

## **Watershed Layers Download**

The Pinelands Comprehensive Management Plan (CMP) was adopted in 1980 following a planning process that began in 1979. What sets the CMP apart from most other land-use regulation and planning programs is that it was based on an ecosystem approach to protecting the natural resources of the New Jersey Pinelands. A major element of the CMP is a land-use-management program that directs development away from areas considered ecologically critical to areas deemed less critical.

Implementation of the CMP over the past three decades has involved more local and site-specific approaches. At times, single issues have overshadowed the broader, multifaceted goal of ensuring the long-term preservation of a unique ecosystem. The purpose of this ecological-integrity assessment is to focus on the big picture again by evaluating the current ecological status of the entire 938,173-acre (379,827-ha) Pinelands Area and the ecosystem that it represents.

The concept of ecological integrity as it was applied to the Pinelands Area, a description of the approach used to characterize ecological integrity, and the results of the assessment are presented in a report, titled “An Ecological-integrity Assessment of the New Jersey Pinelands: A Comprehensive Assessment of the Landscape and Aquatic and Wetland Systems of the Region” and is available via download from the Pinelands Commission’s website at [http://www.state.nj.us/pinelands/images/pdf%20files/EIA\\_Final\\_Report.pdf](http://www.state.nj.us/pinelands/images/pdf%20files/EIA_Final_Report.pdf).

This data download includes the watershed, drainage-unit, and wetland-drainage-unit geospatial layers and supporting metadata. Below is a brief explanation of the three layers. See the metadata for each layer for additional details.

New Jersey Pinelands Commission Watershed Layer: The watershed layer was created as part of the New Jersey Pinelands Commission ecological-integrity assessment (Zampella et al. 2008). Watersheds were created using NJDEP (1996) stream data, a digital-elevation model (NJDEP 2002), and Arc Hydro (ESRI 2007). This shapefile contains the watersheds for the Pinelands Area.

New Jersey Pinelands Commission Drainage-unit Layer: The drainage-unit layer was created as part of the New Jersey Pinelands Commission ecological-integrity assessment (Zampella et al. 2008). Drainage units were created using NJDEP (1996) stream data, a digital-elevation model (NJDEP 2002), and Arc Hydro (ESRI 2007). The term drainage unit refers to a section of a watershed. This shapefile contains the drainage units for the Pinelands Area.

New Jersey Pinelands Commission Wetland-drainage-unit Layer: The wetland-drainage-unit layer was created as part of the New Jersey Pinelands Commission ecological-integrity assessment (Zampella et al. 2008). Drainage units were created using NJDEP (1996) stream data, a digital-elevation model (NJDEP 2002), and Arc Hydro (ESRI 2007). The term drainage unit refers to a section of a watershed. Drainage units were split along streams to create wetland-drainage units. Additional wetland-drainage units were delineated for the upper limit of mapped streams. This shapefile contains the wetland-drainage units for the Pinelands Area.

### **References:**

ESRI. 2007. Arc Hydro for ArcGIS 9 Version 1.2 Beta. Environmental Systems Research Institute, Redlands, California USA.

NJDEP. 1996. New Jersey geographic information system CD-ROM, Series 1, Volumes 1-4. New Jersey Department of Environmental Protection, Office of Information Resource Management, Bureau of Geographic Information Systems, Trenton, New Jersey, USA.

NJDEP. 2002. NJDEP 10-meter digital elevation grid, watershed management areas 13-20. New Jersey Department of Environmental Protection, Office of Information Resource Management, Bureau of Geographic Information Systems, Trenton, New Jersey, USA.

Zampella, R. A., Procopio, N. A., Du Brul, M. U., Bunnell, J. F. 2008. An Ecological-integrity assessment of the New Jersey Pinelands. A comprehensive assessment of the landscape, aquatic and wetlands systems of the region. New Jersey Pinelands Commission, New Lisbon, New Jersey, USA.