DOCKET NO. D-2001-017 CP-3

DELAWARE RIVER BASIN COMMISSION

Wernersville Municipal Authority Groundwater Withdrawal Borough of Wernersville, South Heidelberg Township and Lower Heidelberg Township, Berks County, Pennsylvania

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) on March 20, 2023 and revised on June 25, 2024 for renewal of an allocation of groundwater and review of a groundwater water withdrawal project (Application). The Pennsylvania Department of Environmental Protection (PADEP) public water supply permits issued for the docket holder's water supply wells are as follows:

WELL NO.	PADEP PERMIT NO.	PADEP APPROVAL DATE
Well 3	5996-T1	March 31, 1941
Well 5	8336-W	February 1, 1954
Well 6	8829-W	May 2, 1960
Well 7	668W011	December 30, 1968
Well 8	0677501	May 4, 1977
Well 12	0697504	August 6, 1998
Springs 1-11	WA06-533A	April 3, 2002
Western Berks		
Water Authority	WA 06-1016A	October 26, 2017
Interconnection		

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 Berks County Planning Commission has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on August 7, 2024.

A. <u>DESCRIPTION</u>

1. Purpose. The purpose of this project is to renew the approval of an existing groundwater withdrawal project to supply up to 20.30 million gallons per month (mgm) of groundwater to the docket holder's public water supply system from existing Wells 3, 4, 5, 6, 7, 8, 12, the Tunnel Well and 11 spring sources. The allocation of 20.30 mgm of water from the docket holder's groundwater sources a decrease in allocation from the 30.866 mgm contained in its prior approval.

Location. The project wells and springs are located in South Heidelberg Township, Berks County, Pennsylvania. The exception to this is Well 8 which is located in Wernersville Borough, Berks County, Pennsylvania. Wells 3 and 4 are completed in Hornblende Gneiss, Wells 5, 6 and 12 are completed in the Richland Formation, Well 7 is completed in the Hardyston Formation, Well 8 is completed in the Hershey and Myerstown Formations (undivided) and the 11 spring sources and Tunnel Well are located in outcrop area of granitic gneiss. The water sources are located in the drainage area of Manor Creek, which is located in the Spring Creek Watershed, upstream of Blue Marsh Reservoir.

Specific location information has been withheld for security reasons.

- **Area Served.** The docket holder serves water to Wernersville Borough, Lower Heidelberg Township and South Heidelberg Township, Berks County Pennsylvania. The area served is shown on a figure "Water Distribution System Overall Map", dated August 10, 2020 submitted with the 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. <u>Design Criteria.</u> The system currently contains 2,199 domestic, 103 commercial and 12 institutional service connections and records an existing average and maximum daily water demand of 0.527 million gallons per day (mgd) and 0.864 mgd, respectively. The docket holder projects the 10-year average and maximum water demand to increase to 0.654 mgd and 1.200 mgd, respectively. The requested groundwater allocation of 20.30 mgm in conjunction with the docket holder's interconnection with Western Berks Water Authority described below should be sufficient to meet the future monthly demands of the docket holder.

Springs and Tunnel Well Sources

Based on a March 4, 2002 PADEP site inspection, the 11 spring sources are shallow hand dug wells ranging from 8 to 20 feet deep and appear to capture water from the shallow water table. None of the springs had an overflow or any kind of drainage depression associated with them. The discharge pipe and water level of the springs was correspondingly 8 to 20 feet below the ground surface. PADEP Water Allocation Permit No. WA-06-533A, issued on April 3, 2002 grants the right to withdrawal 90,000 gpd on an average day basis from the collection of 11 springs.

Flow from the 11 spring sources is piped to a 0.75 mg capacity, concrete, ground level, covered reservoir (Reservoir No. 2). The withdrawals from Wells Nos. 3 and 4, located in the general vicinity of the spring sources, are also pumped into Reservoir No. 2 through the same pipe that collects water from the spring sources. Water from Reservoir No. 2 overflows through a pipe into a receiving chamber where it then flows into a second 0.25 mg capacity concrete, ground level, covered reservoir (Reservoir No.1). Flows from Reservoir No. 2 are metered prior to entering the receiving chamber.

The Tunnel Well consists of a vertical borehole drilled to a depth of approximately 40 feet. The well is situated on a topographic high area and the land surface slopes steeply away from its location. At the base of the hill side, a horizontal tunnel has been excavated into the hillside and intercepts the vertical borehole at a depth. Groundwater from the vertical borehole drains via

gravity through the horizontal tunnel into the receiving chamber where it mixes with water from the spring sources prior to flowing into Reservoir No. 1. Flows from the Tunnel Well are metered prior to entering the receiving chamber.

The amount of water available from the 11 springs and Tunnel Well is dependent on local hydrologic conditions. The docket holder estimates that the maximum output of the springs is 215 gpm, but this rate decreases to approximately 14 gpm during dry periods. WMA's system utilizes all the water it collects from the 11 springs and Tunnel Well and supplements the additional water necessary to meet system demands from its bedrock wells.

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

WELL NO.	DEPTH	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY	YEAR DRILLED
3	195'	130' / 4"	51 gpm*	1941
4	78'	50' / 6"	37 gpm*	1953
5	470'	250' / 6"	110 gpm	1954
6	291'	163' / 8"	260 gpm*	1960
7	230'	90' / 6"	170 gpm	1968
8	350'	21' / 6"	110 gpm	1977
12	399'	150' / 8"	350 gpm	1997

^{*} based on PADEP records.

