



2014 UPDATE
ONONDAGA LAKE PROGRESS REPORT

celebrating a decade of improvements

AUGUST 2015

Joanne M. Mahoney, County Executive

Tom Rhoads, P.E., Commissioner



www.ongov.net/wep

Save the Rain

www.savetherain.us



21ST CENTURY INFRASTRUCTURE FOR A CLEANER ONONDAGA LAKE

Advanced wastewater treatment upgrades in 2004 and 2005 dramatically improved water quality conditions in Onondaga Lake. The lake will continue to benefit from ongoing optimization of treatment processes at the Metropolitan Syracuse Wastewater Treatment Plant (Metro).

The Clinton and Lower Harbor Brook storage facilities were fully operational in 2014, collecting 113 million gallons of combined sewage during storms and routing it to Metro for state-of-the-art treatment. It was estimated that the annual combined sewage percent capture in 2014 exceeded 95%, which is the goal for 2018.

Metro Treatment Plant Tour during Clean Water Fair savetherain.us

The Onondaga

County Save the Rain (STR) Program has been in effect for 5 years. Since its inception, the program has developed a comprehensive network of gray and green infrastructure solutions to manage stormwater runoff that help protect Onondaga Lake and its tributaries. This balanced approach has positioned Onondaga County as a national model for sustainable stormwater management. A number of green infrastructure projects were completed in 2014, including the East Washington Street Green Corridor and the Rainwater Harvesting System at the Carrier Dome.

Onondaga County's **Save the Rain** program made substantial progress in 2014. Since 2010, 169 green infrastructure projects have been completed as part of the **Save the Rain** initiative, reducing inputs of stormwater and pollution to Onondaga Lake and its tributaries by 108 million gallons annually. Save the Rain raises awareness of effective ways to improve the environment by using rain barrels, rain gardens, green roofs, porous pavement, cisterns, and vegetated swales. Go to www.savetherain.us for more details.



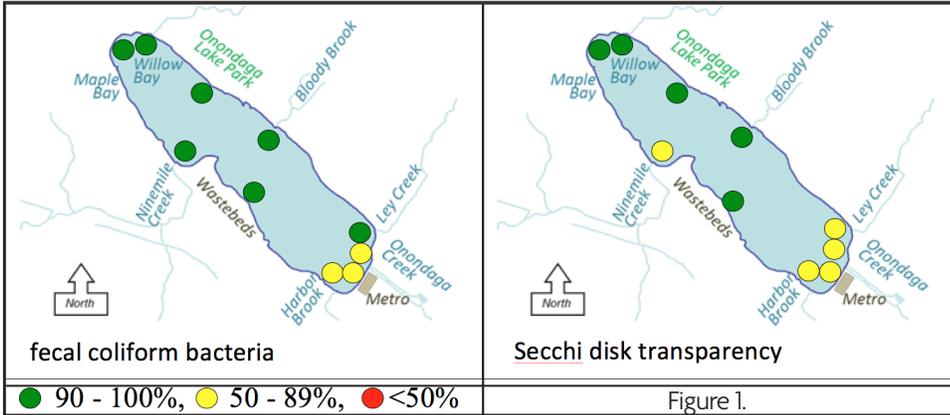
169 Green Infrastructure Projects Completed!
• 3,600 trees planted
• 1,200 rain barrels installed



REMARKABLE IMPROVEMENTS IN WATER QUALITY

Water quality conditions in the northern two-thirds of Onondaga Lake were suitable for swimming throughout the summer of 2014. Although there is no public bathing beach at Onondaga Lake, bacteria levels and water clarity consistently meet regulatory standards for swimming throughout

most of the lake. (Figure 1.) As documented in the technical report “Attainment of Designated Uses in Onondaga Lake”, the bacteria and water clarity data indicate that a beach located at Willow Bay would have been open continuously during the summer months since 2008.



COMPLIANCE WITH
STANDARDS FOR WATER
CONTACT RECREATION
IN 2014

And An Improving Fish Community...

Changes in the fish community of Onondaga Lake have occurred as water quality and habitat conditions have improved. Fish communities are good indicators of aquatic ecosystem conditions because they integrate physical, chemical, and biological conditions and express them in terms of species composition, age and growth characteristics, and reproductive success. The Largemouth Bass is one of Onondaga Lake’s largest fish, and the most popular sport fish. In 2014 Largemouth Bass catch rates were 50 fish captured per hour, second only to those reported in 2013 species (Figure 2.)

Additionally, species richness has gradually increased since 2000. A total of 26 adult species were captured during the adult fish community survey in 2014 (Figure 3). Since 2000, more than 166,000 individual fish have been captured or observed from Onondaga Lake by Onondaga County’s sampling efforts, representing fifty-three species.

