

**DOCKET NO. D-1967-121 CP-2**

**DELAWARE RIVER BASIN COMMISSION**

**Special Protection Waters**

**Town of Liberty**

**Groundwater Withdrawal**

**Town of Liberty, Sullivan County, New York**

**PROCEEDINGS**

This docket is issued in response to an Application submitted by Delaware Engineering, P.C. on behalf of the Town of Liberty to the Delaware River Basin Commission (DRBC or Commission) on August 14, 2014 for renewal of an allocation of groundwater and review of a groundwater water withdrawal project (Application). The docket holder's Stevensville and Grossinger groundwater sources were approved by the Commission in Docket No. D-67-121 CP on December 13, 1967 and Docket No. D-1989-58 CP RENEWAL on March 22, 1995, respectively. The groundwater withdrawal project was most recently approved by the New York State Department of Environmental Conservation (NYSDEC) on March 15, 2011 (Permit No. WSA No. 11,246).

The Application was reviewed for continued inclusion in the Comprehensive Plan and for approval under Section 3.8 of the *Delaware River Basin Compact*. The Sullivan County Planning Department has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on February 10, 2016.

**A. DESCRIPTION**

1. **Purpose.** The purpose of this project is to renew the approval of Wells Nos. 1, 3 and 4 in the Stevensville Well Field and to approve existing Wells Nos. 1 and 2 in the White Sulphur Springs Well Field and the Sherwood and Roth Wells in the Sherwood-Roth Well Field to supply up to a total of 46.75 million gallons per month (mgm) of groundwater to the docket holder's public water system which serves five interconnected water districts in the Town of Liberty.

2. **Location.** The Project wells are screened in unconsolidated glacial outwash in the West Branch Mongaup River Watershed in the Town of Liberty, Sullivan County, New York. The groundwater sources and service area are located within the drainage area to the section of the non-tidal Delaware River known as the Upper Delaware, which is designated as Special Protection Waters. Specific location information has been withheld for security reasons.

3. **Area Served.** The docket holder’s wells serve five (5) separate interconnected water districts including: White Sulphur Springs, Stevensville (including the Stevensville Water District extension), Loomis, Route 55, and the Ferndale Water Districts. The docket holder also has one additional water district (Cold Spring Road Water District) that is supplied by water purchased from the Village of Liberty water system. The docket holder’s service area is outlined on a USGS Topographic Map submitted with the Application. For the purpose of defining Area Served, the Application is incorporated herein by reference consistent with conditions contained in the DECISION section of this docket.

4. **Physical features.**

a. **Design criteria.** The system currently serves water to a full time population of approximately 9,885 persons on 1,050 domestic service connections. The area is home to many seasonal residents and water demands increase significantly during the summer months. During the peak summer months, existing average and maximum water demand is recorded at 0.67 million gallons per day (mgd) and 0.887 mgd, respectively. On a monthly basis, present water usage ranges from approximately 6 mgm during the off-season winter months to approximately 21 mgm during the peak-season summer months. The docket holder projects the 10-year average and maximum daily water demands to increase to 1.106 mgd and 1.508 mgd, respectively. The increase in demand is a result of an increase in population, residential subdivisions, hotels, a college dormitory and an industrial park. The allocation of 46.75 mgm should be sufficient to meet the future monthly demands of the Town of Liberty water supply system.

b. **Facilities.** The existing project wells have the following characteristics:

WELL FIELD	WELL NO.	DEPTH	SCREEN DIAMETER - SCREENED INTERVAL	PUMP CAPACITY	NYSDEC PERMITTED SOURCE YIELD	NYSDEC PERMITTED WELL FIELD YIELD	YEAR DRILLED
White Sulphur Springs Well Field	Well 1	54'	12" 43.5' – 53.5'	No pump	150 gpm	250	1949
	Well 2	49'	12" 37' – 47'	160 gpm	150 gpm		1949
Sherwood Well Field	Well 1 Sherwood Well	58'	12" 46' – 56'	500 gpm	500 gpm	500	1957
	Roth Well	57'	12" 50' -57'	500 gpm	500 gpm		2006
Stevensville Well Field	Well 1	40'	12" 29' – 40'	80 gpm	N/A	485	1948
	Well 3	42.5'	10" 32.5' – 42.5'	160 gpm	135 gpm		1956
	Well 4	37'	100" Caisson type	450 gpm	450 gpm		1970

All wells are metered.

All water service connections are metered.

