



Niagara River Greenway Commission Project Consultation & Review Submission

ELLICOTT ISLAND BARK PARK LIVING SHORELINE PROJECT

March 2020



Project Registration Number _____

**Niagara River Greenway Commission
Consultation and Review Form**

Type of Review Required: Mandatory Consultation
 Voluntary Review and/or Endorsement

PROJECT SPONSOR INFORMATION

Name: Buffalo Niagara Waterkeeper _____

Mailing Address: 721 Main Street, Buffalo _____

State: New York _____ Zip Code: 14203 _____

Federal ID# 22-2993054 _____ Charities Registration # 04-91-05 _____

PROJECT TYPE

Check all that apply: Environmental Cultural/Heritage Land or Water Public Access
 Cultural Trail Educational/Interpretive
 Waterfront or Land Based Development Signage
 Recreational Other

Funding Committee Request: Host Community Standing Committee
 Buffalo and Erie County Standing Committee
 Ecological Standing Committee
 State Parks Standing Committee
 Unsure at this time

PROJECT INFORMATION

Project Name: Ellicott Island Bark Park Living Shoreline _____
Location: _____ Tonawanda Creek _____
Site Address: _10 Creekside Dr. _____
State: _____ New York _____ Zip Code: __ 14120 _____
Minor Civil Division(s): _____ Amherst _____
County: _____ Erie _____
Project Proponent Property Interest (own, lease, easement or other): Other _____

AUTHORIZED OFFICIAL

Name: _Jill Jedlicka _____ Title: __ Executive Director _____
Business Address: _____ 721 Main St _____
State: __ New York _____ Zip Code: __ 14203 _____
Telephone Number: __ 716-852-7483 x21 _____ Cell Number: _____
Fax Number: _____
E-Mail Address: _____ jedlicka@bnwaterkeeper.org _____

PROJECT POINT OF CONTACT

Name: _____ Emily Root _____ Title: _____ Director of Ecological Programs _____
Organization/Firm: _____ Buffalo Niagara Waterkeeper _____
Business Address: _____ 721 Main Street, Buffalo _____
State: _____ New York _____ Zip Code: __ 14203 _____
Telephone Number: _____ 716-852-7483 x16 _____ Cell Number: _____ 240-643-6036 _____
Fax Number: _____ 716-885-0765 _____
E-Mail Address: _____ eroot@bnwaterkeeper.org _____

1. IN A BRIEF PARAGRAPH, DESCRIBE THE PROJECT AND ITS PURPOSE, HOW AND WHEN IT WILL BE ACCOMPLISHED, AND WHY IT IS IMPORTANT.

This project is a continuation of Buffalo Niagara Waterkeeper's (Waterkeeper's) Niagara River Riparian Restoration Program (also referred to as Living Shoreline Program). The program was developed in response to several planning initiatives and data analysis revealing the vast loss in natural shorelines and coastal wetland habitats within the Niagara Region. Modeling best practices from similar shoreline restoration programs around the nation, Waterkeeper's Living Shoreline Program aims to address the gap between interested waterfront landowners and required resources for on-the-ground restoration. This program leverages the skills and existing resources of conservation partners to increase riparian restoration activities in the Niagara River Greenway while increasing community engagement and awareness of shoreline best management practices. To date, and with the support of funding from the Greenway Ecological Fund, Waterkeeper has implemented four successful shoreline restoration projects through this program at Sandy Beach Park Club, Hyde Park Lake, Ellicott Creek Park, and Tifft Nature Preserve and we are currently working on a fifth project at the North Tonawanda Botanical Garden. The completed projects have been successful in restoring degraded shoreline areas while demonstrating the benefits of nature-based landscape management.

The proposed project area is located at Ellicott Island Bark Park which is part of the Erie County Park System. The island is in the Tonawanda Creek and is a popular dog park, sometimes known as "Dog Island". Currently, dogs (with their people) access the water primarily at four points along the island's shoreline and clear signs of erosion and habitat loss have been observed at these locations. The goal of this project is to address the burden of over use and transform the existing, degraded shoreline into a more natural, resilient, and self-repairing form which will better support a sustainable, protective, and higher-functioning ecosystem. Numerous ecological benefits will be achieved through this project, including: protection of critical habitat areas by control of access points, improved water quality and erosion control through bank stabilization; improved resiliency; invasive species removal; and increased plant diversity. The goal to increase aquatic and shallow water habitat areas in protected zones will provide important spawning, resting, and feeding areas for a variety of fish and wildlife species and will create a self-sustaining habitat that grows stronger over time.

Methods:

Waterkeeper will lead this project in close coordination with partners including Erie County Parks and the Friends of Ellicott.

In general, the project will be completed through the following methods: Waterkeeper will create a conceptual design that will serve as a starting point for the design process. Waterkeeper will convene local partners in order to gather feedback on the conceptual design to ensure all project components are consistent with landowner/operator goals and current and future uses of the site. A design consultant, selected through a competitive bid process, will then move forward with developing the design from schematic to full construction documents based on feedback and with guidance from Waterkeeper. Upon completion of construction documents and specifications, Waterkeeper will complete a competitive bid process for a construction contractor. Waterkeeper will continue to oversee project implementation, ensuring goals are met, and guiding the design consultant administration of construction activities. In addition, Waterkeeper will develop educational signage to be installed by the construction contractor.

TIMELINE:

August 2020- October 2020: Secure design funding from standing committee. Execute access agreement with landowner. Develop concept design, get partner feedback. Go out to bid and secure design consultant, complete preliminary data and survey collection.

November 2020- April 2021: Consultant develop design with check ins at 30%, 60%, 90%, and 100%. Submit all required permit applications. Once opinion of probable cost is known, seek funding for implementation.

The timeline for the remaining tasks will depend on the ability to secure required implementation funds. Once funding is secured, the steps are as follows: Go out to bid for contractor, secure contractor and permits, guide construction implementation, complete 1-year Period of Establishment. Develop maintenance plan and review with partners. Ideally, all required funds will be secured by fall of 2021 in order to allow for construction that season, or the following season.

2. REFERRING TO THE NIAGARA RIVER GREENWAY PLAN, CLEARLY DOCUMENT AND DESCRIBE HOW THE PROPOSED PROJECT WILL ADVANCE THE NIAGARA RIVER GREENWAY VISION INCLUDING THE GOALS, PRINCIPLES, AND CRITERIA THAT DEFINE THAT VISION.

The Living Shorelines Program has been found consistent with the Greenway Plan and the Settlement Agreement by the Greenway Commission. Protection and habitat enhancement, such as wetland and meadow habitat creation along Tonawanda Creek and its tributaries is specifically called out as a priority in the Niagara River Greenway Plan. In addition, threats from bank erosion, pollution, and stormwater runoff were noted as key issues, all of which will be addressed by this project.

