



# City of Plattsburgh City Beach and Crete Center *Waterfront Design and Feasibility Study*

April 2016





## Table of Contents

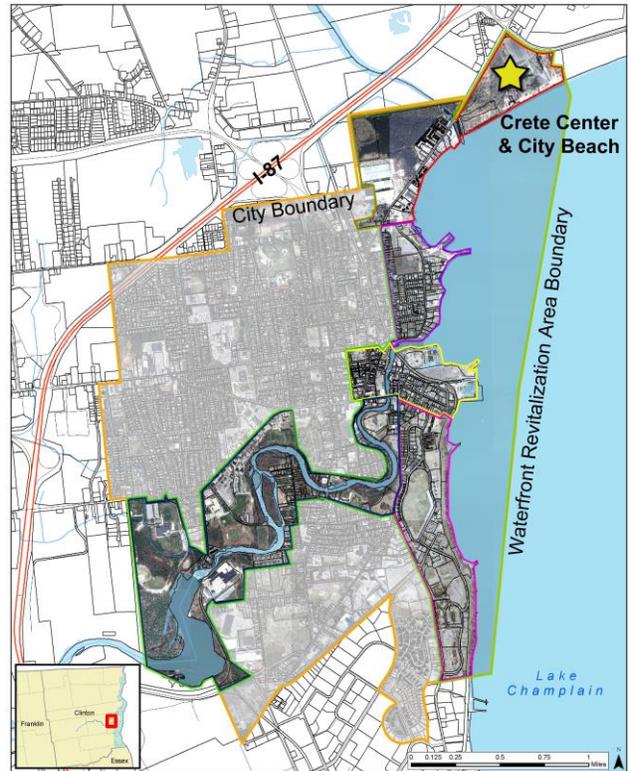
<b>Section I. Introduction .....</b>	<b>1</b>
The City of Plattsburgh .....	1
The City Beach and Crete Center Site.....	2
Recent Community Development Efforts .....	3
<b>Section II. Inventory &amp; Analysis .....</b>	<b>7</b>
Historic and Cultural Resources.....	7
Water Resources and Recreation.....	8
Environmental Features and Sensitive Resources .....	10
State Designations .....	16
Zoning.....	18
Key Overall Waterfront Issues.....	20
Evaluation of Community Needs.....	21
City Beach and Crete Center - Opportunities and Constraints .....	22
“Alienation” and “Conversion” of Parkland .....	23
<b>Section III. Best Management Practices .....</b>	<b>27</b>
Natural Resources.....	27
Community and Cultural Resources .....	31
Environmental Constraints .....	32
Conclusion.....	33
<b>Section IV. Design Standards and Guidelines – Parks and Recreation .....</b>	<b>35</b>
<b>Section V. Enhancement of the City Beach and Crete Center .....</b>	<b>41</b>
Proposed Water Uses and Harbor Management Plan.....	42
Proposed Land Uses .....	42
Opportunities for Regional Coordination.....	43
City Beach and Crete Center – Conceptual Plans.....	44
City Beach and Crete Center – Schematic Designs.....	48
Preliminary Cost Estimates .....	57
Regulations, Permits, and Requirements.....	59
<b>Attachment A. Conceptual Cost Estimate</b>	

Reference note: For further information about the City of Plattsburgh’s waterfront, including analysis and discussion of opportunities, refer to the *Draft Local Waterfront Revitalization Program*.

# City of Plattsburgh: City Beach and Crete Center – Waterfront Design and Feasibility Study

## Section I. Introduction

Within the City of Plattsburgh, the shoreline of Lake Champlain and adjacent upland areas provide a variety of recreational and educational opportunities, along with stunning scenic views. The City Beach and Crete Memorial Civic Center (Crete Center) property is part of the North End Subarea of the recently established Waterfront Revitalization Area, developed as part of the City's 2016 *Preliminary Draft Local Waterfront Revitalization Program (LWRP)*. Located at the northern end of the city, the site is adjacent to Cumberland Corners, the thoroughfare to the ferry, and the on-ramp to I-87. Between Scotion Creek and the Boynton/Cumberland intersection, industrial, residential and commercial development are present. Much of the waterfront between the southern edge of City Beach and the adjacent Georgia Pacific paper mill properties is composed of thriving wetlands.



City Beach and Crete Center in the City of Plattsburgh

Redevelopment and enhancement of the City Beach and Crete Center could serve as a catalyst for waterfront revitalization and economic development throughout the City of Plattsburgh.

### **The City of Plattsburgh**

The City of Plattsburgh is located in Clinton County at the confluence of the Saranac River and Lake Champlain in the Adirondack region of New York State. Located 25 miles from the Canadian border on the western coast of Lake Champlain, the City is an easy drive from the Adirondack Mountains and Vermont, making it an ideal destination for tourist travel. The City's resources place it in a competitive position for future economic and population growth, which heightens the need for long-term planning to enhance and protect its water-based and related recreational resources.

Plattsburgh is a regional population, economic, and educational center with direct access to key transportation infrastructure, including Interstate 87 (the Adirondack Northway), the Canadian Pacific Railroad, and Amtrak passenger service. Like many of its neighbors in the northeastern United States, the City has struggled to balance its numerous assets with the forces of change in the twentieth century. Plattsburgh's history is closely tied to the military and the US Armed Forces, as well as to transportation, tourism, and industry. Its once thriving downtown, along with its resort- and industry-based waterfront, endured a long period of decline, which has recently begun to be reversed.

## The City Beach and Crete Center Site

### City Beach



Swimmers and Sunbathers at City Beach

From the northern city line to Scotion Creek, the waterfront land is owned by the City of Plattsburgh and used as the Municipal Beach, known locally as City Beach. Located immediately south of the Cumberland Bay State Park campground, the City Beach property contains extensive waterfront area and provides public access to Lake Champlain. The City Beach includes a lifeguard patrol, groomed swimming beach, a snack bar, a new bathhouse, as well as restrooms which were damaged in the 2011 flooding and have been closed since. Additional site features include the Heritage Trail and

boardwalk, a picnic pavilion and interpretive area, the Scotion Creek wetlands, storage spaces, and an extensive parking area. Other existing site uses are predominantly recreational and include fishing and boating. Former recreation and entertainment on the site consisted of amusement rides and go-cart and mini-golf facilities near the Route 314 entrance, remnants of which still exist.

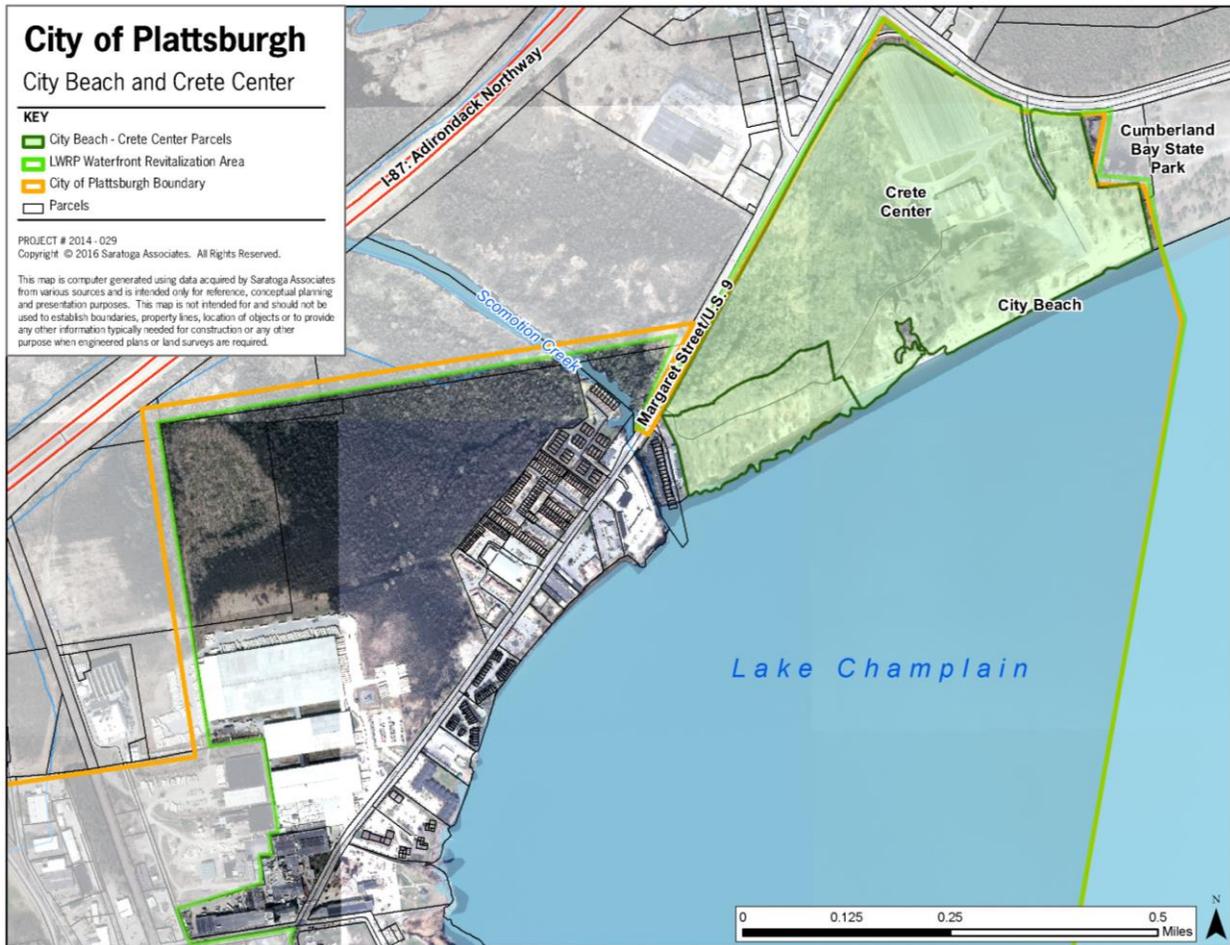
### Crete Center

The Crete Memorial Civic Center, on the eastern portion of the City Beach site, serves as a regional recreation center for residents of the City and Town, as well as for surrounding communities. It was originally constructed in the 1970s to house an ice rink, and currently functions as an indoor turf soccer facility as well as an auditorium, with a seating capacity of 3,500-4,000. The planning process for the future of the City's waterfront has highlighted the need to invest in either significant repairs or replacement of the aging Crete Center. It was evaluated in



The Crete Memorial Civic Center

2015 in terms of its existing mechanical, electrical, plumbing and structural systems, and in relation to possible rehabilitation, redevelopment, or reconstruction in the *Crete Center Assessment Report* by McFarland Johnson. Relocating regional recreation to a new facility may offer an opportunity for the City, Town, and County to address regional recreation needs and make improvements to the City Beach site that could catalyze redevelopment activities in the area.



**The City Beach and Crete Center Site**

**Recent Community Development Efforts**



Champlain Park along the Heritage Trail

Since the late 1980s, the City has undertaken a number of publicly-funded programs to improve waterfront and public park areas, including Riverview Park, an accessible fishing dock at the Macdonough Monument, landscaping improvements and walkway paving at the Champlain Monument, improvements to City Beach, and the Heritage Trail, complete with boardwalk, biking trail, and picnic pavilion.

Recognizing the local and regional importance of its waterbodies, the City of Plattsburgh began to develop a Local Waterfront Revitalization Program (LWRP) in 1995, which was revised in February of 2010. After a series of successful planning and development projects involving Lake Champlain and the Saranac

River, the City decided to conduct a comprehensive update to the 2010 Draft, resulting in the 2016 Preliminary Draft LWRP.

The LWRP was prepared with the following goals:

- Increase public awareness of, and accessibility to, the Lake Champlain and Saranac River waterfronts;
- Capitalize on the economic development/downtown revitalization potential of waterfront redevelopment;
- Address ways to accommodate increasing public demand for recreational resources;
- Explore ways to work regionally to develop and enhance linkages to the rest of the Adirondack Coast; and
- Craft a reasonable plan for protecting and enhancing the city's waterfront, cultural, and natural resources.

The City's 1999 *Comprehensive Plan* outlined goals for recreation and related uses, identifying the dependence of the Plattsburgh economy upon its waterfront. The Plan identified four primary areas for development focused on recreation, one of which was the City Beach complex. The Comprehensive Plan also suggested the creation of a Waterfront District Overlay Zone “to encourage



View from Plattsburgh's City Beach

development or re-development of land lying between public streets and the shore of Lake Champlain in such a way as to preserve public views to the water while minimizing restrictions on property owners.” The Waterfront Overlay District was also recommended by the first draft of the LWRP.

Since 2000, the City has issued or commissioned a number of planning and development related reports and studies. In 2001, *Plattsburgh Waterfront Horizons*

was issued, providing an inventory of potential waterfront development projects, including brownfield restoration and the development of a maritime museum, an aquarium, and a science and nature interpretive center.

Hyett Palma conducted a study and developed an *Economic Enhancement Strategy Report* in 2003 for the Plattsburgh Downtown and Waterfront. Also at this time, a feasibility study was undertaken to study the viability of developing at Waterfront Hotel at Dock Street. Additionally, a *Durkee Street Redevelopment Conceptual Design Report* was completed by Freeman, French, Freeman for development in and around the downtown.

In 2006, a feasibility study was completed for the development of the Saranac River Trail, a shared use recreational trail which runs along the waterfront of the Saranac River. Phase I has since been implemented and Phase II of the trail is expected to begin construction in 2016.

A *Streetscape and Design Guidelines Cultural Arts Corridor and Durkee Street Redevelopment Concept Design Report for the Downtown Area* was completed by Fred Keil in 2009. It focused on the downtown area, but also incorporated designs for the Durkee Street farmer's market area.

In 2010, a *Brownfield Opportunity Area Step 1 Report*, a Pre-Nomination Study, was completed for the City. The *Wastewater Treatment Facility Mitigation Final Feasibility Study* for Phase VI of the Waterfront Rediscovery Program was completed in 2011. More recently, in 2014, the City worked with Vision2Action, with a focus on the Lake Champlain and Saranac River waterfronts, to support public involvement in planning and development efforts. Concurrent with the 2016 LWRP update process, the City has undertaken efforts to conduct a *Plattsburgh City Beach and Crete Center Redevelopment Feasibility Study*.

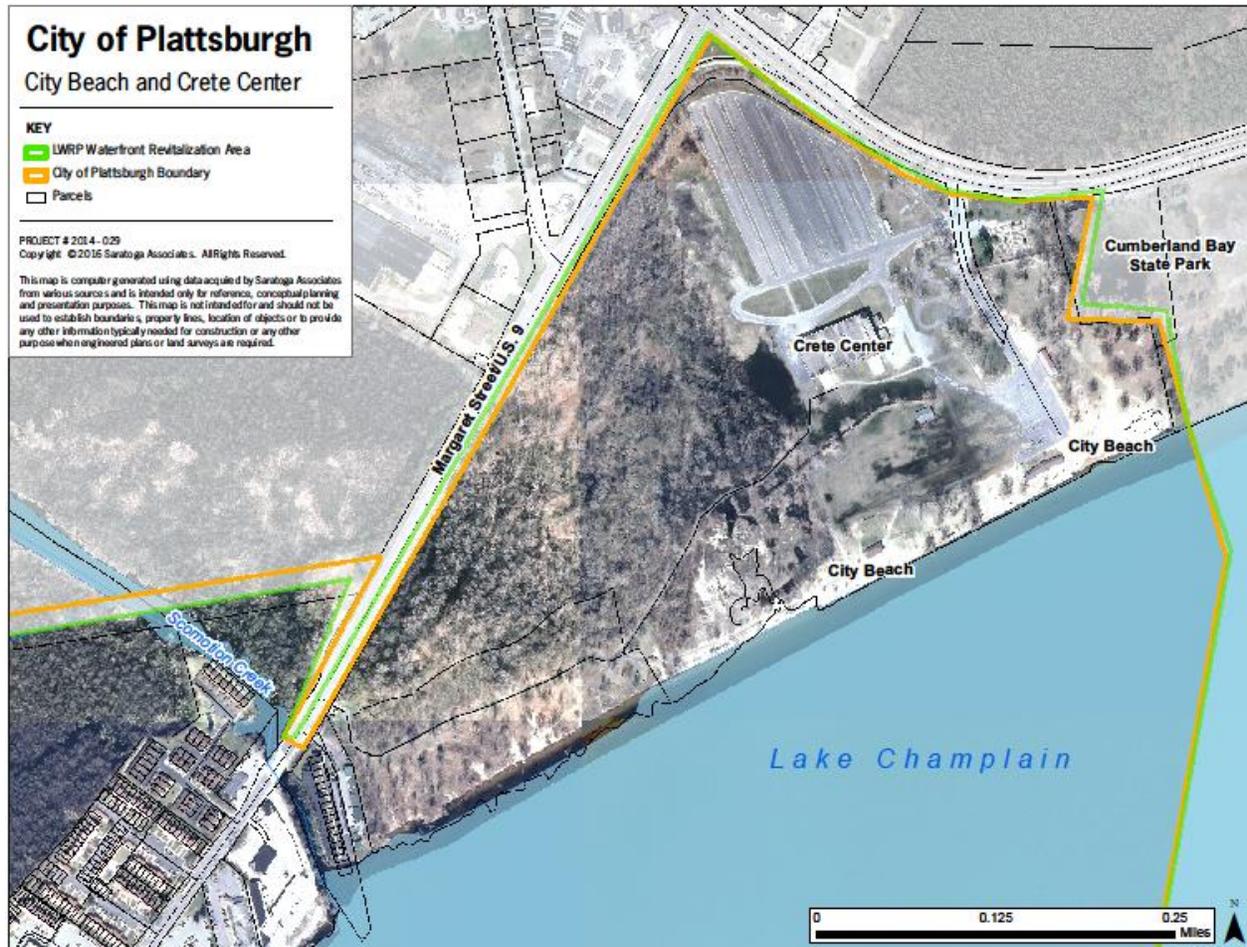
On a regional scale, the City of Plattsburgh has been a part of the 2010 *Opportunities for Action* report issued by the Lake Champlain Basin Program. Similarly, the City was incorporated into the December 2010 *Essex and Clinton Counties Waterfront Plan* and the 2011 *North Country Regional Economic Development Council Strategic Plan*, along with its subsequent Progress Reports (2012, 2013, 2014). Also in 2011, a *Clinton County Destination Master Plan* was issued, followed by revised goals issued in 2012, and 2013. The *Destination Master Plan* featured possible development concepts centered on Crete Center and the City Beach.

