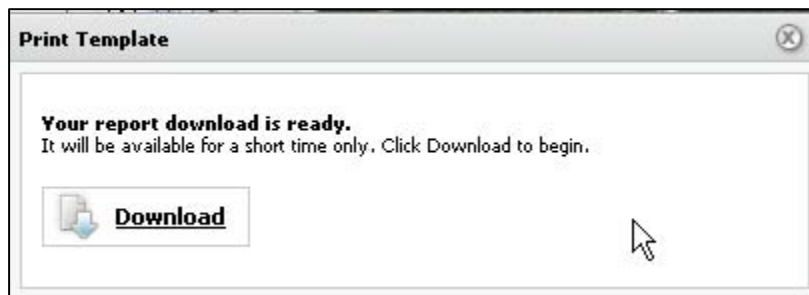
- Choose a format that is compatible with your printer



- Change title on map. Enter additional map notes if desired.
- Note that setting Resolution to “Low” will speed the map creation process.
- Click View

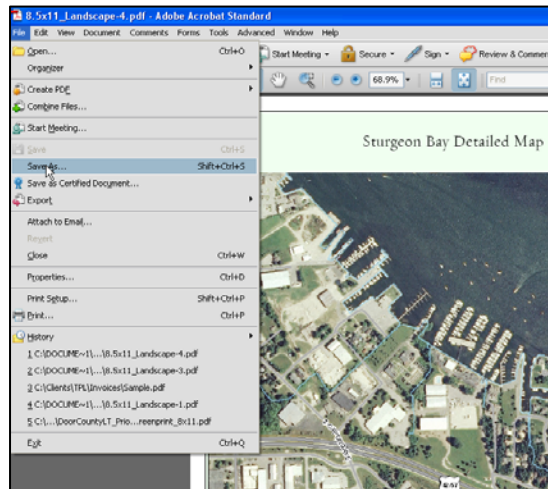


- Click Download to create a PDF.



- Depending on your browser, you may be prompted to “Open” or “Save” the PDF. Choose to Open the PDF on your desktop.

- If you have a printer available, you can print the PDF at this time. You can also use




the PDF File menu and the Save As command to save the PDF to your computer, so that you can share the map with others.

- Close the PDF, and return to the Interactive Map window.
- **Get help**
 - Click the small “?” button at the at top right of your map for detailed instructions on using this mapping site



- Note that some features described in this document may not be available in the Door County Greenprint interactive mapping site
- Still need help? Send an email to gis.support@tpl.org

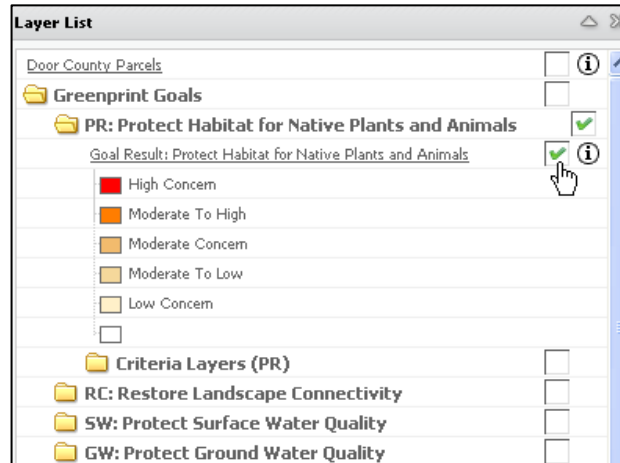
Explore Greenprint Results

- **Return to the original map**
 - Press F5 to reset the mapping site (sometimes it is helpful to refresh the site if the website starts acting strangely).
- **Map resource “areas of concern”**
 -  Click the zoom in button
 - Use your mouse to drag a box around a location near your town
 - The Door County Greenprint is organized based on a set of targeted land use management and planning goals, specific to Door County.

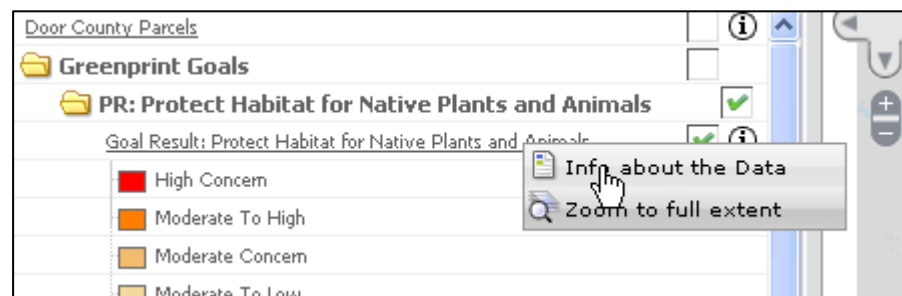
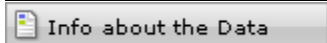
Door County Greenprint Goals:

