

#### FOR IMMEDIATE RELEASE:

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## **DEP Rebuilds Five Dams in the Croton Watershed**

\$96 Million in Reconstruction Ensures Long-term Reliability of NYC's Water Supply

Environmental Protection Commissioner Carter Strickland today announced the completion of \$96 million in reconstruction work on five dams in the Croton watershed, which can provide up to 30 percent of New York City's daily drinking water needs. The upgrades of Croton Falls, Croton Diverting, Sodom, and Bog Brook One and Two dams will extend the useful life of each dam for 50 to 100 years. The upgrades will also bring all five dams into compliance with the latest state and federal standards, including the capacity to safely release water in the event of an emergency—a design feature critical to protecting the dam. The reconstruction of all five dams includes enhanced control and measurement systems to improve drainage and stability and upgraded mechanical and electrical equipment to increase operational reliability in the Croton watershed in order for DEP to optimize water supply levels. All five dams conserved the original structures to preserve their historic character and original design dating back to the 1800s. The rehabilitation of these five dams nearly completes the city's commitment to reconstruct all 14 Croton watershed dams. The last of the Croton system dams to need repairs, the New Croton Dam, is currently in the design stage.

"New York City continues to upgrade its Croton watershed system to ensure the long-term integrity and reliability of the oldest drinking water supply infrastructure in the city," said Commissioner Strickland. "Safe dams are vital for water supply and the communities who live near them. Between projects like these and our Croton Water Filtration Plant, the Croton system will be able to provide up to 30 percent of New York City water, adding another level of reliability to one of the best water systems in the country."

Beginning in 1842, New York City designed, constructed and has operated a system of dams and aqueducts in Westchester and Putnam counties. Following a series of studies and inspections in the 1980s to determine both the condition of city-owned dams and their compliance with the National Dam Safety Act of 1974, DEP proposed to rehabilitate all dams and controlled structures in the Croton Reservoir System to bring them up to first-class operating conditions. The reconstruction project brings each dam into compliance with New York State Department of Environmental Conservation Dam Safety Guidelines.

Details on each of the five projects are as follows:

#### **Bog Brook Dams I and II**

**Built**: 1892

**Location**: Bog Brook I is located across the Bog Brook Reservoir; Bog Brook II is located across a smaller tributary of the Bog Brook Reservoir, in the town of Southeast in Putnam County.

Cost: \$9 million

**Upgrades**: Bog Brook I has a new flow control system and mechanical and electrical upgrades. Similar work was done on Bog Brook II plus an installation of a permanent access road from Sodom Lane to the main flow control gate and the rehabilitation of the existing tunnel that connects Bog Brook Reservoir to Sodom Reservoir.

### **Croton Falls Dam**

**Buil**t: 1910

**Location**: South Central Putnam County, near the Hamlet of Croton Falls.

Cost: \$52 million

**Upgrades**: The work includes the rehabilitation and anchoring of the existing dam and spillway weir, increasing the width and depth of the existing spillway channel, reconstruction of the bridge over the spillway channel, and reconstruction of the gate house and internal equipment. This work also included the reconstruction of Hemlock Dam Road and boat ramps.

### **Croton Diverting Dam**

**Built**: 1911

**Location**: Putnam County, 1.5 miles southwest of the Village of Brewster in the Croton

Reservoir.

Cost: \$22 million

**Upgrades**: Rehabilitation work included the reconstruction of the existing dam and spillway weir, reconstruction of the low-level outlet works and fountain, construction of a new intake tower, reconstruction of the existing bridge over the waste channel, and reconstruction of a boat ramp.

# Sodom Dam:

**Built**: 1893

**Location**: West Side of the East Branch Reservoir.

Cost: \$13 million

**Upgrades**: Work included the installation of a new control flow system as well as extensive electrical and mechanical work. Masonry rehabilitation of the existing tunnel that connects Bog Brook Reservoir to Sodom Reservoir was also a key part of this project.

The Croton system is able to provide up to 30 percent of New York City's current daily drinking water supply needs and consists of 12 reservoirs and three controlled lakes on the three branches of the Croton River and three other tributaries. Water from upstream reservoirs flows through natural streams to downstream reservoirs, rather than through aqueducts or tunnels. Water from the New Croton Reservoir, the last Croton reservoir, is then conveyed through the New Croton aqueduct to the Jerome Park Reservoir in the Bronx where it goes to distribution in New York City. The New York City water system provides drinking water to nine million New Yorkers, including one million upstate residents in Ulster, Orange, Putnam and Westchester counties.

The City continues to implement a multi-year capital program to upgrade and improve its upstate water supply facilities. The city is upgrading all of its dams and spillways to comply with New York State Department of Environmental Conservation Dam Safety Guidelines, starting with its oldest dams in the East-of-Hudson watersheds. Since 2002, the city has invested more than \$507 million to upgrade the city's dams and related upstate assets. The ongoing dam

reconstruction program is part of its watershed-wide infrastructure improvement program and plans to commit another \$283 million until 2021 to complete the dam reconstruction program.

Operating and maintaining DEP's network of dams is outlined in *Strategy 2011-2014*, a far-reaching strategic plan that lays out 100 distinct initiatives to make DEP the safest, most efficient, cost-effective, and transparent water utility in the nation. The new plan, the product of nearly one year of analysis and outreach, builds on *PlaNYC*, Mayor Bloomberg's sustainability blueprint for New York City. The plan is available on DEP's website at <a href="www.nyc.gov/dep">www.nyc.gov/dep</a>.

DEP manages the city's water supply, providing more than one billion gallons of water each day to more than nine million residents, including eight million in New York City, and residents of Ulster, Orange, Putnam and Westchester counties. Approximately 1,000 DEP employees live and work in the watershed communities. DEP employs nearly 6,000 employees, including almost 1,000 in the upstate watershed. DEP has a robust capital program, with a planned \$13.2 billion in investments over the next 10 years. For more information, visit us on Facebook at <a href="www.facebook.com/nycwater">www.facebook.com/nycwater</a>, or follow us on Twitter at <a href="www.twitter.com/nycwater">www.twitter.com/nycwater</a>.

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#### Croton Falls Dam:

