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Buffalo's Outer Harbor: the Right Place for a World-Class Park

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Executive Summary

In 2014, New York opened its first state park within the City of Buffalo: Buffalo Harbor State Park. This report suggests that there are many reasons for an expanded state park encompassing most of the Outer Harbor – creating a unique, world-class, Olmsted-inspired destination on the Great Lakes.

Unique Location. The Outer Harbor offers something unusual: the chance to experience the natural majesty of the Great Lakes inside a major city, just minutes from downtown, in the only Great Lakes city that enjoys a view of the sun setting over water.

Natural Assets. The Outer Harbor includes important, fragile natural assets that call out for protection and appreciation, including state-designated Significant Coastal Fish and Wildlife Habitats and a Globally Significant Bird and Pollinator Habitat.

Historic and Cultural Assets. The fascinating history of the Outer Harbor reflects the contributions of indigenous peoples, civic leaders like Samuel Wilkeson, inventors like Samuel Dart, industrialists like Henry Ford, and many more; and it lives on in historic structures like the Buffalo Lighthouse, the Ford plant, and the Connecting Terminal Grain Elevators, as well as in the historic harbor, canals, and breakwaters. The site has proven to be excellent for public art, as well.

Recreational Opportunities. The site offers great opportunities for recreation, including fishing, sailing, boating, hiking, birding, cross-country skiing, and more.

Public Health and Equal Justice. The Outer Harbor is located near to some of the most discriminated-against, environmentally-burdened, and health-challenged populations in the State: the lower-income neighborhoods of Buffalo and Lackawanna. These residents deserve access to nature, outdoor education, and healthy recreation that is accessible by public transportation and bicycling.

Tourism. An innovative new park that draws on Olmsted's legacy can help to draw more cultural and ecological tourists to Buffalo to enjoy a city that is "beautiful by design."

Connectivity. The Outer Harbor is the gateway to a remarkable network of trails and parks, including the Niagara Greenway, Erie Canal, Shoreline Trail, and Empire State Trail. It is adjacent to the Tiffit Nature Preserve, nearly adjacent to the Olmsted-designed South Park, and closely connected to LaSalle Park. It is a short ferry ride away from Canalside, the Buffalo and Erie County Naval and Military Park, the new Explore & More children's museum, and all the arts, culture, history, sports, and other amenities of downtown Buffalo.

Best Use of Land. The Outer Harbor is nearly all public land already. The City has zoned almost all of the land D-OG (Green), the same designation used for its public parks. Private uses (residential or commercial) are not appropriate due to many factors, including lack of infrastructure; vulnerability to winds, storms, and flooding; and risk of drawing development away from existing city neighborhoods that need it more. A park offers the ability to resolve contaminated soil and water issues through longer-term, less expensive, and more environmentally-appropriate regeneration methods, and to build climate change resilience and adaptation strategies appropriate for a fragile and exposed location.

Impact on City and Region. The economic, health, and environmental benefits of parks, particularly urban parks, have been well researched and documented. This public park will benefit the city and region with its impact on tourism dollars, property values, reduced health costs, reduced air and water pollution, and community cohesion. The park will perfectly complement state and local investments in economic development to aid in Buffalo's resurgence and to make sure that it improves life for all residents.

Public Support. In a series of planning processes and through a plethora of other platforms, Western New Yorkers have amply demonstrated that they want public access to nature, history, and recreation on the Outer Harbor.

Community Partners. A rich array of community partners is already involved with the Outer Harbor, and even more can be brought in to help it succeed. The Buffalo Olmsted Parks Conservancy has proven a remarkable success in managing parks in Buffalo, and it would be wise to contract with BOPC for this park. In addition, groups with expertise on nature education, health and wellness, environmental regeneration, historic preservation, transit, and more will make valuable partners; they should be placed on an advisory council to help guide the new park.

Diverse Funding Streams. The unique location, context, and assets of the Outer Harbor open up the possibility of diverse funding streams from foundations, corporations, and governmental funds related to environment, transit, education, and health.

Most Logical Steward. The Erie Canal Harbor Development Corporation has won accolades as it has expanded public access, added recreational amenities, and moved toward a park-like approach to the land. A park is the natural next step, and State Parks, rather than a development corporation, is the logical entity to run a park, particularly as the ECHDC's main funding source will end in 2029. State Parks has the expertise, staffing, long-term funding, and mission to best protect and enhance the area. ECHDC can then focus its resources on continuing its highly successful redevelopment of Canalside.

Window of Opportunity. Now is the right time to move toward a park on the Outer Harbor. The major public and non-profit investments in cleaning up the Buffalo River, activating Canalside, and creating the Niagara River Greenway and the Empire State Trail have created ripe conditions for a world-class park. The deep commitment of the Ralph C. Wilson Foundation to the parks and trails of Western New York, including a complete re-design of LaSalle Park, opens the prospect of a golden age for Buffalo's waterfront. The 200th birthday of Frederick Law Olmsted in 2022 offers a perfect opportunity for national attention.

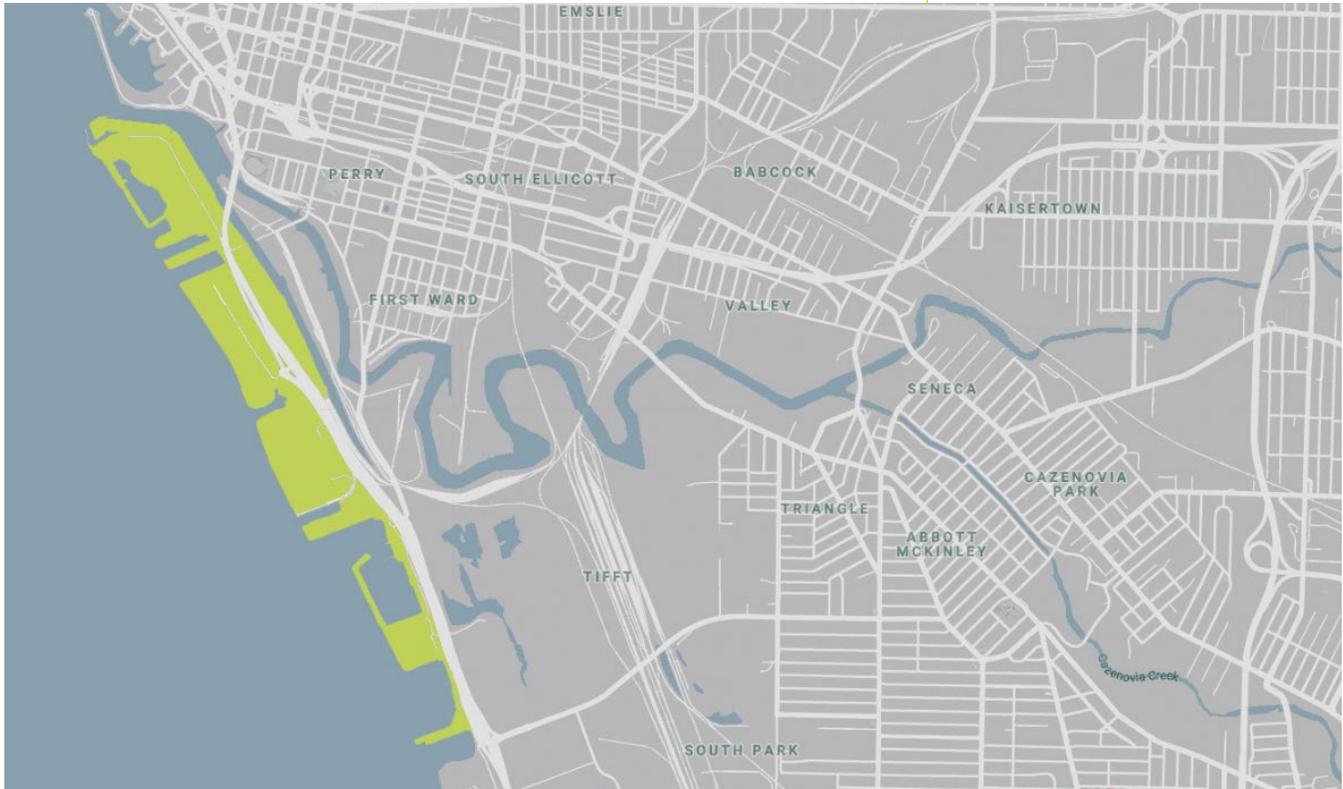


Snowy Owl on the Outer Harbor. Source: Our Outer Harbor.

Introduction: Boundaries and History

BOUNDARIES

The Outer Harbor is the part of Buffalo's waterfront that stretches roughly 3 miles from the mouth of the Buffalo River to the Buffalo-Lackawanna city line. The eastern boundary is created by Fuhrmann Boulevard and the City Ship Canal, and the western boundary is the system of breakwalls.

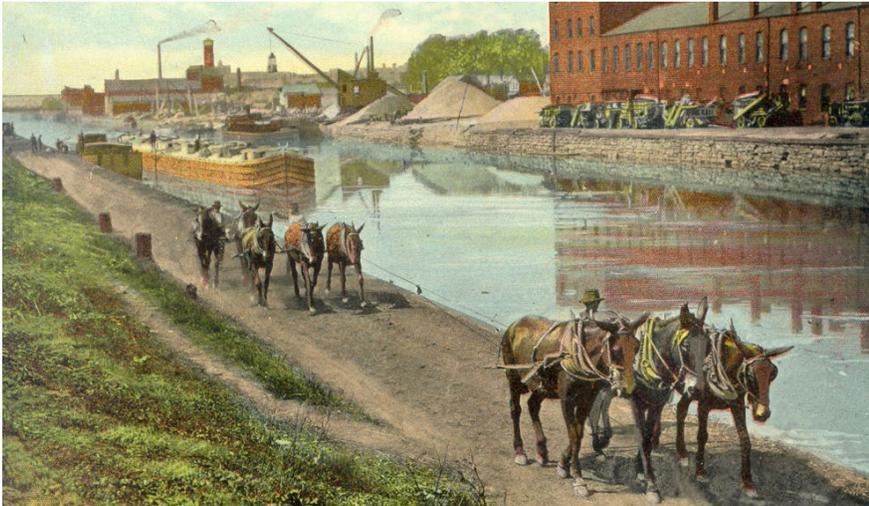


HISTORY

Today's Outer Harbor is all or nearly all land that was underwater until the twentieth century. As of 1901 most or all of the Outer Harbor was open water, and there was a sea-wall located where NYS Route 5 now sits.¹

The land to the east of the Outer Harbor was also radically different prior to industrialization. It was a delta habitat with a fluid shoreline, including small bays, freshwater estuaries, costal marshlands, and sand complexes. Once the Erie Canal was being planned, major changes began. Samuel Wilkeson led the creation of the Buffalo Harbor, which involved re-routing a major channel of Buffalo Creek.

Today's Outer Harbor is all or nearly all land that was **underwater** until the twentieth century.



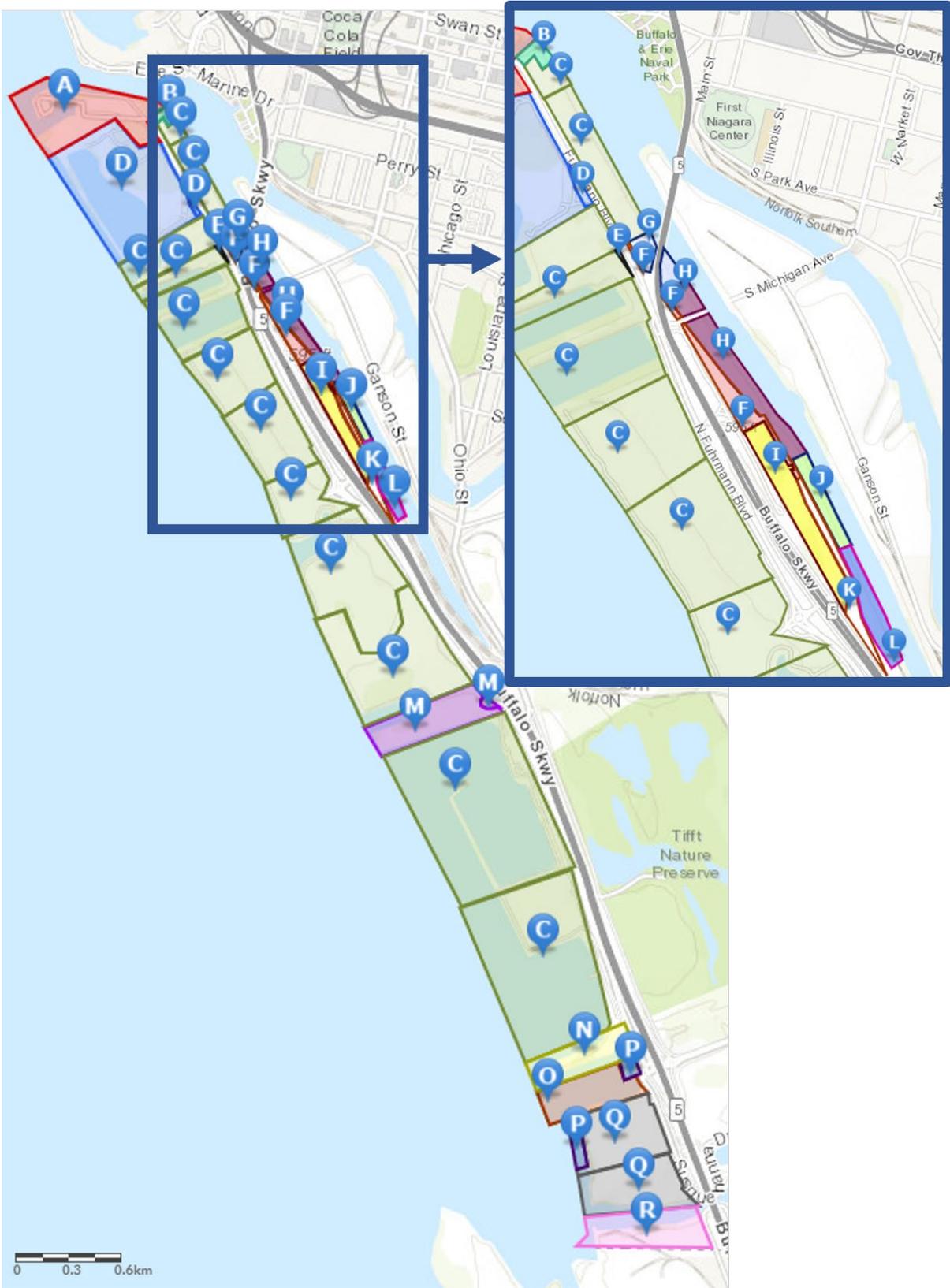
Erie Canal. Source: WBFO.

The Erie Canal was completed in 1825, and from 1831 to 1840 new canals were built to connect the Erie Canal to Buffalo Creek and Lake Erie. Between 1838 and 1867, a seawall was built along what is now Fuhrmann Blvd. In 1842, the first rail line reached Buffalo, and Joseph Dart built the world's first grain elevator. In 1902, the breakwall system was completed, 4.8 miles long, making the largest artificial harbor in world.

Throughout the 1800s and 1900s, fill was added to create piers and sites for roads, railroad tracks, factories, grain elevators, warehouses, and other industrial and shipping-related uses, as well as simply to dispose of waste. The land of the Outer Harbor was created with “dredge spoils from the Buffalo River and other canals and docking areas, dumped off-spec solid and hazard wastes associated with the major industries in the area, and various City of Buffalo wastes, including incinerator ash.”² As the commercial and waste disposal uses gradually terminated over time, the site grew increasingly natural and bio-diverse, and residents began to use it more for its natural beauty and recreational opportunities, such as fishing, bicycling, and boating.

Most of the Outer Harbor is now owned by the Erie Canal Harbor Development Corporation (ECHDC), a subsidiary of Empire State Development. ECHDC acquired roughly 400 acres from the Niagara Frontier Transportation Authority in phases from 2014 to 2016, with approximately 190 acres being dedicated to Buffalo Harbor State Park and the rest managed by ECHDC.³ ECHDC acquired the land at Wilkeson Pointe in 2008 and 2012 from the New York Power Authority (NYPA). In 2016 it received the First Buffalo River Marina site from NYPA. Other owners include the Coast Guard, which owns the sites of the Lighthouse and of Sail Buffalo in addition to its own compound, and the City of Buffalo, which owns the Times Beach Nature Preserve.

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Outer Harbor Land Ownership⁴

- A USA South Pier Lighthouse (U.S. Coast Guard Station) (1)**
1 Fuhrmann Blvd. (SBL: 110.20-3-2)
- B Power Authority of the State (1)**
2 Fuhrmann Blvd. (SBL: 110.20-3-1.1)
- C Erie Canal Harbor Development Corporation (ECHDC) (12)**
10 Fuhrmann Blvd. (SBL: 110.20-3-1.2)
32 Fuhrmann Blvd. (SBL: 122.05-13-1.1)
175 Fuhrmann Blvd. (SBL: 121.08-1-3.1)
225 Fuhrmann Blvd. (SBL: 121.12-1-1)
275 Fuhrmann Blvd. (SBL: 121.12-1-3)
461 Fuhrmann Blvd. (SBL: 122.09-1-1)
525 Fuhrmann Blvd. (SBL: 122.13-1-1)
575 Fuhrmann Blvd. (SBL: 122.13-1-2)
825 Fuhrmann Blvd. (SBL: 122.17-1-1.2)
901 Fuhrmann Blvd. (SBL: 122.17-1-1.1)
1053 Fuhrmann Blvd. (SBL: 132.06-1-2.1)
35 Fuhrmann Blvd. (SBL: 132.10-1-1)
- D City of Buffalo) (2)**
69 Lot Lines (SBL: 121.08-1-1)
79 Fuhrmann Blvd. (SBL: 121.08-1-2)
- E Bidco Marine Group, Inc. (1)**
235 Fuhrmann Blvd. (SBL: 121.12-1-2)
- F Norfolk Southern Corp. (3)**
9/10 Fuhrmann Blvd. (SBL: 122.09-1-2.2)
(SBL: 122.09-1-2.2/A)
11/12 Fuhrmann Blvd. (SBL: 122.05-13-1.3)
(SBL: 122.05-13-1.3/A)
- G Buffalo Sailing Marina, Inc. (1)**
5 City Ship Canal (SBL: 122.05-13-2.1)
- H Ship Canal Properties, Inc. (2)**
9 City Ship Canal (SBL: 122.05-13-1.2)
11 City Ship Canal (SBL: 122.09-1-2.121)
- I 500 Fuhrmann Blvd Inc. (1)**
500 Fuhrmann Blvd. (SBL: 122.13-2-1.11)
- J Port Crescent Land Co. (1)**
13 City Ship Canal (SBL: 122.13-2-3.1)
- K No Listed Owner (1)**
13 City Ship Canal (SBL: 122.13-2-3.1)
- L Port Crescent Land (1)**
15 City Ship Canal (SBL: 122.13-2-4.2)
- M Queen City Landing, LLC (2)**
975 Fuhrmann Blvd. (SBL: 132.06-1-1.1)
1005 Fuhrmann Blvd. (SBL: 132.06-1-1.2)
- N 1515 Fuhrmann Boulevard LLC (1)**
1515 Fuhrmann Blvd. (SBL: 132.14-1-1)
- O Niagara Frontier Transportation Authority (NFTA) (1)**
1699 Fuhrmann Blvd. (SBL: 132.14-1-2.1)
- P The People of the State of New York (2)**
1625 Fuhrmann Blvd. (SBL: 132.14-1-2.2)
1755 Fuhrmann Blvd. (SBL: 132.19-1-1)
- Q Oldcastle Materials Cement (2)**
1751 Fuhrmann Blvd. (SBL: 132.19-1-2)
1775 Fuhrmann Blvd. (SBL: 132.19-1-8)
- R Gateway Trade Center, Inc. (1)**
1825 Fuhrmann Blvd. (SBL: 132.19-1-7)

Reasons for an Expanded Park

AID IN BUFFALO'S RESURGENCE

The Outer Harbor is located inside the city of Buffalo, just minutes from downtown, and borders on Lackawanna. Despite its rich history of Olmsted parks, Buffalo remains significantly under-parked, with parkland constituting only seven percent of the city's area. By contrast, Nashville, Pittsburgh, and Raleigh are 11 percent parkland; Omaha 12 percent; Philadelphia 14 percent; Cincinnati 15 percent; Minneapolis and St. Paul 16 percent; and New York City 20 percent.⁵

Voluminous research proves that parks, particularly urban parks, provide enormous economic, social, and environmental benefits to their regions. They increase property values in nearby neighborhoods, stimulate tourism, lower health care costs, reduce stormwater management costs, and cut air pollution costs by cleaning the air with vegetation.⁶

Governor Cuomo has made Buffalo's resurgence one of his top priorities, and public investments have begun to transform the city, especially its medical corridor, downtown, and waterfront. Most observers now agree that a critical turning point came when the ECHDC, responding to community voices, shifted its focus at Canalside from subsidizing a big-box retail store, Bass Pro, to a community-centered plan that emphasizes public access, recreation, culture, and history. Simply creating a grassy space near the water with Adirondack chairs was one of the most popular changes. Canalside has become almost synonymous with Buffalo's revival, and it is typically the first thing young people mention when asked what they like about Buffalo.

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Kayaking in the Buffalo Harbor. Source: Visit Buffalo Niagara.

Now the Outer Harbor beckons. Whereas Canalside – located in downtown Buffalo, adjacent to the Key Bank Center, office buildings, hotels, and other dense urban development – makes perfect sense for more intensive, active uses, the Outer Harbor, a five minute ferry ride away, offers the perfect complement: the chance to enjoy nature, hiking, birding, biking, boating, fishing, history, public art, and a quiet sunset.

An urban park can be a major tourist destination. Remarkably, the Chain of Lakes Park in Minneapolis is the second largest tourist attraction in the state of Minnesota, drawing over seven million visitors per year.⁷ Central Park draws 13.7 million visitors per year from outside the New York metropolitan area and generates over \$1 billion in direct and indirect revenue for the City.⁸

Imagine an international tourist family that wants to see Niagara Falls but also experience more of what Western New York has to offer. Imagine that they stay at a hotel in downtown Buffalo and spend one day experiencing the city's artistic and architectural treasures. The second day, they visit the Falls, and the third day, they devote to Buffalo's waterfront: kayaking and bicycling on the Outer Harbor, visiting the Naval Park and Explore & More museums, and hearing a concert at Canalside.

High quality parks will also aid in drawing companies and talented individuals to Buffalo. Quality-of-life factors are increasingly important in corporate site selection processes, especially as many businesses can “go anywhere.” The Dallas Chamber of Commerce decided to prioritize parks in its marketing after it found through surveying that “convenient access to parks, green space and hike-and-bike trails was the second most important factor for millennials when deciding where to live and work—ranking only behind the quality of career opportunities.”⁹

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INCREASE RACIAL AND ECONOMIC EQUITY

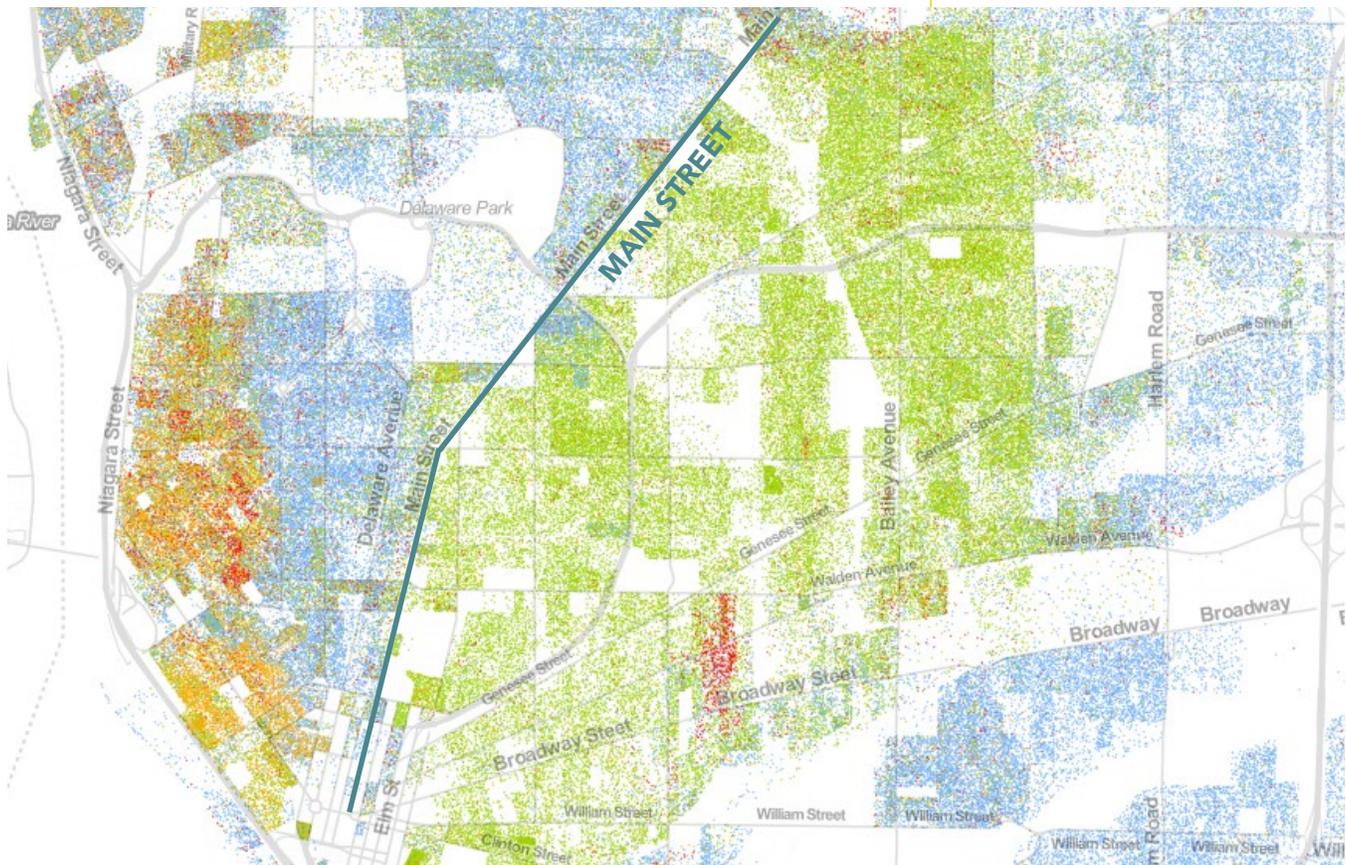
With over 30 percent of its residents living in poverty, Buffalo has one of the highest poverty rates in the nation, and in Lackawanna over 24 percent live in poverty.¹⁰ The region is plagued by high levels of segregation (sixth most segregated in the nation)¹¹ and unusually sharp racial disparities (the poverty rate for African-Americans is over three times that for whites, and life expectancy for black residents is five years shorter than for white).¹² Minority and lower-income residents face extreme environmental health burdens due to traffic pollution, lead paint exposure, proximity to brownfields and pollution sources, food deserts, and lack of adequate recreational opportunities. By providing free access to fishing, hiking, bicycling, and natural beauty, the Outer Harbor has a critical role to play in improving environmental and health equity. Although transit options to the Outer Harbor need much improvement, it is already accessible via bus and bicycle.

LINES OF SEGREGATION IN BUFFALO

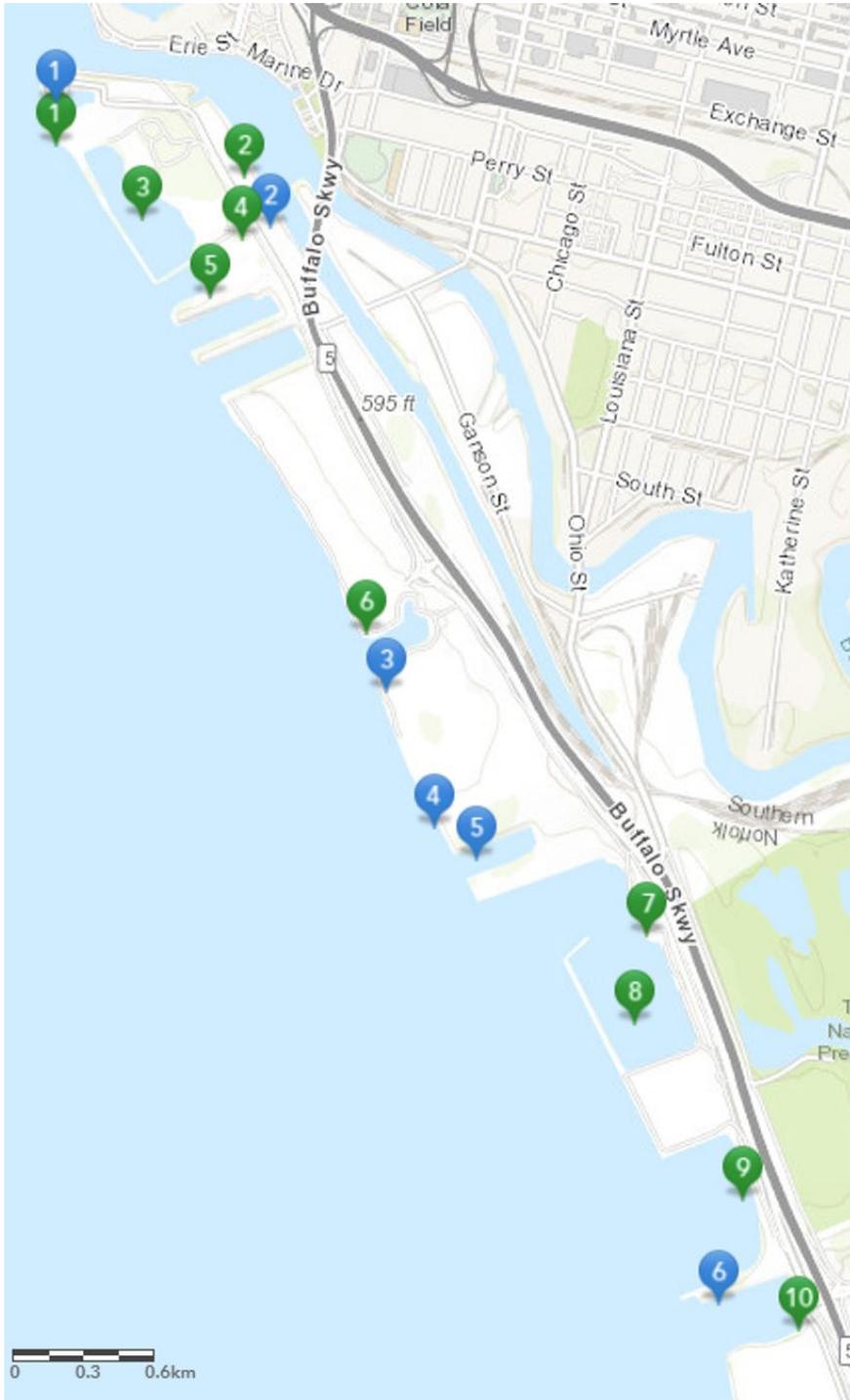
1 dot = 1 person

- White
- Black
- Asian
- Hispanic
- Other

Source: University of Virginia
Cooper Center analysis of 2010
Census data; The Washington Post.



Assets on the Outer Harbor¹³



NATURAL AND RECREATIONAL ASSETS (GREEN)

1. Lighthouse Point Historic Site
2. Queen City Bike Ferry Landing
3. Times Beach Nature Preserve
4. First Buffalo Marina
5. Wilkeson Pointe
6. Bell Slip
7. Buffalo Harbor State Park
8. Safe Harbor Marina
9. Gallagher Pier and Beach
10. Tifft Street Pier

HISTORIC AND ARTISTIC ASSETS (BLUE)

1. Buffalo Lighthouse
2. Connecting Terminal Grain Elevator
3. Flat Man Sculpture
4. Terminal B
5. Terminal A (Ford Plant)
6. Cargill Pool Elevator

Protect Natural Assets

The Outer Harbor sits in a remarkable location at the easternmost edge of the Great Lakes, which contain 20 percent of the world's fresh water. The Outer Harbor is home to at least 40 native species of fish, and includes or is immediately adjacent to three state-designated Significant Coastal Fish and Wildlife Habitats (SCFW): Times Beach, the Small Boat Harbor, and Tift Nature Preserve.¹⁴

The Outer Harbor is particularly important for:

- Habitat and breeding grounds for fish;
- Habitat for birds and pollinators, especially migratory ones;
- Water quality;
- Pollution remediation;
- Storm buffering and climate change resiliency.



Monarch Butterfly on the Outer Harbor.
Source: Our Outer Harbor.

Following are brief descriptions of some key natural assets within the Outer Harbor.

Small Boat Harbor. Designated an SCFW in 1987, this is “one of the few places on Lake Erie that provides protection for fish and wildlife from the harsh weather and waves of Lake Erie.”¹⁵

City Ship Canal. According to the Buffalo Harbor Brownfield Opportunity Area report (BOA), the City Ship Canal and the shallows around Kelly Island provide important habitat for fish, amphibians, and invertebrates, and a nesting, spawning, and resting place for waterfowl and fish. The BOA also notes that “native shoreline and aquatic vegetation have naturalized the western edge of the canal south of the active ADM industrial area.”¹⁶

The Outer Harbor is home to at least **40 native species of fish.**



Woodpecker on the Outer Harbor.
Source: Our Outer Harbor.



Small Boat Harbor, aerial view.
Source: Google Earth.

