

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF COASTAL AND LAND USE PLANNING

ADOPTED AMENDMENT TO THE SUSSEX WATER QUALITY
MANAGEMENT PLAN

Public Notice

Take notice that on **JUL 24 2012**, pursuant to the provisions of the New Jersey Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., and the Statewide Water Quality Management Planning rules (N.J.A.C. 7:15-3.4), an amendment to the Sussex County Water Quality Management (WQM) Plan was adopted by the Department of Environmental Protection (Department). The notice of proposal of this amendment incorrectly identified the amendment as one to the Sussex County and Upper Delaware WQM Plans. This amendment is only to the Sussex County WQM Plan. This amendment, submitted by the County of Sussex on behalf of Byram Township, provides for a Byram Township Municipal Chapter as part of the Sussex County-Wide Wastewater Management Plan (WMP). In accordance with N.J.A.C. 7:15-5.3(g), Sussex County, which acts as both the Water Quality Management Planning Agency and Wastewater Management Planning Agency, has submitted this Municipal Chapter that covers only a portion of their wastewater management planning area, but that addresses the entire municipality of Byram Township.

Byram Township, located within the Highlands Region as delineated by the Highlands Water Protection and Planning Act, N.J.S.A. 13:20-1 et seq. (Highlands Act), has agreed to conform to the Highlands Regional Master Plan (RMP) developed and adopted by the Highlands Water Protection and Planning Council (Highlands Council) in accordance with the Highlands Act and to the Plan Conformance process adopted by the Highlands Council through Resolution

#2010-06. The approved Petition for Plan Conformance for Byram Township was accompanied by approval of a Highlands Center Designation for the Byram Highlands Center. Most of the vacant developable land in the proposed Byram Highlands Center is associated with the "Village Center Zone" (Block 365 Lot 2 and Lot 5) component of the Center, which is designated the Byram Highlands Village Center. The approved Byram Highlands Center includes the Village Center. One of the conditions for each municipality that agrees to conform to the RMP for the entire municipality is the development of a municipal WMP, or municipal chapter of a County WMP, as appropriate, in compliance with the RMP and N.J.A.C. 7:15.

This amendment provides for a municipal WMP chapter (Byram WMP Chapter) of the Sussex County WMP that identifies wastewater service designations as either Septic Areas (Planning Flows of 2,000 Gallons per Day (GPD) or Less) or Future Sewer Service Area (FSSA) of the Musconetcong Sewerage Authority (MSA) Sewage Treatment Plant (STP) or individual NJPDES permitted Ground Water Discharge locations.

This amendment re-delineates sewer service area (SSA) within the boundaries of Byram Township consistent with the RMP. As part of the Byram WMP Chapter, areas that were previously approved SSA that have never been connected to the MSA treatment system, and which have been identified as environmentally sensitive areas (ESA), were removed from the SSA. The locations removed from the previously approved SSA have the wastewater service designation "Septic Areas (Planning Flows of 2,000 Gallons per Day (GPD) or Less)."

Currently, the MSA STP (#NJ0027821) has a permitted capacity of 4.31 million gallons per day (MGD) with a future stage flow of 5.79 MGD contingent upon the

conditions of the recent permit renewal. The MSA STP discharges to the Musconetcong River, a designated Category 2 (C2), Fresh Water 2, Trout Maintenance (FW2-TM) waterway as classified under the Surface Water Quality Standards, N.J.A.C. 7:9B. The Musconetcong River is also a Highlands open water. The MSA STP currently serves portions of the following municipalities in Sussex and Morris Counties: Byram Township, Stanhope Borough, Hopatcong Borough, Netcong Borough, Mount Arlington Borough, Mount Olive Township, and Roxbury Township.

This amendment retains most of the previously approved SSA of the MSA STP within the Planning Area portion of Byram Township, consistent with the RMP, to serve existing and new development within the Byram Highlands Center as designated by the Highlands Council. The adopted FSSA allows for the development of the Byram Highlands Village Center, including connection of existing septic systems that are located within the adopted FSSA. The Byram WMP Chapter includes minor reductions of the previously approved SSA to eliminate conflict with ESA and promotes consistency with the Highlands Act and the RMP.

As part of this amendment, adjustments to the previously approved SSA delineation have been made to more accurately reflect the existing tax parcel and municipal boundary lines of Byram Township within the FSSA. As a result of more accurate digital parcel mapping and Geographic Information Systems technology, this WMP re-delineates portions of the previously approved SSA to accurately identify lots currently served by the MSA STP and revises the FSSA to correspond to the boundary lines of lots proposed for connection to the sewer system.

This amendment has been reviewed in accordance with the Water Quality Management Planning Rules that provide the environmental review standards to be applied to an amendment for a WMP at N.J.A.C. 7:15-5.18, N.J.A.C. 7:15-5.24, and N.J.A.C. 7:15-5.25.

