SENY Stormwater Conference 2015 – 10/14/2015

Ownership and Management of Vacant Lots Repurposed for Stormwater Capture in Syracuse, NY

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About ASLF

- ASLF is a New York based NGO, headquartered in the Near Westside area in the City of Syracuse
- Established in 1982 to provide legal, technical, and organizational services to individuals and organizations dealing with environmental issues
- Is incorporating innovative strategies to improve economic, social, and environmental sustainability
- Has been taking a leading role in protection and restoration of Syracuse waterways and addressing CSO issues



ASLF Office Building at 658 West Onondaga Street, Syracuse, New York



Learning Objectives

- Green infrastructure solutions toward compliance with the court ordered CSO management requirement
- Green infrastructure solutions for repurposing urban vacant lots
- Post-construction ownership and maintenance challenges related to vacant lot repurposing
- The land trust as a tool for continued management and conservation

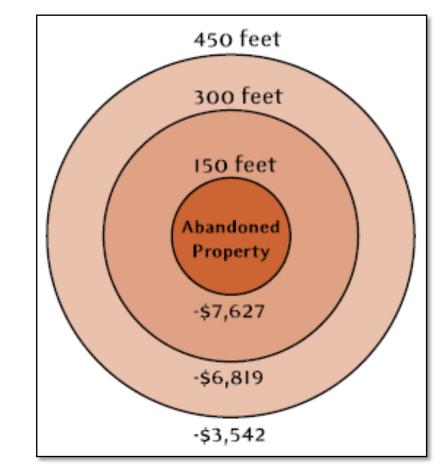


ASLF Office Building at 658 West Onondaga Street, Syracuse, New York



Vacant Lot Issues

- Economically draining for a community
- Lower property values
- Visually blighting
- Increased crime rates
- Public nuisance and health issues



Property Value Degradation around A Vacant Property

Source: Temple University Center for Public Policy and Eastern Pennsylvania Organizing Project. "Blight Free Philadelphia: A Public-Private Strategy to Create and Enhance Neighborhood Value." Philadelphia, 2001.



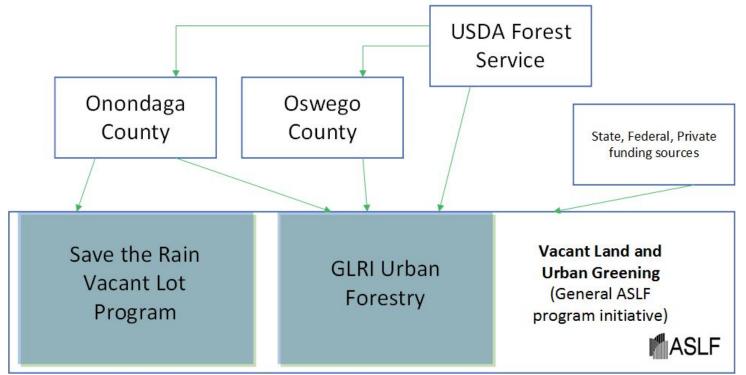
Vacant Lots: Opportunities



- Stormwater retention
- Recreation
- Urban forestry
- Urban agriculture
- Habitat creation and conservation



ASLF: Current Vacant Lot Programs









- Amended Consent Judgment (ACJ)
 - First Entered in 1989
 - 1st ACJ Amendment in 1998
 - 2nd ACJ Amendment in 2006
 - 3rd ACJ Amendment in 2008



http://savetherain.us/

- Landmark Revision the 4th Stipulation: In 2009, when Onondaga County gained federal court approval of its new Save the Rain Green Infrastructure program, Syracuse became the first community in the United States with a legal requirement to reduce sewage overflows with green infrastructure (GI).
- Requires 95% of overall CSO capture by 2018, with 6.3% through GI, which translates to ~250 million gallons/year



- Partners
 - Onondaga County
 - City of Syracuse
 - ASLF
 - Program Development
 - Outreach
 - Site Analysis and Selection
 - Conceptual Design
 - Urban Orchard
 - Community Garden
 - Urban Forestry



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Before



<u>After</u>

- Urban Orchard
- 701 Oswego Street
- Runoff Reduction: 195,000 gallons
- CSO Reduction: 93,600 gallons