The *Adirondack Coast Destination Master Plan* included *Leveraging History* as one of its goals, seeking to create an engaging world-class museum with replica ships. This led to a focus on Plattsburgh City Beach as the location for a Discovery Center, due to its size, interstate access, historical significance, and waterfront access. This potential museum and visitor center would provide information on the Battles of Valcour and Plattsburgh with historical reproductions of ships and would be complimented by trails and outdoor recreation, as well as retail and restaurants. The proposed plan also incorporated a waterfront boardwalk, piers, a water taxi site, a festival and concert area, a hotel site, a botanical garden among the dunes, a canal system for paddling, and a sledding hill with sightseeing tower.

All of these previous studies presented common themes, recognizing the interconnection of Plattsburgh's economy and its waterfront. They looked for ways to capitalize on the city's unique assets by increasing public access to the waterfront, accommodating increasing demand for a variety of recreational resources, redeveloping existing underutilized properties, and ensuring that any new development respects the natural and cultural resources of the city. The City Beach site presents an opportunity to satisfy all of these goals while protecting and enhancing the city's waterfront.



## Section II. Inventory & Analysis



**Aerial View of the City Beach and Crete Center Site**

### **Historic and Cultural Resources**

Plattsburgh is strategically located between the Adirondack Mountains to the west and the Green Mountains of Vermont to the east. In addition to boating and sailing on Lake Champlain, the city, including the City Beach and Crete Center area, is extremely rich in historic and cultural resources and has the potential to draw tourists interested in American history.

City Beach and Crete Center are located on the Cumberland Bay area of Lake Champlain (historically known as Plattsburgh Bay), which occupied an important place in American history, figuring prominently in both the Revolutionary War and the War of 1812. Valcour Bay, located four miles south of Plattsburgh between Valcour Island and the western shore of Lake Champlain, was the site of a naval engagement on October 11, 1776 during the Revolutionary War. The Plattsburgh Bay

National Historic Landmark<sup>1</sup> consists of three sites all linked to the War of 1812 naval and land engagements which took place on September 11, 1814: 1) Plattsburgh Bay itself, including Crab Island, where the naval battle and its aftermath took place; 2) the Macdonough Monument; and 3) the site of Fort Brown, near Route 9, which was related to the repulse of the British land advance southward.

The City of Plattsburgh also includes four National Register Historic Districts and numerous individually listed properties that bear witness to the City's military and civilian past. The City has sought to link these resources by establishing a Heritage Trail adjacent to Lake Champlain which connects major landmarks, multiple museums, and points of interest including Plattsburgh Harbor, the State Campground, Scotion Creek, City Beach, the Crete Center, the Karen Fleury Bike Path



(which runs along the edge of the City Beach/Crete Center property), the site of a Native American village near City Beach, and the site of War of 1812 Graves for 13 unknown American soldiers who died of cholera, also near City Beach. During the 1990s, a series of interpretive markers were put in place at the picnic area on the south end of City Beach along the Heritage Trail. A commemorative marker for soldiers from the War of 1812 is located north of the old bath house. A Heritage Trail sign on the Site notes that Native American archaeological finds in the area include

arrow points, stone axes, scrapers, fire stones, pottery, and human skeletons. Other recent efforts to capitalize on the Lake Champlain waterfront have included the development of a bike trail around the lake using existing roads.

A submission to the New York State Cultural Resource Information System (CRIS) (<https://cris.parks.ny.gov>) was made on January 7, 2015 to review the project and determine whether there are any culturally or archeologically sensitive areas on the Site. The project was subject to two types of review, Survey and Evaluation as well as Archaeology. Both reviews indicated that further consultation would be required if development or re-development of the Site is proposed. The response from OPRHP specified that there are potential archaeological concerns because of known historic and pre-contact Native American archaeological resources in the region.

### **Water Resources and Recreation**

The Plattsburgh area is one of the more heavily used boating and water-based recreation areas of Lake Champlain, making waterfront revitalization of considerable importance to the city's future. The

---

<sup>1</sup> US DOI - National Park Service. *National Register of Historic Places Inventory—Nomination Form: Plattsburgh Bay National Historic Landmark*. <http://focus.nps.gov/pdfhost/docs/NHLS/Text/66000507.pdf>

City Beach site presents an opportunity to expand the city's recreational resources while also protecting and enhancing the natural and cultural resources of its waterfront.

The city is located on the western bank of the widest section of Lake Champlain known as "Broad Lake." The lake is 120 miles long from Whitehall, New York to Quebec, and 12 miles in breadth at its widest crossing near Burlington, Vermont. Unlike most water courses, Lake Champlain flows northward, discharging into the Richelieu River in Quebec, which empties into the St. Lawrence River, and then the Atlantic Ocean. This is a direct navigable connection to the St. Lawrence Seaway, which provides access from the eastern seaboard to the midwestern part of the continent. Lake Champlain is also part of the New York State Barge Canal System, which is largely used for pleasure boating and connects through Central New York and the Finger Lakes region to Buffalo.

In 1990, the United States Congress passed the Lake Champlain Special Designation Act of 1990, mandating that the states of Vermont and New York develop a pollution prevention, control, and restoration plan for Lake Champlain. As a result of this Act, the Lake Champlain Basin Program was established. An important part of the Act is to address recreational issues in the Lake Champlain basin. Accordingly, the New York Office of Parks, Recreation and Historic Preservation and the Vermont Department of Forests, Parks, and Recreation entered into a cooperative agreement to develop a comprehensive recreation plan for Lake Champlain. Through this joint effort, the two states aim to manage Lake Champlain, its shorelines, and its tributaries for a diversity of recreational uses while protecting its natural and cultural resources.



Lake Champlain Basin Program studies have provided strong evidence that recreational use of Lake Champlain has increased dramatically in recent years. This has resulted in recreational use issues: overcrowding at certain facilities and bays by recreationists and boaters; increased competition for access to the lake through public and private facilities; an increase in the number and types of recreation user conflicts; the loss of surface water acreage for certain recreational activities; increases in the number and location of boat mooring and anchorage areas; safety concerns;

continuing deterioration of natural, cultural, and historic resources; and the lack of coordinated promotion and marketing for low-impact tourism. This growing number of lake users includes primarily motorboaters and sailboaters, accompanied by other boaters (canoes, rowboats, paddleboats) and personal watercraft users. Lake Champlain is popular both regionally and into Canada – there is a general perception that 70-80% of boat traffic is Canadian.

Studies have found that the Vermont side of the lake is much more developed and boater-friendly than the New York side, which needs additional tourist facilities, restaurants, and accommodations. In addition to a generally insufficient supply, many existing boat launch sites around the Lake were in a state of disrepair and in need of upgrades and/or expansion. Two of the most popular boat

anchorages identified were Valcour Island and Point Au Roche, New York – both are State Parks near Plattsburgh.

Currently, City Beach and Crete Center do not provide formal boat docking facilities or accommodations. Boats frequently moor off of the City Beach and smaller watercraft beach onto the shore. A strong south wind in the Cumberland Bay area makes it a popular location for windsurfing and kitesurfing. Other popular recreational activities include fishing, swimming, and recreational boating, including kayaking and paddleboarding.



Boating and swimming off of City Beach

The eastern portion of the Site has been developed for public recreation while the remainder is mostly wooded, with the exception of a pedestrian trail and pavilion. The beach is located along the southeastern edge of the site and stretches for approximately 4,700 feet along Cumberland Bay. Former recreation and entertainment consisted of amusement rides and go-cart and mini-golf facilities near the Site entrance, remnants of which still exist. The Crete Center, which is just over 40 years old and was originally designed to house an ice rink, currently serves as an indoor soccer and event facility.

Enhancement at the City Beach site could help to prevent the deterioration of natural, cultural, and historic resources while increasing public access to the waterfront. Sensitive recreational development could address issues with user conflicts and expand opportunities for low-impact tourism as well as both active and passive recreation.

### ***Environmental Features and Sensitive Resources***

Some land and water resources within the waterfront area may present a hazard to future development or be sensitive to developmental activities. Lake Champlain presents unique conditions on the City Beach site, including shallow water depths, unique habitats, iconic views, and also the potential for flooding.

#### ***Lake Champlain***

Lake Champlain is environmentally sensitive because it is shallow within the city boundary. In the northern end of the City of Plattsburgh, the terrain slopes gently toward the lake and is quite swampy, including both the lakeshore and the Dead (Scomotion) Creek banks. Glacial scouring created a gently sloping beach with natural dunes and wetlands along the lake. According to the USGS quadrangle, the shoreline at City Beach is gently sloping and sandy with water depths of 4 to 6 feet at approximately 500 feet out. The depth to the bottom in the lake rarely exceeds eighteen feet and is less than ten feet deep for most of the area when the water surface is calm. These depths vary considerably with regional rainfall cycles (e.g., the 1995 drought left both river and lake water levels unusually low). Water depth also varies with wave action, especially in combination with high

wind speeds. Moisture-laden high winds from the southeast are not unusual, but light westerly winds are the norm.



Lake Champlain from the Shore of City Beach

The shallow lake areas freeze to a thickness in excess of six inches during the winter months. The seasonal freeze/thaw cycles pose a significant development constraint for all immediate shore areas on both waterside and landside. Large sections of ice and frozen snowpack from the lake surface may pose a hazard in combination with occasional severe spring storms. In addition, the shallow waters are considered Waters of the United States and are classified as navigable waterways. Development in the water is subject to U.S. Army Corps of Engineers permitting and approval process for any proposed actions in navigable waterways, including temporary installations such as coffer dams.

#### *Water Quality*

Adjacent to the city, Lake Champlain has a “B” classification from the NYS DEC, designating it as suitable for primary and secondary contact recreation and fishing, as well as for fish, shellfish and wildlife propagation and survival. A water quality rating of C has also been established for Dead (Scomotion) Creek, which flows through a large wetland habitat just north of the city boundary and west of City Beach. This wetland helps to slow movement of sediment and water-borne nutrients from rural runoff, acting as a natural filter that mitigates negative impacts on Lake Champlain water quality.

The shallow water near City Beach may be especially sensitive to water borne pollutants, siltation, weed growth, or infestation during population blooms (e.g., freshwater snails). It may require attentive maintenance such as regular systematic weed harvesting, shoreline grooming, or removal of storm debris for some water uses. Zebra mussels have impacted the shallow water, building up on submerged rocks and docks.

#### *Stormwater*

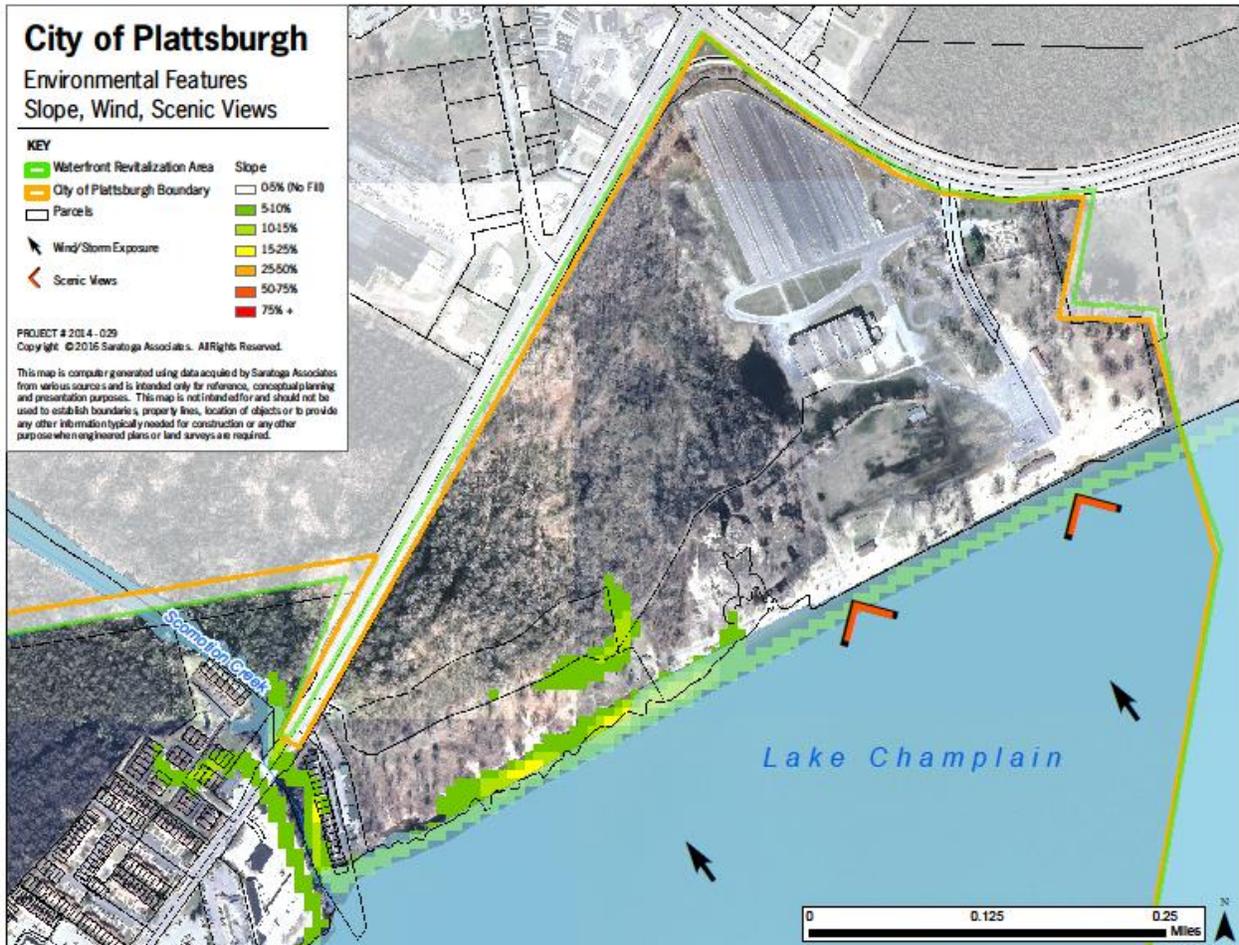
The primary impacts on water quality within the city may be assumed to result from stormwater runoff which takes the form of non-point source urban runoff and rural runoff from upstream locations. In some years, this has impacted water quality at the City Beach. In general, water quality for the Saranac River and Lake Champlain in the area is good and is not expected to pose constraints on future waterfront development.



Impervious Areas Are a Main Source of Stormwater Runoff

As discussed in the March 2016 Site

Reconnaissance Report, stormwater runoff on the eastern portion of the Site sheet flows into a series of catch basins and drainage swales. The stormwater management system directs stormwater towards Lake Champlain where it discharges via two outfalls located on the beach near the new bath house and the concessions building. Stormwater on the western portion of the Site appears to pond within wetland areas onsite and ultimately infiltrates into the ground.



**Environmental Features: Slope, Wind, and Scenic Views**

### *Dunes and Soils*

The Site has varying topography with steep slopes associated with the landward side of the beach and sand dune area and low-lying wet areas along Route 9. According to the Boundary Survey Map, the lowest elevation is 95 feet above mean sea level (AMSL) along the beach and the highest is 116 feet AMSL within the sand dune area northeast of the pavilion. The developed portion of the Site is relatively flat.

Naturally occurring sand dunes occur along the beach and are concentrated between the new bath house and the pavilion. Heights of the sand dunes vary from 6 to 15 feet. The sand dunes are a geologic feature unique to the Site.



