

PUBLIC NOTICE

**ENVIRONMENTAL PROTECTION
OFFICE OF WRM COORDINATION**

**Adopted Amendments to the Upper Delaware Water Quality Management Plan and
Upper Raritan Water Quality Management Plan**

Public Notice

JUL 29 2015

Take notice that on _____, pursuant to the provisions of the New Jersey Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., the Statewide Water Quality Management (WQM) Planning rules, N.J.A.C. 7:15, and P.L. 2013, c. 188, the Department of Environmental Protection (Department) adopted an amendment to the Upper Delaware and Upper Raritan WQM Plan. Notice of the amendment proposal was published in the New Jersey Register on October 20, 2014, at 46 N.J.R. 2117 (a). This amendment adopts a county-wide Wastewater Management Plan (WMP) for Hunterdon County that includes a Frenchtown Borough Municipal Chapter, in accordance with N.J.A.C. 7:15-5.3(g). The amendment also incorporates into the Hunterdon County county-wide WMP, the municipal WMP chapters addressing wastewater management planning for the municipalities of Lambertville and Stockton, which were previously approved on February 7, 2012, as an amendment to the Upper Delaware WQM Plan (see 43 N.J.R. 2675(a); 44 N.J.R. 939(a) for notices of the Lambertville Municipal Utilities Authority WMP, addressing the City of Lambertville and the Borough of Stockton).

The adopted amendment that is the subject of this notice was submitted by the Board of Chosen Freeholders of Hunterdon County as the responsible wastewater management planning agency for Hunterdon County.

The adopted Frenchtown WMP chapter identifies wastewater service designations as either Future Sewer Service Area of the Frenchtown Borough Wastewater Treatment Plant (WWTP), or Septic Areas (planning flows of 2,000 gallons per day (GPD) or less). The WMP chapter also evaluates future wastewater treatment needs, water supply demands, and nonpoint sources of pollution.

The adopted WMP chapter makes modifications to the existing sewer service area (SSA) within the boundaries of Frenchtown Borough, as well as areas in Alexandria Township adjacent to the Frenchtown Borough boundary served by the Frenchtown Borough WWTP, in accordance with the WQM Planning rules at N.J.A.C. 7:15-5.24. The adopted SSA includes the following parcels in Alexandria Township that were previously excluded from SSA: Block 18, Lots 39.01, 41, 44, 52, and a portion of Lot 39. In addition, adjustments to the SSA delineation were made in order to more accurately reflect the existing tax parcel and municipal boundary lines of Frenchtown Borough within the SSA. As a result of more accurate digital parcel mapping and Geographic Information Systems (GIS) technology, the WMP chapter re-delineates portions of the SSA to accurately identify lots currently served by the Frenchtown Borough WWTP and revises the SSA to correspond to the boundary lines of lots proposed for connection to the sewer system.

In accordance with N.J.A.C. 7:15-5.24, environmentally sensitive areas (ESA) have been assessed to determine what areas must be excluded from the proposed SSA. Pursuant to N.J.A.C. 7:15-5.24, ESAs are defined as contiguous areas of 25 acres or larger consisting of habitat for threatened and endangered wildlife species as identified on the Landscape Project Maps of Habitat for Endangered, Threatened or Other Priority Species, Natural Heritage Priority Sites, special water resource protection areas along Category One waters and their tributaries, and wetlands, alone or in combination.

In accordance with N.J.A.C. 7:15-5.24(b), ESAs are not included in the proposed SSA except as provided under N.J.A.C. 7:15-5.24(e) through (h). The undeveloped portions of Block 16, Lots 9 and 13 and of Block 17, Lot 2. have been removed from the Frenchtown Borough SSA in accordance with N.J.A.C. 7:15-5.24. Specifically, Block 16, Lots 9 and 13 are identified as wetlands and as habitat for threatened and endangered species, as well as being located within the special water resources protection area associated with Nishisakawick Creek, a Category One water. Block 17, Lot 2 is identified as habitat for threatened and endangered species as well as being located within the special water resources protection area associated with Nishisakawick Creek, a Category One water. The locations removed from the SSA have the wastewater service designation "Septic Areas (planning flows of