Goals

The proposal meets several goals as defined by the Niagara River Greenway Plan:

Improve Access and Make Connections

Development of designated, protected waterfront access points around the island will directly advance this goal in creating access to the water that will be sustained long-term.

Promote Long Term Sustainability

A variety of environmental features will be incorporated to ensure this project is ecologically sustainable. These features include restoring degraded shoreline areas and creating designated access points that will provide long-term viability of this unique asset within the Greenway and prevent erosion and property loss from recurring in the future. Strengthening the hydrology and ecology of the creek at our project site will foster the growth of a natural system that is self-sustaining, self-repairing, and generates benefits to both the environment and local community for years to come.

Protect and Restore Environmental Systems

The degraded shoreline along Tonawanda Creek will be directly addressed through planning, design, and implementation efforts that correct previously negative effects on the ecosystem and return it to a state of ecological health. Restoration outcomes of the project will include increased aquatic and shallow water habitat to benefit fish and wildlife species, vegetation to improve water quality by filtering runoff and other inputs from entering Tonawanda Creek, and shoreline vegetation to shield the soil from erosive forces, creating a self-sustaining habitat that grows stronger over time.

Celebrate History and Heritage

Ellicott Creek Park is one of the ‘Heritage Parks’ within the Erie County system. This park is one of the oldest in the system and has many structures that were built under the Works Progress Administration (WPA) in the 1930s. The Island itself was designed by landscape architect Charles Ellicott, added as a way to make the Erie Canal more navigable. Ellicott Creek Park and the Island are tied to the history of the Erie Canal and recreation on Tonawanda Creek. Restoration of degraded shoreline will help in preserving both the natural and cultural heritage value of this landscape.

Spark Revitalization and Renewal

As part of the Living Shorelines Initiative, this project is a component of a larger effort that is inspiring ecosystem revitalization throughout the Niagara River Riparian Corridor.

Guiding Principles

Excellence

In congruence with the history of success of our Living Shorelines projects, Waterkeeper is committed to ensuring that this project is completed with excellence. With the restoration of this site along Tonawanda Creek, additional natural amenities will be provided to Erie County residents and visitors to the creek, improving overall quality of life and the experiences visitors have in Western New York. Through this Living Shorelines project, the County will also enhance its coastal resiliency, increasing the safety of its residents and environmental stability.

Restoration

The sensitive location of the proposed project requires that it will be guided by the principle of restoration. Degraded shoreline along Tonawanda Creek will be directly addressed through planning, design, and implementation efforts that correct previously degenerative effects on the ecosystem and return it to a state of ecological health. Restoration outcomes of the project will include improved water quality and erosion prevention.

Celebration

This project will be designed to celebrate the natural water resources that typify this region in Western New York. As beneficiaries of this environmental restoration, local residents and visitors to the Living Shoreline Project will experience the beauty, tranquility, and joy generated from visiting a thriving natural setting.

Sustainability

Long-term sustainability of the property will be achieved through continued partnership with Erie County Parks, which as owner of the site will ensure its maintenance as an environmental restoration site. Every effort will be made to ensure that the restoration master plan incorporates design concepts that will not only protect but also enhance the habitat value of the site. Our environmental restoration techniques will repair and enhance the shoreline into a natural system that is functional and self-repairing.

Authenticity

The Living Shoreline Project promotes authenticity as it directly addresses and reverses degradative effects on the Tonawanda Creek system. Human activities which have altered the natural setting, such as unfettered access to the unprotected shorelines and impacts from water level fluctuations and boat wakes, will be halted in order to promote the site return to its normal ecological conditions.

Accessibility

Project enhancements will include designated access points which will protect critical habitat areas while facilitating access to the water's edge by the already-growing number of visitors while also ensuring shoreline protection measures are successful and sustained.

Ecological Integrity

Restoration, enhancement, and preservation of habitat within the property presents a great opportunity to address areas of severe erosion. The constant erosion is leading to property loss and increased turbidity in the water column which is affecting water quality and aquatic plant growth in the creek that extends beyond the island itself. Restoration achieved with this project will create and protect important in-water, riparian, and upland habitats, that are ecologically significant within the Tonawanda Creek corridor and Niagara River

Greenway.

Partnerships

Waterkeeper has participated in numerous collaborative efforts with Erie County Parks and several recommendations within the parks master plan include working with Waterkeeper to accomplish restoration goals. Waterkeeper and Erie County Parks have a strong working relationship which will be brought to this project. Additionally, Friends of Ellicott are an important partner in this effort as they are responsible for maintenance at the park.

Public Well-Being

Improved, while also strategically limited, public access to Tonawanda Creek will foster increased environmental awareness as well as personal and interpersonal well-being as individuals and groups come together to enjoy and benefit from the restored site.

Connectivity

The site affords connectivity to other Living Shorelines in the Niagara River Riparian Corridor including the living shoreline project and reforestation effort that were implemented in Ellicott Creek Park, and the living shoreline at North Tonawanda Botanical Garden which will be implemented in 2020. The project is also located within the Greenway Focus Area along the Erie Canal. Thus, connectivity to other Living Shoreline sites, and to the Greenway as a whole, is a guiding principle of this restoration effort.

Criteria

The proposal meets nine of the ten criteria as defined by the Niagara River Greenway Plan:

Consistency with Principles: The project addresses the guiding principles of: *ecological integrity and restoration* through restoring degraded shorelines along a key tributary to the Niagara River ; *connectivity* in filling a gap in an important riparian corridor along Tonawanda Creek and the Erie Canal; *partnerships* between landowners, local partners, and Waterkeeper; *accessibility* as local residents will have improved access points within the restored area and will be educated about the importance of natural landscapes in the community.

Priority Status: Restoration of Tonawanda Creek is described as a priority conservation project in the Niagara River Greenway Plan. The project will also offer improved access to waterfront resources, provide restored natural habitat in an area that has been degraded, and will offer educational opportunities through signage.

Focus Area: The project is within the Greenway Focus Area.

Environmental Soundness: Through the implementation of the Living Shoreline Program, Waterkeeper's team has gained extensive knowledge, partnerships, and technical expertise required to administer and lead restoration projects like the one proposed here, as demonstrated through the success that has been achieved through both phases of that program to date.

Implementable: Additionally, Waterkeeper has experience in implementing large-scale and complicated projects throughout the region. We will also consult with local partners and utilize the expertise of our consultant and contractor throughout project development and implementation to ensure all aspects remain feasible and implementable.

Economic Viability: This project is economically viable, and will incorporate the highest level of sustainability possible. The ability to design and implement as much of the project as possible simultaneously will add to the

cost savings of the project. The long-term sustainability and success of the project will be ensured through maintenance activities provided by Friends of Ellicott and Erie County Parks.

Local Sponsors or Partners: Waterkeeper will be the lead sponsor of the project and will work closely with the Erie County Parks, along with other partners, to successfully complete this effort.

