



# Remedial Priority System

## Ecological Health Layers Highlands

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**





# Highlands Layer

- **Reason for Inclusion:** The Highlands Preservation and Planning Area, which was established by the Highlands Water Protection and Planning Act of 2004, includes 1,343 square miles noted for its scenic beauty and environmental significance. The Highlands' diverse natural communities, including its extensive forests, wetlands, rivers, and streams, are of statewide importance. Over 70 percent of its lands are environmentally sensitive.
- **Source Layers:**
  - Highlands
    - **Basis for layer:** Outline of the Highlands Preservation and Planning Areas established in accordance with the Highlands Water Protection and Planning Act of 2004





# Highlands 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.

Highlands Ecological Health Layers	
Highlands Preservation and Planning Area	Cell Value
Planned Community/Specially Planned Areas – Planning Area	90
Conservation – Planning Area	200
Planned Community/Specially Planned Areas – Highlands Preservation Area, Protection – Planning Area	300
Conservation – Preservation Area	700
Protection – Preservation Area	1000

- Calculation Method:

- All cells that are within the ground water Extent Area are summed.





# Highlands Layer

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





# Highlands Layer

Creating the Highlands Layer



Site







# Highlands Layer

Creating the Highlands Layer

Use the Highlands layer



Site

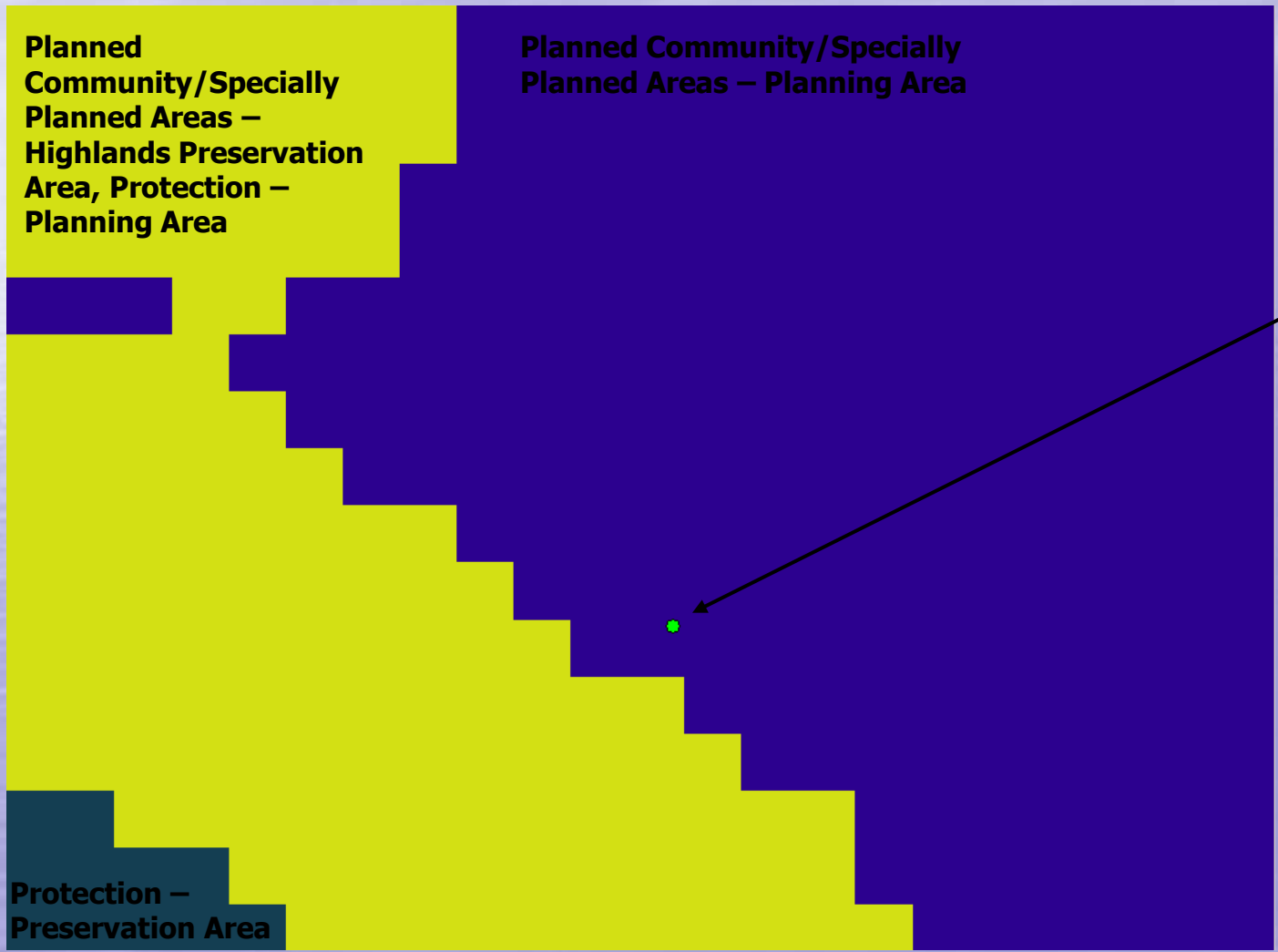
- Highlands
-  Highlands Planning Area
-  Highlands Preservation Area





