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November 2011

Onondaga Lake Amended Consent Judgment Compliance Program Monthly Report



Joanne M. Mahoney,
County Executive

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Project Progress for the Month of November

Report from Commissioner

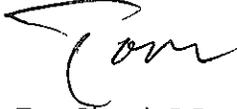
November 2011 was another highly productive month for the Save the Rain program. As usual, this monthly report provides significant details on the green and the gray project status. I highlight four noteworthy milestones:

- On November 21, 2011, the County Executive announced that Onondaga County was on a course to exceed its own 'Project 50' goal. Using a very well-attended open house forum, County Executive Joanne Mahoney and Deputy County Executive Matt Millea showcased what is arguably the most progressive green infrastructure CSO abatement program in the nation. There is little doubt that the county's programs are making tremendous changes in improving the conditions in Onondaga Lake. Those that joined the open house heard strong support from Tim Burns of the NYS Environmental Facilities Corp. acknowledging Onondaga County's environmental leadership and also his strong praise for the benefits of green infrastructure in community development and economic revitalization as displayed here.
- County Executive Mahoney also made another important announcement in November. She recognized County Legislator Jim Corbett with the first environmental leadership award. The success of the Save the Rain program is due in part to the many partnerships created and maintained in its implementation and funding. Clearly, the role of the County Legislature and the leadership provided by Environmental Protection Committee Chair Jim Corbett in providing approval, sponsorship, and support for the resources needed to implement the County's program to clean the lake and its vital tributaries is a critical element to the County's success.
- November also included the latest iteration of the Green Improvement Fund program documents and application materials. What started as a project conceived around Chicago's green roof concepts has now become the benchmark program for creating public/private partnerships in providing financial incentives for the installation of green infrastructure technologies. The "2.1" version of the program documents released in November 2011 provide better administration and review efficiency, better communication among all project parties, and will lead to better capture efficiency per dollar invested by the County. Today this program remains extremely transparent in all determinations and it is very user friendly with web-based program descriptions and applications as well as information on funded projects. This private sector portion of the Save the Rain program is another example of highly innovative tools being implemented and now fine tuned to better efficiency, community, and environment.
- The final note for the month of November is the Onondaga Lake watershed community forum which was held on November 29, 2011. The forum featured presentations from the Onondaga Nation, the USEPA, and the NYSDEC as well as County Executive Mahoney. The forum included breakout discussions--all geared toward communication; i.e., communication of opportunities to utilize the lake's recreational resources now that its

condition is so vastly improved, communication on the on-going work by Honeywell, communication on the Save the Rain program, and finally communication on how the public can be better informed and better involved in restoration activities around the lake.

The full monthly report follows, and in keeping with the November theme I would be remiss not to thank all of the many talented individuals who have come together to make this report and the entire Save the Rain program a team success. My sincerest thanks.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Tom", with a stylized flourish above the first letter.

Tom Rhoads P.E.,
Commissioner

GRAY PROJECTS UPDATE

Gray Projects Update:

Progress of Projects Under Construction

Harbor Brook Interceptor Sewer (HBIS) Replacement and CSO Abatement Project (Construction Phase)

In November 2011, the contractor completed connections to the HBIS for CSO 014 at Seymour Street. Surface restoration work continued at Fowler High School athletic fields and in Skunk City. Comments were received from CH2M-Hill on the design for the Delaware/Grand rain garden and discussions were held with NYSEFC regarding regulatory review. It is anticipated the majority of the rain garden work will occur in the spring of 2012. To date the project has installed 7,503 LF of new 18" to 36" interceptor sewer between Velasko Road and West Fayette Street on the west side of Syracuse. In addition, 5,222 LF of new local sewers was installed, ranging in size from 8" to 42" in diameter. The sewer installation is 99 percent completed and the project, overall, is approximately 91 percent complete.

Midland CSO 044 Abatement Project (Construction Phase)

Construction continued on the 96" CSO conveyance pipeline that will connect CSO 044 in South Avenue to the Midland RTF. In November the contractor completed pipe connections to Flushing Chamber B in West Castle Street and the South Avenue Regulator structure. A majority of the work in South Avenue was completed and the contractor began work on the bridge approach slab and is planning to open South Avenue by mid January. The contractor installed the base slab and began construction of concrete walls for Flushing Chamber A.

Clinton CSO Storage Facility Project (Construction Phase)

The contractor continued site work and preparation for the major construction activities associated with the storage facility that will collect 6 million gallons of combined sewage from 8 downtown Syracuse CSOs during wet weather events. The contractor continued work on the temporary bridge at Fabius Street to be used for construction traffic into the site, with completion of the fabrication of the bridge superstructure and installation of the bridge footings and beginning installation of the superstructure. In November the contractor began work on installation of the west chamber slurry wall and testing of various techniques for installation of the grout plug under the storage tunnels. Work continued on the temporary site power with preparation for National Grid to install high voltage electrical conductors from West Fayette Street to the Trolley lot.

Lower Harbor Brook CSO Conveyance Project (Construction Phase)

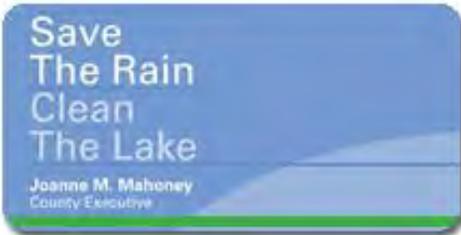
The contractor began work on the project in November with the site clearing and grubbing. Fence installation and field office setup will be underway in December. The project will transmit combined sewage from CSOs 003 (Hiawatha Boulevard) and 004 (State Fair Boulevard) to the new storage facility to be constructed on State Fair Boulevard and from CSO 063 in the future. The USEPA completed the draft NEPA document in November and will release the document for the 30-day public comment period in December. The USEPA gave the County approval for award of the contract to J.J. Lane Construction, Inc.

Lower Harbor Brook CSO Storage Facility Project (Bid Phase)

A post-bid meeting was held with C.O. Falter Construction Corp.; bids were evaluated and the Notice of Intent to Award letter was being sent to the contractor. The storage facility will store combined sewage from CSOs 003, 004, and 063 during storm events and transmit the sewage after the storm to Metro via the HBIS. The USEPA completed the draft NEPA document in November for a 30-day public comment period to begin in early December. The USEPA gave the County approval for award of the contract to C.O. Falter Construction Corp.

CSO 022/045 Sewer Separation Project (Bid Phase)

Bids were opened on November 29, 2011, for two contracts--General Construction and Plumbing Construction--in accordance with Wicks Law. The bids are being reviewed for accuracy and conformance with the contract documents. The project will provide for the separation of sanitary and storm flow in CSO areas 022 (located in downtown Syracuse near West Genesee and Franklin streets) and 045 (located just west of South Avenue near Onondaga Creek). Once complete, the discharge of combined sewage from these two basins will be eliminated and all sanitary sewage will be transmitted to Metro via the main interceptor sewer (MIS).



Project:	Clinton CSO Storage
Project Owner:	Onondaga County
Project Location:	Trolley Lot, Syracuse
Sewershed:	Clinton/Lower MIS
Technology:	Storage Facility
Capacity:	6,000,000 gallons
CSO Capture:	114,000,000 gal/yr
# CSOs Abated:	8
Completion Date:	12/31/13
Contract amount:	\$70,640,000
Bid Date:	7/14/11
Prime Contractor:	Jett Industries

FACT SHEET

Clinton CSO Storage Facility

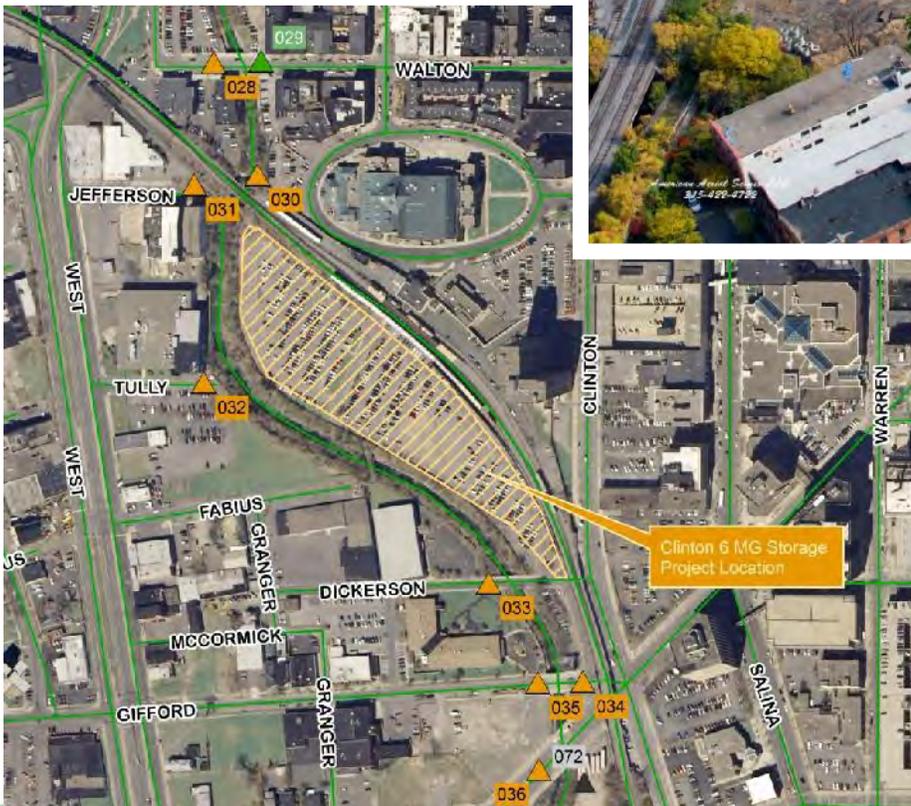
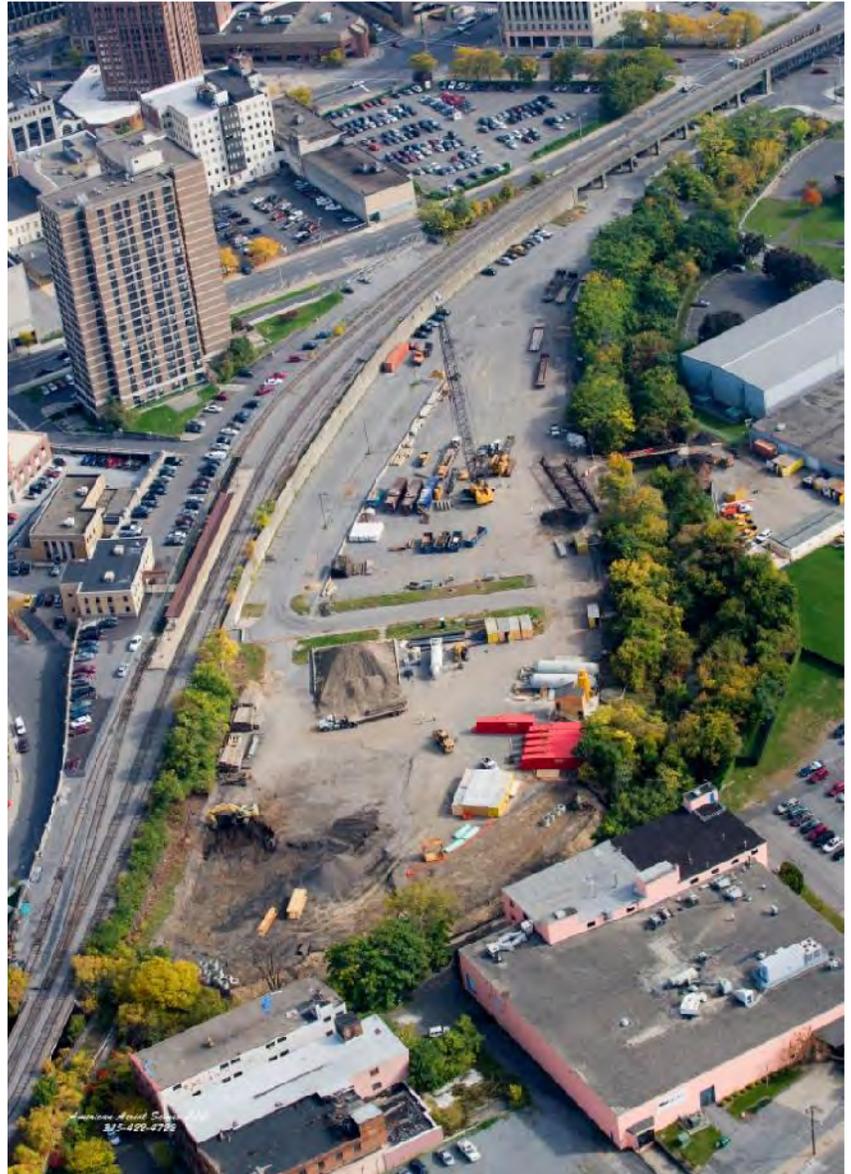
Project Description: The Clinton CSO Storage Facility Project is a 6 million gallon combined sewer overflow storage facility that will be constructed in the parking area between the elevated rail tracks and Onondaga Creek just south of the Armory Square area of downtown Syracuse (formerly known as the Trolley Lot). During wet weather events, the facility’s three, parallel 18-foot diameter, underground storage tunnels will capture flow from 8 combined sewer overflows (CSOs) in the vicinity of the former Trolley Lot. The wastewater will be stored in the tunnels until it can be conveyed via the main interceptor sewer to the Syracuse Metropolitan Sewage Treatment Plant (Metro) for treatment. The off-site conveyance piping, which will transmit the flow to the facility, was installed under the Clinton CSO Phase 1 and 2A conveyances projects completed in 2009. There will be additional on-site conveyance piping installed under this project to connect the existing sewers to the new facility. In addition to the tunnels there will be two above ground structures located at either end (east and west) of the parking lot which provide access to the tunnels and house the pumping, grit collection and odor control facilities

Green Components: To further enhance the sustainability of the facility, the project includes green infrastructure components. The stormwater runoff from the entire site that measures approximately 275,000 square feet or 6.3 acres will be managed by green infrastructure. The stormwater from the area surrounding the main structure on the western half of the site will be collected by a series of catch basins and stormwater piping that will outfall into two bioretention basins. The bioretention basins will allow the stormwater to infiltrate into the ground rather than immediately runoff to the creek. In addition, stormwater runoff from the eastern half of the project site, to be restored as a parking area, will be directed to a subsurface collection facility and used to flush the storage tunnels to clear them of grit and debris that may have settled or been left behind after the stored combined sewage was transmitted to Metro. In addition, a green roof will be installed on the west building.

Construction Update: Construction began on September 1, 2011. The contractor has continued site work including completion of the fabrication of the Fabius Street Bridge superstructure and installation of the bridge footings. The contractor is beginning to install the bridge superstructure and will continue to do so in December. In November 2011, the contractor began to install the west chamber slurry wall and testing of other various techniques for installation of the grout plug under the storage tank.

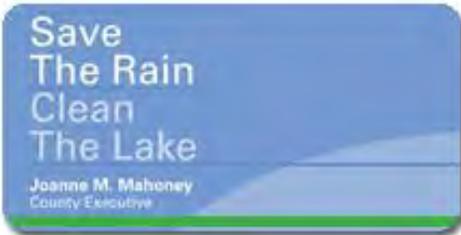


Clinton CSO Storage Facility Project –
Construction Progress October 11, 2011



Project Location Map

Version 10/27/2011



FACT SHEET

CSO Area 022 and 045 Sewer Separation Project

Project:	CSO 022/045 Sewer Separation
Project Owner:	Onondaga County
Project Location:	Syracuse
Sewershed:	Clinton/Lower MIS & Midland
Technology:	Sewer Separation
CSO Capture:	1,000,000 gal/yr
# CSOs Abated:	2
Completion Date:	12/ 31/12
Project Cost:	\$6,500,000 (est.)
Bid Date:	11/29/11
Prime Contractor:	TBD

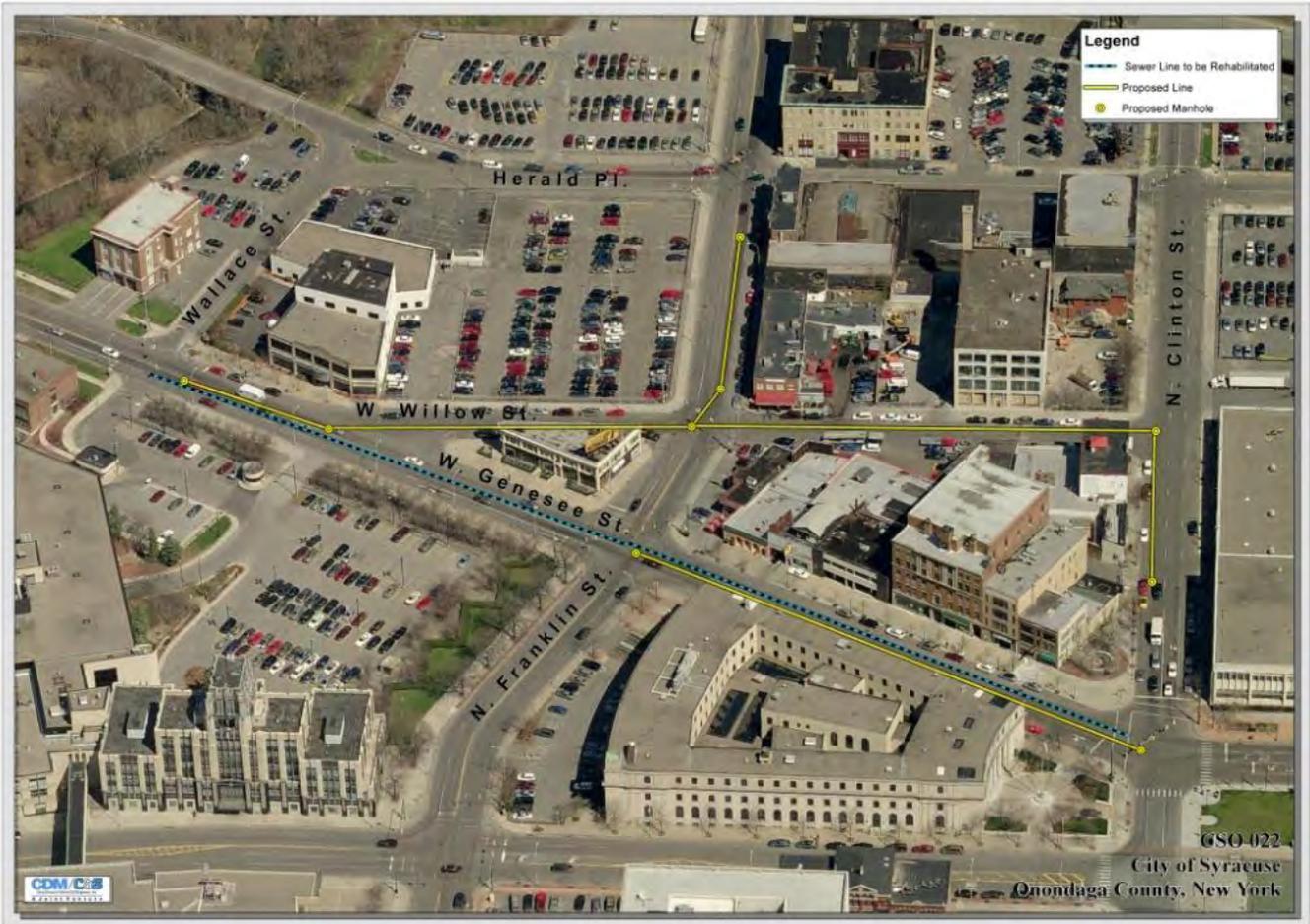
Project Description: In 2000, the separations of 13 separate CSO basins were designed to the 95 percent stage. The CSO areas represented basins whose full separation would be cost effective compared to other CSO abatement technologies. The remaining basins where the full separation has not been constructed were CSO areas 022 and 045. CSO area 022 is located in downtown Syracuse and the tributary sewers are located in North Franklin, West Genesee, and Willow streets. The proposed work to be performed includes 2,000 linear feet (LF) of new sanitary sewer; 800 LF of sewer lining; and twenty (20) internal building separations. CSO Area 045 is located south of downtown Syracuse with the outfall at the intersection of West Castle Street, Hudson Street, and Onondaga Creek. The combined sewage tributary to this outfall is conveyed by combined sewers located in Crescent and Hudson streets. The proposed work to be performed includes: 700 LF of new storm sewer in Hudson and Crescent streets, 1200 LF of sewer lining to convert the existing combined sewers in Crescent and Hudson streets to sanitary sewers, rehabilitation of the existing sanitary sewer in Rich Street between Hudson and Onondaga Creek, and one (1) private property separation.



CSO 045 Project Area

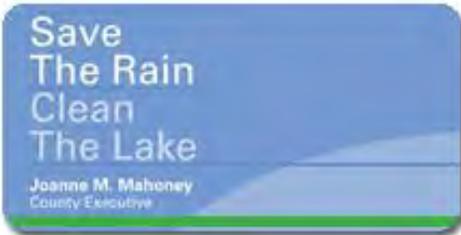
Green Components: The County has successfully applied its "Greening the Gray" mission to the project through the implementation of Green Infrastructure as it related to the reconstruction of the Pocket Park on the corner of West Genesee and North Clinton Streets. The park had fallen into disrepair due to settlement issues and will be rehabilitated with green components under the CSO 022 project.

Update: Bids were opened on 11/29/11 for 2 contracts – General Construction & Plumbing Construction. Bids are being reviewed for accuracy & conformance with contract documents.



