## Frequently Asked Questions (FAQs): DRBC Drought Management



1. What is DRBC's primary role within the Delaware River Basin when conditions are dry and there is a potential drought?

The Commission's primary drought planning and response actions include:

- Complementing and coordinating with the states' drought actions.
- Addressing the essential conservation of regional reservoir storage for purposes of water supply and flow augmentation for the Delaware River.
- Releasing water to repel the salt front in the Delaware Estuary.

### 2. What are the primary objectives of the Drought Management Resolution issued by the Commission on November 23, 2016?

The primary objectives of the Resolution are to:

- Commence basinwide "drought watch" stage operations immediately to conserve reservoir storage.
- Establish maximum out-of-basin diversions and flow objectives based upon drought conditions through the use of a "special permit."
- Explain the key elements of complex drought management and water management rules and agreements.
- Provide for coordination and collaboration among Commission members and New York City during this event.
- Support water conservation and water efficiency measures.
- Allow for flexibility as conditions change during this event.

#### 3. Why is DRBC beginning "drought watch" stage operations at this time?

The combined storage available in the New York City Delaware Basin reservoirs has declined below the "drought watch" line. The Commission's Water Code typically requires that combined storage remains below the "drought watch" line for five consecutive days before drought operations are initiated; however, conditions are such that recovery is not expected in the near term, and preservation of regional storage can be achieved by commencing basinwide "drought watch" stage operations immediately.

#### 4. What is a "special permit"?

The <u>Delaware River Basin Compact</u> in section 10.4 provides that: "[i]n the event of a drought or other condition which may cause an actual and immediate shortage of available water supply within the basin, or within any part thereof, the commission may, after public hearing, determine and delineate the area of such shortage and declare a water supply emergency therein," and further provides that "[f]or the duration of such emergency... no person, firm, corporation or other public or private entity shall divert or withdraw water for any purpose, in excess of such quantities as the commission may prescribe by general regulation or authorize by special permit...."

In this case, a special permit is being used to outline and communicate certain coordinated drought management actions.

#### 5. Is the Delaware River Basin in "Emergency" status?

The DRBC is not declaring a "drought emergency" at this time. The Commission has entered basinwide "drought watch" stage operations based upon current conditions.

#### 6. What is a Compact?

A compact is an agreement between two or more states that has been approved by the U.S. Congress and enacted as federal law. The U.S. Constitution provides in Article 1, Section 10, Clause 3 that: "No state shall, without the Consent of Congress, ...enter into agreement or Compact with another State...."

#### 7. What is the Delaware River Basin Compact?

The <u>Delaware River Basin Compact</u> ("the Compact") is an agreement between the United States, State of Delaware, State of New Jersey, State of New York, and Commonwealth of Pennsylvania recognizing "the water and related resources of the Delaware River Basin as regional assets vested with local, State and National interests, for which they have joint responsibility." The Compact was adopted as law by each party in 1961 and remains in effect. The citations of the respective laws are as follows:

United States: Public Law 87-328, Approved September 27, 1961, 75 Statutes at Large 688

**Delaware:** 53 Delaware Laws, Chapter 71, Approved May 26, 1961

New Jersey: Laws of 1961, Chapter 13, Approved May 1, 1961

New York: Laws of 1961, Chapter 148, Approved March 17, 1961

Pennsylvania: Acts of 1961, Act No. 268, Approved July 7, 1961

#### 8. Does the Delaware River Basin Compact include a drought management plan?

The Compact recognizes the possibility of drought conditions and provides the Commission with certain authorities to respond to such conditions. Using its authorities under the Compact, the Commission has adopted detailed drought management plans as regulations and has placed them in the Water Code.

#### 9. What is the DRBC Water Code?

The <u>DRBC Water Code</u> is a set of regulations adopted by the Commission to address water resource management objectives set forth in the Compact. The Water Code has several water resource management elements, including drought management.

# 10. How does the 1954 U.S. Supreme Court Decree, which provided, among other things, for out-of-basin diversions by New York City and New Jersey and for flow objectives in the Delaware River, deal with drought issues?

The <u>1954 U.S. Supreme Court Decree</u> does not contain any provisions for drought management. In accordance with the Delaware River Basin Compact, the Commission can modify the terms of the decree as long as the parties to the decree (the states of Delaware, New Jersey and New York, the Commonwealth of Pennsylvania, and the City of New York) give their unanimous consent. All Commission actions that affect "the diversions, compensating releases, rights, conditions, obligations, and provisions for the administration thereof as provided" in the decree have been adopted by the Commission with the unanimous consent of the parties to the decree ("Decree Parties").

#### 11. Are the Decree Parties the same as the DRBC?

No. The "Decree Parties" are the parties to the United States Supreme Court decree in *New Jersey v. New York*, 347 U. S. 995 (1954) – the states of Delaware, New Jersey and New York, the Commonwealth of Pennsylvania and the City of New York. The Commission's members are the Governors of the four basin states: Delaware, New Jersey, New York and Pennsylvania; and the Division Engineer, North Atlantic Division, U.S. Army Corps of Engineers, who serves as the federal representative. More information about the Decree and the Parties can be found on the web site of the Office of the Delaware River Master. More information about the DRBC can be found at <a href="https://www.drbc.net">www.drbc.net</a>.

#### 12. What is the effective date of the special permit?

The Special Permit takes effect immediately after the Commission has approved it and the Decree Parties have given it their unanimous consent. That occurred on November 23, 2016.