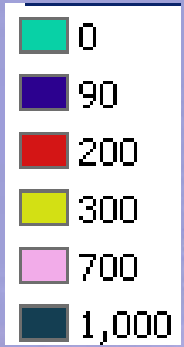
# Highlands Layer

## Creating the Highlands Layer



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

Site

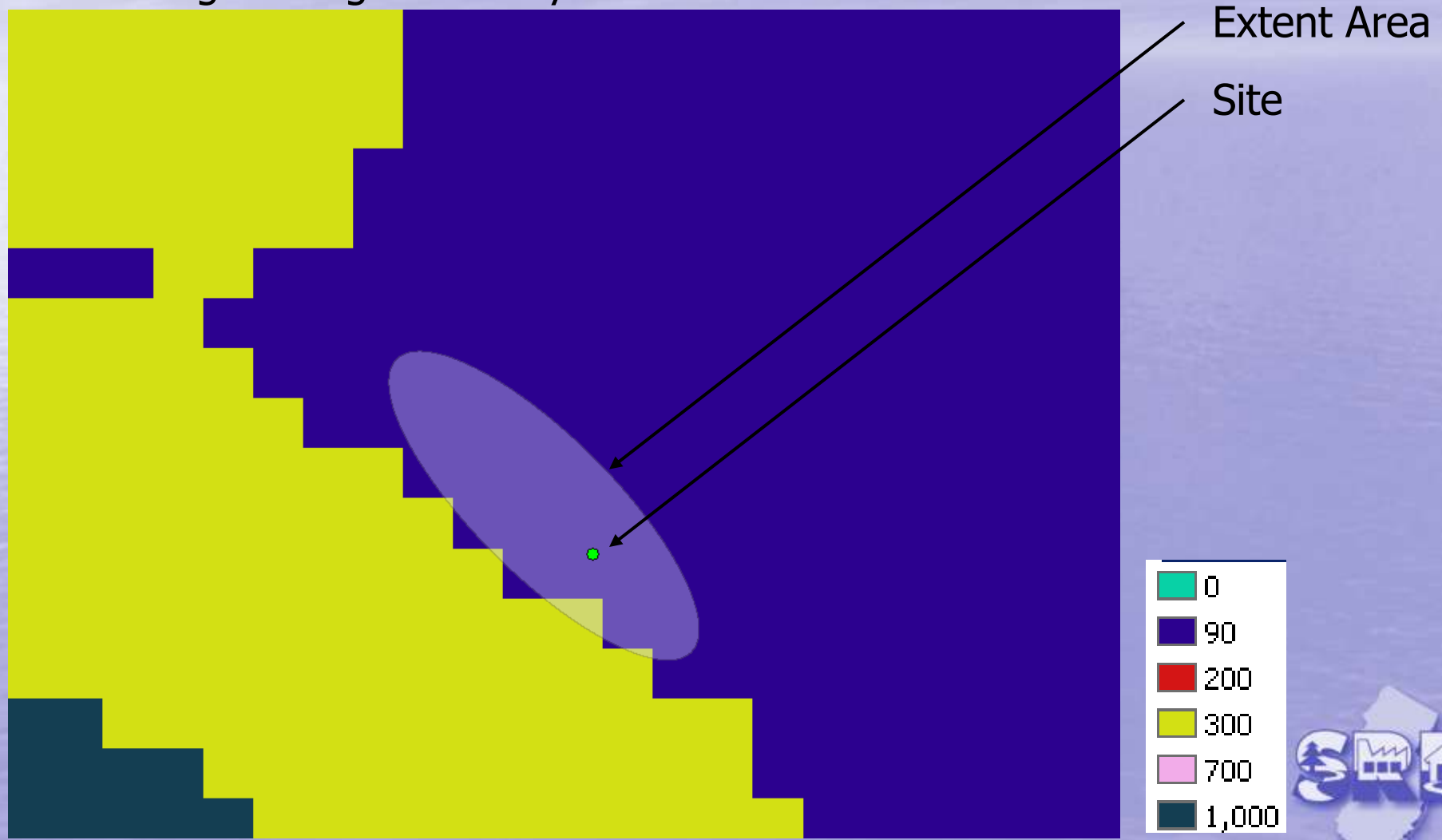






# Highlands Layer

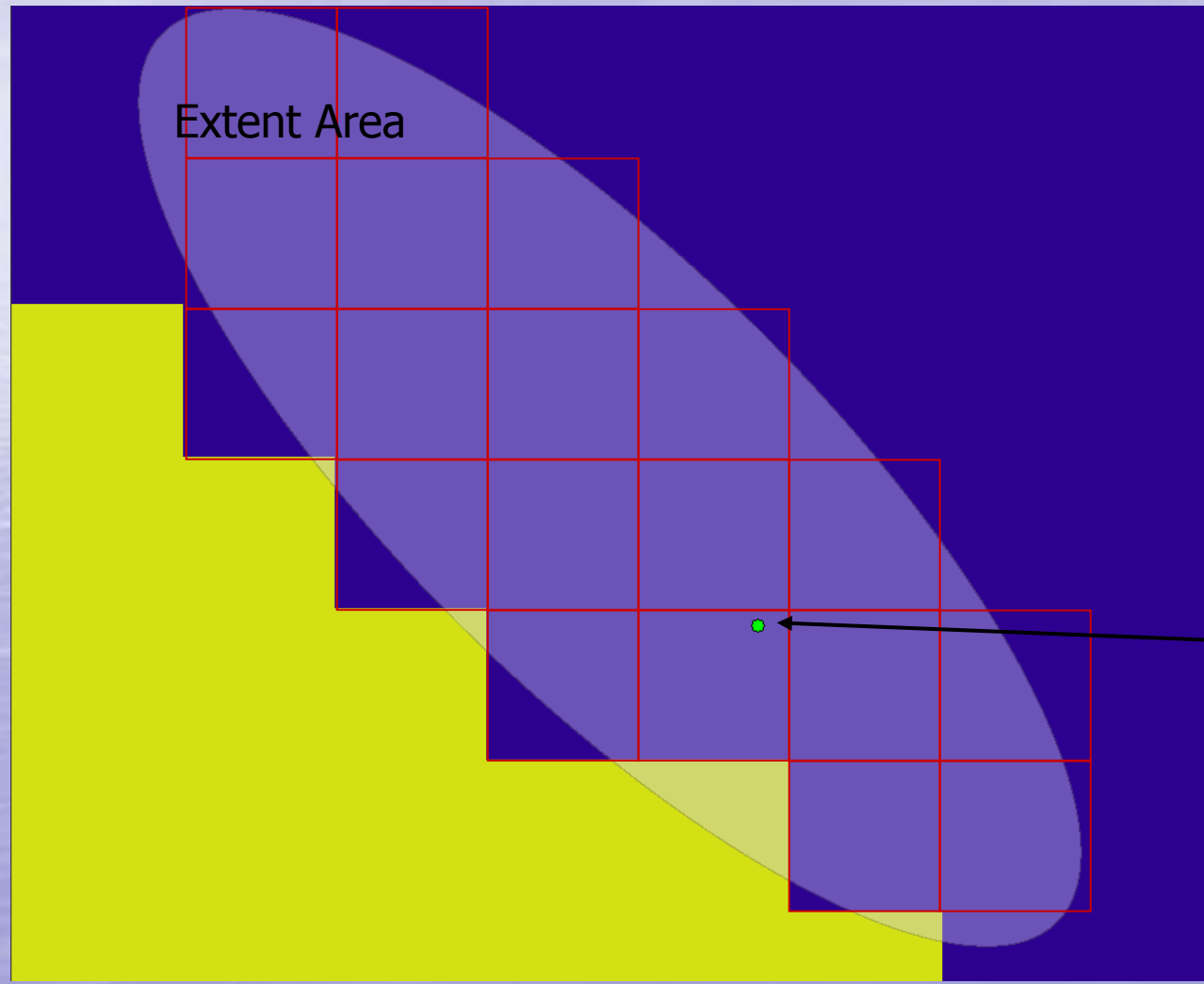