SPRING NO.	WITHDRAWAL WATER BODY	DEPTH	PUMP CAPACITY	YEAR CONSTRUCTED
Springs Nos. 1- 11	Shallow groundwater	8' to 20'	215 gpm gravity	Pre-1960
Tunnel Well	Shallow Groundwater	40'	41 gpm* gravity	Pre-1960

^{*} based on PADEP records.

All water service connections are metered.

All sources are metered. Springs Nos. 1 through 11 are conveyed to a common withdrawal point and share a common meter.

Prior to entering the distribution system, all water is chlorinated and the pH adjusted using soda ash. Water from Well No. 8 is also softened and backwash from the softener is discharged to the sanitary sewer.

All existing project wells and springs are located outside of the 100-year floodplain.

The water system is presently interconnected with WBWA. The design capacity of the interconnection with WBWA is 1.5 mgd. PADEP Permit No. WA 06-1016A grants the right to purchase up to 0.409 mgd (based on a 30-day average) from WBWA. The docket holder currently purchases an average of 0.008 mgd.

- **Other.** The majority of wastewater generated from the use of water supplied by the docket holder is conveyed to the Robesonia-Wernersville Municipal Authority sewage treatment facility most recently approved by DRBC Docket No. D-1988-023 CP-4 on June 7, 2023. PADEP issued National Pollutant Discharge Elimination System (NPDES) Permit No. PA0031062 for this treatment facility. The treatment facility has adequate capacity to continue to receive wastewater from the existing project. The remainder of the wastewater generated in the service area is disposed via on-lot septic systems.
- **Relationship to the Comprehensive Plan.** The wells and spring sources were previously included in the Comprehensive Plan by the Commission in Docket Nos. D-68-112 CP, D-77-21 CP and D-98-10 CP on September 25, 1968, May 25, 1977 and October 7, 1998, respectively. The interconnection with WBWA was included in the Comprehensive Plan by the Commission in Docket No. D-2001-17 CP on September 13, 2001. Issuance of this docket will continue the project in the Comprehensive Plan.

B. FINDINGS

1. 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 15, 2024.

2. Other Findings

This project consists of an existing withdrawal of groundwater from Wells 3, 4, 5, 6, 7, 8 and 12, the Tunnel Well and Springs 1 through 11. The instantaneous well allocations approved by this docket are based on the rates included in PADEP's Public Water Supply Permit No. 0610522 issued to the docket holder for 4-log treatment of viruses or the requested allocation, whichever was less. Instantaneous and monthly allocations are provided in Condition C.6. in the Decision Section of this docket. As the existing water withdrawals have already been realized by the local hydrologic system, there should be no significant impacts from continued withdrawals from the existing system wells.

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-2001-017 CP-3 below, the project described in Docket No. D-2001-017 CP-2 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-2001-017 CP-3; Docket No. D-2001-017 CP-2 is terminated and replaced by Docket No. D-2001-017 CP-3; 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. The docket holder shall continue to report to the PADEP all surface and groundwater sources described in this docket in accordance with the Pennsylvania Regulations (Title 25 - Environmental Protection, [25 PA. CODE CH. 110], Water Resources Planning).

- 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. 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.
- 4. 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.
- 5. 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.
- 6. The docket holder shall continue to implement its Water Conservation Plan as approved by 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

7. During any month, the combined withdrawal from all well and spring sources shall not exceed 20.30 million gallons. No source shall be pumped above the maximum rate and monthly allocation as indicated below:

	MAXIMUM RATE	MONTHLY ALLOCATION
WELL NO.	(GPM)*	(MGM)
Well 3	37 gpm	1.598 mgm
Well 4	37 gpm	1.598 mgm
Well 5	110 gpm	4.752 mgm
Well 6	220 gpm	10.800 mgm
Well 7	170 gpm	7.344 mgm

WELL NO.	MAXIMUM RATE (GPM)*	MONTHLY ALLOCATION (MGM)
Well 8	125 gpm	1.814 mgm
Well 12	350 gpm	15.120 mgm
Tunnel Well	41 gpm	1.830 mgm
Springs	215 gpm	9.288 mgm

^{*} Based on a 24-Hour Average

Additionally, the combined withdrawal of Well 3, Well 4, Tunnel Well and Springs 1-11 shall not exceed 345 gpm or 15.40 mgm and the combined withdrawal of Well 5 and Well 6 shall not exceed 370 gpm or 16.516 mgm.

- 8. 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 substantially 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 substantial for purposes of this provision.
- 9. 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.
- 10. 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.
- 11. The wells and operational records shall be available at all times for inspection by the DRBC.
- 12. The wells shall be operated at all times to comply with the requirements of the *WC* and *WQR* of the DRBC.

- 13. 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.
- 14. Each new water service connection shall include a water meter in accordance with the DRBC's Resolution No. 87-7 (Revised).
- 15. 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).
- 16. The docket holder shall implement to the satisfaction of the PADEP, a drought or other water supply emergency plan.
- 17. 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.
- 18. 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.
- 19. 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*.
- 20. 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).
- 21. 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).
- 22. 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).
- 23. 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.

- 24. 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.
- 25. 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.
- 26. 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.

27. 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: September 5, 2024

EXPIRATION DATE: September 5, 2034