1. Protect Habitat for Native Plants and Animals
2. Restore Landscape Connectivity
3. Protect Surface Water Quality
4. Protect Ground Water Quality

- PR: Protect Habitat for Native Plants and Animals Click on the yellow folder icon to the left of Greenprint Goal - **PR: Protect Habitat for Native Plants and Animals** to expand the legend folder. Then add Habitat Protection areas of concern to your map by clicking on the checkbox to the right of Goal Result: Protect Habitat for Native Plants and Animals.



- The darker the red color on your map, the more critical this area is for Habitat Protection.
- Each goal map in the Door County Greenprint is a composite of a number of data layers known as metrics or “criteria”. To get more information on how the composite Greenprint Goal maps were created, click the underlined Goal Result: Protect Habitat for Native Plants and Animals link in the layer list, and then click

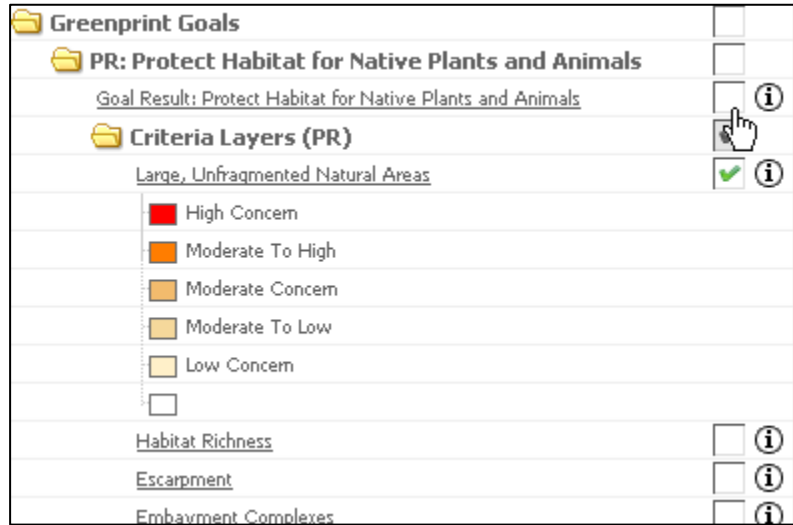



- This link will provide you with a PDF that describes how data was combined to create the Goal Map. Close this PDF to return to the Interactive Mapping Window.

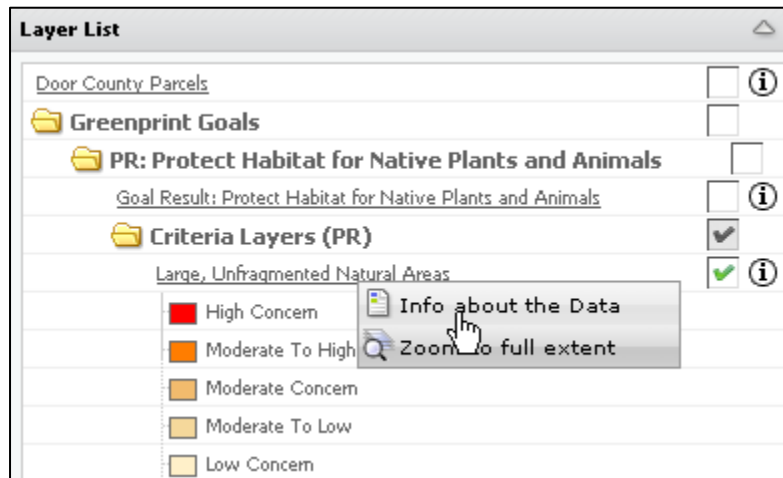
- Criteria Layers (PR) To view the criteria that were considered in determining habitat protection areas on the map, click on the folder icon to the left of Criteria Layers (PR).



- Note that layers are displayed on the map in the order they appear in the layer list. If several Greenprint layers are checked (visible), your map will display only the results for the “top-most” layer that is checked on in the layer list.
- To view a criterion layer, you will need to uncheck the Goal Result layer, and then click to check-on the Large, Unfragmented Natural Areas criteria layer.



- To get more information on the methodology and data sources used to create this Greenprint criteria map, click the underlined Large, Unfragmented Natural Areas link in the layer list, and then click .




- Close this PDF to return to the Interactive Mapping Window.

