Progress continues with the cleanup of Onondaga Lake, its tributaries, and surrounding sites in Onondaga County, New York. Native plants, fish and wildlife are returning to the area and the lake is now supporting a range of recreational uses. Plans are in place to continue expanding lake access and the community conversation is shifting toward Onondaga Lake as a public asset.

### Onondaga Lake Bottom

**Long-Term Monitoring, Nitrate Addition/Monitored Natural Recovery, SCA, and Habitat Restoration**

**Long-Term Monitoring.** With Onondaga Lake bottom dredging and capping activities completed, the project is transitioning into the long-term monitoring phase. Long-term monitoring by Honeywell, with DEC and U.S. Environmental Protection Agency (EPA) oversight, will allow evaluation of the completed remediation to ensure that it continues to be protective of public health and the environment. Components of long-term monitoring include monitoring of: fish tissue quality; surface water quality; the effectiveness of the cap; habitat reestablishment and the return of fish and wildlife; Wastebeds 1-8 shoreline stabilization; as well as monitored natural recovery of the sediments in the deep water portion of the lake.

**Draft Long-Term Monitoring Plan.** The Draft Onondaga Lake Long-Term Monitoring Plan is available for public review on DEC’s website and at the document repository locations listed at the end of this fact sheet. Public comments are being accepted through December 7, 2017. A Public Open House is scheduled for Thursday, November 9, 2017. Details are provided at right.

**Nitrate Addition/Monitored Natural Recovery.** The addition of diluted calcium nitrate solution in the deep-water areas of the lake began in 2012 and is ongoing. The solution inhibits the production of methylmercury, the most toxic form of mercury to fish and biota. Monitoring results, including mercury levels in surface sediment and settling sediments, and annual sedimentation rates, indicate that natural recovery of the deep lake area is occurring faster than previously predicted.

**Sediment Consolidation Area.** The Sediment Consolidation Area (SCA), located on Wastebed 13 in the Town of Camillus, is where material removed from the lake was managed and is now fully contained. The SCA was covered with an engineered cap and seeded with native grasses. Air monitoring at the SCA has transitioned from construction monitoring to long-term monitoring. The SCA Post Closure Plan has been finalized and describes the long-term monitoring of the SCA. The Plan is available for public viewing at the document repository locations listed at the end of this fact sheet.

**Habitat Restoration.** Restoration of Onondaga Lake’s shoreline and tributaries includes improvements at Geddes Brook, Nine Mile Creek, Harbor Brook, and along portions of the western shoreline. To date, 89 acres of wetlands have been created or enhanced with nearly 780,000 native trees, plants and shrubs. Habitat restoration under the cleanup plan is scheduled to be completed in fall 2017.
Onondaga Lake Watershed

Restoring the Shoreline, Tributaries and Watershed

Additional progress has been made at various sites around the lake.

**Bloody Brook.** Lockheed Martin implemented the cleanup plan with DEC oversight. Excavation and offsite disposal of contaminated soil and sediment along with site restoration were completed in 2017. The site will be reviewed on an annual basis by DEC to ensure protectiveiveness of the cleanup remedy.

**Crouse Hinds Landfill.** Capping of the north and south landfills was completed in 2016. Maintenance and monitoring of the landfills is ongoing. The site is reviewed by DEC on an annual basis to ensure protectiveiveness of the cleanup remedy.

**Geddes Brook.** The cleanup of Geddes Brook was completed in 2013. The project involved the removal of contaminated soils, sediments and invasive plants from the excavated areas, and planting of 50,000 native shrubs, plants, and trees on 17 acres of land. Honeywell, a responsible party for Geddes Brook as well as Onondaga Lake, and many of the lake upland sites, will continue maintenance and monitoring to ensure that the cleanup is meeting the objectives. To date, more than 65 varieties of fish, birds—including the pied-billed grebe, blue heron and bald eagle—and other wildlife have returned to the re-established wetlands. The site is reviewed by DEC on an annual basis and by EPA every five years to ensure protectiveiveness of the cleanup remedy.

**Ninemile Creek.** Site activities were completed in 2014 including: removal of contaminated soils and sediments from the creek channel and adjacent floodplains; construction of forested wetlands; enhancement of stream conditions for fish spawning and migration; and improvement of habitat along the lower portion of the creek. Honeywell continues to monitor the site with oversight by DEC and EPA. The site will be reviewed by DEC on an annual basis and by EPA every five years to evaluate the protectiveiveness of the cleanup remedy. EPA's First Five-Year Report for the Geddes Brook/ Ninemile Creek site can be viewed online at [https://semspub.epa.gov/work/02/528263.pdf](https://semspub.epa.gov/work/02/528263.pdf).

**General Motors-Inland Fisher Guide (Upper Ley Creek).** In March 2015, DEC and EPA issued the decision document for Operable Unit 2 of the site (Upper Ley Creek) outlining a cleanup plan. Cleanup of the residential yards downstream of Lemoyne Avenue was completed in 2016 by RACER Trust, the entity created by the U.S. Bankruptcy Court to clean up properties and other facilities owned by the former General Motors Corp. before its 2009 bankruptcy. Excavation and offsite disposal of PCB contaminated soils in the National Grid Wetland is ongoing and expected to be completed by the end of 2017. Design for the cleanup of Upper Ley Creek is ongoing.

