

DOCKET NO. D-77-20 CP (Revision No. 4)

DELAWARE RIVER BASIN COMMISSION

Modifications to the Schedule of Release Rates from
Cannonsville, Pepacton and Neversink Reservoirs
Delaware and Sullivan Counties, New York

PROCEEDINGS

This is an application submitted by the New York State Department of Environmental Conservation (NYSDEC) for approval of an amendment to the revised schedule of augmented conservation releases. The proposed amendment is designed to reserve additional water storage that can be subsequently released for improving fisheries during times when the augmented releases are presently curtailed.

The current schedule of experimental revised augmented conservation release rates from Pepacton and Neversink Reservoirs was added to the Comprehensive Plan and approved by the Delaware River Basin Commission (DRBC) pursuant to Section 3.8 of the *Compact* on June 23, 1993 by Docket No. D-77-20 CP (Revision No. 2). At that time, the release schedule proposed for Cannonsville Reservoir could not be implemented since its release valves did not have the operational flexibility necessary. Afterwards, however, new valves were installed and a new experimental release schedule was approved; the current schedule of experimental augmented conservation release rates from Cannonsville Reservoir was added to the Comprehensive Plan and approved pursuant to Section 3.8 of the *Compact* on February 27, 1997 by Docket No. D-77-20 CP (Revision No. 3).

This application provides for the automatic banking of 50 percent of the yearly excess release quantity and the extension of the current experimental releases to coincide with the expiration of the amended releases program on April 30, 2001. This application was reviewed for inclusion of the project in the Comprehensive Plan and approval under Section 3.8 of the Delaware River Basin *Compact*. A public hearing on this project was held by the DRBC on April 28, 1999.

RESERVOIR RELEASE PROGRAMS

A. Current Augmented Conservation Releases.

Whenever the storage in the New York City Delaware River Basin Reservoirs is "Normal" as defined in DRBC Resolution No. 83-13, the experimental augmented conservation releases shall continue as described in DRBC Docket No. D-77-20 CP (Revision No. 3). (See Table 1A)

TABLE 1A

<u>Reservoir and Operative Dates</u>	Column 1	Column 2	Column 3
	<u>Basic Conservation Release</u>	<u>Current Augmented Conservation Release</u>	<u>Augmented Experimental Conservation Release</u>
<u>Pepacton</u>			
1/1 - 3/31	6 cfs	50 cfs	45 cfs
4/1 - 4/7	6	70	45
4/8 - 4/30	19	70	45
5/1 - 5/31	19	70	70
6/1 - 8/31	19	70	95
9/1 - 9/30	19	70	70
10/1 - 10/31	19	70	45
11/1 - 12/31	6	50	45
<u>Neversink</u>			
1/1 - 3/31	5 cfs	25 cfs	25 cfs
4/1 - 4/7	5	45	25
4/8 - 4/30	15	45	25
5/1 - 9/30	15	45	53
10/1 - 10/31	15	45	25
11/1 - 12/31	5	25	25
<u>Cannonsville</u>			
4/1 - 4/15	8 cfs	45 cfs	4/1 - 5/31: 45 cfs
4/16 - 6/14	23	45	
6/15 - 8/15	23	325	6/1 - 9/15: 160 cfs
8/16 - 10/31	23	45	
11/1 - 11/30	23	33	
12/1 - 3/31	8	33	9/16 - 3/31: 45 cfs

B. Proposed Excess Release Banking.

As a means to further increase the amount of water storage available for release for fisheries enhancement during this experimental augmented conservation release program, 50 percent of the annual excess release quantity shall be automatically held and placed into a "fisheries protection bank". This fisheries protection bank shall be available to augment releases during drought warnings (see "D" below). The remainder of the excess release quantity shall be utilized to provide a proportionally-reduced increase in the Montague flow objective according to the current procedures, or may be banked in accordance with the procedures outlined in the Lower Basin Drought Management Plan.

C. Proposed Drought Watch.

The seasonally segmented line (shown as dashes) splitting the current "Drought Warning" in *Figure 1* of DRBC Resolution No. 83-13 and DRBC Docket No. D-77-20 CP (Revised) is temporarily raised by four (4) billion gallons during the entire year. In addition, the upper half of the drought warning, previously referred to as DW1, is temporarily renamed Drought Watch. Operations during the renamed Drought Watch shall continue to limit the diversion by New York City to 680 million gallons per day (mgd) and reduce the Montague and Trenton flow targets to 1,655 cubic feet per second (cfs) and 2,700 cfs, respectively. Conservation releases will decrease to 85 percent of the augmented experimental level, the remaining thermal stress bank will be reduced by 15 percent, and the New Jersey diversion will remain at 100 mgd.

D. Drought Warning.

The lower half of the drought warning (DW2), based upon the rule curves included in DRBC Resolution No. 83-13 and as temporarily modified by "C" above, is designated Drought Warning, with diversions and flow targets conforming to DRBC Resolution No. 83-13 for the former DW2. The fisheries protection bank shall be used to provide conservation releases at the current summer baseline levels and additional emergency releases, as needed.