Times Beach Nature Preserve. This preserve of over 50 acres, located where the Buffalo River empties into Lake Erie, is owned by the City of Buffalo and managed by Erie County. Much of the work of preserving and improving the site is done by the Friends of Times Beach Nature Preserve, which in 2008 succeeded the Times Beach Oversight Committee, which had functioned since 1989.¹⁷ In 2012, the New York State Department of Transportation (DOT) spent \$900,000 to create an elevated boardwalk, decorative fence, and interpretive signage.¹⁸

Times Beach is a diverse habitat of five ecological zones, including forests, cattail marshes, and meadows. Today, it features trails, boardwalks, viewing blinds, overlooks, fencing, and interpretive signage. Times Beach is “one of the few large, diverse coastal wetland areas on Lake Erie.”¹⁹ Particularly important for fish, birds and pollinators, it was designated as a Significant Coastal Fish and Wildlife Habitat in 1987 and it serves as the western gateway to the Niagara River Corridor, which has been designated a Globally Significant Bird Area.²⁰ Ornithologists have counted 240 bird species there – more than almost any other place on the Great Lakes.²¹

Migrating and breeding pollinators, such as bees, butterflies, and moths, also depend on Times Beach. Monarch butterflies, for example, recently suffered a precipitous global decline of roughly 80 percent.²² Whereas ten years ago visitors saw thousands of Monarchs migrating at Times Beach in a single day, in 2013 none were seen. Thankfully, careful preservation and planting efforts at Times Beach have seen a rebound in recent years. In 2015 the Friends of Times Beach planted a Pollinator Conservation Area demonstration garden with food sources and habitat for bees, butterflies, and other pollinators.²³ In 2017 and 2018, hundreds of Monarchs were observed at Times Beach again.²⁴

The history of Times Beach is fascinating. The land that exists there now is mainly the result of human engineering and waste disposal. It began forming in 1867, when dredging and breakwater construction meant that sand and sediment built up against the seawall instead of within the harbor.²⁵ A shantytown of squatters developed at Times Beach and survived until it was razed for development in 1917.²⁶ In the 1930s and 1940s, Times Beach was used as a municipal beach, until it was closed due to pollution concerns.²⁷ Starting in 1971, the Army Corps of Engineers dumped dredging soils from the Buffalo River shipping channel in a confined disposal facility at Times Beach, until, at the request of the Buffalo Ornithological Society, the facility was closed in 1976.²⁸

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City Ship Canal, aerial view.
 Source: Google Earth.



Times Beach Nature Preserve, aerial view. Source: Google Earth.

BELL SLIP

The Bell Slip area provides a key link between the Tiff and Times Beach nature preserves. It features an unusual sand habitat, a copse of cottonwoods, meadows, and rare species, such as the spotted bee balm, which provides food for monarch butterflies and other pollinators. Extensive natural restoration work on the shoreline has allowed fish such as muskellunge to use the slip as a spawning ground and nursery. In spring, thousands of ducks gather at the Bell Slip to feed on Emerald Shiners, a critical Lake Erie fish.²⁹ The Bell Slip is an excellent place to observe a wide variety of animals and birds, including foxes, coyote, deer, snowy owls, and bald eagles.³⁰ As part of the Niagara Frontier Transportation Authority's (NFTA) restoration efforts described below, the Bell Slip bay is the site of a new shallow-water fish habitat conducive to spawning for local species.

OTHER RESTORATION EFFORTS

In 2002, the Outer Harbor land then owned by NFTA was accepted into the Environmental Restoration Program of the New York State Department of Environment and Conservation (DEC), which reimburses local governments for cleanup activities. DEC provided \$12.1 million, and Congressman Higgins secured additional funding through federal highway programs. With DEC oversight, NFTA remediated contaminated soils and stabilized the shore with a heavy stone embankment, along with other ecological improvements and native plantings along the "Greenbelt" or "Greenway Nature Trail," now known as the Independent Health Trail.³¹



Spotted Bee Balm at the Bell Slip.
Source: *Our Outer Harbor*.



The Bell Slip, aerial view.
Source: *Google Earth*.

Maximize Historic, Cultural, and Recreational Assets

INDIGENOUS HISTORY

Buffalo's waterfront and waterways were important sites for fishing, commerce, and travel for indigenous peoples. The Seneca conquered Western New York in the 1600s and occupied the region around Buffalo Creek. The Buffalo Creek Reservation was set aside for the Seneca in the Treaty of Big Tree (1797) and included almost 50,000 acres, including the waterfront and much of present-day Buffalo and its suburbs. In 1838, the federal government forced the Seneca into the Second Treaty of Buffalo Creek as part of its Indian removal policy, which led to the dissolution of the Buffalo Creek reservation in the 1840s.³² A state park on the Outer Harbor offers a good opportunity to work with the Seneca Nation to create informational displays and programs honoring indigenous history.

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Steamship Entering Buffalo Harbor circa 1900. Source: National Archives.

HISTORIC BUILDINGS AND ASSETS

Buffalo Lighthouse. The Lighthouse was built in 1833, making it the oldest building in Buffalo resting on its original foundation. Added to the National Register of Historic Places in 1979, it is owned by the Coast Guard and leased to the Buffalo Lighthouse Association, a non-profit staffed by volunteers, which has done much to restore the property and add historical signage.³³ The Association is also restoring the 1903 Buffalo Harbor South Entrance Lighthouse, located on Stony Point at the south end of the Outer Harbor and listed on the National Register of Historic Places in 2007.

Cargill Pool Elevator. Originally known as the Saskatchewan Cooperative Elevator, this building standing near the southern boundary of the Outer Harbor at 1515 Fuhrmann Boulevard, was built in 1925 and was able to unload grain directly from ships, thus allowing them to avoid the busy Buffalo Harbor.³⁴ Pillsbury bought it in 1945, and Cargill bought it in 1964, using it to store excess grain. Cargill abandoned the property and failed to pay its property taxes, leading the City of Buffalo to foreclose.³⁵ The site, which includes the former South End Marina, is now owned by 1515 Fuhrmann Boulevard LLC. It is eligible for the State and National Registers of Historic Places.



Cargill Pool Elevator. Source: Sygic Travel.

Connecting Terminal Grain Elevator. This elevator, which sits next to the City Ship Canal at 2 and 32 Furhrmann Blvd. on the northern end of the Outer Harbor, was built in 1915 by the Pennsylvania Railroad Company after the original grain elevator on the site burned down. In 1954, an annex was added on the southern side – the last grain elevator built in Buffalo.³⁶ The New York Power Authority (NYPA) owned the building for a number of years and spent \$3 million to install a new roof, provide stabilization, and remove asbestos and other hazardous materials.³⁷ ECHDC owns this 16.1 acre site, which is zoned N-2E.³⁸ After considering adding a rooftop restaurant and viewing area to the elevator,³⁹ ECHDC is now planning an interpretive center on the ground level of the 1954 annex.⁴⁰

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Connecting Terminal Grain Elevator. Source: Visit Buffalo Niagara.

Ford Plant (Terminals A and B). In 1930, Ford Motor Company bought 94 acres of underwater swampland, dredged and filled it, and built a large factory designed by Albert Kahn. From 1931 until its closing in 1958, it assembled nearly 2 million cars.⁴¹ This building was designated a Local Landmark by the Buffalo Preservation Board in 2019. It is a two-story building with 558,000 square feet.⁴² After the Ford plant closed, the property was owned by the City of Buffalo and then the NFTA and operated as the Port of Buffalo. The Ford plant was known as Terminal A. NFTA built a second building, known as Terminal B, in the 1970s; this is a warehouse with 95,000 square feet.⁴³ By the 1990s the Port was relocated to Lackawanna.⁴⁴

Today, the ECHDC owns this 91.3 acre site at 901 Fuhrmann Blvd., and it is zoned D-OG and N-1S. It was purchased from NFTA in February 2016 for \$3.5 million.⁴⁵ As a historic building directly on the waterfront, with existing infrastructure and ample parking, this is a wonderful place for historical, cultural, and recreational amenities that take advantage of the unique site. ECHDC is currently planning to strip most of Terminal B down to its metal frame, leaving one quarter of the space enclosed for future storage, and adding stairs to take people up to the second level, for a view of the lake.⁴⁶

Industrial Heritage Trail. This is a 3.5 mile multi-use trail with interpretive areas, developed for the NYSDOT Transportation Enhancement Program. Its centerpiece is the Grain Elevator Plaza, with a set of structures and reclaimed sandstone slab paving paying tribute to the historic grain elevators that used to stand nearby.⁴⁷



Ford Plant.
Source: Buffalo History Museum.

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Industrial Heritage Trail. Source: altoaluminum.com.

Public Art. The Outer Harbor has remarkable potential as a site for public art, as several efforts have already proven.

- “Flat Man” is a 30-foot metal sculpture created in 1963 by renowned western New York artist Larry Griffis, Jr.⁴⁸ In 2017 ECHDC installed it near the Bell Slip and Wellness Trail.
- The Wind Sculptures at Wilkeson Pointe were commissioned by ECHDC from Whitaker Studios.
- Since 2015 ECHDC has featured a light display on the Connecting Terminal Grain Elevator, created by Ambience Design Productions of Quebec.⁴⁹
- 21st Century Park on the Outer Harbor has brought to Buffalo the Land Art Generator, an organization that specializes in creating renewable power sources that also function as public art, and has proposed that such a concept is a good fit for the Outer Harbor.⁵⁰
- From June 21, 2018 until October 2019, Wilkeson Pointe is the home to Robert Indiana’s iconic NUMBERS ONE through ZERO sculptures: ten eight-foot-high sculptures weighing close to one ton each, under a loan facilitated by the Albright-Knox Art Gallery’s public art program.⁵¹



*Flat Man Sculpture.
Source: Buffalo News.*



*Robert Indiana’s ONE through ZERO (The Ten Numbers),
© 2018 Morgan Art Foundation Ltd / Artists Rights Society (ARS).
Source: Tom Powel Imaging.*

Maximize Recreational Assets

FISHING, BOATING, HIKING, BIKING, BIRDING, AND MORE

An expanded state park is the best way to enhance recreation on the Outer Harbor. The Outer Harbor is a major locus for boating, a very popular activity in Western New York (approximately 24,500 boats are registered in Erie County), with marinas, sailing schools, kayak launches, and more.⁵² It offers excellent fishing, from both boat and land, with over 40 native species of fish, including muskellunge and other highly prized species. It is probably the best single birding spot in the region, with over 240 species observed. The Outer Harbor has bike trails with great connectivity, and it is one of the prettiest spots to watch a sunset in the region, and maybe in the entire Great Lakes. With careful design and planning, it is entirely possible to add many recreational users to the site while still protecting its fragile eco-systems.

It makes sense to concentrate more active uses around the Ford Plant site, which has existing buildings, parking lots, infrastructure, and highway access, and preserve the rest of the site for natural regeneration and nature-based activities such as hiking and birding.

Following are descriptions of some of the recreational amenities already on the site.

Buffalo Harbor State Park. This 140 acre park was created in 2014 and is the first state park in the city of Buffalo. It includes a 1,100-slip marina, restaurant, boat launches, kayaking, paddleboarding, bicycling, fish cleaning station, restrooms, nautical-themed playground, and Gallagher Beach, with 1,200 linear feet of frontage for strolling and sunbathing. It is just across the road from the Tift Nature Preserve.⁵³ The land was owned by the NFTA prior to its sale to ECHDC in May 2014.⁵⁴

Safe Harbor Marina. The Small Boat Harbor was first built in the late 1940s by the Division of Ports.⁵⁵ It was transferred from NFTA to ECHDC in May 2014, and continues its use with a new private operator, Safe Harbor Marina, at 1111 Fuhrmann Blvd.⁵⁶

Tift Street Pier. This pier at the foot of Tift Street, near the southern end of the Outer Harbor, was completed in 2014; it includes both an observation area and gangways out to a floating dock.⁵⁷ This \$4 million project, which won federal transportation funding, includes fishing access and trail linkages; it is also designed to allow people with disabilities who cannot easily ride in boats a way to experience being on the water.⁵⁸

An expanded state park is the **best way to enhance recreation** on the Outer Harbor.



Playground at Buffalo Harbor State Park. Source: yelp.com.



Tift Street Pier. Source: Buffalo Rising.

Independent Health Wellness Trail. This two-mile trail, operated by ECHDC with support from Independent Health, runs from Wilkeson Pointe past the Bell Slip to the edge of the Ford Plant site. It is a wide, undivided trail shared by bikers, runners, and walkers.⁵⁹ First built by NFTA, it was formerly known as the Greenway Nature Trail or Greenbelt.

Wilkeson Pointe. This area is located just south of Times Beach, on land that used to house the NYPA ice boom. The land was once the Buffalo Marine Construction Company Pier, plus fill that was added in the 1950s and 1960s.⁶⁰ ECHDC completed it as a new, \$3.4 million public recreational space in May 2013. Improvements included shoreline enhancements, lighting and utility installations, restrooms, pedestrian paths, volleyball courts, natural playgrounds, wind sculptures, and public docking.⁶¹ It features free wellness classes and a beer garden, among other programs and amenities. The Outer Harbor Kayak and Canoe Launch occupies the site of an old ferry landing.

First Buffalo River Marina. This 10-acre site sits alongside the Buffalo Harbor at the northern end of the Outer Harbor. Formerly owned by NYPA, it is now owned by the ECHDC and includes 115 marina slips and outdoor storage for approximately 300 boats.⁶² ECHDC contracts with a private company to manage it. Currently, ECHDC is planning to add a small beach, several piers, and a nearby space to rent bikes, kayaks, canoes, and other equipment. The bike ferry would be relocated to the center area, near the Connecting Terminal Grain Elevator, and the boat storage would be reduced.⁶³

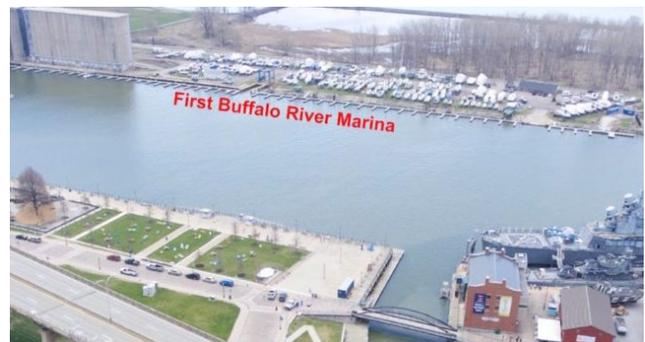
Sail Buffalo. This project of the Cazenovia Community Resource Center runs sailing classes and camps from a site licensed from the Coast Guard at the northern tip of the Outer Harbor, fronting on the Buffalo Harbor. Sail Buffalo launched its Eco Floating Classroom in 2011 and currently operates from May 15 to September 15 each year.⁶⁴



Independent Health Wellness Trail. Source: Our Outer Harbor.



Wilkeson Pointe. Source: Visit Buffalo Niagara.



First Buffalo River Marina. Source: ECHDC.



Sunset on the Outer Harbor. Source: Sail Buffalo.

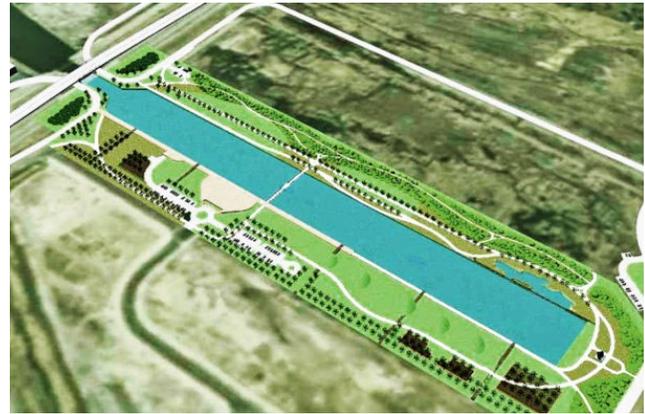
Ship Canal Commons. The Commons is a 22-acre park along both sides of the Union Ship Canal, offering fishing, a footbridge over the Canal, history displays on industrial heritage, over 400 native tree species, and bike/walking trails connecting to the Outer Harbor and Tift Nature Preserve. Over \$9 million in funds came from the New York State Department of State (DOS), DEC's Environmental Restoration Program, DOT, Erie County, the Niagara River Greenway, and the Buffalo Urban Development Corporation. Habitat improvements were made to help fish thrive and spawn.

The Commons was built on the former site of Hanna Furnace, an iron smelting facility. The property had been backfilled with ash, cinders, and slag from local iron and steel foundries. The Hanna Furnace foundry was built on top of this fill material. From 1903 to 1982 when the facility closed, the plant processed iron ore into pig iron. As a result, the soil and groundwater were contaminated with hazardous substances including heavy metals and semi-volatile organic compounds. The clean-up included removing debris, excavating and removing contaminated soil from selected areas and placing a two-foot layer of clean soil over the entire site.⁶⁵

Lakeside Complex on Buffalo's Outer Harbor.