CSO 022 Project Area

Version 9/30/2011



Project:	CSO 044 Conveyances
Project Owner:	Onondaga County
Project Location:	Syracuse
Sewershed:	Midland
Technology:	Storage & RTF
CSO Capture:	6,000,000 gal/yr
# CSOs Abated:	1
Completion Date:	12/31/11
Contract amount:	\$7,978,282
Bid Date:	9/21/10
Prime Contractor:	J.J. Lane Construction

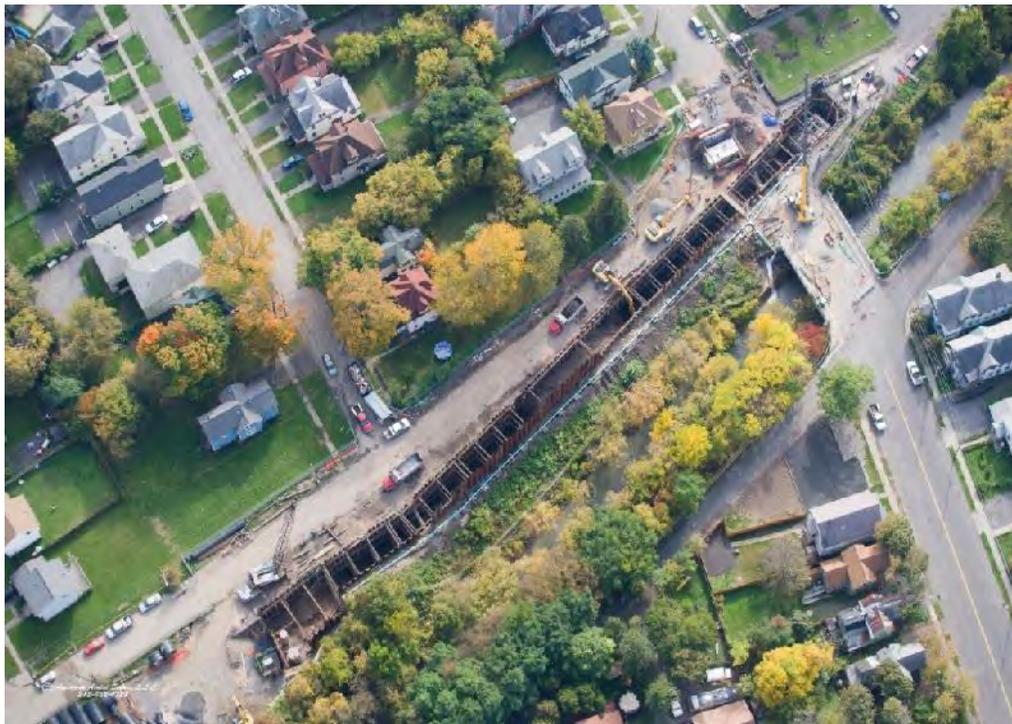
FACT SHEET

CSO 044 Conveyances Project

Project Description The CSO 044 Conveyances Project provides for the transmission of wet weather flow from CSO 044, which discharges to Onondaga Creek at South Avenue and West Castle Street, to the Midland Regional Treatment Facility (RTF) on the south side of Syracuse. Conveyance of the combined sewer flow to the Midland RTF will be via approximately 500 linear feet of 96-inch diameter pipeline between the terminus of the 144-inch pipeline installed under the Midland Phase Two RTF and Conveyances Project to CSO 044.

Green Components: In addition to the pipeline, the project will include the construction of a new regulator structure in South Avenue, and two conveyance flushing chambers. The "Greening the Gray" components incorporated include the utilization of captured stormwater for the flushing chambers, the installation of rain gardens for stormwater infiltration, and an educational interpretive walkway.

Update: The contractor completed pipe connections to Flushing Chamber B in the W. Castle St. & South Avenue regulator structure. Most of the work in South Ave is complete and work on the bridge approach slab is underway. South Avenue is expected to reopen by mid-January. The contractor also installed the base slab and began the concrete wall construction for Flushing Chamber A.



CSO 044 Construction Progress – October 10, 2011



FACT SHEET Harbor Brook Interceptor Sewer (HBIS) Replacement and CSO Abatement Project

Project:	HBIS Replacement & CSO Abatement
Project Owner:	Onondaga County
Project Location:	Harbor Brook Corridor Fayette St. to Velasko Rd.
Sewershed:	Harbor Brook
Technology:	Interceptor Replacement
CSO Capture:	36,000,000 gal/yr
CSOs Addressed:	9
Completion date:	6/30/2012
Contract amount:	\$21,536,849
Bid Date:	11/2/09
Prime Contractor:	J.J. Lane Construction

Project Description: The HBIS Replacement Project provides for a much needed upgrade to the existing Harbor Brook Interceptor between West Fayette Street and Velasko Road on the west side of Syracuse. This length of the interceptor sewer conveys dry weather flow and a portion of the combined flow from CSOs 009, 010, 011, 013, 014, 015, 016, 017, and 018 for conveyance to Metro for treatment. The existing interceptor is a U-shaped cast-in-place concrete pipe constructed in the 1920s and has fallen into disrepair. Due to the shape and age of the HBIS, flow restrictions have developed which have decreased capacity and increased infiltration in some areas. The project includes the installation of 7,600 linear feet (LF) of new HBIS ranging in size from 18- to 36-inches in diameter, 1,500 LF of new local sewers, rehabilitation of 860 LF of 30-inch brick sewer, installation of 4 new regulator manholes, and rehabilitation or replacement of 2500 LF of Harbor Brook Culvert. In addition, during construction the available funding allowed CSO Areas 013 and 016 to be completely separated which will increase CSO capture and eliminate two CSO discharge points. As a result, the capture projection for this project is anticipated to be 0.9 percent or 36 million gallons.

Green Components: In addition the County has successfully applied its "Greening the Gray" mission to the HBIS Replacement Project. The GI components incorporated into this gray construction project include the installation of approximately 40 enhanced tree basins with infiltration zones and the construction of a bioretention area that will manage stormwater runoff from an area of approximately 3.2 acres. The enhanced tree basins will be located on Hartson, Herriman and Hoeffler Streets in the Skunk City area of Syracuse. The bioretention area will be located at the corner of Grand Avenue and Delaware Street and will contain a series of rain gardens and bioretention swales which will collect off-site runoff from impervious areas and manage the on-site stormwater as well. The site will have a "park-like" setting with an educational theme.

Construction Update: The sewer installation is 99 percent complete, and the project overall is approximately 91 percent complete. In November 2011, the contractor completed the connections to the HBIS for CSO014 at Seymour St. Surface restoration work is ongoing both at Fowler High School and in Skunk City. The design work for the rain garden at Delaware Street and Grand Avenue has progressed, and the majority of the construction work will occur in Spring 2012.





Construction Photos – (L to R) – Manhole Installation, Brook Box Culvert Installation, Interceptor Installation



Construction Photos – (L to R) Herriman Street Pavement Restoration 1 and 2, Interceptor Installation



New HBIS Alignment through Skunk City (in yellow)

Version 11/30/2011



FACT SHEET

Lower Harbor Brook CSO Storage and Conveyances Project

Project:	Lower Harbor Brook CSO Conveyances & Storage
Project Owner:	Onondaga County
Project Location:	State Fair Blvd., Syracuse
Sewershed:	Harbor Brook
Technology:	Underground Tank
Capacity:	4,900,000 gallons
CSO Capture:	55,000,000 gal/yr
# CSOs Abated:	3
Completion Date:	12/31/13
Contract Amount:	Conveyances – \$4,147,888
Estimated Cost:	Storage – \$30,082,000
Bid Date:	Conveyances – 8/30/11 Storage – 10/18/11
Prime Contractor:	Conveyances – J.J. Lane Storage – C.O. Falter

Project Description: The Lower Harbor Brook CSO Conveyances and Storage Facility Project is a 4.9 million gallon combined sewer overflow storage facility that will be located on County owned property on State Fair Boulevard between Hiawatha Blvd. and West Genesee Street in the City of Syracuse. The facility will capture and store the overflows from CSOs 003, 004 and 063 for up to the 1-year, 2-hour design storm event. After the storm event subsides, the contents of the storage tank will be pumped to the existing Harbor Brook Interceptor Sewer for conveyance to the Metropolitan Treatment Plant (Metro) for full treatment. The project also includes construction of CSO conveyance pipelines on State Fair Blvd., Hiawatha Blvd., and Erie Blvd. to convey combined sewage from the overflow regulators to the storage tanks during rainfall and snowmelt events. Floatables and grit removal will be included in this facility. Odor control provisions will be incorporated into the facility design and the tank will be completely enclosed.

Green Components: To further enhance the sustainability of the facility, the project includes green infrastructure components. The stormwater runoff from the rooftops of the storage tank and controls building will be stored within the CSO storage tank and used for a second and third cleaning flush of the tank. This water will ultimately be treated at Metro eliminating the need for this stormwater to be treated on-site. The stormwater storage is designed to capture the 100-year storm (5.2 inches) from the tank and the control building rooftop.

Project Update: The contractor began work on the Lower Harbor Brook Conveyances project in November 2011. Also, the US EPA completed the draft NEPA document in November and will release the document for public comment in December 2011. The EPA has approved the award of the contract to Joseph J. Lane Construction, Inc.

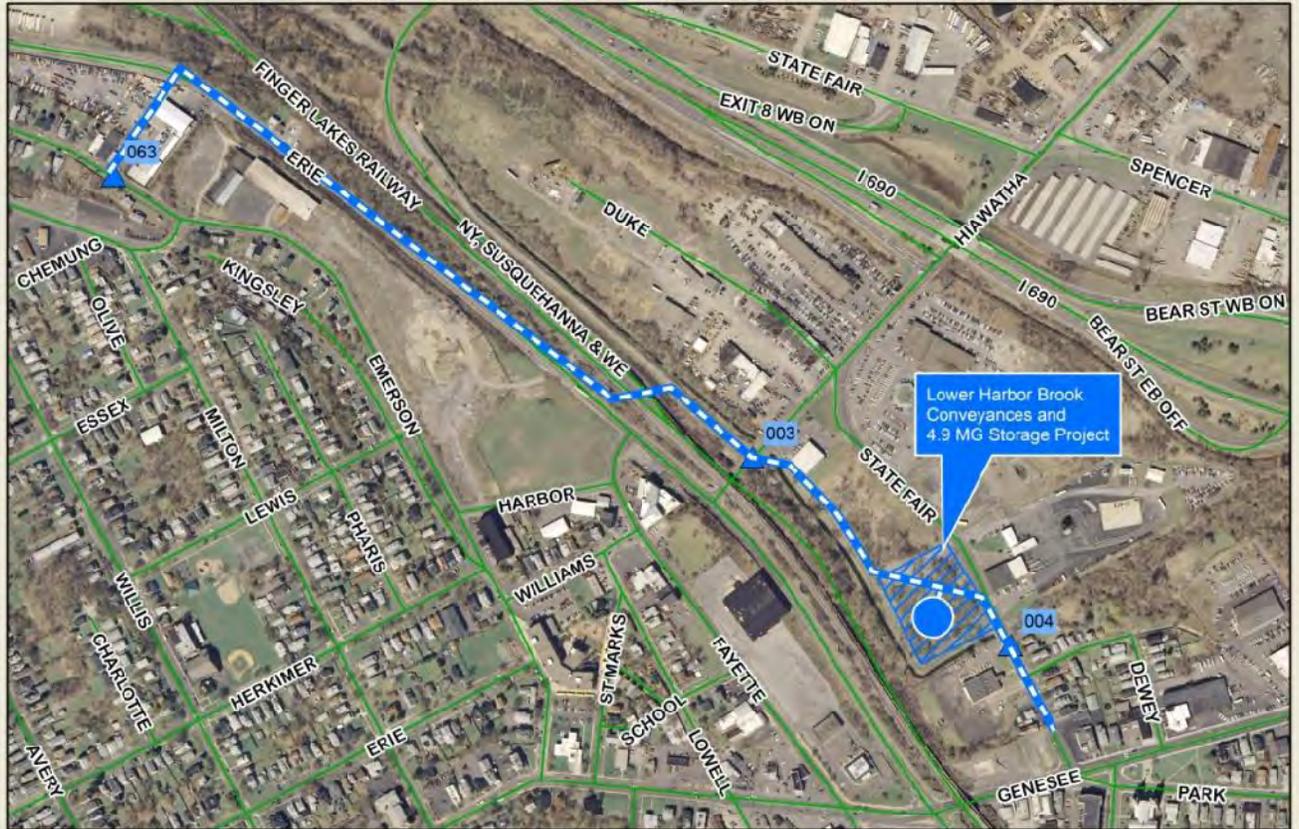
A post-bid meeting for the Lower Harbor Brook CSO Storage Facility project was held with C.O. Falter Construction Corp.; bids were evaluated and the Notice of Intent to Award is being sent to the contractor. The US EPA also completed the draft NEPA document for the storage facility and will release the document for public comment in December 2011. The EPA has approved the award of the contract to C.O. Falter Construction Corp.



Lower Harbor Brook CSO Storage Facility – View from State Fair Boulevard



Lower Harbor Brook CSO Storage Facility – View from the Northeast



Lower Harbor Brook CSO Storage and Conveyances Project Area

GREEN PROJECTS UPDATE

Green Projects Update:

The Save the Rain 'Project 50' campaign is beginning to wind down with the conclusion of the 2011 construction season. The campaign has been a tremendous success with **sixty projects** completed this construction season. Completed this month were the OnCenter surface parking lot, Sunnycrest Arena parking lot, and the downtown streetscaping on the 200 block of Water Street.

Additionally, several projects were able to commence construction this month due to an uncharacteristically warm November. Green infrastructure installations at Dr. Week Elementary began, as well as work on the vacant lot at 701 Oswego Street.

Planning for the 2012 construction season has begun for projects that did not progress to the construction stage in 2011. Additionally, work continues to be made to identify potential projects and strategic partnerships for 2012.

Save the Rain Project 50 Status Summary

Projects Completed	24
Projects Under Construction	30
Projects in Contract Phase	2
Projects in Bid Phase	2
Other Projects	2
Total Projects (as of 11/29/11)	60

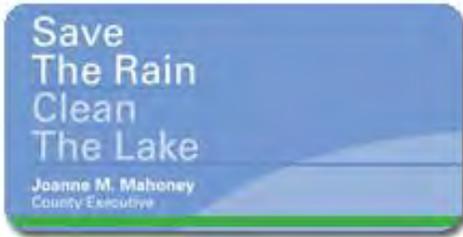
Green Projects Planned for 2012 Summary

Final Design	3
Projects in 90% Design Phase	7
Projects in 50% Design Phase	5
Projects in Fieldwork Phase	13
Projects in Concept Phase	19
Projects to be Procured by Others	2
Total Projects (as of 11/29/11)	49

More information on green projects can be found at www.savetherain.us/green-projects.

Save the Rain - PROJECT 50

	Project	GI Technology	Cost	Capture (gal/yr)
Completed Projects:				13
1	Townsend Median Phase 1	Bioretention	\$86,000	317,000
2	Townsend Median Phase 2	Bioretention	\$43,000	53,000
3	OnCenter Green Roof	Green Roof	\$1,038,000	1,033,000
4	OnCenter Surface Lot	Porous Pavement	\$812,000	2,360,000
5	War Memorial Cistern System (Phase 1)	Stormwater Reuse Cistern	\$1,229,241	400,000
6	Tree Plantings in Woodcourt Lawn	Tree Plantings	\$0	250,000
7	Concord Place	Green Street	\$78,900	955,000
8	Geddes St Road Recon	Bioretention	\$203,000	523,000
9	R.G. Zoo - Elephant Exhibit	Green Roof	\$183,900	114,000
10	Bellevue Academy	Tree Plantings	\$0	20,000
11	Street Tree Contract A	Tree Plantings	\$61,176	600,000
12	Rain Barrel Program 2011	Rain Barrels	TBD	TBD
13	Sunnycrest Arena Parking Lot	Porous Pavement	\$407,000	1,876,000
Completed GIF Projects:				9
14	Monroe Building	Green Roof	\$99,311	91,581
15	Skiddy Park - Courts4Kids	Porous Pavement	\$164,674	344,400
16	Spa at 500 W. Onondaga	Bioretention	\$60,000	150,000
17	CNY Philanthropy Center	Green Roof, Bioretention, Porous	\$62,700	3,718,990
18	Hotel Skyler	Porous Pavement, Cistern	\$100,000	173,000
19	<i>Vibrant Spaces*</i>	Porous Pavement, Bioretention	\$153,618	440,000
20	<i>Putnam Properties*</i>	Green Roof	\$75,757	81,000
21	<i>CNY Regional Transportation Authority*</i>	Infiltration Trench	\$65,390	1,243,000
22	<i>Matawon Development Group*</i>	Infiltration Trench	\$24,214	73,600
<i>* Will be completed by the end of the calendar year</i>				
Other Projects				4
23	Barnabas Ctr - Onondaga Earth Corps Demo	Rain Gardens, Green Wall	TBD	TBD
24	Bishop Foery - Onondaga Earth Corps Demo	Rain Gardens, Rain Barrels	KD	KD
25	Everson Garage (in cooperation with OCFM)		TBD	TBD
26	Atrium Garage Cistern	Stormwater Detention Cistern	\$15,000	38,400
Construction Phase:				30
27	OnCenter Garage	Bioretention	\$234,000	1,277,000
28	Harrison Street	Green Street	\$121,213	180,000
29	Connective Corridor Phase 1 Contract 1	Green Street	\$948,717	5,742,000
30	Connective Corridor Forman Park	Landscape Enhancement	\$50,000	121,000
31	Erie Canal Museum Green Roof	Green Roof	\$73,480	39,000
32	Downtown Streetscapes - 200 block E. Water St.	Enhanced Street Trees	\$230,000	300,000
33	Downtown Streetscapes - 200-300 blocks	Enhanced Street Trees		
34	SCSD Institute of Tech	Separation	\$0	2,251,000
35	Water Street Gateway	Infiltration Trench & Porous Pavers	\$975,000	924,000
36	Otisco St Green Corridor Phase 1	Green Street	\$1,413,732	2,240,845
37	SUNY Upstate Green Roof	Green Roof	\$0	211,000
38	SUNY Upstate Rain Garden/Trees	Rain Garden/Trees	\$0	65,000
39	SUNY Upstate - IHP	Tree Trench	\$0	18,000
40	Rain Garden at Seymour School	Rain Garden	TBD	TBD
41	Greening the Gray - Clinton Storage	Bioretention & Green Separation	\$0	5,152,000
42	Skiddy Park Enhancements	Porous Pavement	\$194,000	898,000
43	Sunnycrest Golf Parking Lot	Bioretention	\$362,599	987,324
44	County Board of Elections Bldg	Bioretention	\$0	114,000
45	Hazard Library Green Roof	Green Roof	\$67,275	88,000
46	Avery Ave at Pass Arboretum	Rain Garden	\$316,420	746,000
47	Wilbur Ave Zoo Entrance	Rain Garden	\$299,990	680,000
48	Delaware Rain Garden (Grand & Delaware St.)	Rain Garden	\$0	TBD
49	Greening the Gray at Harbor Brook	Bioretention & Porous Pavement	\$0	305,000
50	Harbor Brook (CSO18) Treatment Wetland -	Treatment Wetland	\$260,000	20,957,746
51	Greening the Gray - Basin 044	Downspout Disconnection	\$0	69,000
52	SCSD Hughes Magnet School Parking Lot	Porous Pavement	\$288,700	1,504,000
53	Street Tree Contract B	Enhanced Street Trees	\$61,176	600,000
54	SCSD Dr. Weeks Elementary	Rain Garden	TBD	1,474,647
55	Vacant Lot Project: 701 Oswego Street		\$85,214	236,619
56	SCSD Central Offices Parking Lot	Infiltration Beds	\$403,500	2,036,619
Contracting Phase:				2
57	Connective Corridor Phase 1 Contract 2	Green Street	TBD	2,494,366
58	E. Water Street Pavement Removal	Pavement Removal	\$124,000	768,000
Bidding Phase:				2
59	Pocket Park at W. Genesee & N. Clinton	Porous Pavement & Bioretention	\$105,000	125,000
60	Greening the Gray at Basin 045	Downspout Disconnection	\$0	69,000
Total:			\$11,576,897	67,529,184



FACT SHEET

Downtown Streetscapes

Project:	Downtown Streetscapes
Project Owner:	City of Syracuse
Project Location:	300 Block of Montgomery St. & 200 Block of E Water St.
Sewershed:	Clinton/Lower MIS
GI Technology:	Enhanced Street Trees
Capture Area:	17,000 sq. ft.
Run-off Reduction:	300,000 gal/yr
Year Completed:	2011
Construction Cost:	230,000
Bid Date:	8/9/11
Prime Contractor:	Davis Wallbridge

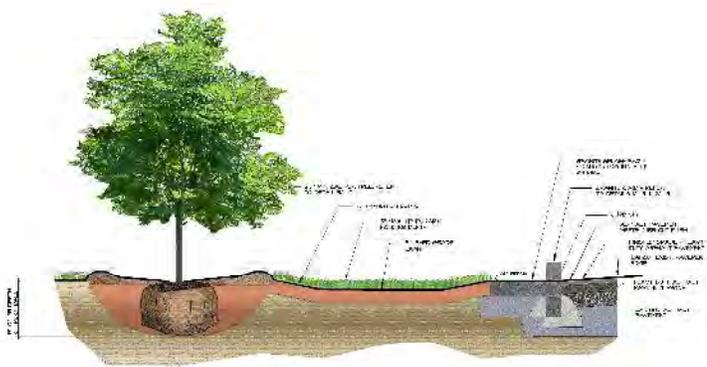
Project Description: Onondaga County is working with the City of Syracuse to develop streetscape improvements on E. Water and Montgomery streets. The designs include the planting of enhanced street trees in the right-of-way and curb extensions at the intersections of S. Salina & Montgomery streets.

The enhanced tree pit design provides a wide storage and soil trench area for trees to maximize stormwater intake. This enhanced tree system will have a dramatic effect on the growth, vitality, and lifespan of the tree.

The project is part of the Save the Rain Urban Forestry Program that will plant over 8,500 trees by 2018 and is part of the long-term strategic vision for a green corridor along E. Water Street from S. Warren Street to Erie Boulevard.



Enhanced Street Trees - 200 Block E. Water St.
Above – Facing Montgomery St.; Below – Facing Warren St.