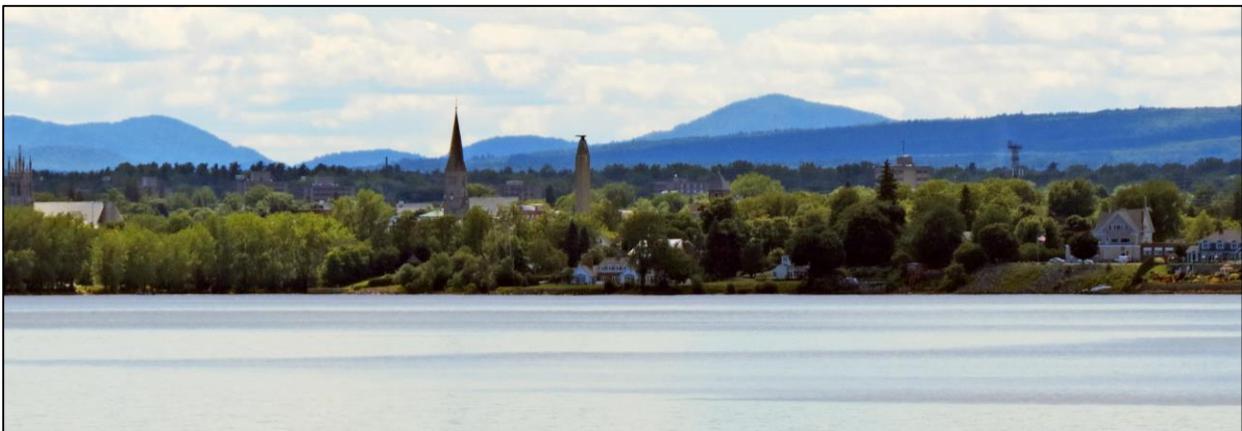
Dunes and Vegetation near City Beach

As discussed in the Site Reconnaissance Report, the soils on the City Beach-Crete Center site are slightly to moderately erodible. Almost half of the Site – the southwestern portion and far northeast corner – is made up of Udorthents, smoothed (Ug), which are typically deep, sandy and moderately well-drained. Urban land (Un) makes up approximately 25% of the Site (primarily the eastern portion, underlying the parking lots and Crete Center), approximately 20% of the Site – the northwestern portion – is made up of Udorthents, wet substratum (Uh) and the remaining 10% in the southeastern

corner is made up of Grattan loamy sand (GrB). The Site and surrounding area are made up of mostly lacustrine sands and silts overlying dense glacial till. Significant areas have eroded from high lake levels and strong high waves. Additionally, strong winds blow sand from the beach and dunes across the southeastern portion of the Site.

### Scenic Views

Scenic beauty is ranked as one of the most important criterion Americans use in choosing parks and recreation areas. Given its location on Lake Champlain between the Adirondack Mountains of New York State and the Green Mountains of Vermont, Plattsburgh has an abundance of scenic views which should be identified and protected. Beautiful views of Lake Champlain can be seen from points all along the waterfront, but particularly from the City Beach, Wilcox Dock, the area at the foot of Point Historic District, the marina, and Sailor’s Beach at the Old Base. City Beach also provides excellent views back to the city. The City Beach-Crete Center area is not, however, located within a Scenic Area of Statewide Significance.



View of Downtown Plattsburgh from City Beach



View Looking Northeast toward Cumberland Head

### Wetlands and Flood Zones

#### Wetlands

Wetlands provide many valuable functions, including serving as natural habitat, filtering pollutants, protecting surface and groundwater, and helping to mitigate the impacts of flood and tidal erosion. The wetlands near the northern lakeshore are environmentally sensitive because they are relatively fragile. Some of the low lying, frequently wet soils are inappropriate for development and should be protected. Some of the wetlands are subject to federal and state regulations, including review and permitting of any proposed actions. Development can occur only with applicable U.S. Army Corps of Engineers and NYSDEC approvals and permits.

Two federal National Wetland Inventory wetlands are mapped onsite, a palustrine emergent (PEM) wetland adjacent to the Crete Center and a palustrine forested-shrub (PFO) wetland along the western property line adjacent to Route 9. Between these two, and extending to the north and the south, is a large area of NYSDEC Freshwater Wetlands. The NYSDEC also regulates a 100-foot “Adjacent Area” to provide a buffer for the wetland. Any development within these sensitive areas will need to be coordinated with the agencies and comply with applicable permitting and regulations.



Wetland Area South of the Crete Center

#### Flood Zones

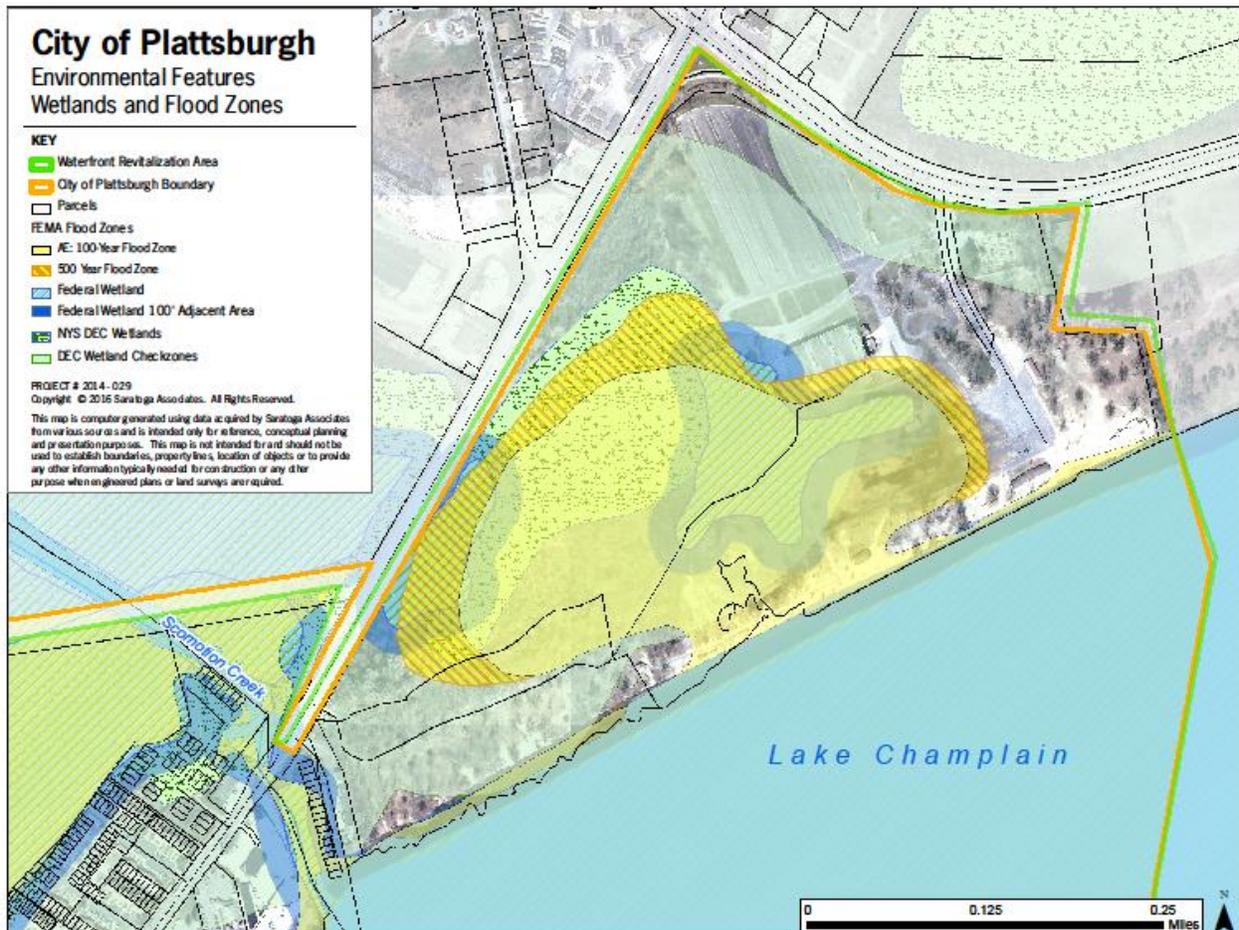
The water level of Lake Champlain typically varies seasonally from 95 to 101 feet (29 to 30 m) above mean sea level. The 100-year floodplain has been designated by the Federal Emergency Management Agency (FEMA) at Flood elevation 102 feet. The 100-year flood zone represents a significant but calculated development constraint, i.e. a flood will occur once in 100 years, or has a 1% chance of occurring in any given year.



Original Bath House Closed Due to Flood Damage

Development within the floodplain is not recommended due to flood hazards. Semi-annual severe storms pose a significant development constraint along exposed southeast-oriented shore areas. As a result of Hurricane Irene and Tropical Storm Lee, which came through the area in summer 2011, Lake Champlain reached the highest levels ever seen. The storms resulted in flood damage at numerous locations, including City Beach, where restroom facilities were damaged and have been closed since. According to City officials and aerial imagery, floodwaters overtopped the

beach near the new bath house and concessions building and flooded the beach parking area and western wooded area. Following these storms, a federal disaster was declared and FEMA funding assistance was provided for repairs. The following graphic shows the extent of the wetlands and flood zones on the Site.



Environmental Features: Wetlands and Flood Zones

The City of Plattsburgh participates in the FEMA National Flood Insurance Program (NFIP) and has adopted a Flood Damage Prevention code. The law institutes limits on the development allowed in 100-year floodplain. A Flood Development Permit is required for all construction or other development within special flood hazard areas. The Flood Damage Prevention code requires all new structures be constructed two feet above the adjacent water surface elevation of the 100-year floodplain. Additionally, development along Lake Champlain within the City of Plattsburgh, must involve the submittal of a Flood Study to the City showing the 100-year floodplain and water surface elevation, based on both current land use and future land use assumptions.

### *Hazardous Materials*

The City Beach – Crete Center site reconnaissance on December 2, 2014 included visual observations of potentially hazardous materials on the western portion of the Site, which was formerly used as a city landfill. A hazardous or contaminated environmental condition is defined as the presence or likely presence of any hazardous substances or petroleum products (including products currently in compliance with applicable regulations) on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property.

An aerial photo from 1964, from the Appendix H of the March 2015 *Phase I ESA* by Aztech Technologies shows a large area along US 9, west of the current Crete Center location, which was previously cleared and was likely used as the dump site. Additional information regarding the old landfill is included in the *Phase I Environmental Site Assessment* report completed in March 2015 by Aztech Technologies, Inc., which states that, from approximately 1930 through the early 1970s, the western portion of the Site was used as a landfill identified as the “city dump.” City of Plattsburgh officials indicated that items such as household appliances and industrial waste were disposed of at the Site. Refrigerators, stoves, metal roofing, 55-gallon drums, and car parts are among items that have been identified in this area. Debris, including tires, appliances, and automobile parts, was observed on the surface during the December 2014 visit.



1964 Aerial Photo Showing Cleared Dump Area

### *State Designations*

#### Scenic Areas of Statewide Significance

The Site does not fall within a scenic area of statewide significance; however, it is situated on Lake Champlain such that it has prominent views of the lake, downtown Plattsburgh, the Adirondack Mountains of New York, and the Green Mountains of Vermont. The impact of built elements on viewsheds should be minimized, and tree plantings should preserve existing view corridors.

Significant Coastal Fish and Wildlife Habitat Areas

Significant coastal fish and wildlife habitats are evaluated, designated, and mapped under the authority of the Coastal Management Program's enabling legislation, the Waterfront Revitalization and Coastal Resources Act (Executive Law of New York, Article 42). These designations are subsequently incorporated in the Coastal Management Program under authority provided by the Federal Coastal Zone Management Act. The Site does not contain any significant coastal fish and wildlife habitats as identified by the NYSDOS Division of Coastal Resources. Furthermore, it does not fall within any other Coastal Management Program special management areas.

As referenced in the Site Reconnaissance Report, a response from the NYSDEC dated April 9, 2015 in regard to rare plants, rare animals, and significant natural communities, at or in the immediate vicinity of the project included the following: common loon (*Gavia immer*) listed as Special Concern for issues related to breeding; Great Lakes dunes listed as a Rare Community Type; and Champlain beachgrass (*Ammophila breviligulata* ssp. *Champlainensis*) listed as Endangered and Critically Imperiled in NYS and Globally Rare. The wooded portions of the Site, predominantly the west, consist of an oak-hickory forest with a dense understory interspersed throughout. The western wooded areas also contain wetlands. Mature white pines are mixed with the oaks and hickories on the easternmost portion of the Site.



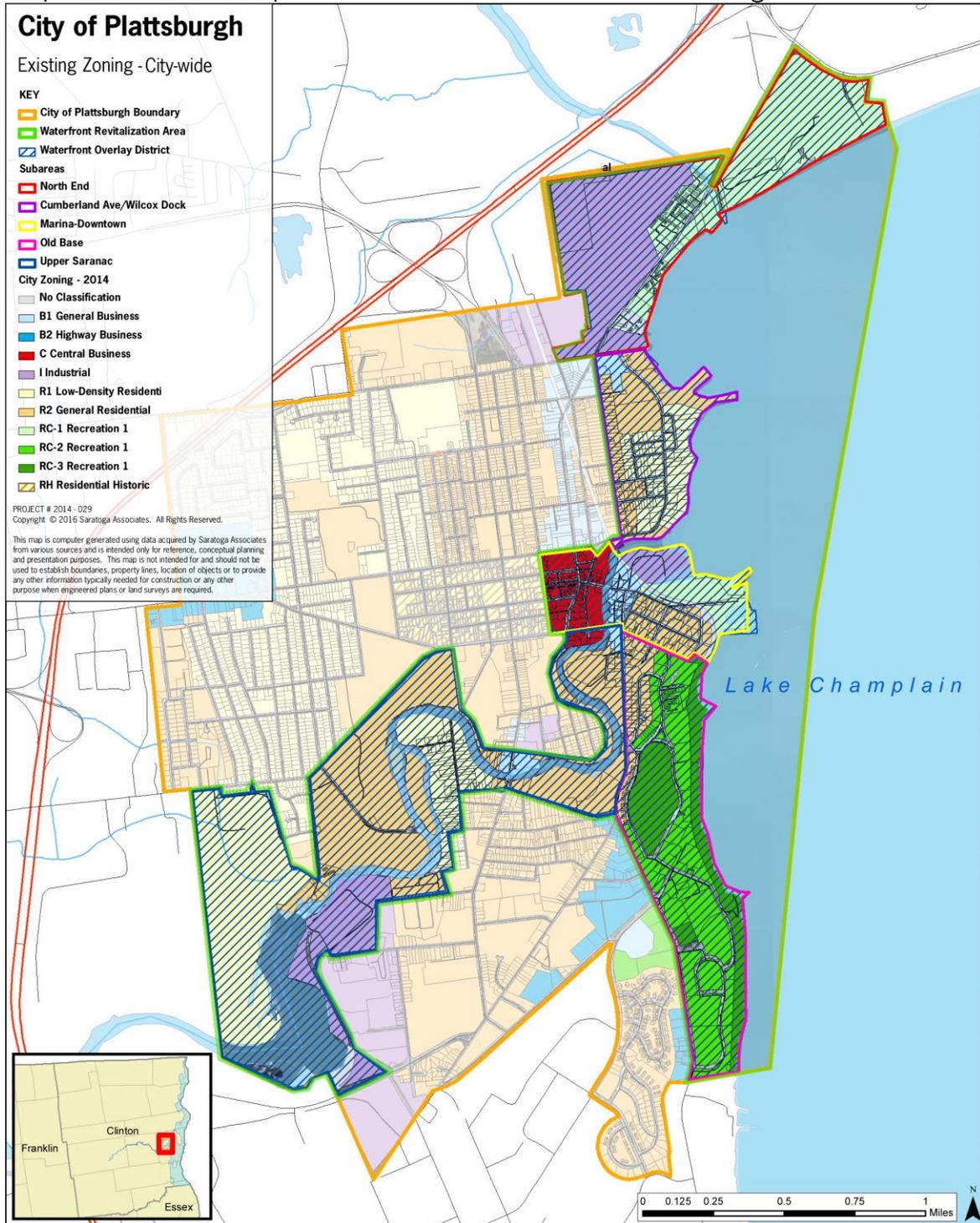
Walkway toward Dune and Woodland Areas

The northern end of the City of Plattsburgh contains habitat, perhaps within the wetland areas, that may support one or more of the rare plants that occur in the vicinity. These species include the Houghton Umbrella Sedge and are protected by state law from disturbance. Areas for proposed action must be surveyed for endangered or threatened plants before undertaking development. Presence of rare or endangered plants precludes development where they occur.

The entire Lake Champlain Basin supports abundant and diverse warm water fish populations. A fisheries survey conducted by the New York State Department of Environmental Conservation during the mid-1980s identified approximately 58 fish species within the Lake. Lake Champlain is the sixth largest freshwater lake in the continental U.S. and is one of its most popular fishing destinations. State-owned boat launches exist at Peru, Port Au Roche and the Great Chazy River within Clinton County. In the City of Plattsburgh, boat launches exist at the Plattsburgh Boat Basin, at the City Marina, at the mouth of the Saranac River at Dock Street Landing, and at Wilcox Dock, and a fishing dock (handicapped accessible) is located just below the Macdonough Monument on the Saranac River. Shoreline and ice fishing are also popular in season.

## Zoning

The City of Plattsburgh Zoning Ordinance has been in effect since 1981, with revisions in 1983, 1988, and 2001. Its general purpose is "promoting the health, safety, morals, convenience, order, prosperity and general welfare of the community." The existing zoning establishes districts with fairly stable uses, but some refinements and enhancements may be needed to accommodate future development and ensure the protection of the waterfront and related existing uses.



**City of Plattsburgh Zoning**

The City of Plattsburgh Zoning Ordinance consists of the following districts:

- *R-1- Low Density Residential*
- *R-2 - General Residential*
- *B-1 - General Business*
- *B-2 - Highway Business*
- *C - Central Business*
- *I – Industrial*
- *RC-1, RC-2, RC-3 - Recreation & Related Uses*
- *RH – Residential Historic*
- *Parking Overlay Districts*
- *Waterfront Overlay District*

Along the waterfront, most land is zoned residential, reflecting current land use patterns. The property on which the City Beach and Crete Center are located is designated RC-1 (Recreation and Related Uses). The RC-1 classification includes a variety of permitted uses including multi-family residences, townhouse residences, hotels and motels, eating and drinking establishments, indoor and outdoor commercial recreation, public recreation and related facilities, retail businesses and commercial uses commonly associated with recreation-related and tourist areas, and personal and business services establishments. Accessory uses include parking and loading areas, pedestrian walkways, beach and related facilities, retail sales and services incidental to a permitted use, and customarily accessory uses to the principal uses permitted. Uses requiring special permits in this area include amusement parks, facilities and concessions, essential public utilities, eating and drinking establishments serving alcoholic beverages, drive-in businesses, and recreation vehicle campgrounds.

