

Onondaga Lake Cleanup Report

August 2009

Onondaga Lake Cleanup Work on Schedule — First of Several Designs Released by DEC



Water Quality Greatly Improves in Onondaga Lake

Last summer, scientists at the Upstate Freshwater Institute reported that Onondaga Lake became significantly cleaner during the summer of 2008. Onondaga County projects that target community sewage reduced phosphorus in the lake at a pace far faster than anticipated.

Thanks to the upgrade of the Metropolitan Sewage Treatment Plant in 2005, the phosphorus is at the lowest level ever recorded. Excess phosphorus in sewage increases the growth of algae, which depletes oxygen in the water.

The improved conditions are terrific news for Onondaga County, now in the 11th year of a 15-year lake cleanup project. Meanwhile, Honeywell is tackling major projects aimed at industrial contamination and habitat restoration.

In 2007, Honeywell began building an underground steel barrier wall on the western shore of Onondaga Lake. Two phases of the barrier wall, which will extend for 1.5 miles along the lakeshore, are complete. The wall blocks contaminated groundwater from old Allied Chemical properties in Solvay and Geddes from flowing or seeping into the lake. Instead, the contaminated water is diverted to special collection wells and piped underground to a groundwater treatment plant. Roughly 80,000 gallons per day are treated before being returned to the lake. Honeywell also has cleaned up the major source of mercury contamination at the former Linden Chemicals and Plastics (LCP) Company in Geddes.

These projects are essential first steps before work can begin on the cleanup of the lake. The cleanup plan will renew lake waters and create healthy habitat conditions for a vibrant "green corridor" extending from Nine Mike Creek to the shorelines of Onondaga Lake.

Partnerships and Sound Science Critical to Success

After years of effort by some of the country's top scientists and engineers, plus input from citizens and public interest groups, the New York State Department of Environmental Conservation (DEC) released for public comment the first of several designs for the cleanup of Onondaga Lake. The release of this design on May 15 has been hailed as a critical milestone in the cleanup schedule, which calls for dredging work to begin in 2012.

The lake remediation plan, which was selected by DEC and the U.S. Environmental Protection Agency (EPA), calls for a combination of dredging and capping — environmental cleanup methods that will address the contamination in lake sediments and water.

Four major designs must be approved by DEC before the work can proceed. Designs are generally submitted in three phases: an initial, intermediate and final design. The initial design released on May 15 is the first of these designs. The DEC will release each design for public review and comment.

Community Input Since 2004

Public input is a critical component of a successful and sustainable cleanup of Onondaga Lake. Since the first meeting in the Town of Camillus in 2004, Honeywell has met with more than 50 local community, environmental, conservation and business groups to keep the public informed and

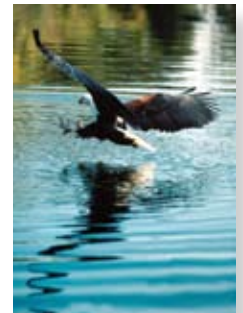
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Habitat Restoration is Key to a Healthy "Green" and Sustainable Onondaga Lake and Its Watershed

Honeywell Organizes Habitat Working Group

A clean and vibrant Onondaga Lake is the ultimate goal, but the lake does not exist alone. It is the centerpiece of an expansive watershed that includes creeks, rivers, wetlands, floodplains and wildlife. At sites in the watershed, lake-sustaining projects are being completed through innovative efforts.

- For the first time in years the wetlands around the old LCP plant in Geddes are alive with native species that are attracting wildlife. Twelve thousand newly-planted trees and native plants are now growing there.
- More than 100,000 shrub willows are growing on a new Shrub Willow Farm, on the former Solvay basins, creating a sustainable and



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Honeywell

Onondaga Lake Cleanup Work on Schedule

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gather feedback. Hundreds of community members have attended eight review meetings and provided comment.

In addition, a Citizen Participation Working Group made up of community leaders, citizens, and conservation and environmental group leaders will work with DEC to elicit questions and comments from the public on each of the designs. With such continued progress, the DEC and Honeywell expect to begin dredging lake sediments in 2012.