Example of Enhanced Tree Pit Detail





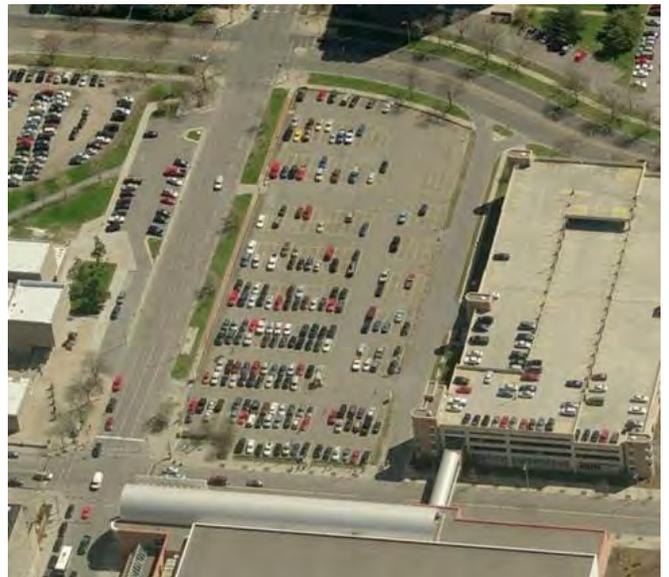
FACT SHEET

OnCenter Surface Parking Lot

Project Description: This project will take place at the existing surface parking lot across the street from the site of the historic War Memorial Arena. The OnCenter is home to countless entertainment attractions for local, regional, and national audiences. Since 1992, the OnCenter has been the premiere convention location for the region.

The OnCenter Surface Lot is the site of a stormwater retrofit project that will repave the existing parking lot with porous asphalt. In addition to the pavement resurfacing, the project features the design and construction of an infiltration trench along three sides of the parking lot to manage runoff from the entire lot as well as from adjacent streets. The project also features a new tree infiltration trench and a new section of sidewalk.

Project:	OnCenter Surface Lot
Project Owner:	Onondaga County
Project Location:	801-813 S. State St.
Sewershed:	Clinton/Lower MIS
GI Technology:	Porous Pavement, Tree Trench
Capture Area:	134,000 sq. ft.
Run-off Reduction:	2,360,000 gal/yr
Year Completed:	2011
Construction Cost:	\$812,000
Bid Date:	7/21/11
Prime Contractor:	Economy Paving



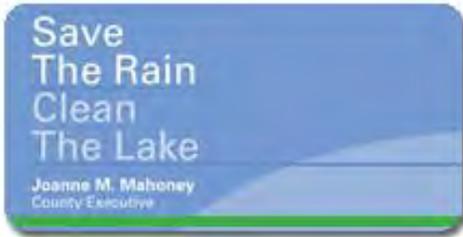
OnCenter Lot Before Construction



Porous Asphalt



OnCenter Lot After Construction Complete



Project:	Dr. Weeks Elementary School
Project Owner:	Syracuse City School District
Project Location:	710 Hawley Ave
Sewershed:	Clinton/Lower MIS
GI Technology:	Bioretention
Capture Area:	124,000 sq. ft.
Run-off Reduction:	2,177,000 gal/yr
Year Contracted:	2011
Construction Cost:	TBD
Prime Contractor:	Fahs Construction

FACT SHEET

Syracuse City School District Dr. Weeks Elementary School

Project Description: The Dr. Weeks Elementary School Project will include green infrastructure enhancements in conjunction with an existing project at the school managed by the Joint School Construction Board (JSCB). The JSCB will be implementing a wide-range of retrofit enhancements to the school building and property with the Save the Rain Program providing green infrastructure improvements.

The project consists of two bioretention areas that are designed to capture runoff from nearly all of the impervious area surrounding the site. This includes all of the paved areas in and around the playground and the parking lot adjacent to the school. In total, this project will prevent 2,177,000 gallons of stormwater from entering into the combined sewer system annually.

This project entered the construction phase in November 2011 and is expected to be completed in 2012.



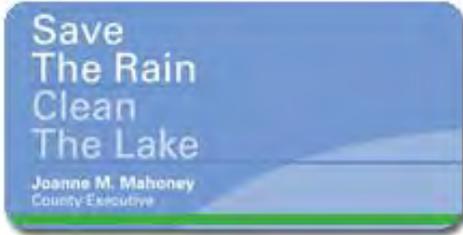
Aerial View of Dr. Weeks Elementary School Before Construction



Conceptual Rendering of Dr. Weeks Elementary School Green Infrastructure

Version 11/30/2011





FACT SHEET

Sunnycrest Park Arena Parking Lot

Project Description: The project will take place at the existing surface parking lot located at the Sunnycrest Park Arena, adjacent to Henninger High School.

The existing asphalt surface will be replaced with porous asphalt parking spaces in the center section of the main parking area and along the outer parking stalls of the baseball field. In addition, the project will include enhanced street plantings (28 trees) and two bioretention areas designed to capture flow from the standard pavement portion of the parking lot.

The Sunnycrest Arena Parking Lot Project is one of the most cost-effective green parking lot projects in the Save the Rain program. Estimated capture is close to 2 million gallons annually.

Project:	Sunnycrest Arena Lot
Project Owner:	Syracuse Parks Dept.
Project Location:	Robinson St.
Sewershed:	Clinton /Lower MIS
GI Technology:	Porous Pavement, Bioretention
Capture Area:	107,000 sq. ft.
Run-off Reduction:	1,876,000 gal/yr
Year Completed:	2011
Construction Cost:	\$407,000
Bid Date:	8/16/11
Prime Contractor:	Ruston Paving



Conditions Prior to GI Project



Aerial Photos of Sunnycrest Arena Parking Lot – Before Construction (Left) and During Construction (Right)

Version 11/30/2011





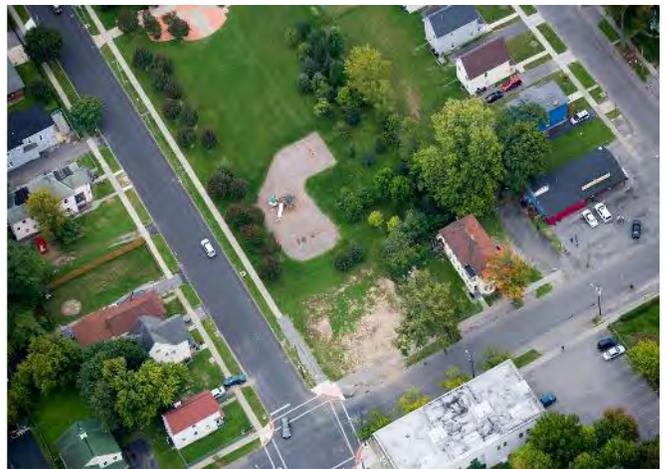
FACT SHEET

Vacant Lot Project: 701 Oswego St.

Project Description: The Vacant Lot Oswego Street Project will be the first vacant lot completed in the Save the Rain campaign. The vision of the Vacant Lot program is to convert City-owned empty lot properties into useable spaces for public benefit. This vision also provides the opportunity for stormwater management and capture at vacant lot sites. The Oswego Street project involves the installation of two infiltration trenches designed to capture stormwater from Oswego and Shonnard streets via existing stormwater infrastructure. The existing catch basins along both streets will be utilized for conveying stormwater into the infiltration trenches. Also included in this project is the construction of an urban garden which will consist of apple and peach trees as well as berry bushes.

This green infrastructure is designed to capture up to 1" of rainfall at a given time, reducing annual stormwater runoff by approximately 259,000 gallons.

Project:	Vacant Lot – Oswego St.
Project Owner:	City of Syracuse
Project Location:	701 Oswego St.
Sewershed:	Clinton/Lower MIS
GI Technology:	Infiltration Trenches, Urban Garden
Capture Area:	15,000 sq. ft.
Run-off Reduction:	259,000 gal/yr
Year Completed:	2011
Construction Cost:	\$88,000 (<i>Engineer's Estimate</i>)
Bid Date:	10/7/11
Prime Contractor:	TBD



**Aerial View of Vacant Lot
Prior to Construction**



Rendering of vacant lot after green infrastructure installation
(*Conceptual rendering: Atlantic States Legal Foundation*)

Version 11/30/2011



GREEN IMPROVEMENT FUND

Green Improvement Fund Update:

Green Improvement Fund Program Summary

The Save the Rain Green Improvement Fund Program continues to provide business owners and nonprofit property owners grant opportunities for the installations of green infrastructure solutions on privately-owned properties.

During the month of November the committee received several additional grant applications, bringing the total number of projects to date to 62. Below is a summary and current status of grant applications for the program:

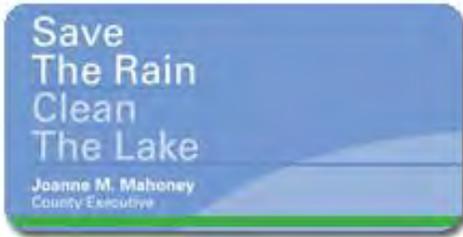
Green Improvement Fund Summary

Applications Received	62
Applications Approved	48
Applications Denied	5
Applications Pending	9
Projects Under Contract	20
Projects Completed (2011)	8
Projects Completed (2010)	7

The green improvement projects can be found at www.savetherain.us/gifprojects.

COMPLETED GIF PROJECTS – NOVEMBER 2011

PROJECT	GI Technology	GIF Award	Annual Capture (gal/yr)
The Spa at 500 W. Onondaga	Bioretention	\$60,000	150,000
Syracuse Model Neighborhood Corporation (Salina)	Rain Gardens	\$250,000	387,000
Jefferson Clinton Commons	Porous Pavement, Green Roof	\$100,000	299,000
King and King Architects	Green Roof	\$100,000	197,000
Hotel Skyler	Porous Pavement, Cistern	\$100,000	173,000
Dunbar Association	Porous Pavement	\$100,000	225,000
SUNY ESF Residence Hall	Infiltration Trench, Cisterns, Bioswales	\$78,000	62,000
Near Westside Initiative (Lincoln Building)	Infiltration Trenches, Tree Planters, Bioretention	\$78,000	476,000
The Monroe Building	Green Roof	\$99,311	91,500
Near Westside Initiative (Artist Studio)	Porous Pavement, Rain Garden, Infiltration Basin	\$22,769	130,000
St Lucy's Church	Porous Pavement	\$125,000	246,000
Courts4Kids: Skiddy Park (Jim & Juli Boeheim Foundation & Carmelo K. Anthony Foundation)	Porous Pavement	\$164,474	344,400
Putnam Properties, Inc.	Green Roof	\$75,757	81,000
Vibrant Syracuse Spaces	Porous Pavement, Bioretention	\$153,618	440,600
TOTAL		\$1,506,929	3,302,500



Project:	Putnam Properties
Project Owner:	Private
Project Location:	212 E. Fayette Street
Sewershed:	Clinton
GI Technology:	Green Roof
Capture Area:	4,600 sq. ft.
Run-off Reduction:	81,000 gal/yr
Year Completed:	2011
GIF Award:	\$75,757

FACT SHEET

Putnam Properties

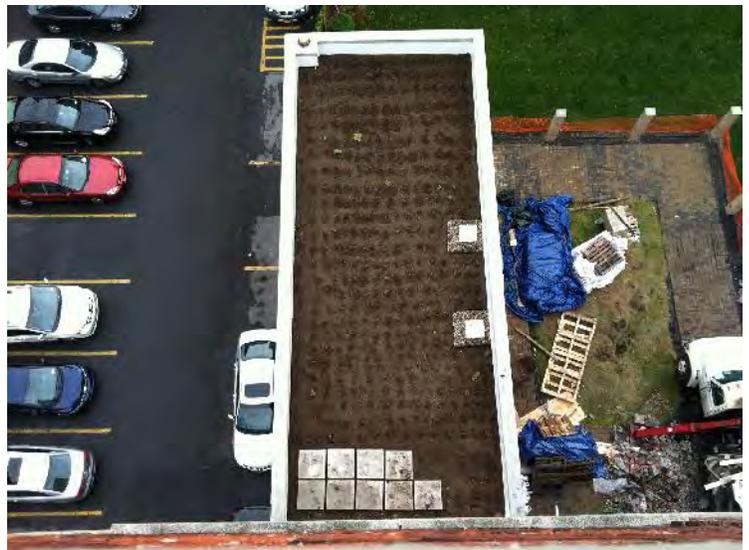
Project Description: The Putnam Properties building is located at 212 East Fayette Street next to the HSBC Building and Lincoln Center.

The project will include the construction of a 3200 square foot green roof that will be implemented to capture up to 2 inches of rainfall per wet weather event. The project also includes a second level of capture on a rooftop area adjacent to the Putnam Properties building.

The Putnam green roof is estimated to capture approximately 81,000 gallons annually and will act as a demonstration project in the downtown corridor with sections of the roof visible to occupants of the HSBC Building, the Hills Building, One Park Place, and Lincoln Center.



Green Roof Planting



Adjacent Section Green Roof



FACT SHEET

Vibrant Syracuse Spaces

Project Description: The Vibrant Syracuse Spaces project located at 196 South Geddes Street is a total conversion of an existing impervious, unused lot to a parking lot for Gear Factory Inc.

The project will include the creation of a 10,000 square foot parking lot utilizing porous pavement to capture stormwater run-off. Additionally, the project will include capture in the city right-of-way section of the property. Approximately 4,500 square feet of new sidewalk and right-of-way sections will be added that will include bioretention areas and tree plantings. In total, the Vibrant Syracuse Spaces Project will capture an estimated 440,000 gallons annually.

Another unique aspect of the project is the manner in which it has come to realization. The applicant has worked closely with both the County and the City of Syracuse to maximize the capture potential of the project. Plans for the private property section were fully vetted for maximum capture while the right-of-way work was fully developed after an extensive collaboration with the City of Syracuse Department of Public Works.

Version 11/30/2011

Project:	Vibrant Syracuse Spaces
Project Owner:	Private
Project Location:	196 S. Geddes Street
Sewershed:	Harbor Brook
GI Technology:	Porous Pavement, Bioretention
Capture Area:	14,510 sq. ft.
Run-off Reduction:	440,600 gal/yr
Year Completed:	2011
GIF Award:	\$153,618



Porous Concrete Parking Lot (Street View)



Sidewalk Bioretention section

**METRO WWTP PHOSPHORUS
PROJECTS/TMDL/AMBIENT
MONITORING PROGRAM
UPDATE**

Metro WWTP Phosphorus Projects/TMDL/Ambient Monitoring Program Update:

Metro Phosphorus Optimization Project

- Revised report incorporating NYSDEC comments transmitted to NYSDEC/ASLF on November 15, 2011.

Metro Phosphorus Work Plan Project

- Financial capability analysis completed on November 9, 2011.
- Preparing final report due to NYSDEC on December 31, 2011.

Onondaga Lake Water Quality Model/TMDL

- Awaiting peer review comments of "Phase 3 Model Validation - Onondaga Lake Water Quality Modeling Project" report, dated August 2011.
- Proceeding with additional model scenarios.

Ambient Monitoring Program

WATER QUALITY SAMPLING SUMMARY:

Tributary Sampling (November 2011)

- Tributary bacteria sampling events conducted on November 3 and 28.
- Tributary biweekly with high flow sampling event conducted on November 15.
- Tributary biweekly sampling event conducted on November 29.

Tributary Bacteria Compliance Assessment (October 2011)

- Bacteria in Compliance with the NYS Ambient Water Quality Standards (AWQS) for:
Bloody Brook at Onondaga Lake Parkway, Ninemile Creek at Lakeland Rt 48, Harbor Brook at Bellevue Avenue and Harbor Brook at Velasko Road.
- Bacteria in Non-Compliance for:
Onondaga Creek at Dorwin Avenue, Onondaga Creek at Kirkpatrick Street, Harbor Brook at Hiawatha Blvd., and Ley Creek at Park Street.

CSO 044 Conveyances Project (Groundwater Dewatering Sampling)

- Continued in-stream monitoring program for Chloride at two (2) bridge sampling locations related to the dewatering project, as required by NYSDEC.

Onondaga Lake Sampling (November 2011)

- Lake biweekly sampling event conducted on November 21.
- Lake fall turnover sampling event conducted on November 3 (during fall turnover).
- Lake quarterly (South and North Deep stations) sampling event conducted on November 8.

BIOLOGICAL MONITORING PROGRAM SAMPLING SUMMARY (November 2011)

No sampling events conducted in November 2011.

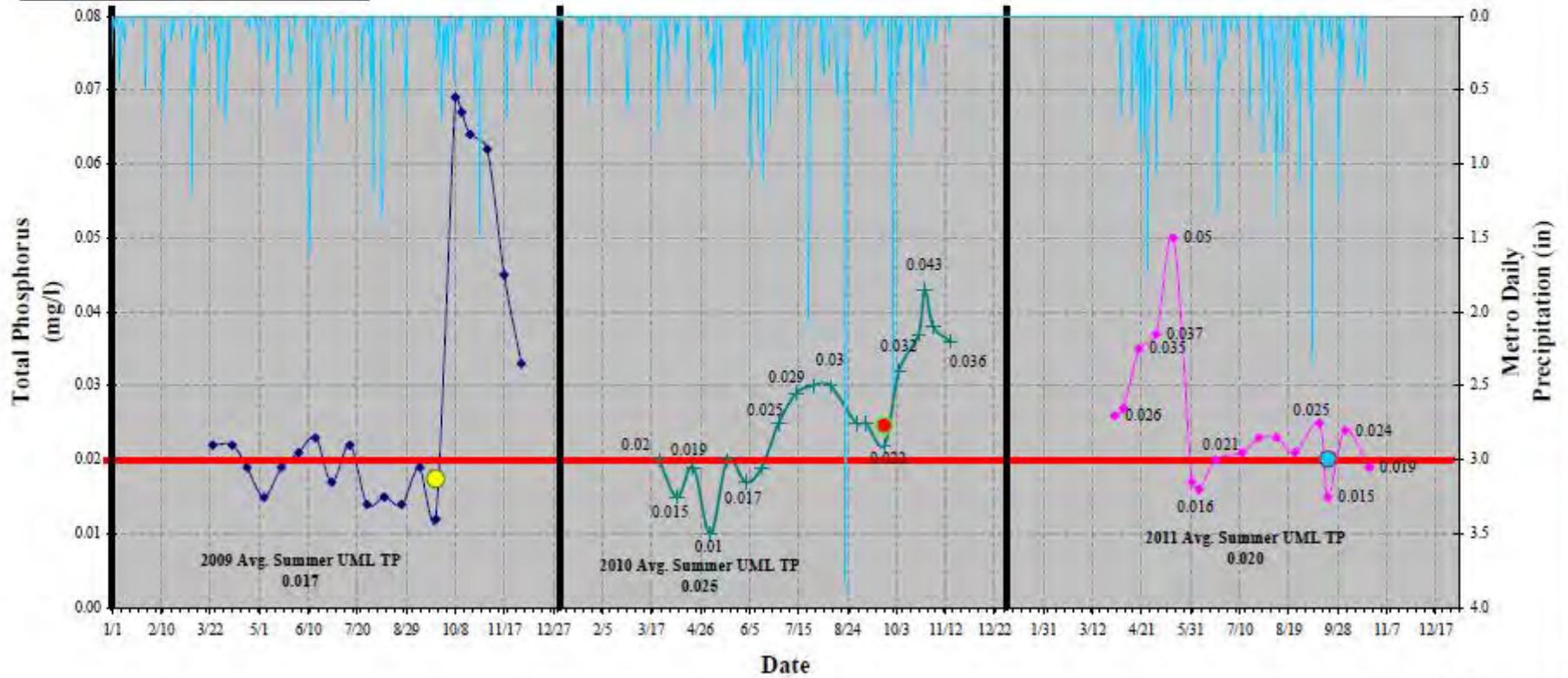
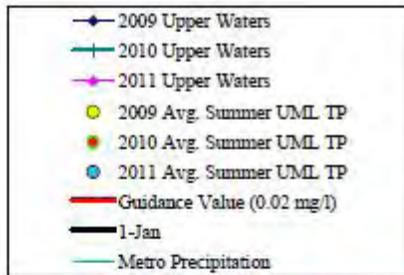
Onondaga Lake Water Quality - Preliminary Year-to-Date Results (2011)

- Ammonia N: Onondaga Lake waters continued to be in full compliance with the state ambient water quality standards for ammonia (all stations, all depths) designed to protect sensitive aquatic life; Metro continues to meet SPDES permit limits.
- Total Phosphorus: 2011 summer average TP (0.020 mg/l) met the NYDSEC guidance value of 0.020 mg/l (assessed June 1 - September 30). Metro continues to meet SPDES permit limits (modified Stage II limit, 0.10 mg/l). Metro estimated to contribute 17 percent of Total Phosphorus load in 2010, with watershed now the major TP source.
- Algal Blooms: There was a minor algal bloom early in the spring (likely to be diatoms), when TP was elevated following spring rains.
- Fecal Coliform: Only station exhibiting non-compliance with fecal coliform bacteria standard is near outlet of Onondaga Creek (Class C segment).
- Dissolved Oxygen (fall turnover): The restoration goal for Onondaga Lake to meet the NYSAWQS for DO during fall mixing continued to be met in 2011, and Dissolved Oxygen levels stayed above the 5.00 mg/l (daily average) and 4.00 mg/l (instantaneous minimum) standards based on lake fall turnover evident on 11/3 at South Deep station.
- Nitrate: Nitrate remaining high in deep waters, no evidence of SRP release from bottom sediments despite development of seasonal anoxia. Honeywell's pilot scale project for the deep water nitrate addition started in June 2011 and is a lake-wide basin experiment.

Onondaga Lake - South Deep Upper Waters Total Phosphorus 2009-2011

Note: Last result is from the 10/24/2011 Sampling event.

NOTE: Upper waters= 0m, 1m, and 3m samples
Avg. Summer UML TP period is June-September.



**LEGISLATIVE / REGULATORY /
MEDIA UPDATE**

Legislative/Regulatory Update:

Action Items for the County Legislature in the Month of November

- A resolution calling a public hearing in connection with proposed improvements for the A resolution authorizing the County Executive to enter into a contract with the U.S. Department of the interior for the operation and maintenance of stream gauging stations. (\$76,780.00)

Action Items for the Environmental Protection Committee in the Month of December:

- Lake Improvement: ACJ update.
- A resolution amending the 2011 Onondaga County budget to increase appropriations within the Department of Water Environment protection and to accept additional revenue. (\$735,000)

2011 PUBLIC OFFICIALS OF THE YEAR

The Eco-Emissary

Joanie Mahoney

County Executive, Onondaga County, N.Y.