The City Beach and Crete Center property also falls within the Waterfront Overlay District proposed as part of the 2016 *Preliminary Draft Local Waterfront Revitalization Program*. The Waterfront Overlay District overlays the underlying zoning district. It was originally proposed as part of the 1999 Comprehensive Plan, “to encourage development or re-development of land lying between public streets and the shore of Lake Champlain in such a way as to preserve public views to the water while minimizing restrictions on property owners.” The zoning regulation of the underlying zoning district applies to all land within the Waterfront District, except as modified, or permitted to be modified, by the Waterfront District zoning regulations.

All new construction and additions require Planning Board approval of a site plan. In connection with such site plan approval, the Planning Board is granted the authority to vary the area requirements for lots within the Waterfront Overlay District, in accordance with guidelines to be developed by the County Planning Office for county-wide and city use. The purpose of the guidelines is to encourage the establishment of Public Viewshed areas to provide an unobstructed view from a public street or other public lands to Lake Champlain. In pursuing its redevelopment options, Plattsburgh will need to balance the needs of local residents with the best interests of the City.

### **Key Overall Waterfront Issues**

Redevelopment and enhancement of the City Beach and Crete Center could serve as a catalyst for waterfront revitalization and economic development throughout the City of Plattsburgh. Based on assessment of existing conditions, key waterfront issues include:

1. Improving conservation efforts and decreasing wetland area endangerment while recognizing these areas as true natural resources and maximizing sensitive beach development opportunities;
2. Implementing erosion control measures to save shoreline areas and improve safety;
3. Improving public access by enhancing existing areas and creating new access points and walkways, particularly at City Beach and Scotion Creek, which have been identified as priority areas for revitalization;



Walkway toward City Beach

4. Continuing mitigation of environmental remediation areas in partnership with various Plattsburgh industries, applicable New York State agencies, and others;
5. Strengthening linkages between the waterfront and downtown, seeking to connect areas to one another through signage, interpretation, trail connections, public transit, and other efforts;
6. Raising public awareness of both the city's and Lake Champlain's cultural and natural resources;
7. Protecting existing resources, such as historic resources and the magnificent resources of Lake Champlain; and
8. Capitalizing on opportunities to enhance potential development along waterfront parcels.

Recent studies indicate a need for careful planning to address continuing population growth, increasing use of Lake Champlain, increasing user conflicts, and the predicted effects of growth on the entire Lake Champlain basin. Fostering more opportunities to access and enjoy the Lake will encourage more people to value it and support water quality protection, ultimately increasing the

number of people engaged in Lake stewardship.<sup>2</sup> The City has also recognized the need to work closely with private property owners and to develop partnerships and establish connections between various community resources and groups.

Perhaps the greatest issue is the City's growing need to make beneficial use of its unrivaled location and substantial Lake Champlain waterfront area. Plattsburgh needs to convert its numerous underutilized waterfront areas to vibrant, publicly accessible destinations for the economic benefit and enjoyment of its residents and visitors while protecting Lake Champlain for future generations.

### **Evaluation of Community Needs**

The evaluation of community needs, relative to the City Beach and Crete Center, focused on those needs related to parks and recreation. The City and Town of Plattsburgh Recreation Departments conducted a survey of both residents and visitors to assess recreation programs and facilities in late 2014. There was a general consensus that both recreation departments were doing well with their programming, but that many of the Town and City facilities were in need of updating.

The survey found that Plattsburgh residents are active, particularly during the summer, and tend to spend more time enjoying outdoor recreational activities than indoor activities. Reasons cited as barriers to participating in recreational activities were that facilities were not conveniently located, respondents were not aware of recreational offerings, respondents had a lack of motivation toward participation, or there was a lack of facilities for what the person wanted to do (e.g. indoor tennis and swimming). Respondents noted that while they appreciated the variety of outdoor recreational opportunities available, there was a concern that facilities were in need of updating and rehabilitation.

Residents indicated development of a multi-use recreational and indoor sports complex (tennis, swimming pool, pickleball courts, adult fitness classes, multipurpose spaces) and expansion of the waterfront with more vendors as priorities for municipal recreational facilities. Many respondents indicated desire for an indoor pool and/or a miniature golf course operated by the City and/or Town. Additionally, many respondents asked for non-competitive recreational opportunities to be expanded and for the consideration of accessibility in any new facilities or programs. City Beach offers many opportunities for meeting the diverse needs and desires of area residents as well as tourists.

Expansion of recreational opportunities, including the addition of bicycle and walking trails that could be used for cross-country running, skiing, and snowshoeing, would support community health and wellness. Connectivity for residents and visitors between the beach and downtown would be improved through trail expansion, local bus service, and improved beach area parking. Improvement of open spaces would provide areas for arts and cultural programs and community events (festivals, seasonal markets, sandcastle and kite-flying competitions).

Overall, goals for recreation at the City Beach site focused on capitalizing on the city's waterfront location. Needs and desires prioritize improving access to the waterfront while creating accessible recreation and fitness opportunities for all populations, including users of multiple generations and

---

<sup>2</sup>Lake Champlain Basin Program, April 2003. *Opportunities for Action: An Evolving Plan for the Future of the Lake Champlain Basin*. "Chapter 4: Recreation and Cultural Resources." <http://www.lcbp.org/wp-content/uploads/2013/03/Final-April03.pdf>

physical abilities. Improvements to City Beach could expand educational and interpretive opportunities relating to historical, environmental, and cultural resources while also protecting and enhancing the natural and cultural resources of the waterfront. Waterfront enhancements could stimulate economic development and strengthen physical linkages between the waterfront and downtown.

### **City Beach and Crete Center - Opportunities and Constraints**

The City Beach - Crete Center area of Plattsburgh serves as the northern gateway to the city and is bordered by Cumberland Corners and Cumberland Bay State Park. New recreational development should strike a balance between economic development and preservation that will permit beneficial use of and prevent adverse effects on Lake Champlain and the waterfront resources. Development should enhance community character, preserve open space, make efficient use of infrastructure, make beneficial use of waterfront locations, and minimize adverse effects of development.



City Beach Waterfront

#### **Opportunities:**

- The close proximity of City Beach, Cumberland Bay State Park, Point Au Roche State Park, and other nature areas, such as Woodruff Pond, present a concentration of attractions and amenities that could be linked, improved, and better marketed. The City could work with the NYS Office of Parks, Recreation and Historic Preservation, the Town of Plattsburgh, Clinton County, and others to develop long-term recreation plans to maximize and enhance mutual resources.
- The City Beach area already attracts considerable tourism activity from Canada. Stronger linkages could be developed between the beach and downtown, as well as other waterfront and downtown amenities. Marketing and promotion efforts could then build on established linkages.
- The City Beach could be a catalyst for recreational development. Though the reuse or rehabilitation of the Crete Center building, or the relocation its uses, are under evaluation, the City Beach-Crete Center property could include a space for hosting concerts or other outdoor entertainment, other forms of recreation, a restaurant, a pier, interpretive opportunities, or recreational rentals.
- Improved interpretation of the Heritage Trail/Scomotion Creek Wetlands/Dunes cultural and natural resources would further enhance the beach area.

**Constraints:**

- Just to the south of the City Beach site, prior PCB contamination levels within soil, surface water, and fish populations have decreased dramatically, resulting from successful remediation<sup>3</sup> at Georgia Pacific. The DEC has stated that there is no longer an exposure concern, but the potential presence of other toxic paper manufacturing related by-products remains, posing potential health threats in the cove adjacent to the Georgia Pacific lands (at the southern end of the beach and creek area near Wilcox Dock). The Georgia Pacific mill is considered a minor source of emissions for by-products including carbon monoxide, volatile organic compounds (VOCs), lead, and hazardous air pollutants.<sup>4</sup>
- As discussed in the *Site Reconnaissance Report* dated March 2016, and the *Phase I Environmental Site Assessment* report completed in March 2015, there are potentially hazardous materials on the western portion of the site; debris, including tires, drums, appliances, and automobile parts, was observed. From approximately 1930 through the early 1970s, that area was used as a landfill identified as the “city dump” for items such as household appliances and industrial waste. Environmental constraints from the existence of the former landfill may be limiting to development.
- Materials in the Crete Center structure have been found to contain asbestos and the refrigeration system has been found to have contained ammonia (see *Phase I ESA*).
- City Beach may not be fully handicapped accessible.
- As noted during a series of public meetings, ongoing beach erosion and debris deposit poses a continuing maintenance problem in this entire area. This could prevent, or considerably add to the expense of, any future attempt to establish a waterfront trail.
- Private ownership (and erosion) of waterfront land south of City Beach prevents extension of the Heritage Trail and represents potential sources of conflict among owners and users.
- The City Beach area has no strong link with the Central Business District and is quite remote from downtown (see opportunities above).
- Two federal National Wetland Inventory wetlands and one large DEC freshwater wetland exist on site.

**“Alienation” and “Conversion” of Parkland**

The City Beach and Crete Center property is currently established parkland. As design and development efforts advance, it should be kept in mind that changes to the use of the property may invoke legislative procedures. The New York State Office of Parks, Recreation and Historic Preservation (“State Parks”) encourages a “no net loss of parkland” policy, while understanding that,

---

<sup>3</sup> <http://www.dec.ny.gov/cfm/x/etxtapps/derexternal/haz/details.cfm>

<sup>4</sup> <http://www.dec.ny.gov/dardata/boss/afs/permits/509130000400029.pdf>

in certain instances, a municipality may conclude that a change in parkland use may be necessary to advance public purposes.<sup>5</sup> The courts have consistently held that “once land has been dedicated to use as a park, it cannot be diverted for uses other than recreation, in whole or in part, temporarily or permanently, even for another public purpose, without legislative approval.”<sup>5, p7</sup> There are two procedures that may be triggered when a municipality wishes to change the way it uses parkland - parkland “alienation” and parkland “conversion.”

According to the handbook published by State Parks, “alienation” occurs when a municipality wishes to sell, lease, or discontinue municipal parkland. In order to convey parkland to a non-public entity, or to use parkland for another purpose, the municipality must receive prior authorization from the State in the form of legislation enacted by the New York State Legislature and approved by the Governor. The requirements for parkland alienation bills – the bills by which the Legislature grants its authorization – vary depending upon whether or not State dollars have been invested in the municipal park that is being considered for a potential change of use. The restrictions vary and depend largely upon the source of the funding that was provided to the municipality, but include requiring legislative approval at minimum and, in some cases, the provision of substitute lands.

The handbook provides some examples of alienation. The issuance of a revocable license to a profit-making entity for the operation of a park facility such as a café, snack bar, parking, or for a boat rental service which serves park patrons in connection with their use of the park has been determined by the courts *not* to be alienation. However, actions such as “the conveyance, sale, or lease of municipal parkland or recreational facilities to another public or private entity, such as an adjoining property owner, a developer, or a school district, which results in the facility no longer



Existing Snack Bar at City Beach

being used for public park and recreation purposes” are considered to be alienations. Buildings that are consistent with park purposes, such as park maintenance buildings and restroom facilities, have been determined to be acceptable in a park setting. These examples should be kept in mind as the possibility of retail or restaurant development is considered on the park property.

The parkland “conversion” process applies *only* to those municipal parks that have received Federal funds for acquisition or improvement pursuant to either the *Land and Water Conservation Fund* or the *Urban Park and Recreation Recovery Program*. Conversion applies when a municipality wishes to sell or otherwise convey funded parkland to another entity, or if the funded park will cease to be used for

---

<sup>5</sup> Content for this topic excerpted from: New York State Office of Parks, Recreation and Historic Preservation, *Handbook on the Alienation and Conversion of Municipal Parkland in New York*, revised March 2012, <http://nysparks.com/publications/documents/AlienationHandbook.pdf>

public outdoor recreation. Parks with Federal dollars invested are subject to both alienation and conversion procedures; the conversion process is a second layer of review required when a municipality takes an action that will impact a federally funded municipal park. Certain conditions must be met during the conversion process, including the requirement that substitute lands be provided that are of at least equal fair market value, and that these lands offer reasonably equivalent recreational opportunities.

The role of State Parks in these processes is to provide advice and guidance to the municipality, concerned citizens, the Governor, and the Legislature. In cases where State or Federal dollars in the form of a grant have been invested in the municipal park in question, the role is more involved due to the existence of a grant contract between the municipality and State Parks. The grant contracts have certain requirements which must be followed by the municipality. In the case of a conversion, because State Parks administers the Federal funding program on behalf of the National Park Service, State Parks is responsible for enforcing the contractual restrictions that the National Park Service places on its municipal grant recipients.

It should be established as early as possible whether the municipality has received state or federal funding for the park property, and whether any proposed changes in use or developments on the property would invoke procedures relating to alienation or conversion.



### Section III. Best Management Practices

New development at the City Beach site should strike a balance between economic development and preservation that will permit beneficial use of Lake Champlain and other waterfront resources. Expansion of recreation-based resources should consider all site opportunities and challenges. The City of Plattsburgh Local Waterfront Revitalization Program outlines Waterfront Management Policies which consider the economic, environmental, and cultural characteristics of the city's waterfront. These policies reflect existing state laws and authorities and pertain to regional character, economic development, recreation, culture, natural resources, and environmental health. Both the LWRP and these Waterfront Management Policies should be reflected in the improvement of recreational opportunities.

#### *Natural Resources*

Natural resources within and surrounding the Site can pose critical development limitations that could create impracticalities resulting from the associated costs of land preparation, improvements, and/or construction. Recreational uses need to be balanced with the preservation of natural shorelines, habitats, wetlands, and scenic beauty.

#### Stormwater

Since site stormwater flows directly into the lake, and not through a filtration and treatment plant, it is important to employ best management practices to avoid or reduce water quality impairments from upland runoff or in-water activities. Groundwater quality is unknown, but there is potential for residual groundwater and soil contamination resulting from past landfilling activities.

Green infrastructure practices maintain or restore stormwater's natural flow pattern by allowing the water to slowly permeate into the ground and be used by plants. Rather than relying on the existing storm sewer line that serves the existing parking area and Crete Center and extends to the beach, there may be opportunities to incorporate green infrastructure to handle stormwater on-site.



Existing Site Conditions: Southwest of the Crete Center

Given the existing site conditions, achievable practices include preserving or restoring natural areas, such as forests, stream buffers and wetlands, and reducing the size of paved surfaces. Paving should be graded to direct water to planted areas. It may also be possible to disconnect any downspouts for existing structures, and to instead use swales, rain gardens, and bioretention to manage runoff. Locate vegetated bioswales and on-site stormwater devices outside of active recreation areas to achieve stormwater management goals for the park site.

Tree planting can also help to manage stormwater on the site, while also enhancing habitat. For any proposed structures, the possibility of incorporating a green roof into the design should be examined. The feasibility of using porous pavements on site should also be explored, perhaps for parking areas (especially overflow areas) and plaza spaces. Additionally, indigenous plants should be

used as components of landscape design to improve habitat and water quality and to lessen water demand.

In accordance with Waterfront Management Policy 11, best management practices to be utilized to minimize non-point source pollution should reflect State erosion and sediment control regulations and best management practices, and include the following:

- A. Retain as much of the natural vegetation as possible and avoid mass clearing of sites to be developed.
- B. Utilize grading methods which impede vertical runoff and provide maximum runoff infiltration capacity.
- C. Locate large graded areas on the most level portion of the site and avoid the development of steep vegetated slopes.
- D. Conduct grading and clearance activities outside floodplains.
- E. Utilize porous pavements in the construction of parking areas.
- F. Protect inlets to storm sewers by installing suitable filtering devices during construction.
- G. Runoff from parking lots, fueling areas, and large building sites should be collected and detained in sediment basins, oil and grease filtering catch basins, or retention areas to trap pollutants which would otherwise be transported from the site.
- H. Fuel spill prevention emergency response plans shall be prepared and the provision of automatic fuel cut-offs for hoses is mandatory.
- I. Stormwater runoff from parking lots, maintenance, fueling, and wash-down areas must be treated in a manner that prevents oils, grease and detergents from reaching adjacent waters and wetlands. Accepted treatment methods include oil and grease filtering catch basins, retention areas and exfiltration systems.
- J. Trash receptacles shall be plentiful and convenient to encourage the proper disposal of trash and waste.

### Wetlands

Wetland buffers should be protected and development should be kept outside of the area. Regulatory requirements restrict shading from elevated walkways and structures. However, sensitive materials can be chosen and walkways may be designed which meet the regulatory requirements, allowing for the creation of trails with interpretive features through the wetland area. Opportunities can be provided to view the area while limiting direct physical access. Improvements should be limited to restorative actions and minimal construction of manmade elements, with the exception of sensitively placed paths. As discussed in Waterfront Management Policy 6.3, the following measures can further the protection or restoration of wetlands:



- A. Compliance with the statutory and regulatory requirements of the Freshwater Wetlands Act and the Stream Protection Act.
- B. Prevention of the net loss of wetlands by:
  1. Avoiding placement of fill or excavation of wetlands

2. Minimizing adverse impacts resulting from unavoidable fill, excavation or other activities
3. Providing compensatory mitigation for adverse impacts which may result from unavoidable fill, excavation or other activities remaining after all appropriate and practicable minimization has been accomplished
4. Providing and maintaining adequate buffers between wetlands and adjacent or nearby uses and activities in order to ensure protection of the wetlands character, quality, values and functions.