The 20-acre site developed by ECHDC, opening in summer 2019, includes:

- a new bike park near the Terminals with a black-topped Tot Track and Pump Track (featuring curves, ramps, banked turns, and dips) and three multi-use dirt loops;⁶⁶
- habitat enhancement and restoration areas;
- a four acre event lawn near Terminal B, plus a nearby area with space for food trucks, public seating, a kiosk, and viewing overlooks;
- more paths added to the existing nature trail; the path will run just north of the Terminal A and B buildings, and include bike racks, benches, Adirondack chairs and other amenities.⁶⁷

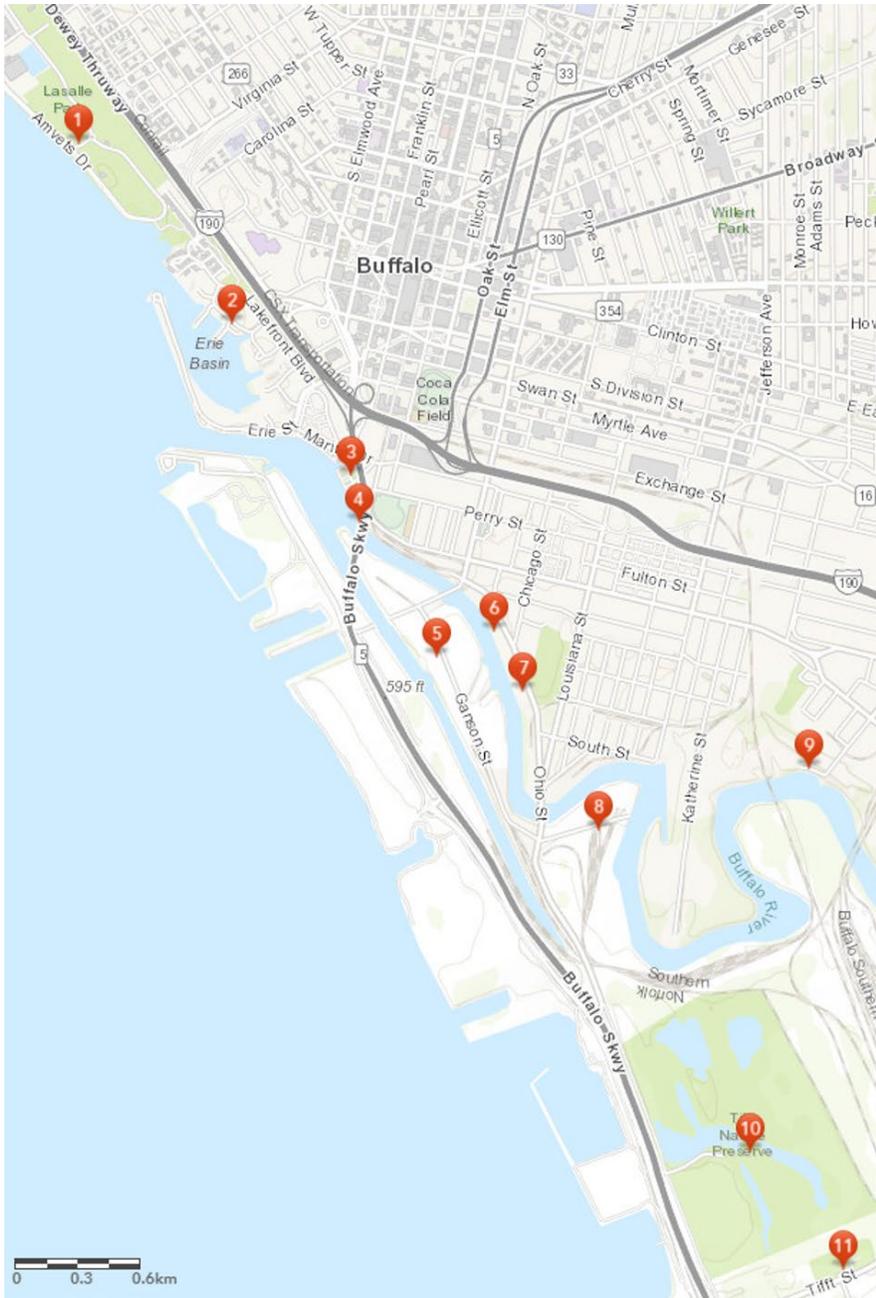


Ship Canal Commons. Source: Wendel Companies.



New Lakeside Bike Park. Source: Buffalo News.

Buffalo Outer Harbor: Nearby Assets⁶⁸



1. LaSalle Park
2. Erie Basin Marina
3. Naval and Military Park
4. Canalside
5. Riverworks
6. River Fest Park
7. Ohio Street Corridor
8. Silo City
9. Red Jacket/River Front Park
10. Tift Nature Preserve
11. George J. Hartman Fields

Take Advantage of Important Connections and Nearby Assets

Great progress has been made already in linking the Outer Harbor to connecting trails, nearby parks, and other assets, but an expanded state park offers the potential to do even more. Following is an inventory of existing connections and assets to build on.

Queen City Ferry. This ferry serves pedestrians and bikers, connecting Canalside and the Outer Harbor, with ridership of over 40,000 per year. It travels 600 feet across the Buffalo River, from the Commercial Slip to the ferry landing, for a one-way ticket price of one dollar. It runs Monday to Friday, 12pm to 8pm, and Saturday/Sunday, 8am to 8pm, from Memorial Day to Labor Day.⁶⁹ ECHDC began this project in 2015 with an investment of \$200,000. In 2016, ECHDC built a new landing on the Outer Harbor side with new boat docks, pedestrian pathway, signage, benches, planters, and bike racks, at a cost of \$835,000.⁷⁰



Ohio Street Corridor. Source: Wendel Companies.

Ohio Street Corridor. This corridor links Canalside to the Outer Harbor by way of the Cobblestone District and the First Ward. What was once a four-lane commercial arterial is now a “complete street” with a multi-use pathway, green infrastructure, permeable pavement, energy efficient street lighting, and enhanced landscaping.⁷¹

Niagara River Greenway. The Greenway is a system of parks, trails, and conservation areas along the Niagara River, stretching from Lake Erie to Lake Ontario. Funding totaling \$450 million over 50 years, from 2005 to 2055, was created through the re-licensing of the Niagara Power Plant, and flows through four standing committees that award grants to projects proposed by municipalities and non-profit agencies. Legislation passed in 2004 established a Niagara River Greenway Commission to create a plan for the Greenway and help guide its implementation.

As the southern anchor of the Greenway, the Outer Harbor plays a critical role in attracting people to the Greenway and in creating an ecological and recreational pathway that links Buffalo to Niagara Falls, Fort Niagara, and all the natural, historic, and cultural amenities in between. In September 2018, the Ralph C. Wilson Foundation announced a grant of \$6.5 million to help close the gaps in the Greenway, including improvements to the gateway hub at Buffalo Harbor State Park, which will mark the beginning of the Greenway as well as the 450-mile Empire State Trail.⁷² In October 2018, the Foundation announced a grant of \$50 million for regional trail systems in Western New York, including \$40 million for construction and \$10 million for a maintenance endowment.⁷³

Shoreline, Empire State, and Erie Canal Trails. The Outer Harbor is part of a remarkable trail network that includes the Greenway and the Shoreline Trail, which continues south along the shoreline of Lake Erie. It is linked to the Empire State Trail, scheduled to be completed in 2020, which will complete a continuous 750-mile route across the state from New York City to Canada, and Buffalo to

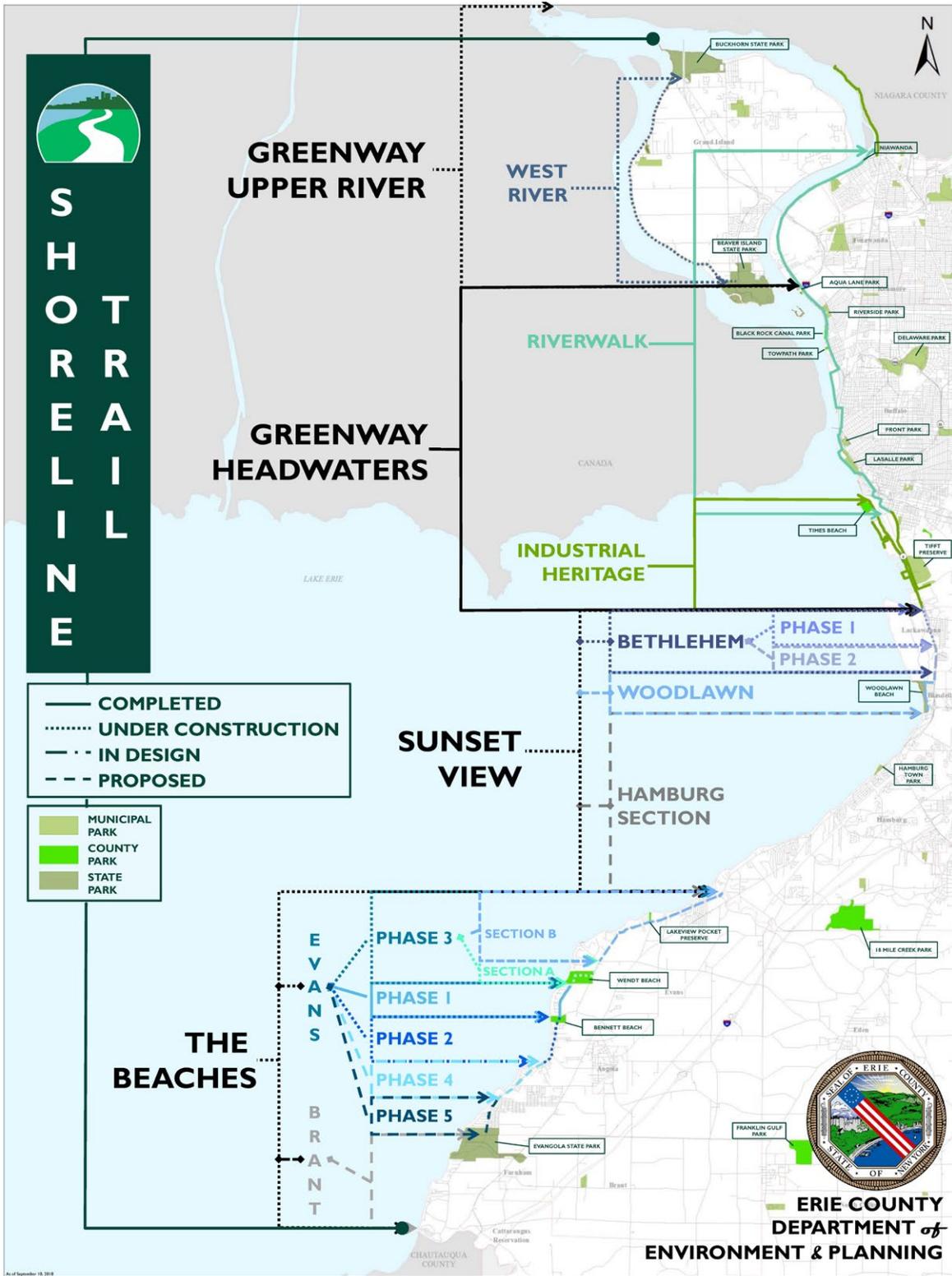
Albany, making it the longest multi-use trail in the nation.⁷⁴ The Outer Harbor is now the official entry point for people who want to bicycle the length of the Erie Canal.

Skyway. The Buffalo Skyway, built in 1959, is a 5,800 foot long viaduct with 52 spans that carries more than 40,000 vehicles per day, including more than 3,000 trucks, as part of Route 5.⁷⁵ It is part of the 518-mile long Great Lakes Seaway Trail, which, in 1978, was one of the first roadways designated as a *National Scenic Byway*.⁷⁶ In May 2019, Governor Cuomo announced a design competition: “Aim for the Sky: a Competition to Re-Imagine Buffalo’s Skyway Corridor.” Eight finalists will be announced the week of September 9, 2019.⁷⁷ The Governor joined Congressman Higgins and other officials who have called for the removal of the Skyway as an outmoded and dangerous piece of infrastructure that blocks access to the waterfront. In September 2018 the NYS DOT began a study (to be completed December 31, 2021) of the long-term viability of the Skyway and alternatives if it is taken down.⁷⁸



Rendering of proposed trail gateway at Buffalo Harbor State Park.
Source: New York State Parks.

Current and Planned Trails⁷⁹



Tift Nature Preserve. Directly adjacent to the Outer Harbor, this 264 acre refuge was once part of a large dairy farm, then a transshipment center used mainly for coal and iron ore, and then, in the 1950s and 1960s, a city dump. The Nature Preserve opened in 1976, after concerned citizens convinced the City to alter its landfill plans to protect the environment. “In 1982 Tift became a department of the Buffalo Museum of Science, which operates an educational center with a wide variety of programs. Popular activities include hiking, fishing, snowshoeing, and cross-country skiing, and birding (Tift is a National Audubon Society Important Bird Area, and birds of 264 species and subspecies have been recorded there).⁸⁰ Tift is the largest contiguous fish and wildlife habitat in the City of Buffalo.⁸¹ It includes a 75-acre remnant cattail marsh, woodlands, grasslands, and three ponds; it provides habitat for beaver, muskrat, turtles, amphibians, and rare birds, including the least bittern and pie-billed grebe, both listed as threatened species in New York.⁸²

Silo City. Located just across the City Ship Canal from the Outer Harbor, Silo City is a complex of grain elevators and other historic, cultural, recreational and natural amenities that has become a favorite destination for many in the region and beyond. Silo City is the site of a new restaurant/bar, Duende, as well as river tours, grain elevator tours, kayaking, live performances of poetry, theater, and music, and many other activities as well. A full-time Director of Ecology has created pollinator gardens, a composting operation, and waterfront restoration projects. A non-profit organization, The Lyceum at Silo City, provides experiential education on the site. Silo City could be linked to Tift Nature Preserve and thus to the Outer Harbor by a network of trails.

Buffalo Riverworks. Located at 359 Ganson Street on Kelly Island, Riverworks includes a restaurant, concert venue, roller derby track, ropes course, two outdoor ice rinks, and a brewery retrofit into the former GLF Grain Silo.⁸³

South Park. This 156-acre park was designed by the Olmsted firm in 1892-1894 as part of their history-making system of parks and parkways for Buffalo. It includes an arboretum and a three-domed greenhouse built in 1898 by Lord and Burnham and operated today by the Buffalo and Erie County Botanical Gardens. South Park lies nearly adjacent to Tift Nature Preserve and the Outer Harbor, and could be connected to them by a trail network. The Buffalo Olmsted Parks Conservancy is currently working to restore the arboretum at South Park. During its original creation, more than 100,000 trees and woody plants were incorporated into the Arboretum.⁸⁴



Birding at Tift. Source: Buffalo News.



Dance Performance at Silo City. Source: Ariel Dance Buffalo.



South Park. Source: Buffalo Olmsted Parks Conservancy.

LaSalle Park. Once known as Centennial Park, LaSalle Park was created in 1932 on a former dumping site adjacent to Lake Erie and very close to downtown Buffalo. Currently it includes baseball fields, a soccer field, picnic shelters, a splash pad, a pool, a playground, a dog park, and a pavilion. It offers some of the best lake views in Buffalo and is located near several West Side neighborhoods with relatively high poverty rates and environmental justice concerns. In October 2018, the Ralph C. Wilson Foundation announced a \$50 million grant to improve LaSalle Park into a regional attraction, with \$40 million for construction and \$10 million in an endowment for maintenance.⁸⁵ Michael Van Valkenbergh, perhaps the world's most prominent landscape architect, is leading the re-design of LaSalle Park. Plans include an ecological habitat and new lagoon; kayak launch; small hills for sledding and viewing; major tree plantings; a new playground; a great lawn for concerts; and a new pedestrian bridge.⁸⁶

In October 2018, the Ralph C. Wilson Foundation announced a **\$50 million** grant to improve LaSalle Park into a regional attraction.



Rendering of Lagoon Planned for LaSalle Park. Source: Buffalo News.



LaSalle Park. Source: Buffalo News.

Other Nearby Parks and Trails. Along the Buffalo River, very close to the Outer Harbor, lie four additional parks (Red Jacket Riverfront, Mutual Riverfront, Conway, and River Fest) and the Ohio Street Boat Launch, offering additional opportunities for park-to-park connections, trails, and kayaking.⁸⁷ The Western New York Land Conservancy is designing an elevated 1.5 mile trail along the former DL&W rail line – from the edge of downtown, through the Perry, Old First Ward, and Valley Neighborhoods, to Red Jacket Riverfront Park and the Buffalo River – just opposite the Tesla plant.⁸⁸

Canalside. This is a “mixed-use urban entertainment destination” created and managed by the ECHDC. Open since May 2008, Canalside attracts nearly 1.5 million visitors per year with amenities such as:

- several fully restored facets of the original Erie Canal Harbor, including the Commercial Slip, Boardwalk, and the Historic Replica Canals;
- Explore & More: a four-story, 43,000 square foot museum that features “seven educational play zones offering hands-on exhibits that tell the story of Western New York – the importance of our waterways, community, culture, traditions, architecture, agriculture, sports, industries and innovations;”⁸⁹

Canalside attracts nearly **1.5 million** visitors per year.



Rendering of Explore & More Exhibit. Source: Buffalo News.

- New York State's largest outdoor ice skating rink on the Replica Canals;
- kayak rentals;
- thousands of events, concerts, festivals, family activities, attractions, historical and cultural programming, art, food, and tours;
- soon to come, the Buffalo Heritage Carousel, a restored 1924 menagerie carousel that will be solar-powered and housed in a building being designed by eco_logic Studio;⁹⁰
- a replica of an 1825 packet boat – similar to the boat that led the flotilla from Buffalo to New York for the opening of the Erie Canal, to be constructed by the Buffalo Maritime Center between 2020 and 2023 (the building that will house it broke ground in spring 2019).⁹¹

In addition to these amenities, two new mixed-use buildings, called Heritage Point, are soon to be built on Marine Drive. A consultation team was slated to begin work on the Memorial Auditorium site in February 2019, with planning for reintroducing the Canal District's historic street pattern and adding lighting, sidewalks, and infrastructure. Finally, Benderson Development is also planning a new project at Scott and Washington.⁹²

Buffalo and Erie County Naval and Military Park. Adjacent to Canalside, this park, which opened in 1979, includes a museum building and gift shop, an outdoor exhibition area, and a large collection featuring three naval vessels (destroyer, guided missile cruiser, and submarine), along with helicopters, jets, a tank, and more.⁹³

Erie Basin Marina. This large marina is owned by the City of Buffalo and currently operated by Smith Boys Buffalo Harbor Inc. It offers slip rentals, transient docking, fuel, a garden, and two restaurants, William K's and the Hatch.