There is a long and discouraging political tradition in upstate New York. Put bluntly, it says counties surrounding places like Rochester, Schenectady and Buffalo should leave those cities to struggle on their own with severe job losses, eroding tax bases, failing school systems, brownfield sites and polluted waterways.

So when someone like Onondaga County Executive Joanie Mahoney says, “Our region will thrive only if Syracuse thrives,” it deserves attention.

Since taking over as county executive in January 2008, Mahoney, a Republican, has pursued a remarkable and sustained effort to partner with Syracuse officials on getting a wide variety of big and important jobs done. Her goal is a healthier Syracuse, creating a thriving city at the heart of what is a mostly rural county.

“Most people will say that it’s important to our region to have a healthy and vibrant city, but too often that’s just lip service,” says Syracuse Mayor Stephanie Miner, a Democrat. “Joanie makes decisions that reflect that.”

Probably the most prominent of Mahoney’s Syracuse-friendly decisions, though, was to push back on a U.S. Environmental Protection Agency (EPA) consent order aimed at cleaning up Syracuse’s Onondaga Lake, considered to be one of the most polluted in the country.

The initial deal worked out with the EPA had been to build three sewage treatment plants downtown. “I just didn’t feel that building those three plants in three different downtown neighborhoods was being respectful of the city,” says Mahoney.

<http://www.governing.com/poy/joanie-mahoney.html>

One of her first initiatives as county executive was successfully renegotiating the consent order so that the city and county could work together on a much greener approach to preventing sewage and runoff from spilling into the lake.

Called Save the Rain, the effort has involved dozens of projects from planting green roofs on municipal buildings, to ambitious and wide-scale landscaping plans, to numerous other efforts to reduce impervious surfaces citywide.

Besides Save the Rain, which has become a national model for a green approach to dealing with overloaded sewer systems and toxic runoff, she has helped craft the county's first long-range sustainability plan. She also pushed for and won a new fiscal arrangement whereby all local sales taxes go to the county's coffers, not only to shore up county finances, but also as a way to directly share that revenue with Syracuse.

Looking at the breadth and depth of Mahoney's accomplishments and the partnerships she has forged begs the obvious question: What makes her so effective? "Joanie will always tell you what she plans to do and why, and then you can take it to the bank and trust her," says Miner. "And even when she has to make difficult decisions that she knows are going to be subject to backlash, she does what she believes is right."

— Jonathan Walters
Photo by David Kidd

Watch Joanie Mahoney explain her proposed 2012 budget to The Post-Standard in this clip.



<http://www.governing.com/poy/joanie-mahoney.html>

NOVEMBER

fact of the month

Electronic waste (e-waste) is one of the fastest growing components of the waste stream. According to the EPA, 25% of electronics were collected for recycling in 2009, with computers collected at the highest rate (38%).

Save the world a little each day.

See how at



E-WASTE

E-waste contains toxic heavy metals and should NOT be thrown in the trash. Do your part and recycle your personal electronics. It is easy and FREE! For a list of the many local places you can recycle your household electronics, visit: <http://tinyurl.com/66gyjeh>

ICE MADE FROM CAPTURED RAIN WATER

When the puck hits the ice for the Syracuse Crunch games, it will be made of rain water. Through a partnership with Howard Dolgon, owner of the Syracuse Crunch, the County's Save the Rain program is helping make the ice in the War Memorial from recaptured rain water. The innovative water reuse system will store approximately 15,000 gallons of water. The technology filters and disinfects the water, heats or cools it and pumps it to the various stations for the intended use. This system will also eventually include provisions for common area maintenance such as building cleanings, exterior washings, laundry, and irrigation of the new green roof at the convention center during dry spells.



ONCENTER GREEN ROOF

Through County Executive Joanie Mahoney's Save the Rain program, a green roof was recently installed at the OnCenter. The 60,000+ square foot rooftop of the Convention Center is one of the largest green roofs in the Northeast. The green roof will capture up to one million gallons of storm water annually, but it will also provide the added benefit of reducing the Convention Center's annual heating and cooling bills. The design consists of a waterproof membrane liner that is covered with a layer of lightweight growing medium, and planted with a mix of sedums (low-growing succulent vegetation). The new rooftop landscape is a self-sustaining system, requiring little maintenance once established, and relies upon natural processes to retain and evapotranspire storm water runoff.



UPGRADE MOVES PASS FORWARD

The tranquil beauty of lovely Pass Arboretum, one of the city's most natural parks, has recently been disrupted by a work crew with back hoes and bulldozers. The project under way, construction of two rain gardens, represents the most fundamental change to the 12-acre tree preserve in decades, providing both beautification in the park and relief from storm-related problems in its Tipperary Hill community.

Pass Arboretum is tucked inside the city's western border with the town of Geddes, diagonally opposite Burnet Park. The ground has been excavated just inside the fence along Avery Avenue to make way for the rain gardens, which will convert a grassy gully into 11,000 square feet of flowers, plants and landscaping.



“The purpose of these rain gardens is basically to collect stormwater and prevent it from running into the sewer system,” explained B.J. Adigun, program coordinator for CH2M Hill, the firm that is acting as a consultant for Onondaga County on its Save the Rain program. “The green infrastructure portion of the project being done at Pass Arboretum is what we call a decentralized project. They’re going to be able to prevent as much stormwater from going into the sewer system as possible, which results in less combined sewer overflow. During heavy rain and snowmelt events, the capacity of the water entering the sewer system sometimes allows for backup into Onondaga Lake and its tributaries. The less water we get into the sewer system during rain events and snowmelt events, the less likely we are to have these combined sewer overflow events.”

Upon completion of the project, scheduled for mid- to late-November, water produced by rain and melting snow that occurs naturally in and around the park will be diverted into the garden areas, with overflow funneled into an underground drainage system. “The system is only designed to take so much water over a given period of time,” Adigun said. “In the event of a very large storm, we don’t want flooding or ponding to become a big issue, so we have overflow catch basins. Once the water rises to a certain level, all of that water would flow into the sewer.”

The rain gardens are designed to add to the charm of Pass Arboretum, diminished in recent years by some loss of older trees due to storm damage and attrition. “We know that that space is right now trafficked and basically used as a park,” Adigun said. “We think this rain garden will basically enhance that park-like setting and provide some nice, natural viewing. So it’s a great collaboration and it’s something that’s going to allow us to be able to capture stormwater, but at the same time improve the aesthetics there and provide value to the park as well.”

Tipperary Hill Neighborhood Association president Janice McKenna is looking ahead to more beautification efforts at the arboretum after completion of the rain gardens. “The neighborhood association is thrilled with the whole concept,” McKenna raved. “It’s going to be beautiful with flowers and it’s going to help a lot with drainage in the neighborhood. Anybody who lives on lower Tipperary Hill knows what it’s like in a big rain to have all this rain come gushing down the hill, and this is going to divert up to a million gallons of rainwater a year. It’s going to be great for our environment, great for our roads and it’s going to be beautiful.”



Planners, conscious of the neighbors’ strong affinity for the rolling landscape of the little park, sought community approval early in the project. “The consultants attended our July meeting to present the plan because they were looking for neighborhood buy-in,” McKenna recalled. “They wanted to make sure that the neighborhood would be behind this. Everybody, 100 percent of the people there, was thrilled about this project. At the initial meeting there was someone there from historic preservation because the park has a lot of restrictions as far as what you can do there. I think it’s because it was a gift from the Pass family.”

Those restrictions come from the original deed transferred by Adelaide Pass, the widow of James Pass, Onondaga Pottery Company president and partner in Pass and Seymour, when she donated 12.1 acres to the city of Syracuse in 1925 in memory of her late husband. The deed stipulated that the property, to be known as James Pass Arboretum, be maintained as an arboretum and not used for recreational purposes.

The neighborhood association helped introduce the plan for gardens to neighbors who attended the Tipp Hill neighborhood picnic at Pass Arboretum in August with photos of some of the flowers that will be planted. “We did get some emails from people who hadn’t attended the meeting or the picnic wondering what was going on there,” McKenna said.

There has been an offer of a donation of park benches to place around the garden. McKenna added that such a gift would have to fit into the character of the arboretum. “We’re looking into a variety of styles that might fit in. We’re thinking stone because of the granite entrance posts.”

Placement of the gardens within the arboretum will not only provide a beautiful view to motorists and pedestrians passing along heavily traveled Avery Avenue, it will do so without infringing upon those who visit the greenspace as the sloping terrain is literally off the beaten path, in a lightly used part of the park. The late-season timing of the project gives Tipp Hill residents another reason to look forward to spring.

—Kevin Corbett



Local Syracuse parks get facelift

Posted on November 3, 2011 by Christopher Hein

Onondaga County's Save the Rain program plants over 20 trees in Union and DeMong Parks



Copyright 2011 Associated Press photo by Lee Reich

by Chris Hein – (Syracuse) If you were to drive by Union Park and DeMong Park in Syracuse, you might notice some changes. Both parks were upgraded this Thursday afternoon thanks in part to Onondaga County's Save the Rain program.

Volunteers ranging from area residents to the Onondaga Earth Corps and even the CommuniTree Stewards were on site lending a hand. Over 20 new trees were planted throughout both parks.

Volunteers were broken up into groups and given instruction by the Cornell Cooperative Extension of Onondaga staff members who were overseeing the event today. They were then stationed at trees in smaller groups and were able to plant the tree from beginning to end. Shovels, picks, and gloves were provided for everyone who showed up to the event today.

The ages of the volunteers ranged from small children to retired residents here in Syracuse. For the majority of the people, they had a great experience.

"This was great," said Tim Glisson who participated in today's event alongside with 14 of his 15 children. "We really enjoyed it. This is what every community needs."

<https://nccnews.expressions.syr.edu/?p=35109>

Helping to protect Lake Onondaga

Fran Lawlor, the Urban Forestry Educator at the Cornell Cooperative Extension of Onondaga, hopes the newly planted trees will help keep storm water out of sewers and even Onondaga Lake.

"The big rainfall events flood down the pavements, and they go into the sewer system and just flood the sewage treatment plant at the base of Onondaga Lake," said Lawlor. "The systems overwhelmed and raw sewage gets into the lake."

According to Lawlor, this has been a major problem here in Syracuse. With heavy rainfalls and even snow melting, the sewage system here in Syracuse tends to flood. When that happens, the water then overflows and runs into Onondaga Lake polluting it.

"Well no one is drinking out of Onondaga Lake," said Lawlor. "But it's serious, it was a world wide joke as one of the most polluted lakes in the world... It's a real goal to bring the lake back to good quality water."

How do the trees help prevent sewage flooding?

The Save the Rain program has developed what it calls an Urban Forestry program. What this program does is develops a robust tree planting strategy for neighborhoods throughout Onondaga County.

These tree plantings have such a huge impact on the area, because they help absorb rain water and reduce the potential run-off to the sewer system. Trees are able to soak up extra rain water because they use it to feed their root system.

This Saturday, the Save the Rain program will have another tree planting event. This time it will be in Schiller Park where over 85 trees will be planted. Over 100 volunteers are expected to turn out for the event.

Syracuse post office at Colvin-Elmwood station will stay open



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By Mark Weiner / The Post-Standard The Post-Standard

The U.S. Postal Service has decided to keep open the Colvin-Elmwood Post Office in Syracuse, in part because Onondaga County will pay for construction of a "green" roof on the building.

The post office at 2200 S. Salina St. was among 3,700 nationwide that the Postal Service included this summer on a list of those it might close to cut costs after a loss of \$8.5 billion in 2010.

But after several months of study, the Postal Service decided to keep open its only remaining post office on Syracuse's South Side.

"We have opted to take Colvin out of the study package for now," said Maureen Marion, a Postal Service spokeswoman. "At this particular juncture, for a lot of reasons we decided it didn't work in terms of being a savings to us."

Marion said the reasons included Onondaga County's agreement to install a green roof with vegetative cover on top of the building. The county will pay for the work as part of its Save the Rain program to reduce the flow of polluted water into Onondaga Creek and Onondaga Lake.

Marion said the vegetative roof could save energy costs for heating and cooling the post office.

"We thought it was the right thing to do as a good corporate citizen and for some savings ... for the facility," Marion said.

In addition, the Postal Service "didn't see a good, clean fit" for relocating more than 40 letter carriers who work out of the Colvin-Elmwood station, Marion said.

Marion did not know how much the new roof would cost. Marty Skahen, communications director for Onondaga County, confirmed the county plans to pay for the roof's installation in 2012. Skahen said he did not know the project's cost.

Postal Service officials who looked at the Colvin-Elmwood office also noted an increase in customer traffic since the closing in January of the Elmwood Station at 1225 South Ave.

South Side residents had circulated petitions to keep the Colvin-Elmwood office open. If it had closed, the nearest post office would have been downtown on South Salina Street.

While Colvin-Elmwood is now off the national list of the 3,700 post offices under consideration for closure, Syracuse still has one location that is a candidate for a shutdown. Postal Service officials are studying the potential impact of closing the Federal Station inside the James M. Hanley Federal Building in downtown Syracuse, Marion said.

She said it is possible that the Postal Service will hold a "community input" meeting if officials decide to move forward with closing the Federal Station. The station already has limited hours. It is open from 2:30 to 4:30 p.m. weekdays.

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http://www.syracuse.com/news/index.ssf/2011/11/syracuse_post_office_at_colvin.html



Rain Date

From downtown rooftops to urban back yards, the Save the Rain effort is spreading like an Antarctic glacier. Since the initiative really got going in late 2009 under a court order, it has seen 50 distinct green infrastructure projects implemented, all with the goal of retuning rainwater and snowmelt to the ground instead of the sewer system. On Wednesday, Nov. 16, Onondaga County Executive Joanie Mahoney invites the community to celebrate in that success.

“Fifty is a big number,” said Mahoney, “and I was hesitant to make the commitment that we would be able to do 50 public works projects in one year. It required the city to change a lot of the way things are done.” All 50 projects are within city limits, and standard operating procedure dictates a series of hoops needing to be jumped through in order to get just one project approved. Mahoney said she approached the Common Council and Mayor Stephanie Miner with an unusual request.

“I asked the mayor if we could present all 50 projects to the Common Council as a whole. The Council and mayor’s office have been very helpful in getting us to meet that goal. Keep in mind, though, that 50 projects will get us to about 20 percent of what we’re required to do. We still have a long ways to go, but still 2011 was very successful for us.”

One of the large projects involved the installation of a green roof atop the Monroe Building, 333 E. Onondaga St. Building owner Jeff DeRoberts, a local general practice attorney, learned about grant money available through Save the Rain to pay for the improvement.

“We had an engineer look at our roof,” he explained. “It fit the criteria because we have a ledge around the roof, so there is easy access, it’s easy to maintain and it’s flat. It was ideal for a green roof.” The project, which covers 5,000 square feet of the building’s top and took place in July, started with a “green” membrane atop the existing roof surface, covered by soil, and then plantings.

Those plants, grown specifically for rooftop installation, came from Motherplants in Ithaca. “The owner has developed a niche in the Northeast,” DeRoberts said, “growing specially formulated plants that grow in low soil. There’s only two to four inches of soil due to weight restrictions, and these plants are restricted in how big they get. Obviously we can’t plant oak trees.”

The green portion of the new roof cost \$99,000, DeRoberts said, and the grant money covered that. “The biggest expense is the green membrane that the soils and plants sit on,” he noted. “I got quotes from three different manufacturers and the one we went with was the cheapest.”

While the building wasn’t in need of a new roof, DeRoberts was intrigued by the green angle of the project, especially since the building’s Columbus Circle home routinely floods after a heavy rain. “Every spring at least once or twice, Columbus Circle gets flooded,” he said. “Heavy rains combined with the storm sewers that back up cause flooding in my basement nearly every spring. So, not only does this green roof eliminate the amount of water going into the street’s storm sewers, but I also paid for some additional sewer work in the basement.”

Of course, the city is swimming in inadequate storm sewers that overflow after a heavy rain and lead directly to Onondaga Lake—the very body of water the county is under orders to clean up. That’s why part of the Save the Rain project also included handing out rain barrels to city residents throughout 2011.

While the rain barrels aren’t counted among the 50 municipal projects, their introduction has been so successful that Mahoney said that initiative will roll over to 2012. “We will continue to hold the rain barrel classes, as long as the residents live in the areas targeted under the consent order, and they attend the class to learn how to use the barrel, they can get one.”

MacGarrett Becker is one such resident. He attended a paint-your-own rain barrel workshop at the Westcott Community Center in late May, and used the accumulated water all summer. “I felt like it was the right thing for the environment and a way to save water that was just running off my roof so I could use it to beautify my property,” he said. “We also follow our dog around, cleaning up after him, to prevent brown spots in the grass.”

After a summer with plentiful rain that kept the barrel amply supplied, Becker has emptied, broken down, dried and stored the vessel for the winter, following Save the Rain’s suggestions. “The guidelines say early May to mid-October,” he noted, adding that decorating his own barrel with an aquarium scene gave him a greater sense of pride in the effort.

“It’s not just a big ugly barrel in my back yard,” he said. “It’s a little piece of art.”

And while he’s experienced a slight decrease in his water bill, that wasn’t the reason he took a barrel home. “I just feel better about returning the water to the earth and not turning on the tap.”

The public is invited to celebrate the milestone Wednesday, Nov. 16, 5 to 8 p.m., at the Palace Theater, 2384 James St. There you can mingle with like-minded citizens as well as design professionals and Save the Rain representatives. Admission is free, while beverages will be available for purchase. RSVPs are requested to savetherain.eventbrite.com or by calling 443-3507.

“Since 1999, when I first held public office,” Mahoney said, “I’ve been looking to other communities for ways to do things, and now, with the Save the Rain project, to think that the rest of the country is looking to us makes me very proud.”

—Molly English-Bowers

<http://www.syracusenewtimes.com/newyork/article-5411-what%E2%80%99s-shakin%E2%80%99.html>

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Rooftops to Rivers: Syracuse, New York

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Joanie Mahoney, County Executive in Onondaga County, discusses Syracuse's efforts to clean up Onondaga Lake and overhaul the city's sewage and stormwater systems through green infrastructure. Instead of building more sewage plants, Syracuse plants rain gardens, and installs green roofs, porous pavement, and rain barrels. As a result, the city creates jobs and beautifies neighborhoods. Archie Wixson, Deputy Commissioner for Facility Management, also discusses the many ways rainwater is used in the city's professional sports arena, from ice for the hockey rink to laundry services.

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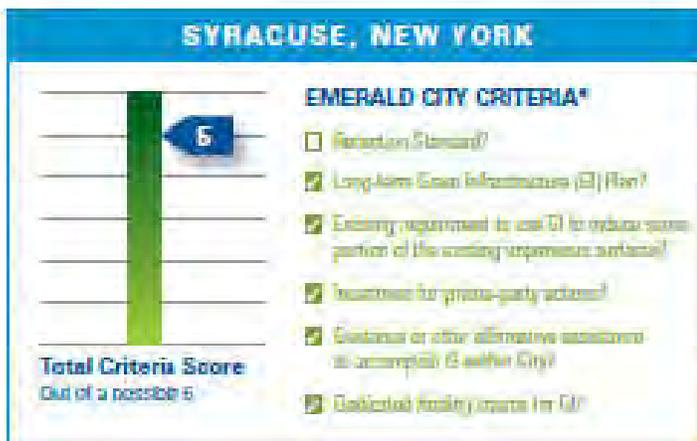
A CASE STUDY OF HOW GREEN INFRASTRUCTURE IS HELPING MANAGE URBAN STORMWATER CHALLENGES

TYPES OF GREEN INFRASTRUCTURE USED: Green roofs, rain barrels/cisterns, permeable pavement, rain gardens, vegetated swales, street trees, green streets, planter boxes



In 2009, when Onondaga County gained federal court approval of its new Save the Rain program, Syracuse became the first community in the United States with a legal requirement to reduce sewage overflows with green infrastructure. The county's strategy integrates both green and gray approaches to meet binding CSO targets phased in over nine years. Green infrastructure investments, totaling nearly \$80 million, will account for nearly two-thirds of future CSO reductions. The program is funded with a combination of sewer fees and low-interest loans and grants from the state. The county has installed a number of demonstration projects

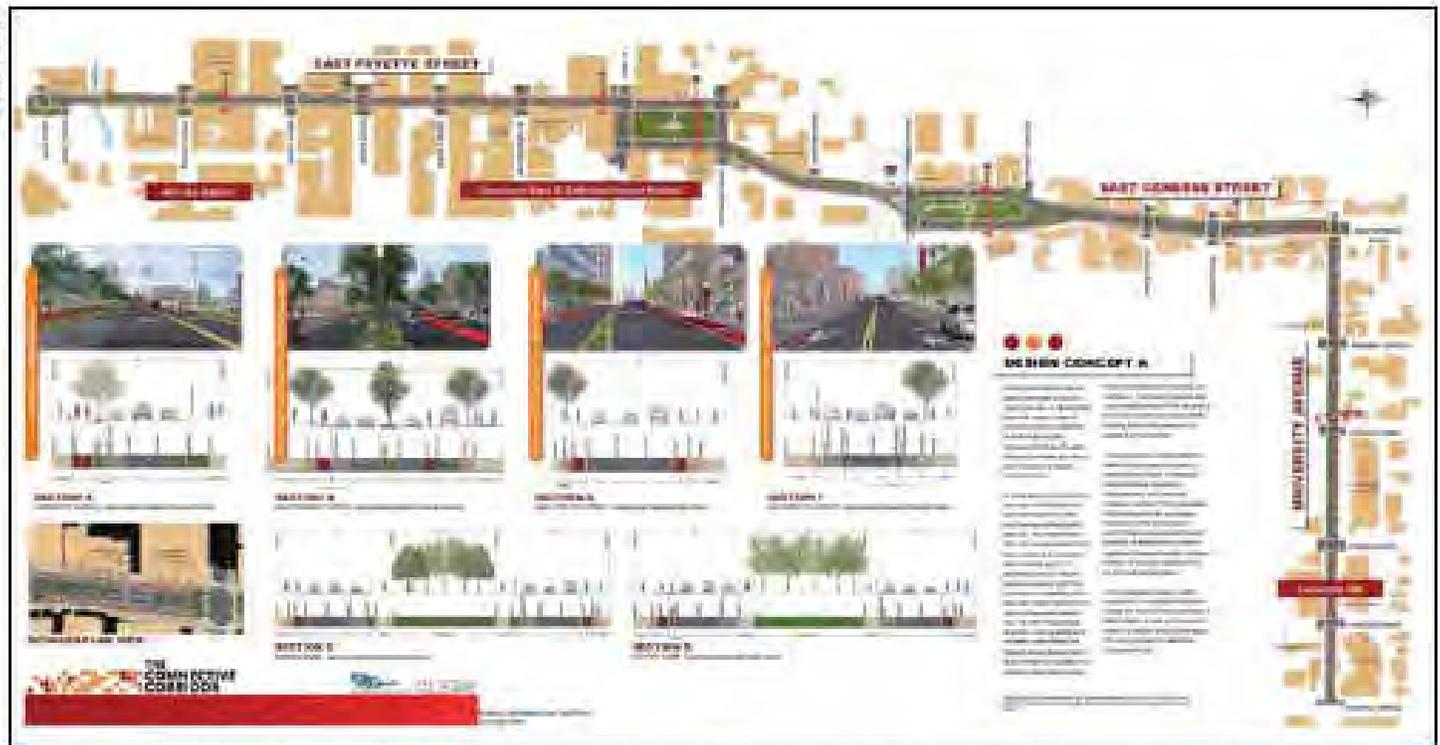
and expects to complete at least 50 projects by the end of 2011. To encourage green infrastructure on private property, the county has launched a comprehensive public outreach and education program and provides financial incentives in the form of a direct grant program and rain barrel giveaways. There is currently no retention standard for new development or redevelopment, but the county is working with the city of Syracuse on a new ordinance that may include such a standard.



