



# City of Kingston 2017 Sustainability Report

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## Staff

Since 2005, the City of Kingston's sustainability staff have helped the City become a leader in environmental awareness and stewardship. The City's Environmental Program's mission is to:

- develop and facilitate unique programs designed to educate the public about the local environment
- focus on creating a more positive energy to solve environmental issues while saving tax payer dollars and leveraging public and private investments
- coordinate sustainability projects among and between municipal departments
- strive to make Kingston a more sustainable and healthy community through programs, capital projects, education, stewardship and environmental services

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## Grants

In 2017, the staff was successful in the development and award of various local and state funds allowing the City to capitalize on the sustainability and efficiency movement. During this time, grant funding was very competitive, which allowed staff to work more cooperatively with outside agencies and not for profit organizations to continue to further the City's goals. In 2017, staff managed the following grants below. (See Table 1: Grant Spreadsheet for full information.)

- a. Open Space Plan For City of Kingston*
- b. Natural Resources Inventory for City of Kingston*
- c. Sea Level Rise Implementation Learning Group*
- d. Clean Energy Communities Grant- City Hall Window and Lighting Upgrades*
- e. Kingston Point Beach ADA Accessibility Improvements (River Access)*
- f. Environmental Asset Manager and Updated Greenhouse Gas Emissions Inventory*
- g. Cornell Street Kingston Municipal Parking Lot EV Charging Station (92)*
- h. Dock Street Kingston Municipal Parking Lot EV Charging Station (120)*
- i. Lower Broadway Kingston Municipal Parking Lot EV Charging Station (120)*
- j. City of Kingston Electric Vehicle Purchases 2016*
- k. Kingston Rec. Youth Development: UC Youth Bureau*
- l. Forsyth Nature Center/Kingston Parks and Recreation: ZBGA*
- m. Kingston Point Park Infrastructure Improvements*

Table 1: Grant Spreadsheet

Year Awarded/ Funding Agency	Original Funding Source State/Fed/Other	Project Title	Timeline	Total Project Cost	KPR Staff on Project
2016 DEC	State: EPF	Open Space Plan For City of Kingston	11/01/16- 10/31/18	\$ 24,500.00	Julie Noble
2015 DEC	State	Natural Resources Inventory for City of Kingston	11/01/15- 10/31/17	\$ 22,000.00	Julie Noble
2015 DEC	State	Sea Level Rise Implementation Learning Group	11/01/15- 10/31/17	\$ 49,684.00	Julie Noble
2017 NYSERDA	State	Clean Energy Communities Grant- City Hall Window and Lighting Upgrades	2018	\$ 100,000.00	Julie Noble
2017 DEC	State	Kingston Point Beach ADA Accessibility Improvements (River Access)	12/01/17- 11/30/19	\$ 45,820.00	Julie Noble
2016 DEC	State	Environmental Asset Manager and Updated Greenhouse Gas Emissions Inventory	03/08/17- 03/07/22	\$ 50,000.00	Julie Noble
2016 DEC	State	Cornell Street Kingston Municipal Parking Lot EV Charging Station (92)	11/01/16- 10/31/18	\$ 15,990.38	Julie Noble
2016 DEC	State	Dock Street Kingston Municipal Parking Lot EV Charging Station (120)	11/01/16- 10/31/18	\$ 15,990.38	Julie Noble
2016 DEC	State	Lower Broadway Kingston Municipal Parking Lot EV Charging Station (120)	11/01/16- 10/31/18	\$ 15,990.38	Julie Noble
2016 DEC	State	City of Kingston Electric Vehicle Purchases 2016		\$ 10,000.00	Julie Noble
2017 UC Youth Bureau	State- OCFS	Kingston Rec. Youth Development	1/1/17- 12/31/17	\$ 10,000.00	Julie Noble and KC Keegan- Twombly
2016 ZBGA	State-OPRHP	Forsyth Nature Center/Kingston Parks and Recreation	04/01/16- 03/31/21	\$ 175,000.00	Julie Noble and KC Keegan- Twombly
2016 OPRHP	State EPF	Kingston Point Park Infrastructure Improvements	12/08/2016- 12/07/2021	\$ 262,645.00	Julie Noble, Kevin Gilfeather, Lisa Bruck
				<b>\$ 797,620.14</b>	

