



Syracuse University

Center for Sustainable Community Solutions &
Environmental Finance Center

efc.syr.edu

SYRACUSE UNIVERSITY
CENTER FOR SUSTAINABLE
COMMUNITY SOLUTIONS



**Getting the Green for Green:
an overview of Cost Savings & State Funding
Resources
for Green Infrastructure**

What's the cost of not?

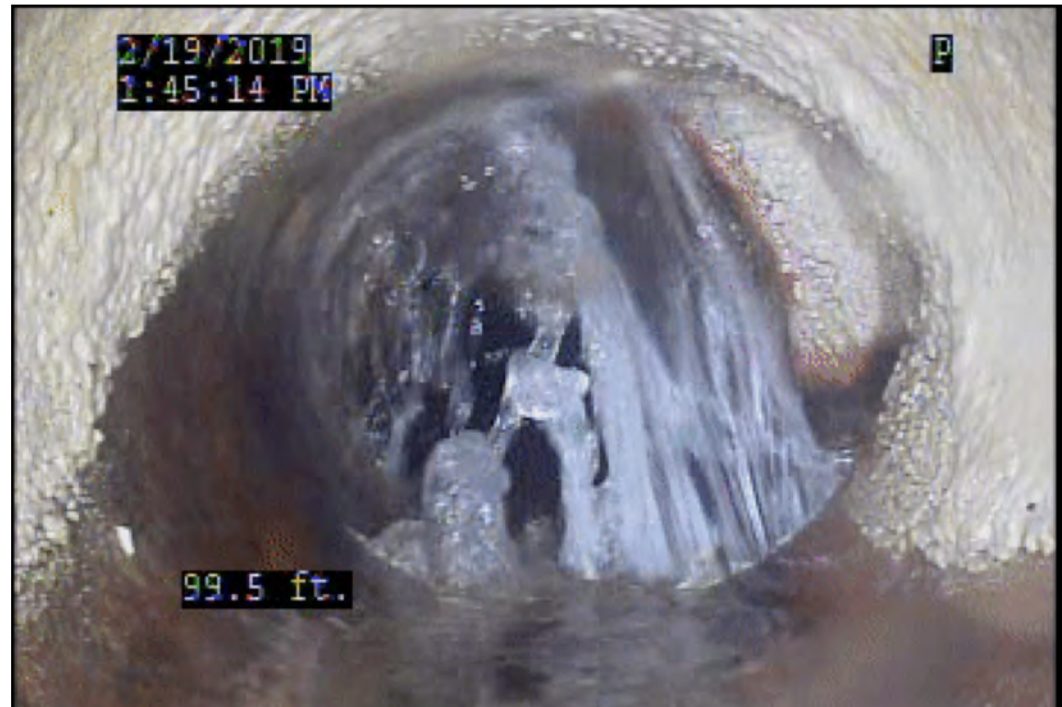
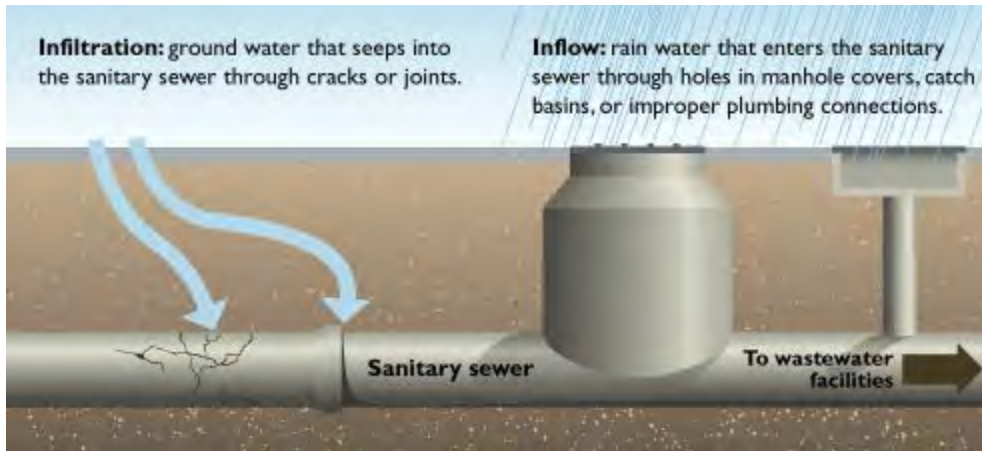




