

Erie County Sustainability Plan Executive Summary

Erie County government provides a variety of services to municipal governments, businesses and the general public. These services involve the management of more than 240 buildings and facilities, as well as over 4,000 employees in 38 departments/agencies. This work has an impact on the environment through energy and materials use that the County is seeking to reduce through the development of this initial Sustainability Plan. As with all sustainability plans, the plan will evolve as we move forward.

The County is currently involved in many projects that address the four areas that are part of the WNY Sustainable Business Roundtable Pledge: reducing waste and pollution; protecting our waterways; optimizing use of energy and material; and investing in our communities. This work includes:

- energy conservation measures in county facilities;
- a recent audit of solid waste generation by county facilities;
- conserving water by installing a cistern at highway garage;
- improvements to sewage treatment facilities; and
- investing in our communities in many other ways, such as household hazardous waste collections and habitat restoration.

The following are our goals moving forward:

This year

- Hire a sustainability coordinator and establish a County Green Team.
- Finalize the County energy baseline and use that to establish a Greenhouse Gas (GHG) emissions inventory.
- Draft an internal energy plan for County buildings.
- Identify a strategy to establish a Solid Waste Manager for County properties.
- Increase collection of household hazardous waste from the amount collected last year.

In 3 Years

- Finalize and adopt *Climate Action & Sustainability Plan* with set goals of % GHG reduction, pounds of waste diverted from landfill, gallons of water saved, cost reductions, etc.
- Complete the Lake Erie Watershed Management Plan.
- Begin to explore the ways that the County can help address the intersecting issues of energy and poverty.

In 5 Years

- Implement a policy to help mitigate the impact of energy costs on low income individuals and families.

The County has many key stakeholders that will be asked for input as the *Climate Action & Sustainability Plan* is developed. These vested parties include County leadership, County employees, unions, community partners, and the public.

Erie County Sustainability Plan

1. Organization Overview

Erie County provides a variety of regional services to municipal governments, businesses and the general public. These services include: welfare and social services; public safety; the development, operation and management of infrastructure; economic development assistance; as well as health and environmental services. Erie County government manages over 240 buildings and facilities and more than four thousand employees in 38 departments/agencies.

The County has a responsibility to its citizens to efficiently and effectively deliver services, as well as provide leadership by example for municipalities and the other stakeholders our programs serve. Inherent within these functions are the use of energy and other materials. The County also generates waste and emissions that impact our environment and have associated costs to the County taxpayer. A County Sustainability Plan that focuses on strategies to reduce our use of materials and energy, as well as our other impacts on the environment, will improve the quality of services we provide and reduce the cost of these services on our taxpayers.

County government has challenges to address as it works toward sustainability. The current County Executive and administration understand the value of being more sustainable and support these efforts. The level of this commitment is captured in the County Executive's economic development plan *Initiatives for a Smart Economy*. Strong direction and leadership from the County Executive is vital to maintaining a coordinated and committed effort from supervisors responsible for a variety of facilities and functions. Like all other organizations, the County must also have buy-in from employees in order to accomplish sustainability goals. For this reason, over the next two years the County will be developing a Green Team, made up of decision makers from most departments, to oversee the development and implementation of a *Climate Action & Sustainability Plan*. At the end of that two-year planning process, the *Climate Action & Sustainability Plan* will be presented to the Legislature for formal adoption so that it will continue beyond a single administration.

Another challenge for this effort is funding. We heavily rely on grants to bring the resources to the table to get this type of work initiated and start realizing results. To this end, the County has been awarded a two-year grant from the New York State Energy Research and Development Authority for a Sustainability Coordinator to lead the Green Team through this *Climate Action & Sustainability Plan* process.

Any sustainability plan is a continuous journey. The plan, as outlined this year, will provide direction to the Green Team as that project moves forward.

2. Erie County's Vision

The bedrock of Erie County's sustainability vision is the Framework for Regional Growth, a bi-county planning document developed with Niagara County, finalized in 2006. It serves as the County's Comprehensive Plan and provides a blueprint for the area's physical development. The Framework for Regional Growth (FRG) addresses the issue of sprawl and how it stresses the local economy, as well as identifies strategies for making our community more sustainable. In fact, FRG provided the foundation for *One Region Forward*, which also focuses on sustainability.