This WMP incorporates an environmental constraints/build-out (build-out) analysis to identify future projected flow from the adopted FSSA within Byram Township to ensure there will be sufficient capacity at the MSA STP to accommodate future need. This build-out analysis was conducted for all parcels within the existing and adopted SSA of Byram Township only.

To assess the current available wastewater capacity at the MSA STP, the existing wastewater flow received from all municipalities currently served by the MSA STP is calculated as the average of the monthly metered flow reported to the Department from January 2010 through December 2010. The calculated annual average of the monthly average flow is 2.30 MGD. This flow volume subtracted from the current Department recognized permit capacity of 4.31 MGD suggests a potential available capacity of 2.01 MGD.

For those portions of the FSSA within Byram Township that are either undeveloped or underdeveloped, the projected wastewater flow was calculated in accordance with N.J.A.C. 7:14A-23.3. Calculations were based upon the current municipal zoning and included potential development of all remaining parcels of vacant land, underdeveloped residential and commercial property, and any existing parcels currently served by individual subsurface sewage disposal systems that are located within the FSSA. Pursuant to N.J.A.C. 7:15-5.25(c)(1), environmentally constrained areas were excluded from the SSA for purposes of projecting wastewater flow. The environmentally constrained areas excluded in

projecting wastewater flow from the adopted FSSA included wetlands, preserved open space, and documented flood prone areas or protected riparian corridor areas where development would be limited. The total projected wastewater flow for undeveloped and underdeveloped portions of Byram Township within existing and adopted FSSA was determined to be 0.0929 MGD, including 0.04 MGD specifically for the Byram Highlands Village Center and 0.005851 MGD for the remainder of the Byram Highlands Center.

As a result of the Highlands Act, and subsequent plan conformance with the RMP, previously approved MSA SSA has been significantly reduced, limiting the potential for future wastewater flow. The Department has concluded that the projected wastewater flow to serve the future needs of Byram Township of 0.0929 MGD would be within the potential available capacity of 2.01 MGD and the permitted capacity of 4.31 MGD of the MSA STP. Accordingly, no expansion of the STP is required at this time nor anticipated in the immediate future.

To comply with the Nonpoint Source Pollutant Loading/Hydromodification Analysis required at N.J.A.C. 7:15-5.25(g)(1), Byram Township submitted and obtained approval of its Stormwater Management Plan and adopted Stormwater Control Ordinance (SCO) from Sussex County. As required the adoption of this ordinance by Byram Township ensures compliance with the performance standards of the Stormwater Management rules, N.J.A.C. 7:8.

To comply with the Nonpoint Source Pollutant Analysis required at N.J.A.C. 7:15-5.25(g)(2)-(6), Byram Township was to adopt a Land Use Ordinance consistent with the RMP, which is required for all conforming municipalities. Byram Township was to adopt the Highlands Land Use Ordinance, the Highlands

Checklist Ordinance, or both, prior to adoption of this amendment, either of which will achieve implementation of these requirements.

On June 6, 2012, Byram Township formally adopted Ordinance No. 4-2012 (Highlands Checklist Ordinance) amending the Township Land Use Ordinance to update submission requirements for development applications. As a result of the adoption of Byram Township's Highlands Checklist Ordinance, the Department's Nonpoint Source Pollutant Analysis, and Riparian Corridor and steep slopes protection requirements have been met.

To satisfy the riparian corridor analysis, it is necessary that riparian areas in the WMP area be protected. Adoption of the Highlands Checklist Ordinance ensures the protection of the riparian corridors along all perennial and intermittent streams and lakes within Byram Township.

Pursuant to the RMP and both the Highlands Land Use Ordinance and the Highlands Checklist Ordinance, Highlands open water buffers extend to 300 feet from the top of bank (or centerline of a first order stream where no bank is apparent). This requirement applies to all Highlands open waters within the Highlands Region, regardless of stream classification in the Surface Water Quality Standards at N.J.A.C. 7:9B. Such buffers will be regulated through the adopted Highlands Checklist Ordinance and are applicable to both the Planning and Preservation Areas. The Highlands Checklist Ordinance is equivalent to or more stringent than the Department's riparian zone standard, the Flood Hazard Area Control Act Rules (N.J.A.C. 7:13), and the Water Quality Management Planning Rules (N.J.A.C. 7:15). In addition, the Highlands open water buffers are not proposed to be served by sewers. Consequently, the Department's Riparian Corridor protection requirements have been met.

Additionally, as required, the Highlands Checklist Ordinance addresses steep slopes for gradients 10 percent or greater. This protection is more stringent than the requirements at N.J.A.C. 7:15-5.25(g)(6), which require protection of steep slopes for gradients 20 percent or greater. Consequently, the Department's Steep Slope protection requirements have been met.