2,000 gallons per Day (GPD) or Less).” As provided under N.J.A.C. 7:15-5.24(e) through (h), limited ESAs have been included in SSA. Where applicable, Department permits or jurisdictional determinations have been utilized to determine the extent of the SSA on individual lots. Parcels meeting the definition of ESA, or portions thereof, proposed to be included in the SSA are included pursuant to N.J.A.C. 7:15-5.24(g)1 to allow infill development and to remove undulations in SSA boundary as necessary to create a linear boundary that relates to recognizable geographic features as allowed by N.J.A.C. 7:15-5.20(b)2.

In accordance with N.J.A.C. 7:15-5.25(c) and (d), this WMP chapter includes an environmental constraints/build-out (build-out) analysis to identify future projected flow from the proposed SSA within Frenchtown Borough and the area in Alexandria Township adjacent to the Frenchtown Borough boundary. This build-out analysis was conducted for all parcels within the adopted SSA. The future projected flow is used to assess whether sufficient capacity exists at the Frenchtown Borough WWTP to accommodate future need. To assess the wastewater capacity at the Frenchtown Borough WWTP, the flows associated with future wastewater needs are combined with the existing wastewater flow to determine a total potential flow for the entire SSA, based on the build-out analysis described below.

Flows associated with future wastewater need were calculated 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 but not currently provided sanitary sewer service, that are located within the proposed SSA, in accordance with N.J.A.C. 7:14A-23.3. Environmentally constrained areas – wetlands, preserved open space, documented flood prone areas or protected riparian corridor areas – located within SSA were excluded from the calculation of future wastewater need, as development would be limited in these areas. The total projected wastewater flow for undeveloped and underdeveloped portions of Frenchtown Borough within existing and proposed SSA was determined to be 0.0735 million gallons per day (MGD).

Existing wastewater flow has been calculated as the average of the monthly average metered flow reported to the Department from November 2012 through October 2013, the most recently available 12-month period at the time the draft amendment was prepared. That calculated annual average of the monthly average flow is 0.154 MGD. Total potential flow for the SSA – future wastewater need of 0.0735 MGD and existing wastewater flow of 0.154 – is 0.2275 MGD.

Currently, the Frenchtown Borough WWTP (NJ029831) has a permitted capacity of 0.15 MGD. Both the existing wastewater flow volume of 0.154 MGD and the total potential wastewater flow of 0.2275 MGD exceed the current Department recognized permit capacity of 0.15 MGD. When the total wastewater generation potential exceeds the permitted flow, the WQM Planning rules at N.J.A.C. 7:15-5.25(d)2 require i) a reduction in the SSA, ii) a change in zoning to reduce wastewater generation potential in the SSA, iii) identification of a new or expanded domestic or industrial treatment works sufficient to address the difference between the permitted flow and wastewater generation potential calculated in accordance with N.J.A.C. 7:15-5.25(d)iii, or iv) “submission of a plan ... to eliminate excessive infiltration and inflow sufficient to accommodate the increase in wastewater flow.” To accommodate the future build-out, as well as to meet estimated water quality-based effluent limits, a new WWTP has been identified. The new WWTP is under construction at a location near the present facility and will replace the existing facility when complete.

The existing Frenchtown Borough WWTP discharges to a segment of the lower Delaware River that is designated as a Special Protection Water. The new WWTP will retain the same discharge point as the existing facility. As such, the construction of the new WWTP is subject to Delaware River Basin Commission (DRBC) jurisdiction, review, and oversight. The DRBC considers the new WWTP a “Substantial Alteration or Addition,” which requires a Natural Treatment Alternatives analysis. Upon review of this analysis, the DRBC adopted Docket No. D-2010-021CP-1, which sets projected effluent limits based on an expanded flow of up to 0.26 MGD provided the Department approves the expanded flow.