Soon to come, the **Buffalo Heritage Carousel**, a restored 1924 menagerie carousel that will be solar-powered and housed in a building being designed by eco_logic Studio.

Honor Existing Laws, Regulations, and Plans

An expanded park on the Outer Harbor is the best way to honor existing laws, regulations, and plans governing the area, including the City of Buffalo's Local Waterfront Revitalization Plan (LWRP), Zoning Code, and Brownfield Opportunity Area plan.

LWRP

The City of Buffalo's LWRP includes all of the Outer Harbor and much of the land adjacent to it, including both sides of the Buffalo River, Tift Nature Preserve, and South Park, among other areas. The broad goals of the Plan are listed to the right. To reach the goal of protecting and rebuilding the food web, the Plan calls for protection of:

- local habitat sites, including breeding grounds;
- native stocks and the restoration of sustainable populations of indigenous fish;
- fishing access sites and wildlife viewing facilities;
- tidal and freshwater wetlands;
- the Niagara River Globally Significant Important Bird Area.

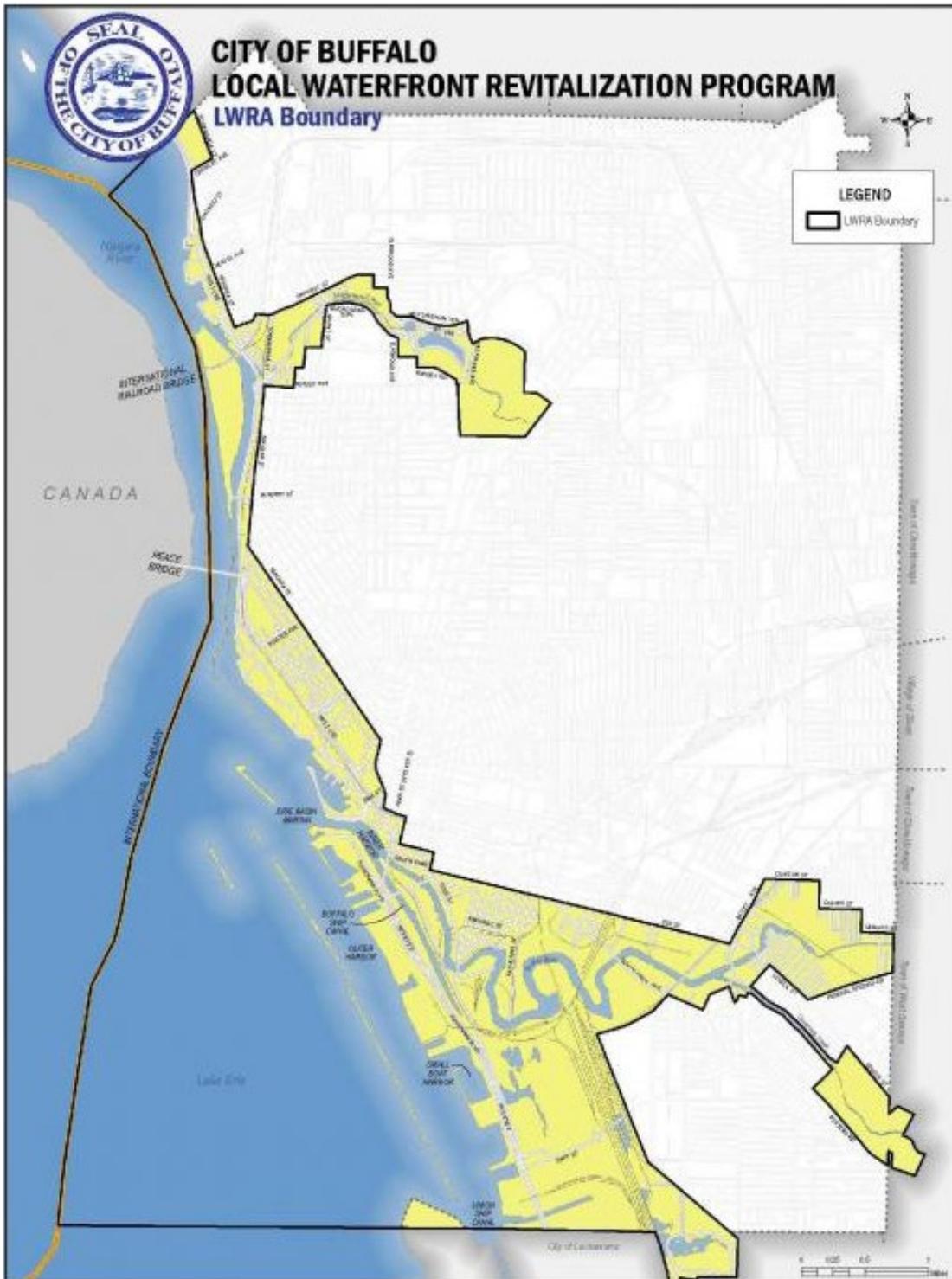
In support of the goal of providing public water access, the Plan includes these State policies:

- "Access to the publicly owned foreshore and to lands immediate adjacent to the foreshore or the water's edge that are publicly owned shall be provided . . . Such lands shall be retained in public ownership (State Policy 20);"
- "Water dependent and enhanced recreation shall be encouraged and facilitated and shall be given priority over non-water-related uses along the coast (State Policy 21);"
- "Protect, maintain, and increase the levels and types of access to public water-related recreation resources and facilities (State Policy 19)," including "Limits on public access and recreational activities where uncontrolled public use would lead to disruption of the environmental clean-up measures, fish and wildlife resources, erosion control or flood protection functions."

In support of the goal of maximizing coastal resiliency, the Plan includes the strategy of minimizing flooding and erosion damage by protecting natural protective features such as beaches and dunes and "preserving existing publicly held open space."

LWRP GOALS

1. Holistically protect the state's coastal economic, social, and environmental interests;
2. Safeguard the City's access to clean, Great Lakes fresh water for generations to come;
3. Promote water based industry and enterprise;
4. Encourage commercial and recreational boating;
5. Build great water-enhanced places that enliven the waterfront and attract the public;
6. Promote the City as an international gateway;
7. Protect and rebuild the Lake Erie/Niagara River food web – recognizing local fish as an important food source;
8. Provide for public water access in support of the public trust;
9. Maximize coastal resilience; and
10. Minimize environmental degradation from solid waste and hazardous substances.



MAP 1 - LWRA BOUNDARY

LOCAL WATERFRONT REVITALIZATION AREA (LWRA) BOUNDARY



CITY OF BUFFALO UNIFIED DEVELOPMENT ORDINANCE

The City of Buffalo's new zoning map classifies most of the Outer Harbor as D-OG (Green), which is the same classification used for the City's parks. The Unified Development Ordinance (UDO) describes D-OG as follows: "The D-OG zone addresses civic greens and parks, characterized primarily by trees and landscapes, framed by landscape elements or building facades, and designed for passive or recreational use." The UDO limits lot coverage in D-OG to building coverage of 10 percent and impervious coverage of 15 percent. In other words, the City has zoned the Outer Harbor for a park. While the State is not required to obey city zoning laws, it is certainly good policy to respect the wishes and expertise of the City, and the ECHDC has indicated its intent to honor the City's code.

BROWNFIELD OPPORTUNITY AREA

In 2011, the City received funding from the NY Department of State to establish the Buffalo Harbor Brownfield Opportunity Area for a 1,045 acre site that includes the Outer Harbor, Inner Harbor, and a portion of downtown.⁹⁴

The City submitted a Nomination Document for the Buffalo Harbor BOA dated September 2016, identifying six potential brownfields totaling 249 acres.⁹⁵ For the BOA as a whole, the Nomination has five principles:

- Create a clean, green, and remarkable waterfront with regional significance;
- Design a destination accessible for everyone;
- Focus on the northern section of the BOA as a unique waterfront entertainment district and extension of Downtown;
- Knit the BOA into the wider community by creating a connected pedestrian, cycling, and open space network;
- Focus investment and development to optimize benefits. Plan for incremental growth over time, and don't allow short-term activities to preclude long-term goals.

The D-OG zone addresses **civic greens and parks**, characterized primarily by **trees and landscapes**, framed by landscape elements or building facades, and **designed for passive or recreational use**.

Outer Harbor Zoning⁹⁶



ZONING KEY:

- **D-OG: Greens and Parks**
Light Green
- **D-ON: Natural Dark Green**
- **D-IL: Light Industrial**
Orange
- **N-3E: Mixed-Use Edge**
Blue/Purple
- **C-R: Rail Grey**
- **D-OS: Square Neon Green**
- **N-1S: Secondary Employment Center**
Light Blue
- **D-C: Flex Commercial**
Yellow
- **D-IH: Heavy Industrial Red**

Resolve Outer Harbor Challenges

A park is the best way to resolve the key challenges facing the Outer Harbor: contamination; wind, storms, and flooding; climate change; Buffalo's "sprawl without growth;" and the existence of several privately owned parcels on the site.

Contamination. Because the Outer Harbor's soil is mostly fill and because of past industrial uses, there are many contaminants in the soil. As noted above, the City's BOA identified six potential brownfields totaling 249 acres, encompassing much of the Outer Harbor, including all the land from the Michigan Pier south through the Queen City Landing site, plus the still-in-use cement factory property at the southern end of the Outer Harbor.⁹⁷ In addition to contaminants on-site, there are issues with nearby sites, including two Class 2 Superfund sites: Bethlehem Steel and Hannah Furnace.

Water pollution is also a major concern, given the combined sewer overflows and outflows at the Buffalo Harbor and at the foot of Tift Street and the Army Corps diked disposal sites containing massive amounts of contaminated dredge spoils. More information on contamination can be found in Appendix IV. Creation of a new park on the Outer Harbor affords the opportunity to use natural regeneration strategies and careful management to address these contamination issues over time and restore habitat as well as safe recreational amenities.

Winds, Storms and Flooding. Buffalo is the tenth windiest city in the nation, with an average wind speed of 11.8 mph and a record gust of 82 mph. The windiest month in Buffalo is January.⁹⁸ The Outer Harbor

A park is the best way to resolve the key challenges facing the Outer Harbor.



Ice shoving onshore in Hamburg, New York. February 25, 2019.
Source: Town of Hamburg Emergency Services.

is perhaps the windiest place in Buffalo. Erie County ranks third in the state for flooding.⁹⁹ The Outer Harbor, located in a 100 year flood plain, is particularly exposed to seiches, or standing waves, when sustained winds from the southwest cause water to pile up at the eastern end of the Lake, i.e., at the Outer Harbor. In 1844, for example, “A wall of water swept across the harbor and city, drowning 78 people while driving ships ashore and washing away scores of homes and wharves.”¹⁰⁰ On February 24, 2019, a seiche occurred, flooding the Niagara River with ice.¹⁰¹ Winds reached 69 mph in Buffalo and 72 mph in Hamburg, forcing ice ashore, creating heaps up to 40 feet high, and knocking down trees and streetlights.¹⁰² Flooding and extreme weather make the Outer Harbor inappropriate for housing development – particularly given the limited evacuation routes available and distance from emergency services.

Climate Change. The Outer Harbor is particularly vulnerable to the impacts of climate change. Most importantly, climate change is increasing the number of extreme weather events and heavy storms, as warmer temperatures lead to increased evaporation and more water in the atmosphere. For Buffalo, the impact is particularly strong because as Lake Erie is less frozen, we can expect more and larger lake-effect snow storms. Annual ice cover has decreased 71 percent on the Great Lakes since 1973, leading to an increase in lake-effect snow.¹⁰³ Already, precipitation from extremely heavy storms has increased 70 percent since 1958.¹⁰⁴ A major lake-effect storm, the October storm of 2006, dumped up to 3.5 feet of wet snow in areas of the city, caused numerous deaths and injuries, and damaged up to 90 percent of the city’s trees burdened with heavy snow on leaves. This snowfall cost over \$130 million in immediate clean-up costs, not to mention all the lost work days, school days, and productivity.¹⁰⁵ More recently, the “Snowvember” storm of 2014 caused up to 7 feet of snow and killed at least 14 people in Buffalo.¹⁰⁶ Needless to say, these storms are particularly intense in the exposed conditions of the Outer Harbor.

Increased flooding will raise pollution levels in Lake Erie, as sewage systems overflow, erosion increases, and contaminants are washed into the water. Warmer water and other impacts will lead to more invasive species, more algae blooms, and declining beach health.¹⁰⁷ It is also possible, though not certain, that increased evaporation due to warmer air temperatures will result in a major drop in water levels, which would have dramatic impacts on the Outer Harbor.¹⁰⁸ The lesson of these weather and climate factors is that planning for the Outer Harbor should be designed to mitigate climate impacts, minimize vulnerabilities, and increase natural resilience.

Flooding and extreme weather make the Outer Harbor inappropriate for housing development – particularly given the limited evacuation routes available and distance from emergency services.



Sewage Outfall at Canalside.
Source: Buffalo News.

Buffalo Land Use Patterns: Sprawl Without Growth, Abandonment, and Vacancy.

It is important to consider the future of the Outer Harbor in the context of Buffalo's development patterns as a whole. The City of Buffalo shrank from 560,132 in 1950 to 261,310 in 2010, and it appears to be shrinking still, albeit at a slower rate.¹⁰⁹ The metropolitan region shrank from 1,349,211 in 1970 to 1,135,509 in 2019. But even as the region's population started to fall, the rapid sprawl continued. From 1980 until 2006, when the region's population was declining by 5.8 percent, the urbanized area grew 38 percent.¹¹⁰ Between 2000 and 2014, 93 percent of new building permits in Erie County were for buildings outside the City of Buffalo, and the City had a net loss of 14,000 housing units.¹¹¹



Vacant Housing in Buffalo.
Source: New York Times.

The result of this sprawl without growth is large numbers of vacant buildings and lots in the urban core, and neighborhoods that have lost the density they need to thrive. For that reason, it makes sense to concentrate new development of housing and businesses in parts of the city that already have infrastructure and need infill, rather than placing them in green areas such as the Outer Harbor that lack critical infrastructure and are not part of any existing residential or commercial neighborhood. The City of Buffalo describes its Comprehensive Plan as driven by three principles: “fix the basics and build on assets; target sustainability; and employ smart growth.”¹¹² Those three reasons offer a compelling case for a park on the Outer Harbor.

Privately Owned Parcels. There are only a few privately owned parcels on the Outer Harbor. They include the Freezer Queen site, 975 Fuhrmann Blvd, the Cargill Pool Elevator site, 1489 and 1515 Fuhrmann Blvd., and the CRH Cement Company, 1751 and 1755 Fuhrmann Blvd. We recommend that the State purchase the Freezer Queen site and Cargill Pool Elevator site for incorporation into the park.

Gerald Bucheit owns the Freezer Queen site. This peninsula, approximately 20 acres, was originally the site of a building constructed from 1927-31 by the Terminal Transportation Company. Freezer Queen operated a factory there from 1958 to 2006. Bucheit demolished the building and plans to build a \$60 million 23-story glass tower with 197

...it makes sense to concentrate new development of housing and businesses in parts of the city that **already have infrastructure and need infill...**

one- and two-bedroom luxury apartments (priced at roughly \$2,000 per month),¹¹³ two restaurants, a nightclub, a pool, a fitness facility, and a parking ramp. Environmental advocates have sued to block the project.¹¹⁴

The Cargill Pool Elevator is owned by the four partners of 1515 Fuhrmann Boulevard LLC, which consists of four executives from the demolition/decommissioning firm Frontier Industrial Corp: David Franjoine, Dennis Franjoine, Robert Zuchlewski, and Craig Slater. They bought it in 2013 from Bill Mackey and Fred Langdon, who had acquired it in 1983 and used it as a boat storage and launch facility until a 2009 fire destroyed much of their equipment. The site includes the South End Marina. As of 2013, the partners planned to convert the site into a mixture of high-end residential, commercial and recreational uses, or possibly for heavy industry.¹¹⁵

The public should also purchase these two sites for a large number of reasons:

- Due to all the factors listed above, the sites are not safe or appropriate for residential or commercial uses.
- If private development occurs on either site, it is likely that the public will massively subsidize it through brownfield tax credits and, most likely, 485-A or ECIDA tax incentives. Rather than essentially paying a private developer to put exclusive luxury housing on the site, it makes much more sense for the public to buy the site for its own use.
- The Cargill grain elevators are historic structures well worth preserving as part of the Industrial Heritage Trail.
- The Cargill site's deep-water access and historic structures make it appropriate for recreational and tourism uses that can generate revenue for a park.
- The Freezer Queen site is the only privately owned parcel that interrupts the stretch of publicly owned land from the Coast Guard station through Buffalo Harbor State Park.
- The Cargill site separates Buffalo Harbor State Park from the Tift Street Pier.
- The giant glass tower proposed for the Freezer Queen site will have large negative impacts on birds, especially migratory birds, who are particularly threatened by tall buildings, glass surfaces, and lights. Buildings kill between 365 and 988 million birds per year in the U.S. High-rise buildings have the highest median mortality rate: 24.3 birds per building each year.¹¹⁶
- The Freezer Queen developer estimates that the tower will generate 2,687 vehicles per day. Each vehicle will cross the public bike path – roughly every 16 seconds during peak traffic times.¹¹⁷
- Buffalo's beautiful, historic, and ecologically fragile waterfront should be devoted to public, water-dependent, sustainable uses, not luxury housing for tiny group of people.