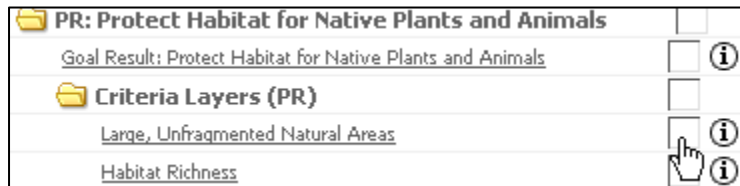


- If desired, print a custom map of Greenprint Results for your town using the instructions provided above.

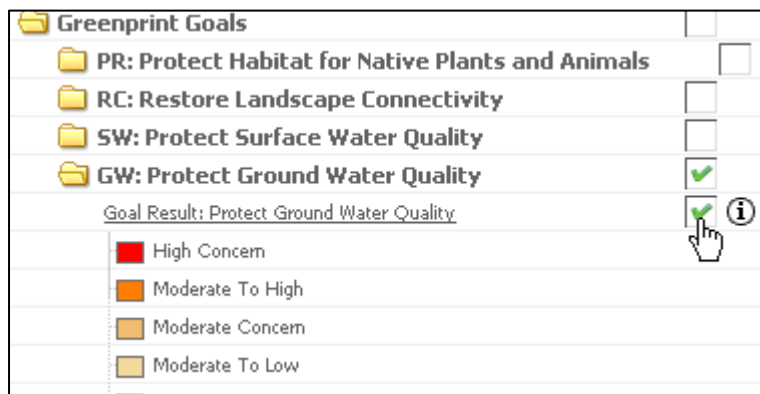
- **Create a parcel profile report**



- Wondering why a particular parcel is shown as high priority on the Greenprint map? Create a parcel profile report to find out.

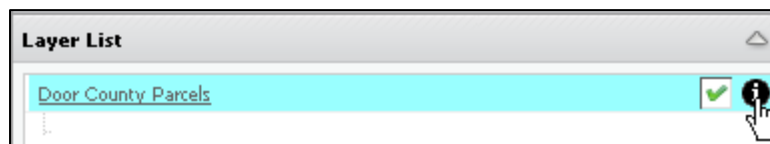
-  Reset the mapping site this time, by clicking the full extent tool. This will return you to a map of the entire Door County Peninsula. Turn off the Large, Unfragmented Natural Areas layer used in the previous exercise.




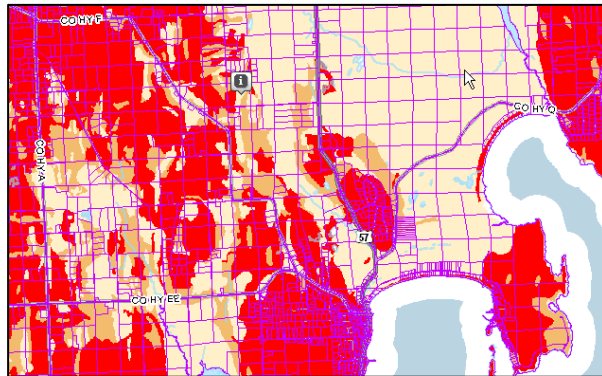
- Turn on Greenprint Goal Map Goal Result: Protect Ground Water Quality.



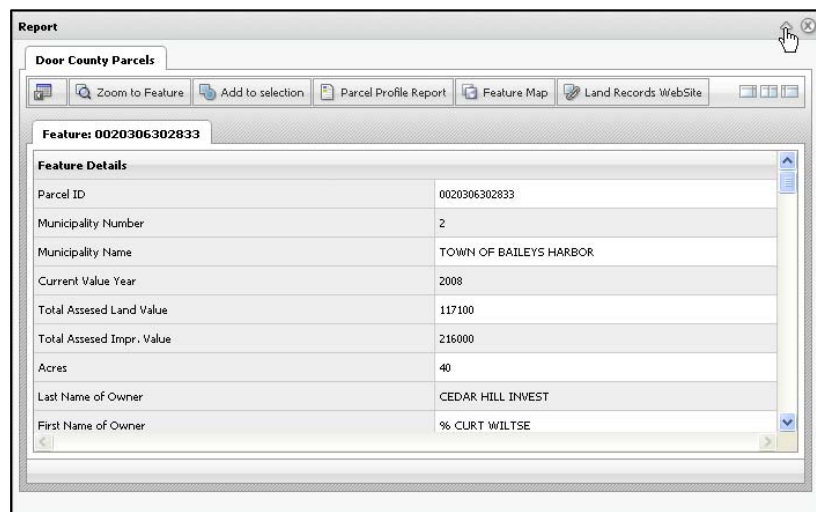
-  Click the zoom in button and zoom to a relatively small area on the map.
- Locate the Door County Parcels layer, at the top of the Layer List to the left of the map. Make the Parcel layer active for selection by clicking the  button to the right of the layer name. The layer will become highlighted in the legend.




