

DOCKET NO. D-2010-026-2

DELAWARE RIVER BASIN COMMISSION

Located in Drainage Area to Special Protection Waters

**Tuthill Corporation & Aquashicola-Little Gap, Inc.
Blue Mountain Ski Area**

**Surface Water Withdrawal and Groundwater Withdrawal
Lower Towamensing Township, Carbon County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) on September 8, 2015, subsequently revised on March 11, 2021 for renewal of an allocation of surface water and groundwater and review of an existing surface water and groundwater withdrawal project (Application). The groundwater withdrawal project was approved by the Pennsylvania Department of Environmental Protection (PADEP) on December 3, 2015 (PWS Construction Permit No. 1315503MA). The surface water withdrawals are not subject to approval by the PADEP.

The Application was reviewed for approval under Section 3.8 of the *Delaware River Basin Compact*. The Carbon County Planning Commission has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on May 12, 2021.

A. DESCRIPTION

1. Purpose. The purpose of this docket is to renew the approval to withdrawal up to 300 million gallons of water from November through March of the following year and 3.5 million gallons per month (mgm) at all other times from two existing surface water intakes located on Aquashicola Creek. The surface water withdrawals are used for snowmaking, pump testing and fire emergencies at the docket holder's ski area. The docket also renews the approval of an allocation of 1.49 mgm from Wells 1 and 2 for the purpose of potable water supply to the ski area.

2. Location. The project is located in the Aquashicola Creek Watershed in Lower Towamensing Township, Carbon County, Pennsylvania. The site is located within the drainage area to the section of the non-tidal Delaware River known as the Lower Delaware, which the Commission is designated as Special Protection Waters. The project wells are completed in the Shawangunk Formation. Aquashicola Creek from the source to Buckwha Creek is classified by PADEP as a High Quality Water that supports both Cold Water and Migratory Fishes (HQ-CWF, MF).

Specific location information has been withheld for security reasons.

3. Area Served. Water withdrawn from the Aquashicola Creek and associated ponds are used only for the purposes of snowmaking, pump testing and fire emergencies at the ski area. Water withdrawn from the on-site wells supply the year-round potable water needs at the ski area.

4. Design criteria. Water is withdrawn from Aquashicola Creek at two locations; the Creekside Pumphouse and the Pond 2 Pumphouse to make snow during the ski season (November to March). Snow is produced by mixing water with compressed air at sub-freezing temperatures. The Creekside Pump House serves the upper portion of the ski area and the Pond 2 Pump House serves the lower portion of the ski area. The separation is to manage both the distance to the delivery area and the water pressure. The Creekside Pump House pumps the water to a put-and-take tank and another set of pumps pump the water to a holding pond towards the ski mountain summit (Pond 1). The water in Pond 1 is then pumped to the snow making guns distributed along the ski trails whenever snow is being made on the upper portion of the ski area. Water from the Pond 2 Pump House is pumped into the Pond 3/Pond 4 holding pond. From Pond 3/Pond 4, the water is pumped to the snowmaking guns along trails in the lower portion of the ski area when snow is being made in that area. Water can also be transferred as needed from Pond 3/Pond 4 to Pond 1 and from Pond 1 to Pond 3 so as not to withdraw more than necessary from the creek. The constructed ponds (Ponds 1, 2, and 3/4) have a total capacity of 6.0 million gallons. Pond 3/Pond 4 also catches snowmelt and precipitation run-off that may also be used for snowmaking purposes. Pond 1 is maintained at least half-full throughout the off-season to support firefighting and pump testing. During periods of drought these ponds can be drawn down to provide a limited alternate supply for up to three days of continuous snowmaking.

The intake designs for both withdrawal locations use a fixed intake with a screen. The Creekside Pump House has a box intake with a screen covering it. The intake is located on the edge of the creek in approximately 4 feet of water. The box intake feeds two 12-14 inch diameter pipes that run horizontally into an 8 foot diameter vertical tank below the pump house where the vertical pumps are located.

The Pond 2 Pump House is located over Pond 2, which acts as a sedimentation pond (for snow melt run-off) and could also act as a holding pond, but it is usually bypassed. Water from the creek is drawn through two horizontal pipes (one 8 inch and one 10 inch), each with a 90 degree vertical turn into the creek. The pipe intake is located on the edge of the creek in 4-5 feet of water. Each pipe is covered by a screen at the opening end in the creek.