<u>Before</u>



- Rain Garden + Trees
- 1344 West Onondaga Street
- Runoff Reduction: 133,000 gallons
- CSO Reduction: 63,840 gallons





- Rain Garden + Trees
 - 1344 West Onondaga Street
- Runoff Reduction: 133,000 gallons
- CSO Reduction: 63,840 gallons



<u>After</u>

GLRI Urban Forestry

- Partners
 - Onondaga County
 - Oswego County
 - USDA Forest Service
 - City of Syracuse
 - Land Bank
 - ASLF
 - Program Development
 - Outreach
 - Site Analysis and Selection
 - Conceptual Design
 - Tree Plantings
 - Maintain Online Database





GLRI Urban Forestry

- Over 600 trees planted by Fall 2015
- Vacant Brownfields and Private Property
- A mature tree uptakes approximately 1,000 gallons of stormwater per year
- A single tree may store up to 100 gallons of water
- Onondaga County could consider our tree plantings when assessing ACJ compliance/modeling





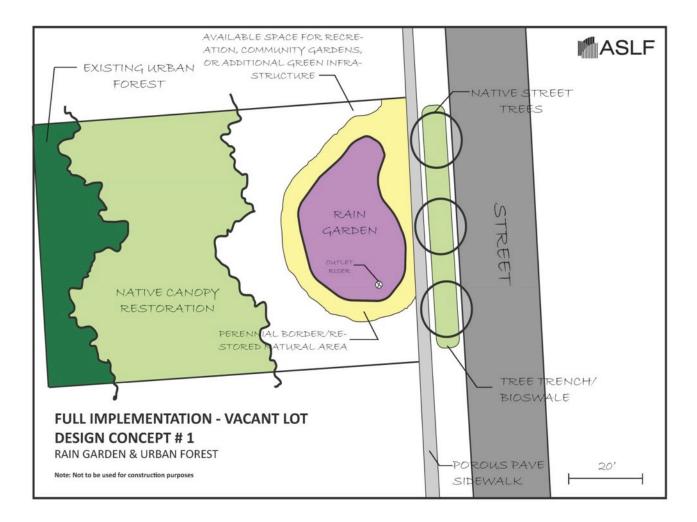


Vacant Land and Urban Greening

- ASLF ongoing program
 GIGP
- Partners
 - Syracuse-Onondaga County Land Bank
 - Sage Land Trust
 - ASLF
 - Program Development
 - Outreach
 - Site Analysis and Selection
 - Conceptual Design
 - Green Infractructure
 - Urban Forest
 - Community gardens, Orchard, Restored natural area



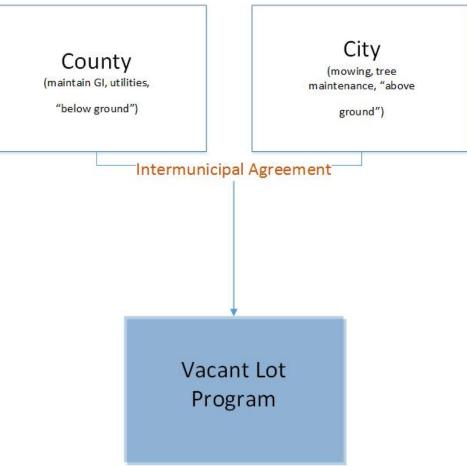
Vacant Land and Urban Greening





Operations and Maintenance: Current Model

- Intermunicipal agreement for lot maintenance
 County contracts
 - with Onondaga Earth Corps





Operations and Maintenance: Current Model







Employees of CH2M HILL maintain Harrison Street thanks to the Adopt-A-Green Project Program.

Support your local community, take pride in our streets, and do your part to keep Onondaga County green!

Adopt a Green Project

Save the Rain is looking to partner with community groups or businesses that wish to "adopt" a green infrastructure project in their neighborhood. Your business or group will be responsible for the landscape maintenance of one of our green infrastructure sites throughout the City of Svracuse.

The Program Coordinator will work with you as the adopting group to determine the project location most appropriate for your organization to maintain - requiring just a few hours each month.