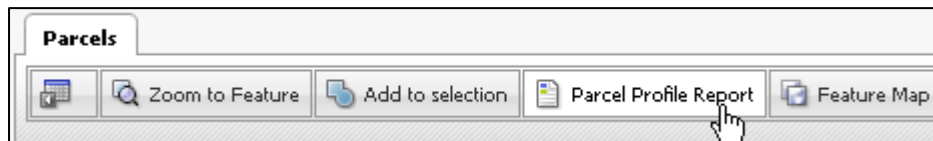
-  Now click the Identify button in the toolbar at the top of the map. Then click on a parcel on the map. Choose a parcel that is of high concern for Ground Water Quality (colored red on the map).



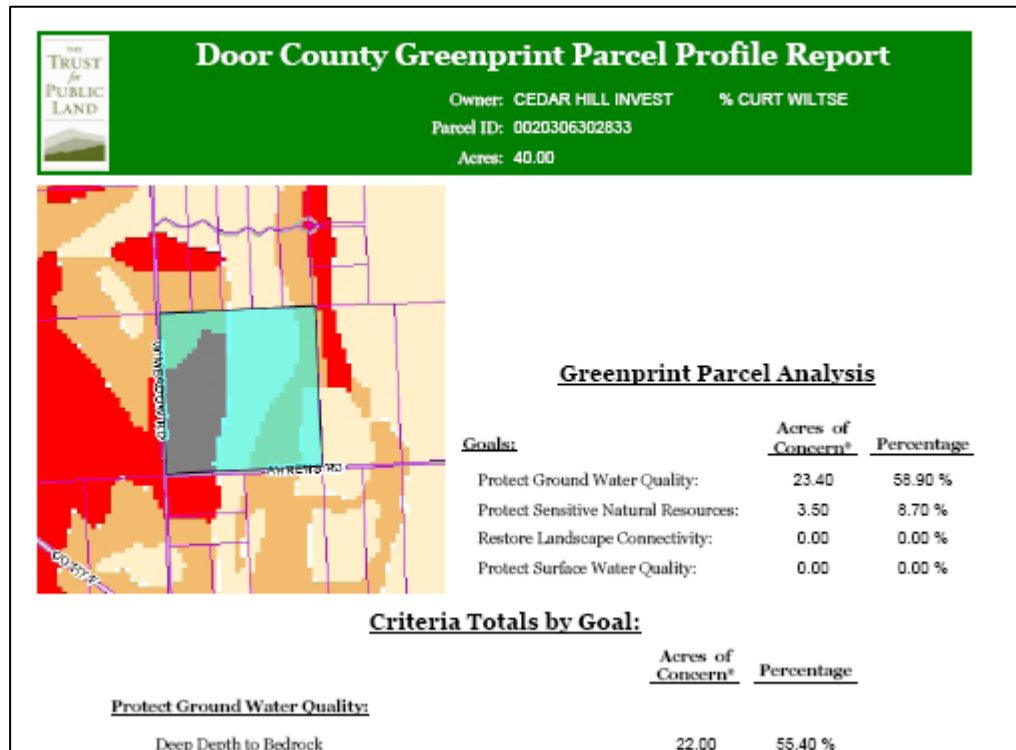
- A report window providing detailed characteristics of that parcel will be displayed.



-  Note: If you would like to temporarily minimize this window so that you can view the map, click the arrow in the upper right corner of the report window. Click again to reopen the report window.
- Use the scroll bar on the report window to review information regarding parcel id, owner, address, and Greenprint results.
- Retrieve a formatted PDF report with Greenprint evaluation information by clicking on the Parcel Profile Report tab at the top of the window.



- Follow the prompts to download and view the report.
- Use PDF File > Save As to save the PDF to your computer, or simply choose print.

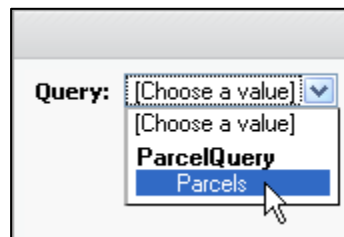


○ **Find specific parcels**

- Would you like to find parcels that meet a specific set of criteria? Use the selection and query tools to find out.
- First, click on the query tool located in the Toolbar at the top of your map.