Town of Camillus Provides Critical Input

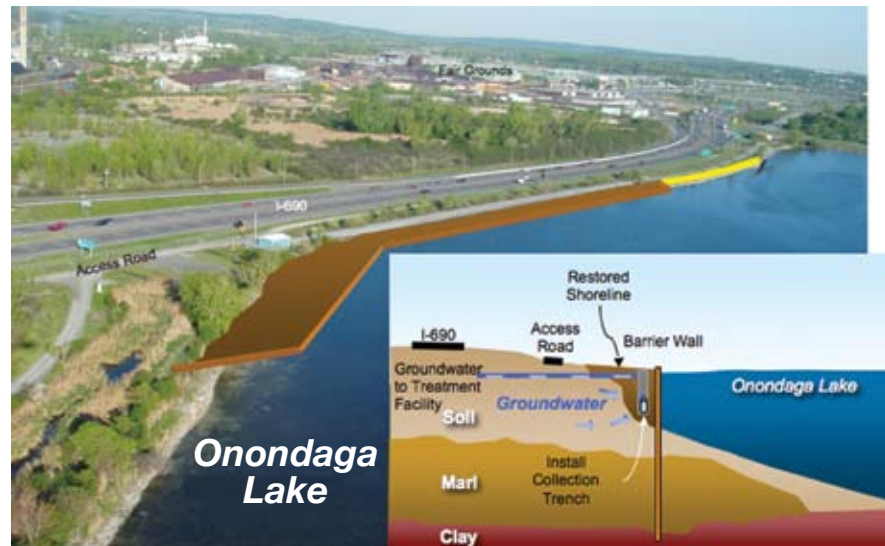
One important aspect of the cleanup is the disposal of sediments dredged from the lake's bottom.

After evaluating 16 possible locations, Honeywell and DEC selected one of the former settling basins in Camillus as a Sediment Consolidation Area (known as the SCA) to contain the dredged sediment. The Camillus basin is ideal because it provides access and capacity and satisfies strict geotechnical considerations.

Sediments will be hydraulically dredged and transported via a pipeline to the SCA. This approach will greatly reduce truck traffic, emissions and noise. The design calls for the use of geotextile tubes, which have a proven track record.

Made to specific standards from industrial strength materials, geotextile tubes retain sediments as water is drained into an engineered collection system for routing to a water treatment plant. They also provide many community advantages: effective odor control, a big reduction in the size of the SCA, and significant setbacks for a safe and secure facility with minimal visibility from outside the site. As a result of consultation with the Town of Camillus, the footprint for the Sediment Consolidation Area is less than one-half the size of the original concept.

Honeywell will submit a second major design later this fall. This design will outline the construction of the Sediment Consolidation Area, which will be fitted with an impervious liner to prevent water from seeping into the ground. Construction of the SCA will begin in 2011, and it will operate for four years once the dredging operation begins in 2012.



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Geotextile tubes have a proven track record, and will retain sediments as water is drained into a collection system before routing to the water treatment plant.

Habitat Restoration is Key to a Healthy Lake

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effective cover for the basins while increasing biodiversity and serving as a productive source of green energy and bio-fuels for the region.

Habitat restoration and enhancement are important community benefits for the remediation of Onondaga Lake. That's why Honeywell, in consultation with DEC, created a working partnership with local habitat, conservation and community groups. Since the first meeting in February 2007, sportsmen and environmental groups have helped identify and resolve key issues for inclusion in the designs submitted to DEC.

The Habitat Working Group includes members from a wide range of organizations, including Audubon Society, Salt City Bassmasters, Citizens Campaign for the Environment, Central New York Wildfowlers, Ducks Unlimited, Izaak Walton League of America, Onondaga County Federation of Sportsmen, Sierra Club and DEC.

Habitat Restoration Plan Submitted to DEC

A draft Habitat Restoration Plan, which presents the conceptual habitat restoration and enhancement designs for those portions of Onondaga Lake where remediation activities will be conducted, has been submitted to DEC.

The plan provides a holistic and comprehensive approach to restoring habitat in and around the lake. Wherever possible, this design takes advantage of natural processes and conditions to create suitable habitat for various species of plants, mammals, fish, benthic macroinvertebrates (bottom-dwelling organisms such as crayfish), birds, reptiles and amphibians, while allowing for public access. Creating sustainable habitats while allowing for public access is a major objective. The plan was developed with consideration for the complexities of these relationships in an effort to address the many needs of this unique resource.

The Citizen Participation Working Group and the Habitat Group will review the plan and assist in ways to ensure public participation.



Partnership with Audubon Society to Raise Awareness of Importance of Lake to Birds and Birding

Honeywell has partnered with the Montezuma Audubon Center (MAC) and the Onondaga Audubon Society (OAS) in the adoption of Onondaga Lake as an Important Bird Area (IBA). Onondaga Lake was established as an IBA in 1997 because of its value to congregating waterfowl. The "Adopt an IBA" program is an educational program facilitated by Audubon New York, a state program for the National Audubon Society.

