

**DOCKET NO. D-2003-036 CP-4**

**DELAWARE RIVER BASIN COMMISSION**

**Located Within Drainage Area to Special Protection Waters**

**Community Utilities of Pennsylvania, Inc. - Penn Estates  
Groundwater Withdrawal  
Stroud Township, Monroe County, Pennsylvania**

**PROCEEDINGS**

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) on April 17, 2024 and supplemented on May 8, 2024 for approval of a new source (Well 9) and an increase of an allocation of groundwater and review of a groundwater water withdrawal project (Application). The new well requires approval by the Pennsylvania Department of Environmental Protection (PADEP).

The Application was reviewed for continuation of this project in the Comprehensive Plan and for approval under Section 3.8 of the *Delaware River Basin Compact*. The Monroe County Planning Commission has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on February 5, 2025.

**A. DESCRIPTION**

1. **Purpose.** The purpose of this project is to supply up to 2.768 million gallons per month (mgm) of water to the docket holders public water system from new Well 9 and to increase the existing allocation for all wells from 12.426 mgm to 15.219 mgm. Well 8 will be decommissioned and removed from this docket.

2. **Location.** The project wells are completed in the Towamensing and Walcksville Members of the Catskill Formation and the Trimmers Rock Formation and are located in the lower Brodhead Creek and Lower Pocono Creek Watersheds in Stroud Township, Monroe County, Pennsylvania within the drainage area to the Middle Delaware, which the Commission has classified as Special Protection Waters.

Specific location information has been withheld for security reasons.

3. **Area Served.** The project wells supply groundwater to the Penn Estates development as outlined on a map entitled "Location Map", dated October 12, 2018 submitted with the previous application. For the purpose of defining Area Served, the Application is incorporated herein by reference consistent with conditions contained in Section C. DECISION of this docket.

4. **Design Criteria.** Penn Estates community is a second home and year-round residential development. The system currently serves approximately 1,727 domestic service connections and 7 commercial service connections and records an existing average and maximum water demand of 0.298 million gallons per day (mgd) and 0.504 mgd, respectively. The docket holder reports that approximately 2 residential unit connections per year will continue to be developed over the next 10 years. The requested allocation of 15.219 mgm should be sufficient to meet the future demands of the project.

5. **Facilities.** The existing and proposed project wells have the following characteristics:

WELL NO.	DEPTH (FEET)	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY (GPM)	YEAR DRILLED
2	338	20' / 6"	65 gpm	1981
3	385	20' / 6"	60 gpm	1981
4	300	61' / 6"	45 gpm	1985
5	250	142' / 6"	85 gpm	1987
6	600	60' / 8"	16 gpm	1998
7	400	52' / 8"	100 gpm	2003
8	1,096	56' / 8"	50 gpm	2007
9	480	98' / 8"	62 gpm	2023

All water service connections are metered.

All wells are metered.

Prior to entering the distribution system, all water is treated by sodium hypochlorite for disinfection. Additionally, water from Well 6 is treated for iron and manganese sequestration.

The project wells are not located in flood hazard areas.

Well 8 will be properly abandoned.

6. **Other.** Wastewater is conveyed to the docket holder's sewage treatment facility most recently approved by DRBC Docket No. D-1999-020 CP-5 on March 8, 2023. The PADEP issued NPDES Permit No. PA0060283 for this treatment facility. The treatment facility has adequate capacity to continue to receive wastewater from the project.

7. **Relationship to the Comprehensive Plan.** The project wells were previously included in the Comprehensive Plan by Dockets Nos. D-77-109 CP, D-89-85 CP, D-98-47 CP, D-2003-36 CP and D-2003-036 CP-2 on January 25, 1978, January 12, 1990, September 30, 1999, September 1, 2004 and October 22, 2009, respectively. Issuance of this docket will continue the withdrawal project in the Comprehensive Plan.

## **B. FINDINGS**

### **1. Special Protection Waters (SPW)**

In 1992, the DRBC amended its Water Quality Regulations (WQR) by the addition of regulations for the protection of SPW, designed to maintain the quality of interstate waters where existing quality is better than the established stream quality objectives. As the result of its initial classifications and subsequent amendments, the Commission has designated the entire non-tidal main stem Delaware River from Hancock, New York to Trenton, New Jersey as SPW. DRBC's SPW regulations apply within the designated reaches and their drainage area.

