



# Remedial Priority System

## Ecological Health Layers Pinelands

March 2012





# Ecological Receptor 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**





# Pinelands Layers

Derived Layer based on population

- Reason for Inclusion: The Pinelands is an internationally important ecological region occupies 22% of New Jersey's land area
- Source Layers:
  - Pinelands
    - Basis for layer: Outline of the Pinelands that was established in accordance with the Pinelands Protection Act of 1979
  - Pinelands Management Areas
    - Basis for layer: The Pinelands Management Area Boundaries data is made up of polygons representing the Pinelands Management Area Boundaries in Southern New Jersey





# Pinelands 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>Pinelands Ecological Health Layers</b>	
<b><u>Pinelands Management Area</u></b>	<b><u>Cell Value</u></b>
<b>Pinelands Town, Pinelands Village, Regional Growth Area</b>	<b>200</b>
<b>Rural Development Area</b>	<b>400</b>
<b>Agricultural Production Area</b>	<b>600</b>
<b>Federal or Military Facility, Forest Area, Special Agricultural Production Area</b>	<b>800</b>
<b>Preservation Area</b>	<b>1000</b>

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





# Pinelands Layer

- The following is the method used to create the Pinelands GIS layer







# Pinelands Layers

Creating the Pinelands Layer



Site

Pinelands boundary

Pinelands Management Area







# Pinelands Layers

Creating the Pinelands Layer



Use the Pinelands Management Areas layer

- Pinelands Management Areas
- Agricultural Production Area
  - Federal or Military Facility
  - Forest Area
  - Pinelands Town
  - Pinelands Village
  - Preservation Area
  - Regional Growth Area
  - Rural Development Area
  - Special AG Production Area