The benefit(s) of funding GI

- The ancillary benefits could outweigh the stormwater benefits
 - Improved streetscapes
 - Increased capacity, or upgraded infrastructure
 - Inter-departmental ‘co-funding’ (combining Parks, schools, libraries, DPW, USPS and other funding streams to create a mutually beneficial project)
 - Increased property value and/or investment
 - Economic Development
 - Quantifying ‘ecosystem services’

Infiltration & Inflow





Green Values® Calculator

<http://greenvalues.cnt.org>

❖ Estimates green infrastructure's financial and hydrologic effect on a single lot or across a neighborhood.

❖ Compares green and 'gray' infrastructure life cycle costs including GI's economic, environmental, and social benefits

❖ Adaptable for local ordinance verification

The screenshot shows the Green Values Calculator web application. It features a navigation menu with links: 'What is Green Infrastructure?', 'Landscapes', 'Run the Calculator', and 'Resources'. The main interface is divided into two columns: 'Calculator' and 'Results'.

Calculator Section:

- Green Interventions:** A list of interventions with checkboxes.
 - 1. Roof Drains to Rain Gardens at All Downspouts: ☐
 - 2. Half of Lawn Replaced by Garden with Native Landscaping: ☒
 - 3. Porous Pavement used on Driveway, Sidewalk and other non-street pavement: ☐
 - 4. Green Roofs: ☐
 - 5. Provide Tree Cover for an Additional 25% of Lot: ☒
 - 6. Use Drainage Swales instead of Stormwater Pipes: ☒
- Site Statistics:**
 - 1. Select a scenario: New Development, Suburban (dropdown)
 - 2. Is this an existing site: ☐
 - 3. Total size of site: 40 acres
 - 4. Number of lots: 80
 - 5. Average Roof Size, including Garage: 1200 ft²
 - 6. Average Number of Trees on Lot: 0
 - 7. Average Driveway Area: 400 ft²
 - 8. Average Impervious patio, deck, alley or parking lot: 100 ft²
 - 9. Sidewalk Width: 5 ft
 - 10. Average Street Width: 32 ft
 - 11. Soil Type: C (dropdown)
 - 12. Average Slope: 1% (dropdown)
 - 13. Real Discount Rate: 3.1 %
 - 14. Life Cycle in Years: 100 (dropdown)

A 'CALCULATE' button is located at the bottom of the calculator section.

Results Section:

The difference between the conventional system and the green intervention(s) you chose **decreases** the total 100 year life cycle costs and **increases** benefits by \$962,481! This strategy reduces peak discharge by 11%.

Navigation tabs: Hydrologic Results, Financial Results, Costs / Benefits, Detail.

Hydrologic Results Table:

Lot Level Improvements:	Conventional	Green	Reduction
Lot Discharge (cfs)	1,968	1,521	23%
Lot Peak Discharge (cfs)	17	13	24%

Total Site Improvements Table:

Total Site Improvements:	Conventional	Green	Reduction
Total Peak Discharge (cfs)	42	37	11%

Detention Size Improvements Table:

Detention Size Improvements:	Conventional	Green	Reduction
Total Detention Required (ft ³)	85,123	66,505	22%

Annual Discharge Improvements Table:

Annual Discharge Improvements:	Conventional	Green	Average Annual Ground Water Recharge Increase
Average Annual Discharge (acre ft)	28.84	25.60	2.02

At the bottom of the page, there is a copyright notice: '© Copyright 2004-2005 Center for Neighborhood Technology'.