The need for the County to address sustainability in its internal operations is outlined in the *Initiatives for a Smart Economy*, County Executive Mark Poloncarz's economic development plan, issued in June 2013. Many of the internal sustainability initiatives can be found in the Energy and Blue Economy Sections. Initiative 3.62 speaks specifically to greening internal operations by calling for the creation of an Interdepartmental Green Team to encourage resource conservation within County facilities. The Green Team will be charged with taking this sustainability plan to the next level by identifying projects that will conserve energy and decrease waste. For example, there are many behavior modifications that could reduce energy consumption in the County but require coordination and training.

In order to achieve this initiative, the Erie County Department of Environment and Planning submitted grant applications to the New York State Energy Research and Development Authority to fund a Sustainability Coordinator for two years. Such a position is necessary to coordinate the project; however adding new positions within the County budget is difficult. Fortunately, the County was awarded the grant through a competitive process and is currently working with NYSERDA to finalize paperwork to hire the coordinator. This two-year project will result in an *Erie County Climate Action & Sustainability Plan* focused on internal operations. As a requirement of the grant, and also to ensure a buy-in from all impacted parties, the *Climate Action & Sustainability Plan* will be officially adopted as an addendum to the FRG.

The County's sustainability vision is not limited to the Green Team. In fact sustainability is woven throughout the *Initiatives for a Smart Economy*, which highlights the economic development benefits to protecting and improving the environment. Many of these projects are highlighted in the "Elements of a Sustainability Plan" section below.

3. Elements of Sustainability Plan

As stated in the WNY Sustainable Business Roundtable Pledge, Erie County has committed to become a thriving and resilient organization by establishing and implementing a sustainability plan that reduces waste and pollution, protects our waterways, optimizes the use of energy and materials and invests in our communities.

Erie County has been actively working on these elements for decades; however these various efforts have not been brought under one plan before. There is value in bringing these together in this plan as it shines a light on what has already been done and what

there is yet to do. As stated above, a more comprehensive *Climate Action & Sustainability Plan* will be developed over the next two years.

Reduces waste and pollution

Solid Waste & Recycling

Erie County hired Wendel Engineering to conduct a Waste Management & Recycling Evaluation to identify opportunities for the County to reduce waste and save money at County owned facilities. The evaluation created a baseline for cost and disposal. The report also put forward recommendations to improve waste management and recycling at County facilities.

Some of the key information in the report, which was completed in March of 2015, was:

- \$400,000 per year is spent on waste disposal at County owned facilities.
 - The majority of that cost, \$260,000, results from the disposal of ash from the sewage treatment process.
 - The evaluation focused on traditional solid waste rather than the “specialty waste” of the ash.
 - However, the Division of Sewerage Management is continuously examining its operations to identify ways to reduce waste.
- The report estimated the annual amount of waste generated by County owned facilities was 22,180 cubic yards. *Note: County Parks were not included in this total.*
- The recycling options at County facilities are inconsistent and underutilized.
- The funds received for the recycling revenue are deposited into a General Fund as opposed to returning, even if just partially, to the facilities participating in the recycling. Thus, there is a lack of economic incentive for the individual facilities.

The report recommended the following:

- Designate a Solid Waste/Recycling Coordinator for County facilities.
This is the most vital of the recommendations as the staffing is needed to institute the other recommendations below.
 - Initiate tracking system for solid waste disposal (volume and cost)
 - Initiate tracking system for recycling (volume and revenue generated)
 - Re-Bid the current contracts taking into account container sizes/pick up frequency and location
 - Implement a recycling program at all County Owned facilities – especially public facilities like Erie County Parks
 - Coordinate efforts through the soon-to-be established Green Team.

Environmentally Preferable Purchasing

Over 10 years ago, the County had an extensive environmentally preferable purchasing (EPP) program, which was funded by a United States Environmental Protection Agency (USEPA) grant. The County Department of Environment and Planning worked with the County Bureau of Purchase to identify products purchased by the County that contained

USEPA's listed urban air toxics and bioaccumulative chemicals. The most significant finding was that the County was purchasing urinal blocks or cakes that were made entirely of one of these chemicals – Paradichlorobenzene - a suspected carcinogen. After conducting some pilot tests with the Department of Public Works and the Department of Parks, Recreation and Forestry, the County switched to an enzyme based block/cake or chose to go without a block/cake at all, as they serve to mask odor instead of sanitize. This change in purchasing eliminated 2,000 pounds of Paradichlorobenzene annually. The County became known as a leader in this issue and identifying the ban of USEPA's list of toxics became part of standard product bids for the County.