Consideration of Other Planning Efforts: Consistency with other regional plans is detailed in the section below. The project also advances priorities outlined in Erie County Parks Master Plan.

Clear Benefits: Riparian buffers are proven to effectively reduce stormwater and degrade, extract, contain, or immobilize contaminants and excess nutrients from soil and water, and reduce shoreline erosion. Increasing the tree canopy and shoreline vegetation will improve structure in soils will create areas of infiltration that support regional green infrastructure by providing flood protection and reducing nonpoint source pollution. Enhanced public access and experiences will also help connect the community to the unique ecological and cultural assets that the Niagara River Greenway has to offer.

3. IDENTIFY ALL SOURCES OF FUNDING AND THE AMOUNT OF FUNDING EXPECTED FROM EACH SOURCE. IDENTIFY AND QUANTIFY FUNDS THAT ARE ALREADY ON HAND OR HAVE BEEN ALLOCATED FOR THE PROPOSED PROJECT. EXPLAIN HOW THE PROJECT WILL BE OPERATED AND MAINTAINED.

Estimated Project Budget:

Based on Waterkeepers experience with implementing projects through the living shoreline program, the total cost of this project is estimated at \$1.7 million. Waterkeeper utilized square foot costs from past projects to calculate this number, adding additional mobilization costs, as the work requires the heavy machinery and materials to be brought in by barge. This is a preliminary estimate without the benefit of analysis and design, and the opinion of probable cost will be refined as the project progresses through the design phase.

Matching Funds:

Matching funds for the project will be provided through in-kind services, materials, and volunteer hours contributed by partners including Erie County Parks and Friends of Ellicott. Details on matching contributions will be determined as the project progresses.

Operation and Maintenance Plan:

For one year following substantial completion of restoration activities, the selected contractor will be held to a Period of Establishment which ensures that any project components under the contractor's control that are not successful are replaced or repaired. Following this, Erie County Parks and Friends of Ellicott will conduct maintenance activities at the site. The restoration design development will consider the need for long-term maintenance activities, ensuring that they are simple and easy to follow. In implementing the suite of living shorelines projects to date, Waterkeeper has gained knowledge of how to design the features of a project to consider the width and turning radius of maintenance equipment and other relevant factors. The landscape is designed to require little maintenance, and to reduce the amount of work and frequency of maintenance activities from current regimes. Waterkeeper will develop an easy-to-use guide for maintenance activities and will review them on site with maintenance personnel prior to the end of the period of establishment. The guide is also intended to be clear to read and understand for future personnel. If any maintenance activities are required over the years Waterkeeper has a vast network of volunteers including our RestoreCorps program that can be convened to ensure the project remains successful.

4. DESCRIBE THE MEASURES TAKEN AT THE LOCAL LEVEL TO GAIN COMMUNITY AND GOVERNMENT SUPPORT FOR THIS PROJECT (HEARINGS, PETITIONS, PUBLIC SURVEYS, RESOLUTIONS OF SUPPORT OR OTHER METHODS).

IF THIS PROJECT HAS BEEN CITED OR DESCRIBED IN A LOCAL PLANNING DOCUMENT OR SOME EQUIVALENT THEREOF, ATTACH COPIES OF THAT DOCUMENTATION HIGHLIGHTING THE SECTIONS THAT ARE RELEVANT TO THE PROPOSED PROJECT. DESCRIBE THE ROLE OF MUNICIPAL AGENCIES, STAKEHOLDER GROUPS, CONSULTANTS, VOLUNTEERS OR OTHERS WHO WILL BE INVOLVED IN THE PROPOSED PROJECT.

The land that makes up the Park is owned by Erie County Parks. Initial project development included coordination with this partner, and as the project continues to progress, Parks is committed to support development of the project. Project partners will be involved in weighing in on design development. Additionally, Friends of Ellicott are an important partner in this effort as they are responsible for maintenance at the park. Letters of support from both partners are included with this application as Attachment B.

The recently completed Erie County Parks Master Plan directly calls for working with Waterkeeper on Living Shorelines on Ellicott Island as a means of preventing erosion and stabilizing the shoreline. The Master Plan section describing Ellicott Park is included as Attachment C.

The restoration of shoreline and coastal habitats is a regional priority outlined in numerous local and state-wide planning efforts. The vitality of coastal habitats provides a broad range of social, ecological, and economic benefits including: protection and improvement of water quality, improved community resiliency and mitigation of impacts from climate change, reduced runoff and shoreline erosion, enhanced access and enjoyment of local water resources, and sustained populations of native wildlife species.

The Niagara River Remedial Action Plan cites the loss of fish and wildlife habitat and biodiversity along with degradation of nearshore habitats as major issues affecting the health of the Niagara River ecosystem. The Living Shoreline Program directly addresses this critical impairment, while advancing goals found in other important documents including: The Niagara River Greenway Habitat Conservation Strategy, Great Lakes Regional Collaboration Strategy, NY State Forest Action Plan, NY State Open Space Plan, NY Wildlife Action Plan, Great Lakes Action Agenda, and NYS Comprehensive Wildlife Conservation Strategy.

5. DESCRIBE AND DOCUMENT THE ENVIRONMENTAL SETTING AND EXISTING CONDITIONS AT THE PROPOSED PROJECT SITE. IF YOU ARE NOT THE OWNER OF THE PROPERTY INCLUDE A LETTER(S) OR RESOLUTION(S) EVIDENCING SUPPORT FOR THE PROJECT BY THE OWNER. PROVIDE PHOTOGRAPHS, CONCEPTUAL PLANS AND DRAWINGS THAT SHOW THE SITE AS IT PRESENTLY EXISTS AND HOW THE SITE WILL CHANGE WITH THE ADDITION OF THE PROPOSED PROJECT. DESCRIBE HOW YOUR PROJECT WILL COMPLY WITH THE STATE ENVIRONMENTAL QUALITY REVIEW ACT (SEQRA). THE EXISTENCE OF WETLANDS, SIGNIFICANT UPLAND AND AQUATIC HABITATS, AND PLANT OR ANIMAL SPECIES THAT ARE CLASSIFIED AS RARE, THREATENED, OR ENDANGERED SHOULD BE NOTED. EXPLAIN HOW SUCH NATURAL RESOURCES WILL BE PROTECTED AND/OR ENHANCED. CITE ANY RELEVANT PROJECT-RELATED STUDIES.

The project area is located at Ellicott Island Bark Park which is part of the Erie County Park System. The Island is in the Tonawanda Creek and is a popular dog park, sometimes known as "Dog Island". Currently, dogs access the water primarily at four points along the island's shoreline and clear signs of erosion and habitat loss have been observed at these locations. The impacts of heavy dog traffic are most apparent, and most severe, at the southern end of the Island. In addition to these direct impacts to the access points, the accelerated erosion is introducing large quantities of suspended sediments to the water column. This increased turbidity is carried with the current and is affecting shallow water habitat far beyond the dog access areas. Drone footage showing conditions surrounding the island can be viewed at this [link](#) (footage provided by Friends of Ellicott).

