

HIGHLANDS OPEN WATERS

I. INTRODUCTION

Requirements of the Highlands Act

Among the goals of the Highlands Act are to “protect, restore and enhance water quality and quantity of surface and ground waters” and to “protect the natural, scenic, and other resources of the Highlands Region, including but not limited to contiguous forests, wetlands, vegetated stream corridors, steep slopes, and critical habitat for fauna and flora” (Section 10.a.).

Overview of Highlands Open Waters

Highlands Open Waters are vital natural resource of the Highlands Region. As defined in the Highlands Act, Highlands Open Waters includes all springs, streams including intermittent streams, wetlands and bodies of surface water, whether natural or artificial, located wholly or partially within the boundaries of the Highlands Region, but shall not mean swimming pools. Highlands Open Waters are a critical public trust resource and an essential source of drinking water for the residents of the State of New Jersey. They also provide protection against floods and help to ameliorate the affects of prolonged droughts. They are also important habitat for numerous plant and animal species including many endangered and threatened in the State. They provide a wealth of agricultural, recreational and aesthetic uses for both residents and visitors alike, helping to contribute to a vibrant regional economy.

II. APPROACH AND INITIAL ACTION

To implement this section of the Highlands Act, the Highlands Council determined to undertake an analysis of Highlands Open Waters for the development of the Regional Master Plan by taking the following actions:

- identify and map the location of Highlands Open Waters.
- categorize each Highlands Open Waters using water classifications consistent with existing State regulatory programs
- establish protection area buffers for each Highlands Open Waters category.
- evaluate the ecological integrity of Highlands Open Waters at the subwatershed level (HUC14) using a number of regional indicators of ecological integrity or impairment.
- utilize the Highlands Open Water categories and regional indicators to inform resource protection needs and land use standards.

In furtherance of this approach the Council took the following initial actions:

1. Established an inventory of Highlands Open Waters to incorporate their protection areas into the Land Use Capability Map.
2. Established "buffers" based on the following categories:
 - Highlands Waters – All Highlands Open Waters contained within the Highlands Preservation Area. They receive a 300-foot protection area buffer from each edge of the Highlands Open Water feature.
 - Special Waters – All Highlands Open Waters that drain to a Category One (C1) waters (including Trout Production [TP] waters), or are upstream of and hydrologically interconnected with a C1, TP, or Highlands Waters within the same HUC14 subwatershed. They receive a 300-foot protection area buffer from each edge of the Highlands Open Water feature.
 - Exceptional Waters– All Highlands Open Waters other than Highlands or Special Waters that drain to a FW1 waterway or include habitat for threatened or endangered species, or are upstream of and hydrologically interconnected with an Exceptional Waters within the same HUC14 subwatershed.

They receive a 150-foot protection area buffer from each edge of the Highlands Open Water feature.

- Intermediate Waters – All remaining Highlands Open Waters that are not Highlands, Special, and Exceptional Waters including waters that are hydrologically isolated from a surface water feature within the same HUC14 subwatershed. They receive a 50-foot protection area buffer from each edge of the Highlands Open Water feature.
3. Evaluated the integrity and protection needs at the subwatershed level based on the following regional indicators – Total Forest Cover, Habitat Quality, Developed Lands, and Agricultural Uses.
 4. Established land use standards based on value class. The following value classes shall be incorporated into the RMP: High Resource Value Watershed – All watersheds that contain predominantly forest lands and/or include a significant portion of the watershed as high quality habitat based on the presence of suitable habitat for rare, threatened or endangered species, and all watersheds draining to a surface water supply drinking water reservoir or potable water supply intake. Moderate Resource Value Watershed - All watersheds that may contain a high proportion of forest lands or high quality habitat but typically consist of significant levels of existing agricultural uses within the watershed. Low Resource Value Watershed - All watersheds that do not contain a high proportion of forest or high quality habitat and typically consist of significant levels of existing developed uses within the watershed.
 5. Developed strategies and standards for inclusion in the Policy Guidance Element, Land Use Capability Map and Standards, and Implementation Framework Element of the Plan. (See following section).