Bird habitats and birding are important to the future of Onondaga Lake, and Honeywell is collaborating with MAC and OAS in developing educational programs to raise awareness and promote stewardship to new audiences.

Montezuma Audubon Center's 5th Annual Benefit program notes:

"With support from Honeywell, the Center has coordinated programming that has helped raise awareness about the value of Onondaga Lake to birds and birding. The Center is currently working with Honeywell and OAS to develop habitat enhancement initiatives and educational materials that will further showcase Onondaga Lake as a true asset to birds and birding in Central New York."



New Forested Wetlands Will Complete Restoration for Geddes Brook/Nine Mile Creek Improved Habitat Will Increase Wildlife and Recreation Opportunities

Creation and restoration of forest and other wetlands along Geddes Brook and Nine Mile Creek are essential components in linking habitat improvements along the upland sites and the lake shore. Forested wetlands control erosion, stabilize shorelines and retain nutrients to enhance water quality and habitat. They also support diverse plant and animal species. Improved forested wetlands and habitats are a sustainable approach to the restoration of Onondaga Lake and can lead to a "green corridor" for recreation.

"Working under the supervision of DEC, Honeywell's team found innovative ways to create robust wetlands and habitats as part of this restoration of Geddes Brook and Nine Mile Creek," said Honeywell Syracuse Program Director John McAuliffe.

"Continued involvement of local residents, environmental groups, fishing and wildlife enthusiasts, as well as academic and civic organizations, is critical for these waterways and the lake to achieve their full potential."

The Geddes Brook/Nine Mile Creek plan released by DEC on May 20 will restore forested wetlands, enhance stream conditions for fish spawning and migration and improve habitat along the creek. The DEC plan includes:

- Replacing an estimated 58,000 cubic yards of contaminated soil with certified clean soil.
- Planting roughly 15,000 emergent wetland plants, shrubs and trees.



Restored wetlands around old LCP plant.

- Increasing the number of new trees and native plants along the creek to more than 75,000.

Plants may include Silver Maple, American Elm, Grey Stem Dogwood, Buttonbush and Spicebush. Forested wetlands can support many animal species including mink, beaver and leopard frog and a variety of birds, including red-tailed hawk, belted kingfisher and red-headed woodpecker. Other highlights of the two-year project include:

- Habitat and cover systems will create enhanced ecological benefits, including sufficient water depth for fish and canoeing and new native vegetation to help reduce water temperature.
- Geddes Brook and Nine Mile Creek will be realigned to improve the connectivity of the tributaries to a wider floodplain and create synergies between remediation and restoration.
- Wildlife corridors will be developed by providing shallower slopes from Geddes Brook and Nine Mile Creek to the floodplains as well as to adjacent upland areas.

"We are very pleased that the need for improved wetlands and upland habitat for birds and other wildlife has been recognized and included in the remediation plan for Onondaga Lake and its tributaries," said Frank Moses, Director of the Montezuma Audubon Center. "We look forward to working with DEC and Honeywell and contributing to connecting future habitat enhancement initiatives around the lake's watershed."

Onondaga Lake Citizen Participation Plan Launched Formalizes Previous Efforts Undertaken by DEC and Honeywell

To keep the public informed and involved in the cleanup of one of Central New York's most important natural resources, DEC has established a Citizen Participation Plan (CPP) for the restoration of Onondaga Lake.

The Citizen Participation Plan formalizes previous efforts undertaken by DEC and Honeywell to engage community members through public meetings and presentations, bulletins, e-newsletters and annual progress reports.

"Public engagement and dialogue are critical to the successful restoration of Onondaga Lake," said McAuliffe. "We have already received valuable recommendations from the public during the initial design stages. Community input will play an important role in the final design and construction of the lake remedy."

Citizen participation activities are designed to:

- Ensure open communication among community members, DEC project staff and Honeywell throughout each step of the remedial process.

- Involve key stakeholder groups in critical projects.
- Create opportunities for the public to contribute information, opinions and perspectives.
- Continually analyze the effectiveness of the CPP.



Citizen Participation Plan activities will align with project milestones. Community members are invited to participate in regularly scheduled working group meetings.