Stevensville Well No. 1 is used only for emergency purposes.

Prior to entering the distribution system, well water is treated with caustic soda for pH adjustment, polyphosphate for scaling control and disinfected with sodium hypochlorite.

The Sherwood and Roth Wells and the White Sulphur Springs Wells and treatment buildings are located within the floodway of an unnamed tributary of West Branch Mongaup River and the Stevensville Wells and buildings are located within the 100-year floodplain of an unnamed tributary of West Branch Mongaup River (See discussion in the Findings Section).

The Town of Liberty water system has a 0.150 mgd capacity emergency interconnection with the Village of Liberty water system.

**c. Other.** Approximately 60 percent of the wastewater from the docket holder's service area is conveyed to three wastewater treatment plants located in the area. The remainder of the wastewater is disposed through individual on-lot septic systems. Two of the three WWTP's are owned by the Town of Liberty and receive approximately 53 percent of the wastewater from the docket holder's total of 1,050 service connections. Wastewater from the Stevensville Water District and several properties in the Route 55 Water District is conveyed to the 0.425 mgd Town of Liberty Swan Lake Treatment Plant most recently approved by DRBC Docket No. D-85-52 CP on October 28, 1986. The NYSDEC issued its most recent SPDES Permit No. NY0030252 on August 19, 2015 for this treatment facility. Wastewater from the Loomis Water District is conveyed to the 0.1 mgd Town of Liberty Loomis Sewage Treatment Plant most recently approved by DRBC Docket No. D-1985-065 CP-3 on June 11, 2014. The NYSDEC issued its most recent SPDES Permit No. NY0030261 on December 1, 2015 for this treatment facility. A portion of the wastewater from the Ferndale Water District is conveyed to the 2.0 mgd Village of Liberty WWTP, most recently approved by DRBC Docket No. D-1965-039 CP-3 on June 10, 2015. The NYSDEC issued its most recent SPDES Permit No. NY0030074 on June 1, 2010 for this treatment facility.

At the present time, between the two (2) wastewater treatment plants, the Town has the capacity to treat 0.5 mgd. Of the present 1,050 service connections, 557 service connections (53 percent) are conveyed to one of the Town's wastewater treatment plants (Swan Lake WWTP and Loomis WWTP). Assuming that roughly half of the water produced by the system will continue to be treated at one of the Town's existing wastewater treatment plants, the projected average daily demand of 1.106 mgd, would result in approximately 0.55 mgd of effluent. In the future as water usage and demands increase, the Town will evaluate each project for projected usage of water and the resulting sewage. Through this evaluation, the Town will determine if new or expanded wastewater treatment capacity is required. The treatment facilities have adequate capacity to continue to receive wastewater from the existing project; however, additional treatment capacity may be required to meet the docket holder's ten year projected demands. Because the project is located in the drainage area to the Upper Delaware SPW, new or expanded

treatment facilities will likely require DRBC approval. The docket holder is encouraged to discuss the DRBC requirements and effluent limits as it relates to any new facility or expansion of an existing facility early in the planning phase of any such expansion.

d. **Cost.** There are no construction costs associated with this approval.

e. **Relationship to the Comprehensive Plan.** The docket holder's Stevensville Wells Nos. 1, 2, 3 and 4 were previously included in the Comprehensive Plan by the Commission in Docket No. D-67-121 CP on December 13, 1967. Grossinger Wells Nos. 1, 2 and 3 were included in the Comprehensive Plan by the Commission in Docket No. D-89-58 CP on February 28, 1990; however, these wells were never placed into operation. The docket holder's other sources described herein will be added to the Comprehensive Plan upon approval of this docket. The docket holder's Stevensville Wells No. 2 and the Grossinger Wells Nos. 1, 2 and 3 are inactive and will be removed from the Comprehensive Plan.

## B. **FINDINGS**

### **Special Protection Waters**

In 1992, the DRBC adopted Special Protection Waters requirements, as part of the DRBC *Water Quality Regulations* (WQR), designed to protect existing high water quality in applicable areas of the Delaware River Basin. One hundred twenty miles of the Delaware River from Hancock, New York downstream to the Delaware Water Gap were classified by the DRBC as SPW. This stretch includes the sections of the river federally designated as "Wild and Scenic" in 1978 -- the Upper Delaware Scenic and Recreational River and the Delaware Water Gap National Recreation Area -- as well as an eight-mile reach between Milrift and Milford, Pennsylvania which is not federally designated. The SPW regulations apply to this 120-mile stretch of the river and its drainage area.