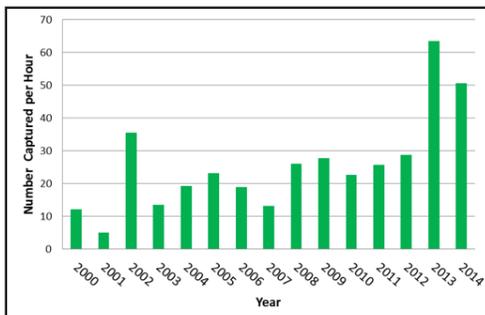


Figure 2. Catch Rates of Largemouth Bass

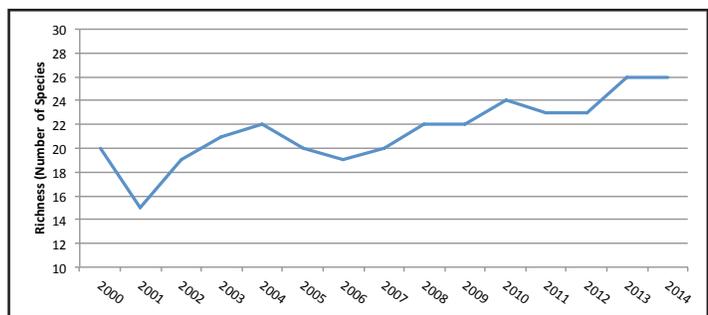


Figure 3. Species Richness
(Number of Species Captured in Onondaga Lake, 2000 - 2014).

COME AND SEE THE NEW AND IMPROVED ONONDAGA LAKE!

Onondaga Lake Park. With over 1 million visitors annually, Onondaga Lake Park is the most popular park in Central New York. Experience the best paved, vehicle-free trails in the region, great special events, sporting competitions, and festivals. Developed areas in Willow Bay and Cold Springs as well as seven miles of shoreline nooks and crannies provide families with a variety of recreational opportunities. For a quiet change of pace, check out the recently completed West Shore Trail.



ONONDAGA LAKE LOUNGE

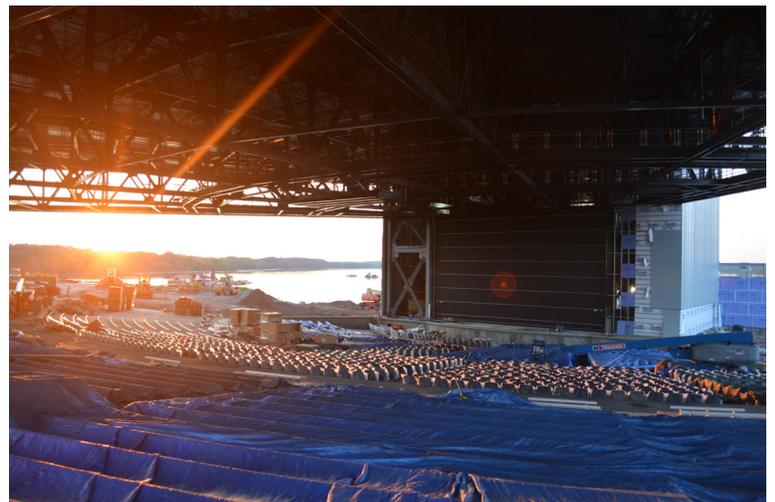


The “**Onondaga Lake Lounge**”, a 1,350-square-foot wooden deck that will be built at the end of the Onondaga Creekwalk near Destiny USA, will have tiered seating to offer views of the lake and Onondaga Creek. Construction is expected to begin in 2015.

NEW IN 2015!

The **Lakeview Amphitheater** Facility, an outdoor event complex located on the western shore of Onondaga Lake, will host its first concert during the 2015 New York State Fair. The facility will include an amphitheater with both covered and lawn seats, a vendor area, recreational trails and amenities.