The DEC solicited applications from interested community members to serve on a lead Community Participation Working Group. This volunteer-based working group will take a broad look at Onondaga Lake remediation activities and community outreach, and recommend additional opportunities

for the community to contribute and receive information.

To learn more about the Citizen Participation Plan, please contact Stephanie Harrington or Diane Carlton, DEC Region 7, at 315-426-7403.

Onondaga Lake Cleanup Plan

— CALENDAR FOR 2009 —

The Calendar indicates the timeline of scheduled events for 2009. Details and updates are available online at:

www.onondaga-lake-initiatives.com

— Key —

Design and Engineering Projects	Citizen Participation Plan Projects
DEC Actions	Construction Projects

JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
Willis Barrier Wall Phase 2 Completed				DEC released first of several initial cleanup designs for public review			Southwest Lakeshore Construction Work				DEC expected to release second of several cleanup designs
			DEC issued Record of Decision for Nine Mile Creek and Geddes Brook Phase One	DEC issued for public review proposed plan for Nine Mile Creek Phase Two							
		Citizen Participation Plan Finalized Formation of Citizen Participation Working Group Announced				Citizen Participation Working Group Kick-Off Meeting		Citizen Participation Working Group Meeting	DEC expected to issue Record of Decision for Nine Mile Creek Phase Two	Citizen Participation Working Group Meeting (Tentative)	



Onondaga County Teachers Attend Honeywell Educators @ Space Academy

West Genesee school teachers Rick Chapman, Craig Dowler and Sue Potrikus, plus East Syracuse-Minoa teacher Becky Loy, were awarded scholarships this year to Honeywell Educators @ Space Academy. Created in partnership with the U.S. Space & Rocket Center in 2004, the program provides math and science teachers with supplemental teaching techniques through real-life astronaut training and innovative education tools.



After a rigorous competitive process, Chapman and Dowler were selected to become two of just 24 educators to participate in Advanced Space Academy this spring.

Participants in Honeywell Educators @ Space Academy engage in unique activities such as astronaut training exercises, high performance jet simulation, scenario-based space missions, land and water survival training and state-of-the-art flight dynamics programs. They receive 45 hours of professional development and an intensive curriculum focused on space science and exploration. They also receive classroom, laboratory and field training linked to science and math teaching standards.

Chapman and Dowler, who previously attended Space Academy, have brought science to life in new and interesting ways for their students. Building on a relationship established during the program, Chapman partnered with Arizona State University to create an after-school program that helped students study Mars. Throughout the school year Chapman's students used materials from the university and examined images of Mars taken by NASA's Odyssey Space Craft. Students presented the findings of their studies to Arizona State University via video phone last spring.

Since its inception in 2004, more than 1,100 teachers from 36 countries and 50 states have graduated from the Honeywell Educators @ Space Academy program at the U.S. Space & Rocket Center.

"F.O.C.U.S. on The Future"

In February, nearly 300 people joined F.O.C.U.S. Greater Syracuse for its latest community visioning session. During the program, which Honeywell co-sponsored, Syracuse Mayor Matthew J. Driscoll and County Executive Joanie Mahoney as well as Syracuse Program Director John McAuliffe answered questions from journalists and community members on topics important to Central New York. F.O.C.U.S. used the event and nine visioning sessions

as a vehicle to enable thousands of citizens to add their input and influence critical decision making.

In a survey conducted by F.O.C.U.S. nearly a decade ago, cleaning Onondaga Lake was ranked as one of the most important community goals for Central New Yorkers. F.O.C.U.S. has played an important role in keeping the vision of a clean lake and a desire for improved access and recreation trails around the lake at the forefront of community dialogue. The organization continues to champion these ideas with community groups and civic leaders and encourage public involvement in the process.

Fourth Annual Honeywell Summer Science Week at the MOST

Fifty Syracuse-area middle school students participated in the 2009 Honeywell Summer Science Week at the MOST in July. The innovative science-based program, sponsored by Honeywell and the Milton J. Rubenstein Museum of Science & Technology (MOST) is now in its fourth year.

"It is wonderful to see science come to life through these students," said Program Director McAuliffe. "Honeywell is proud to partner with the MOST on a program that inspires students to become engineers and researchers who will play a key role in protecting and restoring our precious resources."

Local students kicked off the one-week scientific journey with a guided boat cruise of Onondaga Lake. Other activities included



Fifty Syracuse-area middle school students participated in the 2009 Honeywell Summer Science Week at the MOST in July.

exploring rock formations in the Tully Valley, conducting water chemistry sampling, and collecting insects and other creatures. Students also learned from local experts about their natural environment, the efforts underway to improve water quality and how science and technology can help restore the watershed.