Rather than essentially **paying a private developer** to put exclusive luxury housing on the site, **it makes much more sense for the public to buy the site for its own use.**

Respect Public Sentiment

For many years and in many venues, the public of Western New York has called for a green, public Outer Harbor. Perhaps this broad support is no surprise; research shows that seven in ten Americans regularly visit their local park and recreational facilities, and nine in ten agree that their community benefits from them.¹¹⁸

In the Buffalo Harbor BOA process, the strongest support for the options presented was for the expansion of public access through trails and boardwalks, and residential development was strongly disfavored.¹¹⁹

When ECHDC surveyed the public in summer 2018, the Buffalo News summarized the public's input as "More trails. More access to the water. And more places to rent boats, find a bathroom and buy food and beverages." According to the News, "those who responded to the survey generally see the Outer Harbor as a family-friendly spot for relaxing in a natural environment, viewing beautiful sunsets, engaging in recreational activities and bringing out-of-town guests."

As ECHDC executive director Steve Ranalli said, "The results re-enforce our current direction. Overall, they want a space that complements Canalside, a place where you can get away from an urban or suburban environment and enjoy a quieter, simpler waterfront."

ECHDC did a second survey in fall and winter 2018/2019. As the Buffalo News summarized the results:

Those who participated... preferred trails, ecological areas, a shoreline and amenities for the Connecting Terminal Grain Elevator for the First Buffalo River Marina. Commonly mentioned themes at the 15-acre site included a natural landscape with less development but an on-site restaurant. For the nearly 150 acres from Wilkeson Pointe to the Bell Slip, a new kayak launch, paths and pedestrian bridges were given high marks. At the 15-acre site around Terminal B, survey takers favored continuing the Greenway Trail along the water's edge and observation decks or a walkway for views of Lake Erie, along with reuse of the existing building and outdoor entertainment.¹²⁰

The public wants
**"a place where you
 can get away from
 an urban or suburban
 environment and
 enjoy a quieter,
 simpler waterfront."**

21st Century Park on the Outer Harbor, a citizen group, has enlisted the support of over 25 other organizations and many elected officials in its call for a park on the Outer Harbor. Its vision and mission can be found in Appendix II. The Our Outer Harbor Coalition unites a host of organizations and individuals around issues such as “keeping public lands and waters public; protecting the environment and fragile habitats of the area, historic preservation, advocating for passive recreation; and creating on the ground policies that focus on climate resiliency.” Its ten principles can be found in Appendix I. The Western New York Environmental Alliance, which unites over 100 organizations, and the Partnership for the Public Good, which unites over 280 organizations, have strongly supported the call for a park on the Outer Harbor.

Hundreds of organizations, united in Our Outer Harbor, 21st Century Park on the Outer Harbor, WNY Environmental Alliance, and PPG support a park on the Outer Harbor.



Public Meeting of Our Outer Harbor Coalition. Source: Our Outer Harbor.

Involve the Buffalo Olmsted Parks Conservancy and Other Community Partners

We recommend that State Parks contract with the Buffalo Olmsted Parks Conservancy (BOPC) to operate the expanded Outer Harbor Park, similar to the way the City of Buffalo contracts with the Conservancy to operate the Olmsted Parks. State Parks collaborates with non-profit groups in similar fashion; for example, it licenses Old Fort Niagara Association to operate the Fort.¹²¹

BOPC is the first nonprofit in the nation to manage an entire urban park system: 850 acres, including six parks, their seven connecting parkways – joined by eight circles – plus several pocket parks and other spaces – altogether making up 75 percent of the City's parkland. The organization was formed in 1978 as the Buffalo Friends of Olmsted Parks, and it entered its partnership with the City and County in 2004, giving it full responsibility for management and maintenance, including turf care, litter pick up, trash removal, and tree, shrub and flower plantings and prunings.

BOPC is the **first nonprofit in the nation** to manage an entire urban park system.



Olmsted's Original Plan for South Park, Which Included the Outer Harbor. Source: OlmstedinBuffalo.com.

BOPC has brought tremendous philanthropic and volunteer support to the parks. In the last five years, volunteers have spent over 20,000 hours on the parks.¹²² Since 2008, the park system has received over \$55 million in investments.¹²³ The Olmsted Naturally program has brought sustainable practices and projects to many aspects of the parks, including composting, invasive species management, alternative fertilizers, managed meadow areas, and native plantings.¹²⁴

Contracting with BOPC would offer many advantages. Linking the Outer Harbor to the Olmsted Park system would ensure its full integration into the City parks. The potential for a direct trail connection to South Park is particularly exciting. It would allow the State and City to highlight Buffalo's Olmstedian legacy for tourists and residents alike, building on one of our greatest assets. As a non-profit, BOPC is better positioned than the State to leverage volunteer hours; private, tax-deductible donations; foundation grants; and fundraising events.

Interestingly, Frederick Law Olmsted's original proposal for a South Buffalo park was a 240 acre park along the southern border of the City, including frontage on the Outer Harbor with a bathing beach. Unfortunately, perhaps, the Park Board turned down this proposal and opted to create two smaller parks (South and Cazenovia) instead.¹²⁵ Today, we have the chance to fulfill Olmsted's dream of a park on the Outer Harbor.

Many other local community groups can help to make the Outer Harbor a success. The Buffalo Science Museum's Tiff Nature Preserve and the Explore & More Museum are obvious choices for educational programming. Friends of Times Beach, the Buffalo Lighthouse Association, and Sail Buffalo already operate on the Outer Harbor. Buffalo Niagara Waterkeeper has been integral in efforts to restore water and shoreline quality at and near the site. Citizens Regional Transit Corp. and GObike Buffalo can help in getting more people to the Outer Harbor by bike, walking, and public transit. Preservation Buffalo Niagara can aid in the preservation and education around historic resources. The Albright Knox Art Gallery Public Art program has already proven to be a great partner for ECHDC in selecting and placing high quality art at Canalside and on the Outer Harbor. Our Outer Harbor unites many groups with expertise on nature, parks, recreation, wellness, and other relevant topics.

To fully leverage local expertise and commitment, we recommend the formation of a local advisory council to help run the new park. In addition to the groups listed above, the advisory council should include leaders from diverse Buffalo populations, particularly those currently underserved by park and recreational opportunities, to ensure that the park reflects the needs and wishes of the entire community.

Today, we have the chance to fulfill Olmsted's dream of a park on the Outer Harbor.

Draw on Diverse Funding Streams

The Outer Harbor's unique location, assets, and connections to other amenities make it possible to draw on funding streams beyond the State Parks budget. A wide array of sources have invested the Outer Harbor already, demonstrating its appeal to funders.

- Improvements to the Outer Harbor would be strong candidates for Niagara River Greenway funding through three of its four standing committees: Parks (which allocates \$3 million per year), Ecological (\$1 million), and Buffalo and Erie County (\$2 million). In addition to capital improvements, Greenway funds may be used for maintenance and operation of new projects, such as these would be.
- State purchases of open space and parkland and capital improvements to them may be funded through the State's Environmental Protection Fund.¹²⁶
- Improvements to roads, trails, and signage may be eligible for state and federal transportation funding.
- Environmental protection and restoration projects may be eligible for state and federal environmental funds, such as the NYS DEC Environmental Restoration Program.
- Local and national foundations will be interested in improving natural and recreational opportunities at the Outer Harbor, particularly if the government involves non-profit organizations in the planning and operation. The Ralph C. Wilson Foundation has parks and trails as one of its focus areas and has already demonstrated the depth of its commitment. Funders interested in health and wellness, environmental preservation, historic preservation, education, and racial equity will all have an interest in the Outer Harbor.
- The business community will be interested in sponsoring and supporting projects and programming at the Outer Harbor, particularly as this amenity will draw tourists, companies, and professionals to the region. The Independent Health Wellness Trail is a good example.
- The recreational opportunities at the site, and the presence of the large Terminal A (Ford Plant) and Terminal B buildings with parking and infrastructure, creates potential for revenue-generating activities that fit the park's mission.
- Over the long term, it makes sense for the Outer Harbor to be funded as a state park. The ECHDC's base source of revenue – NYPA funding from the relicensing agreements regarding the Niagara Power Plant made in 2005 – is time limited. In 2009 the funding was expedited to allow for annual payments of \$8.4 million over 20 years instead of \$2.5 million per year over 50 years; hence this funding source will end in 2029.¹²⁷



Patch of Spotted Bee Balm near Bell Slip. Source: Our Outer Harbor.

Conclusion: An Historic Opportunity

In 1876, Frederick Law Olmsted proclaimed Buffalo to be “the best planned city ... in the United States, if not the world.” An expanded park on the Outer Harbor offers the opportunity to take that legacy into the twenty-first century with a magnificent new destination for residents and visitors to enjoy: a crown jewel for Western New York, the State, the Great Lakes region, and the world. Buffalo has rediscovered its waterfront in recent years, and the results have been dramatic. Like other cities around the world, Buffalo has found that the best, most value-creating use of waterfront land is for nature and recreation available to everyone, not for private uses that benefit only a few. New York State, under Governor Cuomo’s leadership, has shown a deep and steadfast commitment to Buffalo’s resurgence. Now, the State can do something remarkable for the environment, tourism, healthy recreation, historic preservation, equal justice, and the public good by dedicating this land for a park.



Bird Viewing Area at Times Beach Nature Preserve. Source: Our Outer Harbor.

Appendix I

Our Outer Harbor

PRINCIPLES FOR OUTER HARBOR DEVELOPMENT

1. The Lake Erie Waterfront is a public trust and belongs to everybody. Do not sell or privatize and maximize public access to water, nature, and recreation.
2. Respect, preserve and enhance the integrity and healing properties of the ecological processes and biodiversity in and supported by the Outer Harbor including international bird migration, fish spawning, existing and incipient eco-systems and pollinator/ regenerating landscapes.
3. Protect public health from historic contamination through best practices, careful planning and design of public activities and diversity of green spaces.
4. Create a uniquely Buffalo waterfront contrasting and complementing a vibrant urban sustainable city. Therefore, don't sprawl. Densify existing urban structures internal to city in contrast to green Outer Harbor. On Outer Harbor, protect existing cultural resources, build only in existing building footprints, and locate services where there is existing infrastructure.
5. Protect Waterfront in perpetuity through designation as ecological "park."
6. Practice full cost accounting and fiscal integrity; include environmental justice, social costs and lost opportunity.
7. Develop a publicly vetted plan for the waterfronts of the City of Buffalo, including the Outer Harbor. Instead of random acts of development, let's create a shared vision toward which acts of preservation and development move.

The Lake Erie Waterfront is a public trust and belongs to everybody. Do not sell or privatize and maximize public access to water, nature, and recreation.

Appendix II

21ST CENTURY PARK ON THE OUTER HARBOR VISION AND MISSION

Vision:

To protect and preserve over 130 acres of Lake Erie waterfront land for public use and recreation by creating a modern park for the benefit of the people of Western New York.

Mission:

Gather support from all facets of our community – individuals, organizations and government – to dedicate this land as park land;

Create public access to the Outer Harbor for water related activities and recreation;

Connect greenways and bikeways from Lake Ontario to Lake Erie according to Olmsted's original vision;

Use Olmsted's vision for a lakefront park for Buffalo and dedicate the park to him, as the first public park to do so;

Implement sustainable practices throughout;

Improve quality of life in Western New York by providing recreational opportunities for all people to gather, celebrate, contemplate and engage in activities that promote health, well-being, community and the environment.

Why:

This land happens to be the largest parcel of available urban waterfront land in the Northeast and we see it as vital to the rebirth of Buffalo as the “Queen City.” A waterfront park would be the best possible of use of this land creating the greatest return for the population. We are a civic-minded group in WNY actively lobbying for public access of our waterfront i.e. *the common good*. Buffalo is the largest city in the northeast that can view a sunset over water, but the best vantage point lies inaccessible and unused.

Improve quality
of life in Western
New York
by providing
recreational
opportunities
for all people.

Appendix III

CONTAMINATION CONCERNS

The environmental assessment form filed by the ECHDC for its 2015 Access and Activation plan includes, among other things, the following notes on contamination:

Times Beach. Times Beach CDF constructed by Army Corps of Engineers in 1971 for disposal of dredging from Buffalo River, due to contamination in the dredged sediments. PCBs and elevated concentrations of PAHs and metals found.

Wilkeson Pointe. Soil sampling in 2008 and 2011 showed widespread contamination with SVOCs and metals, attributable to the fill, but not at levels sufficient to make the site hazardous under state and federal guidelines. The site was remediated in 2012 through capping.

Michigan Pier. This eight-acre pier was built in 1926-27, reportedly with dredge material from Lake Erie, demolition debris, and miscellaneous refuse. Assessments and studies done in 1987 and 1991 showed elevated levels of metals and VOCs, making the soil contaminated but not hazardous.

Port of Buffalo Lands. NFTA did many assessments starting in 1987, including an RI/FS in 1995 finding SVOCs at elevated concentrations. NYSDEC issued a record of decision in 1999 for the Radio Tower site, south of the Bell Slip and north of the paved portions of 901 Fuhrmann Blvd., with stipulations for full clean-up and de-listing of this NYS-listed Inactive Hazardous Waste Site, now fully completed (NYSDEC 1999). NYSDEC issued a record of decision in 2002 for the rest of the Port of Buffalo lands, with soils classified as contaminated but not hazardous. The remedy was a soil/geotextile cap and riprap stabilization, completed in 2010, and a “use-based” strategy for the rest of the site, depending on development, to prevent possible exposure to contaminants. “For example, land uses associated

periodic visitation to the site (e.g., commercial and institutional development) could require a soil cap of one foot of clean fill; whereas detached single family housing might require a deeper soil cap or removal of soils for off-site disposal.”¹²⁸

2012 Assessment. In 2012 NFTA and ECHDC hired URS Corporation to do a Limited Human Health Exposure Assessment to determine the risk to recreational visitors and users of the Outer Harbor. The URS study found that some of the areas were potentially usable for passive recreation with minimal or no remediation, while others were not.¹²⁹

Deed restrictions were filed in 2005 limiting the Radio Tower Area site to industrial or commercial usage, and a Site Management Plan was put in place requiring annual inspection and maintenance of the soil cover.¹³⁰

Regarding the Port of Buffalo lands, the BOA includes this information in its environmental history:

Bulk storage facility: Several aboveground and underground tanks have been closed and removed; one 300 gallon aboveground steel tank, and one 6,000 gallon underground fiberglass tank remain in service.

Hazardous waste generator: Large Quantity Generator, reported in 2001.

NYSDEC spill event site: Unknown amount of petroleum affecting soil; nine recorded spill events from 1987 to 2010 with fuel oil, gasoline, diesel and asbestos impacting surface water, groundwater and soil; status: closed.

NYSDEC remediation database: Ongoing hazardous waste remediation project registered as Class 2 Superfund Site on 6-acre site (Radio Tower Area) near parking area. Classification C - Environmental Restoration Program associated with 90-foot wide Greenway Nature Trail; remediation completed and Certification of Completion issued by NYSDEC in 2012.

Regarding the Queen City Landing site, the BOA includes this information in its environmental history:

Bulk storage facility: All tanks have been closed and removed.

Hazardous waste generator: NA.

NYSDEC spill event site: Closed; unknown amount of hydraulic oil spilled, impacting water.

NYSDEC remediation database: Classification A - Brownfield Cleanup Program; contamination at site is from use of various sources of urban fill and presence and use of petroleum products.

Notes: Necessary remediation should be completed under Brownfield Cleanup Program

The Army Corps created other disposal sites in the Outer Harbor, as well:

Diked Disposal Site 1, south of the Small Boat Harbor, was filled with 1,133,000 cubic yards of polluted materials dredged from 1967 to 1976.¹³¹

Diked Disposal Site 4, a 107 acre site, was created near Stony Point, at the southern edge of the Outer Harbor, and between August 1977 and November 1981 it received 1,402,356 cubic yards of dredged spoils from the Buffalo River, Black Rock Channel Ship Canal, and Buffalo Harbor as well as materials from private interests.¹³²

Sewage Pollution. There are four combined sewer overflows in the Buffalo Harbor BOA. Numbers 14, 15, and 16 discharge into the Erie Basin by Waterfront Village, while Number 17 discharges into the Commercial Slip at Canalside. Number 17 covers the largest areas and averages 133 overflows per year.¹³³ The BOA also contains 4.6 miles of storm sewer and 10 storm sewer outfalls, six of which carry combined sewer overflows.¹³⁴

Gallagher Beach. In 2013, when the State considered opening Gallagher Beach for swimming, a consultant hired by the Erie County Department of Health advised that it was “probably impractical from a public health standpoint” due to environmental problems. In addition to the Army Corp dredge spoils sites, the consultant listed these concerns:

Combined sewer overflows, including a large 36 inch combined outfall at the foot of Tiftt Street, 600 feet south of Gallagher Beach. The NYS Department of Health forbids public beaches within 750 feet of a combined sewer outfall. Because Gallagher Beach is inside the breakwall, the sewage does not get diluted as quickly and well as it would in an more open area.