In accordance with N.J.A.C. 7:15-5.25(e), a build-out analysis was performed to evaluate the future wastewater treatment needs for the development of those areas that are outside of the

adopted SSA and are to be served by individual subsurface sewage disposal systems with wastewater planning flows of 2,000 gallons per day or less (septic systems). A nitrate dilution model developed by the Department was applied to estimate the minimum lot size necessary to support conformance with the ground water quality standards. Areas that are designated for individual subsurface sewage disposal systems (septic areas) must achieve a planning standard of 2.0 mg/L nitrate on a hydrologic unit code (HUC) 11 watershed basis. It is, therefore, necessary to determine how much development relying on groundwater disposal of wastewater can be supported on a HUC 11 watershed basis within the planning area while attaining this planning standard, using one of the nitrate dilution models described in the WQM Planning rules at N.J.A.C. 7:15-5.25(e)1i. Achieving the planning standard ensures that existing groundwater quality will be maintained on a regional basis, thus ensuring compliance with the antidegradation policy in the Ground Water Quality Standards at N.J.A.C. 7:9C-1.8. The analysis was performed by Hunterdon County for the nitrate target of 2.0 mg/L and resulted in the potential for 35 new units to be served by septic systems in the Frenchtown Borough portion of that HUC 11 watershed. The analysis determined that under current municipal zoning regulations, potential development densities will result in attainment of 2.0 mg/L nitrate in groundwater on a HUC 11 watershed basis and therefore comply with the requirements of N.J.A.C. 7:15-5.25(e).

In accordance with N.J.A.C. 7:15-5.25(f), a build-out analysis was performed to evaluate whether the water supply needs can be met with existing, new, or expanded water supplies that do not conflict with the currently adopted New Jersey State Water Supply Plan (NJWSP). The current NJWSP was adopted in August 1996. Pursuant to N.J.A.C. 7:15-5.25(f), the Water Use Analysis demonstrated that the existing water allocation permit(s) for the water supply purveyors within Frenchtown Borough could serve future build-out as projected for this WMP chapter, and do not conflict with the current NJWSP.

In accordance with N.J.A.C. 7:15-5.25(g), an assessment of nonpoint source pollution impacts of planned future development was conducted. In order to demonstrate that groundwater recharge will be maintained and stormwater runoff quality will be controlled in accordance with the requirements of the Stormwater Management rules, N.J.A.C. 7:8, Hunterdon County

has submitted the adopted Frenchtown Borough Stormwater Control Ordinance (#638), adopted on March 15, 2006.

In order to demonstrate that environmental standards for riparian zones are met, Hunterdon County has submitted the adopted Frenchtown Borough riparian zone ordinance (#719), adopted October 3, 2012, which provides riparian zone protections by preventing new disturbance for projects or activities, except as provided at N.J.A.C. 7:15-5.25(g)3i and ii.

In order to demonstrate that environmental standards for steep slopes are met, Hunterdon County has submitted the adopted Frenchtown Borough steep slope ordinance (#729), adopted August 7, 2013, that protects steep slopes from new disturbance for projects or activities, except as provided at N.J.A.C. 7:15-5.25(g)6i and ii.

The notice of this amendment proposal was published in the New Jersey Register on October 20, 2014, at 46 N.J.R. 2117 (a), beginning a public comment period, which ended 30 days later on November 20, 2014.

The following people commented on these amendments:

Number – Commenter Name, Affiliation

1. Mary MacConnell, RMC, Kingwood Township Clerk
2. Frenchtown Borough, Resolution # 2014-117

Any party may submit an application to the Department for a site specific amendment or revision, as applicable, to a WQM Plan to include or exclude additional areas and/or facilities in accordance with N.J.A.C. 7:15 and P.L. 2013, c.188.

A summary of the comments and the Department's responses follows. The number(s) in parentheses after each comment identifies the respective commenter listed above.

