

# Washington Township Highlands Regional Master Plan Conformance ENVIRONMENTAL RESOURCES INVENTORY

## Highlands Planning Area

Municipal plan conformance is voluntary

## Highlands Preservation Area

Municipal plan conformance is mandatory

## Washington Township in the Highlands Region

- Planning Area: 7,953 ac (69%)
- Preservation Area: 3,595 ac (31%)
- Washington Twp has opted to conform to both the Planning and Preservation Areas

## Land Use Capability Zones

Major Zones:

- Protection Zone (PZ)
- Conservation Zone (CZ)
- Existing Community Zone (ECZ)

Sub-Zones:

- Lake Community Zone (LC)
- Conservation Zone - Environmentally Constrained – (CZ-EC)
- Existing Community Zone - Environmentally Constrained (ECZ-EC)

## For more information

Washington Township's Petition for Plan Conformance with all supporting documentation and presentations can be found here:

[http://www.highlands.state.nj.us/njhighlands/planconformance/wash\\_twp\\_warren.html](http://www.highlands.state.nj.us/njhighlands/planconformance/wash_twp_warren.html)

## Contact:

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The Highlands Plan Conformance Process centers on a task-oriented approach for which financial assistance was provided and is being used for professional fees. Washington Township retained Natural Systems Utilities, LLC to provide professional planning services toward Plan Conformance. Angela S. Clerico, PP/AICP, LEED AP is the project lead.

The Highlands Council has identified a number of tasks for towns to complete in order to conform to the “goals, requirements, and provisions of the Regional Master Plan”. These tasks are categorized into Modules and Other Plan Conformance Tasks. Highlands Modules and Other Tasks relative to Washington Township can be found in the side bar on the next page (Implementation Plan & Schedule).

The Environmental Resources Inventory (ERI) is one component of Plan Conformance that addresses the main subject of the Highlands Regional Master Plan's Goals, Objectives and Policies: *the protection of the region's natural resources*. An ERI provides the framework to assess the location, condition, and abundance or deficit of a certain resource. It is a useful tool for land use planning in any community. It is a base source for resource conservation and protection plans and ordinances.

*“The natural resources of the Highlands Region join to create a landscape that supports endangered species, scenic vistas, agriculture, small towns, manufacturing, and the water supplies for New Jersey's largest metropolitan areas. Forest, waterways, Critical Habitat, and agricultural soils are affected by and intermixed with steep slopes, limestone valleys and lake areas.”*

This brief guide to the ERI explains some of the key concepts and topics important to plan conformance and are based on the Land Use Capability Zones as established by the Highlands Council.

*The Land Use Capability Zones are six zones located in both the Planning and Preservation Areas to guide development away from environmentally sensitive lands and agriculture lands. They also provide the framework for compact development and redevelopment in or adjacent to existing developed areas where public facilities are available to serve new growth, provided that such growth is compatible with existing land uses and community character.*

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## Washington Township's Implementation Plan & Schedule

1. Housing Element & Fair Share Plan (Module 3)
2. Highlands Environmental Resource Inventory (Module 4)
3. Highlands Element of Municipal Master Plan (Module 5)
4. Highlands Land Use Ordinance (Module 6)
5. Planning Area Petition Ordinance / Checklist Ordinance
6. Agriculture Retention / Farmland Preservation Plan Element
7. Zoning Map Update
8. Habitat Conservation & Management Plan
9. Stream Corridor Protection / Restoration Plan
10. Wastewater Management Plan
11. Highlands Center Designation Feasibility Study
12. Highlands Council Training Sessions

*Washington Township started with the ERI in order to complete a baseline inventory of resources. This will be followed by a comprehensive approach to Agriculture Retention, Centers Designation and Wastewater Management Planning.*

## For more information

Check the Township website for regular updates on this process and including these fact sheets

[http://www.washington-twp-warren.org/highlands\\_plan\\_conformance/index.jsp](http://www.washington-twp-warren.org/highlands_plan_conformance/index.jsp)

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## Some common terms in the ERI:

**Subwatersheds** - The area on which many of the ERI water-related categories are based

**Forest Resources** – Include forest areas of high ecological value including those that exhibit the least fragmentation and are vital for the maintenance of ecological processes

**Open Waters & Riparian Areas** – All springs, wetlands, intermittent or ephemeral streams, perennial streams, and bodies of surface water, whether natural or artificial, located wholly or partially within the boundaries of the Highlands Region

**Watershed Resource Values** – High, Moderate, or Low depending on quality of habitat, amount of existing development, and proportion of forest lands

**Riparian Integrity** – High, Moderate or Low depending on quality of habitat, amount of impervious cover, and amount of agricultural uses

**Steep Slopes** – Severely, Moderately, or Limited constraints to development depending on grade of slope. Steeper slopes are more severely constrained for development.

**Critical Wildlife Habitat** – Identified through NJDEP's Landscape Project: a pro-active, ecosystem level approach to long-term protection of imperiled species by maintaining and enhancing imperiled wildlife populations within healthy, functioning ecosystems.