The attached preliminary concept plan (Attachment A) identifies three treatment areas which will be applied across the site to project goals as detailed in Question #1. Each treatment area applies a different set of nature-based techniques to address current conditions within each area, while also considering future uses and preventing impacts to important habitat areas associated with the high traffic at the site. A description of how natural resources will be protected and enhanced for each treatment type is described below.

- **TREATMENT AREA TYPE 1**

Treatment area 'Type 1' will be applied to the areas experiencing the most severe erosion issue at the island's northern and southern points. These areas are experiencing more rapid erosion than the rest of the island due to the steepness of the slopes and also because, in addition to heavy dog traffic, these areas are being impacted by persistent boat wakes. This combination is particularly damaging and calls for both upland and aquatic intervention to accomplish project goals. These interventions may include: Bio-engineering techniques, stone sills/rock reefs, earth moving, dense native plantings, and habitat protection fencing.

- **TREATMENT AREA TYPE 2**

This beloved park is heavily used by members of the community which provides ample opportunities to educate people about living shoreline techniques, but it also presents a challenge towards achieving the previously mentioned project goals to which special considerations must be given. Treatment area 'Type 2' accounts for the largest area of intervention. The main strategy for revitalization includes habitat protection measures and enhancement of existing riparian/shoreline areas.

Habitat protection will be absolutely critical to the establishment and longevity of any restoration activities occurring on the island. Given the unique programming of the site, as an off-leash dog park, permanent fencing will be necessary to keep dogs out of sensitive areas. In the absence of fencing: seedlings will be trampled, aquatic plants will be up-rooted, small trees/shrubs will be damaged, and erosion will continue. Cost effective solutions will be explored through the design process.

In an effort to maximize cost effectiveness and connect local communities to the project, Waterkeeper will explore options to organize volunteer planting events within the newly protected riparian areas. Waterkeeper has had great success with organizing and overseeing volunteer planting events in other areas of Ellicott Creek Park. For 'Type 2' treatment areas, invasive species and dangerous tree removal, fence installation and in-water and riparian plantings will be installed by the contractor. We will explore the possibility that some of the trees and shrubs anticipated for the protected areas can be planted by volunteers.

- **TREATMENT AREA TYPE 3**

Lush vegetation is incredibly effective at controlling erosion, reducing turbidity, and filtering runoff; unfortunately, in the high traffic areas where dogs access the water, vegetation establishment is highly unlikely. One option for addressing these erosion areas is to keep dogs and owners away from the water's edge to allow for vegetation regeneration, but this solution is short sighted. If we simply keep them out of the current erosion areas, they will likely find new areas to access the water, in the process recreating the same ecological impairments that this project seeks to alleviate.

Instead, the solution proposed in this application seeks to formalize access points as a way to address the erosion issues associated with overuse and to prevent future erosion areas from becoming established in new locations.

The creation of a stabilized stone beach will handle the burden associated with heavy use and concentrate access to three points along the shoreline. By concentrating disturbance associated with dog activity to these three sites the rest of the shoreline is spared from unpredictable dog behavior which will enable newly planted and existing plant communities to self-propagate and spread along the edge. The stone beach will also significantly reduce the amount of suspended sediments entering the system which will greatly improve the growing conditions for emergent and aquatic plants along the entire shoreline.

Waterkeeper does not anticipate the requirement of SEQR for the proposed project. We will hold a pre-application consultation with US Army Corps of Engineers prior to submitting a joint application for the project in order to determine the required state and federal permits and approvals. Waterkeeper will also seek necessary permits and approvals from Canal Corps and North Tonawanda prior to construction. Waterkeeper is not the owner of this property; a letter of support from North Tonawanda is provided.

The improvements achieved through this project will contribute towards the revitalization of a regionally significant waterfront resource and aid in drawing people to this unique outdoor and cultural heritage destination offering educational and recreational opportunities that fit a wide array of ages and abilities.

PHOTOS OF ELLICOTT ISLAND BARK PARK

Figure 1. Existing Conditions - Photo from Erie County Parks Mater Plan



Poor shoreline conditions at Ellicott Island Bark Park

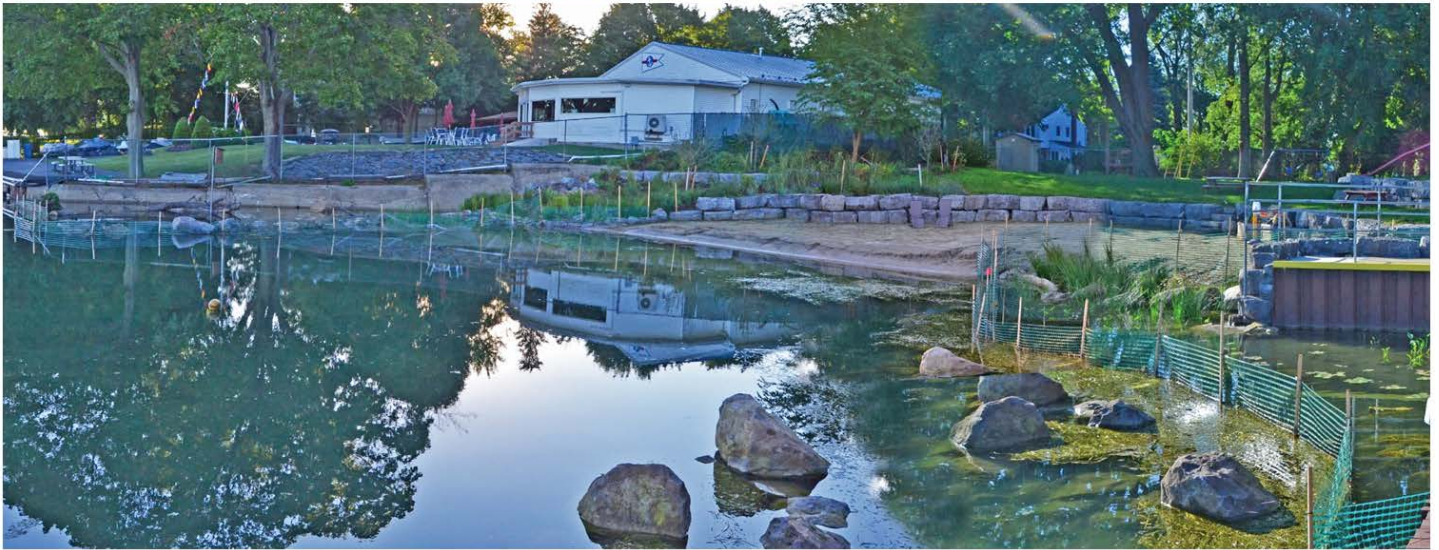
Existing Shoreline Conditions along Tonawanda Creek, looking South





