



PHOTO INFO...

**Fall Foliage**

Pepacton Reservoir - New York City Water Supply System

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FOR IMMEDIATE RELEASE

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**Statement of New York City Department of Environmental Protection on Recent Flooding in Upstate Watershed****DEP to Discuss Further Flood Mitigation Proposals  
New York City Providing Assistance Throughout Flooded Areas**

"During my brief time as DEP Commissioner, the communities in and near the West of Hudson Watershed have been hit by three record or near-record storms," said New York City Department of Environmental Protection (DEP) Commissioner Emily Lloyd. "The storms have caused tremendous suffering and damage. Rainfall of up to 10 inches has occurred near the Ashokan Reservoir, and three of the City's reservoirs have seen record high water levels."

"Watershed reservoirs were designed to ensure a safe and reliable water supply for New York City, but they also provide a secondary benefit of reducing flooding downstream. Even when full, they slow the rate at which water cascades downstream, reducing the inundation area. Recently, frequent storms have raised the question of whether the reservoirs can do more to help in flood mitigation. DEP is actively seeking to assist the counties in this effort. Over the past three years, New York City has sought and received approval for two innovative proposals to create additional storm water capacity.

"Recently, DEP briefed the other Delaware River partners on a third proposed change. With more frequent storms and droughts predicted by climate scientists, DEP hopes to work with West of Hudson watershed counties and with state and federal agencies to develop long-term strategies to address flooding while continuing to provide safe and reliable drinking water to almost one-half the residents of New York State.

"In addition to exploring these long-term water management proposals, DEP has been assisting watershed counties and towns with rescue and emergency operations. DEP's emergency and operations staff have been in close communication with county, state, and municipal emergency services officials beginning last Friday (6/23)," said Commissioner Lloyd. "The Department and the City are ready to provide on-going emergency assistance."

**MORE INFORMATION**

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Over 100 DEP police officers have been deployed to command centers in Delhi, Walton and Beerston to assist with rescues and to coordinate with county emergency management personnel. These officers have conducted or assisted in hundreds of rescues and evacuations, including the rescue of over 50 employees who were trapped in a building collapse at Breakstone Dairy. In addition to officers trained in swift water rescue, the DEP Police has also deployed 10 scuba divers and two pilots. DEP Police equipment involved in the recovery effort includes one helicopter, two boats, one air boat, three all terrain vehicles, three vehicles with light towers, five rescue trucks and 17 4-wheel-drive vehicles.

In addition Commissioner Lloyd has instructed DEP water and sewer personnel from New York City to assist in the watershed region. Two 8-inch pumps that were dispatched from the City to the Port Jervis Wastewater Treatment Plant have been directed to Downsville to await deployment at the direction of Delaware County Emergency Management. Several pump trucks of various sizes that had been dispatched to the Margaretville Wastewater Treatment Plant are also headed to Downsville. The DEP facility in Downsville will serve as a staging area for equipment and material support to affected communities.

DEP has also sent a 1000-gallon tanker truck with fresh drinking water to the Town of Walton to assist the Town with its water supply needs. A second 1000-gallon truck is standing by to shuttle water continuously from New York City to the Town.

DEP has also offered to send leak detection crews to Walton to help locate the source of the Town's broken water pipes. These crews have extensive experience locating leaks beneath New York City's streets and are equipped with the latest pipe monitoring equipment.

DEP road crews continue to help clear local roads throughout the Ashokan and Schoharie basins. Other DEP crews are working to keep city roads open near the Pepacton and Cannonsville reservoirs. At least six DEP dump trucks, two road graders, two back hoes, a paving machine, a pavement roller and a bucket truck have been put to work in the regional recovery effort.

**Water management to mitigate flooding**

New York's Delaware Watershed also supplies drinking water to millions of residents of New Jersey, Delaware and Pennsylvania. In 1954, the United States Supreme Court stepped in to set up a framework for cooperation between New York and these states to regulate how water is distributed from the City's Delaware reservoirs. Some watershed communities have suggested that making additional controlled releases downstream might further mitigate flooding and they have asked DEP—and DEP has agreed—to study this.

Flood mitigation programs are currently in place at the Pepacton and Neversink reservoirs. At those reservoirs, from December to March each winter, the Department of Environmental Protection lowers reservoir levels based on the amount of snow that will melt and refill the reservoirs. Absent any significant snowpack, the reservoirs are lowered by an amount equal to the runoff that would result from a one-inch rainfall taking place over a six-hour period.

These programs were enacted with the unanimous approval of all the parties to the Delaware River Basin Commission (DRBC), including New York City, New York State, New

Jersey, Pennsylvania and Delaware. Lowering the Cannonsville, Pepacton, Neversink and Rondout reservoirs requires downstream water releases, and this must be approved by the DRBC parties.

This year, New York City Deputy Mayor Dan Doctoroff announced that the DEP would implement similar flood mitigation programs at the Schoharie Reservoir once new release works are installed as part of the 2008 overall reconstruction of the Gilboa Dam. Also this year, the City has also reactivated the Ashokan Release Channel as a method for making controlled releases from the Ashokan Reservoir.

### **Record rain falls and dam performance**

The Department of Environmental Protection continues to monitor its West of Hudson reservoirs and dams, and none of the six dams has been placed in danger by this week's events. This includes the Gilboa Dam at the Schoharie Reservoir, where construction work that began early this year has been temporarily halted because of the need to remove equipment and personnel from the spillway of the dam. None of the City's dams has shifted or been damaged by the flooding.

The volume of controlled downstream releases from the four Delaware River reservoirs has not increased throughout this past week of heavy rains and it continues to be the minimum amount as required by State conservation law and by the DRBC. Approximately 580 million gallons per day (MGD) continues to be diverted from the Schoharie Reservoir through the Shandaken Tunnel in order to help minimize pressure on the Gilboa Dam. There have been no downstream releases from the Ashokan Reservoir during the storms this week.

The City's water system was not designed to contain floods, but as large controlled basins with constricted outlets the reservoirs do perform a substantial amount of flood mitigation by retaining water and decreasing the peak flows of floods.

During this week's flood, the Ashokan Reservoir decreased peak flows on the Lower Esopus by around 60 percent. The maximum inflow to the Ashokan Reservoir from storm waters upstream was about 34,000 cubic feet per second (CFS) while the maximum discharge was about 13,400 CFS.

Similar results were seen this week at the City's Delaware reservoirs: the Pepacton Reservoir lowered the downstream flood peak by 35 percent; the Cannonsville Reservoir lowered the downstream flood peak by 38 percent; the Rondout Reservoir lowered the downstream flood peak by over 50 percent; the Neversink Reservoir lowered the downstream flood peak by 40 percent; and the Schoharie Reservoir lowered the downstream flood peak by 25 percent. These figures show that reservoirs play a critical role in retaining the rush of storm waters and slowing the downstream flow.