The Tiftt Preserve was a Buffalo Municipal landfill until capped in the early 1970s and probably includes industrial waste.

Several smaller private industrial landfills behind and south of the Tiftt landfill may also be sources of chemical and heavy metal contamination.

Industrial waste was included in fill used to expand Bethlehem Steel by 440 acres and may have leached or be leaching into the water and contaminating both the water and the beach sediment.¹³⁵

In its article on the topic, Investigative Post flagged additional concerns:

The Outer Harbor is an “impaired waterway” that does not meet water quality standards, due to sewage overflows and PCBs in the floor sediments, and the state has a limit on fish caught in it.¹³⁶

The beach is near two Class 2 Superfund sites:

Bethlehem Steel, where benzene was found in groundwater at levels 100,000 times higher than permitted by federal drinking water standards;

Hanna Furnace iron foundry dumpsite: 5.5 acres 200 feet north of the Union Ship Canal, where arsenic, benzene, and phenols have been found. (The Canal itself contains sediment with heavy metals, including mercury and lead).¹³⁷

Appendix IV

A Stand of Cottonwood

by Carl Dennis

I'm glad to be here, amid these cottonwood trees,
Feeling the wind from the lake on my face,
Sniffing the marsh smells and lake smells
As I listen to the calls of unseen shorebirds.
And I'm glad as well to acknowledge my
civic coordinates:

To be standing fifty yards from the Coast Guard Station
Barely half a mile from downtown Buffalo,
At the western edge of the Empire State,
Which might have taken more care of its shore line
Had it been ruled, now and then, by an emperor.

Self-seeding cottonwood that began to root
Some forty years back, I've read in a pamphlet,
After the beach shacks were torn down and dredges
Stopped dumping the sludge from the channel here.
Trees that like their feet to stay wet while I
Am thankful for the boardwalk path
Lifted a yard above the cattails.

Of the dozen birds named on the sign
Beside their outlines, I can barely claim to know one
By sight or sound. But that doesn't mean
I'm too old to learn. Already I can distinguish
Their calls from the traffic noise blowing in,
Now and then, from the Skyway, and the ship horns,
And the lunch-time bells from the Cathedral.

Maybe when I learn to listen, I'll hear
The tree toads scratching, or the tree roots
Gripping the stone-rich soil and drinking,
Or the termites tunneling in the logs--
All oblivious to how close they are
To what used to be numbered among the top three
Grain ports of the western world.

So what if the grain is stored elsewhere now.
It's time to focus on the life at hand,
Which explains why I've donned my safari hat
And brought my binoculars:

Because it's now or never if I want to become
Familiar with the residents of my neighborhood,
Including these pioneer cottonwood
Rising above the boardwalk
And the birds unseen at rest in the canopy.

And why not include the three fellow pedestrians
Now approaching at a leisurely pace,
Who nod when I nod, as if they knew me
Or knew my kind. "Look, here's another
Late-blooming, cottonwood-loving creature

With a northerly range." Or, "Here's another
Self-appointed surveyor of urban wetlands
Who hopes to learn on the job
All he needs to know."

Acknowledgements

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Sources

- 1 Erie Canal Harbor Development Corporation (ECHDC), "General Project Plan (GPP): Buffalo Outer Harbor Access and Activation Civic Project, Addendum," (Empire State Development, 2015), 17-18, 22. <https://esd.ny.gov/sites/default/files/OuterHarborGPP-2015.pdf>.
- 2 Kerry Traynor, Annie Shentag, and Camden Miller, "The Buffalo, New York Outer Harbor as a Cultural Landscape" (Buffalo: kta preservation specialists, 2018), 45, citing Edward O. Edward, Southtowns Connector/Buffalo Outer Harbor Project: Environmental Impact Statement, (Buffalo: Watts Engineering, 2005), 3-2. <https://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1402&context=buffalocommons>.
- 3 James Fink, "It's Official: State Agency Now Owns Outer Harbor Property," Buffalo Business First, September 1, 2016, <https://www.bizjournals.com/buffalo/news/2016/09/01/its-official-state-agency-now-owns-outer-harbor.html>.
Erie Canal Harbor Development Corporation (ECHDC), "General Project Plan (GPP): Buffalo Outer Harbor Access and Activation Civic Project, Addendum, 2.
- 4 "Land Parcels and Ownership in and around the Buffalo Outer Harbor," Environmental Systems Research Institute (ERSI), "World Topographic Map" [basemap], 1in:0.6km, May 23, 2019, <http://arcg.is/1P4qeb>. Based on data from [City of Buffalo GIS Property Viewer](#), [Landgrid](#), and [Erie County Real Property Tax Services](#).
- 5 "Ranking Analysis," ParkScore, accessed May 3, 2019, http://parkscore.tpl.org/rankings_advanced.php#sm.0001jctwrdfx5ejys9w1punipj5bg.
- 6 Peter Harnik and Ben Welle, "Measuring the Economic Value of a City Park System" (The Trust for Public Land, 2009) <http://cloud.tpl.org/pubs/ccpe-econvalueparks-rpt.pdf>.
- 7 William Bornhoft, "Minnesota's Top 40 Tourist Attractions, Ranked By Attendance," Patch, November 15, 2018, <https://patch.com/minnesota/southwestminneapolis/minnesotas-top-tourist-attractions-ranked-attendance>.
- 8 "The Central Park Effect: Assessing the Value of Central Park's Contribution to New York City's Economy," (New York City: prepared for the Central Park Conservancy, produced by Appleseed, 2015), https://s3.amazonaws.com/assets.centralparknyc.org/pdfs/about/The_Central_Park_Effect.pdf.
- 9 "Promoting Parks and Recreation's Role in Economic Development," (Ashburn, V.A.: prepared for the National Recreation and Park Association, prepared by the George Mason University Center for Regional Analysis, 2018) <https://www.nrpa.org/siteassets/nrpa-economic-development-report.pdf>.
- 10 Eli J. Levine, "The Geography of Poverty in Erie and Niagara Counties," Partnership for the Public Good, November, 2018, https://ppgbuffalo.org/files/documents/poverty_low_wage_work_income_inequality/the_geography_of_poverty_in_erie_and_niagara_counties.pdf.
- 11 Anna Blatto, "A City Divided: A Brief History of Segregation in Buffalo," Partnership for the Public Good, April, 2018, https://ppgbuffalo.org/files/documents/data-demographics-history/a_city_divided_a_brief_history_of_segregation_in_the_city_of_buffalo.pdf.
- 12 Sam Magavern, "Poverty in Buffalo: Causes, Impacts, Solutions," Partnership for the Public Good, April, 2018, https://ppgbuffalo.org/files/documents/poverty_low_wage_work_income_inequality/truth_commission_report_poverty_in_buffalo_causes_impacts_solutions.pdf.
- 13 "Buffalo Outer Harbor Assets," Environmental Systems Research Institute (ERSI), "World Topographic Map" [basemap], 1in:0.6km, May 23, 2019, <http://arcg.is/1P4qeb>.

- 14 City of Buffalo, "Local Waterfront Revitalization Program," (New York State Department of State, 2018), 111-114 https://docs.dos.ny.gov/opd-lwrp/LWRP/Bufalo_C/BufaloLWRP.pdf.
City of Buffalo, "Buffalo Harbor Brownfield Opportunity Area," (City of Buffalo, 2015), 40 http://buffalogreencode.com/October2015/BOAs/bh_step2%20_web.pdf.
- 15 Ibid.
- 16 Ibid.
- 17 Wooster et al v. Queen City Landing, LLC, Verified Amended Petition, 62.
- 18 City of Buffalo, "Buffalo Harbor Brownfield Opportunity Area," 115.
- 19 Ibid, 40.
- 20 Ibid.
- 21 "Times Beach is a Nature Preserve," The Friends of Times Beach Nature Preserve, accessed May 7, 2019, <http://www.friendsoftimesbeachnp.org/times-beach-nature-preserve.html>.
- 22 "Saving the Monarch Butterfly," Center for Biological Diversity, accessed May 7, 2019, https://www.biologicaldiversity.org/species/invertebrates/monarch_butterfly/.
- 23 "The Friends of Times Beach Introduces our First Pollinator Conservation Garden/Area," Friends of Times Beach Nature Preserve, June, 4, 2015, accessed May 7, 2019, <http://www.friendsoftimesbeachnp.org/pollinator-conservation-area.html>.
- 24 Jay Burney, "Why Keeping the Outer Harbor Green is Important," Our Outer Harbor, February 2, 2018, <http://www.ourouterharbor.org/blog>.
- 25 Traynor, Shentag, and Miller, 36.
- 26 Traynor, Shentag, and Miller, 37.
- 27 Ibid.
- 28 Erie Canal Harbor Development Corporation (ECHDC), "General Project Plan (GPP) Buffalo Outer Harbor Access and Activation Civic Project, Addendum," 23.
- 29 "The Bell Slip Sand Barren Preserve," Our Outer Harbor, accessed May 9, 2019, <http://www.ourouterharbor.org/bell-slip-preserve.html>.
- 30 Jay Burney, "GreenWatch Sunday Morning TV: Our Outer Harbor," The Daily Public, June 26, 2016, <http://www.dailypublic.com/articles/06262016/greenwatch-sunday-morning-tv-our-outer-harbor>.
- 31 "Outer Harbor Development: New Shoreline Trail in Buffalo's Outer Harbor Open," Niagara Frontier Transportation Authority, accessed May 9, 2019, <https://www.nfta.com/About/OuterHarbor.aspx>.
- 32 "Buffalo Creek Reservation," Wikipedia, accessed May 9, 2019, citing Laurence Hauptman, *Seven Generations of Iroquois Leadership: The Six Nations Since 1800*, (2008: Syracuse University Press), ISBN 978-0-8156-3165-1, https://en.wikipedia.org/wiki/Buffalo_Creek_Reservation.
- 33 "Buffalo Main Lighthouse," Lighthouse Friends, accessed May 9, 2019, <http://lighthousefriends.com/light.asp?ID=296>.
- 34 Traynor, Shentag, and Miller, 39.
- 35 "Cargill Pool Elevator," Wikipedia, accessed May 9, 2019, citing Thomas E. Leary, John R. Healey, and Elizabeth C. Sholes, "Saskatchewan Cooperative Elevator," (Washington, D.C.: National Park Service, United States Department of The Interior, 1991), from the Library of Congress, HABS/HAER/HALS Collection, https://en.wikipedia.org/wiki/Cargill_Pool_Elevator.
- 36 "Connecting Terminal Grain Elevator," "Buffalo Architecture and History," accessed May 9, 2019, <http://buffaloah.com/a/fuhr/100/index.html>.
- 37 City of Buffalo, "Buffalo Harbor Brownfield Opportunity Area," 169.
- 38 Ibid, 125.
- 39 Mark Sommer, "Outer Harbor Proposals: From Promenades to Playgrounds, 'We Have an Option for You'," The Buffalo News, November 20, 2018, <https://buffalonews.com/2018/11/20/outer-harbor-proposals-seeks-to-balance-nature-recreational-activities/>.

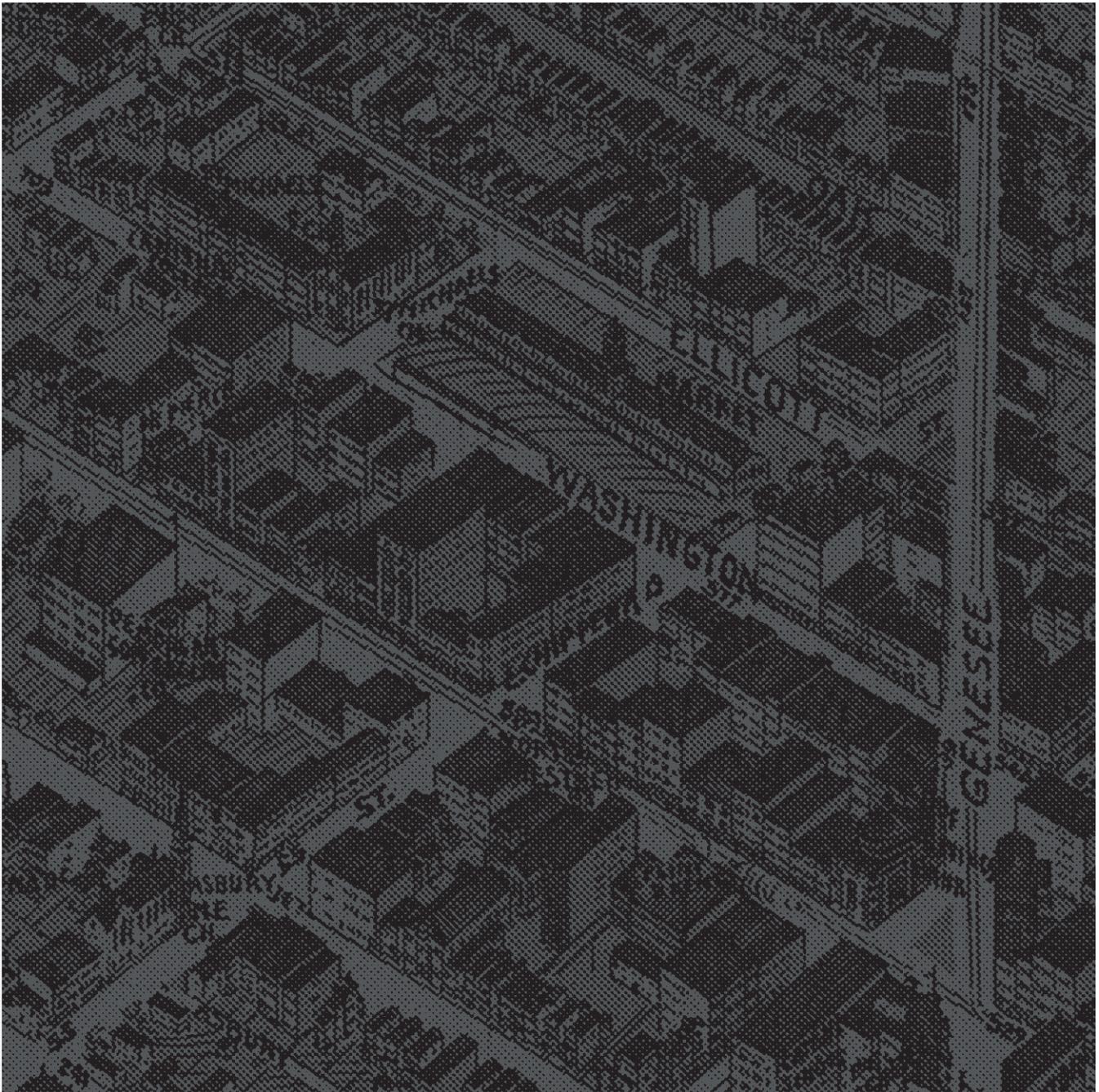
- 40 Mark Sommer, "Take Your First Look at the \$125 Million Master Plan for the Outer Harbor," The Buffalo News, May 2, 2019, <https://buffalonews.com/2019/05/02/leisure-activities-environmental-restoration-the-plan-for-outer-harbor/>.
- 41 Traynor, 41.
- 42 City of Buffalo, "Buffalo Harbor Brownfield Opportunity Area," 132.
- 43 Ibid.
- 44 Erie Canal Harbor Development Corporation (ECHDC), "General Project Plan (GPP) Buffalo Outer Harbor Access and Activation Civic Project, Addendum," 23.
- 45 City of Buffalo, "Buffalo Harbor Brownfield Opportunity Area," 131, 169.
- 46 Mark Sommer, "Take your First Look at the \$125 Million Master Plan for the Outer Harbor."
- 47 "Buffalo Industrial Heritage Trail," Trowbridge Wolf Michaels Landscape Architects, <http://www.twm.la/work/buffalo-outer-harbor-industrial-heritage-trail/>.
- 48 Harold McNeil, "30-foot 'Flat Man' Sculpture Installed on Buffalo's Waterfront," The Buffalo News, August 30, 2017, <https://buffalonews.com/2017/08/30/30-foot-flat-man-sculpture-installed-buffalos-waterfront/>.
- 49 James Fink, "Even Grain Elevator Light Bulbs Need to be Changed," Buffalo Business First, June 11, 2018, <https://www.bizjournals.com/buffalo/news/2018/06/11/even-grain-elevator-light-bulbs-need-to-be-changed.html>.
- 50 "Bring LAGI to your city!," Land Art Generator, accessed May 9, 2019, <http://www.landartgenerator.org/benefitsforcities.html>.
- 51 "ONE through ZERO (The Ten Numbers)," Albright-Knox Art Gallery, accessed May 9, 2019, <https://www.albrightknox.org/community/ak-public-art/one-through-zero-ten-numbers>.
- 52 City of Buffalo, "Local Waterfront Revitalization Program," 6.
- 53 "Buffalo Harbor State Park," New York State Department of Parks, Recreation, and Historic Preservation, accessed May 9, 2019, <https://parks.ny.gov/parks/191/details.aspx>.
- 54 City of Buffalo, "Buffalo Harbor Brownfield Opportunity Area," 169.
- 55 Traynor, Shentag, and Miller, 46.
- 56 City of Buffalo, "Buffalo Harbor Brownfield Opportunity Area," 169.
"Discover Why Life on Lake Erie is Better at Buffalo Harbor," Safe Harbor Marina Buffalo Harbor, accessed May 9, 2019, <http://www.safeharbormarina.com/>.
- 57 Newell Nussbaumer, "Tiftt Street Pier is Complete," Buffalo Rising, July 7, 2014, <https://www.buffalorising.com/2014/07/tiftt-street-pier-is-complete/>.
- 58 Chris Caya, "New Tiftt Street Pier and Boardwalk Opens on Outer Harbor," WBFO 88.7 NPR, July 18, 2014, <https://news.wbfo.org/post/new-tiftt-street-pier-and-boardwalk-opens-outer-harbor>.
- 59 "Independent Health Wellness Trail," Buffalo Waterfront, accessed May 9, 2019, <https://buffalowaterfront.com/activities/wellness-trail>.
- 60 Traynor, Shentag, and Miller, 65.
- 61 Erie Canal Harbor Development Corporation, "Buffalo Outer Harbor Blueprint," 2015.
- 62 Mark Sommer, "Operator Sought for Outer Harbor Marina," The Buffalo News, January 18, 2019, <https://buffalonews.com/2019/01/18/operator-sought-for-outer-harbor-marina/>.
- 63 Mark Sommer, "Take Your First Look at the \$125 Million Master Plan for the Outer Harbor."
- 64 "About Sail Buffalo," Sail Buffalo Sailing School, accessed May 9, 2019, <https://www.sail-buffalo.org/about/>.
- 65 "Ship Canal Commons Opens on Outer Harbor," Buffalo Rising, November 6, 2011, <https://www.buffalorising.com/2011/11/ship-canal-commons-opens-on-outer-harbor/>.
- 66 Mark Sommer, "Off-Road Biking Comes to the Outer Harbor," The Buffalo News, May 24, 2019, <https://buffalonews.com/2019/05/24/off-road-biking-comes-to-the-outer-harbor/>.