## Education and Outreach

The City of Kingston's Parks and Recreation Department offers residents and visitors a variety of Environmental Education opportunities, including experiences and programming through the [Forsyth Nature Center](#), one of the only municipal nature centers in New York State. Kingston's **Environmental Education program** offers both indoor and outdoor experiences for school and youth groups, as well as adults, plus summer camps and a summer Junior Naturalist Program. To learn more visit the [Environmental Education/Nature Center](#) page. In 2017, 4713 community members participated in Environmental Education Programming with the City, including the Junior Naturalist Summer Program, which the staff direct annually.

In 2017, sustainability staff, in collaboration with community partners, developed, planned, organized, and executed several major public outreach events. Each of these events drew community members and regional visitors to the Kingston Parks System. Events include the Kingston Kayak Festival, Fall Festival and [Earth Fair](#).

The City of Kingston was proud to host the **2017 Conference on the Environment**, a gathering of citizens, business owners, economic and environmental organization members and staff, local officials and staff, and members of municipal Conservation Councils and Boards and County Environmental Management Councils. With 38 presenters, November 17<sup>th</sup> was a busy day, with presentations on the Food Economy, Energy, Transportation, Flooding and Sea Level Rise, Land Trust/Municipal Collaborations, the Clean Energy Communities Program, Resiliency, Natural Resources Inventories and Sustainable Urbanism. **For full access to the conference presentations, click [here](#)**. Seventeen counties across the state were represented at this year's event with 140 attendees. Attendees heard from key environmental leaders including EPA Region 2 Regional Administrator Pete Lopez, NYS Assemblymember Steve Otis, Ulster County Executive Michael Hein, Mayor Steve Noble, and philanthropist/Emmy award-winning musician/NY Times best-selling author Peter Buffett.

Hosted this year at The Chateau, a magnificent event venue in historic Kingston, NY, the NYS Conference on the Environment has been held annually in NYS since at least 1972. Sponsored by the NYS Association of Conservation Commissions and the NYS Association of Environmental Management Councils and hosted by a local organization, 2017 marked the 45<sup>th</sup> year since this conference's inception.

## Energy and Renewables

A [Climate Smart Community](#) – The New York State Climate Smart Communities (CSC) Program is a network of New York [communities](#) engaged in reducing greenhouse gas emissions and improving climate resilience. Municipalities become involved with the CSC Program by adopting the [CSC Pledge](#), which includes 10 elements that lead to a reduction of greenhouse gas emissions, and provide guidance on climate change adaptation. Municipalities can opt to participate in the [Climate Smart Certification Program](#), which has four certification levels: certified, bronze, silver and gold. Communities can access technical support and funding opportunities to reach their certification goals.

The City of Kingston achieved **Bronze Climate Smart Community certification** in 2014, the highest level achieved by any municipality in New York State. Kingston has completed a variety of adaptation and mitigation strategies to achieve this level, including appointing a commission, conducting a [Greenhouse Gas Inventory](#) and creating a [Climate Action Plan](#). The Climate Action Plan outlines strategies and actions for the city to take to reduce greenhouse gas emissions and set a goal for energy use reduction of 20% by 2020. For more information, visit the Climate Smart Kingston webpage, and view Kingston's [Climate Smart Communities](#)

**Profile. In 2018, the City will be updating our Greenhouse Gas Emissions Inventory, tracking our progress, and understanding the road ahead toward achieving our goals.**

To take the City's commitment even further, in 2017, the City adopted Resolution #179 of 2017: Resolution of the Common Council of the City of Kingston, NY Committing to 100% Clean Energy by 2050 and Continuing Support of the Principles of the Paris Agreement. Staff were instrumental in stewarding this process.