**Significant Natural Areas** – Identified by the NJDEP's Natural Heritage Program; Includes rare or endangered plant species or exemplary ecological communities

**Vernal Pools** - Confined, ephemeral wet depressions that support distinctive, and often endangered, species that are specially adapted to periodic extremes in water pool levels

**Preserved Lands** – Public and private areas of land and water available for active and passive recreation; areas maintained as conservation areas dedicated to the preservation of natural and cultural resources; lands that provide access to inland water bodies; and other public or private lands that may not be directly accessible to the public but that enhance the open space system in the Highlands Region.

**Conservation Priority Areas** – Areas that should be preserved to protect their ecological and water value. Ranking based on 33 ecological indicators which measure the quantity and quality of these regional resource values: forests, watershed condition, critical habitat, prime ground water recharge areas, open waters and riparian areas, and steep slopes.

**Special Environmental Zones** – Goal was to create an element of critical mass with a greater focus on water protection. Determined by 5 indicators from the *Land Preservation and Stewardship Technical Report* and correlated to Conservation Priority Area Clusters.

**Carbonate Rock** – Identifies areas of Karst topography and such features as sinkholes, sinking streams, enlarged bedrock fractures, caves, and underground streams.

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**Water Resource Availability** - Examines stream base flows which are critical to maintaining healthy aquatic ecosystems and protecting potable surface water supplies, particularly during periods of drought.

**Prime Groundwater Recharge** – Measured by precipitation, evapotranspiration, anthropogenic, ecological factors, geological factors, hydrogeological factors.

**Water Quality** – Clean Water Act requires municipalities to identify impaired waters. Section 303(d) of the Act (known as the 303(d) list) identifies the name of the water body and the pollutant or pollutants causing the water body to be listed as impaired. Section 305(b) also requires states to periodically assess and report on the overall quality of their waters. With guidance from USEPA, in 2002 the NJDEP integrated the 303(d) report with the 305(b) report into one report titled the New Jersey Water Quality Monitoring and Assessment Report (Integrated Report). Data in this plan stems from the 2006 Integrated Report which categorizes impaired streams into the 5 Sublists below.

<b>Sublist 1:</b>	The designated use is assessed and attained AND all other designated uses in the assessment unit are assessed and attained.	
<b>Sublist 2:</b>	The designated use is assessed and attained BUT one or more designated uses in the assessment unit are not attained and/or there is insufficient information to make a determination.	
<b>Sublist 3:</b>	Insufficient or no data are available to determine if the designated use is attained.	
<b>Sublist 4:</b>	The designated use is not attained or is threatened; however, development of a TMDL (Total Maximum Daily Load) is not required for one of the following reasons:	<ul style="list-style-type: none"> <li>a. A TMDL has been completed for the pollutant causing non-attainment.</li> <li>b. Other enforceable pollution control requirements are reasonably expected to result in the conformance with the applicable water quality standard(s) in the near future and the designated use will be attained.</li> <li>c. Non-attainment is caused by something other than a pollutant (e.g. "pollution"), such as natural conditions.</li> </ul>
<b>Sublist 5:</b>	The designated use is not attained. The waterbody is impaired or threatened for the designated use by a pollutant(s), and requires a TMDL.	
<b>N/A:</b>	Designated use does not apply.	

**Wellhead Protection** - An effective Wellhead Protection Ordinance establishes Wellhead Protection Areas (WHPAs) around public community wells; public water supply wells serving at least 15 service connections used by year-round residents regularly serving at least 25 year round residents. Non-community water supply wells are defined as public water supply wells that are not public community wells and regularly service at least 25 individuals for at least 60 days in any given calendar year.

**Septic System Yield** – Used as a method for minimizing the potential for contamination of ground water and is a useful indicator of the potential impacts to ground water quality.

**Agricultural Resource & Priority Areas and Important Farmland Soils** – identify existing ag uses, soils, and areas that should be prioritized for protection. These are important to understanding where valuable ag lands are located and which should be considered for protection.

**Scenic Resources** - goals associated with protecting scenic resources are to maintain the visual integrity and scenic beauty of noteworthy viewsheds and natural and cultural features of regional significance in the Highlands Region.

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**Contaminated Site Inventory** – Provides awareness of sites with potential impact of contamination regarding on-site or adjacent natural resources, neighborhoods, and economic potential. Is a planning tool for future remedial actions including redevelopment.

**Public Community Water Systems** - water and wastewater utilities rely upon significant volumes of ground water or surface water, and thus are intrinsically linked to those natural resource components for which the Highlands RMP provides protection policies. These community systems, whether their source consists of ground water or surface water withdrawals, may have the potential for inducing or supporting growth.

**Domestic Sewerage Facilities** - An important tool to identify areas where growth should or should not be encouraged and where land adjacent to this infrastructure is appropriate for growth. Additionally, this inventory will assist in the identification of areas of concern where dense development patterns without sewer service exist. Such situations may require the replacement of septic systems with community wastewater systems in order to safeguard public health.

**Roadway Network** - Past development patterns of inefficient land use in the region have led to an increased dependence on automobile travel, which is true for much of the country. Smart growth principles that encourage more efficient land use will allow for an accessible, multi-modal transportation system will help to protect and improve environmentally sensitive areas.

**Transit Network** - The movement of people and goods via transit features, and the relationship of these features to the resources and land use conditions of the Region, provide a framework for evaluating environmental resources that are potentially affected by the presence of these features. Such impacts could involve habitat features that are bisected by transit networks, for example, or habitat that surrounds these networks and should be evaluated when planning for future development and redevelopment activities.