Site





# Pinelands Layers

## Creating the Pinelands Layer



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

Site

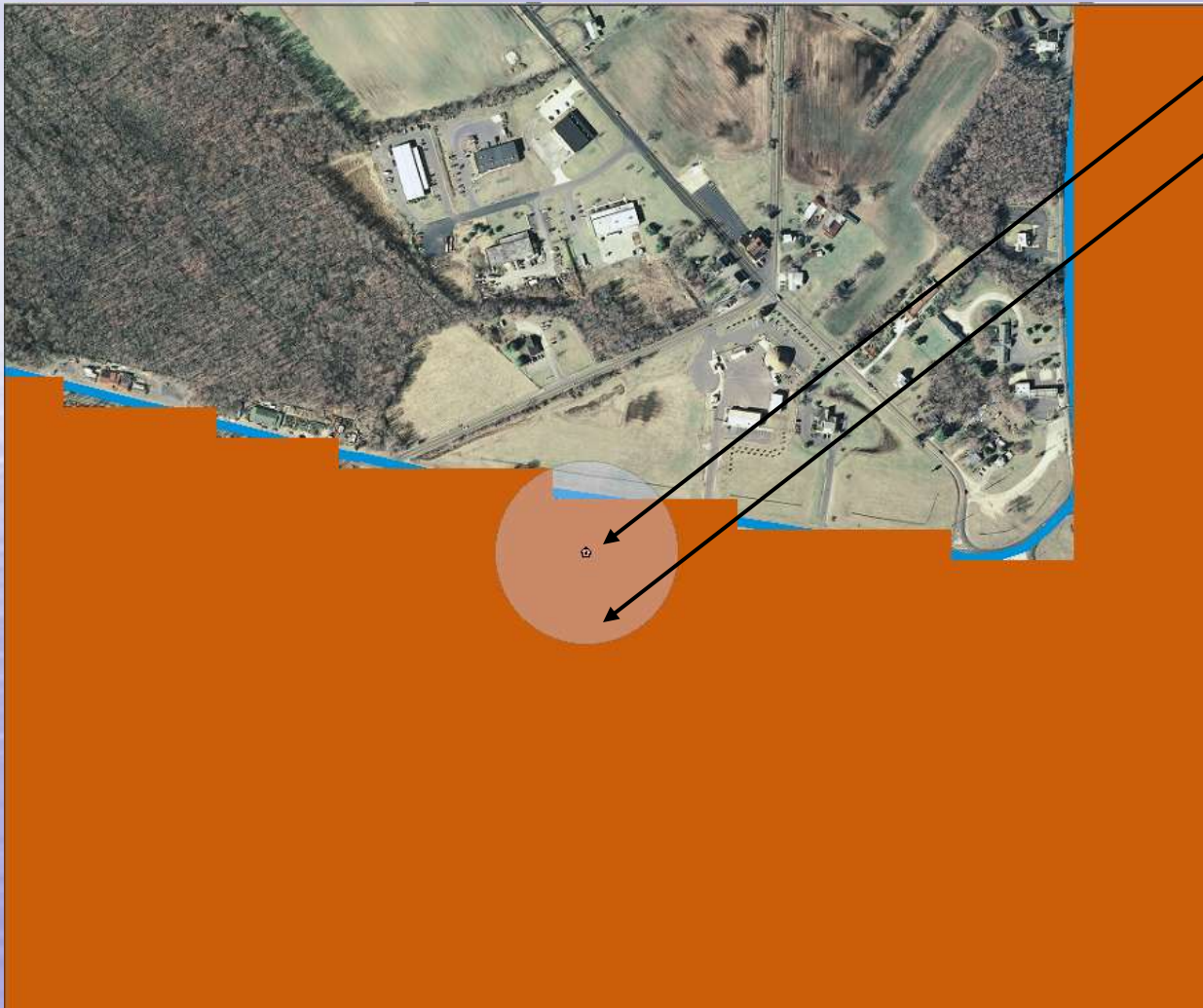






# Pinelands Layers

Creating the Pinelands Layer



Site

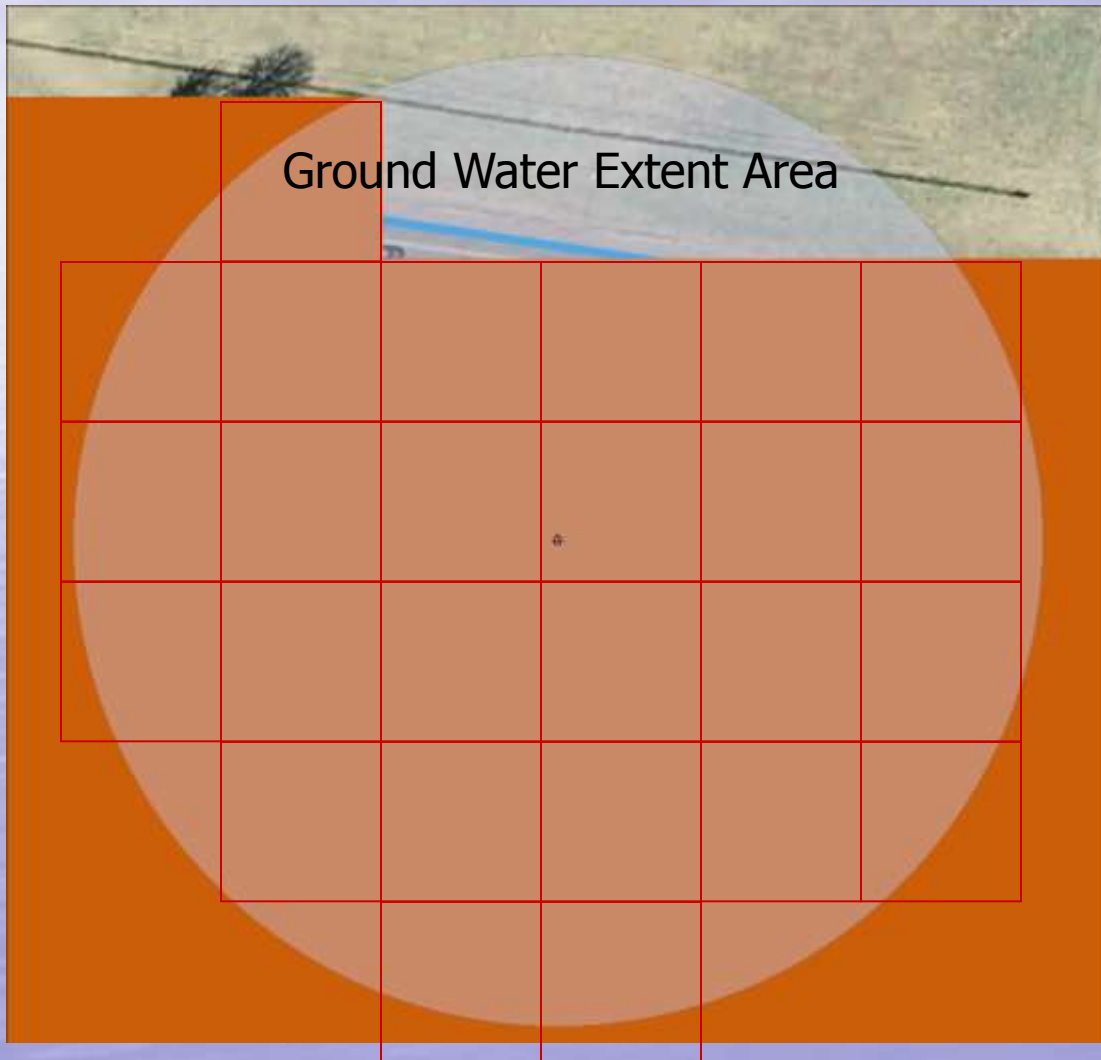
Extent Area