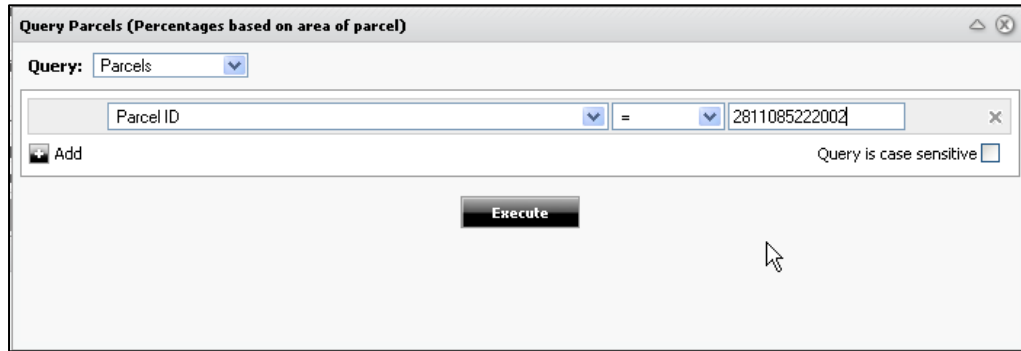


- Choose Parcels from the Query menu

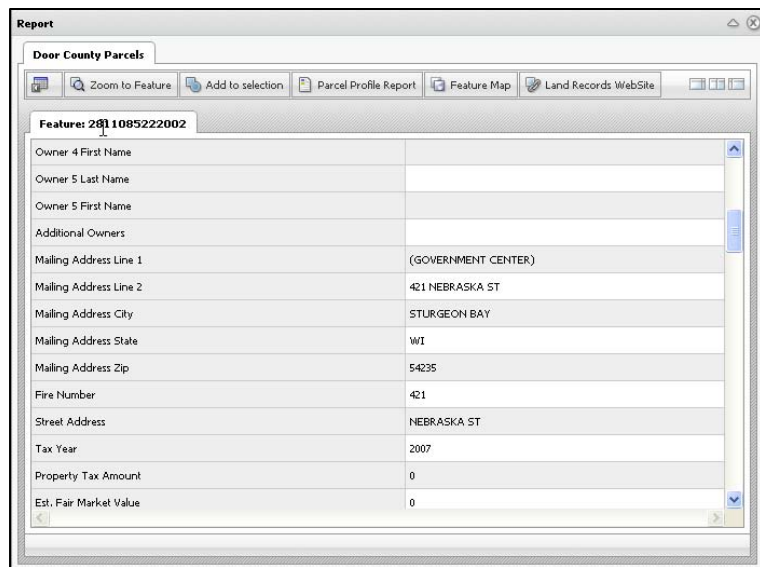


- Start by asking for a specific property by using the Parcel ID number. From the drop-down lists provided, choose:
Parcel ID = 2811085222002

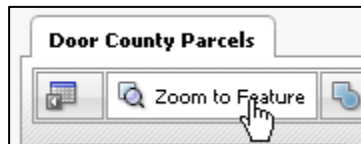
(this is the parcel id for Door County Government Center)



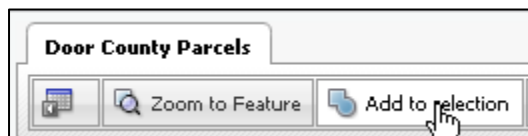
- Click Execute.




- A full report on this property will be provided, including Land Records information and Greenprint resource analysis results. Use the scroll bar to the right of the report to see additional information.
- Zoom to this property on the map by clicking the Zoom to Feature tab along the top of the report.



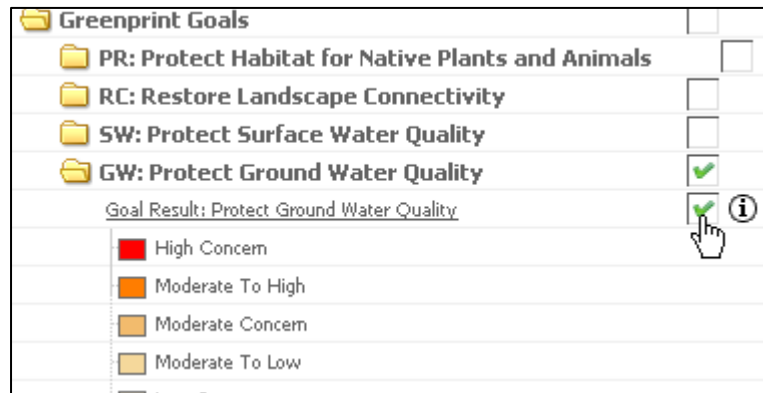
- Highlight the property on the map, by clicking the Add to Selection tab.