The ski area generally uses between 132 to 247 million gallons per season and projects usage requirements of up to 295 million gallons, depending on the weather (in-season thaws can result in the need to make more snow to replenish what has melted and drained back into the creek). This seasonal use is typically not distributed evenly among the potential snowmaking months of November through March. December, January, and February are usually the heaviest withdrawal months with January being the heaviest withdrawal month if temperatures are too high to make snow in December. If early snowmaking is disrupted by a thaw where snow needs to be completely reestablished on the ski area within a month the total monthly withdrawal could be as high as 200.0 mgm at projected levels. Peak withdrawals occur during the months of December, January, and February with the most recent maximum monthly withdrawal of 126 mg occurring December 2017. The docket holder records an existing annual average and maximum surface water demand of 0.694 million gallons per day (mgd) and 13.104 mgd, respectively. The docket holder projects the 10-year daily average and maximum surface water demand will be 0.808 mgd and 13.104 mgd, respectively. As seasonal demands fluctuate from month to month, the following previously approved monthly allocations should be sufficient to meet the future snow making demands:

MONTH	MONTHLY ALLOCATION
November	67.0 mg
December	200.0 mg
January	200.0 mg
February	200.0 mg
March	67.0 mg

The total seasonal withdrawal of surface water (the period from November through March of the following year) shall not exceed 300 million gallons.

The docket holder operates two domestic wells to supply potable water to the ski area. Water is pumped from the wells to the Waterhouse pump house. At the Waterhouse the water is treated and then pumped to storage tanks located at the resort summit and near the Waterhouse. The present average and maximum daily demand is 0.023 mgd and 0.082 mgd, respectively. The docket holder expects the 10-year groundwater demands to increase to an average of 0.040 mgd and a maximum of 0.125 mgd. The 10-year projected peak monthly demand is estimated to be 1.2 mgm.

5. **Facilities.** The existing surface water intakes have the following characteristics:

INTAKE NO.	WITHDRAWAL WATER BODY	PUMP CAPACITY	7Q10 FLOW AT INTAKE (CFS)	YEAR CONSTRUCTED
Creekside Pumphouse	Aquashicola Creek	3,000	4.13	1987
Pond 2 Pumphouse	Aquashicola Creek	6,100	4.13	1994

The existing groundwater wells have the following characteristics:

WELL NO.	DEPTH	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY (GPM)	YEAR DRILLED
1 (Water House Well)	198'	120' / 6"	55	1980
2 (Ski Patrol Well)	245'	66' / 8"	85	1981

All surface water intakes are metered.

All wells are metered.

Prior to entering the distribution system, the well water is treated by chlorination.

The project pump house final floors and well heads are above the 100-year flood elevation.

6. **Other.** Wastewater is conveyed to the Blue Mountain Ski Area sewage treatment facility most recently approved by DRBC Docket No. D-2008-023-4 on December 9, 2015. The PADEP issued its most recent NPDES Permit No. PA0063428 on February 1, 2016 for this treatment facility. The treatment facility has adequate capacity to continue to receive wastewater from the existing project.

B. FINDINGS

1. Special Protection Waters

In 1992, the DRBC adopted Special Protection Waters (SPW) 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 SPW designation and clarity on definitions and terms were updated for the entire program.

Article 3.10.3A.2.e.1). and 2). of the *WQR, Administrative Manual - Part III*, states that projects subject to review under Section 3.8 of the *Compact* that are located in the drainage area of SPW 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 SPW. The wells and surface water intakes providing water supply to the docket holder are located within in the drainage area to the SPW. Since this project does not entail additional construction and expansion of facilities and there are not any new or increased non-point source loads associated with this approval, the non-point source pollution control plan requirement is not applicable at this time. Accordingly, Special Condition C.26 has been included in the Decision section of this docket.

2. Drought Management and Contingency Plans (DMCPs) for Water Withdrawal greater than 1 mgd

Section 2.3.5.1 C. of the Commission's *Rules of Practice and Procedure (RPP)*, requires industrial and commercial water withdrawals in excess of one million gallons per day to develop a contingency plan including emergency conservation measures to be instituted in the event of a Commission declared drought or other water shortage. Resolution No. 83-14 amended the Commission's *Water Code* (Section 2.1.4) to include the conservation goal of a 15 percent reduction in depletive use during drought conditions. Hereafter referred to as drought management and contingency plans (DMCPs), DMCPs must contain the following: source of water supply; the average daily and monthly peak water withdrawal; average daily and peak monthly consumptive use (difference between quantity withdrawn and quantity returned to the ground or surface waters of the basin); description of recycling and conservation measures; point of discharge (where water is returned or discharged); types of products produced; normal employment levels (numbers); and estimated employment (numbers) and economic impact for curtailment of water usage for the following levels of curtailment: 10%; 25%; 35%; 50% and 100%. The docket holder submitted a DMCP with the application. Staff reviewed the DMCP and find it to be in accordance with the Commission requirements. The docket holder shall implement the DMCP upon direction by the Executive Director. (see Condition C.5).

3. Surface Water Charges

The docket holder shall pay for surface water use in accordance with the provisions of Resolution No. 74-6, as amended as described in Condition C.3 in the DECISION section.