The Endangered or Threatened Species Habitat Analysis, required pursuant to N.J.A.C. 7:15-5.24(g), was performed utilizing the Department's Division of Fish and Wildlife, Endangered and Non-Game Species Program "Landscape Project." The Landscape Project identifies areas of critical habitat for Federal and State endangered or threatened species and other species of concern. Endangered and threatened species habitats reviewed under this analysis are Rank 5 (Federal endangered and/or threatened species), Rank 4 (State endangered species), or Rank 3 (State threatened species). Ranked 3, 4, or 5 habitat areas have been determined as critical to the overall population and/or survival of the specific species. The Highlands Council has limited the inclusion of threatened and endangered species habitat within the SSA and provides additional protections through the Highlands Checklist Ordinance and Highlands Land Use Ordinance. The Department, therefore has determined that habitat for endangered and/or threatened species will be protected.

The analysis to evaluate the groundwater impacts and septic system density on a Hydrologic Unit Code 14 (HUC 14) basis from potential development of those areas outside of the adopted FSSAs has been conducted as part of this amendment in accordance with the RMP requirements. The evaluation conducted to comply with the RMP applies the Nitrate Dilution Model, developed by the Department, on a HUC 14 basis in both the Planning and Preservation Areas, and uses the

following Nitrate targets for the respective land use capability zones as identified in the adopted RMP: 2 mg/l within the Community Zone, 1.87 mg/l within the Conservation Zone, and 0.72 mg/l within the Protection Zone. These targets are equivalent to or more stringent than the requirements at N.J.A.C. 7:15. Utilizing these targets, the model estimates the minimum lot size necessary to comply with the groundwater quality standards within the HUC 14. This analysis resulted in the potential for 5 new dwellings to be served by septic systems in the Planning Area and 5 new dwellings to be served by septic systems in the Preservation Area. The approval of development served by septic systems in the Preservation Area will be regulated by the Highlands Act rules (N.J.A.C. 7:38).

Further, any project involving a septic system outside of the adopted FSSA must have approval under the septic system density provisions of the adopted Highlands Checklist Ordinance pursuant to Highlands Council approval of the Township's Petition for Plan Conformance. Because any project approved pursuant to the provisions of the Highlands Checklist Ordinance must first demonstrate consistency with the RMP, the applicable septic system density requirements are deemed to be in accordance with the septic system density requirements of N.J.A.C. 7:15. However, where the development activity is exempt from the Highlands Act or receives a Highlands Preservation Area Approval from NJDEP, such development shall be in conformance with N.J.A.C. 7:15(e) regarding septic system densities. Consequently, the Department concluded that groundwater quality will be protected.

The Water Use Analysis, performed pursuant to N.J.A.C. 7:15-5.25(f), indicated that several Department regulated water supply purveyors serve Byram Township through their existing water allocation permits. The main public water utility serving Byram Township is Sparta Township Water Utility (WA#5358), which

serves a relatively small area in the northern portion of the Township bordering Sparta Township. The current approved water allocation capacity for the utility is 103.2 million gallons per month (MGM). The current capacity available to Byram Township is approximately 2.46 MGM. The build-out analysis identifies no additional public water demand for this facility from Byram Township.

As indicated in this WMP, Byram Township will require approximately 0.048 MGD of additional water supply to serve the entire Byram Highlands Center including the Highlands Village Center. This demand will be met by an extension of water supply lines from Stanhope Borough by NJ American Water Company (which will operate the system with the Byram Highlands Center). The 0.048 MGD additional water supply needed to serve the Byram Highlands Center is within the 22.2 MGM water utility capacity of this purveyor.

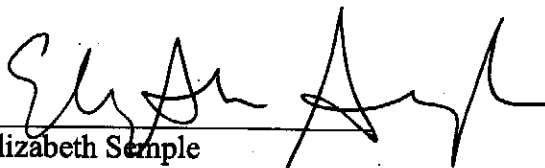
Byram Township is additionally served by several small public water utilities including Brookwood-Musconetcong River Property Owners Association, East Brookwood Property Owners Association, North Shore Water Association, Strawberry Point Property Owners Association, Byram Homeowners Association, Briar Heights and Della Heights Property Owners Association, Colby Water Company, Forest Lakes Water Company, and South Shore Water Company. The current available approved water allocation capacity for the Brookwood-Musconetcong River (BMR) Property Owners Association utility is 4.5 MGM. The build-out analysis identifies no additional public water demand for this facility.

Due to their relative small size, the current available capacities for the remaining facilities are not identified as actual permitted allocation by the Department's community well permitting program as these wells divert less than 100,000 GPD

of water. Therefore the total municipal available capacity is not known at this time for the remaining facilities listed above. However, as the total water demand calculated through the build-out analysis indicates no new future demand, the utility capacity conditions for these facilities will not change. Consequently, the Water Use Analysis has been satisfied.

This amendment proposal was published in the New Jersey Register on January 17, 2012, at 44 N.J.R. 182(a). No comments were received during the comment period.

Approval of this amendment does not eliminate the need for any permits, approvals, or certifications required by any Federal, State, County or municipal review agency with jurisdiction over this project/activity.



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7/24/12
Date