BACKGROUND

Onondaga Lake, located on the northern edge of Syracuse, was at one time “arguably the most polluted lake in the United States.”¹ The roughly 4.6-square-mile lake, whose 285-square-mile drainage area includes two counties, one city, 18 towns, six villages, and the Onondaga Nation Territory,² has long suffered from pollution problems due to its highly urbanized surroundings.^{3,4} As a means of addressing this pollution, in 2009 Onondaga County (which includes the city of Syracuse) became the first metropolitan area in the United States with a binding legal obligation to build green infrastructure to achieve specific, quantitative reductions in combined sewer overflows (CSOs).

Beginning in the 1800s, power plants, steel mills, and other manufacturers used the lake and its tributaries as a dumping ground for their waste.⁵ With little or no regulation, industrial pollution from mercury, PCBs, pesticides, creosotes, heavy metals, PHAs, and volatile organic compounds severely degraded the lake's water quality.⁶ Parallel to the industrial discharges, wastewater from municipal sources has similarly been a problem since the late-19th century. In the 1940s the



The Connective Corridor showcases the diverse art and cultural aspects of Syracuse, igniting a resurgence of economic development, tourism, and urban residential smart growth. In addition to its focus on culture, the Connective-Corridor will feature creative lighting, sustainable transportation options, green infrastructure, technological hot spots, and more.

lake was deemed unsuitable for swimming. In 1970, fishing was banned due to concern over the level of contaminants in fish.¹² Although regulation of discharges after the passage of the Clean Water Act in 1972 helped to mitigate industrial pollution and improve the lake's condition, the damage has been lasting. In 1994 the entire lake bottom as well as certain sites around the lake were added to the federal Superfund list.²

As industrial pollution waned, water pollution from municipal sources came sharply into focus. One major pollution source was the discharge of excess ammonia and phosphorus from Onondaga County's Metropolitan Sewage Treatment Facility. Another key source was—and continues to be—the county's aging combined sewer infrastructure.^{10,11}

In 1988 the Atlantic States Legal Foundation (ASLF), joined by the state of New York and the New York State Department of Environmental Conservation (NYSDEC), brought a lawsuit against Onondaga County to prevent raw sewage overflows from polluting Onondaga Lake and to reduce pollutant loadings from the Metro plant. The case resulted in a consent judgment, in 1989, requiring the county to evaluate the need for upgrading Metro and providing treatment of the CSOs in the Metro service area.¹² In 1998, the consent judgment was amended to incorporate a 15-year schedule to construct various upgrades to the Metro plant and the sewer system. At that time, the system was capturing and treating only 74 percent of the annual wet weather flow through the combined sewer system; the amended consent judgment required the county to achieve 95 percent capture and treatment.¹³

SYRACUSE'S 2009 AMENDED CONSENT JUDGMENT

Over the next two decades, the county proceeded down a path that strictly used gray infrastructure to mitigate its water problems. While nutrient loading has been significantly reduced since the 1989 judgment,¹⁴ millions of gallons of sewage overflow continue to pollute the lake and its tributaries after storm events.¹⁵ Further, the county's gray infrastructure approach to CSO abatement was met with increasing resistance from the community, especially after the first of four regional treatment facilities (RTFs) was built in 2007 amid much controversy in a low-income, primarily African-American neighborhood.^{16,17,18} Community groups and organizations had strongly objected to the construction of this RTF for fear it would put unfair burdens on the disadvantaged neighborhood and its residents, including being inconvenienced during construction and subjected to potential odors and stigma when it was completed. This local opposition, coupled with the potential for cost savings, was largely the impetus behind the decision to seek an alternative to the three additional RTFs slated for construction.

With the election of new local officials in 2008, ASLF and the Onondaga Nation initiated talks about the alternatives with county and city officials, who then solicited input from local environmental and community groups, the State University of New York Environmental College of Science and Forestry (SUNY ESF), and the New York State Department of Environmental Conservation (DEC) to identify green alternatives for CSO mitigation.¹⁹ In November 2009,

with consensus among these stakeholders and an official statement of support from EPA,²⁰ the federal court approved an amendment to the consent judgment that eliminated the three planned RTFs and explicitly required the use of green infrastructure technology to reduce sewer overflows to Onondaga Lake and its tributaries.²¹⁻²³ Syracuse and Onondaga County thus became the first community in the United States to be legally required to meet binding targets for CSO reduction by using green infrastructure.

As of 2009, the county's sewer system was capturing 84.6 percent of wet weather flow in a typical year. The amended decree requires 95 percent capture by 2018 using a combination of green and gray approaches—resulting in more pollution reduction than the original decree, since the RTFs would have provided only partial treatment of combined sewage and stormwater, whereas green infrastructure both treats stormwater and frees up capacity for sewage treatment plants to accept, and fully treat, greater volumes of sanitary sewage.²⁴ Nearly two-thirds of the future CSO reductions will come from the use of green infrastructure.²⁵

ONONDAGA COUNTY'S SAVE THE RAIN CAMPAIGN

The county is now embracing the unique opportunity to meet its CSO reduction mandates by using green infrastructure practices. The County Executive's office has launched Save the Rain, a comprehensive plan to incorporate green infrastructure into all types of land use in the city to manage stormwater, restore Onondaga Lake, and more generally to "cultivate a green urban culture in Syracuse," while also including certain localized gray infrastructure improvements such as storage facilities and sewer separation.²⁶ The use of green infrastructure will be divided into 10 program types, including streets, parks and open space, rooftops, public facilities, grants that will incentivize green infrastructure retrofits on private property, and a stormwater ordinance. Each program type has more than one strategy for implementing green infrastructure retrofits. The total 2011–2018 green infrastructure budget for the Save the Rain program, with funding from sewer fees, state low-interest loans, and grants, is approximately \$78 million.^{27,28} Notably, some estimates have indicated that Save the Rain, with its balance of gray and green infrastructure, will save the county as much as \$20 million compared with traditional CSO mitigation programs.^{29,30}

A handful of projects have already been implemented. The Pearl Street parking lot retrofit project, completed in 2010, transformed an existing 1-acre asphalt/gravel lot into a lot partially covered with porous pavement, including

25,000 square feet of subsurface infiltration to capture an estimated 1.3 million gallons of stormwater runoff annually.³¹ A stormwater retrofit project at City Parking Lot #3 included the conversion of a traditional lot into one with porous pavement, plus the planting of 26 trees in the interior of the lot and along its perimeter; an estimated 678,000 gallons of stormwater will be captured annually there.³² The Townsend Median stormwater retrofit project, completed in 2011, included redesigning the median to be below surface grade to allow approximately 317,000 gallons of stormwater runoff capture per year. The project also included the planting of four "stormwater trees," with new inlets built into the existing curb to allow stormwater runoff to infiltrate the soil around the trees.³³

AN AMBITIOUS PLAN FOR GREEN INFRASTRUCTURE: SAVE THE RAIN—PROJECT 50

After several years of extensive planning, Onondaga County began construction on a long list of green infrastructure projects. The county has identified 82 potential projects to date and has a goal of advancing 50 during calendar year 2011: the Save the Rain—Project 50 campaign.^{34,35} Projects in the pipeline vary widely in their size and expense, ranging from a 3,500-square-foot porous sidewalk that will capture around 60,000 gallons of water annually to a 12-acre wetlands project that will capture an estimated 14.9 million gallons per year.³⁶

To meet its commitment to 95 percent total volume capture by 2018, the county will need to capture 250 million gallons per year. While it aims to achieve this capture for an average of about 35 cents per gallon, the county is willing to spend more on certain high-profile projects because "they will generate significant dialogue in the community, and also showcase the whole (green infrastructure program) nationwide."³⁷ One key example is the project planned for the War Memorial Arena, home to the Syracuse Crunch hockey team: the installation of a \$1 million system to collect rainwater from the roof in cisterns and then filter, disinfect, and use the rainwater to make ice for the hockey rink. The collected rainwater will also be used for irrigation around the facility, and will potentially replace potable water in the facility's heating/cooling system.^{38,39,40} The county recently received a \$712,000 grant for the system, which will capture around 366,000 gallons per year,⁴¹ through the New York State Environmental Facilities Corporation's Green Innovation Grant Program.⁴²

Another prominent project will be the construction of a massive green roof on top of the Nicholas J. Piro Convention Center. Built for an estimated \$1 million, the 1.5 acre green

roof will be one of the largest in the Northeast, absorbing an estimated 1 million gallons of rain annually that would otherwise run into the combined sewer system.^{13,15,16}

ADDITIONAL PROGRAMS AND STRATEGIES TO REDUCE STORMWATER IN SYRACUSE

In addition to the short-term goal of advancing 50 green infrastructure projects in 2011, Save the Rain includes a number of longer-term programs that aim to implement, or promote the implementation of, green infrastructure on public and private property. For example, Onondaga County is initiating an Urban Forestry Program. Partnering with the city of Syracuse, the county will plant 6,500 trees in neighborhoods throughout the city.¹⁷ Tree species will be chosen on the basis of their appropriateness for the region and ability to sustain a canopy for maximum rainwater capture, and a long-term maintenance program will be implemented to ensure that these trees are being cared for appropriately. Additionally, a sophisticated asset management system called Maximo will be used to manage these trees.^{18,19} Onondaga County is also adding green infrastructure elements to its conventional storm water storage projects. Interceptor sewer construction restoration includes rain gardens, tree plantings and infiltration boxes, and more than 10 million gallons of constructed storm water storage facilities include rainwater reuse systems and bioretention.¹⁴

The county is also taking steps to encourage the use of green infrastructure on private property. A rain barrel program, funded in 2009 by grant money through New York State's Green Innovation Grant Program, provides free rain barrels to homeowners in designated CSO sewer sheds in Syracuse. To receive a rain barrel, residents must attend a brief workshop on rain barrel installation and maintenance; a companion guide is available online. To date, the county has distributed more than 300 rain barrels to local residents^{20,21,22} and aims to have more than 1,000 in use within the next two years. The county also aims to develop a more sophisticated tracking system for the rain barrel program, making use of GIS data to pinpoint where the barrels are located.²³

Additionally, the county has developed a multimillion-dollar Green Improvement Fund (GIF) that offers grants for green infrastructure retrofits on private property, including businesses and nonprofits, in combined sewer drainage areas.^{24,25,26} Projects that have received funding include, but are not limited to, tree trenches, planter boxes, porous swales, rain gardens, green roofs, green streetscapes, and cisterns.^{27,28}

Save the Rain has launched a comprehensive public outreach campaign that includes green infrastructure education at the neighborhood level, within the public

school system, and via a new website (www.savetherain.us). Green infrastructure design charrettes, public meetings, and workshops are frequently held within local communities, and every third-grade class in the city of Syracuse is learning about green infrastructure. The county has also partnered with a number of community-based organizations that offer additional support for green infrastructure. For example, some groups offer workshops for residents on creating rain gardens and constructing rain barrels. The county is considering fee structures based on impervious area for future implementation and is currently working with the city of Syracuse on revisions to the current ordinance that may ultimately require enhanced stormwater mitigation on redevelopment projects.^{29,30}

GREEN JOBS TRAINING IN SYRACUSE

While Onondaga County proceeds with its Save the Rain campaign and continues to identify and execute green infrastructure projects, two programs providing green jobs training for Syracuse residents, particularly those in underemployed demographic groups, have been established in the region. SUNY ESF operates a training program that partners with regional organizations to train unemployed or underemployed residents in development and implementation of green infrastructure projects such as rain gardens, permeable pavers, and urban forests.³¹ Additionally, in 2010 CNY Works won a \$3.7 million grant from the U.S. Department of Labor to train up to 750 Syracuse residents in energy efficiency, renewable energy, and green infrastructure jobs over a two-year period.³²

MEASURING THE EFFECTIVENESS OF SYRACUSE'S GREEN INFRASTRUCTURE

To satisfy the CSO reduction requirements of the amended consent judgment, the effectiveness of all green infrastructure projects must be quantifiable. Onondaga County uses a cost-effectiveness calculator on every project to compare the proposed project costs with actual costs of completed projects of similar scope, to ensure that the county is paying for the most cost-effective green infrastructure projects.³³ For every project undertaken with public funds, the Save the Rain website will include fact sheets detailing costs and stormwater capture volumes, as well as technical plans and specifications.³⁴ After projects are completed, performance evaluations are used to monitor the effectiveness of different types of capture practices. Additionally, as mandated by the amended consent judgment, the county has developed a comprehensive Ambient Monitoring Program (AMP) for Onondaga Lake and its tributaries to assess the program's

overall performance and impact on the lake. If the green infrastructure projects undertaken under the Save the Rain program are functioning properly, then AMP data should demonstrate reduced nutrient loading from captured runoff as well as reduced contamination from CSO events.⁶⁰

Currently, metrics illustrating the ancillary benefits of green infrastructure are being developed. The county has partnered with a number of organizations to measure these additional benefits, including U.S. EPA, Syracuse University, and SUNY ESF. A few examples of the benefits that will be studied include air quality improvements, economic impacts, mitigation of the urban heat island effect, energy savings, and recreational and transportation improvements. Syracuse University recently approached the county about conducting on-site monitoring of the aforementioned Nicholas J. Pirro Convention Center green roof. In addition to measuring the roof's stormwater capture, the university will also measure energy savings and the reduction of the heat island effect.⁶¹

On April 20, 2011, the EPA recognized Onondaga County's efforts by selecting it as one of 10 green infrastructure partner communities in the United States; the EPA's Green Infrastructure Partnership program focuses on identifying opportunities and providing technical assistance to communities implementing green infrastructure approaches to control stormwater runoff.⁶² The EPA will partner with Onondaga County to exchange information regarding green infrastructure best management practices utilized in Syracuse, highlighting the county's program as a model for other municipalities on how to implement effective green infrastructure programs.

*EMERALD CITY RATING SYSTEM

Each of the cities profiled in *Rooftops to Rivers II* is a leader in green infrastructure investment—rethinking the design of municipal services and infrastructure. These cities leverage funding in creative ways. They provide tools to residential and commercial land owners to retrofit private properties and realize the multiple benefits provided by green infrastructure. In short, they are changing how cities look and function.

NRDC's Emerald City Rating System identifies six actions cities should undertake to maximize their green infrastructure investment. Our metric does not directly compare one city to another, due to geographical, population, budgetary and other differences. Instead, it identifies the presence or absence of common factors of success that NRDC believes are essential elements of a robust green infrastructure commitment. Only one city profiled, Philadelphia, is undertaking each of the actions identified, although each city is undertaking at least one.

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[Jon Devine's Blog](#)

Do You Live in an Emerald City? New NRDC Report Profiles Communities Leading the Way on Green Infrastructure



Posted November 16, 2011 in [Curbing Pollution](#), [Green Enterprise](#), [U.S. Law and Policy](#)

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As [my colleague David Beckman wrote today](#), NRDC released a new report called *Rooftops to Rivers II*. Our study presents the pollution problems caused by stormwater – particularly contaminated runoff and sewage overflows – and discusses in depth how communities use green infrastructure techniques to clean up their waterways and to bring multiple valuable benefits to city residents. We felt it important to produce this analysis now, because this winter the Environmental Protection Agency will propose an update its national standards for controlling runoff pollution from new development and existing paved areas, and cities' successes can help EPA develop robust requirements for communities across the nation.

In particular, *Rooftops to Rivers II* details common water pollution problems and provides case studies for 14 geographically diverse cities that all can be considered leaders in employing green infrastructure solutions to address their pollution problems. These cities have improved their ability to manage stormwater and reduce runoff pollution, saved money and beautified cityscapes by capturing rain where it falls.

To assess the breadth of each of these leaders' green infrastructure activities, we created a metric we're calling the "Emerald City Scale." The six-point scale identifies six core criteria every city can undertake to maximize their green infrastructure investment, including: a long term green infrastructure plan for the city, a requirement to retain a defined amount of runoff from development projects, a requirement to reduce existing impervious surfaces using green infrastructure, incentives for private-party installation of green infrastructure, guidance or other assistance in deploying green infrastructure, and a dedicated funding source to help ensure that green infrastructure projects keep going.

Cities were awarded one point for each of the criteria that have been met. Each city in our report received at least one point but only one received a perfect score of six – and that was Philadelphia, which has emerged as the national leader when it comes to green infrastructure.

The other cities featured in the report received the following number of points on our Emerald City Scale:

- Milwaukee, WI (5)
- New York, NY (5)
- Portland, OR (5)
- Syracuse, NY (5)
- Washington, D.C. (5)
- Aurora, IL (4)
- Toronto, Ontario, Canada (4)
- Chicago, IL (3)
- Kansas City, MO (3)
- Nashville, TN (3)
- Seattle, WA (3)



Pittsburgh, PA (1)

Detroit Metro Area & the Rouge River Watershed, MI (1)

(Photo: Seattle's High Point Neighborhood -- Street-sides being supplanted with additional plants. Notice trees and shrubs. Photo by Nancy Arazan)

Below is a chart depicting how the communities earned their distinctions as Emerald Cities.

Table ES-1: "Emerald Cities," listed darkest to lightest by the number of key green infrastructure actions taken

City	Long-term green infrastructure (GI) plan	Retention standard	Requirement to use GI to reduce some portion of the existing impervious surfaces	Incentives for private-party actions	Guidance or other affirmative assistance to accomplish GI within city	Dedicated funding source for GI
Philadelphia, PA	★	★	★	★	★	★
Milwaukee, WI		★	★	★	★	★
New York, NY	★		★	★	★	★
Portland, OR		★	★	★	★	★
Syracuse, NY	★		★	★	★	★
Washington, D.C.		★	★	★	★	★
Aurora, IL	★	★			★	★
Toronto, Ontario, Canada	★	★		★	★	
Chicago, IL		★		★	★	
Kansas City, MO				★	★	★
Nashville, TN	★				★	★
Seattle, WA				★	★	★
Pittsburgh, PA		★				
Rouge River Watershed, MI					★	

It's important to note that while some of the cities received higher scores than others, each is meeting at least one of the core NRDC criteria. The ranking is not meant to highlight areas in which some cities are lacking compared to others, because every city that is meeting one or more of our criteria are performing in ways that deserve to be emulated. In fact, because each of these diverse cities has implemented at least one aspect of NRDC's Emerald City plan, we know it's doable.

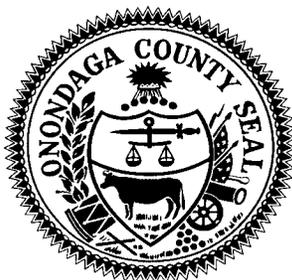
Each of these cities is proof that green infrastructure works. Their success should encourage both the EPA and policymakers on the local and state levels to adopt policies that will drive similar approaches and outcomes nationwide.

For cities not included in the report, but which are pursuing green infrastructure programs that meet NRDC's six criteria, we want to know about it. NRDC has developed a function on our website that [allows municipalities to submit information about local green initiatives](#). We welcome other communities to add their names to the growing list of cities using green infrastructure. Doing so will further demonstrate to the EPA and other policymakers that green infrastructure is effective, affordable and should be implemented across the country.

[Share](#) | [0](#) | [Like](#) < 1

OFFICE OF THE COUNTY EXECUTIVE

JOANNE M. MAHONEY
COUNTY EXECUTIVE



WILLIAM P. FISHER
DEPUTY COUNTY EXECUTIVE

Press Release

Contact: Marty Skahen
Office Phone: (315) 435-3516 Cell Phone: (315) 753-1048
For Immediate Release: November 16, 2011

County Executive Joanie Mahoney Presents County Legislator Jim Corbett With First Onondaga County Environmental Leadership Award

Award Part of Event Celebrating Success of Save the Rain's Project 50

On Wednesday, at a reception held to thank community members for their support of the County's Save the Rain Program, Onondaga County Executive Joanie Mahoney presented her first Environmental Leadership Award to Jim Corbett, Chair of the Onondaga County Legislature's Environmental Protection Committee.