The EPP program also conducted education and outreach to County purchasing clerks who buy items for the County outside of the Bureau of Purchase, for example office supplies. This is an area that could use further attention and may become a goal of the Green Team.

Protects our waterways

The *Initiatives for a Smart Economy* section entitled "Blue Economy" addresses many current and upcoming County projects that work to protect water. "The "Blue Economy" is a term coined by the Buffalo Niagara Riverkeeper. At its essence, the Blue Economy recognizes that our water resources are a vital part of our economy. Water access and the waterfront are highlighted as assets for both smart growth and tourism in the Western New York Regional Economic Development Council's "Strategy for Prosperity." Preserving and restoring water quality builds upon these assets. Moreover, keeping our drinking water and beaches safe, investing in improved wastewater treatment infrastructure, and other water quality projects can be an economic driver for the region. The concept of the "Blue Economy" has been developed to refer to the jobs and economic development that can be created as a result of protecting our watershed and water resources.

As a way to better measure the benefits of Blue Economy investments, the Erie County Department of Environment and Planning recently teamed with the Buffalo Niagara Riverkeeper on a study that identified and quantified the economic impacts of certain projects completed by the Riverkeeper, Erie County Sewer District No. 3, and PUSH Buffalo. In all, four case studies were evaluated with investments totaling \$5.5 million. This study noted that these sustainable projects stimulated a total economic output of \$10.1 million, ultimately supporting approximately 80 jobs in the state of New York. This analysis shows that driving revitalization through the protection and restoration of the health and integrity of Western New York's fresh water systems is not only sound environmental policy but also represents a smart investment in our economic future.

Wastewater Treatment Plants

One of the key *Initiatives for a Smart Economy* that is presently under construction is the Erie County Department of Environment and Planning's Division of Sewerage Management's (DSM) implementation of a sewer infrastructure project called the Rush Creek Interceptor. This project entails construction of a new sewer that will allow for the elimination of the Blasdell Wastewater Treatment Plant, three (3) pumping stations, and

three (3) overflows that the County took over from local municipalities in the 2000's. This critical project better protects our waterways by elimination of these overflows which may impact the Woodlawn Beach area. Importantly, this project also decreases the County's electrical loads and hence its carbon footprint by eliminating these facilities and replacing them with a sewer that flows by gravity

In 2015, the DSM will also be completing a large sustainability initiative at the County's second largest wastewater treatment facility. The Energy Efficiency Improvement Project at the Big Sister Creek Wastewater Treatment Plant is presently under construction and represents a holistic approach to energy and green improvements at the plant. The facility improvements include:

- Upgrade of the lighting and lighting control;
 - Provisioning process controls and implementation of new equipment that will minimize pump and blower operation;
 - Implementation of an energy management system through development of a supervisory control and data acquisition, or SCADA system
 - A green roof on the SCADA building
- The total estimated cost is \$1.1 million with an estimated payback of 8.4 years. This payback does not even consider a NYS Environmental Facility Corporation grant provided through their Green Innovation Grant Program or National Grid incentives. The total energy reduction implemented through this project is estimated to be 866,000 kwh/year, which is roughly 12% of the facility usage. This project will save money, provide environmental benefits, and will promulgate green principles.

Stormwater

Erie County is also active on the issue of stormwater. Stormwater is water from rain or melting snow that does not soak into the ground. It flows from rooftops, over paved areas, bare soil, and sloped lawns. As it flows, stormwater runoff collects and transports animal waste, litter, salt, pesticides, fertilizers, oil & grease, soil and other potential pollutants.

Rain and snowmelt wash pollutants from streets, construction sites, and land into storm sewers and ditches. Eventually, these empty the polluted stormwater directly into streams and rivers with no treatment. This is known as stormwater pollution.