**A Clean Energy Community** – An initiative of the New York State Energy Research and Development Authority (NYSERDA), the [Clean Energy Communities Program](#) provides funding and technical support to communities that are implementing energy efficiency, renewable energy and sustainable development projects. A community must complete four out of the [10 High Impact Actions](#) that save energy and money, and contribute to lowering greenhouse gas emissions, to achieve the Clean Energy Community designation.

In 2017 the City of Kingston became the **first city in New York to be designated a Clean Energy Community**. To earn the designation, the city by completed the following high-impact actions:

- Establishing a [Clean Fleet](#) by adding electric vehicles (EV) to the city fleet.
- Implementing a [Benchmarking](#) initiative that establishes a policy of data collection on energy use in municipal buildings to identify opportunities to cut energy waste. The Environmental Protection Agency's [Energy Star Portfolio Manager](#) Program is a tool that the City of Kingston uses to benchmark the performance of municipal buildings.
- Establishing the [Energize NY Finance](#) program, a loan to help commercial and non-profit property owners to tackle energy upgrades and renewable energy projects. The loan is repaid through a special charge on the property tax bill.
- Earning [Climate Smart Community](#) certification. As an added incentive for receiving Clean Energy Community certification, the City was awarded \$100,000 by NYSERDA to complete an energy or sustainability project (see CEC Grant in Table 1).
- In addition to these actions, Kingston is also a solar-friendly community. In 2015, the City of Kingston participated in the [Solarize Hudson Valley](#) campaign, which was designed to make it easier for households and small businesses to go solar. The Solarize Kingston campaign has ended, but residents can access a Solar Guidebook and Kingston's Solar Permit [here](#).

## Land Use

**Green Infrastructure** – Storm water runoff carries pollutants into waterways and can intensify water quality and flooding problems. Storm water runoff is increased by imperious surfaces, such as roofs, roadways and parking lots, and by intense precipitation. Green Infrastructure (GI) is a method to manage storm water by mimicking natural processes that slow and capture rain to allow it to soak into the ground. Rain gardens, green roofs, vegetated swales and pervious pavement are all techniques to reduce runoff, water pollution, sewer overflows and flooding.

The City of Kingston is beginning to actively integrate Green Infrastructure techniques and practices into municipal infrastructure. Two municipal lots on North Front Street in downtown Kingston were fully retrofitted in the fall of 2016 to incorporate Green Infrastructure, including dry wells, bioretention areas and pervious paving. In 2017, staff worked with a Master's student to study the effects of these practices in order to inform future use and replication. The City of Kingston is installing a variety of green infrastructure treatments, including porous pavers, bioswales and street tree pits, as part of the [Broadway Streetscape](#)

**Project.** The project will help to reduce the amount of storm water flowing into the combined sewer system. To learn more details about the Broadway Streetscape Project, visit the [Office of Economic and Community Development](#) page and scroll down to the Active Projects list. Sustainability staff are part of the design and aesthetics review team for this project.

Sustainability staff also annually assists the Engineering Department with the completion of the City of Kingston Annual Storm Water Report, measuring the City's adherence to the Municipal Storm Water Regulations (MS4) also documenting any illicit discharges into the storm water system.

**Open Space Planning** - Conservation of natural landscapes, such as forests, streams and wetlands, can help to reduce damaging floods. Forests naturally reduce storm water by slowing the movement of runoff and absorbing rain into the ground. Wetlands allow water to slow down and spread out during heavy precipitation events, reducing flood volumes. In tidal areas, wetlands may buffer upland areas from storm surge. Protection of stream corridors can reduce flood vulnerability.