"Jim Corbett has been a tremendous partner and leader on many environmental issues impacting Onondaga County," said County Executive Mahoney. "I am honored to present Jim with our first Environmental Leadership Award as he is a true steward of the environment and a trusted advocate for all. Throughout his tenure in the County Legislature Jim has championed an approach to public service built on collaboration, pragmatism and patience."

As Chair of the Onondaga County Environmental Protection Committee, Mr. Corbett personally sponsored and advanced numerous legislative initiatives that will have a positive impact on the residents of Onondaga County and the environment for years to come.

Earlier this year, Jim played an integral role in the adoption of Local Law #1 of 2011, which will help the County to address storm water pollution and contain the growing cost of large capital investments in new wastewater and storm water infrastructure. Mr. Corbett also helped to advance bonding authorizations for the Save the Rain program, ensuring that the County will have the resources needed to comply with the Federal Court Order driving the County's lake cleanup program.

Onondaga County's Save the Rain program is aimed at reducing storm water pollution and helping clean Onondaga Lake. The county is pursuing a balanced, gray and green infrastructure approach to reduce the impact of harmful pollutants that can enter the lake and its tributaries during storm events. The event at the Palace on James Street also addressed the many projects that the Save the Rain program has advanced in 2011.

Jim has served on the Legislature since 1995 and will leave his seat when his current term ends at the end of 2011.

The County Executive's Environmental Leadership award will be given out to outstanding citizens of Onondaga County who demonstrate a strong commitment to the ideals of sustainability, environmental protection and recreation. Mr. Corbett is the first recipient of this award.

For more information on Save the Rain go to www.savetherain.us.

###

You help Save the Rain. Now, help us celebrate.

Save the Rain Project 50 Reception & Celebration

Nov. 16, 2011 The Palace Theater, 2384 James Street
5:00 - 8:00 PM

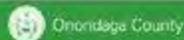
As a **thank you** to community members who have done their part to "Save the Rain," you are invited to a **celebration** of Project 50.

Join us for updates on Save the Rain and mingle with community members, design professionals and Save the Rain representatives. The Palace Theater will provide complimentary hors d'oeuvres, and wine and beer will be available for purchase. **The event is free**, but please RSVP at <http://savetherain.eventbrite.com> or call 315-443-3507.



Joanne M. Mahoney
County Executive

Save the Rain



savetherain.us

On November 16, 2011 Save the Rain held a reception at the Palace Theatre to celebrate the successes Project 50 with the community and all of the various stakeholders that we've worked with since the inception of the Save the Rain program.

Approximately 200 guests were in attendance to see a recap of the year's accomplishments and hear the perspectives of our distinguished panel of speakers on their participation in Save the Rain.

At the end of the panel, County Executive Mahoney recognized County Legislator James Corbett for his contributions to Save the Rain, presenting her first Environmental Leadership Award.



***The distinguished panel of speakers
(from left):***

Jim Tierney,
Assistant Commissioner for Water Resources
NYS Dept. of Environmental Conservation

Stephanie Miner,
Mayor of the City of Syracuse

James Corbett,
Environmental Protection Committee Chair
Onondaga County Legislature

Joanie Mahoney,
County Executive,
Onondaga County



Media Contact:
Larry Luttinger
315.479.5299
larry@cnyjazz.org



JAZZ CENTRAL IS THE FIRST CNY ARTS VENUE TO RECEIVE GREEN ROOF

(Syracuse, NY, Nov. 22, 2011)—If you ever dropped by Jazz Central at 441 East Washington St., Syracuse, NY—home to the CNY Jazz Arts Foundation—after a rainstorm, you might have had a hard time finding a staff member to assist you. That’s because they were probably in the basement, nervously watching the rising water, straining sump pumps, and gushing downspouts, or putting plastic sheeting over the computers in the back office to capture drips.

- [In the News](#)
- [News Archive](#)

The building’s aging, leaking roof was causing problems not only for Jazz Central (which has owned the building since 2003), it was also contributing to the combined storm sewer problems faced by downtown Syracuse. Every time it rained hard, hundreds of gallons of rainwater poured off Jazz Central’s flat, synthetic rubber roof and into an old storm sewer. When that storm sewer reached capacity, the water had nowhere else to go but into Jazz Central’s basement or through its ceiling.

Now, thanks to grants from Onondaga County’s Save the Rain Green Improvement Fund and the Reisman Foundation, Jazz Central’s roof problem is being solved in a sustainable way. When retrofit work is complete in late November, Jazz Central will be the first arts organization in Central New York to conduct operations under a “green roof!”

“CNY Jazz staff know the drill. When it rains, go down to the basement to save any instruments, props, or sheet music left on the floor and cover everything in the office with a tarp,” says Larry Luttinger, Executive Director, CNY Jazz. “Now, thanks to generous grants from Onondaga County and the Reisman Foundation, as well as the work of Natural Systems Engineering and other contractors, we can actually enjoy a summer rain storm and know we’re doing good for the city. CNY Jazz has been going green for a few years now, supporting the Save the Rain initiative through the Blue Rain ECOfest, which hosted rain barrel workshops this past summer—the workshops were so popular, Save the Rain ran out of barrels!”

Work on the project—which costs approximately \$66,000—began on Nov. 14, 2011. According to project engineer Kyle Thomas of Syracuse, NY-based Natural Systems Engineering, Jazz Central’s green roof consists of insulation, roof board, a moisture retention mat, a root barrier, filter fabric, a growth medium, and vegetation. The plants that will live on the roof are members of the sedum family, a good choice for green roofs because they are adapted to natural microclimates similar to rooftops, with extreme fluctuations in temperature and moisture. The growth medium is made up of shale-based material and compost.

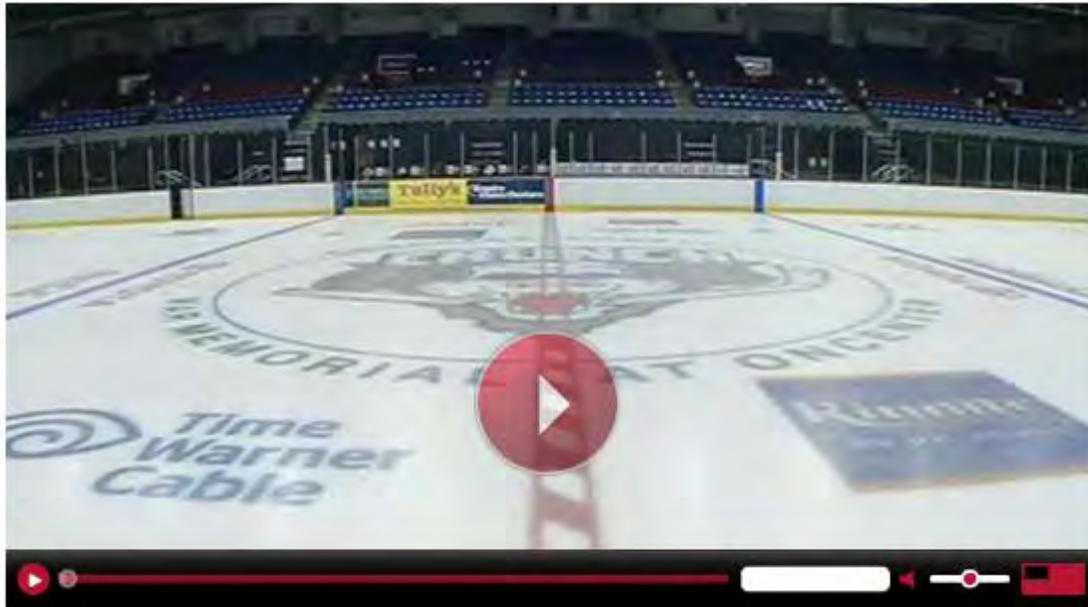
As for maintenance, the roof will need weeding from time to time, but you won’t see CNY Jazz staff on the roof mowing—sedum is a slow-growing, low-growing succulent. Contractors working on the roof include Helping Hands, a local green jobs training organization, and Motherplants of Ithaca, NY, a provider of green roof soils and vegetation.

Once the sedum is established, it will soak up and slow down rainwater. That will reduce the amount of rain gushing into the city’s aging combined storm sewers, somewhat easing the flooding and overflow issues the city has long coped with (untreated sewage flowing into Onondaga Creek, for instance, when storm sewers reach capacity).

11/28/2011 05:00 AM

Going Green: Rainwater Ice

By: Terry Ettinger



It looks like regular ice, it feels like ice, it's slippery like ice- but this ice is very different from ice in any other hockey arena. The rink surface is made from rain and snow run off from the roof of the building. What's more, it's the first of the kind in the country.

Syracuse Crunch owner Howard Dolgon said, "To be the first in all of hockey to have the rainwater used for your ice and for your resurfacing says a lot about this community, our county executive, and as a team to be out front is something we strive to do."

It's part of the "Save the Rain" campaign adopted by Onondaga County. Nearly 15,000 gallons of rainwater can be held in a storage tank located within the basement of the War Memorial where the Syracuse Crunch play.

The project is intended to recapture rain water and snow melt runoff from the War Memorial Arena roof, reusing the water for ice production and maintenance.

Senior scientist of Atlantic States Legal Foundation Samuel Sage said, "A lot of people don't think about the water rich area of Central New York as in need of water conservation. But saving water is a major need. It saves in economics and everything else. The less water you have to use, the less water you have to pump and the less water you have to treat."

<http://centralny.ynn.com/content/features/565161/going-green---rainwater-ice/>

The rainwater collected will help contribute to the required 250 million gallons of rain water the county hopes to capture before 2018.

"If we can reuse water numerous times besides just pumping it from a clean lake, using it and flushing it back down to the sewage treatment plant, we're saving all along. The consumer is saving, in this case the Crunch, but the public is saving, too," said Sage.

Dolgon said, "The community is supportive, it's forward thinking and there's positives not only for the exposure it gets, but it's good for the people who live here."

Dolgon said there is little difference skating on regular water versus rainwater.

you're invited...

onondaga lake watershed *community forum*

Discuss current progress and future opportunities of the Onondaga Lake watershed
Free and open to the public

tuesday, november 29
rosamond gifford zoo, 1 conservation place, syracuse, ny

Guests can reach the zoo by car or bus. Use the Solvay-Milton (74) and Solvay-Avery-Bailey (274) lines.
A SUNY-ESF shuttle will be available to transport guests from the city bus stop to the zoo entrance.

5:00 - 6:00 p.m. | open house: exhibits with refreshments
6:00 - 8:30 p.m. | presentations & roundtable discussions

The Forum will feature presentations from key governmental agencies about current clean-up progress followed by roundtable discussions regarding the future of Onondaga Lake.

The Community Forum is a collaboration of:



A Clean Lake Reflects Well
On All of Us.



US Army Corps
of Engineers
Buffalo District
BUILDING STRONG.



Onondaga Lake
Natural Resource Damage
Assessment and Restoration
Trustee Council



For more information, visit the Onondaga Lake Partnership website at www.onlakepartners.org, or call 315-472-2150.

Additional collaborating organizations: Onondaga Lake Lead Community Participation Working Group, Onondaga Environmental Institute.

The Onondaga Lake Partnership sponsors the Onondaga Lake Watershed Community Forum with support from the U.S. Environmental Protection Agency.

About 150 people turn out Tuesday night to discuss details of Onondaga Lake's cleanup



Published: Tuesday, November 29, 2011, 10:49 PM; Updated: Tuesday, November 29, 2011, 10:57 PM
By **Catie O'Toole / The Post-Standard**

Syracuse, NY -- Joel Potash remembers bringing his family to Onondaga Lake in the 1960s to swim, fish and have a picnic on the shoreline.

Today, the 74-year-old Syracuse resident volunteers with the Neighbors of the Onondaga Nation in hopes of seeing the lake — which for decades served as a dumping ground for raw municipal sewage and industrial wastes — cleaned up so others can once again enjoy those same activities.

"I think it would be a wonderful resource," he said. "It's worth the effort."

Potash was among some 150 people who came out to a community forum on a rainy Tuesday night at the Rosamond Gifford Zoo to learn more about lake cleanup. Organizers said they were not expecting so many people to attend, but they were glad to see the community come together to listen, discuss and share ideas.

Bill and Kathy Rodgers, of Camillus, spend their summers on a house boat on Onondaga Lake. With the long-awaited dredging of the contaminated lake bottom scheduled to start next summer and continue over four construction seasons, Bill Rodgers said he was concerned how that would affect their summers.

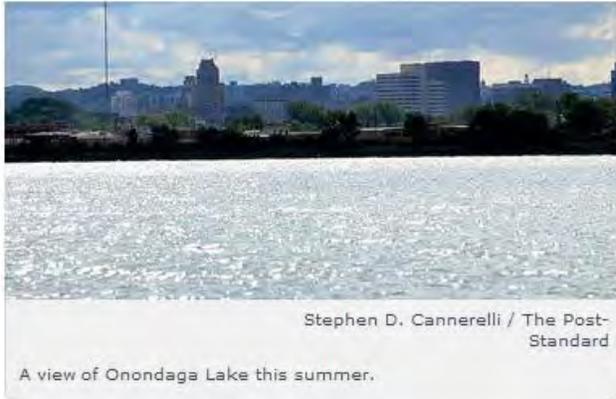
How much of the lake would be dredged, and how often? Would mixing up the water make it unpleasant for summer residents like the Rodgers?

Bob Edwards, engineering geologist for the state Department of Environmental Conservation, eased the Rodgers' worries. Edwards explained that while the dredging would take place 24 hours a day, from Monday through Saturday, the electronic pumps are shielded. "They are really quiet," he said. "You're not going to hear them."



Dick Blume / The Post Standard, 2010

File photo of the cleanup area at Onondaga Lake.



The dredging also will take place in a small portion of the lake, about 450 acres of the 3,000-acre lake, along the southwest shore off Interstate 690 West, DEC officials said.

Honeywell International Inc., the successor to Allied Chemical, which dumped mercury and other chemicals into the lake from 1881 to 1986, has agreed to spend \$550 million cleaning up the lake bottom and its tributaries.

Ken Lynch, regional director for the DEC, said a lot of cleanup work has already been done. Honeywell officials said they began this summer planting trees and grass along the lake side of I-690.

Construction has begun on pipes that will take the dredged sediment from the lake near the state Fairgrounds and pump it to Wastebed 13. And work continues on a sediment consolidation area and a wastewater treatment plant that Honeywell is required to build on Wastebed 13 in Camillus.

The DEC also is reviewing the final design for remediating Nine Mile Creek behind the fairgrounds and work is expected to begin next year. Plans include removing contaminated soil and restoring wetlands.

All this work sets the stage for the \$451 million project to dredge the contaminated lake bottom, and cap parts of it, to keep mercury and other chemicals from contaminating fish.



Onondaga County also is spending more than \$500 million on lake cleanup projects, including upgrading the wastewater treatment plant and addressing the combined sewer overflow, which happens when it rains and stormwater flows into the creeks and eventually the lake, Lynch said.

The county built storage and treatment facilities, and also completed about 60 "green" infrastructure projects to help clean up Onondaga Lake this year, he said.

Some of the "green" projects include a 1.5 acre, \$1 million vegetative roof on the OnCenter's Nicholas J. Pirro Convention Center; a \$1 million system that collects, treats and freezes ice that the Syracuse Crunch hockey team plays on at the War Memorial rink; and the use porous

pavement at the Skiddy Park basketball courts (donated by the Jim and Juli Boeheim Foundation) so that water doesn't pool up, according to County Executive Joanie Mahoney.

"Tremendous progress has been made in the last five to 10 years in making the lake a healthier ecosystem," said Judith Enck, regional administrator for the Environmental Protection Agency. "I think the message is it's getting better. We've made some progress. We still have a long way to go."

Bill Rodgers said he has seen an improvement. A decade ago, he couldn't see the bottom of the lake from his boat, docked in 5 feet of water. "The water was too cloudy," he said. And on those hot summer days, Rodgers said, "it almost looked like a green carpet on the water.

"Now you don't see that anymore," he said. "You just see normal vegetation."

Residents at the community forum Tuesday emphasized the need to keep the public informed about the progress of the lake cleanup, to reassure them the process is being done safely and to continue moving toward the overall goal to once again have a "fishable" and "swimmable" lake.

"It's not going to happen this summer," said Enck, of the EPA, "but it will happen in the near future."

Catie O'Toole can be reached at cotoole@syracuse.com or 470-2134.



Onondaga Lake Clean Up Forum Big Success

Posted on November 29, 2011 by Danielle Woods

Big Gov't Officials & Many People Show up in Support of Lake Cleanup

Danielle L. Woods (SYRACUSE) – For the people of Central New York, [Onondaga Lake](#) means a lot to them, so tonight's forum at the Rosamond Gifford Zoo in Syracuse drew a large crowd and plenty of curious, and optimistic, people.

"The clean up effort that I came to find out more about tonight I think will go a long way," Sarah Brown, a Syracuse resident said. She's only lived in the city for a year, but she says she goes to the lake to workout and wishes it was in better condition.

A shared optimism

Another woman, Marilyn Charles — also of Syracuse, has not been in the city for long either, but she's heard the reputation of Onondaga Lake. But she also is optimistic.

"We want to clean up the lake so that we can go fishing again and spend time by the lake. It will happen," Charles said.

Officials were in full attendance

Onondaga County Executive Joanie Mahoney and Syracuse Mayor Stephanie Miner were both in attendance, and spoke to those in attendance. Mahoney stressed how successful the clean up efforts are, and stressed how well the Save the Rain program is going.

In addition to these well known figures, another government official, Ken Lynch who is the regional director at the New York State Department of Environmental Conservation, says cleaning the lake means a lot to him.

"I grew up in the area, and I think there has been a lot of apathy about the lake, but we're starting to see people begin to understand that it can be cleaned up that it is being up," Lynch said.

<https://nccnews.expressions.syr.edu/?p=37699>

City, county announce free holiday season weekend parking, extended hours at Washington Street garage



Published: Tuesday, November 29, 2011, 1:01 PM Updated: Tuesday, November 29, 2011, 1:10 PM

By **Rick Moriarty/The Post-Standard**

Onondaga County and the city of Syracuse are partnering to provide free parking in the city-owned Washington Street garage on Saturdays and Sundays and after 4 p.m. Thursdays and Fridays through the holiday season.

The complimentary parking started Friday and will continue through New Year's Day to encourage shopping at Armory Square merchants and restaurants.

The Washington Street garage also will have extended operating hours to accommodate shoppers while the Trolley Lot parking area in Armory Square is closed due to construction.

Normally, the Washington Street garage is open Monday through Friday from 6 a.m. until 10 p.m. and closed on weekends. Currently, it is open every day: Monday through Wednesday from 6 a.m. until 10 p.m.; Thursday through Friday from 6 a.m. until 3 a.m.; Saturday from 10 a.m. until 3 a.m.; and Sunday from 10 a.m. until midnight.

Parking will be free all day Saturdays and Sundays, as well as after 4 p.m. on Thursdays and Fridays through Jan. 1. Regular rates apply at all other times.

In September, the county announced the closure of the 700-space parking lot adjacent to the Museum of Science and Technology for the construction of a 6-million-gallon stormwater storage system as part of the county's Save the Rain program.

The Washington Street garage is accessible from Washington Street, west of Franklin Street, or from West Water Street. Armory Square is one block from the Washington Street entrance and is accessible from the recently opened Onondaga Creekwalk.

Syracuse / Oswego / Auburn



YNN.COM
YOUR NEWS NOW.

11/29/2011 03:15 PM

More parking available at Washington Street Garage

By: Web Staff

SYRACUSE, N.Y. -- Anyone doing their holiday shopping in Syracuse's Armory Square can take advantage of some free, or at least more available parking.

The Mayor and Onondaga County Executive have announced the Washington Street Garage will be open and complimentary for shoppers Saturdays and Sundays and after 4 p.m. on Thursdays and Fridays.

From now until the New Year, the garage will remain open Monday through Wednesday 6 a.m. to 10 p.m., Thursday and Friday from 6 a.m. to 3 a.m., Saturday from 10 a.m. to 3 a.m. and Sunday from 10 a.m. to midnight.

Officials say this should help offset parking lost by the Trolley Lot closing this fall.

Going Green at Our House

Observations on our living and attempts to be green.

WEDNESDAY, NOVEMBER 30, 2011

Save The Rain Project

The County of Onondaga has a program to keep rainwater out of the combined sewers, and avoiding additional sewage overflow treatment during rainstorms. One of the measures is at Forman Park, downtown, which is being relandscaped with trees. Trees, shrubs and plantings slow down runoff and allow it to infiltrate the soil.



Water Street, Outside of the Erie Canal Museum, Syracuse, NY



We were downtown this past weekend to visit the Erie Canal Museum and the annual Gingerbread House exhibit. We did not park near the museum as that side of the street was off limits due to construction. The city is constructing a strip of permeable pavement along Water Street. The permeable pavement will allow capture of some of the street runoff, as it drains thru the pavement, temporarily stored in the gravel below, and is absorbed into the earth.

Posted by PWB at 8:19 PM

<http://plumbingwithpaul.blogspot.com/2011/11/save-rain-project.html>

FINANCIAL UPDATE

Financial Update:

Contracts

New Contracts

Green Infrastructure – Syracuse City School District Parking Lot

- Contract with Orchard Earth & Pipe Corp. to upgrade the Syracuse City School District Central Offices parking lot.

Contract Amount: \$403,500

Executed: 11/3/11

Amendments to Existing Contracts

Green Infrastructure Fund (GIF)

- Contract with Vibrant Spaces, LLC amended to include additional green infrastructure improvements in the Harbor Brook sewer shed.

Contract Amendment Amount: \$63,200.

Executed: 10/21/11

Green Infrastructure Fund (GIF)

- Contract with Tash Taskale amended to include additional green infrastructure improvements in the Clinton sewer shed.

Contract Amendment Amount: \$17,000.

Executed: 10/24/11

Clinton CSO Storage Facility

- Contract with Environmental Engineering Associates, LLP amended to include post-construction phase serves and the addition of on-site geotechnical staff.

Contract Amendment Amount: \$5,385,167.

Executed: 10/24/11

Change Orders

None to report.