EXAMPLES OF COMPLETED RESTORATION PROJECTS THROUGH BNW LIVING SHORELINE PROGRAM

Sandy Beach Park Club, Grand Island NY- Before and after



Hyde Park Lake, Niagara Falls NY- Before



Hyde Park Lake, Niagara Falls NY- Restored Shoreline Habitat





ELLICOTT ISLAND PARK - DOG PARK

Living Shoreline Project Proposal - Site Objectives & Preliminary Approach

MARCH, 2020

PRELIMINARY TAKE-OFF'S

Total Project Area ~3.15 Acres



TREATMENT AREA TYPE 1 Stabilize, Protect, & Enhance

TOTAL AREA
~ 30,000 SF

SQUARE FOOT COST
~ \$25.00

DESCRIPTION OF WORK
Grading
Sill/Barrier rock reef
Toe protection
Aquatic shelf
Aquatic substrate
In-water planting
Riparian/upland plantings
Upland permanent fencing
Invasive species removal



TREATMENT AREA TYPE 2 Protect & Enhance

TOTAL AREA
~ 88,000 SF

SQUARE FOOT COST
~ \$3.00

DESCRIPTION OF WORK
In-water planting
Riparian/upland plantings (volunteer)
Permanent fencing
Invasive species removal
Woody debris (8 total)



TREATMENT AREA TYPE 3 Stabilize

TOTAL AREA
~19,000 SF

SQUARE FOOT COST
~ \$35.00

DESCRIPTION OF WORK
Grading
Subgrade stabilization
Stone beach creation



TREATMENT AREA TYPE 1
AREA ~15,000 SF
UPLAND PERIMETER ~400 LF

STONE SILL/ROCK REEF, TYP.

TREATMENT AREA TYPE 1
AREA ~15,000 SF
UPLAND PERIMETER ~250

TONAWANDA CREEK (CANAL)

TREATMENT AREA TYPE 2
AREA ~13,500 SF
UPLAND PERIMETER ~1,050 LF

TREATMENT AREA TYPE 2
AREA ~74,500 SF
UPLAND PERIMETER ~4,500 LF

HABITAT PROTECTION
FENCING, TYP.

EXISTING
WETLAND HABITAT

POTENTIAL IN-WATER
PLANTING AREA, TYP.

TREATMENT AREA TYPE 3, TYP.
AREA ~6,500 SF





COUNTY OF ERIE
MARK C. POLONCARZ
COUNTY EXECUTIVE



DEPARTMENT OF PARKS, RECREATION AND FORESTRY

MARK D. CORNELL
DEPUTY COMMISSIONER OF PARKS

TROY P. SCHINZEL
COMMISSIONER

JAMES K. McDONALD
DEPUTY COMMISSIONER OF RECREATION

March 2, 2020

Greg Stevens
Executive Director
Niagara River Greenway Commission
PO Box 1132, Niagara Falls NY 14303

Mr. Stevens,

On behalf of the Erie County Department of Parks, Recreation & Forestry (Erie County Parks), I am writing to confirm our support and participation in the living shoreline restoration project at Ellicott Creek Park (Island) proposed by Buffalo Niagara Waterkeeper (BNW). We fully support the application to the Niagara River Greenway Commission.

Erie County Parks and BNW have established a relationship through coordination on various initiatives throughout the Niagara River watershed, and we are looking forward to continuing this relationship through collaborating on this important restoration project. BNW has implemented a shoreline restoration project in partnership with Erie County Parks at Ellicott Island Park, which was successful and well received by the community. We fully support the continuation of the Living Shoreline Program at Erie County Parks, and Ellicott Creek Park (Island) is a great candidate for this program due to areas of extensive erosion.

The project aims to transform current conditions along the shoreline within Ellicott Creek Park (Island) to a more natural and self-sustaining ecosystem. The restoration completed through this project will create unique in-water and shoreline habitats that support fish and wildlife; address erosion and sedimentation issues with innovative bioengineering techniques and best management practices; create sustainable riparian buffers that lessen maintenance and improve water quality; and create spaces that improve the public's enjoyment of our waterfront.

The project directly advances priority actions outlined in the Erie County Parks Master Plan, and will address current erosion issues and property loss that is currently being experienced at Ellicott Creek Park (Island). As the site landowner, Erie County Parks is committed to participating and providing input throughout project design and implementation. We are also committed to providing long-term maintenance and management of the project in order to maintain its success for many years in the future.

Erie County Parks looks forward to working with Buffalo Niagara Waterkeeper to achieve shoreline restoration at the site. If you have any questions, feel free to contact me at (716)858-8353 or Troy.Schinzel@erie.gov.

Sincerely,

A handwritten signature in blue ink that reads "Troy P. Schinzel".

Troy P. Schinzel
Commissioner



Board of Directors

Ganesa Glose, President
Andy Witt, Vice President
Burn Barnes, Secretary
Samantha Waldbillig, Treasurer

contact@friendsofellicott.com

https://friendsofellicott.com

March 5, 2020

Greg Stevens
Executive Director
Niagara River Greenway Commission
PO box 1132, Niagara Falls NY 14303

Mr. Stevens,

On behalf of the Friends of Ellicott, Inc., I am writing to confirm our support and participation in the living shoreline restoration project at Ellicott Island Park proposed by Buffalo Niagara Waterkeeper (BNW).

Friends of Ellicott, Inc. is a non-profit organization that was formed in 2013 to work with Erie County Parks officials to provide for an environmentally sensitive off-leash dog park at Ellicott Island Park. Our organization engages in volunteer efforts to act as a steward of the park, completing maintenance activities and improvements through a formal agreement with Erie County Parks.

Ellicott Island Park, located in the Niagara River Greenway and along the Erie Canalway Trail, offers important recreational, cultural, historic, and natural resource opportunities. The proposed project will restore degraded shoreline areas throughout the property and divert public uses to more appropriate areas which is important in preventing future property loss while providing safe access to the water for recreational purposes. By addressing the severe erosion that is currently occurring at the site, water quality improvements will be observed in the Tonawanda Creek system, which is an important tributary to the Niagara River. The results of this project will achieve both enhanced community resiliency and ecosystem integrity.

Friends of Ellicott, Inc. and BNW have established a relationship through coordination on several projects including the reforestation effort at Ellicott Creek Park downstream of Ellicott Island Park. We are looking forward to continuing this relationship through partnering on this important restoration project.