The City of Kingston is completing a [Natural Resources Inventory](#) and Open Space Index and is in the process of creating an Open Space Plan for the city. By the end of 2017, the final data layers have been collected and mapped for the City's natural resources by consultant John Mickelson, and Behan Planning and Design has been chosen to complete the Open Space Plan. **Public input on prioritization and conservation interests will be a crucial component of the process. Public meetings will be held in the spring of 2018.**

**Cultivating Street Trees** – Kingston has earned the Arbor Day Foundation's "Tree City USA" designation for nearly two decades, and celebrates Arbor Day with an annual event. The [Kingston Tree Commission](#) oversees an annual tree planting initiative and coordinates street tree management for the City. The City has recently received funding to conduct an inventory of street and park trees and to update and strengthen local ordinances related to management of trees. Further, in 2017, the City received a grant from the NYSDEC to conduct a Street Tree Inventory for the City. **Work will commence in 2018 and sustainability staff are partnering on this project.**

## Transportation

**Complete Streets** - "Complete Streets" is a term used to describe ordinary city streets that are designed to allow people of all ages and abilities to walk, bike, take the bus and drive less. By "completing the street" to encourage movement, kids, grandparents, adults of all ages can be active, healthy and feel connected to their neighborhoods. To read more about this program, visit the [Complete Streets Advisory Council](#) page.

**Greening Our Streetlights** – Kingston's streetlights consume 1.9 million kWh of energy annually. Kingston is part of the Mid-Hudson Streetlight Consortium that is developing a request for proposals to retrofit and implement a changeover to energy efficient LED streetlights, which will result in a retrofit of over 2,200 municipal streetlights to LED. **As the process develops, there will be opportunity for public input into design and many other components of the project into 2018.**

**Green Fleet** – Kingston is advancing efforts to reduce greenhouse gas emissions of municipal vehicles by purchasing hybrid and full electric vehicles, installing electric vehicle (EV) charging stations and hiring an Environmental Asset Manager who will manage the fleet and update the greenhouse gas inventory. The City is working towards a goal of retrofitting the municipal fleet to have 20% comprised of alternative fuel vehicles by 2020. In 2017, the City of Kingston purchased two alternate fuel vehicles for our fleet, bringing the end of

2017 total to 4: one each in the Building Safety Division, Parks and Recreation, the Police Department, and City Hall. **Additionally, the City plans to purchase three more alternative fuel vehicles in 2018. Further, the City will begin to install public Electric Vehicle Charging Stations in select municipal lots in 2018.**

## Recycling and Solid Waste Management

**Single Stream Recycling and Composting** – In an effort to make recycling more convenient for residents, the City of Kingston has established a single-stream recycling program. Most households have received blue totes designated for recycling pick up. View Kingston’s Refuse and Recycling [brochure](#) for more information. The City’s recycling calendar can be found [here](#).

City environmental education staff offers a series of recycling programs throughout the year to educate both the general public as well as school children to the benefits of recycling. Each school year, staff works in each elementary school that serves City of Kingston students to provide informative and age appropriate recycling programs. Additionally, a series of public composting education workshops are held each year. These workshops educate Kingston residents on how to reduce their trash output through food and yard waste diversion. Additionally, the process of composting generates free natural fertilizer for in- and at-home use, reducing the need for synthetic chemical landscape applications. Furthermore, increased waste diversion saves taxpayer dollars in tipping fees averted.

By instituting single stream recycling, the City of Kingston has increased our recycling rates, reducing landfill-tipping fees and thousands of miles of truck transport emissions saved. In 2017, the city DPW collected 1,960 tons of recycled material, saving taxpayers over \$165,000. To further reduce our emissions and tipping fees, the City of Kingston will be exploring the feasibility of instituting a citywide food waste collection system. In 2017, the City received funding to create an Organic Waste Management Plan to better understand and design a system, if feasible, for organics collection citywide. **The City will partner with the Hudson Valley Regional Council in 2018 and 2019 to conduct this study.**

## Adaptation and Resiliency

**Waterfront Flooding Task Force** – Kingston is one of four Hudson riverfront communities to convene a Waterfront Flooding Task Force. In 2013 the Task Force studied sea level rise and flood projections, analyzed local vulnerability assessments and recommended 24 strategies for increasing the resilience of waterfront areas. In 2016-2017, Kingston initiated a series of meetings with the other Flood Resilience Task Force communities to combine efforts in pursuit of adaptation strategies. Download the Kingston Tidal Waterfront Flooding Task Force Final Report and view the full proceedings [here](#).