On July 16, 2008, the DRBC approved amendments to its WQR that provide increased protection for waters that the Commission classifies as Special Protection Waters. The portion of the Delaware River and its tributaries within the boundary of the Lower Delaware River Management Plan Area was approved for Special Protection Waters designation and clarity on definitions and terms were updated for the entire program.

Article 3.10.3A.2.e.1). and 2). of the Commission's WQR, states that projects subject to review under Section 3.8 of the Compact that are located in the drainage area of Special Protection Waters must submit for approval a Non-Point Source Pollution Control Plan that controls the new or increased non-point source loads generated within the portion of the docket holder's service area which is also located within the drainage area of Special Protection Waters.

The docket holder's wells and service area are located within the drainage area to the SPW. However, the project is located in the West and East Branch Mongaup watersheds which are tributary to the Mongaup River upstream of a group of water impoundments referred to as the Mongaup System. This system is listed as one of the major surface water impoundments in Section 3.10.3A.2.g.5. of the Commission's WQR and the docket holder's water supply project

in this area is exempt from the NPSPCP requirements, as outlined in Article 3.10.3A.2. of the Commission's WQR.

### **Water Demands and Well Capacity**

The docket holder's water supply system is currently permitted by NYSDEC to withdraw up to 1,235 gpm or 1.778 mgd. Because the White Sulphur Springs Well No. 1 is currently inactive, the actual maximum daily water production rate of the system is limited to 1,135 gpm or approximately 1.63 mgd. Although the system well capacity can meet the docket holder's 10-year projected demand (1.508 mgd), the distribution of water in portions of the service area are limited at times. The docket holder is planning system improvements (upsizing water mains) to facilitate water distribution. Additionally, the docket holder is investigating the siting of a well and storage structure in the Ferndale Water District to assist during periods of peak demand.

The Town of Liberty is considering the future development of the inactive Grossinger Wells for use as a backup system to supply portions of the Ferndale Water District. The Town has requested Commission approval to withdraw from these wells in the future as part of the DRBC application. The Grossinger Wells Nos. 1, 2 and 3 were drilled and tested in 1989 for water supply purposes of a proposed residential development. A total allocation of 4.0 million gallons per 30 days was approved by the Commission in Docket No. D-89-58 CP on February 28, 1990 and renewed on March 22, 1995 (DRBC Docket No. D-89-58 CP RENEWAL). Docket D-89-58 CP RENEWAL expired on March 22, 2005. Three additional wells (Grossinger Wells Nos. 3, 4 and 5) were also drilled and tested in 1990 for use as backup sources to the Grossinger Wells 1, 2 and 3, but were not previously approved by the Commission. The Grossinger residential development was not constructed and the Grossinger Wells were not placed into operation.

Because of the limited amount of pumping test information available and uncertainty of the current well conditions and yields due to the fact that the wells have not been tested or used for over 25 years, Commission staff do not recommend the approval of the Grossinger wells at this time. Prior to use of the Grossinger wells or any other well source developed or connected to the Town or Liberty water supply system, the docket holder must submit an application to the Commission accompanied by the results of a pumping test performed in accordance with NYSDEC Pumping Test Procedures for Water Withdrawal Permitting.

This project consists of an existing withdrawal of groundwater from White Sulphur Springs Wells No. 2, Sherwood Well, Roth Well and Stevensville Wells Nos. 3 and 4. In its Application, the Town of Liberty requested individual allocations for its wells based on NYSDEC permitted maximum rates and a total monthly allocation of 55.13 mgm, which is equal to the total NYSDEC maximum permitted well field yields. However, the estimated ten-year projected maximum water use as stated in the Application is 1.508 mgd (46.75 mgm). As the Commission bases the monthly water allocations on ten-year projected maximum use estimates, the allocation of 46.75 mgm granted herein satisfies the docket holder's ten year projected maximum use. The allocations and rates are provided in Decision Condition II.d. in the Decision Section of this docket.

### **Water Audits for Public Water Supply Systems Serving Greater than 100,000 gpd**

Section 2.1.8 of the Water Code states that it is the policy of the Commission to establish a standardized water audit methodology for owners of water supply systems serving the public to ensure accountability in the management of water resources. Voluntary Water Audits were encouraged for public water supply systems through December 31, 2011 (Section 2.1.8.B.). Effective January 1, 2012, the owners of each public water supply system are required to implement an annual calendar year water audit program conforming to IWA/AWWA Water Audit Methodology (AWWA Water Loss Control Committee (WLCC) Water Audit Software) and corresponding AWWA guidance (Section 2.1.8.C). Water audits shall be submitted annually to the Commission by March 31. The Town of Liberty submitted their most recent Water Audits on March 11, 2015.