-  Remember: If you would like to temporarily minimize the report window so that you can view the map, click the arrow in the upper right corner of the report window. Click again to reopen the report window.
- Create a parcel profile report or custom map of this property if desired. Refer to previous tutorial instructions.



- **Locate parcels using Greenprint evaluation results**
 - Now let's find all properties that have critical resource characteristics based on the Greenprint analysis.
 - If you haven't already, turn on Greenprint Goal Map Goal Result: Protect Ground Water Quality.
 - Also turn on the parcel layer.



- Click on the query tool located in the Toolbar at the top of your map.



- Enter the following condition:

Acres >= 50

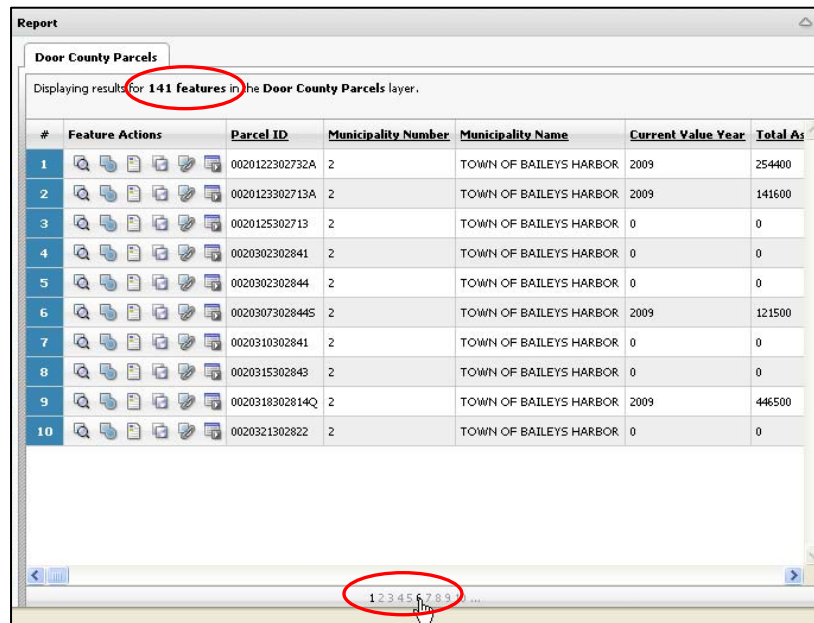


- Click on the word "Add" in the lower left to add an additional condition.

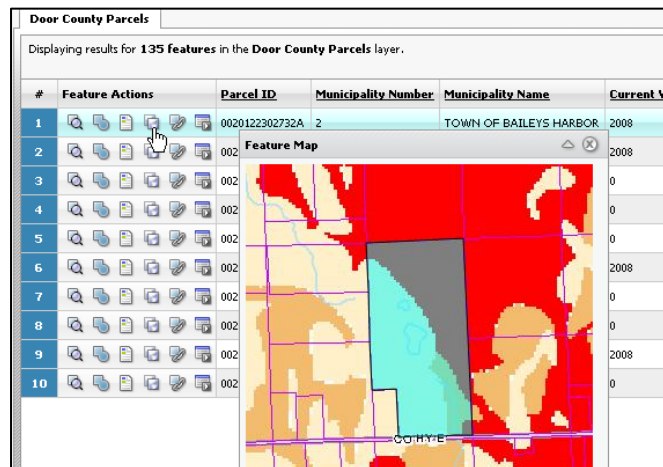
- Enter the following additional condition:
GOAL: Protect Ground Water Quality >= 10%



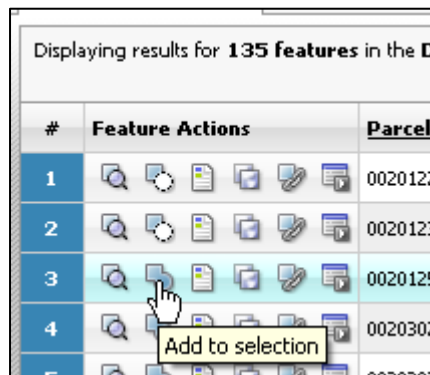
- NOTE: Greenprint queries are based on the percentage of area within the parcel that is of Moderate Concern or higher.
- IMPORTANT: Make your Greenprint results queries as specific as possible, by adding more conditions such as Acres or Municipality Name. A general query, such as **GOAL: Protect Ground Water Quality >= 10%** will find thousands of results and will likely time out before completing.
- 141 properties are at least 50 acres in size AND contain sensitive areas for ground water quality. There are 10 properties listed per page. To view additional pages of properties, click on a page number at the bottom of the report.