III. STRATEGIES & STANDARDS

A. Policy Guidance Element

RMP Standards

The Policy Guidance Element of the Plan will contain standards that will provide protection for Highlands Open Waters. The standards will vary depending on which Land Use Capability Map zone they are in. The standards will include the following:

To protect Highlands Open Waters:

- Discourage development activities and land uses within a Highlands Open Waters Protection Area.
- Require inclusion of Highlands Open Waters Protection Area within municipal zoning and land use ordinances.
- Establish minimum requirements for development and approval of stream corridor protection and restoration plans.
- Establish minimum requirements for incorporation of Highlands Open Waters Protection Areas within municipal and County Open Space Plans.

To provide for Smart Design:

- Establish minimum site design guidelines and permissible uses within Highlands Open Waters:
 - a) Permissible uses within a high value area shall be limited to maintenance of pre-existing uses. No increases in pre-existing impervious area shall be permitted. Prioritization for acquisition or restoration of impaired areas shall be required wherever practical. Relief from strict adherence to Resource Protection Standards shall be permitted only within areas deemed a Special Planned Areas as approved by the Highlands Council
 - b) Permissible uses within a medium value area shall be limited to maintenance of pre-existing uses or other compatible uses that do not impair Highlands Open Waters resource value. Minimal increases in pre-existing impervious area shall be permitted upon approval of a Stream Corridor Protection Plan and program approved by the Highlands Council. Restoration of impaired areas shall be encouraged wherever practical. Relief from strict adherence to Resource Protection

Standards shall be permitted within Agricultural Development Areas or areas deemed a Special Planned Areas as approved by the Highlands Council

- c) Activities within a low value area shall encourage redevelopment of previously developed areas and allow for other compatible uses that do not impair Highlands Open Waters resource value. Increases in pre-existing impervious area shall be permitted upon approval of a Stream Corridor Protection Plan and Low Impact Development Best Management Practices program approved by the Highlands Council. Restoration of impaired areas shall be encouraged wherever practical.
- Establish minimum requirements for development and approval of low impact best development best management practices.
- Require inventory of Highlands Open Waters including the identification of headwater streams, seeps or springs, subject to review and approval of Highlands Council, as a mandatory requirement for any site plan application.

To address Regional Growth:

- Require development of regional stormwater and wetland management and mitigation plans, subject to review and approval of Highlands Council.
- Require participation in regional stormwater and wetland management and mitigation program, where applicable, as a mandatory requirement for any site plan application.

B. Land Use Capability Map and Standards

The Land Use Capability Map will include various overlay zones, currently called Regional Protection Zone (most environmentally sensitive), Regional Conservation Zone (middle level) and Regional Development Zone (most appropriate for development). A number of factors will be considered in determining into which zone particular land belongs. One of these factors will be Highlands Open Waters value (high, medium or low).

Regional Protection Zone: Include all Highlands Open Waters Protection Areas for Highlands or Special Waters. Include those Highlands Open Waters Protection Areas for Intermediate or Exceptional Waters that fall within a High Resource Value Watershed.

- Discourage adjustments and revisions to Highlands Open Waters Protection Area requirements except when within a Special Planned Area or within an Agricultural Development Area, as determined by the Highlands Council, and only upon demonstration that any relief of protection requirements will not impair or reduce the ecological integrity of the Highlands Open Waters.
- Prioritize acquisition, development restrictions and/or Transfer of Development Rights (TDR) credit bonuses for lands within a Highlands Open Waters Protection Area

Regional Conservation Zone: Include all Highlands Open Waters Protection Areas for Exceptional Waters. Include those Highlands Open Waters Protection Areas for Intermediate Waters that fall within a Moderate Resource Value Watershed.

