



# Remedial Priority System

Ecological Health Layers  
Natural Heritage

March 2012





# Human Health Layers

The Ecological Receptor Layers developed by the Department are:

- **Pinelands**
- **Highlands**
- **Water Bodies** (Surface Water Quality Standards)
- **Natural Heritage**
- **Landscape - Habitats and Animals**
- **Other Freshwater Wetlands**
- **Salt Water Marsh**





# Natural Heritage Layers

## Derived Layer based on population

- **Reason for Inclusion:** This layer consists of areas of critical importance for the preservation of biodiversity or ecological habitat. The emphasis of this coverage is to track areas that are of interest to the State of NJ or to non-governmental preservation groups for future preservation acquisition and management
- **Source Layers:**
  - Natural Heritage Layer
    - **Basis for layer:** The Natural Heritage Grid Map was produced to provide a general portrayal of the geographic locations of rare plant species and rare ecological communities for the entire state.





# Natural Heritage Layers

- **Cell Values:**
  - The cell values were established to give weight to more critical and sensitive ecological receptors. Values were created to reflect inter-relationships between this layer and all other Ecological Receptor Layers.

<b>Ecological Health Layers</b>	
<b><u>Natural Heritage Area</u></b>	<b><u>Cell Value</u></b>
<b>General significance ecological community</b>	<b>500</b>
<b>Moderate significance ecological community</b>	<b>875</b>
<b>High significance ecological community</b>	<b>1250</b>
<b>Very high significance ecological community</b>	<b>1625</b>
<b>Outstanding significance ecological community</b>	<b>2000</b>

- **Calculation Method:**
  - All cells that are within the ground water Extent Area are summed.





# Natural Heritage Layer

- The following is the method used to create the Natural Heritage GIS layer





# Natural Heritage Layers

Creating the Natural Heritage Layer



Site





# Natural Heritage Layers

## Creating the Natural Heritage Layer



Use Natural Heritage layer







# Natural Heritage Layers

## Creating the Natural Heritage Layer



Convert vectors into Raster (100 by 100 grid) and assign the appropriate values to each cell.