Funding

Grants

State Bond Act Funds

- Reimbursements requested in November:
Clinton Storage for \$1,348,880.70 on 11/7/11.

Total payments received to date in State Bond Act funds: \$128,780,000.

Federal EPA Funds

- Reimbursements requested in November:
Midland CSO 044 for \$506,668.00 on 11/16/11.
- Reimbursements received in November: None to report.

Federal Army Corps of Engineers Funds

- None to report.

EFC Loans

- Reimbursement requests to EFC in November: None to report.
- Reimbursements received in November: None to report

Total reimbursement monies received to date through EFC loans for the funded ACJ projects:
\$188,093,647 (short term) and \$43,949,336 (long term).

Onondaga County Lake Improvement Project

4th Stipulation of the ACJ

Clinton/Lower MIS CSO Improvements

Summary of Current and County Authorizations

<i>Project/Task/Line Item</i>	Total Project Costs		
	Total Proposed Budget	Expended To Date	Authorization Remaining
<i>Clinton Street CSO Facility Planning (Original)</i>			
Engineering Services (EEA)	\$ 751,266	\$ 751,266	\$ (0)
Original Facility Plan Subtotal	\$ 751,266	\$ 751,266	\$ (0)
<i>Clinton Street CSO Conveyances Project</i>			
Contract No. 1 - Phase 1 Conveyances (Delaney)	\$ 14,478,053	\$ 14,478,053	\$ (0)
Contract No. 2 - Phase 2A Conveyances (Delaney)	\$ 4,074,455	\$ 4,074,455	\$ (0)
Construction Testing (CME)	\$ 5,095	\$ 5,095	\$ 0
Engineering/Construction Services (CDM/C&S)	\$ 2,738,000	\$ 2,737,369	\$ 631
Conveyances Subtotal	\$ 21,295,603	\$ 21,294,972	\$ 631
<i>Clinton Storage Project ⁽¹⁾</i>			
Construction Estimate (with contingency)	\$ 58,000,000	\$ 4,361,497	\$ 53,638,503
Engineering Services (EEA and others)	\$ 8,500,000	\$ 6,453,324	\$ 2,046,676
Construction Management and Administration	\$ 3,600,000		\$ 3,600,000
Project Escalation to Midpoint of Construction	\$ 3,500,000		\$ 3,500,000
CSO Storage Subtotal	\$ 73,600,000	\$ 10,814,822	\$ 62,785,178
<i>Facility Plan for CSOs 027 & 029</i>			
Construction Estimate	\$ 3,100,000		\$ 3,100,000
Engineering Services (Ch2MHill)	\$ 88,944	\$ 91,186	\$ (2,242)
Engineering Services (TBD)	\$ 770,000		\$ 770,000
County Administration and Other Costs	\$ -		\$ -
Facility Plan Subtotal	\$ 3,958,944	\$ 91,186	\$ 3,867,758
<i>Clinton/Lower MIS Green Implementation Program</i>			
Construction Contracts incl. GIF Public/Private	\$ 38,508,611	\$ 4,581,118	\$ 33,927,493
Ch2MHill Program Management & Engineering	\$ 15,900,000	\$ 4,841,857	\$ 11,058,143
Green Subtotal	\$ 54,408,611	\$ 9,422,975	\$ 44,985,636
<i>Program Management</i>			
Project Management (CDM/C&S)	\$ 1,811,903	\$ 1,409,891	\$ 402,012
Project Management for Facility Plan (CDM/C&S) ⁽²⁾	\$ -		\$ -
Program Management Subtotal	\$ 1,811,903	\$ 1,409,891	\$ 402,012
<i>Miscellaneous County Costs</i>			
Land Acquisition	\$ 4,132,400	\$ 2,077,200	\$ 2,055,200
IMA	\$ 4,861,000	\$ 3,808,741	\$ 1,052,259
Legal	\$ 64,564	\$ 50,608	\$ 13,957
Consulting (John Clare & Mezey)	\$ 226,334	\$ 226,334	\$ 0
Debt	\$ 175,832	\$ 170,885	\$ 4,947
Other	\$ 117,644	\$ 78,134	\$ 39,510
Miscellaneous Subtotal	\$ 9,577,774	\$ 6,411,902	\$ 3,165,872
Total	\$ 165,404,101	\$ 50,197,014	\$ 115,207,087
Authorized Master Budget 165,500,000			

Notes:

(1) Includes engineering costs from original Clinton RTF Project

(2) CDM/C&S Project Management costs are included in the total facility plan costs

Onondaga County Lake Improvement Project
4th Stipulation of the ACJ
Harbor Brook Drainage Basin CSO Abatement
Summary of Current and Proposed Costs, and County Authorizations

<u>Project/Task/Line Item</u>	Total Project Costs		
	Total Proposed Budget	Expended to Date	Authorization Remaining
<u>Harbor Brook CSO Abatement Project</u>			
Original Engineering Expenses	\$ 5,500,000	\$ 5,500,000	\$ -
<u>HBIS Replacement and CSO Abatement Project</u>			
Construction Contract No. 1 (1) (JJ Lane)	\$ 18,289,918	\$ 18,344,748	\$ (54,830)
Other Miscellaneous Work	\$ 2,482,920	\$ -	\$ 2,482,920
Engineering/Construction Services (CDM/C&S)	\$ 2,012,615	\$ 1,768,762	\$ 243,853
County Administration and Other Costs	\$ 114,547	\$ 115,417	\$ (870)
HBIS Replacement and CSO Abatement Project Total	\$ 22,900,000	\$ 20,228,927	\$ 2,671,073
<u>Lower Harbor Brook Storage & Conveyance</u>			
Construction Estimate (with contingency)	\$ 34,502,000		\$ 34,502,000
Engineering Services (EEA)	\$ 4,200,000	\$ 1,616,134	\$ 2,583,866
Engineering Services (CDM/C&S)	\$ 3,390,000	\$ 245,212	\$ 3,144,788
Project Escalation to Midpoint of Construction	\$ 2,280,000		\$ 2,280,000
Lower Harbor Brook Storage & Conv Total	\$ 44,372,000	\$ 1,861,346	\$ 42,510,654
<u>Harbor Brook CSOs FCF Program</u>			
Construction Estimate	\$ 12,000,000		\$ 12,000,000
Engineering Services (Arcadis)	\$ 1,878,731	\$ 74,300	\$ 1,804,432
County Administration and Other Costs	\$ 800,000		\$ 800,000
Project Escalation to Midpoint of Construction	\$ 400,000		\$ 400,000
FCF Program Total	\$ 15,078,731	\$ 74,300	\$ 15,004,432
<u>Other Harbor Brook Green</u>			
Construction Contracts incl. GIF Public/Private & Rain Barrels	\$ 9,300,000	\$ 572,771	\$ 8,727,229
Ch2MHill Engineering & Program Management	\$ 3,650,000	\$ 1,423,671	\$ 2,226,329
Harbor Brook Green Project Total	\$ 12,950,000	\$ 1,996,442	\$ 10,953,558
<u>Program Management</u>			
Project Management (CDM/C&S)	\$ 499,269	\$ 319,271	\$ 179,998
Project Management for FCF Plan Implem (CDM/C&S)	\$ -		
Program Management Total	\$ 499,269	\$ 319,271	\$ 179,998
<u>Harbor Brook Mitigation</u>	\$ 3,500,000	\$ 3,265,000	\$ 235,000
Total Costs for Harbor Brook CSO Area under 4th Stip	\$ 104,800,000	\$ 33,245,285	\$ 71,554,715

Onondaga County Lake Improvement Project

4th Stipulation of the ACJ

Midland CSO Abatement

Summary of Current and Proposed Costs, and County Authorizations

<i>Project/Task/Line Item</i>	Total Project Costs		
	Total Proposed Budget	Expended to Date	Authorization Remaining
<u>Midland Ave. RTF & Conveyances</u>			
Midland Phase 1 Conveyances - Construction	\$ 1,836,434	\$ 1,836,434	\$ (0)
Midland Phase 2 RTF & Conveyances - Construction	\$ 53,372,390	\$ 53,372,689	\$ (299)
Midland Demolition Contracts - Construction	\$ 748,483	\$ 748,483	\$ 0
Other Construction	\$ 124,579	\$ 124,579	\$ (0)
Phase 1 and 2 Engineering (Parsons & EEA)	\$ 14,717,163	\$ 12,503,353	\$ 2,213,810
CME Construction Testing	\$ 213,745	\$ 148,355	\$ 65,390
RTF Modifications (Construction, Eng, CM, Admin)	\$ 3,000,000	\$ -	\$ 3,000,000
Facility Plan Total	\$ 74,012,794	\$ 68,733,894	\$ 5,278,900
<u>CSO 044 Conveyances Project</u>			
Contract No. 6. - JJ Lane	\$ 7,701,898	\$ 4,313,643	\$ 3,388,255
Construction Contingency 5%	\$ 770,190	\$ -	\$ 770,190
Engineering Services (EEA)	\$ 664,921	\$ 374,578	\$ 290,343
Construction Management Services (CDM/C&S) see below	\$ -	\$ -	\$ -
Conveyances Project Total	\$ 9,137,009	\$ 4,688,221	\$ 4,448,788
<u>FCF Facility Plan</u>			
Construction Estimate	\$ 5,000,000	\$ -	\$ 5,000,000
Engineering Services (Arcadis and others)	\$ 623,954	\$ 13,942	\$ 610,012
Construction Management and Administration	\$ 210,000	\$ -	\$ 210,000
Project Escalation to Midpoint of Construction	\$ -	\$ -	\$ -
Clinton Storage Project Total	\$ 5,833,954	\$ 13,942	\$ 5,820,012
<u>Facility Plan for Midland CSOs</u>			
Construction Estimate	\$ 14,900,000	\$ -	\$ 14,900,000
Engineering Services (Ch2MHill)	\$ 118,384	\$ 121,368	\$ (2,984)
Engineering Services, County Admin, ect (TBD)	\$ 3,720,000	\$ -	\$ 3,720,000
Facility Plan Total	\$ 18,738,384	\$ 121,368	\$ 18,617,016
<u>Midland Green Implementation Program</u>			
Construction Contracts incl. GIF Public/Private	\$ 7,500,000	\$ 410,313	\$ 7,089,687
Ch2MHill Program Management & Engineering	\$ 3,202,341	\$ 783,203	\$ 2,419,138
Clinton Green Program Total	\$ 10,702,341	\$ 1,193,516	\$ 9,508,825
<u>Program Management</u>			
Project Management (CDM/C&S) includes CSO 044	\$ 6,530,602	\$ 5,624,897	\$ 905,705
Project Management for Facility Plan (CDM/C&S) ⁽¹⁾	\$ -	\$ -	\$ -
Program Management Total	\$ 6,530,602	\$ 5,624,897	\$ 905,705
<u>Miscellaneous County Costs</u>			
Land Acquisition	\$ 1,806,946	\$ 1,806,802	\$ 144
IMA	\$ -	\$ -	\$ -
Legal	\$ 182,323	\$ 181,975	\$ 348
Consulting (John Clare & Mezey)	\$ 208,317	\$ 194,317	\$ 14,000
Debt	\$ 635,031	\$ 495,031	\$ 140,000
Other	\$ 509,615	\$ 510,431	\$ (816)
Miscellaneous Costs Total	\$ 3,342,232	\$ 3,188,556	\$ 153,676
Total Cost for Midland project under 4th stipulation	\$ 128,297,316	\$ 83,564,395	\$ 44,732,921
Authorized Master Budget \$128,300,000			

Onondaga County Lake Improvement Project

4th Stipulation of the ACJ

Sewer Separation of CSO Areas 022/038/040/045/046A/046B/047/048/050/051/053/054

Summary of Current and Proposed Costs, and County Authorizations

<u>Project/Task/Line Item</u>	Total Project Costs		
	Total Proposed Budget	Expended to Date	Authorization Remaining
<u>Sewer Separation Construction Contracts</u>			
CSO 024 (Falter)	\$698,864	\$698,864	\$0
CSO 053/054 (Falter)	\$2,000,817	\$2,000,817	\$0
CSO 038//40/046A/046B (Falter)	\$3,598,931	\$3,524,487	\$74,444
CSO 047/048 (Falter)	\$1,654,022	\$1,654,022	\$0
CSO 050 (Lane)	\$4,362,188	\$4,362,188	\$0
CSO 051 (Lane)	\$5,037,280	\$5,037,280	\$0
CSO 022/045 (estimated Project Costs)	\$6,750,000	\$0	\$6,750,000
Construction Total	\$24,102,102	\$17,277,659	\$6,824,443
<u>Service Contracts (Engineering /Consulting /Program Management)</u>			
ACE	\$484,286	\$484,286	\$0
CDM/C&S	\$1,446,468	\$1,247,982	\$198,486
CME	\$109,492	\$49,704	\$59,788
Department of the Army	\$153,504	\$153,504	\$0
Spectra	\$437,996	\$437,996	\$0
Engineering/Management Total	\$2,631,746	\$2,373,472	\$258,274
<u>Miscellaneous County Costs</u>			
City of Syracuse	\$135,084	\$135,084	\$0
Consulting (John Clare & Mezey)	\$101,425	\$101,425	\$0
Debt	\$116,269	\$106,269	\$10,000
Legal	\$14,235	\$14,235	\$0
Other	\$13,540	\$4,093	\$9,447
Miscellaneous Costs Total	\$380,553	\$361,105	\$19,448
Total	\$27,114,401	\$20,012,236	\$7,102,165
Authorized by Legislature \$27,684,286			

Onondaga County Lake Improvement Project
 Save The Rain Education and Outreach Grant
 Summary of Current and Additional Costs, and County Appropriations
 November, 2011

Funding Sources			Appropriations
Program Funding			
2009 Appropriation			\$ 375,000
2010 Appropriation			\$ 300,000
2011 Appropriation			\$ 200,000
2011 Additional Appropriation 8/11			\$ 200,000
2012 Appropriation			\$ -
Total			\$ 1,075,000
Funding Uses			
<u>Retzcanter Marketing</u>	Contract Amount	Expended to Date	Difference + (-)
Newspaper Advertising	\$ 6,308	\$ 6,308	\$ -
Television Placement	\$ -	\$ -	\$ -
Radio Advertising	\$ -	\$ -	\$ -
Outdoor Advertising	\$ 18,054	\$ 18,054	\$ -
Online Advertising	\$ 2,110	\$ 2,110	\$ -
Website	\$ 30,796	\$ 30,796	\$ -
Social Media	\$ 6,443	\$ 6,443	\$ -
Direct Mail Production Postage	\$ -	\$ -	\$ -
Interactive DVD	\$ 11,885	\$ 11,885	\$ -
Viral Marketing	\$ 2,696	\$ 2,696	\$ -
Press Releases	\$ -	\$ -	\$ -
Media Kit/Brochure	\$ 7,335	\$ 7,335	\$ -
Trade Show Booth	\$ 11,509	\$ 11,509	\$ -
Green CNY	\$ 12,355	\$ 12,355	\$ -
Rain Saver Support Program	\$ 4,300	\$ 4,300	\$ -
General Marketing *	\$ 201,210	\$ 194,175	\$ 7,035
SubTotal	\$ 315,000	\$ 307,966	\$ 7,035
<u>Environmental Finance Center Education and Outreach</u>	Contract Amount	Expended to Date	Difference + (-)
Environmental Finance Center Staff	\$ 100,155	\$ 84,510	\$ 15,645
Onondaga Environmental Institute	\$ 110,212	\$ 70,623	\$ 39,589
ESF	\$ 49,937	\$ 27,024	\$ 22,913
Onondaga Earth Corps	\$ 13,040	\$ 2,833	\$ 10,208
Baltimore Woods Nature Center	\$ 22,601	\$ 22,601	\$ -
Purchased Services (ASLF)	\$ 7,937	\$ 20,000	\$ (12,063)
SubTotal	\$ 303,882	\$ 227,590	\$ 76,292
<u>Non-Labor Expenses (EFC)</u>			
Printing-Outreach	\$ 21,000	\$ 10,131	\$ 10,869
Postage	\$ 4,000	\$ 78	\$ 3,922
Travel	\$ 1,200	\$ 1,359	\$ (159)
Facilities Rental	\$ 5,200	\$ 35	\$ 5,165
Program-related Supplies - Other	\$ 3,000	\$ 2,022	\$ 978
Web -based Marketing Efforts	\$ 1,000	\$ -	\$ 1,000
Training Supplies and Materials	\$ 4,000	\$ -	\$ 4,000
Indirect/Overhead	\$ 60,614	\$ 50,328	\$ 10,286
SubTotal	\$ 100,014	\$ 63,953	\$ 36,061
Total EFC Contract	\$ 403,896	\$ 291,543	\$ 112,353
<u>Miscellaneous Ed/Outreach Expenses</u>	Contract Amount	Expended to Date	Difference + (-)
Exhibit & More	\$ -	\$ 1,955	\$ -
Tri Tank Corp	\$ -	\$ 3,680	\$ -
Integrated Marketing	\$ -	\$ 9,721	\$ -
Century Decorations	\$ -	\$ 950	\$ -
The Post Standard	\$ -	\$ 22,468	\$ -
Lamar	\$ -	\$ 16,250	\$ -
Snafu Promotion	\$ -	\$ 10,000	\$ -
Greater Syr Chamber	\$ -	\$ 675	\$ -
Syr Jazz Fest (2010)	\$ -	\$ 10,000	\$ -
CNY Jazz Arts Found (2010)	\$ -	\$ 5,000	\$ -
The Right Coast Assoc	\$ -	\$ 1,000	\$ -
Ballantyne Gardens	\$ -	\$ 700	\$ -
Maple Hill Nursery	\$ -	\$ 515	\$ -
Marks Products Ent	\$ -	\$ 1,899	\$ -
Syr Hibernian Fest Corp	\$ -	\$ 2,000	\$ -
Printglobe	\$ -	\$ 2,775	\$ -
Just the Right Stuff	\$ -	\$ 1,568	\$ -
Dano Enterprises	\$ -	\$ 7,680	\$ -
Centerstate CEO	\$ -	\$ 675	\$ -
CME dba Salt City Signs	\$ -	\$ 590	\$ -
Travel	\$ -	\$ 566	\$ -
CNY Jazz Arts Found	\$ -	\$ 1,500	\$ -
Credit Card	\$ -	\$ 1,542	\$ -
Multi Media	\$ -	\$ 25,650	\$ -
Total	\$ -	\$ 129,359	\$ -
STR Education and Outreach Totals	Budget	Expended	Balance
	\$ 1,075,000	\$ 728,868	\$ 346,132
Anticipated Additional Expenditures Through 12/31/2011		\$ 122,227	\$ 223,905

* Moved \$20,000 from the Retzcanter General Marketing Line as it will be charged to Clinton for Trolley Lot advertising.

APPENDIX

November 2011

FINANCIAL TRACKING SUMMARY:					
FEDERAL & STATE GRANTS/LOANS APPLIED FOR, NOT YET APPROVED					
	ORIGINAL	EFC	EFC		NYS
PROJECT NAME	BUDGET	SHORT TERM	LONG TERM	E.P.A.	FUNDING
METRO - CURRENT					
AERATION SYSTEM UPGRADE	\$8,500,000				
AMMONIA REMOVAL DEMO	\$2,000,000				
BIOSOLIDS - MECHANICAL THICKENERS					
DIGESTER MOD/CHEMICAL STORAGE	\$5,600,000				
DIGITAL SYSTEM IMPROVEMENTS	\$2,900,000				
MISCELLANEOUS IMPROVEMENTS	\$1,400,000				
ODOR CONTROL	\$7,700,000				
AMMONIA REMOVAL FULL SCALE/ STAGE II PHOSPHORUS REMOVAL	\$190,000,000				
PHOSPHORUS REMOVAL PILOT	\$5,000,000				
CSO - CURRENT					
CLINTON ST CONVEYANCE & RTF	\$31,245,000				
ERIE BLVD SEW SEP STORAGE	\$3,000,000				
FRANKLIN ST FCF	\$3,200,000				
HARBOR BROOK FCF	\$250,000				
HARBOR BROOK CSO ABATEMENT	\$5,444,000				
HIAWATHA INTERCEPTOR/RTF	\$8,000,000				
KIRKPATRICK ST PUMP STATION	\$5,642,000				
MALTBIE ST FCF	\$250,000				
MIDLAND AVE CONVEYANCE	\$3,000,000				
MIDLAND AVE PHASE II & RTF	\$45,000,000				
MIDLAND AVE PHASE III	\$27,000,000				
MIDLAND AVE MITIGATION COSTS					
NEWELL ST FCF	\$1,310,000				
ONONDAGA CREEK FCF	\$3,000,000				
SEWER SEPARATION	\$7,704,000				
SIPHON REHABILITATION	\$1,230,000				
TEALL BROOK FCF	\$175,000				
WEST ST SEWER SEPARATION	\$1,000,000				
OTHER					
AMBIENT WATER MONITORING	\$8,000,000				
OXYGENATION DEMO	\$2,400,000				
SEQR REGULATORY	\$50,000				
TOTAL DOLLARS	*\$380,000,000	\$0	\$0	\$0	\$0
*Original budget figures were based on 1997 dollars					