The DRBC estimates that the project withdrawals, used for the purpose of public water supply, result in a consumptive use of 10 percent of the total water use. The DRBC definition of consumptive use is defined in Article 5.5.1.D of the *Administrative Manual – Part III – Basin Regulations – Water Supply Charges*.

### **Flood Plain Regulations**

The Sherwood and Roth Wells and the White Sulphur Springs Wells and treatment buildings are located within the floodway of an unnamed tributary of West Branch Mongaup River, but the top of the wells and building floors are located greater than 1 foot above the base flood elevations. The Stevensville Wells and buildings are located within the 100-year floodplain of an unnamed tributary of West Branch Mongaup River and are below the base flood elevation. However, the docket holder reports that the flooding of the well field has not been observed in the last 30 years. No new construction, additions or modifications to the water supply facility are included with this approval; therefore, the existing project complies with the DRBC, *Administrative Manual – Part III, Basin Regulations – Floodplain Regulations*.

The project is designed to conform to the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

## **C. DECISION**

- I. Effective on the approval date for Docket No. D-1967-121 CP-2 below:

a. The projects described in Docket Nos. D-67-121 CP and D-89-58 CP RENEWAL are removed from the Comprehensive Plan to the extent that they are not included in Docket No. D-1967-121 CP-2; and

b. Docket Nos. D-67-121 CP and D-89-58 CP RENEWAL are terminated and replaced by Docket No. D-1967-121 CP-2.

c. The project and the appurtenant facilities described in the Section A “Physical features” shall be added to the Comprehensive Plan.

II. The project and appurtenant facilities as described in the Section A “Physical features” are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the NYSDEC and NYSDOH, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission’s. The docket holder shall also satisfy annual withdrawal, capacity and conservation reporting requirements in the form and manner prescribed by NYSDEC’s Division of Water in accordance with NYCRR Part 601.5(a).

b. The wells and operational records shall be available at all times for inspection by the DRBC.

c. The wells shall be operated at all times to comply with the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.

d. During any month, the combined withdrawal from all well sources shall not exceed 46.75 million gallons. No well shall be pumped above the maximum instantaneous rate and monthly allocation as indicated below:

<b>WELL NO.</b>	<b>MAXIMUM INSTANTANEOUS RATE</b>	<b>MONTHLY ALLOCATION</b>	<b>WELL FIELD ALLOCATION</b>
White Sulphur Springs Well No. 1	150 gpm	6.696 mgm	250 gpm or 11.160 mgm
White Sulphur Springs Well No. 2	150 gpm	6.696 mgm	
Sherwood Well	500 gpm	22.320 mgm	500 gpm or 22.320 mgm
Roth Well	500 gpm	22.320 mgm	
Stevensville No. 1	Emergency Use Only		485 gpm or

WELL NO.	MAXIMUM INSTANTANEOUS RATE	MONTHLY ALLOCATION	WELL FIELD ALLOCATION
Stevensville Well No. 3	135 gpm	6.026 mgm	21.650 mgm
Stevensville Well No. 4	450 gpm	20.088 mgm	

Additionally, Stevensville Well No. 1 shall only be used for emergency purposes and operated in accordance with NYSDOH requirements.

e. The wells shall be equipped, where possible, with readily accessible capped ports and minimum ½ inch inner diameter (ID) drop pipes as repairs or modifications are made at each existing well so that water levels may be measured under all conditions.

f. The project withdrawals shall be metered with an automatic continuous recording device that measures to within 5 percent of actual flow. An exception to the 5 percent performance standard, but no greater than 10 percent, may be granted if maintenance of the 5 percent performance is not technically feasible or economically practicable. A record of daily withdrawals shall be maintained, and monthly totals shall be reported to the NYSDEC annually and shall be available at any time to the Commission if requested by the Executive Director.

g. Each new water service connection shall include a water meter in accordance with the DRBC's Resolution No. 87-7 (Revised).