### Flood Zones

Natural shoreline edges, rather than constructed bulkheads, can promote flood mitigation, provide marine habitat, and improve water quality. In the design process, review regulations that control waterfront development, including those of the Department of Environmental Conservation, the New York Department of State, and the US Army Corps of Engineers. Design elements should aim to minimize damage from flooding and erosion, focusing on nonstructural technologies when possible and maximizing the extent of natural resources.

As discussed in Waterfront Management Policy 4, within floodways, as identified by the Federal Emergency Management Act (FEMA), only open space uses will be allowed. Within flood hazard areas, development will be undertaken in accordance with the following guidelines:

- A. All structures shall be designed and anchored to prevent flotation, collapse or lateral movement due to flood water related forces.
- B. All construction materials and utility equipment used shall be resistant to flood damage.
- C. Construction practices and methods shall be employed which minimize potential flood damage.
- D. All public utilities and facilities shall be located and constructed to minimize or eliminate potential flood damage.
- E. Adequate drainage shall be provided to reduce exposure to flood hazards.
- F. All water supply and sewage disposal systems shall be designed to minimize or eliminate flood water infiltration or discharges into the flood waters.
- G. All new residential construction or substantial improvements to residential structures shall have the lowest floor (including basement) elevated to at least two (2) feet above the base flood elevation of the one hundred (100) year flood.
- H. All new non-residential construction or substantial improvements to such non-residential structures shall have the lowest floor (including basement) elevated to at least two (2) feet above the water level of the one hundred (100) year flood or, as an alternative, be flood-proofed up to that same water level, including attendant utility and sanitary facilities.
- I. No use shall be permitted, including fill, dredging or excavation activity, unless the applicant has demonstrated that the proposed use, in combination with all other existing or anticipated uses, will not raise the water level of the one hundred (100) year flood more than one (1) foot at any point.
- J. Comply with the provisions of any municipal erosion management plan, consistent with the provisions of this policy.

As stated in Waterfront Management Policy 11, dredging often proves to be essential for waterfront revitalization and development, maintaining navigation channels at sufficient depths, pollutant

removal, and meeting other coastal management needs. Such dredging projects, however, may adversely affect water quality, fish and wildlife habitats, wetlands and other important resources. Often, these adverse effects can be minimized through careful design and timing of the dredging operation and proper siting of the dredge spoil disposal site. Dredging permits will be granted if it has been satisfactorily demonstrated that these anticipated adverse effects have been reduced to levels which satisfy State dredging permit standards set forth in regulations developed pursuant to the Environmental Conservation Law (Articles 15, 24, 25 and 34).

The future siting and/or expansion of marina facilities within the City may also necessitate dredging. In this regard, such facilities shall be located in areas where minimal maintenance dredging will be necessary. In addition, dredging which would impact identified wetlands should be avoided so as not to degrade these sensitive environmental resources.

#### Fish and Wildlife Habitat Areas

To support the natural landscape and ecological functions of the site, efforts should be made to incorporate natural vegetation, habitat, and support for wildlife. Disturbance or fragmentation of habitat should be avoided, and habitat areas should be established where human use is compatible or low. Vegetation should be planted that is both consistent with the site and that provides shelter and food for wildlife. A diverse plant palette provides greater visual interest as well as greater resilience to infestation and disease. Native or adapted species should be used where appropriate.



#### Dunes and Soils

In the interest of protecting the dunes, hard surfaces, including bike trails and boardwalks, should be minimized in the area to avoid dissecting or disturbing them.

In accordance with Waterfront Management Policy 9.3, it is important that any recreational or general access projects proposed in these areas are designed to be compatible with the ecological considerations on the site. The following guidelines are intended to be considered in the identification and design of such recreation facilities:

- A. Provide appropriate access and associated recreational activity that will avoid potential adverse impacts on natural resources. Use the following factors in determining the potential for adverse environmental effects:
  1. Intensity of the associated recreational, scientific, or educational activity
  2. Level of likely disturbance associated with the proposed activity. The following types of access or associated activities are listed in decreasing order of potential for disturbance: motorized activities; active, non-motorized activities, including water-dependent and water-related uses; passive activities; and avoidance of the area.
  3. Sensitivity of the natural resources involved and the extent of the ecological benefits associated with avoidance of the area.
- B. Limit public access and recreational activities where uncontrolled public use would lead to impairment of natural resources.

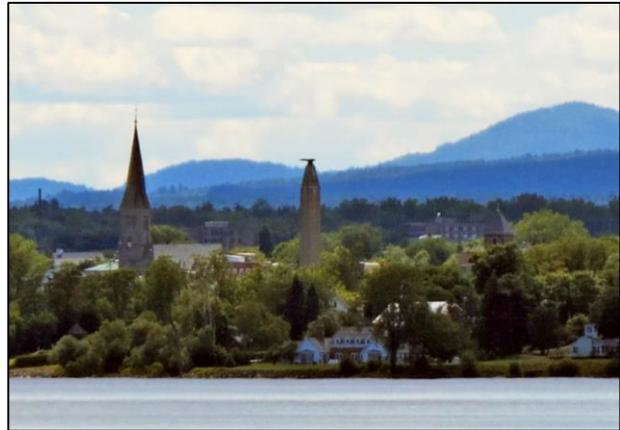
1. Establish appropriate seasonal limitations on access and recreation in order to minimize adverse impacts on fish and wildlife species.
  2. Provide stewardship which is capable of controlling anticipated adverse impacts before providing public access.
  3. Physically limit or avoid provision of public access to natural resource areas whose principal values are based on the lack of human disturbance, such as the escarpment in the south portion of the LWRP lake coast area.
  4. Provide educational, interpretive, research, and passive uses of natural resources through appropriate design and control of public access and recreation.
- C. Provide public access for fish and wildlife resource related activities, including fishing, provided that the level of access would not result in a loss of resources necessary to continue supporting these uses.
- D. Provide access using methods and structures which maintain and protect open space areas associated with natural resources. Determine the extent of visual and physical impairment by structures extending through these open space areas based on:
1. The value of the open space as indicated by continuous size or mass of the wetland or other natural resources, distance to navigable water, and wetland value, and
  2. The size, length, and design of proposed structures.

### *Community and Cultural Resources*

Recreational development should enhance community character, preserve open space, make beneficial use of waterfront locations, and minimize adverse effects of development.

#### Scenic Resources and Views:

The City of Plattsburgh has prominent views of Lake Champlain, the Adirondack Mountains, and the Green Mountains, all of which are visible from City Beach. The impact of built elements on viewsheds should be minimized, and tree plantings should preserve existing view corridors.



The City should also work to improve interpretive access at key viewpoints, providing appropriate signage and information such as descriptions of Revolutionary War and War of 1812 naval battles, explanations of wetlands, other microclimates and geological features, and the city's commercial and industrial development.

#### Historic and Cultural Resources

Community identity should be reinforced by highlighting local history and important natural and manmade features. Waterfront Management Policy 2.2 discusses ways to protect and preserve archaeological resources in Plattsburgh's waterfront area. Policy 2.3 explores strategies to protect and enhance resources that are significant to the culture of Plattsburgh and Cumberland Bay.

#### Policy 2.2:

- A. Conduct a cultural resource investigation when an action is proposed on an archaeological site, fossil bed, or in an area identified for potential archaeological sensitivity on the

archaeological resources inventory maps prepared by the New York State Department of Education.

1. Conduct a site survey to determine the presence or absence of cultural resources in the project's potential impact area.
  2. If cultural resources are discovered as a result of the initial survey, conduct a detailed evaluation of the cultural resource to provide adequate data to allow a determination of the resource's archaeological significance.
- B. If impacts are anticipated on a significant archaeological resource, minimize potential adverse impacts by redesigning the project, reducing direct impacts on the resource, and recovering data prior to construction
- C. Avoid disturbance or adverse effects on any object of archaeological or paleontological interest situated on or under lands owned by the State of New York. These resources may not be appropriated for private use.

Policy 2.3:

- A. Protect historic shipwrecks and shipwrecks to which the state holds title. Numerous colonial era to modern-day shipwrecks lie in the waters of Lake Champlain. While the location of many of these ships is well documented, more research remains to be done to identify and protect these historic and recreational resources as significant components of the culture of the state. Historic shipwrecks are those wrecks which, by reason of their antiquity or their historic, architectural, archaeological, or cultural value, have state or national importance and are eligible for inclusion on the State or National Register of Historic Places. The state holds title to all shipwrecks determined to be abandoned under the Abandoned Shipwrecks Act of 1987.
1. Provide for the long-term protection of historic shipwrecks through the least degree of intervention. The least degree of intervention can be achieved by preserving historic shipwrecks in place. When preservation is not feasible, record and recover shipwrecks or their artifacts.
  2. Manage shipwrecks to provide for public appreciation, use, and benefit.
  3. Avoid disturbance to shipwrecks unless the shipwreck: poses a navigation hazard; or, would impede efforts to restore natural resource values.
  4. Prevent unauthorized collection of shipwreck artifacts and associated direct or cumulative impacts.
  5. Maintain the natural resource values that are associated with shipwreck sites which may be sensitive to disturbance.

### *Environmental Constraints*

#### Hazardous Materials

Environmental constraints from the existence of the former landfill may be limiting to development if complete remediation of impacted soils and materials is not economically feasible. Additionally, if the Crete Center is razed, care should be taken during demolition, as materials in the structure have been found to contain asbestos, and the refrigeration system has been found to have contained ammonia (see *Phase I ESA*).

In the event that limited mitigation is the selected path toward site reuse, limited removal and capping of impacted areas – previously determined by investigative invasive site assessment techniques (Phase II Environmental Site Assessment) – will be necessary, depending on the planned

footprint for reuse of the site. In areas believed to have residual contamination, site excavation should be limited. Contaminated soil that is removed or displaced should be segregated and managed accordingly. Careful consideration should be given to locating park features so as to offset site contamination or structural issues. For containment, necessary impervious features, such as parking lots and play courts, could be placed over non-hazardous (but contaminated) soils. A vegetated buffer could be used to filter surface water runoff from uncapped waste areas and control contaminants from entering adjacent water bodies. Interpretive signage can be used as an educational feature to describe the site's history, remediation, and conversion to a park.

### *Conclusion*

Overall, potential development should reflect the goals of the Local Waterfront Revitalization Program and be consistent with the City of Plattsburgh Waterfront Management Policies, which are included as an Appendix to the 2016 Preliminary Draft Local Waterfront Revitalization Program. The policies are the basis for consistency determinations made by state and federal reviewers for actions affecting the City of Plattsburgh waterfront and Lake Champlain Basin and as a guide for development of new Local Waterfront Revitalization Programs and revisions to approved Local Waterfront Revitalization Programs. Development should also reflect City of Plattsburgh Zoning and other regulations, state and local codes, and guidelines from relevant regulatory authorities. The design guidelines in the following section can help to ensure compatibility of any improvements.



## **Section IV. Design Standards and Guidelines – Parks and Recreation**

In conjunction with City zoning regulations and the guidelines set out by the Waterfront Overlay District, the Local Waterfront Revitalization Program, and the LWRP Waterfront Management Policies, design guidelines can serve as a reference which will help to ensure visual and overall compatibility of new development with existing character, while preserving unique features.

### **Design Intent**

Design guidelines for parks and recreation spaces are intended to reinforce open space and recreational use, while encouraging compatible complimentary development as is suitable. The overall goals are as follows:

- Incorporate recreational activities, public access, open space, or amenities, to enhance the site and the surrounding community, and to increase visual and physical access to the waterfront.
- Maintain natural habitat space (wetlands, dunes, woodland, open space, streamside).
- Encourage new development to be sensitive to the environmental context.
- Ensure development is compatible in scale and character with the waterfront.
- Improve the pedestrian environment, incorporating universal access where feasible.
- Promote public spaces for formal and informal gatherings.
- Encourage and maintain vistas and establish points of interest.
- Maintain and encourage a specific sense of place for the natural and active waterfront areas.
- Plan for use during different times and seasons.
- Create recreation and fitness opportunities for all populations. Design parks with flexible spaces that can accommodate a variety of users and changes in use.

### **Design Guidelines**

Design guidelines provide descriptions of design features that may be allowed. They may specify a size, type, color, location, and other relevant specifications for a design feature and may include a range of choices or recommendations. Overall, development and design should be consistent with the Guidelines for Review, contained in §270-36 of the City of Plattsburgh Code, reflect the City of Plattsburgh Local Waterfront Revitalization Program Waterfront Management Policies, and should also conform to Article VIII: Flood Hazard Areas (§270-44 of City Code). Care and consideration should be given to the use of each space, the relationship between activities, and possible future expansion within a park.

#### **A) Built Elements**

- 1) Architectural style and detail
  - a) Traditional materials used within the city include brick, stone, and wood rather than steel, vinyl, or imitation stone.
  - b) The design of structures and park elements shall implement unifying architectural features in these elements throughout the space. For example, downtown buildings are characterized by a variety of surface textures, pedestrian scale detailing, and elements such as bay windows, balconies, recessed street-level entrances, and awnings.
  - c) Building design should be encouraged on all facades, avoiding blank walls and including rear facades exposed to view.

2) Recreational Facilities

- a) Designs should encourage activity for all ages, user groups, and ability levels. Elements should include both active and passive components.
- b) 2001 City Code §270-22.B. *Commercial outdoor recreation facilities* states:
  - (i) Such uses include golf courses, ice-skating rinks, amusement parks, beach swimming facilities, swimming pools, tennis courts, and similar facilities.
  - (ii) In any district where permitted, no building shall be located within fifty feet of any property line.
  - (iii) In any district where permitted, there may be permitted retail sales which are clearly secondary to the principal use.
  - (iv) Unenclosed recreational facilities shall be located not less than twenty-five feet from any property line, except where greater distances are otherwise required herein, and shall be effectively screened from adjoining residential uses in accordance with the provisions of Sec 270-19 of this chapter.
  - (v) Illuminated signs and other lights shall be directed away or shielded from adjoining residential properties in such a way as not to disturb the residents thereof.
  - (vi) No public address system shall be permitted, except where such system is inaudible at any property line.
  - (vii) All commercial outdoor recreational facilities shall not occupy a lot or parcel of less than twenty thousand square feet, and such lot or parcel shall not be less than one hundred twenty feet in width nor less than one hundred fifty feet in depth.
  - (viii) All commercial outdoor recreational facilities shall provide suitable off-street parking facilities in accordance with §270-25 of this chapter.

3) Building mass and siting

a) Area and Bulk Controls

- (i) 2001 City Zoning classifies the property under RC-1 (Recreation), and Local Law 7 of the year 2005 lists updates to Schedule II: Schedule of Area and Bulk Controls. Plattsburgh City Code also contains the following table (Schedule IV) of Area and Bulk Controls for the Waterfront Overlay District, within which the City Beach and Crete Center fall:

RC-1 Use	Min. Lot Size Requirements				Min. Yard Requirements			Max. Bldg. Ht.		Min. % Open Space
	Area (SF)	Area per dwelling unit (SF)	Width (ft)	Depth (ft)	Front (ft)	Side one/Both (ft)	Rear (ft)	Feet/stories	Coverage (%)	
Permitted Residential Uses	10,000	Current formula or 2,000	100	100	12	2 1/2/30	10	35/2.5	40	40
Other permitted uses	10,000	N/A	100	100	12	1 1/2/30	10	35/2.5	40	40

- (1) 20% of setback can be used for parking
- (2) No parking allowed in setback.

\*\*Note: Proposed modifications to the Area and Bulk Controls for the Waterfront Overlay District were provided in the Draft LWRP.

b) Facility siting

- (i) Physical access and compatibility of adjacent uses should be considered for buildings, as well as for other park and recreational functions. Placement should prioritize safety, compatibility, privacy, minimization of noise conflicts, and ease of operations.
- (ii) Facilities that draw the largest number of users should be sited within view of transportation routes to encourage alternative modes of travel.
- (iii) All structures shall be sited to recognize, preserve and protect established major vistas.
- (iv) When locating a new park structure, consideration shall be given to site variables (size, shape, topography, orientation, views, and natural features) and climatic variables.
- (v) Restroom buildings should be visible and in close proximity to parking areas, children's play areas, active recreation areas, and event spaces.

**B) Site Coverage and Open Space**

- 1) As listed in the above Schedule IV, maximum building coverage should not exceed 40%.
- 2) As listed in Schedule IV, minimum open space should be 40% of lot area for Recreation 1 (RC-1) use spaces.
- 3) According to 2001 zoning regulations, parking is not included as open space, and areas “paved or otherwise covered and used as uncovered patios, swimming pools, tennis courts, or similar recreation-oriented uses may be included as open space, provided that such uses do not comprise more than one-third of the required open space.”

**C) Circulation**

1) Pedestrian

- a) Locate primary and secondary paths to minimize environmental impacts on the site.
- b) Walkway, trails, sidewalk, and waterfront esplanade widths should be comfortable and proportional to a hierarchy of use. Primary circulation should be at least 8' (10' preferred) in width. Secondary paths could be narrower in width (eg. 6').
- c) Walkways, sidewalks, and esplanades should provide for universal access to points of interest to the extent feasible. Ensure that sidewalks within and providing access to parks have curb cuts.
- d) Provide a safe and accessible route for pedestrians, separating vehicular and pedestrian entrances. Provide crosswalks at points of pedestrian-vehicular intersection.
- e) Include visible markers to identify park walkways or trails. Paved pathways should direct users to areas within the park as well as to adjacent trails, greenways, streets and sidewalks.
- f) Provide ample paving around building perimeters for ease of access and entry.

