

**Preamble to the Draft Scope for the Environmental Impact Statement:  
Modification of the Catalum SPDES Permit**

In June 2012, DEP requested a modification to the New York State Department of Environmental Conservation (NYSDEC) Catskill Influent Chamber State Pollutant Discharge Elimination System (SPDES) Permit (Catalum SPDES Permit) (Proposed Action). The proposed permit modification is subject to environmental review under the State Environmental Quality Review Act (SEQRA). This Environmental Impact Statement (EIS), will analyze potential environmental impacts (both adverse and beneficial) from, among other things described more fully in the draft Scope, DEP's operation of the Ashokan Release Channel (ARC) in accordance with the Interim Release Protocol (IRP) and the postponing of dredging alum floc at Kensico Reservoir until the completion of certain infrastructure projects.

DEP has been studying a variety of measures to effectively manage turbidity in its Catskill Water Supply System for over a decade. DEP's Catskill Turbidity Control Study was undertaken pursuant to the U.S. Environmental Protection Agency's 2002 and 2007 Filtration Avoidance Determinations as well as the 2007 Catalum SPDES Permit. The purpose of the turbidity control measures evaluated in the Study is to continue to provide reliable, clean, and safe drinking water while reducing reliance on chemical treatment of the water supply, specifically the use of aluminum sulfate (alum), during episodic turbidity events. These measures include, but are not limited to, releases from the Ashokan Release Channel (ARC) to the lower Esopus Creek in accordance with the Interim Ashokan Release Protocol (IRP) updated in the Consent Order effective on October 4, 2013. The 2007 Filtration Avoidance Determination called for DEP to implement any feasible, cost effective measures identified by the Catskill Turbidity Control Study.

Subsequent to DEP's completion of the Catskill Turbidity Control Study, several major storm events occurred in the watershed that led to substantial reliance upon use of the Ashokan Release Channel to reduce the need for alum treatment. The sustained use of the Ashokan Release Channel after heavy rainfall in Fall 2010 led to prolonged releases of turbid water to the lower Esopus Creek basin. This in turn led to an increased focus on a broader range of impacts potentially associated with a variety of operational alternatives at the Ashokan Reservoir.

In response to these concerns and in accordance with the Order on Consent dated October 4, 2013, DEP has agreed to undertake an EIS which will assess all the potential environmental impacts of:

- (i) the use of alum, subsequent flocculent deposition in the Kensico Reservoir, and dredging to remove flocculent deposition that has accumulated since 2005;
- (ii) the use of the ARC in accordance with the Interim Release Protocol; and
- (iii) the identified alternatives noted below.

Of note, these assessments will also take into account implementation of DEP's turbidity control measures as a whole.

The EIS will include water quality modeling of the releases under the IRP, including the frequency, volume, and duration of the releases, using the Operational Support Tool (OST).

An overview of the environmental impact categories in the EIS includes but is not limited to those listed below. These impact categories would be used to evaluate potential impacts to both the Ashokan Reservoir/lower Esopus Creek and Kensico Reservoir. Where potential adverse impacts are identified, reasonable and practicable measures that have the potential to avoid, mitigate, or minimize these impacts will be identified.

- Land use, Zoning and Public Policy
- Socioeconomic conditions including:
  - Potential impacts on businesses
  - Potential impacts on landowners
  - Potential impacts on agriculture
  - Potential impacts on tourism
- Infrastructure
  - Potential impacts on municipal infrastructure, including municipal water supplies
  - Potential impacts on private infrastructure – septic systems
- Open Space and Recreation
  - Potential impacts on recreation and other water dependent users
- Aesthetic and Visual Resources
- Historic and Cultural Resources
- Water Resources and Water Quality, including potential impacts associated with erosion, stream bank saturation, and flooding.
- Natural Resources
  - Potential impacts to fish and benthic communities
  - Potential impacts to stream channel geomorphology
  - Potential impacts to wetlands
  - Potential impacts to wildlife
- Public Health
- Consistency with Coastal Zone Management Policies

The EIS will also evaluate a suite of Alternatives as listed below:

#### Ashokan Reservoir Alternatives

- Ashokan Reservoir Alternative 1 - West Basin Outlet
- Ashokan Reservoir Alternative 2 - Dividing Weir Crest Gates
- Ashokan Reservoir Alternative 3 - East Basin Diversion Wall and Channel Improvements
- Ashokan Reservoir Alternative 4 - Upper Gate Chamber Modifications
- Ashokan Reservoir Alternative 5 - East Basin Intake
- Ashokan Reservoir Alternative 6 - Changes to Release Channel Operations
- Ashokan Reservoir Alternative 7 - Bypass of Low Turbidity upper Esopus Creek Water directly to the Ashokan East Basin
- Ashokan Reservoir Alternative 8 - Bypass of upper Esopus directly to the lower Esopus Creek

Alternatives along the Catskill Aqueduct

- Catskill Aqueduct Alternative 1 – Use of the Hudson River Drainage Chamber
- Catskill Aqueduct Alternative 2 – Use of the Croton Lake Siphon
- Catskill Aqueduct Alternative 3 – Use of the Rondout Pressure Tunnel
- Catskill Aqueduct Alternative 4 – Use of Wallkill Pressure Tunnel Siphon Drain or the Wallkill Blow-off Chamber

Alternatives at Kensico Reservoir

- Kensico Reservoir Alternative 1 - Perforated Target Baffle
- Kensico Reservoir Alternative 2 - Sedimentation Basin
- Kensico Reservoir Alternative 3 - Perforated Baffle Wall
- Kensico Reservoir Alternative 4 - Submerged Weir
- Kensico Reservoir Alternative 5 - Boom and Silt Curtains
- Kensico Reservoir Alternative 6 - Large Settling Basin

This EIS will also review DEP's existing studies of the potential effects of climate change on the City's water supply to better understand areas of potential future concern.