The project directly advances priority actions outlined in the Erie County Parks Master Plan, and will address current erosion issues and property loss that is currently being experienced at Ellicott Island Park. As the organization charged with creation and maintenance of the Ellicott Island Bark Park, Friends of Ellicott, Inc. is committed to participating and providing input throughout project design and implementation. We are also committed to assisting in providing long-term maintenance and management of the project in order to maintain its success for many years in the future.

If you have any questions, feel free to contact me at 716-213-7425 or email ganesaglose@friendsofellicott.com.

Sincerely,



Ganesa Glose

President, Friends of Ellicott, Inc.

716-213-7425

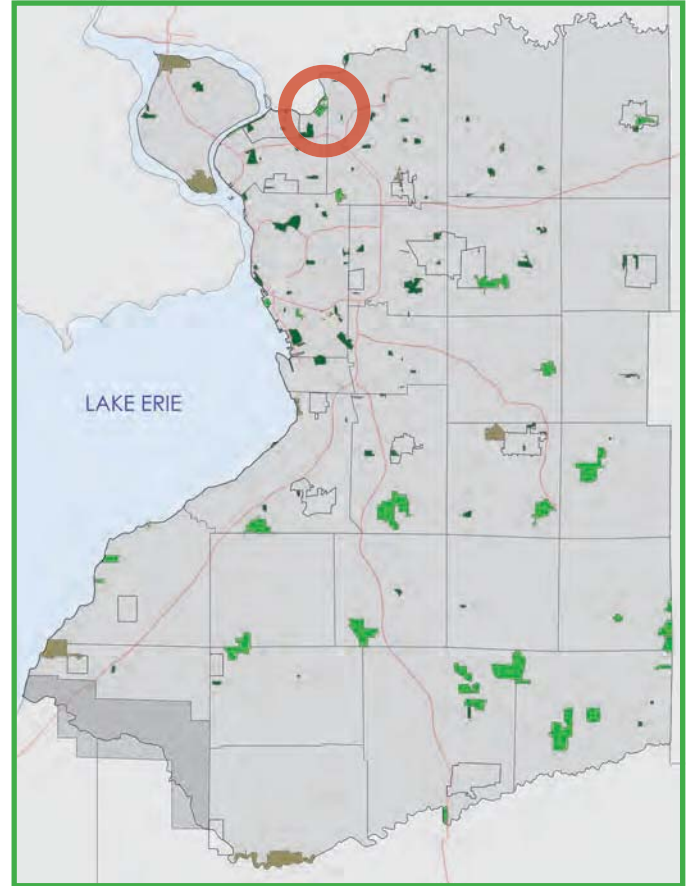
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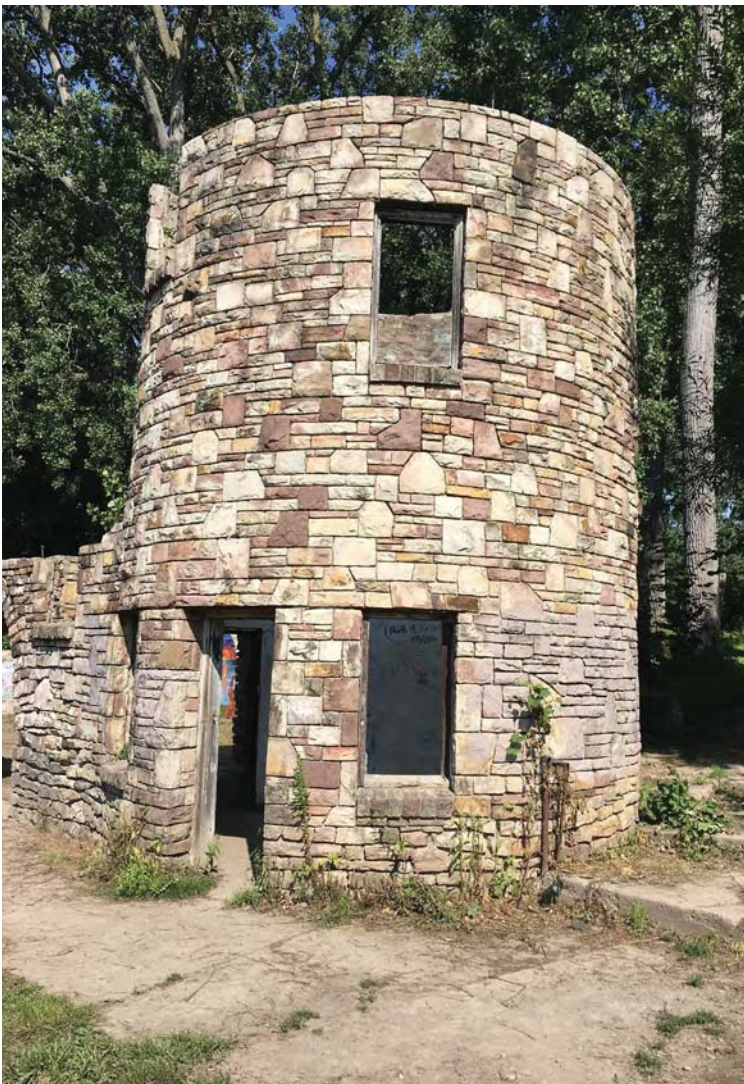
ELLICOTT CREEK PARK

DESCRIPTION

At 165 acres, Ellicott Creek Park is one of the original Heritage parks in the County system, and is entirely within an urban environment setting. The park is centrally located and easily accessed by residents of Tonawanda, Amherst, Buffalo, and North Tonawanda (Niagara County), and is also a destination along area bike routes, including the Ellicott Creek Bike Path (via the Town of Amherst), and Erie Canalway Trail which connects with the Shoreline Trail. It is one of the four oldest parks in the system, acquired by the County in 1925 due to its attractive landscape setting between Ellicott Creek and the Erie Canal (Tonawanda Creek). This beautiful Heritage park is noted for its impressive collection of old stone structures and waterfront setting. Ellicott Creek Park is generally flat, which was considered ideal for the development of many field sports and active recreation, such as tennis and ice-skating. The Park is bisected by a major floodway corridor (spillway flume) between the two Creeks.



Park Location Map: Ellicott Creek Park is located in the Town of Tonawanda



WPA Boathouse Ruins

PARK SPECIFIC PRIORITIES

- **Preserve and enhance Heritage areas and special park features, including:** Repoint/clean stonework where needed, replace missing stones, replace or repair roofs, make improvements to concrete/asphalt floors, etc. to all historic structures and facilities.
- **Reduce lawn mowing in passive recreational areas, provide meadows and wildflowers to enhance natural character of park.**
- **Coordinate with Friends of Ellicott Island Bark Park to maintain and upgrade amenities on Ellicott Island, as well as protecting and enhancing sensitive shoreline conditions.**



WPA Comfort Station #1



WPA era Casino



WPA Creekside Stand

CURRENT ISSUES AND PROBLEMS

- The park is showing deterioration in its older, historic stone structures.
- There is a lack of directional signage to the park, and within the park. The park occupies four distinct areas: the area between Ellicott Creek Road and Ellicott Creek, the 'main' part of the park between Ellicott Creek and Creekside Drive, the Creekside area, and Ellicott Island.
- Better linkages could be made between four park areas.
- There is a lack of interpretive signage highlighting the wonderful park structures and natural features.
- Currently, most of the open space in the park is mowed, including areas that are beyond the recreational use areas.
- There is an apparent underutilization of some of the park facilities.
- There are numerous outdated play structures that do not meet current safety or accessibility codes.
- Many older trees are displaying health issues.
- Many dead trees within the park including Silver Maples and Ash.
- Nearly all shelters off of Creekside Drive are showing deterioration and need repairs.
- Heavy usage of the Bark Park on Ellicott Island has caused erosion and maintenance issues.