h. In accordance with DRBC Resolutions No. 87-6 (Revised) and No. 2009-1, the docket holder shall continue to implement to the satisfaction of the NYSDEC, the systematic program to monitor and control leakage within the water supply system. The program shall at a minimum include: periodic surveys to monitor leakage, enumerate non-revenue water and determine the current status of system infrastructure; recommendations to monitor and control leakage; and a schedule for the implementation of such recommendations. The docket holder shall proceed expeditiously to correct leakages and unnecessary usage identified by the program.

i. In accordance with DRBC Resolution No. 2009-1 and Section 2.1.8 of the Water Code, the docket holder shall implement an annual calendar year water audit program conforming to IWA/AWWA Water Audit Methodology (AWWA Water Loss Control Committee (WLCC) Water Audit Software) and corresponding guidance. Water audits shall be submitted annually to the Commission by March 31.

j. No water service connections shall be made to newly constructed premises with plumbing fixtures and fittings that do not comply with water conservation performance standards contained in Resolution No. 88-2 (Revision 2).



k. Sound practices of excavation, backfill and reseedling shall be followed to minimize erosion and deposition of sediment in streams from any new facilities or repair related construction.

l. No new water service connections shall be made to premises connected to sewerage systems which are not in compliance with all applicable effluent limits contained in State permits and the *Water Quality Regulations* of the Commission.

m. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

n. The docket holder is permitted to provide the water approved in this docket to the areas included in Section A.3. Area Served of this docket. Any expansion beyond those included in Section A.3. Area Served is subject to DRBC review and approval in accordance with Section 3.8 of the *Compact*.

o. Unless an extension is requested and approved by the Commission in advance, in accordance with paragraph 11 of the Commission's Project Review Fee schedule (Resolution No. 2009-2), the docket holder is responsible for timely submittal of a docket renewal application on the appropriate DRBC application form at least 12 months in advance of the docket expiration date set forth below. The docket holder will be subject to late charges in the event of untimely submittal of its renewal application, whether or not DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. In the event that a timely and complete application for renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below (or the later date established by an extension that has been timely requested and approved), the terms and conditions of the current docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

p. The issuance of this docket approval shall not create any private or proprietary rights in the water of the Basin, and the Commission reserves the rights to amend, alter or rescind any actions taken hereunder in order to insure the proper control, use and management of the water resources of the Basin.

q. If the monitoring required herein or any other relevant data or information demonstrates that the operation of this project is interfering with or otherwise impairing existing uses of ground or surface water, or if the permit holder receives a complaint from an existing ground or surface water user within the zone of influence of the withdrawal alleging such interference or impairment, the permit holder shall immediately notify the Executive Director, and unless excused by the Executive Director, shall investigate the demonstrated or alleged impacts. For purposes of this condition, notification shall mean either (a) electronic transmittal of written notice to the Executive Director via email (using addresses posted on the DRBC website); or (b) written notice to the Executive Director and a telephone call to the Project Review Section at 609-883-9500, ext. 216. (Oral notification must always be accompanied by immediate written notification directed to the Executive Director.) In addition, the permit holder shall provide written notice to all potentially affected water users of the permit holder's

responsibilities under this condition. **Any well or surface water supply that is impaired as a result of the permit holder's project withdrawal shall be repaired, replaced or mitigated at the permit holder's expense.** The scope of the options to consider for repair, replacement and/or mitigation shall not be limited solely to those that are owned, operated, or controlled by the project sponsor. An investigation report and/or mitigation plan prepared and certified by a licensed professional engineer and/or a licensed professional geologist shall be submitted to the Executive Director as soon as practicable following notice of the demonstrated or alleged impairment consistent with this paragraph. The Executive Director shall make the final determination regarding the scope and sufficiency of the investigation and the extent of any mitigation measures that may be required. Where ground and surface waters are rendered unavailable, unusable, or unsuitable for the pre-existing use, the Executive Director may direct the permit holder to take interim actions to mitigate such impacts, pending completion of the investigative report and any long-term repair, replacement or mitigation.

r. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

s. For the duration of any drought emergency declared by either New York or the Commission, water service or use by the docket holder pursuant to this approval shall be subject to the prohibition of those nonessential uses specified by the Governor of New York to the extent that they may be applicable, and to any other emergency resolutions or orders adopted hereafter by the Commission.

t. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the *Rules of Practice and Procedure*. In accordance with Section 15.1(p) of the Delaware River Basin Compact, cases and controversies arising under the Compact are reviewable in the United States district courts.

**BY THE COMMISSION**

**APPROVAL DATE: March 16, 2016**

**EXPIRATION DATE: March 16, 2026**