### 13. Is this the "lower basin drought warning" that DRBC discussed in its October 26, 2016 news release?

Since the <u>news release on October 26, 2016</u>, hydrologic conditions in the basin have changed. Basinwide drought watch as defined by combined storage in New York City's three Delaware Basin Reservoirs and lower basin drought warning as defined by storage availability in the Blue Marsh and Beltzville Reservoirs are occurring almost simultaneously. As such, the Commission has begun implementing comprehensive "basinwide drought watch" stage operations.

#### 14. Does drought management under a "basinwide" drought plan protect the lower basin as well?

Yes. The DRBC Water Code provides for coordination of the operation of lower basin and hydroelectric reservoirs with the objective of management towards lower basin (Trenton) flow objectives.

#### 15. What is the Flexible Flow Management Program (FFMP)?

The Decree Parties, in consultation with the DRBC, have been working on the principle of adaptive management to improve and optimize a variety of water resource management needs. The Decree Parties have unanimously agreed to several versions of a flexible flow management program since 2007. More information about the FFMP, including the current 2016 agreement, can be found on the web site for the Office of the Delaware River Master.

#### 16. What are DRBC drought stages for this drought event?

Drought stages consisting of "drought watch," "drought warning," and "drought" will be determined on the basis of combined storage in the Cannonsville, Pepacton, and Neversink Reservoirs, as shown in Figure 1 of the Resolution.

### 17. What are the allowable out-of-basin diversions and Delaware River flow objectives during this drought event?

The schedule of diversions and flow objectives will be in accordance with the basinwide drought stages depicted in Figure 1 of the Resolution. The corresponding diversion and flow rates are set forth in Tables 1 and 2 of the Resolution. The schedules are consistent with the out-of-basin diversions and Delaware River flow objectives established by the current 2016 FFMP agreement.

#### 18. Are all drought management operations described in this Resolution?

No. Except as set forth in the Resolution, drought operations will be in accordance with sections 2.5.1 through 2.5.5 of the DRBC Water Code.

#### 19. What is a reserve water "bank"?

Water "banks" can be created by reserving stored water that, in accordance with the applicable operation plans, could have been released. The water is "banked" – i.e., it is kept in storage – for use at a later time when the needs are of a higher priority.

#### 20. What is the bank of water referenced in this Resolution?

Out-of-basin diversions by the State of New Jersey and the City of New York are limited by the 1954 Decree. During each water year (June 1-May 31), the Decree Parties have the ability to "bank" water not released under normal conditions earlier in the "water year" for use later in the "water year" in the event of a greater need. The conditions for creation and use of the "bank" referenced in the Resolution are set forth in the Decree Party agreement known as the 2016 FFMP. The bank has a current balance of 1.48 billion gallons. As long as water is available in the bank, New Jersey's out-of-basin diversion can be adjusted consistent with the upper limits set forth in Table 1 of the Resolution.

#### 21. What is the "salt line" and where is the "salt line"?

Fresh water from the non-tidal Delaware River and salt water from the Atlantic Ocean meet and mix in the Delaware Estuary (the tidal river and bay). DRBC uses the "salt line" or "salt front" as an indicator of salinity intrusion into the estuary and defines it as the seven-day average 250 milligram per liter chloride concentration. Adequate freshwater flowing downstream is needed to repel the upstream advancement of the "salty" or "brackish" water from the Delaware Bay to keep it away from drinking water intakes serving residents in Philadelphia and New Jersey and industrial intakes along the river. As of November 22, 2016, the salt line is estimated to be at river mile 89, or 19 miles above its "normal" location for this time of the year. This location is still 21 miles downstream of the water supply intakes referenced above. More information about the salt line and a map showing the most recent salt line location can be found <a href="here">here</a>.

#### 22. If flow objectives are reduced, how will that impact the salt line?

Under the drought management plan, the flow objectives are reduced to preserve water stored in regional reservoirs. If conditions reach "drought" stage and if the salt line continues to progress upstream, the flow objectives are increased as noted in Table 2 of the Resolution.

#### 23. Is the DRBC calling for water restrictions?

At this stage, the Basin states have the lead responsibility for implementing and enforcing any mandatory water use restrictions, based upon drought conditions identified by each state. The DRBC through this Resolution encourages all residents, businesses, and users of waters of the basin to maximize water efficiency.

### 24. What other actions are being taken by the DRBC as part of basinwide "drought watch" stage operations?

As required by the DRBC Water Code, the following actions have been taken:

- Operators of regional reservoirs, including F.E Walter Reservoir, Beltzville Reservoir, Blue Marsh Reservoir and Lake Nockamixon, have been asked to lower their conservation releases.
- DRBC has notified water users with DRBC dockets that include evaporative loss ("consumptive use") make-up (replacement) requirements that they may be asked to replace or curtail their consumptive use if dry conditions persist.
- Brookfield Renewable, which currently owns and operates Lake Wallenpaupack, has been advised that it may be called upon to provide releases from storage to assist in meeting flow objectives at Montague or Trenton, N.J.

#### 25. Are the Resolution and special permit subject to change?

Yes. Consultation among the Commissioners, the Decree Parties and the Office of the Delaware River Master will continue regularly through the duration of this drought event. Based upon changing conditions, including migration of the salt line, and with the unanimous consent of the Decree Parties, the Commission may modify or terminate the conditions of the special permit.

END OF SECTION
ADDITIONAL QUESTIONS AND ANSWERS WILL BE ADDED AS REQUIRED