Honeywell Summer Science Week at the MOST is made possible by a generous grant from Honeywell Hometown Solutions, the company's corporate citizenship initiative.

Honeywell Supports Onondaga Lake Partnership's Free Fishing Weekend

Fishing Enthusiasts in Catch and Release Fishing Fun

Scores of Central New York families had the opportunity to fish without a license and enjoy Onondaga Lake's supply of wild, naturally occurring carp by participating in the fifth annual Free Fishing Weekend. The catch-and-release event, sponsored by the Onondaga Lake Partnership and supported by Honeywell and others, included a Carp Fishing Tournament and a Family Fun Fishing Derby at Willow Bay in Onondaga Lake Park with the chance to win some of the \$2,000 awarded in prize money.

"Free Fishing Weekend was a great opportunity for the community to experience the asset Onondaga Lake is to Central New York," said event organizer Al Daher, owner of Mickey's Live Bait & Tackle Shop. "Onondaga Lake is a great resource for carp and provides a great family-friendly fishing experience."

The event is held in conjunction with New York State's "Free Fishing Days," an annual state-sponsored opportunity to fish without a license during the last weekend in June. DEC established "Free Fishing Days" to let residents and visitors sample New York



State's myriad of fisheries.

Major sponsors included the Onondaga Lake Partnership, the Onondaga County Parks Department, the National Carp Anglers Group and Honeywell. Co-sponsors include the Izaak Walton League of America, the Onondaga County Federation of Sportsmen's Clubs, the Liverpool Optimist Club and Mickey's Live Bait & Tackle Shop.

Reed Webster Park Playground Enjoys Honeywell Support

Thanks to a contribution from Honeywell Hometown Solutions, scores of Camillus children are now enjoying new play structures at the renovated Reed Webster Park Playground. Renovation of the playground kicked off in early 2007, when the neighbors of Reed Webster Park approached the Town of Camillus to request new equipment at the site. The town board allocated \$10,000 toward initial restoration, including the installation of one new jungle gym with two slides. Honeywell's donation allowed the town to complete the playground project by adding a new swing set, climbers and slides.



"The Town of Camillus is very grateful for the help and partnership Honeywell provided throughout the restoration of Reed Webster Park Playground," said Camillus Town Supervisor Mary Ann Coogan. "The playground has needed various renovations for a long time, and we were able to complete this work with Honeywell's help."

"Honeywell is proud to partner with the Town of Camillus on the recent renovations at Reed Webster Park Playground," said Honeywell's McAuliffe. "The passion and enthusiasm the town and community brought to this project were contagious. We have been looking forward to this day since we first started working with the town and the community on plans for this renovation."



Onondaga Lake Cleanup Report

About this Report ...

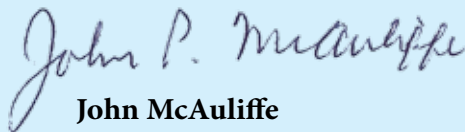
Because you are a community member who shares our keen interest in the many projects underway for restoration of Onondaga Lake and its watershed, I am sending you the second annual Onondaga Lake Cleanup Report.

Thanks to community input and participation, plus ongoing science and engineering, Honeywell has made great strides in the past year. In these pages, we present you with some highlights on the efforts to date and discuss some recent important developments that will add to our progress.

We still have many years of work ahead before the job is done. Your advice and input will be essential as we strive to make this entire area a “green” corridor of opportunity for families and businesses to grow, thrive and prosper.

If you have questions, contact me at 315-431-4443. You also can learn more by visiting us online at www.onondaga-lake-initiatives.com.

Thank you,



John McAuliffe
Syracuse Program Director

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What They're Saying About Onondaga Lake

“After all these years, the lake is starting to get better. In terms of the relative changes we’re seeing, this really stands out. If you look nationwide and worldwide, this is right up there among the most dramatic changes ever recorded for a lake.”

Steven W. Effler, Ph.D.
*Director of Research
Upstate Freshwater Institute
The Post-Standard
September 27, 2008*

“If you had asked me two or three years ago about the extent the lake would recover, I would have never predicted it. This is nothing short of spectacular. It’s really outstanding.”

Professor Charles T. Driscoll
*Director of the Center for
Environmental Systems
Engineering
Syracuse University
The Post-Standard
September 27, 2008*