Polluted stormwater degrades our lakes, rivers, wetlands and other waterways. Nutrients such as phosphorus and nitrogen can cause the overgrowth of algae resulting in oxygen depletion in waterways. Toxic substances from motor vehicles and careless application of pesticides and fertilizers threaten water quality and can kill fish and other aquatic life. Bacteria from animal wastes and improper connections to storm sewer systems can make lakes and waterways unsafe for wading, swimming and fish consumption. Eroded soil is a pollutant as well. It clouds the waterway and interferes with the habitat of fish and plant life.

It is important to note that a sanitary sewer system and a storm sewer system are not the same. Water that goes down a sink or other inside drain flows to either a wastewater treatment plant or to a septic system for treatment. Storm sewer flows are not treated. Water that flows down driveways, streets, and outside areas into a storm sewer or ditch, flows directly to nearby creeks, fish and wildlife habitats, downstream recreational areas, and drinking water supplies.

Stormwater Infrastructure

Erie County Department of Public Works (DPW) is responsible for stormwater management at its own facilities. DPW recently installed a cistern at its Aurora Highway Garage. This cistern collects rain water so that it can be used for vehicle washing and asphalt operations instead of using treated water for this function.

DPW and DEP have also worked to pursue other stormwater project funding, such as funding for pervious pavement parking lots. This funding was not awarded in the 2014 New York State grant cycle, but the County will continue to pursue that project, as well as other stormwater protection infrastructure projects.

Optimizes use of energy and materials

Energy Use in Buildings

Energy for County buildings is managed within the County Department of Public Works (DPW). Due to changes in administrations and a 2005 budget shortfall, the County was left without a qualified energy manager for the past 10 years. This resulted in the lack of priority and attention to County energy conservation and reduction efforts as well as the loss of benefits, rebates, incentives and savings associated with the current services and programs available.

The need for a County energy manager was highlighted in the *Initiatives for a Smart Economy*. In December 2015, the County DPW hired an Energy Manager. Working with the DPW, the Department of Environment and Planning (DEP), National Grid and past performance contractors, Erie County is developing an energy baseline, as well as an energy plan to ensure that these opportunities are not missed in the future. This team will look at initiatives to conserve energy, as well as finding ways for the County to purchase renewable energy. This team is looking at releasing a Request for Professional Services (RFP) for a power purchase agreement (PPA) for solar power. The PPA should enable the County to enter into an agreement for solar energy for an amount that will save money on an annual basis.

The Energy Manager will also be a vital member of the Green Team, especially as the Green Team looks at ways employees can reduce the County's energy impact through behavior change. Such modifications could come in a variety of forms. For example, computer monitor shut down could be programmed into computers and/or there could be an education and outreach element to it.

Furthermore, the work of the Energy Manager will create a baseline which will be used to create a greenhouse gas inventory for the County.

Fleet

Erie County has a significant fleet. A large portion of the fleet is managed by the Department of Public Works, but the Sheriff's office also has a significant number of vehicles. DPW's Bureau of Fleet Services provides support services for County departments. The provision of such services by one division permits the County to benefit from both economies of scale and the elimination of duplicated activities. The functions provided by the Bureau of Fleet Services include equipment acquisition, deployment, disposal, maintenance, facilities management, inventory control and administration. Fleet Services also has full responsibility for fuel purchasing for all County departments along with the required DEC reporting.

The Bureau of Fleet Service's mission statement is to monitor motor vehicle maintenance and repair requirements, service procedures and scheduling. They also oversee the distribution and usage of vehicles in the County's vehicle pool; track and record vehicle operating expense per mile to determine maximum vehicle usage at minimum expense to the County; and oversee the distribution and usage of fuel in the County fleet along with full control of all ordering.

Invests in our communities

The County works to serve our community, whether it is in providing social services, maintaining infrastructure, or maintain and improving County Parks. In this way, the County is different from many of the other members of the WNY Sustainable Business Roundtable. All County departments are consistently looking for ways to provide services to the community in a way that does not cause a burden to Erie County taxpayers. These solutions often involve partnerships, grants or both. Below are just some of the ways the County invests in our community with an emphasis on projects that have either been "greened" or are environmental at their heart.