1. **Comment:** The commenter states Frenchtown Borough obtains its water from groundwater and then discharges that water to surface water. The large increase in

groundwater use may impact surrounding wells, and this water does not then recharge groundwater after it is used. This is a critical concern to Kingwood residents since all of Kingwood Township relies on groundwater. According to the new water availability workbook developed by NJDEP Division of Water Supply and Geoscience, the HUC11 watershed number 02040105170 (which includes the western half of Kingwood Township, as well as Frenchtown Borough and part of Alexandria Township), may already be fully allocated. Using the workbook, a "Low Flow Margin" can be user-selected, depending on how sensitive the streams are. Using the number of Highlands uses, 5%, to protect sensitive streams such as C1 or trout production streams, or any number up to 16%, this HUC11 cannot safely accommodate greater water withdrawals. Using the highest Low Flow Margin of 25%, this HUC11 may have 0.8MGD of remaining available water; however, this may be inadequate to protect stream health and any increase uses other than the Frenchtown water wells. (1)

Response: Pursuant to N.J.A.C. 7:15-5.25(f)1, the water supply needs associated with the environmental build-out analysis of public water supply service areas and for the areas outside public water supply service areas are to be demonstrated. Pursuant to P.L. 2013, c.188, the Wastewater Management Planning Agency is permitted to prepare and submit a portion of a WMP to the Department for review. In the case of Frenchtown Borough, the public water supply area for the New Jersey American Water Company (NJ American) encompasses the entire Borough. As such, no environmental build-out analysis was conducted for the water supply needs associated with areas outside of Frenchtown Borough.

Additionally, the WQM Planning rules at N.J.A.C. 7:15-5.24(f)1 require that the environmental build-out needs are demonstrated to not conflict with the most current New Jersey State Water Supply Plan. The currently adopted Water Supply Plan does not yet include the low flow margin method, and so was not considered in this review. Further, the low flow margin method is intended for screening purposes only.

Finally, the majority of domestic wells in Kingwood Township are not in the same hydrogeologic interval as the Frenchtown Borough wells, and therefore, are unlikely to


impact water supply in Kingwood Township. A detailed analysis of water supply availability is conducted during water allocation permit review process.

2. **Comment:** The commenter opposes the elimination of Block 16, Lots 9 and 13, and Block 17, Lot 2 from the Frenchtown Borough SSA because the Frenchtown Borough may wish to expand its facilities on Block 16, Lots 9 and 13, and the property owner of Block 17, Lot 2, wishes to develop the property sometime in the future and also wishes to conduct a habitat study to determine if there are endangered wildlife as indicated by NJDEP.

Response: The parcels in question are identified as environmentally sensitive and have been excluded from SSA consistent with the WQM Planning rules at N.J.A.C. 7:15-5.24. Block 16, Lots 9 and 13 are identified as wetlands and as habitat for threatened and endangered species, as well as being located within the special water resource protection area associated with Nishisakawick Creek, a Category One water. Block 17, Lot 2 is identified as habitat for threatened and endangered species, as well as being located within the special water resource protection area associated with Nishisakawick Creek, a Category One water. Therefore, the parcels will remain excluded from the adopted SSA. In the future, an eligible party may submit an application for consideration to the Department, to amend the Upper Delaware WQM Plan in accordance with N.J.A.C. 7:15 and P.L. 2013, c. 188, as applicable. (2)

Adoption of these amendments does not eliminate the need for any permits, approvals, or certifications required by any Federal, State, county, or municipal review agency with jurisdiction over any project/activity. Approval of these amendments does not provide any implied approval for any other aspects of any project or needed permits and approvals. Further, the Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., and implementing regulations require that full county-wide WMP updates be completed pursuant to the requirements set forth in N.J.A.C. 7:15.

The adopted FWSA Map is available at the Department, Office of Water Resource Management Coordination, 401 East State Street, Trenton, New Jersey, 08625.



Colleen Kokas, Director
Office of WRM Coordination
Department of Environmental Protection
7/29/15

Date