- 67 Mark Sommer, "New Waterfront Attractions Expected in 2019 Include Trail, Museum, Bike Park," The Buffalo News, January 27, 2019, <https://buffalonews.com/2019/01/27/prospectus-new-waterfront-attractions-expected-in-2019/>.
- 68 "Buffalo Outer Harbor Nearby Assets," Environmental Systems Research Institute (ERSI), "World Topographic Map" [basemap], 1in:0.6km, May 23, 2019, <http://arcg.is/1P4qeb>.
- 69 "Queen City Bike Ferry," Queen City Bike Ferry, accessed May 9, 2019, <http://www.queencityferry.com/>.
- 70 City of Buffalo, "Buffalo Harbor Brownfield Opportunity Area," 168.
- 71 "Ohio Street Corridor Redevelopment," Wendel Companies, accessed May 9, 2019, <https://wendelcompanies.com/projects/ohio-street/>.
- 72 Thomas J. Prohaska, "\$6.5M Wilson Foundation Grant to Fund Completion of Niagara River Trail System," The Buffalo News, September 18, 2018, updated September 19, 2018, <https://buffalonews.com/2018/09/18/wilson-foundation-grant-clears-way-for-completion-of-trail-network/>.
- 73 Mark Sommer, "Ralph Wilson's Biggest Gift Yet: \$100M to Transform LaSalle Park, Trails," The Buffalo News, October 17, 2018, <https://buffalonews.com/2018/10/17/ralph-c-wilson-foundation-100-million-dollar-grant-lasalle-park-trails/>.
- 74 "The Empire State Trail," New York State, accessed May 9, 2019, <https://www.ny.gov/programs/empire-state-trail>.
- 75 NYS Department of Transportation Request for Proposals, February 26, 2018. The Skyway, built in 1959, is a 5,800 foot long viaduct with 52 spans that carries more than 40,000 vehicles per day, including more than 3,000 trucks.
- 76 City of Buffalo, "Buffalo Harbor Brownfield Opportunity Area," 24.
- 77 Mark Sommer, "Skyway Competition Will Unfold Over Four Months, Governor Says," The Buffalo News, May 14, 2019, <https://buffalonews.com/2019/05/13/skyway-competition-will-unfold-over-four-months-governor-says/>.
- 78 Stephen T. Watson, "Have a Vision for the Skyway? You could win \$100,000," The Buffalo News, February 8, 2019. <https://buffalonews.com/2019/02/28/cuomo-100000-in-works-for-design-competition-to-replace-skyway/>. See also the DOT's RFP for the Skyway engineering study, https://www.dot.ny.gov/portal/pls/portal/MEXIS_APP.BC_ENG_ADMIN.VIEWFILE?p_file_id=18078.
- 79 Erie County Department of Environment and Planning, "Shoreline Trail" [map], no scale, Erie County, New York, September 10, 2018, <http://www2.erie.gov/environment/index.php?q=shoreline-trail>.
- 80 "About Us," Tiftt Nature Preserve, accessed May 9, 2019, <https://www.tiftt.org/about-us/>.
- 81 City of Buffalo, "Local Waterfront Revitalization Program," 111-114.
- 82 Buffalo Society of Natural Sciences, "Mosquito Junction Swamp Restoration at Tiftt Nature Preserve," Application for Niagara River Greenway Commission Consistency Review, March 20, 2019, https://docs.wixstatic.com/ugd/4994b4_de835656e9654b98b1b6b90183f9956f.pdf.
- 83 "About Us," Buffalo Riverworks, accessed May 9, 2019, <https://buffaloriverworks.com/about-us/>.
- 84 Buffalo Olmsted Parks Conservancy, "Buffalo Olmsted Parks Conservancy Launches the South Park Arboretum Restoration Project," news release, <https://www.bfloparks.org/buffalo-olmsted-parks-conservancy-launches-the-south-park-arboretum-restoration-project/>.
- 85 Mark Sommer, "Ralph Wilson's Biggest Gift Yet: \$100M to Transform LaSalle Park, Trails."
- 86 Mark Sommer, "Ambitious Plan would (Literally) Reshape LaSalle Park," The Buffalo News, May 3, 2019, <https://buffalonews.com/2019/05/03/concept-reveals-what-a-renamed-and-redesigned-lasalle-park-will-look-like/>.
- 87 "Work on Ohio Street Site to Begin This Fall," Buffalo Rising, June 29, 2017, <https://www.buffalorising.com/2017/06/work-on-ohio-street-site-to-begin-this-fall/>.

- 88 "Bringing Nature Downtown: A New Life for an Old Rail Corridor," Western New York Land Conservancy, accessed May 9, 2019, <https://wnylc.org/dlw/>.
- 89 "Economic Impact," Explore & More, accessed May 9, 2019, <http://exploreandmore.org/canalside/>.
- 90 Mark Sommer, "Coming to Canalside: Big Changes Over the Next 3 Years," The Buffalo News, November 27, 2017, <https://buffalonews.com/2017/11/27/buffalos-canalside-next-3-years-to-bring-big-changes/>.
- 91 Mark Sommer, "New Waterfront Attractions Expected in 2019 Include Trail, Museum, Bike Park."
- 92 Ibid.
- 93 "About Us," Buffalo & Erie County Naval & Military Park, accessed May 9, 2019, <https://buffalonaivalpark.org/about-us/>.
- 94 There are separate BOAs for Buffalo River Corridor, Tonawanda Street Corridor, and South Buffalo (the South Buffalo BOA includes much of the land directly east of the Outer Harbor, such as Tiff Nature Preserve).
- 95 City of Buffalo, "Buffalo Harbor Brownfield Opportunity Area," 66.
- 96 "Buffalo Outer Harbor Zoning," Environmental Systems Research Institute (ERSI), "World Topographic Map" [basemap], 1in:0.6km, May 23, 2019, <http://arcg.is/1P4qeb>. Based on data from: "Camiros," Buffalo Green Code Unified Development Ordinance Prepared for the City of Buffalo Mayor's Office of Strategic Planning," December 2016, [https://www.buffalony.gov/DocumentCenter/View/2107/Unified-Development-Ordinance-PDF?bidId=](https://www.buffalony.gov/DocumentCenter/View/2107/Unified-Development-Ordinance-PDF?bidId=;).; and the [City of Buffalo Property Viewer](#).
- 97 City of Buffalo, "Buffalo Harbor Brownfield Opportunity Area," 66, 70.
- 98 Melissa Breyer, "The 10 windiest cities in the US," Treehugger, May 18, 2016, <https://www.treehugger.com/natural-sciences/10-windiest-cities-us.html>.
- 99 Margaret Wooster, "Outer Harbor Needs Climate-Smart Planning," GrowWNY, July 1, 2017, <https://www.growwny.org/wnyea/energy-climate-change/outer-harbor-needs-climate-smart-planning/>.
- 100 Sara Meehan, "Oct. 18, 1844: 'Great Flood of 1844' Devastates Buffalo," The Buffalo News, October 18, 2014, <https://buffalonews.com/2014/10/18/oct-18-1844-great-flood-1844-devastates-buffalo/>.
- 101 Patrick Hammer, "A Rapid Water Rise or Seiche is Expected on Lake Erie Due to the High Winds," WGRZ-TV, February 24, 2019, <https://www.wgrz.com/article/news/a-rapid-water-rise-or-seiche-is-expected-on-lake-erie-due-to-the-high-winds/71-0348b33a-4fbd-42ad-b955-01c8f433694a>.
- 102 Kelly Neugent, "Wild Wins and Walls of Ice," Weather Blog from Shade Tree Meteorology, February 28, 2019, <https://www.shadetreemeteorology.com/blog/winter-weather/high-winds-and-high-ice/>.
- 103 Eric Holthaus. "Global Warming is Probably Boosting Lake-Effect Snows," Slate, November, 2014, <https://slate.com/technology/2014/11/lake-effect-snow-in-buffalo-climate-change-is-making-snowstorms-more-extreme.html>.
- 104 United States Environmental Protection Agency, "What Climate Change Means for New York," August, 2016, EPA 430-F-16-034, <https://19january2017snapshot.epa.gov/sites/production/files/2016-09/documents/climate-change-ny.pdf>.
- 105 "Lake Storm 'Aphid'," Wikipedia, accessed May 9, 2019, citing Michael Beebe, "Cleanup Costs Top \$135 Million," The Buffalo News, October 20, 2006, https://en.wikipedia.org/wiki/Lake_Storm_%22Aphid%22.
- 106 "November 13-21, 2014 North American Winter Storm," Wikipedia, accessed May 9, 2019, citing "Death Toll Rises to 14 from November Storm," WIVB-TV, retrieved December 8, 2014, https://en.wikipedia.org/wiki/November_13%E2%80%9321,_2014_North_American_winter_storm#cite_note-BuffaloNews-18.

- 107 Sara C. Pryor et al., "Chapter 18: Midwest," 419 in *Climate Change Impacts in the United States: The Third National Climate Assessment*, eds. Jerry M. Melillo, Terese (T.C.) Richmond, and Gary W. Yohe (2014: U.S. Global Change Research Program), doi: 10.7930/J0J1012N, <https://nca2014.globalchange.gov/report/regions/midwest>.
- 108 Brent M. Lofgren et al., "Evaluation of Potential Impacts on Great Lakes Water Resources Based on Climate Scenarios of Two GCMs," *Journal of Great Lakes Research* 28, 4 (2002): 537; see also Matt Kasper, "How Climate Change is Damaging the Great Lakes, with Implications for the Environment and the Economy," *Think Progress*, January 18, 2013, <https://thinkprogress.org/how-climate-change-is-damaging-the-great-lakes-with-implications-for-the-environment-and-the-economy-ad8a2f5e867d/>.
- 109 From 2010 to 2017 it is estimated that it shrank slightly, to 258, 612.
- 110 Niagara County Center for Economic Development, "Niagara County Comprehensive Economic Development Strategy," June, 2015, 15 https://www.niagaracountybusiness.com/2015_Niagara_County_CEDS.pdf.
- 111 City of Buffalo, "Buffalo Harbor Brownfield Opportunity Area," 33, 34.
- 112 City of Buffalo, "Buffalo Harbor Brownfield Opportunity Area," 17.
- 113 Wooster et al v. Queen City Landing, Verified Amended Petition.
- 114 Jonathan D. Epstein, "Queen City Landing Project Faces New Legal Appeal to Block It," *The Buffalo News*, April 22, 2018, <https://buffalonews.com/2018/04/22/queen-city-landing-project-faces-new-legal-appeal-to-block-it/>.
- 115 Jonathan D. Epstein, "New Owners of South End Marina Property Hope to Incorporate Silos in Plans," *The Buffalo News*, September 23, 2013, <https://buffalonews.com/2013/09/23/new-owners-of-south-end-marina-property-hope-to-incorporate-silos-in-plans/>.
- 116 Scott R. Loss et al., "Bird-Building Collisions in the United States: Estimates of Annual Mortality and Species Vulnerability," *The Condor: Ornithological Applications* 116, 1 (2014), <https://doi.org/10.1650/CONDOR-13-090.1>.
- 117 Wooster et al v. Queen City Landing, Verified Amended Petition, 46.
- 118 "The Economic Impact of Local Parks," National Recreation and Park Association, accessed May 9, 2019, <https://www.nrpa.org/publications-research/research-papers/the-economic-impact-of-local-parks/>.
- 119 The "Community Feedback" section of the BOA nominating document includes highlights on the Outer Harbor section. It notes that the "strongest support was for expansion of public access through trails and boardwalks," while the "Waterfront City" concept drew "concerted opposition," as "participants worried that it is not feasible, that residential development will draw market potential from other neighborhoods, that the housing would be exclusive, and generally that the proposed development was too intense." "Legacy Park" (50 percent) and "Environmental Repair and Recreation" (46 percent) were the most favored alternatives, while "Waterfront City" drew just 4 percent. BOA, 10.
- 120 Mark Sommer, "Outer Harbor Survey Results Released," *The Buffalo News*, March 5, 2019, <https://buffalonews.com/2019/03/05/outer-harbor-survey-results-released/>.
- 121 "The Old Fort Niagara Association," Old Fort Niagara, accessed May 9, 2019, <https://www.oldfortniagara.org/about-us>.
- 122 Buffalo Olmsted Parks Conservancy, "2017 Annual Report," 2018, 4-5, <https://view.publitas.com/bopc/annual-report-2017/page/4-5>.
- 123 Ibid.
- 124 "About Olmsted Naturally," Buffalo Olmsted Parks Conservancy, accessed May 9, 2019, <https://www.bfloparks.org/about/olmsted-naturally/>.
- 125 "Original South Park Proposal," Olmsted in Buffalo, accessed May 9, 2019, <http://olmstedinbuffalo.com/original-south-park-proposal>.

- 126 Thomas P. DiNapoli, State Comptroller, "New York State's Environmental Protection Fund: A Financial History," March 2018. <https://www.osc.state.ny.us/reports/environmental/epf-report-3-2-18.pdf>.
- 127 "As Buffalo's NYPA Settlement Reaches Halfway Point, Higgins Calls for Plan to Invest in the Public's Waterfront." Press Release, May 3, 2018. <https://higgins.house.gov/media-center/press-releases/as-buffalo-s-ny-pa-settlement-reaches-halfway-point-higgins-calls-for-0>.
- 128 Erie Canal Harbor Development Corporation (ECHDC), "General Project Plan (GPP) Buffalo Outer Harbor Access and Activation Civic Project, Addendum," 25.
- 129 Ibid, 26-29.
- 130 NYS Department of Environment Conservation Database Search, Site Code 9150126. See also NYS DEC Environmental Restoration Record of Decision, Site Number B-00149-9, March 2002.
- 131 Traynor, Shentag, and Miller, 45.
- 132 Ibid, 46, 49.
- 133 City of Buffalo, "Buffalo Harbor Brownfield Opportunity Area," 44.
- 134 Ibid, 46.
- 135 "Gallagher Beach and Times Beach – Public Beach Development and Operation," Investigative Post, uploaded October, 2013, <http://ipost.wpengine.netdna-cdn.com/wp-content/uploads/2013/10/Briefing-on-Times-and-Gallagher-Beaches.pdf>. See also Dan Telvock, "Troubled Waters at Gallagher Beach?," Investigative Post, October 3, 2013, <http://www.investigativepost.org/2013/10/03/troubled-waters-at-gallagher-beach/>.
- 136 See also New York State, "Draft: 2018 Section 303(d) List of Impaired Waters Requiring at TMDL/ Other Strategy," June 20, 2018, https://www.dec.ny.gov/docs/water_pdf/303dlistdraft18.pdf.
- 137 Dan Telvock, "Troubled Waters at Gallagher Beach?"



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