WNY Sustainable Business Roundtable

One of the projects that was recommended in the *Initiatives for a Smart Economy* is the creation of a Western New York Sustainable Business Roundtable dedicated to increasing the implementation of sustainable business practices in the region. The implementation of such strategies within the private sector will increase their economic viability and value to the community. This work will also result in an increase in the private investment in energy efficiency and weatherization projects and services, creating more energy related jobs and improving the economic viability of energy service contractors. The County has dedicated a significant amount of staff time, including working with partners to secure a United States Environmental Protection Agency grant to provide a staff person for the Roundtable, to help get this business-driven effort off the ground. The Roundtable was officially kicked-off on Earth Day in 2014 when more than 30 organizations, including Erie County, joined

the Roundtable by signing a pledge to create and implement a sustainability plan. The roundtable has held regular monthly meetings and workshops since that time.

Community Development Block Grant

The Erie County DEP Planning Division administers the Erie County Community Development Block Grant and HOME Investment Partnership Consortia. These comprise 34 and 37 communities, respectively, in Erie County that have banded together to receive federal funds. These monies are used for a variety of community planning/improvement projects, housing programs, and economic development programs. In 2013 the CDGB program began referring its low income clients to a free energy audit program through PUSH (People United for Sustainable Housing) which has received a grant from the New York State Energy Research and Development Authority (NYSERDA).

Waste Collection Events

Hazardous household (HHW) materials are common products used around the home almost every day. A substance is considered hazardous if it ignites easily, reacts or explodes when mixed with other substances, is corrosive or toxic. Check for labels that bear the words "poison", "toxic", "warning", "danger", "combustible", "flammable", "corrosive", or "caution." Hazardous household materials could pose an unnecessary health and safety risk. Unwanted materials should be disposed in an environmentally sound manner. In order to provide residents with the opportunity to dispose unused hazardous household materials, Erie County provides multiple Household Hazardous Waste Collection Days each year. A similar service, though with a charge, is provided to "Conditionally Exempt Small Quantity Generators," businesses which meet a regulated threshold of waste and can realize economies of scale through this organized event.

The County also works with partners on other special waste collections, such as pharmaceutical waste, electronics, and textiles.

Demand for these HHW collection events has increased over the years. However, state funding has diminished. To maintain the level of service and meet continuing demand, the 2015 County budget included funding for one additional collection event. The County is also seeking grant funding for an education program to reduce such waste by using a paint calculator, identifying less toxic products, etc.

Watershed Management Planning

A watershed is an area of land where all of the water that drains on the land or below the land empties to a particular body of water. In August 2009 a ravaging flood event initiated the response of municipal officials in southern Erie County to lead a grassroots effort to proactively manage their local watersheds, all of which drain to Lake Erie. The storm event highlighted localized flooding problems, excessive debris accumulation in area streams, and overall non-point source pollution issues affecting their respective communities and ultimately Lake Erie. These watershed concerns were brought to the attention of the Erie County Water Quality Committee, which facilitated a regional discussion of the issues. As a

result, the Lake Erie Watershed Protection Alliance (LEWPA) was formed with Cattaraugus, Chautauqua, and Erie counties as a membership of stakeholders intending to address water quality issues affecting the New York portion of the Lake Erie watershed and its shoreline.

The Erie County Department of Environment and Planning recently received a grant from the NYS Department of State that, in collaboration with LEWPA and Buffalo Niagara Riverkeeper, will build off the recently completed Healthy Niagara watershed management plan and include the LEWPA watershed. The Watershed Management Plan, which will be finalized in two years, will provide a blueprint for municipalities to maximize the economic benefits of the watershed while minimizing environmental impacts on it.

WNY Stormwater Coalition

The County Department of Environment and Planning (DEP) also manages the WNY Stormwater Coalition (WNYSC) which consists of forty-two communities in Erie and Niagara counties that have joined together to develop a stormwater management program to protect our waterways and enhance our quality of life. The WNYSC is a forum for these regulated communities to share resources and work in partnership toward compliance with the United States Environmental Protection Agency (USEPA) Phase II Stormwater requirements.

The overall goal of the Coalition is to utilize regional collaboration to identify existing resources and develop programs to reduce the negative impacts of stormwater pollution. The purpose of the public outreach website is to enhance public knowledge and awareness of stormwater pollution and provide information to individuals and households to prevent stormwater pollution and protect water quality.