NatHeritage

-  0
-  500
-  880
-  1,250
-  1,630
-  2,000

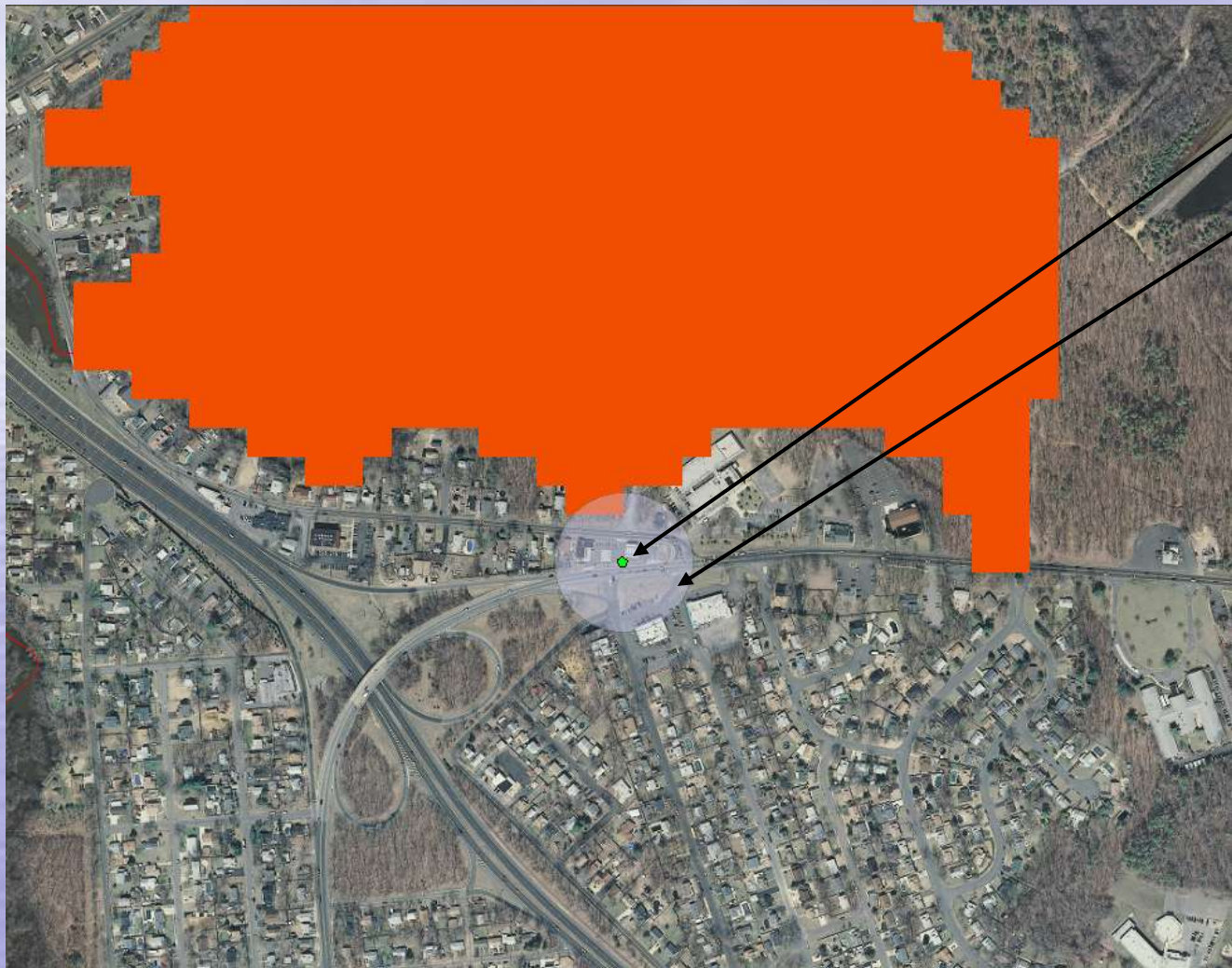






# Natural Heritage Layers

## Creating the Natural Heritage Layer



Site

Extent Area

NatHeritage

- 0
- 500
- 880
- 1,250
- 1,630
- 2,000





# Natural Heritage Layers

## Creating the Pinelands Layer



**Ground Water Extent Area**

Zoom in

Sum up all cell values that are within the Extent Area

cell value = 1,250

Cells within area = 1

Final Score = 1,250

Note: more than 50% of cell is required to be within the Extent Area to be counted