2) Vehicular

a) Roadway types and widths

- (i) Ensure that a vehicular-width route through the space is maintained to allow for emergency and service vehicle access (minimum 10' for maintenance

- vehicles, consistent with fire code for emergency vehicles), with appropriate turning radius dimensions.
      - (ii) Vehicular access paths should be provided to large event spaces, buildings, sports fields, accessory buildings (such as concession stands), and to trash/recycling enclosures.
      - (iii) Roadways should be designed to control vehicular speed through the park. Provide traffic calming solutions in appropriate areas, such as texture paving, circles or roundabouts, curb extensions, or speed bumps.
    - b) Parking
      - (i) Provide parking lots that service and support park facilities without bisecting or segmenting the park site. Locate parking in close proximity to major activity areas.
      - (ii) City of Plattsburgh off-street parking design standards call for 9 by 18 foot parking spaces with 26 foot aisles for perpendicular parking (§270-25.C.).
      - (iii) Provide vegetated screening or visual barriers to prevent vehicle headlights from shining into adjacent properties.
      - (iv) Provide trees, shrubs, and ground cover at suitable intervals in order to break up the continuity of the parking area.
      - (v) Large impervious surfaces increase stormwater runoff, concentrate nonpoint source pollutants, can prompt soil erosion, and contribute to the urban heat island effect. These should be minimized and semipermeable or permeable incorporated where possible.
    - c) View obstruction
      - (i) City zoning regulations stipulate that there shall be no obstruction to vision exceeding 30" in height above established grade of the street at the property line within 30' of a street intersection.
      - (ii) Views of the waterfront not only enhance the character of Plattsburgh, but increase property values for properties near, but not on, the waterfront, thereby encouraging economic growth. Waterfront Management Policy 9.2 provides guidance regarding visual access at the waterfront.
  - 3) Other
    - a) Accommodate non-pedestrian uses (bicyclists, etc) if appropriate, widening or separating pathways and trails as necessary for various user groups. Avoid creating areas of bicycle and pedestrian conflict. When bicycles are mixed with pedestrians, increase sightlines at potential points of conflict such as intersections and entrances
    - b) Bicycle and shared-used paths should be clearly marked and, where possible, separated from vehicular travel.
    - c) Provide connections to existing paths surrounding the park. Look for opportunities to make connections to adjacent neighborhoods. Connect parks to bike routes to expand those routes, and provide easy access to parks, as well as opportunities for recreation by bicycle commuters.

#### **D) Site Furnishings**

- 1) Bulkheads and railings
  - a) Limit shoreline alteration and surface water coverage. Natural shoreline edges, rather than constructed bulkheads, can promote flood mitigation, provide marine

habitat, and improve water quality.

- b) According to City of Plattsburgh Code §270-28. F, retaining walls are permitted, provided that the vertical height not exceed three feet, and, if greater height is required, the wall be terraced with a minimum of three feet of horizontal surface for each three feet of vertical rise, otherwise a special use permit and four-foot-high fence and screening shall be required.
- c) According to City of Plattsburgh Code §270-28. G, walls and fences for security, privacy, or screening shall be permitted in RC-1 zones, provided that they meet clearance requirements, are no higher than four feet when located in the front yard or setback from a street right of way, and are not higher than eight feet when in a rear or side yard.

## 2) Signs

- a) Provide a highly visible and distinct park entry marker or gateway to create a sense of transition and arrival to the destination.
- b) Provide directional signage from the street to main buildings and destination points. Provide smaller-scale directional signage for path and trail connections.
- c) Park identification, information, and regulatory signage should be uniform in design and compliment the overall park vocabulary.
- d) Do not permit signs that obstruct vision or distract motorists and other street and sidewalk users. (§270-26.A.1)
- e) Encourage integration of signage with architectural and landscape designs so the overall appearance is harmonious in color, form, and proportion. (§270-26.A.2)
- f) Prevent the placement of signs that obscure the public view of other properties and landscapes. (§270-26.A.2)
- g) In the RC-1 zone, only one static digital sign is allowed per lot, at a maximum size of 100 square feet. Similarly, only one programmed changing digital sign of 50 square feet is allowed per lot, and only one automated or interactive changing digital sign of a maximum of 2 square feet is allowed (per business). (§270-26, Table A)

## 3) Other amenities

- a) Landscaping
  - (i) Vegetation and variations in elevation can create visual interest, perspective, and linkages between spaces. Landscaping can be used to buffer and screen parking, loading, and other vehicular features of the site, as well as to filter noise and light and soften architecture.
  - (ii) Create landscape designs that provide surveillance, especially in proximity to points of entry, maximize visibility between spaces, and foster positive social interaction.
  - (iii) Street tree plantings should be composed of a mix of deciduous shade trees, evergreen trees, and flowering trees, incorporating native species. Large existing trees should be protected. Canopy trees should be incorporated along paved paths and parking to provide shade, reduce heat, and minimize glare.
  - (iv) Shrubs should be selected and located with consideration for their mature size and function.
  - (v) Turf areas shall be graded at a slope that allows for easy mowing.

- (vi) Care should be taken to ensure that sight lines are clear near roadways and intersections, and that there are enough visual openings along trails to provide a sense of security.
  - (vii) Passive, open play spaces should remain unobstructed by trees within, but should locate shade trees near the perimeter.
  - (viii) Landscape designs must be sensitive and appropriate for the project site to minimize disruption to existing plant habitats.
  - (ix) Naturally occurring landscape features are desirable design that enhance the natural character of the site and should be protected if they are existing.
  - (x) Reduce landscape irrigation to the minimum, for establishment periods and high use turf areas. Prioritize use of systems that reuse stormwater and greywater.
- b) Benches
- (i) Benches or other seating, some shaded, should be provided at the park entry, along the waterfront, along plaza and gathering areas, at points of interest and recreation areas, and at intervals along trails and pathways. Seating locations should offer places of rest, occasions to experience views, and socialization opportunities.
  - (ii) Bench design should be consistent with the waterfront and park vocabulary.
  - (iii) Benches shall be located adjacent to the path of travel but should not impede circulation.
  - (iv) In addition to ADA accessible seating, provide options with age-friendly design (full back support and armrests).
  - (v) Seating should be made from a material that is comfortable both in winter and the heat of summer while being able to withstand vandalism.
- c) Lighting
- (i) Light pollution should be reduced or eliminated. Fixtures should be dark skies compliant. Use shielded or cut-off fixtures to control glare.
  - (ii) Include fixtures for roadway safety as well as pedestrian-scaled post and bollard lighting along pathways, within plazas, and at points of interest.
  - (iii) Building lighting should be provided to avoid dark corners and to clearly designate entrances and exits. Ensure potential problem areas are well-lit: pathways, stairs, parking areas, kiosks, bus stops, children's play areas, recreation areas, storage areas, dumpster and recycling areas, etc.
  - (iv) Avoid fixture placement which creates glare or blind-spots or leaves large areas in shadow.
- d) Bicycle racks should be provided at buildings, gathering areas, and destination points within the park which are accessible from vehicular roadways or bicycle paths.
- e) Trash receptacles should be provided at trailheads, along the beach, near building entrances, as well as at points of interest within the park.
- f) Additional amenities, such as drinking fountains, barbeque grills, shelters, and information kiosks, should be consistent in character with the vocabulary of other items within the park.
- g) All park furnishings should be securely anchored to paving or installed in footings.

## **Section V. Enhancement of the City Beach and Crete Center**

The cornerstone of successful waterfront revitalization is attractive, safe, and inviting public access; without public access, the water's edge could be cut off, private, or lack the single ingredient absolutely necessary for revitalization— people. Additionally, without a comprehensive plan for the entire City of Plattsburgh waterfront, access that is gained is likely to be haphazard, unconnected and underutilized and will not maximize the true potential of this unique resource.

Successful public access has the following characteristics<sup>6</sup>:

- It invites public use by virtue of its recognizably public design characteristics.
- It permits the public to walk, jog and bike along the water's edge, while minimizing conflicts among types of users.
- It connects the downtown to the waterfront at points where the Central Business District and other City neighborhoods front the Lake and River.
- It provides a variety of pedestrian experiences by using changes in width, elevation, orientation, plantings and surface treatment.
- It establishes or preserves visual connections to the waterfront from upland sites and streets.
- It allows boaters access to and from the water and a secure place to temporarily leave their boats.
- It respects people's basic needs by providing comfortable street furniture; clean, safe restrooms; and shelter from rain.
- It sparks visitors' curiosity through interpretive markers and signs explaining the waterfront's role in history, its contemporary industries, natural environment and wildlife, and other intrinsically interesting stories.
- By its design, it guards the privacy and security of adjacent residences and protects people from hazardous waterfront industrial sites.
- It respects the needs of children, the elderly, and the disabled.

Revitalizing the waterfront depends on identifying and conserving existing assets and amenities and recognizing opportunities for the creation of a wide range of additional features. The revitalized Plattsburgh waterfront should be pleasant and welcoming to all ages and ability levels of people, offer a wide variety of activities, and be varied in use and activity concentration. However, land and water uses are not expected to depart drastically from existing patterns; proposed uses and projects are predominantly refinements of existing patterns that provide amenities appropriate to the intended level of use.

---

<sup>6</sup> Good, J.W., and R.F. Goodwin, Waterfront Revitalization for Small Cities, Corvallis, OR: Oregon State University Extension Service, May 1992.

### ***Proposed Water Uses and Harbor Management Plan***

In an effort to make optimum use of the city's waterfront location, to make the waterfront more accessible, and to stimulate economic development in the waterfront and downtown, Plattsburgh should encourage development of water-dependent and water-enhanced uses. The City of Plattsburgh recognizes the need to manage the shoreline area of Lake Champlain, including its surface waters, and has integrated a Harbor Management Plan within its Local Waterfront Revitalization Plan. A Harbor Management Plan addresses conflict, congestion, and competition for space in the community's surface waters and underwater lands. It provides the opportunity to identify various alternatives for the optimum use of the waterfront and adjacent water surfaces. The City also recognizes the need to provide improved facilities and access for recreational uses such as fishing and non-motorized boating.

### ***Proposed Land Uses***

Based on the description of existing land and water uses and analysis of opportunities and constraints, recommendations are made for proposed land and water uses. The proposed projects primarily represent refinements or expansions of existing uses and development patterns and are expected to enhance existing natural, recreational, and scenic assets.

The City has successfully completed several projects in this area, including an Environmental Quality Bond Act (EQBA)-funded extension of the Heritage Trail. In addition, the City has encouraged and assisted in the rehabilitation of deteriorated buildings. The Karen Fleury Bike Path, which runs along Route 9 from City Beach to Scotion Creek, was dedicated in 2002. In 2014, the North Margaret Street Road Diet project added bike lanes from Boynton Avenue to the Karen Fleury Path and Heritage Trail. Additional bicycle lanes have been developed along Cumberland Avenue.

The City Beach property contains extensive waterfront area and provides public access to Lake Champlain. Existing water uses are predominantly recreational and include fishing, swimming, and boating. The following proposed projects and uses would maintain and strengthen these uses:

- City Beach water-related recreation improvements: piers and docking, flexible open space, performance/event space, possible new buildings, historic interpretation, wetland trails, renovated bathhouse and concessions, pavilions, boater services
- City Beach - natural environmental improvements including dune and habitat protection and restoration, trail improvements (wetland boardwalk, interpretive signage), and flood protection;
- City Beach – Given recent impacts on water quality resulting from runoff and flooding, a water quality study should be undertaken to explore causes and contributing factors, as well as potential solutions to water quality issues;
- City Beach enhancements – remediation of former landfill site;
- From Scotion Creek to end of the City Beach, additional beach monitoring and cleanup should be carried out;
- Improve interpretation of the Scotion Creek wetlands and dunes area with additional signage and recreational programming (such as self-guided nature walks). Provide pedestrian access to the creek waterfront as well as a hand launch; and

- Improve connectivity toward Wilcox Dock and Downtown. Construct a Cumberland Bay trail connecting the interpretive trail proposed for Scotion Creek and the Wilcox Dock site. The streetscape could be improved near the “northern gateway” Route 9 - Route 314 intersection and along North Margaret Street, incorporating additional complete streets elements to build upon the recent bicycle lane construction, façade improvements, and additional commercial, mixed-use, or hotel elements.

### **Opportunities for Regional Coordination**

#### *Cumberland Corners, Crete Center, and City Beach*

Cumberland Corners is an important recreational and economic development resource for both the Town and the City of Plattsburgh as well as the entire Clinton County region and, therefore, offers significant opportunities for regional coordination and cooperation. The Cumberland Corners area was once a thriving regional retail center; currently, the area has several underutilized properties.

The City of Plattsburgh’s Beach and Crete Memorial Civic Center are key components of Cumberland Corners. The Crete Center is an important regional facility utilized by residents of the City and Town, as well as surrounding communities. It was originally constructed in the 1970s to house an ice rink, and currently functions as an indoor turf soccer facility as well as an auditorium, with a seating capacity of 3,500-4,000. The planning process for the future of the Plattsburgh’s waterfront has highlighted the need to invest in either significant repairs or replacement of the aging Crete Center. It was evaluated in 2015 in terms of its existing mechanical, electrical, plumbing and structural systems, and in relation to possible rehabilitation, redevelopment, or reconstruction in the *Crete Center Assessment Report*.

Located adjacent to the City Beach, in the Town of Plattsburgh, Cumberland Bay State Park has a beach, picnic areas, playgrounds, and playing fields and provides facilities for camping. Together, the sites in this area offer many recreational opportunities for residents and visitors. They also offer an opportunity to provide complementary facilities and programs through coordination between the City, Town, County, and State.

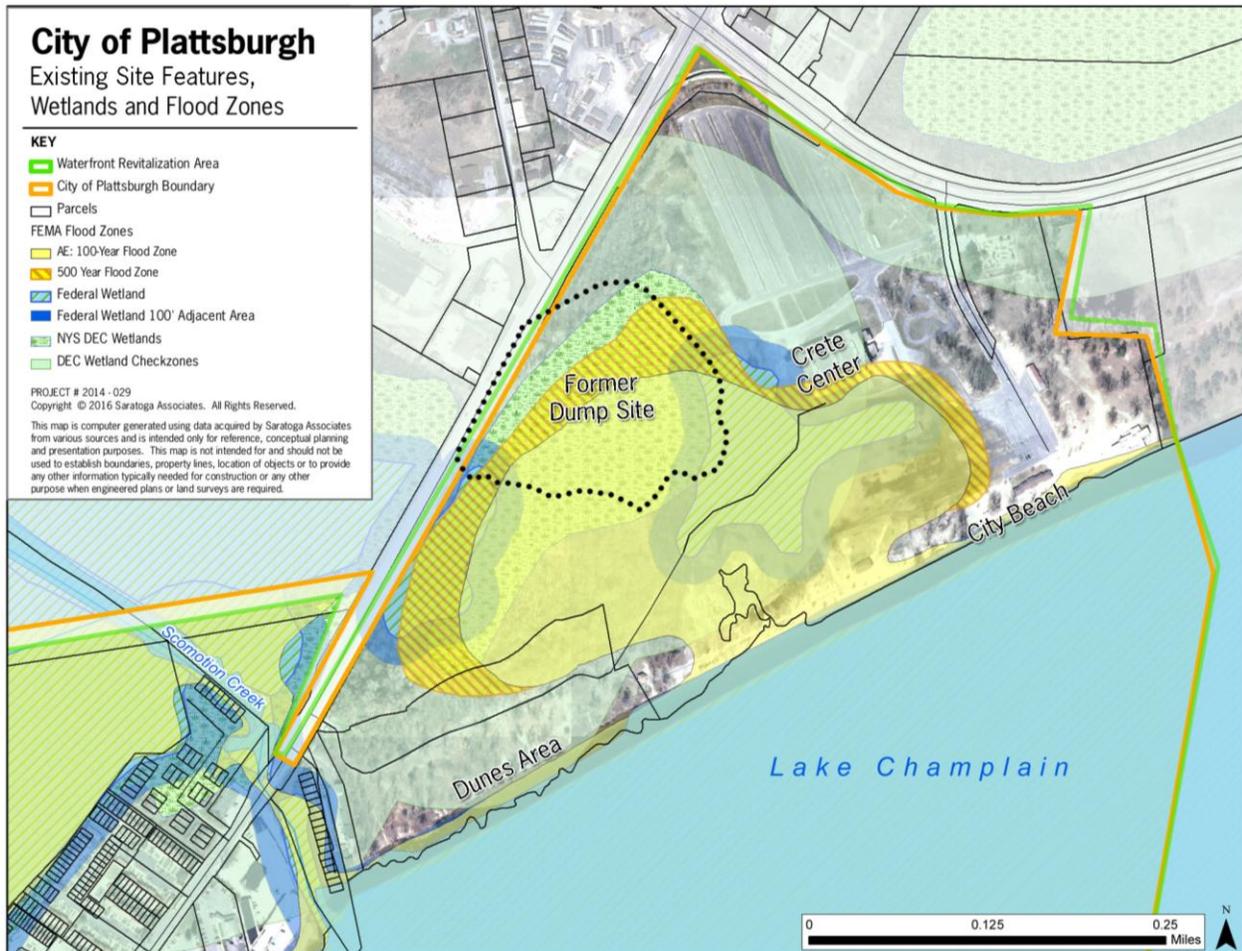
Relocating regional recreation to a new regional facility offers an opportunity for the City, Town, and County to address regional recreation needs and make improvements to the City Beach site that could catalyze commercial sector redevelopment activities in the area. Several sites in the Cumberland Corners/Route 9 corridor have potential as locations for a regional recreational center.

