

**DOCKET NO. D-1994-018 CP-3**

**DELAWARE RIVER BASIN COMMISSION**

**Jackson Township Municipal Utilities Authority  
Groundwater Withdrawal and Importation  
Jackson Township, Ocean County, New Jersey**

**PROCEEDINGS**

This docket is issued in response to an Application submitted by Jackson Township Municipal Utilities Authority (JTMUA) to the Delaware River Basin Commission (DRBC or Commission) on March 4, 2015 for renewal of an allocation of groundwater and review of a groundwater withdrawal project, importation and exportation project (Application). The groundwater withdrawal project, along with fifteen (15) additional wells, was renewed by the New Jersey Department of Environmental Protection (NJDEP) on November 12, 2013 (Water Allocation Permit No. 5075). These sources were previously approved by the Commission in Docket No. D-1994-018 CP-2 on March 1, 2006. These withdrawals will continue to be regulated by NJDEP in accordance with the Administrative Agreement (AA) between DRBC and NJDEP, Section IV.C.4, enacted on December 18, 2009, amended May 8, 2013. The docket holder's importation and exportation remains reviewable by the Commission and is the subject of this docket renewal.

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 Ocean County Planning Board has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on November 10, 2015.

**A. DESCRIPTION**

1. **Purpose.** The purpose of this docket is to approve the renewal of an existing import of up to 0.792 million gallons per day (mgd) of groundwater from the Atlantic Basin to the Delaware River Basin (DRB) from existing JTMUA Well No. 14 to supply the Six Flags Great Adventure Theme Park Complex distribution system. The application also requested to renew the approval to withdraw up to 30 million gallons per month (mgm) of groundwater from three (3) DRB groundwater sources, including an aquifer storage and recovery Well No. 12. The DRB allocation corresponds to the allocation in NJDEP Permit No. 5075. The project's existing groundwater withdrawals are approved by the NJDEP and will continue to be regulated in accordance with the AA entered into on December 18, 2009, amended May 8, 2013 by the Commission and the State of New Jersey.

2. **Location.** The project wells are completed in the Upper Potomac-Raritan-Magothy Formation and are located in the Crosswicks Creek Watershed in Jackson Township, Ocean County, New Jersey.

Specific location information has been withheld for security reasons.

3. **Area Served.** The project wells supply water to the Six Flags Great Adventure Theme Park Complex which includes the Six Flags Great Adventure Theme Park, Six Flags Wild Safari and Six Flags Hurricane Harbor Water Park only. 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.

It should also be understood that the Jackson Township MUA water system (PWSID No. 1511001) and the Six Flags Great Adventure water system (PWSID No. 1511300) will be interconnected on or about 2018. Such interconnection is permitted but no allocation increase in the Delaware River Basin (DRB) wells is authorized as part of this project and the existing import limit of up to 0.792 mgd and a monthly allocation of 17 mgm from the Atlantic Basin shall remain unchanged.

4. **Physical features.**

a. **Design criteria.** The docket holder operates four wells to supply for the distribution system serving the Six Flags Great Adventure Theme Park Complex system. These include Well No. 14 which is located in the Atlantic Basin. The system currently serves water to approximately 30,000 guests and facility and records an existing average and maximum water demand of 0.321 mgd and 0.848 mgd, respectively. The docket holder projects an average and maximum water demand of 0.366 mgd and 0.967 mgd, respectively, by the year 2025. The DRB allocation of 30 mgm should be sufficient to meet the future demands of the JTMUA Six Flags Great Adventure Theme Park Complex system. Groundwater from Well No. 14, is imported into the DRB from the Atlantic Basin to supplement the water demand with up to 0.792 mgd and a monthly allocation of 17 mgm.

The distribution system supplies the theme park that operates on a seasonal basis (open daily May through August and open weekends in April, September and October). There is nominal water demand in the off-season. Water is chiefly used during this period in the administration buildings and for maintenance purposes. Significant water demand occurs in March for filling the rides prior to Opening Day. During the operating season, an on-site filtration system is used for water recycling to minimize water demand from the wells.

In addition to seasonal groundwater usage, water may be pumped from Wells Nos. 7 and 10 and treated during the winter months to recharge Well No. 12 for summer peak usage. Well No. 12 can be recharged at a rate up to 225 gallons per minute (gpm) or 0.3 mgd.

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

WELL NO.	DEPTH (FEET)	CASED DEPTH / CASING DIAMETER	SCREENED INTERVAL (FEET TO FEET)	PUMP CAPACITY (GPM)	YEAR DRILLED
7	652	584' / 8"	584 to 648	400	1974
10	977	876' / 8"	876 to 976	500	1978
12 ASR	605	560' / 12"	560 to 600	500	1993
14 (Out of Basin)	680	553' / 12"	553 to 675 (not screened from 570 to 590)	550	1998

All water service connections are metered.