November 2011

FINANCIAL TRACKING SUMMARY: FEDERAL & STATE GRANTS/LOANS APPROVED & RECEIVED											
		NYS	NYS	FED EPA	FED EPA	SHORT-TERM	SHORT-TERM	LONG-TERM	LONG-TERM	ACE	ACE
	PROJECT	GRANT	GRANT	GRANT	GRANT	EFC LOAN	EFC LOAN	EFC LOAN	EFC LOAN	GRANT	GRANT
PROJECT NAME	BUDGET	APPROVED	RECEIVED	APPROVED	RECEIVED	APPROVED	RECEIVED	APPROVED	RECEIVED	APPROVED	RECEIVED
METRO - CURRENT											
AERATION SYSTEM UPGRADE	\$8,500,000	\$5,834,381	\$5,834,381			\$7,365,000	\$6,868,954	\$1,049,185	\$14,613		
AMMONIA REMOVAL DEMO	\$2,000,000	\$1,145,109	\$1,145,109			Full-Scale	\$202,078				
BIOSOLIDS-MECHANICAL THICKENERS ^(c)								\$14,676,422	\$14,711,148		
DIGESTER MOD/CHEMICAL STORAGE	\$5,600,000	\$4,319,819	\$4,319,819			\$4,938,419	\$4,938,419	\$775,509	\$154,126		
DIGITAL SYSTEM IMPROVEMENTS	\$2,900,000	\$1,563,317	\$1,563,317			\$1,849,000	\$1,849,000	\$285,682	\$3,833		
MISCELLANEOUS IMPROVEMENTS	\$1,400,000										
ODOR CONTROL	\$7,700,000							\$7,413,199	\$7,389,197		
AMMONIA REMOVAL FULL SCALE/ STAGE II PHOSPHORUS REMOVAL	\$190,000,000	\$47,331,203	\$47,331,203	\$54,705,015	\$54,705,015	\$108,000,000	\$105,860,930	\$17,200,000	\$989,323		
PHOSPHORUS REMOVAL PILOT	\$5,000,000					Full Scale	\$1,936,991				
CSO - CURRENT											
CLINTON ST CONVEYANCE & RTF	\$31,245,000	\$51,120,000	\$20,000,000			\$37,788,890	\$9,334,263	\$15,603,494	\$3,731,790		
ERIE BLVD SEW SEP STORAGE	\$3,000,000	\$1,700,000	\$1,700,000			\$2,301,876	\$2,094,314	\$923,162	\$216,543		
FRANKLIN ST FCF	\$3,200,000	\$3,828,053	\$3,828,053			\$4,726,762	\$4,589,759	\$1,179,012	\$296,823		
HARBOR BROOK FCF	\$250,000	\$384,200	\$384,200					\$343,500	\$348,596		
HARBOR BROOK CSO ABATEMENT	\$5,444,000	\$3,880,000	\$3,880,000			\$53,689,500	\$19,690,186				
HIAWATHA INTERCEPTOR/RTF ^(a)	\$8,000,000							\$2,710,169	\$37,749	\$3,406,000	\$3,406,000
KIRKPATRICK ST PUMP STATION	\$5,642,000	\$7,502,302	\$7,502,302			\$12,000,000	\$10,940,632	\$4,246,376	\$828,115		
MALTBIE ST FCF	\$250,000	\$211,097	\$211,097			\$212,000	\$188,106				
MIDLAND AVE CONVEYANCE	\$3,000,000	\$26,055,238	\$26,055,238	\$48,904,185	\$29,070,012						
MIDLAND AVE PHASE II & RTF	\$45,000,000					\$15,000,000	\$15,000,000	\$25,155,568	\$8,456,884		
MIDLAND AVE PHASE III	\$27,000,000					\$10,000,000					
MIDLAND AVE MITIGATION COSTS											
NEWELL ST FCF ^(b)	\$1,310,000	\$367,737	\$367,737								
ONONDAGA CREEK FCF	\$3,000,000	\$442,154	\$442,154								
SEWER SEPARATION ^(a)	\$7,704,000							\$7,231,454	\$6,756,274	\$14,050,177	\$11,100,177
SIPHON REHABILITATION	\$1,230,000	\$870,768	\$870,768			\$1,435,500	\$1,024,433	\$140,623	\$1,958		
TEALL BROOK FCF	\$175,000	\$1,045,162	\$1,045,162			\$1,236,594	\$1,094,139	\$188,809	\$5,743		
WEST ST SEWER SEPARATION	\$1,000,000	\$2,299,460	\$2,299,460			\$3,059,716	\$2,481,443	\$395,540	\$6,621		
OTHER											
AMBIENT WATER MONITORING	\$8,000,000										
OXYGENATION DEMO	\$2,400,000										
SEQR REGULATORY	\$50,000										
TOTAL DOLLARS	*\$380,000,000	\$159,900,000	\$128,780,000	\$103,609,200	\$83,775,027	\$263,603,257	\$188,093,647	\$99,517,704	\$43,949,336	\$17,456,177	\$14,506,177
*Original budget figures were based on 1997 dollars											
(a) NOTE: PROJECT IS US ARMY CORPS OF ENGINEERS PROJECT											
(b) NOTE: PROJECT RECEIVED \$40,500 COST SHARE GRANT FROM (NYSERDA)											
(c) NOTE: PROJECT RECEIVED \$87,500 COST SHARE GRANT FROM (NYSERDA)											

Lake Improvement Project Status Report For The Period Ending 11/30/2011

	Project Title	ACJ START DATE	ACJ FINISH DATE	COUNTY FINISH DATE	ORIGINAL BUDGET(2)	AUTHORIZED BUDGET	ENGINEER
	METRO - Current						
1	AERATION SYSTEM UPGRADE		7/1/2002	01/03/00	\$ 8,500,000	\$ 6,925,115	EEA
2	AMMON. REMOVAL DEMONSTRATION	11/1/1998	3/1/2000	12/31/99	\$ 2,000,000	\$ 1,350,000	EEA
3	BIOSOLIDS - MECHANICAL THICKENERS					\$ 15,100,000	
4	DIGESTER MOD/CHEMICAL STORAGE		7/1/2002	10/31/00	\$ 5,600,000	\$ 5,092,545	C&S
5	DIGITAL SYSTEMS IMPROVEMENTS		7/1/2002	06/31/01	\$ 2,900,000	\$ 3,520,317	Systems Integrated
6	MISCEL. IMPROVEMENTS		7/1/2002	01/31/99	\$ 1,400,000	\$ 1,400,000	
7	ODOR CONTROL		7/1/2002	12/20/00	\$ 7,700,000	\$ 8,393,855	OBG
8	AMMONIA REMOVAL FULL SCALE/ STAGE II PHOSPHORUS REMOVAL	10/1/2001 10/1/2003	11/1/2003 4/1/2005	11/01/03	\$ 125,000,000 \$ 65,000,000	\$ 129,386,187	EEA
9	PHOSPHORUS REMOVAL - PILOT	4/1/2006	4/1/2007	12/31/00	\$ 5,000,000	\$ 4,300,000	EEA
	CSO - Current						
10	CLINTON ST. CONVEYANCE/ CLINTON ST. RTF	5/1/2003 5/1/2007	5/1/2007 1/1/2012	10/28/06 12/28/10	\$ 15,987,190 \$ 15,258,090	\$ 165,500,042	EEA
11	ERIE BLVD STORAGE SYSTEM		7/1/2002	04/13/02	\$ 3,000,000	\$ 2,684,523	Barton & Loguidice
12	FRANKLIN ST. FCF	4/26/1999	5/1/2000	05/01/00	\$ 3,200,000	\$ 5,216,618	EEA
13	HARBOR BROOK FCF		7/1/2002	07/01/02	\$ 250,000	\$ 889,109	EEA
14	HARBOR BROOK CSO ABATEMENT		7/1/2002		\$ 5,443,980	\$ 104,800,000	Moffa & Assoc.
15	HIAWATHA INTERCEPTOR/RTF		7/1/2002	12/31/00	\$ 8,000,000	\$ 6,047,183	EEA/Parsons
16	KIRKPATRICK ST. PUMP STATION		7/1/2002	10/29/02	\$ 5,641,860	\$ 12,558,335	EEA
17	MALTBIE STREET FCF	8/31/1998	7/1/2002	04/26/99	\$ 250,000	\$ 362,028	EEA
18	MIDLAND AVE RTF & CSO ABATEMENT	5/1/1999	5/1/2004	12/06/00	\$ 75,000,000	\$ 145,368,853	EEA
19	MIDLAND AVE MITIGATION COSTS					\$ 3,000,000	
20	NEWELL STREET RTF		7/1/2002	07/01/01	\$ 1,310,000	\$ 473,132	Moffa & Assoc.
21	ONONDAGA CREEK FCF		7/1/2002	07/01/02	\$ 3,000,000	\$ 648,342	Parsons
22	SEWER SEPARATION		1/1/2012	01/01/12	\$ 7,703,880	\$ 27,684,286	OBG
23	SIPHON REHABILITATION		7/1/2002	06/11/99	\$ 1,230,000	\$ 1,026,391	C&S
24	TEALL BROOK FCF		7/1/2002	12/01/01	\$ 175,000	\$ 1,235,346	EEA
25	WEST ST SEWER SEPARATION	5/1/1999		01/14/00	\$ 1,000,000	\$ 2,720,572	CHA
26	ERIE BLVD CSO ABATEMENT						New Project
	OTHER						
27	AMBIENT WATER MONITORING		7/1/2002		\$ 8,000,000		
28	OXYGENATION DEMO PROJECT	5/1/1999	4/1/2003	02/25/04	\$ 2,400,000	\$ 10,087	
29	SEQRA REGULATORY COMPLIANCE ⁽¹⁾				\$ 50,000	\$ 50,000	Parsons
	TOTAL DOLLARS ⁽²⁾			*	\$ 380,000,000	\$ 655,742,866	
	*Original budget figures were based on 1997 dollars						
	(1) SEQR costs are reflected in the individual projects under total payments to date						
	(2) Original budget figures were based on 1997 dollars						

November 2011

	Project Title	TOTAL PAYMENTS TO DATE 11-30-11	TOTAL PAYMENTS TO DATE 10-31-11	Change
	METRO - Current			
1	AERATION SYSTEM UPGRADE	\$ 6,925,115	\$ 6,925,115	\$ -
2	AMMON. REMOVAL DEMONSTRATION	\$ 1,347,187	\$ 1,347,187	\$ -
3	BIOSOLIDS - MECHANICAL THICKENERS	\$ 14,754,506	\$ 14,741,838	\$ 12,668
4	DIGESTER MOD/CHEMICAL STORAGE	\$ 5,092,545	\$ 5,092,545	\$ -
5	DIGITAL SYSTEMS IMPROVEMENTS	\$ 3,520,317	\$ 3,520,317	\$ -
6	MISCEL. IMPROVEMENTS	\$ 1,400,000	\$ 1,400,000	\$ -
7	ODOR CONTROL	\$ 8,393,855	\$ 8,393,855	\$ -
8	AMMONIA REMOVAL FULL SCALE/ STAGE II PHOSPHORUS REMOVAL	\$ 128,688,040 \$ -	\$ 128,688,040 \$ -	\$ -
9	PHOSPHORUS REMOVAL - PILOT	\$ 4,106,726	\$ 4,089,386	\$ 17,340
	CSO - Current			\$ -
10	CLINTON ST. CONVEYANCE/ CLINTON ST. RTF	\$ 50,197,014 \$ -	\$ 45,273,942	\$ 4,923,072 \$ -
11	ERIE BLVD STORAGE SYSTEM	\$ 2,684,523	\$ 2,684,523	\$ -
12	FRANKLIN ST. FCF	\$ 4,948,516	\$ 4,948,516	\$ -
13	HARBOR BROOK FCF	\$ 804,020	\$ 804,020	\$ -
14	HARBOR BROOK CSO ABATEMENT	\$ 33,245,284	\$ 33,089,693	\$ 155,591
15	HIAWATHA INTERCEPTOR/RTF	\$ 6,047,183	\$ 6,047,183	\$ -
16	KIRKPATRICK ST. PUMP STATION	\$ 12,558,335	\$ 12,558,335	\$ -
17	MALTBIE STREET FCF	\$ 362,028	\$ 362,028	\$ -
18	MIDLAND AVE RTF & CSO ABATEMENT	\$ 83,564,396	\$ 82,536,860	\$ 1,027,536
19	MIDLAND AVE MITIGATION COSTS	\$ 3,000,000	\$ 3,000,000	\$ -
20	NEWELL STREET RTF	\$ 473,132	\$ 473,132	\$ -
21	ONONDAGA CREEK FCF	\$ 648,342	\$ 648,342	\$ -
22	SEWER SEPARATION	\$ 20,012,236	\$ 20,012,066	\$ 171
23	SIPHON REHABILITATION	\$ 1,026,391	\$ 1,026,391	\$ -
24	TEALL BROOK FCF	\$ 1,235,346	\$ 1,235,346	\$ -
25	WEST ST SEWER SEPARATION	\$ 2,720,572	\$ 2,720,572	\$ -
26	ERIE BLVD CSO ABATEMENT	\$ -	\$ -	\$ -
	OTHER			
27	AMBIENT WATER MONITORING	\$ 14,615,290	\$ 14,615,290	\$ -
28	OXYGENATION DEMO PROJECT	\$ 10,087	\$ 10,087	\$ -
29	SEQRA REGULATORY COMPLIANCE	\$ -	\$ -	\$ -
				\$ -
	TOTAL DOLLARS	\$ 412,380,986	\$ 406,244,609	\$ 6,136,377

Chronology of Project Construction Starts

	<u>Status</u>	<u>Location</u>
<u>Pre-ACJ Signing (1/20/98)</u>		
• General Improvements	Complete	Metro
• Odor Control and Residuals Handling	Complete	Metro
 <u>1998</u>		
• Digital Systems Upgrade	Complete	Metro
• Ammonia Removal Demonstration	Complete	Metro
• Aeration System Upgrade	Complete	Metro
• Hiawatha RTF - ACOE	Complete	Regional Market
• Newell St. RTF Demo/Improvements	Complete	W.Newell/Vale St.
• Maltbie St. FCF	Complete	Maltbie/Plum St.
• Siphon Rehab	Complete	Various
 <u>1999</u>		
• Digester Modifications/Chemical Storage	Complete	Metro
• Franklin St. FCF	Complete	I-690/Franklin
• West Street Sewer Separation	Complete	W. Genesee, Plum, Tracy, N. West St.
• Ammonia Trackdown	Complete	Metro
 <u>2000</u>		
• Midland Ave. Conveyance Phase I	Complete	Tallman/Oxford St.
• Phosphorus Removal – Phase I Pilot	Complete	Metro
 <u>2001</u>		
• Erie Blvd. Storage System Upgrade	Complete	Franklin to Teall
• Full Scale Ammonia Removal/ Stage II Phosphorus Removal	Complete	Metro
• Kirkpatrick St. Pump Station & Force Main	Complete	Kirkpatrick St.
• Onondaga Creek FCF	Complete	Inner Harbor
• Teall Brook FCF	Complete	Teall Ave.
• Water Street Sewer Separation (CSO 024)	Complete	Water Street
 <u>2002</u>		
• Harbor Brook FCF	Complete	W.Hiaw./I-690
• Brighton Ave Sewer Separation (CSO 053/054)	Complete	Brighton/Bishop Ave

<u>Project</u>	<u>Status</u>	<u>Location</u>
<u>2004</u>		
• Tallman/Onondaga Sewer Separation (CSO 038, 040, 046A & 046B)	Complete	Tallman/Onondaga
• Midland Phase II RTF/Conveyances	Complete	Blaine/Oxford St.
<u>2005</u>		
• Phosphorus Removal – Phase II Pilot	Complete	Metro
• Biosolids Handling Improvements	Complete	Metro
<u>2006</u>		
• Sewer Separation – CSO 047 & 048	Complete	South Ave/ Bissell St.
<u>2007</u>		
• Sewer Separation – CSO 050	Complete	Parkway/Rockland
• Clinton Phase I Conveyances	Complete	
<u>2008</u>		
• Clinton Phase IIA Conveyances	Complete	
<u>2009</u>		
• Sewer Separation – CSO 051	Complete	Colvin St.
<u>2010</u>		
• Harbor Brook Interceptor Sewer	Authorized/Underway	Velasko/Fayette
<u>2011</u>		
• Midland CSO 044	Authorized	W. Castle/South Ave

**CONTRACTORS for
CONSTRUCTION PROJECTS
Metro Treatment Plant**

AERATION SYSTEM UPGRADE

Bongiovanni Construction (General)	\$5,626,956.41
Ridley Electric (Electrical)	\$ 846,154.00

DIGITAL SYSTEM UPGRADE

Systems Integrated	\$2,974,514.27
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ODOR CONTROL CONTRACT # 1

Falconet, Inc. (General)	\$4,872,660.53
Scriba Electric (Electrical)	\$ 315,580.30
Burns Bros. (Heating/Ventilation)	\$ 82,459.00
Burns Bros. (Plumbing)	\$ 50,168.00

ODOR CONTROL CONTRACT # 2

Murnane Construction	\$1,636,000.00
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PHASE III IMPROVEMENTS CONTRACT 1 – DIGESTER & LAGOON
IMPROVEMENTS

Maxim Construction	\$ 645,730.74
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PHASE III IMPROVEMENTS CONTRACT 2 – CHEMICAL STORAGE & FEED
FACILITIES

C.O.Falter Construction Corp. (General)	\$2,528,952.08
Barry & Barry Electrical Co. (Electrical)	\$ 193,665.22
Burns Bros. (HVAC)	\$ 224,232.51
Edward Joy Company (Plumbing)	\$ 38,669.37

PHASE III IMPROVEMENTS CONTRACT 3 – DIGESTER & LAGOON CLEANING

Waste Stream Environmental Inc.	\$ 727,881.80
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FULL SCALE AMMONIA/PHOSPHORUS REMOVAL - FIELD OFFICE

James & Son Construction	\$ 28,388.00
Resun Leasing, Inc.	\$ 112,224.00
Ridley Electric Co.	\$ 32,295.00
Burns Brothers	\$ 18,440.00

FULL SCALE AMMONIA/PHOSPHORUS REMOVAL

U.S. Filter – Kruger Products, Inc.	\$ 8,271,182.00
U.S. Filter – Kruger Products, Inc.	\$ 3,918,080.00

**CONTRACTORS for
CONSTRUCTION PROJECTS
Metro Treatment Plant**

FULL SCALE AMMONIA/PHOSPHORUS REMOVAL

SITE PREPARATION - CONTRACT 2

C.O. Falter Construction Corp. (General)	\$22,243,695.00
Ridley Electric (Electrical)	\$ 255,627.00
C.O. Falter Construction Corp. (Pile Testing)	\$ 431,008.00
Moretrench Environmental	\$ 4,602,086.57

PILE INSTALLATION – CONTRACT 3

M.A. Bongiovanni Construction	\$ 9,045,731.95
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GENERAL - CONTRACT 4

The Pike Company (General)	\$46,860,263.46
Ridley Electric Co. (Electrical)	\$ 6,927,238.00
Edward Joy Company (HVAC)	\$ 3,009,057.61
Burns Brothers (Plumbing/Fire Protection)	\$ 1,217,583.74

BIOSOLIDS HANDLING IMPROVEMENTS

C.O. Falter Construction Corp. (General)	\$10,929,016.19
Ridley Electric (Electrical)	\$1,476,223.00
Airside Technology (HVAC)	\$ 532,187.00
Burns Bros. (Plumbing)	\$ 173,679.09

CSOs

CLINTON CONVEYANCES PHASE I & 2A

The Delaney Group, Inc.	\$14,478,053.39
The Delaney Group, Inc.	\$ 4,074,455.32

CLINTON CSO ABATEMENT

Ruston Paving	\$ 188,046.14
Davis Wallbridge	\$ 635,873.93
Davis Wallbridge	\$ 428,000.00

ERIE BOULEVARD STORAGE SYSTEM

M. Hubbard Construction	\$1,556,752.00
Ridley Electric (Electrical)	\$ 154,059.47
Burns Bros. (Mechanical)	\$ 174,350.00
Scriba Electric (Electrical)	\$ 144,640.61
Burns Bros. (Plumbing)	\$ 33,217.97

**CONTRACTORS for
CONSTRUCTION PROJECTS
CSOs**

HARBOR BROOK CSO ABATEMENT

Titan Wrecking & Environmental, LLC (Demolition)	\$ 227,850.00
Joseph J. Lane Construction (Interceptor Sewer Replacement)	\$18,289,918.00
Bette Cring (Elephant Barn greening)	\$ 207,701.00

HARBOR BROOK FCF

C.O. Falter Construction Corp. (General)	\$ 373,370.21
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KIRKPATRICK ST. PUMP STATION & FORCE MAIN

C.O. Falter Construction Corp.	\$ 4,477,820.47
C.O. Falter Construction Corp.	\$ 4,425,766.31
Patricia Electric	\$ 761,184.63
King & King Mechanical	\$ 245,569.51
G.J. Adams Plumbing	\$ 51,624.16

MALTBIE STREET FCF

Over & Under Piping	\$ 152,418.00
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MIDLAND AVENUE CONVEYANCES

Marcellus Construction (General)	\$1,836,434.47
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MIDLAND AVENUE PHASE II CONVEYANCES & RTF

Empire Dismantlement Corp. (Demolition)	\$ 457,681.50
Murnane Building Contractors, Inc. (General)	\$47,929,392.75
Ridley Electric Company (Electrical)	\$ 2,904,771.00
Edward Joy Company (HVAC)	\$ 2,053,808.50
Edward Joy Company (Plumbing)	\$ 484,717.17

MIDLAND AVENUE PHASE III CONVEYANCES

Titan Wrecking & Environmental, LLC (Demolition)	\$ 290,801.39
JJ Lane	\$ 7,701,898.00

**CONTRACTORS for
CONSTRUCTION PROJECTS
CSOs**

<u>SEWER SEPARATION – CSO 024</u> C.O. Falter Construction Corp.	\$ 701,799.00
<u>SEWER SEPARATION – CSO 053/054</u> C.O. Falter Construction Corp.	\$ 2,211,604.54
<u>SEWER SEPARATION – CSO 038, 040, 046A&B</u> C.O. Falter Construction Corp.	\$ 3,598,930.76
<u>SEWER SEPARATION – CSO 047 & 048</u> C.O. Falter Construction Corp.	\$ 1,654,022.34
<u>SEWER SEPARATION – CSO 050</u> Joseph J. Lane Construction	\$ 4,360,527.06
<u>SEWER SEPARATION – CSO 051</u> Joseph J. Lane Construction	\$ 5,029,323.00
<u>SIPHON REHABILITATION</u> Insituform Metropolitan	\$1,025,551.00
<u>TEALL BROOK FCF</u> C.O. Falter Construction Corp. (General) Scriba Electric (Electrical)	\$ 877,095.43 \$ 26,470.20
<u>WEST STREET AREA SEWER SEPARATION</u> Maxim Construction (General)	\$2,467,488.50