**Hosting the Cornell University Climate Adaptive Design Studio** -The Climate-Adaptive Design (CAD) Studio links Cornell students in landscape architecture with Hudson Riverfront communities to explore design alternatives for more climate resilient, beautiful and connected waterfront areas. The studio is an effort in partnership with Cornell Landscape Architecture Department, Cornell Water Resources Institute, the NYS DEC Hudson River Estuary Program and the City of Kingston. The CAD Studio envisioned a more resilient Rondout waterfront, focusing on the parcel level on Kingston’s tidal water front, hosting a Studio in 2016 and 2017. The project culminates with an open house to share student ideas with the community. CAD designs show the community options for development and revitalization that also deal with expected sea-level rise and flooding. By taking a comprehensive design approach, the student teams incorporate human and natural systems to inspire adaptation and innovation. CAD will host a third Studio on Kingston’s Rondout Waterfront in Spring 2018.

## Boards and Commissions

[Conservation Advisory Council](#) – Per NYS General Municipal Law, each municipality is sanctioned to create a Conservation Advisory Council (CAC) to advise local government on environmental matters and review development proposals with potential environmental impact in an advisory capacity. Since 2009, the Kingston CAC has worked as a volunteer board to ensure the conservation of the City’s natural resources and the enhancement and protection of its environment, while fostering unified actions on environmental matters. The Kingston CAC meets the second Tuesday of each month at 6:30 pm in Kingston City Hall Conference Room 1. The meetings are open to the public. For more information, visit the [Kingston CAC webpage](#). Julie Noble, Environmental Education and Sustainability Coordinator, serves as the Chair of this Council and in this role, acts as a liaison to the City for the Council. See [Kingston CAC 2017 Annual Report](#).

[Climate Smart Kingston Commission](#) - The Climate Smart Kingston Commission convenes monthly to strategize, plan, and implement the goals of Kingston's [Climate Action Plan](#). The Commission is comprised of residents and officials who want to take action to assure a sustainable future for the city. The Climate Smart Kingston Commission meets the 4<sup>th</sup> Wednesday of each month from 4:30-6:00 pm at Kingston City Hall, Common Council Chambers. The Commission also hosts a [Climate Smart Kingston Commission](#) webpage, where community members can sign up for the Climate Smart Kingston Mailing List to be informed via email of updates on Kingston’s sustainability initiatives, they can also follow Climate Smart Kingston on [Facebook](#). Julie Noble serves as the Climate Smart Community Coordinator for the City of Kingston, and as such also serves as the Chair of this Commission, as an ex-officio member.

[Friends of Forsyth Nature Center](#) - The Friends of Forsyth Nature Center is a 501(c) 3 non-profit organization whose mission is to support the Forsyth Nature Center and to foster and inspire the exploration and conservation of the natural world in and around our urban community. The FFNC Board of Directors meets regularly throughout the year. This group provides scholarships for the Junior Naturalists Program and participates in the Kingston Earth Fair and the Fall Festival, fundraising for the FNC. All proceeds are dedicated to maintaining and improving the Forsyth Nature Center and its programs. Julie Noble is the City liaison to this board.

## Professional Development

Sustainability staff regularly attends meetings, workshops and conferences annually to further professional development and to keep updated on regionally and locally relevant environmental issues.

### [2017 Conferences, Webinars, Workshops, Trainings](#)

NYS Conference on the Environment: Kingston, NY (Julie and KC)

Communicating About Climate Change Webinar (Julie)

Brownfield Redevelopment and Community Revitalization Summit (Julie)

Panel on Climate Change (Julie)

CDL Recertification and Review (physical, written and road) (Julie and KC)

NYS Parks and Recreation Society Conference (KC)