### City Beach and Crete Center – Conceptual Plans

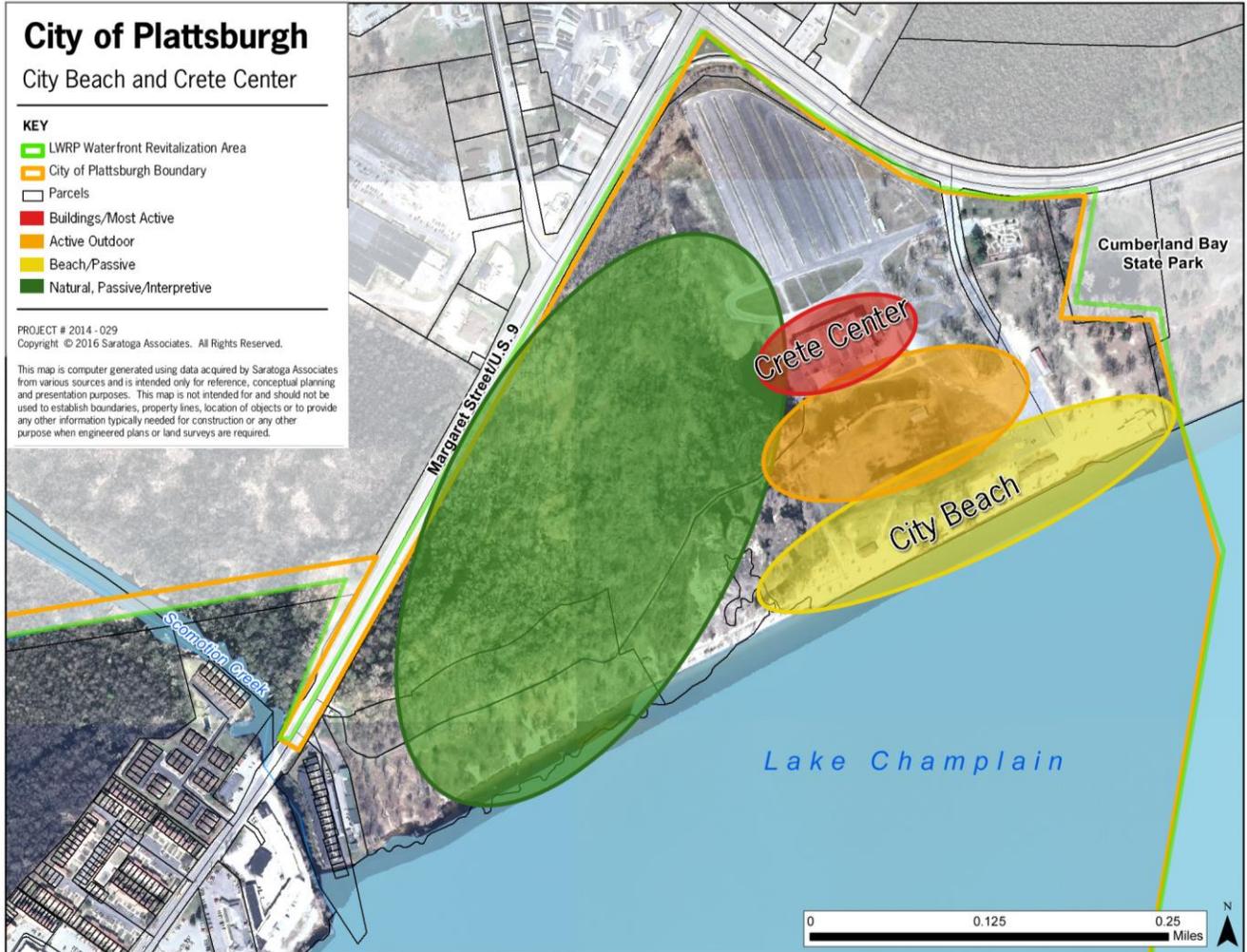
The City Beach site presents an opportunity to enhance the interconnection of Plattsburgh’s economy and its waterfront. The City can capitalize on its unique assets by increasing public access to Lake Champlain, accommodating a variety of recreational resources, and ensuring that any new development respects natural, cultural, and historic resources.

Various previous planning efforts that centered on the City Beach site have looked to interpret the Battles of Valcour and Plattsburgh, while also providing trails and recreational opportunities and incorporating uses such as waterfront retail, hotel accommodations, and restaurants.

The objective in the following concepts was to design enhanced recreational development to highlight existing resources, such as local history and important natural and man-made features, to reinforce community identity—to design features as a focus for activity that draws people to the waterfront and use site design to link the waterfront to upland portions of the community. The concept focus was to protect this unique regional waterfront setting for appropriate enhancement and development of community resources. The three alternatives explored were: maintain existing patterns of use and development; focus on rehabilitation of existing features with the additional of complementary uses; and develop a new center for both passive and active recreation, with diverse activities.



**Existing Site Features, Wetlands, and Flood Zones**



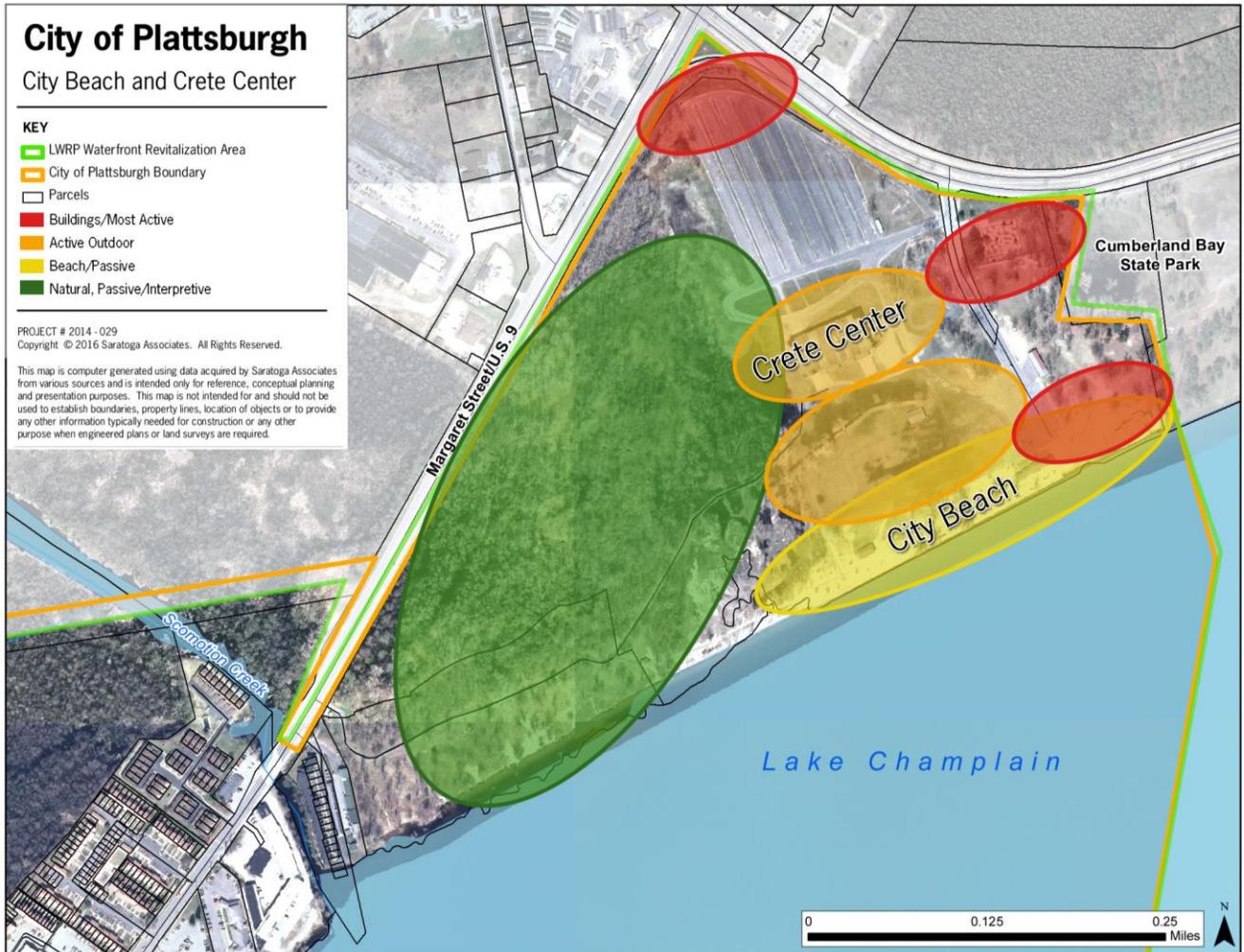
### Concept 1 – Maintain Existing Uses

The first concept would maintain existing patterns of use and development. The Crete Center would remain, and continue to be used for active recreation and events. The *Crete Center Assessment Report*, which provides an overview of the results of the building surveys conducted concurrently with the LWRP process, examined the existing mechanical, electrical, plumbing, and structural systems, evaluated options for rehabilitation, redevelopment, and reconstruction of the Crete Center, and provided cost estimates for repairs to deficiencies and for demolition. While there were no serious structural obstacles to renovation, recommendations were made for renovations to the existing mechanical, electrical, and plumbing systems, as well as to the leaking roof, should the building be renovated for continued use.

The western portion of the site could remain natural and provide environmental and historical interpretation along passive trails. These could be sensitively designed to have minimal impact upon the dune and wetland areas.

The City Beach would remain as it is currently developed. The closed bathhouse building could be repaired and reopened for a complementary use, and the concessions building would be maintained.

Concept one provides a low-cost option, where all existing programming is maintained, and there are minimal impacts to the site.



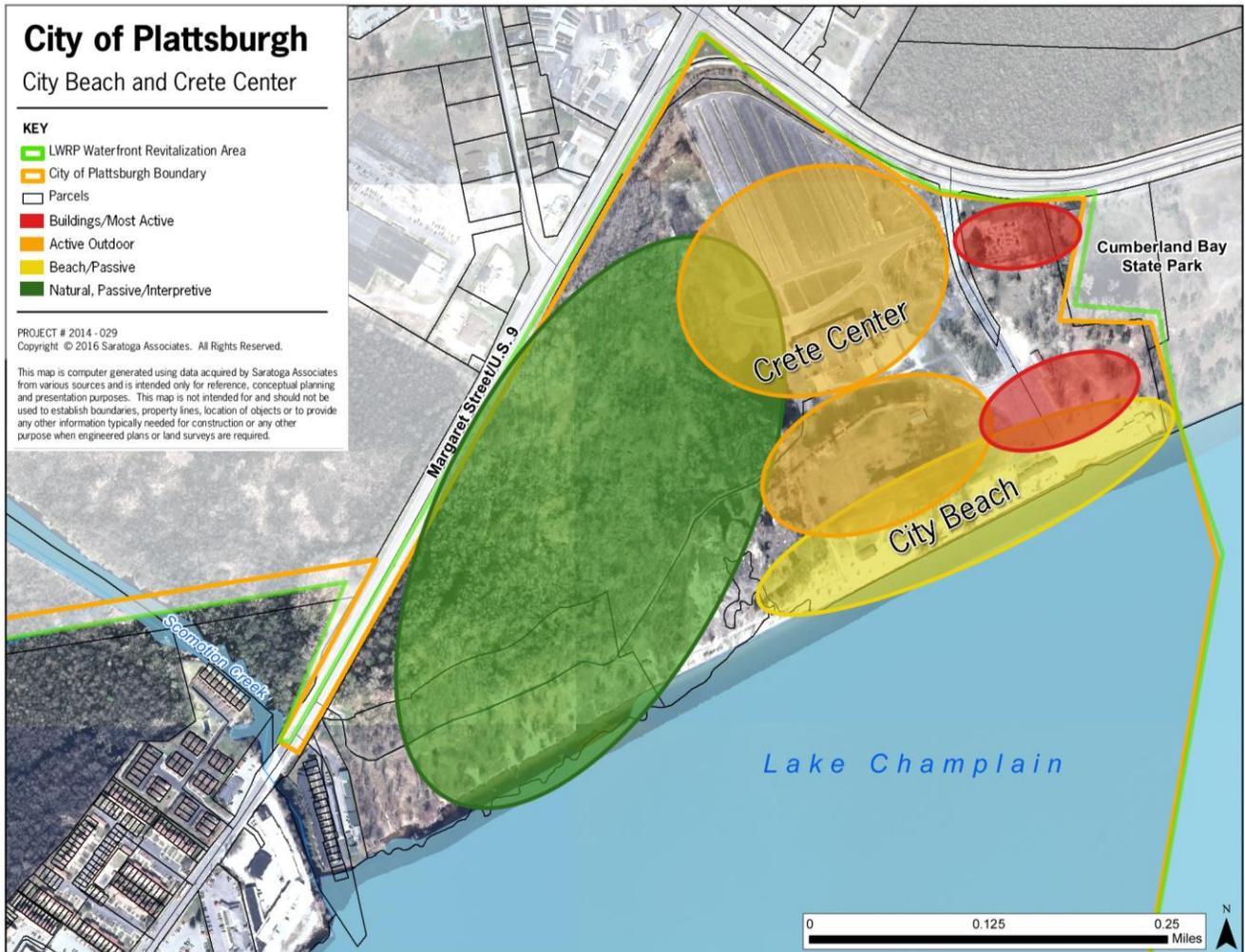
### **Concept 2 – Mixed Recreational Development**

The second concept would provide a mix of recreation and complementary development. The Crete Center would be rehabilitated (mechanical, electrical, plumbing, structural) and reused. In order to balance the commercial development at Cumberland Corners, additional building could be provided at the intersection of US 9 and Route 314, as well as at the existing site entrance. These buildings could house community and recreation-related mixed uses. An additional building could be provided along the waterfront to compliment the reuse of the Crete Center. As additional buildings or uses are added, care must be taken to avoid parkland alienation or conversion issues.

Similar to the first option, in the natural, western portion of the site, environmental and historical interpretation could be provided along a sensitively-designed passive trail system.

The City Beach would remain, with enhancements and additional amenities for beachgoers.

This concept would maintain the existing programming on site, while allowing for development which would complement and support the recreational uses.



### **Concept 3 – Open Space and Expanded Recreation**

Similar to the second concept, the third concept would provide a mix of recreation and complementary development. However, this concept provides a greater amount of open space.

In this scenario, the Crete Center is removed, rather than rehabilitated or renovated. The building is replaced by large, multipurpose lawn that can host events, activities, and performances. A secondary, flexible use open space is provided between the active space and the beach. This space could provide picnic areas and a place for pick-up games.

Additional buildings are provided near the existing entrance to the site and at the waterfront for mixed uses which would complement and support the on-site recreation.

Enhanced environmental and historical interpretation would be provided along passive trails in the woodland, wetland, and dunes areas.

Again, the City Beach would remain, with enhancements and additional amenities for beachgoers.

### **City Beach and Crete Center – Schematic Designs**

Following review of the three concepts, it was determined that there were two options for the Crete Center – either significant renovation, or demolition and replacement. In all initial concepts, it was important to maintain the use of the City Beach, expanding the range of recreational amenities provided. It was also important to the City and the community to protect the sensitive dune and habitat areas on the site, and to incorporate opportunities to enhance environmental and historical interpretation. It was also suggested that any proposed trail network connect to the existing Karen Fleury Bike Path and the Heritage Trail, provided for improved connectivity between the waterfront and the rest of the city. These elements were incorporated into the following schematic designs.

#### *Design 1: Mixed-Use Development*

The first design provides mixed use development to support the recreational uses of the City Beach site. New buildings at the Cumberland Corners intersection balance the character of this important community gateway. These buildings, near the Crete Center and park entrance, would provide compatible recreation-oriented amenities. Shared parking south of these mixed-use buildings could also serve the Crete Center building. The Crete Center would require significant continued investment in maintenance and renovations over the long-term, but would remain. The best use or adaptation of the Crete Center – whether recreation, convention, event, or other use – would need to be determined.

A new main access drive is provided for circulation from the site entrance, connecting to the parking and enhancing the approach to the waterfront. Along the lakefront, new buildings and associated parking are provided to complement the existing concessions and bathhouse buildings which would remain. A new docking pier could serve a water taxi, and additional piers could provide fishing and overlook opportunities for pedestrians.

A multipurpose event lawn with waterfront pavilion could be used for performances and recreation. The existing trail network would be enhanced and expanded, in a manner sensitive to the wetland and dune areas. To complement the passive recreational uses, public access, with a hand launch and parking, could be provided at Scotion Creek.



**Design 1: Mixed-Use Development**

### *Design 2: Open Space and Recreation*

The second schematic design provides expanded open space with a focus on recreation.

As in the first design, an access drive is provided for circulation from the site entrance, connecting to the parking and enhancing the approach to the waterfront. A second access drive is provided to serve the large northern parking area, which is screened from the roadway with vegetation.

Rather than continue to invest in the maintenance and renovation of the Crete Center building, it is removed, and replaced with a large open multipurpose lawn with performance pavilion that could be used for events. Additional flexible open space would be provided near the lake.



A new building could be provided at the main entrance along Cumberland Head Road. Along the lakefront, new buildings and shared parking are provided near the beach. The existing concessions and bathhouse buildings would be removed.

A large pedestrian plaza would connect the new buildings and the waterfront. A new docking pier could serve a water taxi, and an additional pier adjacent to a waterfront pavilion could provide fishing and overlook opportunities for pedestrians.

The existing trail network would be enhanced and expanded, in a manner sensitive to the wetland and dune areas. To complement the passive recreational uses, public access, with a hand launch and parking, could be provided at Scotion Creek.

This design provides open space where wetlands and floodplains exist on the site, and also provides low-impact enhancements in the western woodland and dune areas.