New York State Consolidated Funding Application

- Loans and grants are awarded through the New York State Consolidated Funding Application (CFA) process
- Applications typically open in May with a late July deadline
- Grants are announced by the Governor as part of the Regional Economic Development Competition Awards Ceremony in December



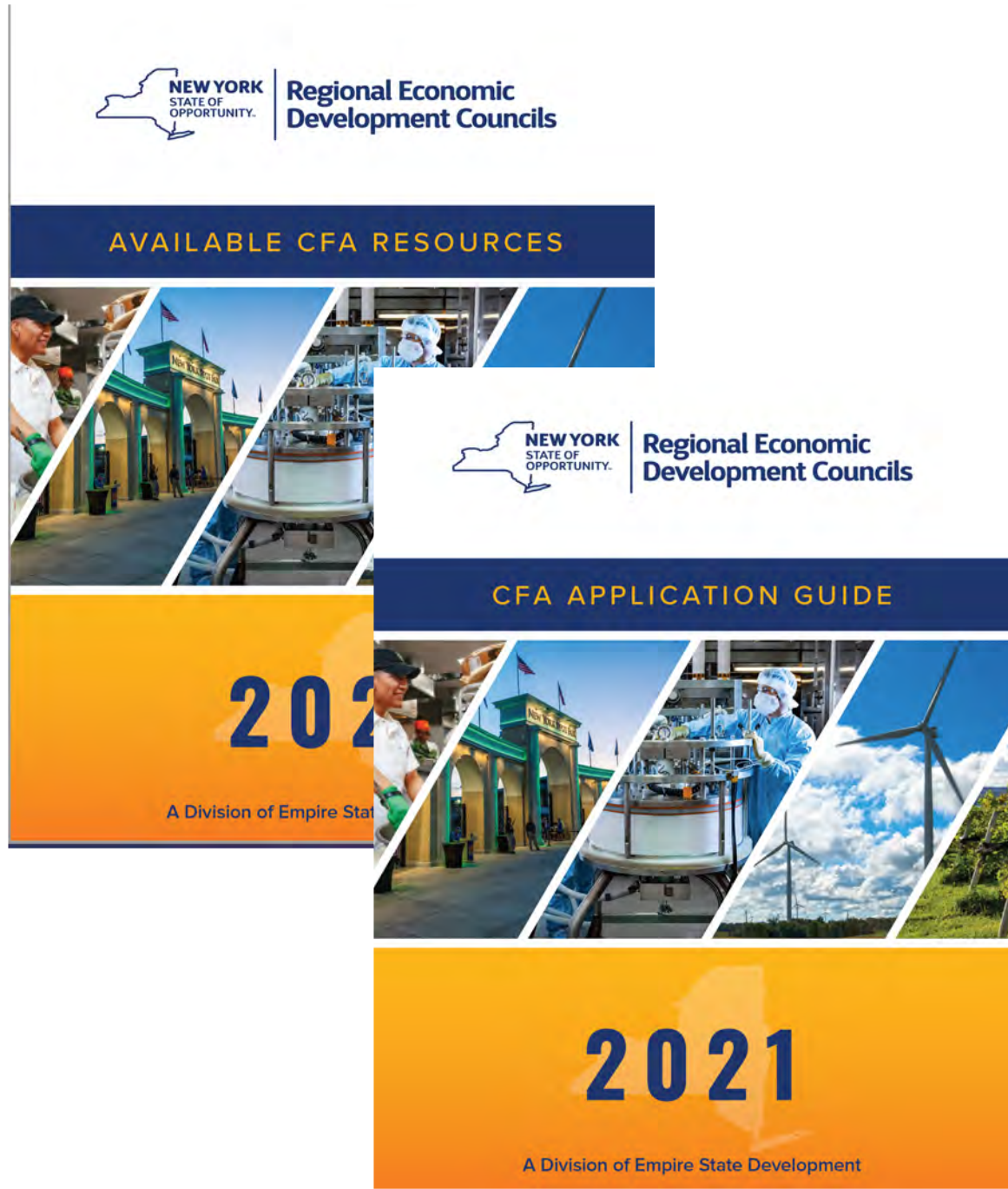
<http://regionalcouncils.ny.gov/>

REDC and the CFA

Selection Criteria for NYS DEC/EFC Wastewater Infrastructure Engineering Planning Grant from 2017		
	Points Assigned	Criteria
Regional Economic Development Priority	20	Alignment with the goals and priorities of its REDC
Performance Measures	40	Severity of existing water quality impairments
Strategies	24	Proposed project is required by a Consent Order, SPDES permit or TMDL
Process	8	Local commitment
Vision	4	Planning project is identified in a formally adopted plan
NYS DEC Regional Priority	4	Alignment with the goals and priorities of the DEC region that the project is located

Guidebook

- Resources typically announced in May
- Applications typically due in late July



Be in the know...
www.regionalcouncils.ny.gov

The screenshot shows the website for the Regional Economic Development Councils (REDCs) of New York State. The header includes the New York State logo and navigation links for Services, News, Government, and Local. A search bar and a Translate button are also present. Below the header, a dark blue banner displays the text "Regional Economic Development Councils" and navigation links for Regions, About Us, Consolidated Funding Application, News, and Resources. The main content area is titled "Resource Center" in white text on a blue background. Below this, a breadcrumb trail reads "HOME / RESOURCE CENTER". A paragraph of text states: "Use the filters, search by keyword, or enter a date range to access REDC and CFA materials, information and more - from 2011 to today." On the left side, there is a "FILTER" sidebar with a "REGION" section. The regions listed are Capital Region, Central New York (selected with a checkmark), Finger Lakes, Long Island, Mid-Hudson, Mohawk Valley, New York City, North Country, REDC, and Southern Tier. The main content area displays a list of items available within the Central New York region, with a total of 123 items. Two items are shown: "CNY REDC August Meeting" and "CNY REDC July Meeting". Each item includes a date, time, and location, along with an "EVENT DETAILS" button.

NEW YORK STATE

Services News Government Local

Q Search Translate

Regional Economic Development Councils

Regions About Us Consolidated Funding Application News Resources

Resource Center

HOME / RESOURCE CENTER

Use the filters, search by keyword, or enter a date range to access REDC and CFA materials, information and more - from 2011 to today.

FILTER

REGION

- Capital Region
- Central New York
- Finger Lakes
- Long Island
- Mid-Hudson
- Mohawk Valley
- New York City
- North Country
- REDC
- Southern Tier

123 items available within Central New York [X Clear All](#)

CNY REDC August Meeting
MEETING

Aug 27, 2019
1:00 PM - 2:00 PM
Lake Ontario Conference Center
26 E 1st Street
OSwego, NY 13126

EVENT DETAILS

CNY REDC July Meeting
MEETING

Jul 11, 2019
3:30 PM - 5:00 PM
The Pointe at Sands Beach
2924 Sand Beach Road
Auburn, NY 13021

EVENT DETAILS

WQIP: Non-Agricultural Nonpoint Source

Eligible projects & programs (25% match)

- Particular nonpoint source best management practices (BMPs)