The wells providing water supply to the docket holder are located within the drainage area to SPW. Sections 3.10.3A.2.e.1) and 2) of the WQR state that projects subject to review under Section 3.8 of the Compact that are located within the drainage area of SPW must submit for approval a Non-Point Source Pollution Control Plan (NPSPCP) 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 SPW. Any new service connections are fill in lots located within the Penn Estates community. A non-point source pollution control plan submitted to the Commission by the docket holder in 1999 indicated that the subdivision contains three manmade lakes that were created to detain stormwater runoff from the property. Stormwater is fed to the lakes through a series of culverts and rock lined channels. Several dry basins and extended detention basins are also present on the site. Additionally, an extensive network of gassed swales and several wetland areas exist on the site and work in conjunction with the other best management practices (BMP's) to improve runoff water quality. New development within the Penn Estates community will benefit from the BMPs already in place as the BMPs serve the development as a whole.

Condition C.29. of this docket provides that at such time, if ever, as additions to the area served by the docket holder's withdrawals are proposed, the docket holder will be required to demonstrate compliance with an approved NPSPCP in accordance with DRBC's SPW regulations.

**2. Well 9 Aquifer Pumping Test**

On October 2 through October 5, 2023, a 72-hour pumping test was conducted to assess withdrawal capabilities of Well 9 and the underlying aquifer characteristics and potential impacts to the local hydrologic system. The initial pumping rate of 115 gpm was reduced twice to a final pumping rate of 62 gpm at an elapsed time of 1190 minutes where it remained constant (within 5 percent of the pumping rate) for the final 52 hours of the test. Discharge from the pumping well was conveyed approximately 280 feet southeast into a rocky section of the UNT-South streambed downstream from the wetland and stream stilling well and piezometer locations.

Groundwater response monitoring was conducted in the pumping well (Well 9), a residential well located 2,530 feet north of Well 9 and Production Well 4 located 3,600 feet northeast of Well 9. These two wells are the closest wells to new Well 9. Water levels in the residential well were measured with a pressure transducer and datalogger. Water levels in Well 4 were measured manually.

Surface water response monitoring was conducted in the wetlands located 200 feet south of Well 9 and the UNT of Brodhead Creek (referred to as UNT-South) located 250 feet south of Well 9. The wetland area was monitored with a piezometer installed approximately 2.5 feet below grade with 0.5 feet of screen at the bottom with a sand filter pack (No. 2 Morie sand) followed by a bentonite seal to grade. The UNT-South was monitored with a streambed piezometer and an adjacent stilling well installed in a pool upstream of the pumping test discharge location. Electronic dataloggers were used to record surface water levels and programmed at a 10-minute frequency at the monitoring locations.

Prior to the start of the pumping test, the water level in Well 9 was 42.96 feet below top of casing (btoc). Drawdown observed at the pumping well, after approximately 72 hours of pumping was 49.26 feet (water level of 92.22 feet btoc). The pumping water level was observed to be in steady state condition during the final 12 hours of the pumping test at a level approximately 2 feet above the bottom of the well casing and approximately 34 feet above the shallowest water bearing zone. Following pumping, the water level recovered 50 percent within 7 hours and 95 percent in approximately 4 days. Drawdown from the pumping test withdrawal was not observed in either of the observation wells. Additionally, there was no discernible effect from the withdrawal on water levels measured in the wetland or stream piezometers or the stilling well.

The observed drawdown and recovery data were used to calculate aquifer parameters to characterize the underlying aquifer. The median transmissivity value for the Well 9 test data was 259 ft<sup>2</sup>/d using Cooper-Jacob and Theis Residual Drawdown methods. Storativity could not be calculated as drawdown was not observed in the observation wells.

The Commission has reviewed the Aquifer Testing Results Report for the Penn Estates Well 9 pumping test. No adverse impacts are expected to occur to the local hydrologic system due to the pumping from Penn Estates Well 9.