LAKEVIEW AMPHITHEATER



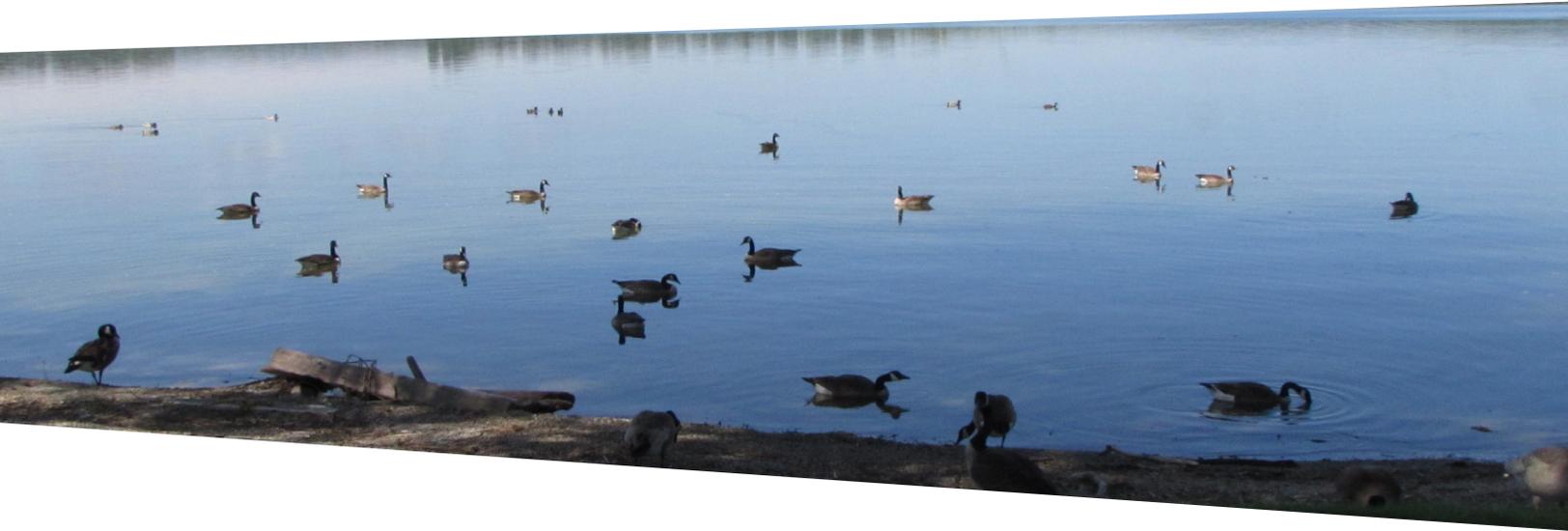
Construction in progress, July 2015

CONTINUING PROGRESS IN THE RECLAMATION OF ONONDAGA LAKE

The County's **Save the Rain** program supports innovative stormwater management. Onondaga County is conducting a phased program of combined sewer overflow (CSO) remediation with the goal of capturing or eliminating no less than 95% of CSO volume by 2018. This goal was achieved in 2014, four years ahead of schedule. To meet this goal, the County

initiated the **Save the Rain** program, which is implementing green and gray infrastructure for removal of stormwater from the combined sewer system through green infrastructure projects, CSO storage with conveyance to Metro, and elimination of CSO discharge points. Twenty-two (22) green infrastructure projects were completed in 2014,

including the East Washington Street Green Corridor and the Rainwater Harvesting System at the Carrier Dome, which are reducing annual stormwater by 923,000 and 903,000 gallons, respectively. In addition, sixty-six (66) green infrastructure projects have been identified for potential implementation in remaining priority CSO areas in 2015 and beyond.



Progress with

Honeywell's Onondaga Lake Cleanup. Dredging and capping of Onondaga Lake sediments continued in 2014. About 2.2 million cubic yards of contaminated sediment were removed from the lake by hydraulic dredging, which was completed in 2014, a year ahead of schedule. About 450 acres of the lake bottom are being capped to provide a new habitat layer, prevent erosion, and isolate remaining contaminants. Capping is scheduled to continue into 2016. To date, 44 acres of wetlands have been restored at Geddes Brook, Harbor Brook, Nine Mile Creek, the former LCP Chemicals site, and along the western shoreline of Onondaga Lake. More than 110 species of fish, birds, and mammals have returned to restored wetlands, including mink, bald eagles, and northern pike. About 1.1 million plants, shrubs, and trees are being planted to enhance habitat for fish and wildlife in the Onondaga Lake watershed. Additional information on Honeywell's remediation activities is available on their project website, www.lakecleanup.com.



HOW YOU CAN HELP PROTECT ONONDAGA LAKE

here are 7 easy ways that you can protect water quality and aquatic life in onondaga lake and its tributaries

Plant a Tree! Trees naturally soak up stormwater to feed their root systems.

A tree canopy slows the rainwater with its leaves, allowing the soil to become fully saturated with water. The tree is then able to absorb more rain water and reduce runoff entering the sewer system.

Use a Leaf Bag - Homeowners should collect leaves and other yard debris and place them into leaf bags. This will prevent leaves and other debris from being blown or carried into nearby storm drains.

Make Your Property a Sustainable One - Diverting your gutters into a garden or planting trees around your property are easy ways to absorb stormwater naturally. Homeowners should also consider using porous surfaces for sidewalks, driveways or walkways on your property.



Connect a Rain Barrel - Rain barrels are easy ways to capture and recycle stormwater. Connect the rain barrel to your gutter system and reuse the water to irrigate your garden, water your plants or wash your car.

Use and Dispose of Chemical Products Properly - Anytime you use gasoline, paint, motor oil, fertilizer, pesticides or any other chemicals DO NOT dispose of them by pouring them down your household or storm drains. Homeowners should contact the Onondaga County Resource and Recovery Agency for instructions on disposal of these products.

Dispose of Litter Properly - Storm drains drain rainwater and snowmelt off the streets to prevent flooding. As rainwater flows off roofs, the ground, sidewalks, and streets to storm drains, it picks up pollutants such as street litter, pet waste, automotive oil, antifreeze, and lawn and garden chemicals such as fertilizers and pesticides, which are dumped untreated, directly into the nearest streams. These pollutants can be harmful to humans and to wildlife

Get Involved - visit www.savetherain.us to learn more about stormwater runoff and ways you can help reduce pollution.



Visit Our Websites
www.ongov.net/wep
www.savetherain.us



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