Poor shoreline conditions at Ellicott Island Bark Park

- **(P: 14.0) Coordinate with Friends of Ellicott Island Bark Park to maintain and upgrade amenities on Ellicott Island.** Park is heavily used and needs to be monitored to provide a safe and sustainable environment.
 - Priority: High
 - Partner: Friends of Ellicott Island Bark Park/In-House

- **Improve ADA access throughout the park wherever is reasonable and feasible. (2003 Master Plan)**
 - New renovations can present opportunities to address standards in ADA accessibility. These can include for example, designing sports fields/courts for greater accessibility and seating, improved accessibility/updated surfaces to children play areas, and potential paving of new trails for people with mixed abilities.
 - Priority: Medium
 - Partner: In-House

- **(P: 15.0) Improve pedestrian safety and visibility along main road(s),** particularly the trail crossing at Creekside Drive; possible reduction in speed.
 - Priority: Medium
 - Partner: NYSDOT/Greenway funding

- **(C: 11.0-12.0) Restore or reconstruct the various pedestrian bridges that connect to the community.** These important linkages tie the park to its neighborhood users.
 - Priority: Medium
 - Partner: Consultant/Greenway funding



Existing trails on Ellicott Island



Comfort station and former concession stand on Ellicott Island



Shoreline conditions need to be addressed on Ellicott Island Bark Park

- **(P: 18.0) Remove any remaining existing ball diamond backstops or repurpose ball diamonds.** Coordinate with Visit Buffalo Niagara and usergroups/stakeholders to maintain diamonds if there is interest in the use of these amenities.
 - Priority: Low
 - Partner: Visit Buffalo Niagara/Community groups
- **(P: 12.0) Stabilize the slopes on Ellicott Island; several areas due to high usage by dogs accessing the water are losing vegetation and thus exposing the soil resulting in the slopes eroding into the creek.**
 - Continue coordination with Friends of Ellicott Island Dog Park to identify problematic areas and engage consultants to implement methods of stabilization and protection of critical areas.
 - Priority: High
 - Partner: Friends of Ellicott Island Dog Park
- **(A: 4.1-4.3) Improve the tree health of the park, in particular within maintained areas.**
 - Remove dead, dying or diseased trees.
 - Prune deadwood from trees.
 - Routinely monitor the tree population for indications of pest infestations.
 - Provide new tree plantings throughout the park, particularly along the roadway edges.
 - Develop a multi-pronged approach to tree planting strategy including contracted work, in-house staff and volunteer group plantings.
 - Develop annual tree planting program to restore tree canopy and improve natural image of the park.
 - Apply for funding from NYSDEC for example for purchase of trees and materials and for the tree inventory.
 - Priority: High
 - Partner: WNY PRISM/ECSWD/Forestry
- **(P: 12.0) Improve the health of Ellicott Creek and Tonawanda Creek.** Work with NYSDEC, Buffalo Waterkeeper, Soil and Water District and other local stakeholder groups.
 - Focus projects should include stream bank stabilization and erosion control, habitat conservation and restoration, stormwater management, and contaminant reduction.
 - Continue coordination with Buffalo Niagara Waterkeeper on “expanding” Living Shoreline along Ellicott Creek, along with additional site specific projects as needed.
 - Continued improvements to the ecological status of the creek and naturalization of the surrounding wooded areas can contribute to educational nature programs and trail/water recreation.
 - Priority: Medium
 - Partner: Buffalo Niagara Waterkeeper, NYSDEC



Erosion off the southern tip of the island



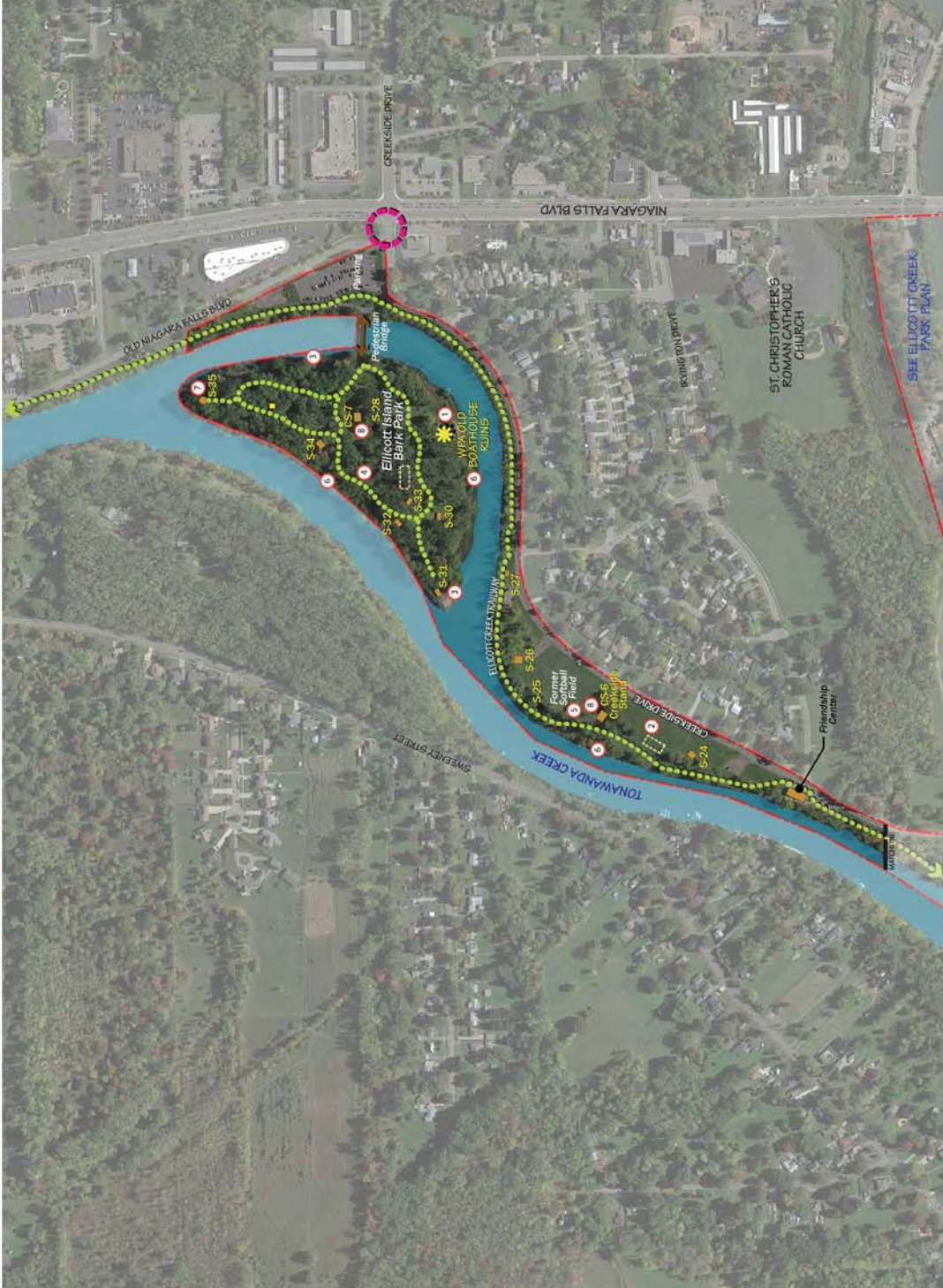
MASTER PLAN ELLICOTT CREEK PARK - ELLICOTT ISLAND