**3. 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 docket holder submitted their most recent Water Audit on March 18, 2024.

**4. Other Findings**

In its Application, the docket holder requested an allocation of 15.219 mgm. This allocation is based on the sum of the approved individual well allocations plus the requested allocation of Well 9 and is an increase in the previously approved allocation of 12.426 mgm. The present peak daily demand is reported to be 0.504 mgd (15.624 mgm) and the docket holder expects only minimal growth over the next 10 years (20 new domestic connections). The allocation of 15.219 mgm should satisfy the docket holder's ten year projected monthly use.

The docket holder's public water system reports water losses of approximately 30 percent. The docket holder reported that its operations team uses acoustic leak detection, data loggers, and tank drawdown to locate leaks. Customer service meter data are analyzed, and customers are notified of leaks after the meter each month. When leaks are found within the water system, they are repaired as quickly as possible. Despite ongoing internal efforts locating and repairing leaks, unaccounted for water percentages have not declined. In 2023, a third-party leak detection firm identified seven leaks. The leaks, totaling 0.033 mgd, were located on service laterals and were repaired. In 2024, the docket holder ordered new acoustic leak detection equipment which was chosen for its ability to detect leaks on plastic water pipes. Also in 2024, the docket holder's consultant started the development of a concept design for virtual district metering areas within the Penn Estates community. An additional leak survey was conducted 2024 and all discovered leaks will be repaired. Condition C.4 requires that the docket holder continue to implement a systematic program to monitor and control leakage within the water supply system.

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 Basin Regulations-Water Supply Charges 18 C.F.R. 420.1(d).

The project is designed to conform to the requirements of the *Water Code (WC)* and *Water Quality Regulations (WQR)* 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**

Effective on the approval date for Docket No. D-2003-036 CP-4 below, the project described in Docket No. D-2003-036 CP-3 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-2003-036 CP-4; Docket No. D-2003-036 CP-3 is terminated and replaced by Docket No. D-2003-036 CP-4; and the project and the appurtenant facilities described in in Section A.4. (Design Criteria) and A.5. (Facilities) shall be continued in the Comprehensive Plan. The project and appurtenant facilities as described in in Section A.4. (Design Criteria) and A.5. (Facilities) are approved subject to the following conditions, pursuant to Section 3.8 of the *Compact*:

#### **Monitoring and Reporting**

- 1.** Within 60 days, the docket holder shall provide written confirmation to the Commission that it has registered with PADEP the new groundwater source (Well 9) in accordance with the Pennsylvania Regulations (Title 25 - Environmental Protection, [25 PA. CODE CH. 110], Water Resources Planning. The docket holder shall continue to report to the PADEP all surface and groundwater sources described in this docket.
- 2.** The project withdrawals shall be metered by means of an automatic continuous recording device, flow meter, or other method, and shall be measured to within 5 percent of actual flow. Meters or other methods of measurement shall be subject to approval and inspection by the PADEP as to the type, method, installation, maintenance, calibration, reading and accuracy. A record of daily withdrawals shall be maintained, and monthly totals shall be reported to the PADEP annually and shall be available at any time to the Commission if requested by the Executive Director.
- 3.** This approval of the construction related to Well 9 as described in paragraph A.4.a of this docket shall expire five years from date below unless prior thereto the docket holder has commenced operation of the subject project or has provided the Executive Director with written notification that is has expended substantial funds (in relation to the cost of the project) in reliance upon this docket approval.
- 4.** 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 PADEP, 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.

5. In accordance with DRBC Resolution No. 2009-1 and Section 2.1.8 of the *Water Code (WC)*, 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.

6. The docket holder shall implement to the satisfaction of the PADEP, a continuous program to encourage water conservation in all types of use within the facilities served by this docket approval. The docket holder will report to the PADEP, on the actions taken pursuant to this program and the impact of those actions as requested by the PADEP.

7. The docket holder shall continue to implement its Water Conservation Plan as approved by the PADEP, and shall report to the PADEP on actions taken pursuant to this program and the impact of those actions as requested by the PADEP.