# Pinelands Layers

## Creating the Pinelands Layer



Zoom in

Sum up all cell values that are within the Extent Area

cell value = 400

Cells within area = 26

Final Score = 10,400





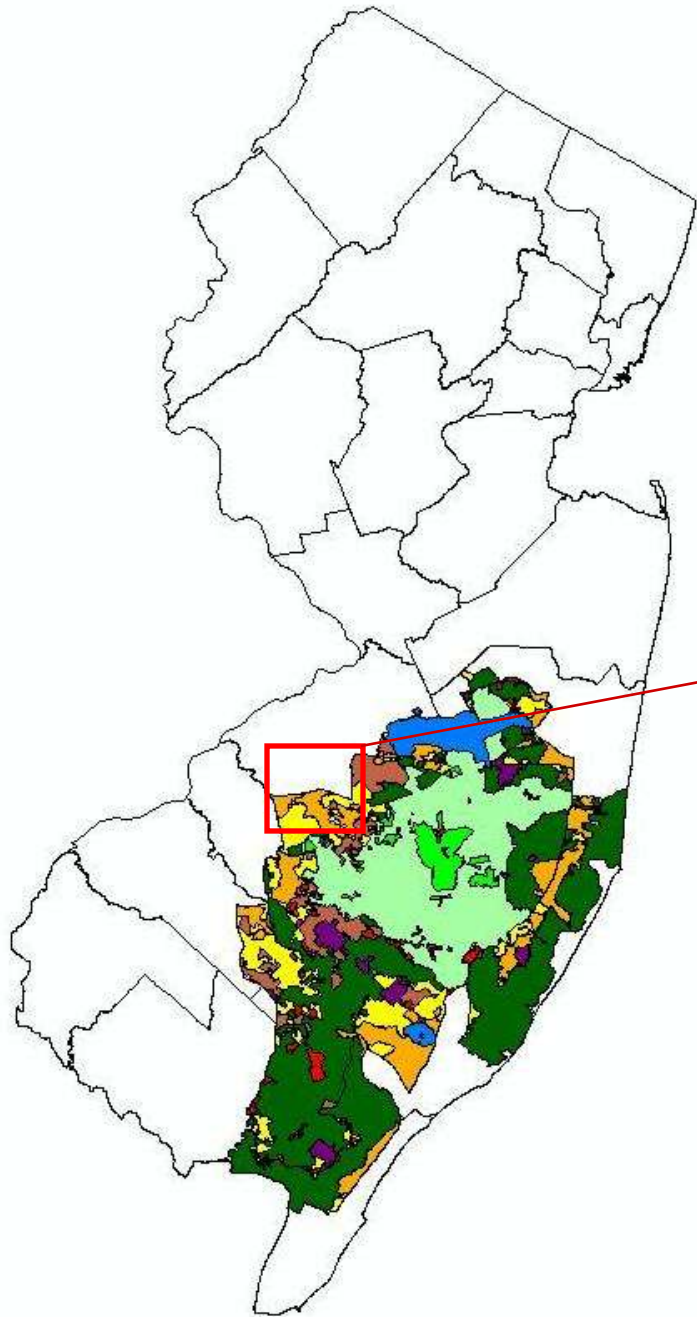
# Pinelands Layers

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





# Pinelands



## Legend

Pinelands

