

New York Regional Energy-Water Workshop
New York State Department of Environmental Conservation
Division of Water
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Thank you. This conference provides a great opportunity to identify regional clean water issues that are essential to balancing water use.

New York State, home to the nations largest metropolis, is blessed with vast water resources that act as great economy drivers for New York State.

- Mighty rivers such as the Hudson, Delaware and Susquehanna
- Two Great Lakes
- Salt water treasures of the Atlantic Ocean, Long Island Sound (LIS) and the Hudson River Estuary

Unfortunately, these magnificent resources are taken for granted, underappreciated. Yet, people rely on them to provide potable water, fishing, shellfishing, shipping, wildlife habitat, recreation, tourism, industry and the generation of energy.

As noted in recent United States Geological Survey (USGS) study, New York State will have some regional water shortages even without drought in the next decade. The southeast portion of the state is especially of concern. The New York City metropolitan area relies on upstate surface water and Long Island aquifers for its water supply. However, both these sources are especially vulnerable to drought. Irrigation for landscaping is a major causal factor. Water supplies statewide are being negatively impacted because of similar landscape irrigation situations.

The New York State Department of Environmental Conservation (DEC) addresses these water resource shortages by developing or implementing water resource management strategies. These various strategies ensure the availability of a reliable water supply when and where it is needed, adequate in quantity and quality, at a reasonable cost, and consistent with sound environmental practices. Water resource management strategies (not overlying) that New York administers include:

- Permitting authority over individual water utilities by providing water supply permits for municipalities essentially mandating water conservation.
- Regulating Great Lake proposals for Diversions and New or Increased Consumptive Uses that exceed 100,000 gallons per day.
- Utilizing the assistance of various commissions, such as the Susquehanna River Basin Commission (SRBC) and the Delaware River Basin Commission (DRBC). However,

because these commissions are created by states and federal governments, it can sometimes be a great balancing act to achieve mutual agreements, due to difference in criteria of statutes.

As New York's population continues to increase, meeting the demand for both water and energy creates inevitable stresses on our water resources. Cooling water for thermo-electric power plants accounts nationally for 38 percent of all water withdrawals in the United States. Out of 12.2 billion gallons of water used per day in New York State, Indian Point alone uses 2.5 billion gallons of water per day. Cooling water intake structures of large energy generating facilities such as Indian Point, threaten aquatic life by raising water temperatures and killing 1.5 billion fish eggs and larvae per year. This issue is especially relevant to the Hudson River. The draft permit that DEC has developed for Indian Point offers insight on the current approach to what can be done in an economical way to address environmental impacts of power plants.

Providing the energy needed to power New York State while at the same time protecting the state's freshwater resources is a critical focus of DEC. Wastewater treatment systems and water supply systems must be functional at all times, especially during blackouts or power shortages. Since the inception of New York State's, State Pollution Discharge Elimination System over \$2 billion in State Bond Act funding has been for wastewater infrastructure. Currently, our state is facing major funding shortages, yet we must continue to upgrade wastewater infrastructure in order to meet energy requirements during future energy shortages.

We need more environmentally sensitive ways to meet energy needs while balancing our natural resources. Water is a precious natural resource, not free of cost. States around the nation need to implement strict programs to control air emissions. Waters in New York State are greatly impacted due to the generation of energy in western states. According to New York State's waterbody pollutant listings, 30 percent of our impaired waters are so because of acid deposition an additional 29 percent of our waters are impaired with fish consumption advisories, due to high PCB and mercury levels.

Our country needs to recognize the dire need for conserving power and protecting the health of our waters. The production of energy requires large volumes of water. Water usage must be reduced when generating power. Competition for water resources is increasing among power generators, residential, commercial, industrial, and agricultural users. We must balance the use of water from these users while maintaining flows for aquatic life, reducing the impacts to natural resources.

In closing, I would like to thank you for this opportunity to speak on such an important issue. Recognizing the real value of water used to generate power is essential to meeting energy needs and protecting the health of our waters and people.