4. Passby Flow

The docket holder's surface water withdrawal will continue to be subject to a pass-by flow requirement. The estimated contributing drainage area to Aquashicola Creek above the docket holder's intakes is approximately 18.76 square miles. The estimated seven-day low flow with a recurrence interval of 10 years (Q7-10) at the point of withdrawal is 4.13 cubic feet per second (cfs) or 2.67 million gallons per day (mgd). These values are based on data available from the United States Geological Survey (USGS) Palmerton Gaging Station No. 01450500 adjusted proportionally for the area of the basin for the period of record from 1941 to 2010. Throughout the ski season, the project withdrawal must not cause the stream flow in Aquashicola Creek to be less than 4.13 cfs at the point of taking and daily withdrawal rates shall be reduced as appropriate to ensure that a minimum of 4.13 cfs passes by the intake. Withdrawals shall cease entirely if the 24-hour average flow as measured below the intake, less the withdrawal, is 4.13 cfs or less. Whenever the stream flow below the intakes is less than 4.13 cfs, no withdrawal from the creek shall be made and the entire natural stream flow must be allowed to pass. No withdrawals shall be made until flow in Aquashicola Creek as measured below the intake is at least 14 cfs for at least a 24 hour period.

The docket holder monitors flows in Aquashicola Creek at the Creekside Pump House as described in its Operations Plan dated October 13, 2011 and supplemental information package dated April 18, 2012. The docket holder shall continue to monitor passby flows at the site. The docket holder is required to submit records of its daily withdrawals and streamflow discharge measurements to the Commission on an annual basis (see Section C. Decision Condition C.6). This data will be reviewed by the Commission and may be used to modify monitoring and passby requirements at the site.

5. Other Findings

The DRBC estimates that the project withdrawals, used for the purpose of snowmaking, result in a consumptive use of 22 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*.

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-2010-026-2 below, Docket No. D-2010-026-1 is terminated and replaced by Docket No. D-2010-026-2. 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 and reported with 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. An exception to the 5 percent performance standard, but no greater than 10 percent, may be granted for surface water withdrawals by the designated agency (PADEP) if maintenance of the 5 percent performance is not technically feasible or economically practicable. 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. The docket holder shall pay for surface water use in accordance with *Administrative Manual – Part III Basin Regulations – Water Supply Charges 18 CFR Part 420*.

4. The docket holder shall implement to the satisfaction of the Bureau of Watershed Management, 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 Bureau of Watershed Management, PADEP, on the actions taken pursuant to this program and the impact of those actions as requested by the PADEP.

5. The docket holder shall implement the DMCP upon direction by the Executive Director.

6. The docket holder shall submit records of its daily withdrawals and streamflow discharge measurements to the Commission on an annual basis. The data for the preceding snow making season shall be submitted electronically by June 1 each year. The first data report for the 2021-2022 season is due June 1, 2022.

Other Conditions

7. During the period from November to March of the following year, the total combined withdrawal from all surface water intakes shall not exceed 300 million gallons. During any month, the combined withdrawal from all surface water intakes shall not exceed the following monthly allocations:

MONTH	MONTHLY ALLOCATION (MGM)
November	67.0
December	200.0
January	200.0
February	200.0
March	67.0

At all other times, during any month, the total withdrawal from the project surface water intakes shall not exceed 3.5 mg. These withdrawals shall only be utilized for fire emergencies and pump testing.

No surface water intake shall be pumped above the maximum instantaneous rate as indicated below:

INTAKE NO.	MAXIMUM RATE (GPM)*
Creekside Pumphouse	3,000 GPM
Pond 2 Pumphouse	6,100 GPM

*Based on average daily flow.

14. During any month, the combined withdrawal from all well sources shall not exceed 1.49 million gallons. No well shall be pumped above the maximum rate and monthly allocation as indicated below:

WELL NO.	MAXIMUM RATE (GPM)*	MONTHLY ALLOCATION (MGM)
1 Water House Well	55	1.49
2 Ski Patrol Well	85	1.49

* Based on a 24-Hour Average

8. 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 CFR 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 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, 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.

9. The docket holder shall continue to measure flows in the Aquashicola Creek as described in its approved Operations Plan.

10. The project withdrawal must not cause the stream flow in Aquashicola Creek to be less than 4.13 cfs at the point of taking and daily withdrawal rates shall be reduced as appropriate to ensure that a minimum of 4.13 cfs passes by the intake. Withdrawals shall cease entirely if the 24-hour average flow as measured below the intake, less the withdrawal, is 4.13 cfs or less. Whenever the stream flow below the intakes is less than 4.13 cfs, no withdrawal from the creek shall be made and the entire natural stream flow must be allowed to pass. No withdrawals shall be made until flow in Aquashicola Creek as measured below the intake is at least 14 cfs for at least a 24-hour period.

11. The wells and surface water intakes and operational records shall be available at all times for inspection by the DRBC.

12. The wells and surface water intakes 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. 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).

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

16. 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.

17. 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.

18. 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*.

19. 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).

20. 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).

21. 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 CFR 401.43).

22. 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.

23. 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.

24. 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.

25. 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.

26. 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 is in compliance with a DRBC approved NPSPCP.

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: June 9, 2021

EXPIRATION DATE: June 9, 2031