Eligible categories

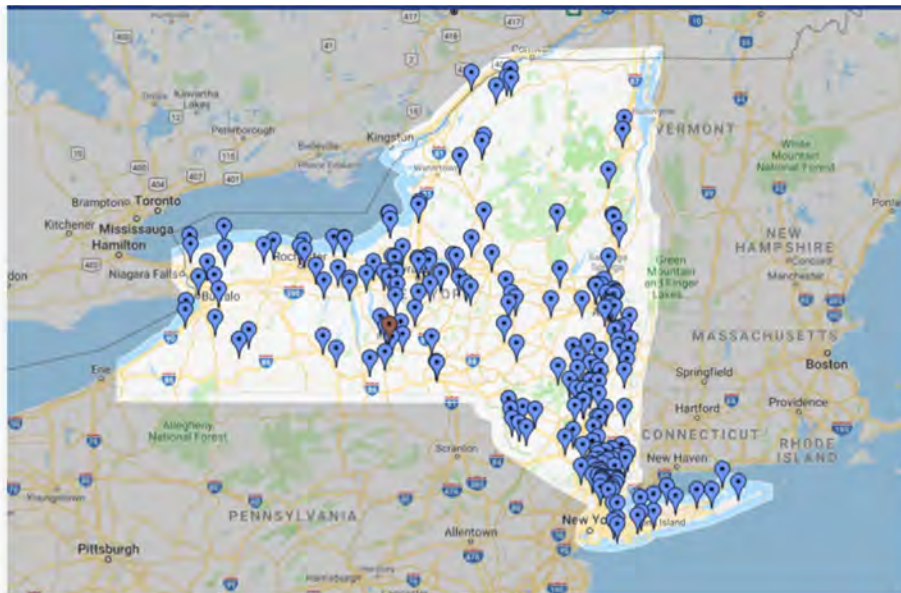
- Decentralized Wastewater Treatment Facilities for Failing On-Site Treatment Systems or Long Island On-Site Treatment Systems that do not Currently Abate Nitrogen
- Green Infrastructure Practice/Stormwater Retrofits
- Great Lakes Nature-Based Shoreline
- Streambank Stabilization and Riparian Buffers
- In-Waterbody Controls for Nutrients
- Beach Restoration
- Culvert Repair and Replacement
- Nonpoint Source Programs

Non-Agricultural Nonpoint Source Planning Grant

Grants to help pay for planning reports needed for nonpoint source projects

- Prepare projects to apply for WQIP, other funding
- Grant categories align with WQIP nonpoint source
- Eligible reports are required or suggested for WQIP NPS projects

Climate Smart Communities Grants (CSC)



State Support for Local Climate Action

Climate Smart Communities (CSC) is a New York State program that helps local governments take action to reduce greenhouse gas emissions and adapt to a changing climate. The program offers free technical assistance, grants, and rebates for electric vehicles.

Registered communities have made a commitment to act by passing the CSC pledge. **Certified** communities are the foremost leaders in the state; they have gone beyond the CSC pledge by completing and documenting a suite of actions that mitigate and adapt to climate change at the local level.

[> LEARN MORE](#)

Participating Climate Smart Communities:

 REGISTERED COMMUNITIES

347

 BRONZE CERTIFIED COMMUNITIES

72

 PEOPLE LIVING IN CLIMATE SMART COMMUNITIES

9,428,292

 SILVER CERTIFIED COMMUNITIES

8

Climate Smart Communities Grants

Certification projects:

- Total available: \$500,000
- Award size: \$10,000 to \$100,000
- For planning, assessments, inventories, development of strategies



Ulysses, Tompkins County,
Certification Event - 2018

Implementation projects:

- Total available: \$9.5 million
- Award size: \$10,000 to \$2 million
- Construction projects
- No more than 15% on design & engineering

More information on CSC is online at
<https://climatesmart.ny.gov/>

Climate Smart Communities Grants

Grants are available from \$10,000 to \$2,000,000 for implementation projects such as:

- Increasing natural resiliency to future flood risks (e.g., living shorelines and nature-based landscape features)
- Relocating or retrofitting critical infrastructure to reduce future flood risks
- Replacing or right-sizing flow barriers to facilitate emergency response or protect people, infrastructure, and natural resources

Green Innovation Grant Program (GIGP)

- An additional \$5M this year
- GIGP grants are awarded on a competitive basis to projects that improve water quality and implement green stormwater infrastructure in New York
- GIGP-funded projects range from rain gardens to stream “daylighting”
- <https://efc.ny.gov/gigp>

To Date

**Apprx. \$200
Million**

**awarded to apprx
250 GIGP projects**



Thank you!

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