We need teamwork to protect our local water and keep the community beautiful! Sign up at **savetherain.us/adopt-gi/**





Operations and Maintenance: Challenges

<u>Ownership</u>

- City? County?
 Community Group?
 Private citizen? Land
 Bank? Land Trust?
- Municipalities uninterested in prolonged ownership
- Uncertain future for green projects
- Liability issues





Operations and Maintenance: Challenges

<u>Maintenance</u>

- City? County? Community Group? Private citizen? Land Bank? Land Trust?
- Adhering to compliance
- Green project vs. Grey project

No	Indicator	Status
1	Severe Inlet Obstruction	Most runoff cannot enter the facility
4	Structural Integrity	Facility or adjacent infrastructure at risk of failure
2, 6,14	Severe Inlet Erosion, Sideslope or Bed	A foot or more of gully erosion
7	Severe Design Departures	More than 25% departure from design assumptions for surface area, ponding depth and/or contributing drainage area
8	Severe Bed Sinking	A foot or more of localized bed sinking and/or sediments observed in underdrain
9	Severe Sediment Caking	More than two inches of deposition in the facility
10	Severe Standing Water	More than 3 inches of ponding 72 hours after rain
15	Severe Vegetative Cover	35% of less vegetative cover

Source: Chesapeake Stormwater Network

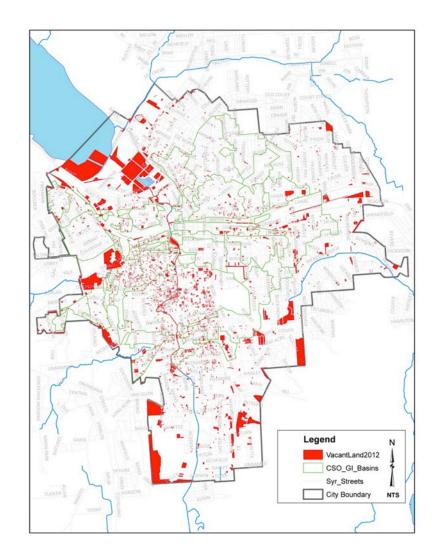


Operations and Maintenance: Challenges

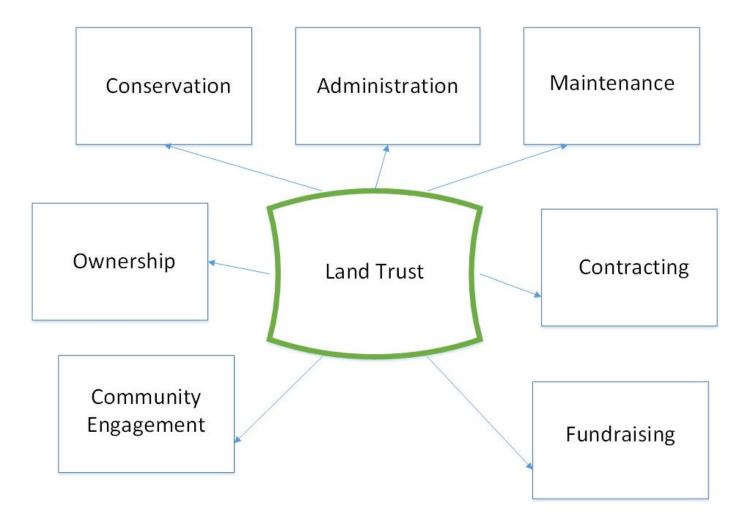
Administration

- The nature of urban green projects: small, geographically scattered
- Managing properties
- Coordinating maintenance and subcontractors
- Community outreach
- Fundraising

ASLF



Operations and Maintenance: Land Trust





Operations and Maintenance: Land Trust

- Conservation: Keeping green projects in perpetuity, taking "undevelopable" properties
- Administration: Managing properties, contractors, funding, insurance, etc.
- Maintenance: Proper upkeep of GI, and keeping in compliance (as per the mandate)
- Community outreach and <u>buy-in</u>: Appropriate outreach to community partners and citizens, integrating recreational opportunities
- Fundraising: Seeking additional and supplemental funding with the eventual goal of financial independence
- The Sage Land Trust