**General Motors-Inland Fisher Guide (Former Plant Site).** The feasibility study to identify and compare remedial alternatives is underway. Following the completion of the feasibility study, DEC will prepare and issue a proposed cleanup plan for public comment.

**Lower Ley Creek.** EPA, as lead agency, is overseeing the design of the cleanup selected in the September 2014 decision document. The design is being performed by a group of potential responsible parties. A sampling program is underway to gather data to support the design. More information is available by contacting EPA.

**Ley Creek PCB Dredgings.** The cleanup, consisting of a cover and fencing, was completed in 2001. Maintenance and monitoring is ongoing by RACER Trust with oversight by DEC and EPA. The latest five-year review was conducted in 2017. The site maintenance and monitoring activities are reviewed for continued effectiveness by DEC and EPA every five years to evaluate the protectiveiveness of the cleanup remedy.

**LCP Bridge Street.** The final cover system was completed at the LCP Bridge Street Site. The site will continue to be maintained and monitored regularly by Honeywell with oversight by DEC and EPA. In addition, a remediation program for treatment of contaminated soil and groundwater in the northern portion of the site is underway. The treatment includes injection of a solution that enhances breakdown of the contamination to non-hazardous substances.

**Former Roth Steel.** Onondaga County Industrial Development Agency (OCIDA) purchased the property located on Hiawatha Boulevard along the lakeshore. The site was accepted into the Brownfield Cleanup Program and a draft remedial investigation work plan is under review by DEC. Remedial investigation activities are expected to begin late fall 2017.
Salina Landfill. Final construction of the landfill remedy including the cap and the leachate/groundwater pre-treatment system was completed in April 2015. With DEC and EPA oversight, the Town of Salina continues to maintain the landfill closure (completed in 2013) and leachate pre-treatment systems and periodically sample the groundwater to ensure that this final remedy remains effective. The site is reviewed by DEC every three years and by EPA every five years to evaluate the protectiveness of the remedy.

Semet Residue Ponds. A cleanup remedy for the Semet residue was selected in 2002. The selected cleanup method included, among other elements, excavation and processing of the residue into a raw material used in the manufacturing of driveway sealant. A change in market conditions led to reevaluation of this portion of the remedy and alternative technologies have been pilot tested to address the residue. A change to the remedy was issued in the summer of 2017. This change expands on the pilot studies being performed by Honeywell (the responsible party) and includes removal and off-site thermal processing for re-use of the residue. The 2002 remedy also called for a lakeshore barrier wall/groundwater collection system and a Tributary 5A groundwater collection system. This work was completed in 2007 and 2013, respectively.

Hiawatha Boulevard Former Manufactured Gas Plant (MGP). A cleanup remedy was selected for the site in 2010. The cleanup is being implemented by National Grid, the responsible party. Solidification of the contaminated soil was completed in 2012. A pilot study that evaluates the enhanced bioremediation of contaminated groundwater was completed in 2016. Full-scale implementation of bioremediation is expected in 2018.

Wastedbed B/Harbor Brook. A feasibility study for the main site area will soon be submitted by Honeywell, after which a proposed cleanup plan will be released for public review.

Wastedbeds 1-8. A cleanup plan was issued in 2014. Remediation work began while the construction of the Lakeview Amphitheater was underway. Work on the rest of the site by Honeywell, the responsible party, is ongoing. A feasibility study is under review that evaluates groundwater at the site. As part of an ongoing Interim Remedial Measure (IRM), remediation of Ditch A (a small tributary to Onondaga Lake) and installation of a shallow groundwater collection system is anticipated to begin in the fall of 2017. Thirty acres of wetlands and upland areas have been restored along this portion of the Onondaga Lake shoreline with approximately 70,000 native plants installed. Additionally, just over three miles of a groundwater collection system was installed on the western shoreline (including collection systems installed at this site, as well as Semet Residue Ponds, Willis Avenue and Wastedbed B/Harbor Brook sites). The systems collect contaminated groundwater so that it does not enter the lake and sends it to Honeywell’s Willis Avenue Groundwater Treatment Plant for treatment. The NYS Department of Transportation is paving a large portion of the State Fair parking area. This paving is being coordinated with DEC to ensure there is no adverse impact to the cleanup remedy for the site.

Wastedbeds 9-15. DEC approved the completeness reports for the interim measures to improve stormwater discharges from the site. The effectiveness of these measures will continue to be evaluated in 2018 as a closure plan is developed for the entire Wastedbed 9-15 site.

Willis Avenue. A draft revised feasibility study is being prepared by Honeywell. The next step will be to issue a proposed cleanup plan for public comment.

Willis Avenue Ballfield. A remedial investigation/feasibility study is underway and is being performed by Honeywell, the responsible party.