Creating the Highlands Layer





# Highlands Layer

## Creating the Highlands Layer



Zoom in

Sum up all cell values that are within the Extent Area

cell value = 90

Cells within area = 19

Final Score = 1710

Site

0
90
200
300
700
1,000

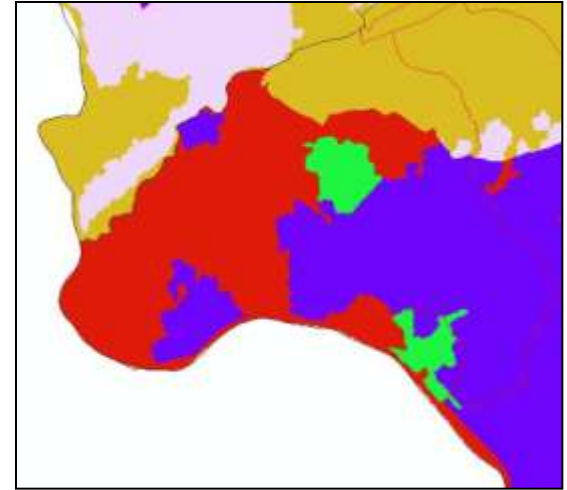
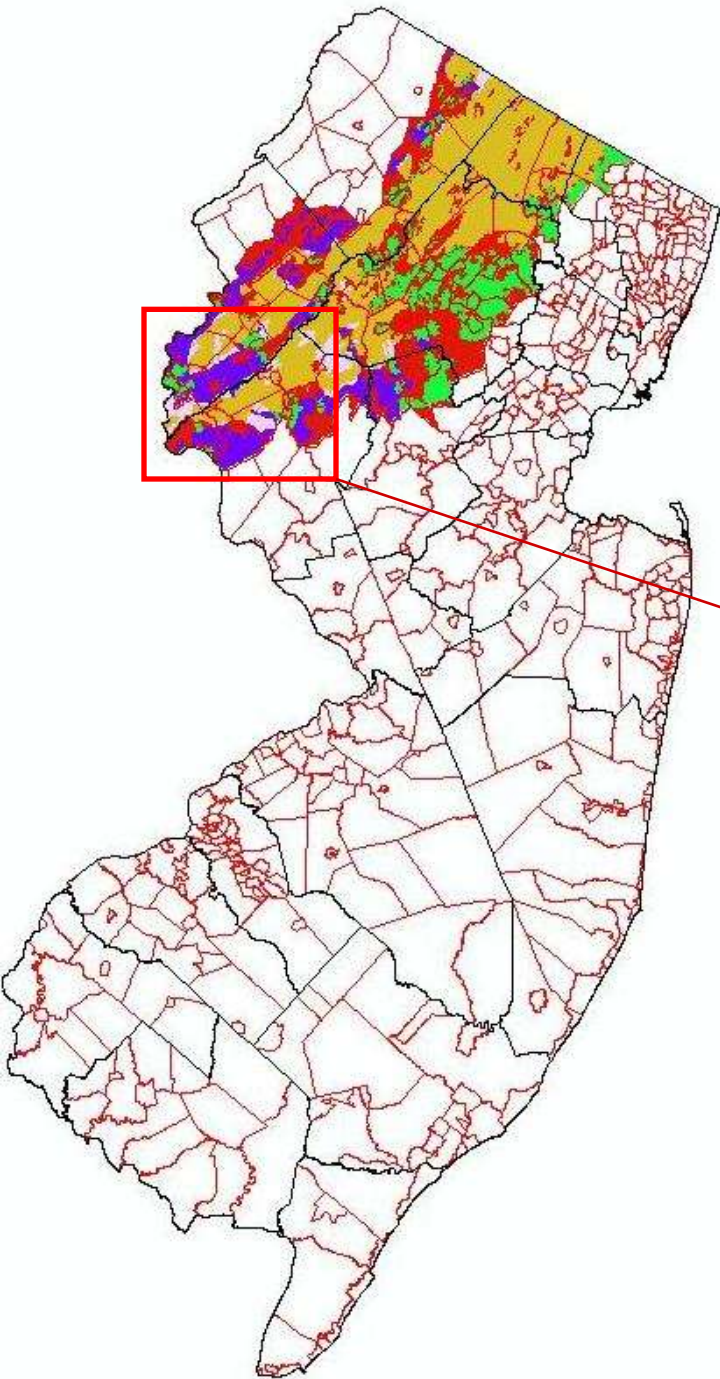




- A Highlands Layer is created for the entire state.
- The following is the layer used to calculate the Highlands Receptor Layer Score.



# Highlands Layer



## **Legend**

Highlands  
Score