**Design 2: Open Space and Recreation**

### *Preferred Design Development*

The preferred design was developed through a process that involved public workshops, online feedback, and review by the Waterfront Committee and the City. The two previous concepts were presented during community workshops, along with relevant information, photos, and key issues. *The City Beach and Crete Center Waterfront Design and Feasibility Study*, conducted at the same time as the Draft LWRP update, examined the existing facilities, their current usage, community needs, site constraints, potential for redevelopment, regulatory and permitting implications, and costs of alternatives. Feedback obtained during this process, and the findings of the feasibility study, were used to inform a refined design for the City Beach site.

As in the second schematic design, a primary access drive provides circulation from the park entrance, connecting to the parking areas and enhancing the approach to the waterfront. A second access drive is provided to serve the large northern parking area, which is screened from the roadway with additional vegetation. The new parking facilities could incorporate permeable or porous pavements along with bioretention or planting areas in order to minimize the effects of stormwater runoff and increase infiltration. The planting of additional trees and landscape areas would also help to manage stormwater, while supporting the natural landscape and ecological functions of the site.

Existing recreational uses, such as fishing, swimming, and boating, would continue. Beach improvements would include new waterfront buildings that could incorporate bath house and concessions facilities, connected by a large pedestrian plaza with pavilion. Any new construction should be designed to minimize flood damage and to maximize scenic views. Additional lakefront amenities could include a new short-term docking pier, which could accommodate a water taxi, as well as a fishing and viewing pier for pedestrians. The natural shoreline edge should be maintained as much as possible.

A new multipurpose building could be provided at the main entrance along Cumberland Head Road to support the park's recreational uses. As mentioned previously, new buildings or uses on site will need to be established in a way that is sensitive to the subject of parkland alienation. A revocable license could be issued to a profit-making entity for the operation of a park facility such as a café, snack bar, parking, or for a boat rental service which serves park patrons in connection with their use of the park without resulting in alienation. Also, buildings that are consistent with park purposes, such as park maintenance buildings and restroom facilities, have been determined to be acceptable.

The preferred designed prioritizes the protection of natural environmental resources – dune, wetland, and habitat restoration and protection; interpretive features throughout the property; and a low-impact wetland boardwalk with overlook areas and signage. Sensitive boardwalk materials can be chosen and walkways may be designed which meet the regulatory requirements, allowing for the creation of trails. The wooded area in the western portion of the site may accommodate passive recreation activities such as picnicking, biking, or similar activities. New trails could connect to Margaret Street, the Karen Fleury Bike Path, and the Heritage Trail in order to improve overall connectivity. An environmental or nature center is proposed to further enhance interpretation, research, and educational opportunities. As in the second schematic design, public access, with a hand launch and parking, could be provided at Scotion Creek to complement the passive recreational uses. Additional signage and recreational programming, such as self-guided nature walks, could be incorporated.

Given recent impacts on water quality from runoff and flooding, a water quality study should be undertaken to explore causes and contributing factors, as well as potential solutions, to water quality issues. Additional monitoring and cleanup should be carried out along the western end of the beach toward Scotion Creek. As new recreational development occurs, opportunities should be taken to incorporate green infrastructure practices which would benefit and protect water quality.

In the preferred design, the Crete Center would be removed to allow for the creation of a large multi-use event lawn. As the building is removed, care should be taken during demolition, as materials in the structure have been found to contain asbestos, and the refrigeration system has been found to have contained ammonia (see *Phase I ESA*). The City could join in partnership with the Town of Plattsburgh and Clinton County to explore opportunities to find a suitable location for construction of a regional indoor-outdoor recreation complex to replace the Crete Center. The new multi-use lawn would have both a large, main performance venue and a smaller secondary pavilion and could serve as a place to host festivals, concerts, and other large events. The smaller flexible use space between the large venue and the lakefront could accommodate a variety of users and activities and incorporate amenities such as a picnic area.

This preferred design expands Plattsburgh's passive and active recreational resources while also protecting and enhancing the natural and cultural resources of its waterfront. The proposed design reflects the goals of the Local Waterfront Revitalization Program, is consistent with the City of Plattsburgh Waterfront Management Policies, and expresses the design guidelines proposed for parks and recreation.

The design improves public lakefront access by enhancing existing areas and creating new access points and walkways. It maintains open space in the flood zone areas and incorporates sensitive recreational development near the wetlands. The proposed trail network would not only increase opportunities for interpretation, but strengthen linkages between the waterfront and the rest of the city. Proposed development is concentrated in the previously disturbed areas of the site, preserving existing open space. The impact of built elements on the site is minimal, and the tree plantings preserve and enhance existing view corridors.

The City Beach site is positioned to become a vibrant public destination that provides not only an economic benefit, but enjoyment for residents and visitors while protecting the waterfront for future generations.



**Preferred Design: Open Space and Expanded Recreation**



Bird's Eye View Looking Northeast



Perspective Looking Northwest Across the Beach

## **Preliminary Cost Estimates**

### *Crete Center Preliminary Cost Estimates*

Our team evaluated the Crete Center’s mechanical, electrical, plumbing, and structural aspects and submitted the *Crete Center Assessment Report* to the City. The report included an evaluation of rehabilitation, redevelopment, and reconstruction of the Crete Center, and cost estimates to repair deficiencies and to demolish the structure.

### *Renovation*

Overall, the *Crete Center Assessment Report* indicated that there were no major structural issues with the building, aside from a leaking roof. If the building does not undergo a Change of Use within the Code, they did not foresee any major obstacles to a significant renovation. If Change of Use should occur, further structural evaluation may be necessary, specifically relating to the building’s lateral systems.

The renovation cost estimate included renovation of the existing mechanical, electrical, and plumbing systems (\$1.83 million) and replacement of the roof (\$900,000) for a total of \$2.73 million. These costs did not include additional structural renovations.

### *Demolition*

The estimated cost for demolition of the Crete Center is just over \$925,000, based on the building’s square footage, the plans, and their visual observations. The cost assumes the entire building and interior/exterior components would be removed and disposed of and includes salvage material value, hazardous materials removal/abatement, and disposal of construction debris.

### *Preferred Design Overall Cost*

The preferred design is intended to provide the City with a collaborative vision for the future of the City Beach property. The realization of this vision, or portions thereof, will likely occur in phases and will be driven by the availability of public and private investment resources. The Conceptual Cost Estimate Summary provided on page 58 provides a general breakdown costs associated with the preferred design. Attachment A provides an itemized breakdown of those costs.

The following cost estimate summary is presented in two sections; Demolition and Remediation, and New Construction. The Demolition and Remediation estimated costs include the demolition and removal of all buildings, asphalt, and concrete currently onsite. Speculative costs for the remediation and restoration of the former dump area are also included in this section. The costs were finalized following input by professionals in the fields of environmental remediation and demolition. (please see Attachment A for further detail).

The New Construction section includes cost estimates for all new building construction and site development on the City Beach property.

The New Construction section of the cost estimate for the preferred design includes:

- Construction of six new buildings:
  - Cumberland Head Road multipurpose building
  - Waterfront buildings – to include bathhouse, concessions, and multipurpose uses
  - Nature Center

City of Plattsburgh: City Beach and Crete Center – Waterfront Design and Feasibility Study

- Main performance venue - larger performances such as national acts
- Multipurpose performance pavilion for local and regional performances
- Pavement and pavement installation– roads, parking, concrete walkways, pavers in plaza areas
- Shelters and Kiosks – pedestrian pier, pavilions, pathway shelters
- Piers: Docking pier and Pedestrian pier with shelter
- Wetland Trails and boardwalks with overlooks
- Landscaping - Tree planting and lawn establishment
- Earthwork: event lawn and multipurpose lawn, waterways
- Furnishings – signage, benches, picnic tables, bike racks, trash receptacles, fencing, etc.
- Site Utilities and Stormwater Management
- Scotion Creek access with hand launch and parking

The costs included in the New Construction Conceptual Cost Estimate were based on the input of professional architects, landscape architects, contractors, and engineers familiar with the site and the estimated quantities taken off of the preferred design master plan. These costs are for informational purposes only and are intended to provide a rough order of magnitude estimate for planning of future construction and development at City Beach. See Attachment A for an itemized breakdown of the costs provided below.

<b>Conceptual Cost Estimate Summary</b>	
<b>Item</b>	<b>Estimated Cost</b>
Crete Center Demolition	\$925,336
Demolition - Other Buildings	\$120,209
Site Pavement Demolition	\$808,442
Landfill Remediation and Wetland Restoration (Est.)	\$2,000,000
<b>Demolition and Restoration Subtotal</b>	<b>\$3,853,987</b>
New Building Construction	\$34,996,800
Pavement and Walkways	\$3,690,750
Shelters and Kiosks	\$924,400
Piers	\$705,600
Wetland Trail System	\$306,800
Landscaping	\$500,000
Earthwork	\$585,444
Furnishings and Fencing	\$325,000
Stormwater Management	\$430,000
Utilities - gas, electric, sewer, water, site lighting	\$1,000,000
Scotion Creek Access	\$53,000
<b>New Construction Subtotal</b>	<b>\$43,517,794</b>
<b>Estimated Total</b>	<b>\$47,371,782</b>

### **Regulations, Permits, and Requirements**

Enhancement and development of the City Beach site may involve a number of permits or be subject to a variety of regulations or requirements.

Depending on the extent of site impacts, the following types permitting will likely be necessary:

- Floodplain development permits and regulations
- Environmental permits relating to wetlands (Army Corps of Engineers, Department of Environmental Conservation)
  - The placement of a boardwalk in ACOE jurisdictional wetlands may require Nationwide Permit (NWP) #42 Recreational Facilities (applies to disturbance less than ½ acre). Disturbance ½ acre or more may then require an individual permit from the ACOE and a longer application and approval time.
    - Once the preferred alternative is identified, coordination with ACOE should be requested to have them verify jurisdiction and confirm necessary approvals. There may be design requirements for the boardwalk (i.e., allowed width, clearance, type of materials, etc.) that ACOE may require or recommend.
  - If the construction of the nature center building also results in impacts to the wetlands, the impact may also be covered under NWP #42. This will need to be verified through ACOE.
- Environmental permits relating to habitat (Department of Environmental Conservation)
- Environmental permits relating to the former city dump
- Permits relating to the Crete Center and abatement or removal of hazardous materials
- Permits relating to historic and cultural resources (SHPO)

Additionally, in New York State, most projects or activities proposed by a state agency or unit of local government, and all discretionary approvals (permits) from a NYS agency or unit of local government, require an environmental impact assessment as prescribed by State Environmental Quality Review (SEQR).

Development should be consistent with City zoning regulations, the Guidelines for Review contained in §270-36 of the City of Plattsburgh Code, the guidelines set out by the Waterfront Overlay District, the Local Waterfront Revitalization Program and its Waterfront Management Policies, and City Code Article VIII: Flood Hazard Areas (§270-44 of City Code). Design should also incorporate ADA accessibility wherever practicable and conform to state and local building and health codes.

Attachment A  
Conceptual Cost Estimate

City of Plattsburgh		SARATOGA ASSOCIATES		
City Beach and Crete Center				
Conceptual Cost Estimate		April 2016		
Item	Qty.	Units	Cost Per	Total Item Cost
<b>DEMOLITION AND REMEDIATION</b>				
<b>Building Demolition</b>				
(3) Storage Buildings	92475	CF	\$ 0.30	\$27,743
Old Bathhouse	102600	CF	\$ 0.30	\$30,780
New Bathhouse	33075	CF	\$ 0.30	\$9,923
Concessions	73125	CF	\$ 0.30	\$21,938
Disposal	1	LS	33%	\$29,826
<b>Building Demolition</b>				<b>\$120,209</b>
<b>Crete Center Demolition</b>				
Mobilization and Demobilization	1	LS	5%	\$43,240
Site Preparation	1	LS	2%	\$17,296
Asbestos Abatement and Disposal	1	LS	\$30,000	\$30,000
Hazardous Material Abatement and Disposal - Ammonia Refrigeration System	1	LS	\$20,000	\$20,000
Building Demolition	900000	CF	\$0.30	\$270,000
Foundation Removal and Disposal	1	LS	\$125,000	\$125,000
Roofing Removal, Handling, Transport, and Disposal	1	LS	\$80,000	\$80,000
Building Debris - Handling, Transport, and Disposal	1712.5	Ton	\$80	\$137,000
Hardscaping Debris - Removal, Handling, Transport, and Disposal	350	Ton	108	\$37,800
Electrical Components/Transformers - Removal, Handling, Transport, and Disposal	1	LS	\$50,000	\$50,000
Mechanical/HVAC Components/Transformers - Removal, Handling, Transport, and Disposal	1	LS	\$75,000	\$75,000
Site Restoration	1	LS	\$50,000	\$50,000
Salvage Value - Metals	1	LS	(\$10,000)	(\$10,000)
<b>Crete Center Demolition</b>				<b>\$925,336</b>
<b>Site Pavement Demolition</b>				
Concrete (Site + Miniature Golf)	3726.889	SY	\$ 13.00	\$48,450
Concrete Disposal - Clinton Co. Landfill C&D cost	736	TON	\$64	\$47,104
Asphalt - to be recycled (no disposal fee)	89111.11	SY	\$ 8.00	\$712,889
<b>Pavement Demolition</b>				<b>\$808,442</b>
<b>Landfill Remediation and Wetland Restoration (estimated)</b>	<b>1</b>	<b>LS</b>	<b>\$2,000,000</b>	<b>\$2,000,000</b>
<b>DEMOLITION AND REMEDIATION SUBTOTAL</b>				<b>\$3,853,987</b>

Item	Qty.	Units	Cost Per	Total Item Cost
<b>NEW CONSTRUCTION</b>				
<b>Pavement and Walkways</b>				
Pavement - Drives and Parking - no curb (456,972 SF)	50775	SY	\$40	\$2,031,000
Pavement Striping	1	LS	\$12,000	\$12,000
Walkways - concrete (196,240 SF)	21805	SY	\$50	\$1,090,250
Walkways - pavers (50,150 SF)	5575	SY	\$100	\$557,500
<b>Pavement and Walkways</b>				<b>\$3,690,750</b>
<b>New Building Construction</b>				
Cumberland Head Rd Multipurpose 2-story Bldg (16,812 SF/st)	33624	SF	\$200	\$6,724,800
Waterfront Buildings - (2) 2-sty (18,360 SF/st)	73440	SF	\$200	\$14,688,000
Nature Center Building - 1-story	6336	SF	\$250	\$1,584,000
Main Performance Venue (16050 SF)	1	LS	\$10,000,000	\$10,000,000
Multipurpose Performance Pavilion (4032 SF)	1	LS	\$2,000,000	\$2,000,000
<b>New Building Construction</b>				<b>\$34,996,800</b>
<b>Shelters and Kiosks</b>				
Waterfront Pavilion at Beachfront Plaza	1600	SF	\$150	\$240,000
Waterfront Kiosk at Beachfront Plaza	576	SF	\$150	\$86,400
Large Waterfront Pavilion near Pier	3320	SF	\$150	\$498,000
Pathway Shelters along Lawn (2) 10x10, (1) 20x20	600	SF	\$100	\$60,000
Pedestrian Pier Shelter	400	SF	\$100	\$40,000
<b>Shelters and Kiosks</b>				<b>\$924,400</b>
<b>Piers</b>				
Pedestrian Pier	4500	SF	\$70	\$315,000
Docking Pier	5580	SF	\$70	\$390,600
<b>Piers</b>				<b>\$705,600</b>
<b>Wetland Trail System</b>				
Wetland/Forest Boardwalk/Trails	29720	SF	\$10	\$297,200
Boardwalk/Trail Overlooks: (2) at 400 sf	800	SF	\$12	\$9,600
<b>Wetland Trail System</b>				<b>\$306,800</b>
<b>Landscaping</b>				
Tree Planting	700	EA	\$500	\$350,000
Turf Establishment	30000	SY	\$5	\$150,000
<b>Landscaping</b>				<b>\$500,000</b>
<b>Earthwork</b>				
Large Event Lawn Areas (277,000 SF - 3' avg max)	30777.78	CY	\$12	\$369,333
Multipurpose Lawn (132,000 SF - 1' avg grading)	4888.889	CY	\$12	\$58,667
Stream/pond Excavation (70850 SF, avg. 5' deep)	13120.37	CY	\$12	\$157,444
<b>Earthwork</b>				<b>\$585,444</b>
<b>Utilities</b>				
Gas, Electric, Sewer, Water	1	LS	\$500,000	\$500,000
Site Lighting	1	LS	\$500,000	\$500,000
<b>Utilities</b>				<b>\$1,000,000</b>
<b>Stormwater Management</b>				
Sand Filter - 80000 sf total bldg footprints	1	LS	\$300,000	\$300,000
Storm Piping	4000	LF	\$25	\$100,000
Area Drains \$1500 each	20	EA	\$1,500	\$30,000
<b>Stormwater Management</b>				<b>\$430,000</b>

<b>Furnishings</b>				
Site Furnishings - Signage, Benches, Picnic Tables, Bike Racks, Trash Receptacles, etc.	1	LS	\$125,000	\$125,000
Fencing or Retaining Walls	1	LS	\$200,000	\$200,000
<b>Furnishings</b>				<b>\$325,000</b>
<b>Scotion Creek Access</b>				
Hand Launch (docks, gangway)	1	LS	\$15,000	\$15,000
Parking- Asphalt (estimated 8500 SF)	950	SY	\$40	\$38,000
<b>Scotion Creek Access</b>				<b>\$53,000</b>
<b>NEW CONSTRUCTION SUBTOTAL</b>				<b>\$43,517,794</b>
<b>ESTIMATED TOTAL</b>				<b>\$47,371,782</b>