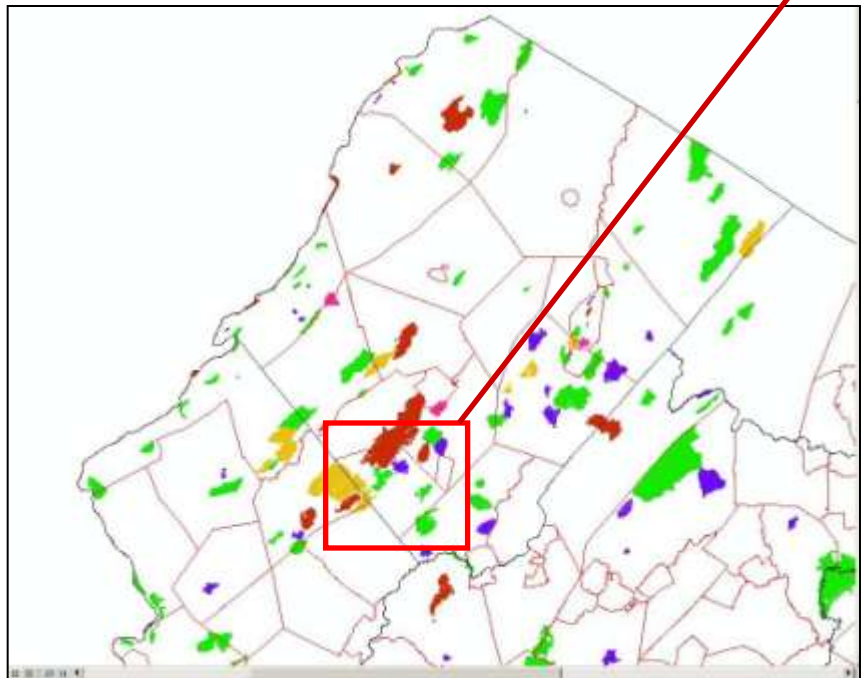
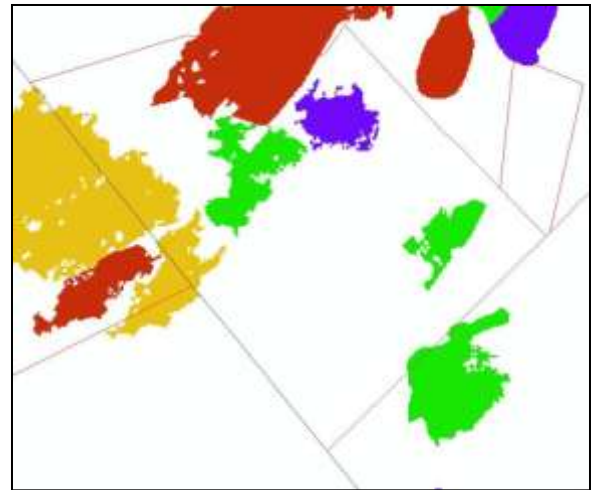
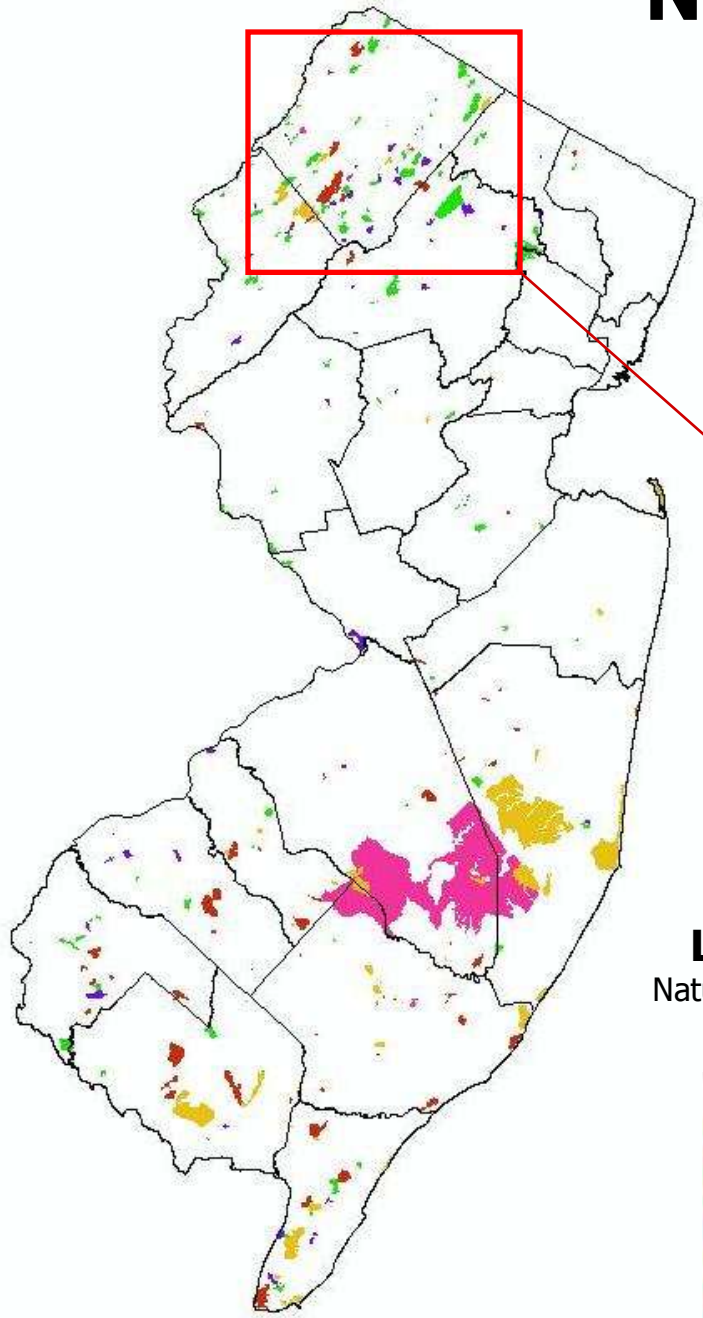


# Natural Heritage Layers

- A Natural Heritage Layer is created for the entire state.
- The following is the layer used to calculate the Natural Heritage Receptor Layer Score.



# Natural Heritage Layer



**Legend**  
Natural Heritage  
Score

- 0
- 500
- 880
- 1,250
- 1,630
- 2,000