ERIE COUNTY PARKS MASTER PLAN UPDATE DRAFT

MASTER PLAN RECOMMENDATIONS: *Specific Action Items: Ex. (A-1)*

- 1 (C: 4.0-5.0, P: 1.0-10.0) Preserve, repair, and enhance park Heritage Areas and structures, i.e. the Boathouse Ruins, WPA era shelters, comfort stations, and pump shelters.
- 2 (A: 2.0-3.3) Reduce lawn mowing to provide more natural setting in non-use, little-trafficked areas, and help to shift park maintenance towards restoring older park structures.
- 3 (P: 12.0) Stabilize the slopes on Ellicott Island; several areas due to high usage by dogs; as the water is losing vegetation and thus exposing the soil resulting in the slopes eroding into the creek.
- 4 (P: 14.0) Coordinate with Friends of Ellicott Island Bark Park to maintain and upgrade amenities on Ellicott Island. Park is heavily used and needs to be monitored to provide a safe and sustainable environment.
- 5 (P: 18.0) Remove existing ball diamond backstops or repurpose ball diamonds. Coordinate with Visit Buffalo Niagara and user groups/stakeholders to maintain diamonds if there is interest in the use of these amenities.
- 6 (P: 12.0) Continue coordination with Buffalo Niagara Waterkeeper on "expanding" Living Shoreline along Ellicott Creek and Tonawanda Creek.
- 7 (P: 11.0) Restore old gazebo overlook, stone steps, and gardens on north portion of Ellicott Island. Potentially fence off this area as a scenic pedestrian only area.
- 8 Potential partnership with neighborhood business to provide snacks/drinks at Creekside Stand, or concession stand on Ellicott Island.

- ### MASTER PLAN HIGHLIGHTS:
- (A: 4.1-4.3) Improve the tree health of the park, in particular within maintained areas. Remove dead, dying or diseased trees. Prune deadwood from trees.
 - Improve ADA access throughout the park wherever is reasonable and feasible. (2003 Master Plan)
 - (C: 1.0-1.2) Establish more dominant "gateway" features for the park, including upgraded entrance signs, enhanced landscaping with seasonal interest, etc. (2003 Master Plan)
 - (C: 2.0-2.4) Provide new interpretive signage system and informational kiosks that tie the park better into the mix with other local cultural and historical attractions.
 - (A: 6.1) Improve and maintain playground structures throughout park.
 - (A: 6.2) Remove playground equipment that is not compliant with current regulations, with the exception of the wheel barrow or other "legacy" pieces of equipment
 - Improve overall shoreline accessibility, amenities, and features. Although the park is heavily used, most of the park's activity is not waterfront related.



Legend:

- Potential Major and Minor Park Gateway Locations
- WPA Park Heritage Feature/ Destination
- Natural Features
- WPA Pump Shelters/ Misc. Features
- Existing Park Trails
- Park Boundary
- Playground

RS: Comfort Station - (P) (C) (S) WPA Era Structure
 S-1: Shelter - (P) (C) (S) WPA Era Structure
 WS: Warming Shelter



NATURALIZATION PLAN ELLICOTT CREEK PARK - ELLICOTT ISLAND

ERIE COUNTY PARKS MASTER PLAN UPDATE DRAFT

MOWING REDUCTION:

Total proposed mowing reduction at
Ellcott Creek Park: 21 acres

TREATMENT DESCRIPTIONS:

- 1 Low-Mow with Tree Planting
In this area, low use presents an opportunity for reduced mowing and improved natural habitat, but it is desirable to maintain open sight lines between Creekside Drive and the Ellcott Creek Trailway. Adding young trees in widely spaced clusters can provide wildlife habitat, stormwater management, and aesthetic enjoyment. The space between clusters would be mowed periodically to prevent woody plants from establishing, and native meadow plants with low height would be encouraged. This strategy maintains flexibility for tailoring management to changing conditions in the future.



NATURALIZATION RECOMMENDATIONS:

Lawn Reduction
At Ellcott Creek Park, the majority of lawn reduction will be conversion to Low Mow Meadow. Near Ellcott Island, there is an opportunity to combine Low Mow with Tree planting to create a diverse, visually open habitat space. This can allow increased natural benefits without compromising visitor safety and enjoyment by obscuring sight lines from the Ellcott Creek Trailway.

Tree Planting
Many trees in Ellcott Creek Park are nearing the end of their natural lifespan. Planting young native trees can create a new generation of park trees for both visitors and wildlife to enjoy and use well into the future. In areas near Tonawanda Creek, trees can also help to reduce stormwater runoff that may contribute to flooding. Within the Ellcott Island Bark Park, volunteers have already begun a process of reintroducing native plant communities. Continuing to support this effort can lead to gradual increase in natural habitat in Ellcott Creek Park.

Water Quality Protection
With major creeks on either side, Ellcott Creek Park is an opportunity to showcase practices that protect water quality. This has already begun with the construction of the "Living Shoreline" demonstration projects. Areas of particular concern include bank erosion at the northern and southern-most tips of Ellcott Island, where high traffic from dogs has worn away the vegetation. During heavy rain, these exposed areas can contribute excess sediment to Tonawanda Creek.

Invasive Species Management
Aggressive non-native plants are a concern, particularly in some shoreline areas of Ellcott Island. It is important to continue monitoring for new or expanding invasive species populations, and managing those already present.