



Department of Environmental Conservation





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Delaware, New York, Pennsylvania and New York City Announce Contingency Plan to Preserve Conservation Releases and Enhanced Flood Protection on Delaware River

Additional water releases to lessen harm as Flexible Flow Management Program expires due to lack of unanimous consent among Decree Parties

The states of Delaware, New York, Pennsylvania and New York City today announced an agreement on a plan to continue sustainable water management for the Delaware River. With support from the three states, the New York City Department of Environmental Protection (NYCDEP) will voluntarily release additional water from its Delaware System reservoirs to protect the ecological health of the Delaware River, maintain seasonal reservoir voids that enhance flood protection, and lessen the regional harm caused by the expiration of the Flexible Flow Management Program (FFMP).

The FFMP regulated the flow of water from New York City's three reservoirs (Cannonsville, Neversink and Pepacton) on the headwaters of the Delaware River since it was first adopted in 2008. The program had been extended for several years upon unanimous agreement of New York City and the states of Delaware, New Jersey, New York and Pennsylvania, which were given that authority by a 1954 U.S. Supreme Court Decree.

However, the FFMP expired on Thursday after the State of New Jersey refused to approve an extension of the program. Without unanimous agreement, flow management on the Delaware River now reverts back to a program known as "Revision 1," which was developed in 1983. Under Revision 1, the amount of water released downstream from New York City's reservoirs would be cut by more than half during most times of the year, and the seasonal 10-percent voids that bolstered flood attenuation provided by the reservoirs would be eliminated. This significant reduction in water releases would adversely affect the wild trout fishery on the upper Delaware River, the myriad tourism businesses that make their living off the river, and riverside communities that benefit from the enhanced flood protection.

While the FFMP set exact downstream release rates for New York City's reservoirs based on season, reservoir storage and advanced runoff forecasts, Revision 1 only outlines minimum release requirements from Cannonsville, Neversink and Pepacton reservoirs.

To reduce the negative environmental and economic effects of Revision 1, under the four-party agreement, New York City will voluntarily release quantities of water above the minimum targets beginning today. To support downstream ecology, NYCDEP will release quantities of water equal to those outlined in tables 4a through 4e of the FFMP. In most cases, these releases are several hundred cubic feet per second more than under Revision 1. NYCDEP will also release water to meet the seasonal storage objective, a 10-percent void from October to March, that enhances the flood attenuation already provided by the reservoirs.

"While New York City is under no legal obligation to release more water than outlined in the 1983 program, we are using our authority to voluntarily release water for the benefit of downstream communities, ecological health, and to preserve years of progress on the Delaware River," **DEP Acting Commissioner Vincent Sapienza said.** "The support we received from the states of Delaware, New York and Pennsylvania has been invaluable. They truly understand that the parties can and should work collaboratively to advance the interests of everyone connected to the river without needlessly moving backward."

"The agreement we executed today preserves the important water releases provided by the FFMP to support over 35 miles of prized cold water trout streams, protecting both the natural environment and an important regional economic driver," **said New York State DEC Commissioner Basil Seggos.** "NYCDEP's voluntary action will also help limit peak high water levels in communities that have a long and difficult history of damaging floods."

"The new agreement will provide additional releases that will help to maintain the water quality in the lower Delaware basin and the Delaware Bay," said Secretary Shawn Garvin of the Delaware Department of Natural Resources and Environmental Control.

"Pennsylvania is pleased that, despite difficult negotiations, this group was able to put together a plan that prioritized the needs of the river and its communities," said Pennsylvania DEP Commissioner Patrick McDonnell.

The table below outlines the quantity of water that New York City will release on Thursday, June 1, as a result of its action. It also shows what the releases from each reservoir would have been according to the minimum requirements of the 1983 Revision 1 plan. The releases listed below are measured in cubic feet per second.