E. Drought Emergency.

The Drought Emergency provision shall remain at the levels designated in DRBC Resolution No. 83-13.

F. Balancing Adjustment.

In order to conserve water, the Delaware River Master is requested to utilize a balancing adjustment when calculating the releases to be directed to meet the Montague target. Additionally, during drought warning, the amount of the conservation releases from the New York City Delaware River Basin Reservoirs that is above the basic conservation release rates shall be considered as directed releases for the purpose of calculating the balancing adjustment.

FINDINGS

The experimental augmented conservation release rates program has significantly improved NYSDEC's ability to control the minimum flow and the maximum temperatures downstream of the Cannonsville, Pepacton and Neversink Reservoirs. However, the current experimental augmented release rates program may not provide adequate flows to protect the fisheries during drought warning and drought emergency. The proposed revisions should significantly increase New York State's ability to manage trout habitat conditions during many drought conditions.

DECISION

I. The "Modification to the Schedule of Release Rates from Cannonsville, Pepacton and Neversink Reservoirs", Docket No. D-77-20 CP (Revision No. 3), including the modifications herein, are hereby extended until April 30, 2001.

II. The Comprehensive Plan is hereby amended to include the revisions described above with the modifications specified hereinafter.

III. The amended project, as described above, is approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

a. Monthly summaries of reservoir operations submitted by NYCDEP to NYSDEC shall also be submitted to the DRBC.

b. Detailed operational records of each reservoir, maintained by both the City and State Reservoir Release Managers, shall be available to the DRBC upon request.

c. The provisions of the reservoir release program approved herein shall not be applicable to any action taken by NYCDEP or NYSDEC with regard to the operation of the Cannonsville, Pepacton, or Neversink Reservoirs in any emergency situation where there is a threat to the continued existence or safe operation of the dams or tunnels or to any appurtenant structures or to the public health or safety. Any emergency action shall continue only for such time as is necessary to avert the threat and is subject to the approval of the Executive Director of the DRBC.

d. Increases in the augmented conservation release levels may not be made except in accordance with the allowances provided for in the Stipulation of Discontinuance in *The City of New York vs. The State of New York Department of Environmental Conservation*, Index No. 5840-80, and shall be subject to approval by the DRBC.

e. Releases under emergency conditions. The Commission retains its power under Section 3.3(a) and Article 10 of the *Compact* to declare a drought emergency after consultation with the River Master, in order to conserve the waters in the Delaware River and its tributaries and in the reservoirs of the Upper Delaware River Basin, in order to protect water supply, health, and safety of the residents of the Delaware River Basin and its service area. The River Master retains all of his powers under the Decree including the powers under Article VII, B.1 of the 1954 Decree to conserve the waters in the river, its tributaries, and in reservoirs owned by the City of New York, or in reservoirs developed by other parties to the Decree after 1954.

f. Prior to application for an extension or modification of the experimental release program, a report describing the results of the project shall be submitted.

g. This experimental augmented conservation release rates plan may be revisited during any meeting of the parties to the 1954 Supreme Court Decree that is convened pursuant to DRBC Resolution No. 83-13 as a result of below-normal hydrologic conditions.

h. This revised experimental augmented conservation release rates program will automatically terminate on April 30, 2001 unless extended by agreement of all parties to the Decree.

i. The redesignation of the upper portion of drought warning (DWI) to drought watch will not change the compensation release requirements from Merrill Creek Reservoir. For the duration of this fisheries protection plan, the Delaware River Master, in cooperation with the DRBC, will track the operation of Merrill Creek Reservoir and compare the number of days of compensation releases and the volume of compensation releases from the Reservoir to those which would have occurred under the current plan as set forth in DRBC Resolutions Nos. 83-13 and 88-2 (Revised). If the difference in the number of days of compensation releases for any period June 15 to the following March 14 exceeds three days, the Commission shall determine the means by which the additional impact on Merrill Creek Reservoir shall be mitigated.

j. The operation of any project or facility previously approved by DRBC, with a reference to Drought Warning, is not altered or revised by the change in name from Drought Warning to Drought Watch.

BY THE COMMISSION

DATED: April 28, 1999

Consent to Action by

Delaware River Basin Commission

Consent of the parties to the U.S. Supreme Court Decree in New Jersey vs. New York, 347 U.S. 995 (1954) to the action of the Delaware River Basin Commission in adopting Docket No. D-77-20 CP (Revision No. 4) amending the Comprehensive Plan with respect to experimental modifications to the schedule of release rates from Cannonsville, Pepacton and Neversink Reservoirs.

4/28/99

State of New Jersey Date

4/28/99

State of New York Date

4/28/99

State of Delaware Date

4/28/99

Commonwealth of Pennsylvania Date

4/28/99

City of New York Date

New York City Delaware Basin Reservoir Experimental Rule Curve