**Other Conditions**

8. During any month, the combined withdrawal from all well sources shall not exceed 15.219 million gallons. No well shall be pumped above the maximum rate and monthly allocation as indicated below:

<b>WELL NO.</b>	<b>MAXIMUM RATE (GPM)*</b>	<b>MONTHLY ALLOCATION (MGM)</b>
Well 2	40	1.116
Well 3	43	0.837
Well 4	35	1.550
Well 5	60	2.480
Well 6	55	2.450
Well 7	90	4.018
Well 9	62	2.768

\* Based on a 24-Hour Average

9. In accordance with 18 C.F.R. 401.8. of the Commission’s *Rules of Practice and Procedure (RPP)*, if at any future time the Project is changed materially from the Project as described in this docket, it will be deemed to constitute a new and different project for the purposes of Article 11 of the Delaware River Basin Compact and will require Commission amendment of the Comprehensive Plan. In accordance with the same section of the RPP, whenever a change to the Project is made, the sponsor must advise the Executive Director, who will determine whether the change is deemed materially for purposes of this provision.

**10.** Section 2.3.10 of the Commission's Rules of Practice and Procedure (18 C.F.R. 401.41), limiting the Commission's approval to five years in the absence of an expenditure of substantial funds by the project sponsor in reliance on the approval, is hereby waived for good cause shown in accordance with Section 2.9.3 (18 C.F.R. 401.123) of the same regulations. This approval shall expire on the expiration date set forth below unless prior thereto the docket holder has applied to the Commission to renew or extend this approval.

**11.** The docket holder is responsible for timely submittal to the DRBC of a docket renewal application on the appropriate application form including the appropriate docket application filing fee (see 18 C.F.R. 401.43) at least 6 months in advance of the docket expiration date set forth below. The docket holder will be subject to late filed renewal surcharges in the event of untimely submittal of its renewal application whether DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. If the docket holder has not applied to renew the docket or the DRBC is unable to reissue the docket before the expiration date below, the terms and conditions of the current docket will remain fully effective and enforceable pending the renewal of the docket.

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

**13.** The wells shall be operated at all times to comply with the requirements of the *WC* and *WQR* of the DRBC.

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

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

**16.** 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).

**17.** The docket holder shall implement to the satisfaction of the PADEP, a drought or other water supply emergency plan.

**18.** 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.

**19.** 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.



20. 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.
21. 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*.
22. The docket holder shall be subject to applicable DRBC regulatory program fees, in accordance with duly adopted DRBC resolutions and/or regulations. (see 18 CFR 401.43).
23. This approval is transferable by request to the DRBC Executive Director provided that the project purpose and area served approved by the Commission in this docket will not be materially altered because of the change in project ownership. The request shall be submitted on the appropriate form and be accompanied by the appropriate fee (see 18 CFR 401.43).
24. The docket holder shall request a name change of the entity to which this approval is issued if the name of the entity to which this approval is issued changes its name. The request for name change shall be submitted on the appropriate form and be accompanied by the appropriate fee (see 18 C.F.R. 401.43).
25. 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 to ensure the proper control, use and management of the water resources of the Basin.
26. 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 docket 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 docket holder shall provide written notice to all potentially affected water users of the docket holder's responsibilities under this condition. **Any well or surface water supply that is impaired as a result of the docket holder's project withdrawal shall be repaired, replaced or mitigated at the docket 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 docket holder to take interim actions to mitigate such impacts, pending completion of the investigative report and any long-term repair, replacement, or mitigation.

**27.** 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.

**28.** For the duration of any drought emergency declared by either Pennsylvania 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 Pennsylvania, the Pennsylvania Emergency Management Council, PADEP, or the Commonwealth Drought Coordinator to the extent that they may be applicable, and to any other emergency resolutions or orders adopted hereafter by the Commission.

**29.** Prior to allowing connections from any new service areas or any new developments, the docket holder shall either submit and have approved by the Executive Director of the DRBC a Non-Point Source Pollution Control Plan (NPSPCP) in accordance with Section 3.10.3.A.2.e or receive written confirmation from the Executive Director of the DRBC that the new service area complies with a DRBC approved NPSPCP.

**30.** 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 12, 2025**

**EXPIRATION DATE: March 12, 2035**