UTC Carrier. A sheet pile wall was installed to direct groundwater to the onsite treatment plant before entering Sanders Creek, a tributary to Ley Creek. A Remedial Action Work Plan is currently being developed for dredging PCB contamination from the creek. Carrier, the responsible party, is actively seeking property access agreements for Sanders Creek offsite cleanup activities.

Natural Resource Damage Assessment

Trustees, including DEC and the U.S. Fish and Wildlife Service, are working to assess injuries to natural resources resulting from the release of hazardous substances and to restore those injured resources. The Trustees finalized a restoration plan for Onondaga Lake in 2017, which details twenty ecological and recreational projects planned for the Onondaga Lake watershed. For more information and to suggest additional potential restoration projects, please visit www.fws.gov/northeast/nyfo/ec/onondaga.htm.
Wastewater and Stormwater Advancements

Wastewater and stormwater improvements are also contributing to a cleaner lake and watershed. Under the direction of DEC, Onondaga County continues to implement projects to improve the quality of water entering Onondaga Lake and its tributaries. Combined Sewer Overflow capture rates and water quality improvements continue to progress on schedule. Installation of additional green roofs, porous parking areas and sidewalks, tree pits, rain gardens, wetlands and other green infrastructure techniques are helping to not only protect the environment, but also beautify the community. The award-winning Save the Rain program continues to serve as a national model. Fish sampling and water quality monitoring continue to document improvements. For more information, visit Onondaga County Water Environment Protection and savetherain.us.

Recreation

Expanding Access

Public Boat Launch and Visitor Center. Design and construction of the launch are being funded by Honeywell as part of a previously negotiated Environmental Benefit Project. Plans include Americans with Disabilities Act-compliant accessible shoreline fishing access, a trailer boat launch, car top/kayak launch, and parking for approximately 30 vehicles with trailers and additional parking for cars only. The visitor center will be operated at the site on the west shore of Onondaga Lake at the end of Route 690 Exit 7 near the State Fairgrounds. Construction will commence after completion of the Honeywell remediation project and the Onondaga County west side pump station upgrades. The preliminary plans offer opportunity for further public input on the design and features of the site. The preliminary design, above, is also available online at www.dec.ny.gov/outdoor/60782.html and comments can be made by emailing Info.R7@dec.ny.gov.

Loop-the-Lake Trail Extension. Onondaga County is designing plans to connect the current terminus of the west side trail near the State Fair parking lot to the boat launch site. One of the projects selected in the Trustee Restoration Plan includes continuing the trail southward from the boat launch, eventually connecting to the City of Syracuse Creekwalk.

Boat Docks. Public access to Ninemile Creek has been restored; paddlers can now reach Onondaga Lake from Honeywell’s fishing access point on Airport Road in the Village of Camillus or from Pump House Road in Geddes. Onondaga County installed new boat access at Lakeview Point Landing, which provides boaters access to Onondaga Lake Park’s West Shore Trail that runs directly through the Lakeview Amphitheater. The county also installed new docks on the Onondaga Lake Outlet along the Seneca River.

For More Information

To Learn More. Project updates will continue to be available via DEC’s Onondaga Lake News email list. To sign up, visit www.dec.ny.gov/chemical/52545.html. Questions about progress in and around Onondaga Lake can be directed to Info.R7@dec.ny.gov or call (315) 426-7400 or (518) 402-9676. All project documents are available for review at DEC Central Office and Region 7 Headquarters. Select documents are also available at the following locations and online at www.dec.ny.gov/chemical/37558.html. A fish consumption advisory issued by the New York State Department of Health for Onondaga Lake and its tributaries remains in effect. New York State Department of Health Advice on Eating Fish You Catch is available at www.health.ny.gov/environmental/outdoors/fish/health_advisories/.

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<tr>
<td>Atlantic States Legal Foundation*</td>
<td>658 West Onondaga Street, Syracuse, NY 13204</td>
<td>(315) 475-1170</td>
</tr>
<tr>
<td>Camillus Town Hall</td>
<td>4600 West Genesee Street, Room 100, Syracuse, NY 13219</td>
<td>(315) 488-1234</td>
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<tr>
<td>Moon Library</td>
<td>SUNY ESF, 1 Forestry Drive, Syracuse, NY 13210</td>
<td>(315) 470-6712</td>
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<tr>
<td>NYSDEC Central Office*</td>
<td>625 Broadway, Albany, NY 12233</td>
<td>(518) 402-9676</td>
</tr>
<tr>
<td>NYSDEC Region 7*</td>
<td>615 Erie Boulevard West, Syracuse, NY 13204</td>
<td>(315) 426-7400</td>
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<tr>
<td>Onondaga County Central Public Library</td>
<td>The Galleries, 447 South Salina Street, Syracuse, NY 13202</td>
<td>(315) 435-1800</td>
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<tr>
<td>Solvay Public Library</td>
<td>615 Woods Road, Solvay, NY 13209</td>
<td>(315) 468-2441</td>
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* Please call for an appointment