

LAKE SOURCE COOLING

"From the Environment for the Environment"

The deep, cold waters of Cayuga Lake are drawn into the Heat Exchange Facility on 983 East Shore Drive where they transfer their chill to a separate loop of water circulating to cool the Ithaca campus.

• Lake Source Cooling (LSC) was brought online in July 2000. This culminated five years of planning, testing, environmental investigation, design, permit acquisition, and construction.

• On average, LSC saves more than 25 million kilowatt-hours of electricity per year to cool the lthaca campus. This represents an energy savings of about 86%.



- On average, LSC prevents the release of about 18,500 tons per year of CO_2 to the atmosphere.
- Heat drawn from campus buildings that is added to the lake is returned to the atmosphere each winter as the lake cools and mixes, making the cold water a completely renewable resource.
- The investment in LSC reflects Cornell University's commitment to a "green campus" and long-term planning horizon.
- LSC has won major environmental and engineering awards, including the Governor's Award for Pollution Prevention, ASCE Outstanding Civil Engineering Achievement, and an Award of Special Recognition and Merit from the Ecological Society of America.
- Protection of Cayuga Lake was a focus during





construction and remains so during operation. Cornell is required to monitor the temperature and water quality of the LSC return flow and southern Cayuga Lake to confirm that LSC has no adverse impacts. Findings are reported to the community and posted at the project web site:

energyandsustainability.fs.cornell.edu/util/cooling/production/lsc

• There have been no discernable adverse impacts on Cayuga Lake from construction or operation of LSC.





Cornell University Facilities Services Energy and Sustainability

More Information

energyandsustainability.fs.cornell.edu