Habitat Protection

Erie County DEP has received a USEPA grant entitled, Buffalo River Remedial Action Plan Project Management: Bailey & Red Jacket Natural Habitat Parks Restoration Delisting Project. The project will complete habitat restoration work at two County-owned Natural Habitat Parks, Bailey Avenue Peninsula and Red Jacket, which border the Buffalo River. Over a three-year span this project will correct habitat degradation at both locations including extensive stream bank erosion and invasive plant species. The purpose of the funding is to continue ongoing remediation activities of the Buffalo River corridor with the ultimate goal of the project work to contribute to the delisting of the River by USEPA as an Area of Concern (AOC) for impaired waters.

By restoring the habitat and ecosystems to healthy conditions at these two County-owned parks, several Beneficial Use Impairments (BUIs) will be removed, which are crucial steps toward delisting the entire Buffalo River as an AOC. ECDEP will work closely with the Buffalo Niagara Riverkeeper as Remedial Action Plan (RAP) Coordinator to ensure that USEPA delisting criteria are met, and that monitoring of the sites will preserve the completed restoration work.

4. Goals

As stated in the WNY Sustainable Business Roundtable pledge, Erie County will track progress against our sustainability targets in a transparent and measurable way that collectively, with the efforts of other WNY organizations, reduces the severity of global climate change.

This year

- Hire a sustainability coordinator and establish a County Green Team.
- Finalize the County energy baseline and use that to establish a Greenhouse Gas (GHG) emissions inventory.
- Draft an internal energy plan for County buildings.
- Identify a strategy to establish a Solid Waste Manager for County properties.
- Increase collection of household hazardous waste from the amount collected last year.

In 3 Years

- Finalize and adopt *Climate Action & Sustainability Plan* with set goals of % GHG reduction, pounds of waste diverted from landfill, gallons of water saved, cost reductions, etc.
- Complete the Lake Erie Watershed Management Plan.
- Begin to explore the ways that the County can help address the intersecting issues of energy and poverty.

In 5 Years

- Implement a policy to help mitigate the impact of energy costs on low income individuals and families.

5. Stakeholders

The County has many key leaders that are advocates for sustainability. As mentioned throughout this plan, the County Executive has made the case for sustainability in his *Initiatives for a Smart Economy*. There are many other strong advocates for sustainability in Erie County's leadership. On both sides of the aisle, County legislators have championed and supported a variety of environmental issues.

It is important to develop an outreach plan to make sure that employees are aware of the sustainability plan and any associated projects. For this reason, the Green Team will hold quarterly meetings that are open to all employees.

Having the right members on the Green Team is also vital. Key internal stakeholders for the team shall include representatives from the following County Departments:

- Environment and Planning (Divisions of Planning, Environmental Compliance Services, and Sewerage Management);
- Public Works (Divisions of Buildings and Grounds, Fleet, and Highways);
- Health;

- Information Support Services;
- Parks, Recreation and Forestry;
- Personnel;
- Purchasing; and
- Social Services.

Members shall be solicited from both management and union employees. Other key internal stakeholders that will be invited to join the Green Team are staff from the Erie County Legislature and union representatives.

There are also several important external stakeholders that have offered to assist the County with its plan. For example, National Grid has offered staff time to help the County achieve energy conservation and sustainability goals. Likewise, the New York State Pollution Prevention Institute has offered technical assistance to develop and implement our Sustainability Plan. The University at Buffalo has also offered to be part of the review team. The County will continue to work to establish other partnerships that can help in this effort.

Finally, the public will have a voice in the planning process. As part of the New York State Energy Research and Development Authority grant for the *Climate Action & Sustainability Plan*, the County will present the project to the public at least three times. There will be a presentation prior to starting the process. A public meeting will also be held to present a draft plan and solicit comments from the public on that draft. Prior to the final adoption of the plan, a public meeting will be held.

6. Conclusion

As shown in this initial Sustainability Plan, Erie County has been working on many projects that fall under the heading of sustainability. As we move forward with the Green Team and its *Climate Action & Sustainability Plan*, we will be able to identify additional ways to make Erie County more efficient in its internal operations. Measuring the impact of these projects will help us to track progress towards the larger goal of reducing the environmental impact of Erie County operations. Input from the public and the various stakeholders in Erie County government will be an important part of this process. As part of its commitment to the WNY Sustainable Business Roundtable, Erie County will update information about its plan on an annual basis.