Reservoir	Release rate due to NYC action	Minimums required by Revision 1
Cannonsville	325 cfs	54 cfs
Pepacton	150 cfs	84 cfs
Neversink	110 cfs	54 cfs

New York City has also pledged to make its operations transparent to the public as it moves ahead with the voluntary releases. The City will make available to the Office of the Delaware River Master all the inputs and outputs to its Operations Support Tool model, which was used to determine the amount of water released under FFMP and will continue to be used for

that purpose. It will also provide updates on the status – including storage, release and drinking water diversion data – for its Delaware System reservoirs. These data will also be posted on the NYCDEP website.

Additional background information:

Flow management programs for the Delaware River are created upon unanimous agreement by the states of Delaware, New Jersey, New York, Pennsylvania and New York City. These five – known as the Decree Parties – were given that responsibility under terms of a 1954 decree by the U.S. Supreme Court.

The most recent program, known as the Flexible Flow Management Program (FFMP), was collaboratively created by the parties in 2007 and first implemented in 2008. It has been renewed by all five Decree Parties on an annual basis for the past five years.

The FFMP takes advantage of an advanced modeling tool built and managed by the New York City DEP. The tool, called the Operations Support Tool (OST), incorporates advanced runoff forecasts, streamflow and snowpack measurements, drinking water demand, operational rules and other data. The advanced modeling tool allowed the Decree Parties to design the FFMP by accounting for the drinking water needs of New York City and releasing downstream any excess water from its three reservoirs on the headwaters of the Delaware River.

As a result, the FFMP resulted in the release of more cold water throughout the year than any flow management programs that came before it. This additional water released downstream helped to support the cold-water trout fishery that attracts an estimated \$10 million in annual economic activity to Delaware River communities, and it also supported boating and other tourism activities along the river. The FFMP was also the first flow management program to include void space in the reservoir to enhance the downstream flood protection that is already provided by the dams. The program required a 10 percent void in New York City's three Delaware basin reservoirs from October-March.

The FFMP also allowed New Jersey to draw additional drinking water from the Delaware River during the three stages of drought. New Jersey's diversion under FFMP increased from 85 mgd to 100 mgd during drought watch, from 70 to 100 mgd during drought warning, and from 65 to 85 mgd during drought emergency.

The release of cold water, provisions for enhanced flood protection, and drought diversions for New Jersey made the FFMP a much better and more fair flow management program than any agreement that came before it.

The Decree Parties have continued to negotiate changes and improvements to the FFMP during the past several years. Because no unanimous agreements could be reached, the five parties have agreed in the past to extend the FFMP annually.

However, this year New Jersey chose not to sign a one-year extension while the Decree Parties continue to negotiate a longer-term program. The FFMP is not allowed to continue without unanimous agreement by all five parties. As a result, the FFMP (paragraph 21) requires that the Decree Parties revert to "Revision 1," a flow program that was designed and

implemented in 1983. Revision 1 provides significantly lower downstream releases, does not include a program for flood protection, and it permits New Jersey to draw less water from the river during the three stages of drought.

DEP manages New York City's water supply, providing more than 1 billion gallons of high-quality water each day to more than 9.5 million New Yorkers. This includes more than 70 upstate communities and institutions in Ulster, Orange, Putnam and Westchester counties who consume an average of 110 million total gallons of drinking water daily from New York City's water supply system. This water comes from the Catskill, Delaware, and Croton watersheds that extend more than 125 miles from the City, and the system comprises 19 reservoirs, three controlled lakes, and numerous tunnels and aqueducts. DEP has nearly 6,000 employees, including almost 1,000 scientists, engineers, surveyors, watershed maintainers and other professionals in the watershed. In addition to its \$70 million payroll and \$166 million in annual taxes paid in upstate counties, DEP has invested more than \$1.7 billion in watershed protection programs—including partnership organizations such as the Catskill Watershed Corporation and the Watershed Agricultural Council—that support sustainable farming practices, environmentally sensitive economic development, and local economic opportunity. In addition, DEP has a robust capital program with \$20.7 billion in investments planned over the next 10 years that will create up to 3,000 construction-related jobs per year. For more information, visit nyc.gov/dep, like us on Facebook at facebook.com/nycwater, or follow us on Twitter at twitter.com/nycwater.

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