All wells are metered.

Prior to entering the distribution system, the water is pre-oxidized, filtered, adjusted for pH and disinfected.

The project well-heads are above the 100-year flood elevation.

The water system is not presently interconnected with any other distribution system.

c. **Other.** Wastewater is conveyed to the Ocean County Utilities Authority sewage treatment facility which is located in the Atlantic Basin. The NJDEP issued its most recent NPDES Permit No. NJ0028142 on July 1, 2015 for this treatment facility. The exportation of wastewater was approved by the Commission in Docket No. D-1993-070 on September 28, 1994. During the months of operation, approximately 0.318 mgd of wastewater is generated and exported from the Six Flags Great Adventure Theme Park Complex to the Ocean County Utilities sewage treatment plant in the Atlantic Basin. The treatment facility has adequate capacity to receive wastewater from the proposed project.

d. **Cost.** There is no cost associated with this project.

e. **Relationship to the Comprehensive Plan.** The project wells were included in the Comprehensive Plan via DRBC Dockets Nos. D-1974-071 CP, D-1977-065 CP, D-1979-008 CP, D-1979-008 CP REN, D-1979-008 CP REN 2, D-1994-018 CP and D-1994-018 CP-2 issued on October 30, 1974, March 22, 1978, December 19, 1979, October 24, 1984, January 16, 1991, August 9, 1995 and March 1, 2006, respectively. Issuance of this docket will continue the groundwater importation and withdrawal project in the Comprehensive Plan.

## **B. FINDINGS**

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

### **Groundwater Importation**

The JTMUA water distribution system which serves the Six Flags Great Adventure Theme Park Complex has a well (Well No. 14) which provides up to 0.792 mgd of groundwater from the Atlantic Basin with an allocation of 17 mgm. The Six Flags Great Adventure Theme Park Complex is located in the DRB in Jackson Township, Ocean County, New Jersey. The continued importation of water to the DRB from sources outside of the DRB reduces reliance on in-basin sources. No other significant benefit or impairment is incurred to the basin from the ongoing importation of water from Well No 14 located in the Atlantic Basin.

The NJDEP water allocation is valid for a period of 10 years from the effective date of December 1, 2013. Water Allocation Permit No. 5075 expires on November 30, 2023. The allocations for the DRB included in the NJDEP permit are:

- Monthly Water Diverted – 30 mgm
- Well No. 7 Rated Pump Capacity – 400 gpm
- Well No. 10 Rated Pump Capacity – 500 gpm
- Well No. 12 Rated Pump Capacity – 500 gpm

JTMUA is in the process of preparing a Water Allocation Minor Permit Modification application for the replacement of Well No. 10, with well No. 17. At this point, they have received a construction permit from the Bureau of Water System Engineering for the replacement. Well No. 17 will be installed within 100 feet of Well No. 10, in the same aquifer, it will be completed to approximately the same depth, and have an equal or lesser pump capacity.

The DRBC estimates that the project withdrawals, used for the purpose of amusement park supply, result in a consumptive use of 90 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 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-1994-018 CP-3 below:

a. The projects described in Docket No. D-1994-018 CP-2 is removed from the Comprehensive Plan to the extent that they are not included in Docket No. D-1994-018 CP-3; and

b. Docket No. D-1994-018 CP-2 is terminated and replaced by Docket No. D-1994-018 CP-3.

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 NJDEP in its water allocation permit, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission’s.

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 30 mgm. No well shall be pumped above the maximum instantaneous rate as indicated below:

WELL NO.	MAXIMUM INSTANTANEOUS RATE (GPM)
7	400
10	500
12 ASR	500

e. 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.

f. The recovery of water from Well No. 12 shall be preceded by injection of an equivalent storage volume and the water recovered from storage shall take place within one

year of the date on which storage began. The annual amount of water recovered from well No. 12 may exceed the quantity injected during any year. However, once the water recovered exceeds the amount of water injected, the volume of water withdrawn shall count against the docket holder's withdrawal limitation on the Upper Raritan aquifer of 297.5 mgd. For the purpose of this docket condition, the docket holder's water year shall run from October 1 to September 30.

g. 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 NJDEP quarterly and shall be available at any time to the Commission if requested by the Executive Director.

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

i. The docket holder shall implement to the satisfaction of the NJDEP, the 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 NJDEP on the actions taken pursuant to this program and the impact of those actions as requested by the NJDEP.

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

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

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

n. 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.

o. 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.

p. 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*.

q. 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.

r. 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.

s. 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 docket 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 certified mail or email (using addresses posted on the DRBC website); or (b) written notice in accordance with the preceding clause 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.

t. 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.

u. 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: December 9, 2015**

**EXPIRATION DATE: December 9, 2025**