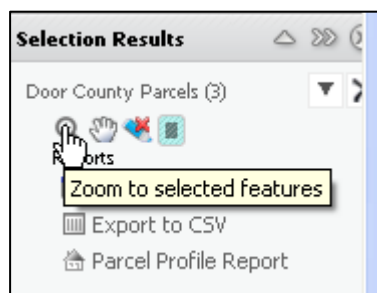
- Get a quick location indicator for each parcel by clicking on the View Map: Feature Map control under “Feature Actions”



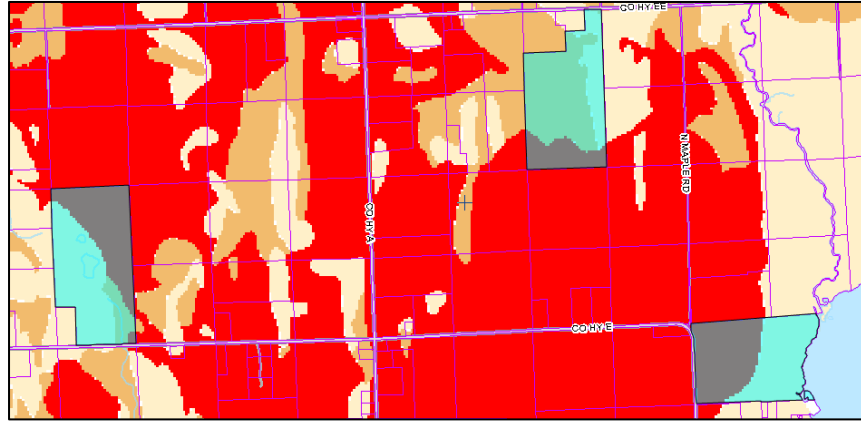
- To get an overall view of several parcel locations, add the first 3 parcels in the report to a map “selection”. Click the Add to Selection control for several parcels in the list.



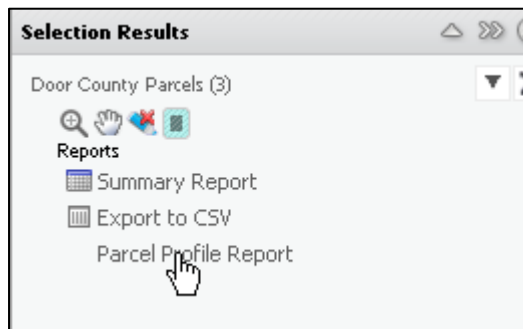
- A selection window will open on the left side of your map below the legend.
- Click on zoom tool in this panel to zoom to these parcels. The selected parcels are highlighted on the map.



- Close the parcel report window to view the map. Note that the Ground Water Quality Greenprint results are displayed to illustrate how these large parcels correspond with Greenprint priorities.



- Create property profiles and or maps as desired.
- Note: you can generate a consolidated profile report for all selected parcels by clicking on Parcel Profile Report in the Selection Results window as shown below.



Establish Greenprint Priorities for Your Town

○ **The concept of weighted goals**

- Master planning and development include consideration of areas with critical or sensitive resources
- To assist with this, the Greenprint is organized based on four targeted resource identification goals:

Protect Habitat for Native Plants and Animals (PR)
Restore Landscape Connectivity (RC)
Protect Surface Water Quality (SW)
Protect Ground Water Quality (GW)

- Depending on local priorities and landscape characteristics, certain goals may have greater influence on planning and development decisions.
- Greenprint goal weighting allows you to assign importance levels to each Greenprint goal, and combine these goals to create a composite map based on local resource protection priorities.

○ **Review sample weighted goal maps**

- Sample weighted composite maps are provided to help you understand the effects of applying various weighting combinations.
- Press F5 to reset the mapping site



- Zoom to your town
- Open the folder **Sample Goal Weightings** by clicking on the yellow folder icon. Turn on layer named - Goal Weighting: Equally Weighted (PR:25, RC:25, SW:25, GW:25)

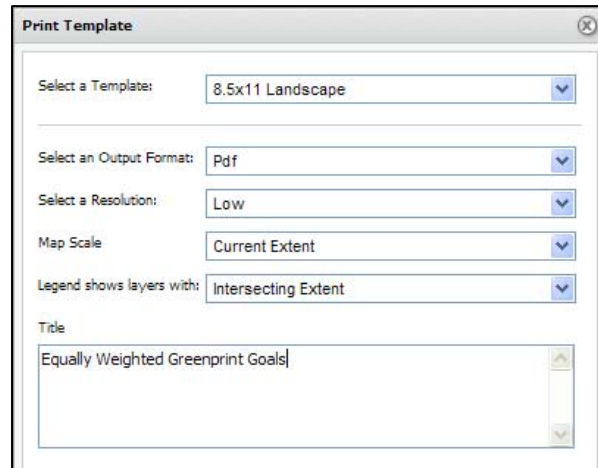


- This map displayed depicts a composite map with equal weighting applied to all 4 Greenprint goals:

