

# Office of the Delaware River Master

## Introduction

The U.S. Geological Survey (USGS) is the Nation's largest earth - and life - science agency and has the principal responsibility within the Federal government for providing hydrologic information and appraising the Nation's water resources. The USGS Office of the Delaware River Master, established by a Supreme Court Decree of 1954, is responsible for administering provisions of the Decree relating to releases of water from the New York City reservoirs into the headwaters of the Delaware River Basin, yields of these reservoirs, and diversions from these reservoirs to New York City for water supply.

## Historical Background

In the 1920's, the States of New York, New Jersey, and Pennsylvania were interested in the development of water supplies in the Delaware River Basin, as a source for meeting their individual needs. Between 1924 and 1927, these States made two attempts to forge an agreement for coordinated development of water supplies. Both attempts, however, were unsuccessful. Faced with little prospect of multilateral agreement, and confronted with water shortages and growth pressures, New York City, which lies outside the Delaware River Basin, in 1928, moved to develop new sources of water supply from within the Basin. This action resulted in an interstate conflict and, in 1930, the State of New Jersey brought an action in the U.S. Supreme Court to enjoin the City and State of New York from using the waters of any tributary to the Delaware River. On May 25, 1931, the Court granted New York City the right to withdraw 440 million gallons per day (Mgal/d) of water from two reservoirs the City planned to build on headwater tributaries feeding the main stem of the Delaware River. The impoundments--Neversink on the Neversink River and Pepacton on the East Branch of the Delaware River--became fully operational in late summer of 1955.



Delaware River Basin

The original Supreme Court action, in the form of a decree, stood for 23 years. In 1952, however, New York City filed a petition with the court, seeking to increase its diversion of Delaware River Basin water for water-supply purposes. As a result, the decree parties--the States of Delaware, New Jersey, New York, and Pennsylvania, along with New York City--returned to the Court, in a dispute over the City's right to divert additional water out of the Basin. An amended decree was consented to by all parties and adopted on June 7, 1954. This decree permitted New York City to increase its withdrawal rate to 800 Mgal/d, contingent upon the City's construction of a third in-basin reservoir--the Cannonsville impoundment on the West Branch of the Delaware River--which was completed in 1967. In return, under the amended decree, New York City was required to release from its three upper basin reservoirs into the Delaware River a sufficient quantity of water to meet a flow objective of 1,750 cubic feet per second at Montague, N.J., in order to ensure adequate streamflows downriver. The decree also permitted an out-of-basin diversion of 100 Mgal/d to central and northeastern New Jersey through the Delaware and Raritan Canal. A River Master employed by the U.S. Geological Survey was appointed by the Court to administer specific provisions of the amended decree.

## Advisory Committee

When the Office of the Delaware River Master was established in 1954, the Director of the U.S. Geological Survey formed an Advisory Committee to provide consultation and guidance on technical, procedural, and policy issues related to River Master operations. Periodic interaction with the Advisory Committee has continued during the 45 years of these operations. Presently, the Advisory Committee participates in at least one meeting per year with the River Master to review the status, progress, and plans for operations, and to discuss water-supply matters of concern in the Delaware River Basin. Members of the Advisory Committee are the representatives of the Governors of the States of Delaware, New Jersey, New York, and Pennsylvania, and the Mayor of the City of New York.

## Duties and Function of the Delaware River Master

(excerpted from the Amended Decree)

### *General Duties*

1. Administer the provisions of the Amended Decree relating to the yields, diversions, and releases of water from the New York City reservoirs.
2. Conserve the waters in the Delaware River, its tributaries, and in the New York City reservoirs in the Delaware River Basin.
3. Compile and correlate data on the water needs of the Parties to the Decree.
4. Check and correlate streamflow gagings on the Delaware River and its tributaries.
5. Observe, record, and study the effects of development on the Delaware River and on the water supply and other [beneficial] water uses.
6. Make periodic reports to the U.S. Supreme Court, with copies to the Governors of the four basin States and the Mayor of the City of New York.

### *Specific Duties in Connection with the Montague Release Formula*

1. Determine the average transit time of the flow between the New York City reservoirs and the U.S. Geological Survey streamflow-gaging station at Montague, New Jersey.
2. Make a daily computation of what the average flow at Montague observed on the previous day would have been, exclusive of releases from the New York City reservoirs and storage of water in other reservoirs in the Delaware River Basin upstream from Montague, in order to determine the amount that would have been required for exact forecasting.
3. Calculate the release required from the New York City reservoirs to meet the flow objective at Montague, taking into account all the changes that can be anticipated in runoff from the area above Montague and not under the control of New York City.
4. As needed, design and direct daily adjusted releases from the New York City reservoirs to maintain the applicable minimum basic rate of flow at the Montague gaging station.

### *For further information, please contact:*

For additional information on USGS water resources programs in each State, please see <http://water.usgs.gov>. For current information on from the Office of the Delaware River Master, please see <http://water.usgs.gov/orh/nrwww/odrm/> or contact:

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