- Allow for adjustments and revisions to Highlands Open Waters Protection Area requirements within a Special Planned Area or within an Agricultural Development Area, as determined by the Highlands Council, upon demonstration that the ecological integrity of the Highlands Open Waters can be maintained.
- Require stream protection/restoration plans and Low Impact Development Best Management Practices within an area designated as Special Planned Areas to mitigate and restore impacts to any Highlands Open Waters Protection Area.
- Encourage stream protection/restoration plans and Low Impact Development Best Management Practices within an area designated as Agricultural Development Area to mitigate and restore impacts to any Highlands Open Waters Protection Area.

Regional Development Zone: Include all Highlands Open Waters Protection Areas for Intermediate Waters. Including Highlands Open Waters Protection Areas for all waters within a Low Resource Value Watershed that is not a Highlands, Special or Exceptional Waters.

- Allow for adjustments and revisions to Highlands Open Waters Protection Area requirements upon approval of the Highlands Council
- Require Low Impact Development Best Management Practices for any development activity within an Highlands Open Waters Protection Area.

C. Implementation Framework Element

Pre-Conformance Strategies:

- Develop technical guidelines for the identification and delineation of Highlands Open Waters.
- Develop technical guidelines and procedures for development of Municipal Stream Corridor Protection and Restoration Plans, Open Space Plans and for development and implementation of Low Impact Development Best Management Practices.
- Develop technical review procedures for proposed adjustments and revisions to Highlands Open Waters Protection Area requirements.

Conformance Strategies:

- Require inclusion of Highlands Open Waters Protection Element, stream corridor protection and restoration plans, regional stormwater and wetland mitigation/management plans, and Open Space Plans into Municipal and/or County conformance documents, Master Plans, Zoning and Land Use Ordinances, as appropriate.

Five Year Highlands Resource Protection and Planning Goals:

- Develop methods for continued development and refinement of Highlands Open Water Inventory with an emphasis on identification of vernal habitat, headwater streams and headwater seeps/springs.
- Develop a wetland habitat functional assessment to ensure levels of Highlands Open Waters protection requirements are appropriate to maintain existing resource value for water quality treatment, flood prevention, protection of base flows of streams and wildlife habitat.
- Continue development of a regional stream integrity model at a HUC17 level to establish protection requirements of Highlands Open Waters based on biological and water quality indicators.
- Coordinate activities among public and private entities to encourage regional restoration activities and open space acquisition strategies.
- Develop recommendations for reclassification of Surface Water Quality Standards at N.J.A.C. 7:9B for Highlands Open Waters consistent with the resource protection goals of the RMP.

Coordination and Consistency Considerations:

- Develop a coordinated regulatory review program with the NJDEP to ensure consistency of permit actions, open space acquisition priorities, surface water quality standards and restoration activities consistent with the resource protection goals of the RMP.
- Coordinate with NJDEP to expand Ambient Biological Monitoring Network (AMNET) to include additional stations in the Highlands Region.
- Coordinate with the New Jersey Department of Transportation, county and regional transportation planning agencies, to promote a regional program for restoration and mitigation of impacts to Highlands Open Waters attributable to Transportation Improvement Programs within the Highlands Region that are compatible with the Resource Protection goals of the RMP.

- Coordinate with the NJDEP Land Use Regulation Program to develop regional programs for management and mitigation of non-point source and wetland impacts from land development activities within the Highlands Region.
- Coordinate with the USDA Natural Resource Conservation Service and NJDA to promote Highlands Open Water Protection Area requirements and standards in Resource Management and Conservation Plans for existing agricultural uses to the maximum extent practical.
- Coordinate with the NJDEP Bureau of Forestry to develop and implement Forest Management practices that maintain and protect the resource value with Highlands Open Waters Protection Areas.

Local Participation Considerations:

- Develop educational and technical training programs for municipal officials and interested watershed organizations to promote consistent standards for the protection, restoration and acquisition of important waters of the Highlands Region.
- Develop educational and technical training program for municipal officials on Highland Open Water Protection Areas, land use standards, conservation measures and Low Impact Development Best Management Practices to minimize impacts from land development activities.
- Coordinate with municipal Environmental Commissioners and watershed organizations to encourage a comprehensive stream monitoring program within the Highlands Region.

IV. DISCUSSION