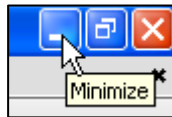
Protect Habitat for Native Plants and Animals (PR)	25%
Restore Landscape Connectivity (RC)	25%
Protect Surface Water Quality (SW)	25%
Protect Ground Water Quality (GW)	25%



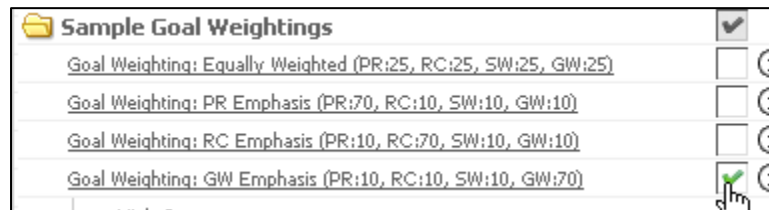
- Create custom map of the equally weighted Greenprint Results for your town using the instructions provided above.
- Title the map “Equally Weighted Greenprint Goals”.



- Minimize the PDF map to keep it available on your desktop.



- Turn off the equally weighted Greenprint layer. Turn on layer named - Goal Weighting: GW Emphasis (PR:10, RC:10, SW:10, GW:70)



- This map was created by giving significant weight to Greenprint goals: Protect Ground Water Quality:

Protect Habitat for Native Plants and Animals (PR)	10%
Restore Landscape Connectivity (RC)	10%
Protect Surface Water Quality (SW)	10%
Protect Ground Water Quality (GW)	70%

- Refer to the Equally Weighted PDF that you just created to see the difference that this weighting approach makes to the composite results.

○ **Run a custom weighting experiment**

- Now you will create a custom composite Greenprint map of your own.
- Turn off layer - Goal Weighting: GW Emphasis




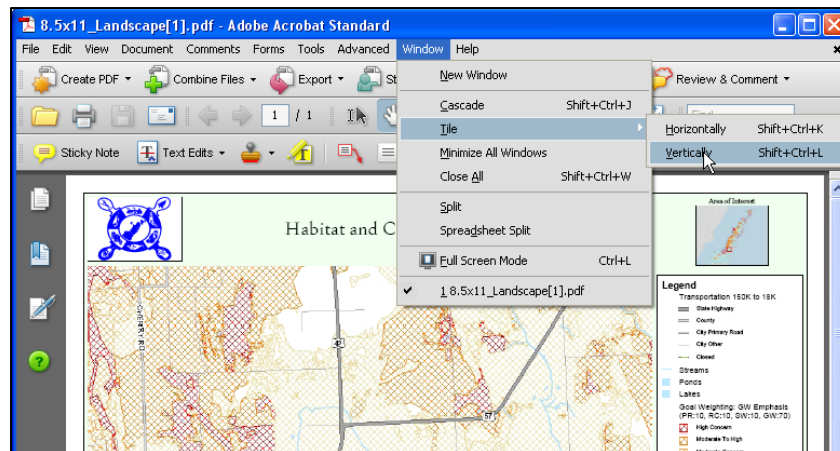
- Click the Goal Weighting Tool.

- Enter weights of your choosing. A sample set of weights is shown below.
- Weights are often expressed as percentages that add to 100%, but this is not strictly necessary. Weights only need to be expressed in values that are relative to each other. Entering a weight of 0 (zero) for any goal is OK.

Goal	Weight
Weight for Goal: Protect Ground Water Quality	10
Weight for Goal: Protect Surface Water Quality	10
Weight for Goal: Restore Landscape Connectivity	40
Weight for Goal: Protect Habitat for Native Plants and Animals	40

- Click the Submit button.
- Since the composite is computed “live”, this process can take up to 5 minutes to display the results on your map. Be patient.
- Helpful Hint: The Custom Weighting Tool will return results much more quickly if you are zoomed in on the map.
- Helpful Hint: Always turn off (uncheck) the results from one weighted goal result, before viewing another. The hatch pattern that is used to display these results will make it difficult to interpret, if more than one result is displayed on your map at the same time.

-  Create a map of results of your custom Greenprint composite map.



- Use the PDF Window > Tile > Vertically menu to create a side-by-side comparison of the equally weighted map to your custom map.

