

DRAFT

SOUTH SHORE BLUEWAY TRAIL PLAN



Prepared by:



Going Coastal, Inc.
Brooklyn, NY
www.goingcoastal.org



CAMERON ENGINEERING & ASSOCIATES, LLP

Cameron Engineering and Associates. LLP
Woodbury, NY”
www.cameronengineering.com

Acknowledgments

The genesis for the South Shore Blueway Trail were project nominations submitted, respectively, by Kyle Rabin and Michael Fehling in response to 2006 Environmental Bond Act Program. This plan reflects the work and contributions of many individuals and organizations in Nassau County and Long Island. Of particular note are the contributions of the South Shore Blueway Trail Advisory Committee — which is comprised of local paddlers, recreational-based business owners, non-profit organizations with interests in conservation, and local government representatives — that has acted as a guide for the development of this Plan. Members gave their time, knowledge and experience and are gratefully acknowledged.

The South Shore Blueway Trail Advisory Committee

Michael Chachkes, Long Island Paddlers
Joe Creamer, The Freeport Inn
Michael Fehling, Owner Empire Kayaks
Ken Fink, Owner, Kayak Ken Outfitters
Susan Guilliani, Director, Jones Beach State Park
Sean Jordan, Deputy Commissioner, Town of Oyster Bay Dept. of Environmental Resources
Nancy Kearney, Town of Oyster Bay
Ray Maguire, Village of Freeport
Michael Martino, Press Secretary, Nassau County Department of Public Works
Steve McDonald, North Atlantic Canoe & Kayak
Tara Schneider Moran, Department of Conservation & Waterways Town of Hempstead
Elizabeth O'Connor, SKSA, Ltd.
Kyle Rabin, Nassau County Resident, Committee Chair
Brian Schneider, Asst. Deputy Commissioner, Nassau County Department of Public Works
Nora Sudars, Grants Technician, Village of Freeport
Rob Weltner, President, Operation SPLASH
Brian Vander Veer, Deputy Commissioner, Town of Oyster Bay Department of Parks

New York State Department of State:

Patrice Benneward, Program Implementation Specialist, South Shore Estuary Reserve Council, 2008 to 2011
Jaime Ethier, Coastal Resources Specialist, Division of Coastal Resources
Dennis Mildner, Coastal Resources Specialist, Division of Coastal Resources
Lou Seigel, Estuary Learning Specialist, South Shore Estuary Reserve Council

Dozens of volunteers and workshop participants contributed their knowledge and experience of local waters to this plan. Numerous agencies, organizations and individuals supported and contributed their time to the development of this plan. :

Peter Lauridsen, NYSDOS, GIS Unit	North Atlantic Canoe & Kayaks
Nassau County GIS Department	South Shore Estuary Reserve Council
Empire Kayaks	Town of Hempstead
Freeport Recreation Center	Town of Oyster Bay
Freeport Water Taxi, Capt. Cohen	Village of Freeport
Long Island Paddlers	Citizens Campaign for the Environment
Nassau County	Vision Long Island

All images of paddlersports courtesy of Empire Kayaks, wildlife contributed by Alan Mindlin.

Table of Contents

TABLE OF CONTENTS.....	
OVERVIEW	1
PROJECT AREA	2
HISTORIC BACKGROUND	3
PLANNING FOR PRESERVATION.....	6
BLUEWAY PLAN BENEFITS & OBJECTIVES	7
PUBLIC PARTICIPATION	8
BLUEWAY TRAIL PLAN.....	9
A ACCESS POINT RECOMMENDATIONS	10
B BOAT RAMPS.....	20
C EXISTING TRAILHEADS.....	31
D LAUNCH FEES AND ACCESS LIMITS.....	36
E BOAT STORAGE SOLUTIONS.....	43
F ROUTES AND DESTINATIONS.....	47
G COMMUNITY CONNECTIONS	60
H RECREATION AND SAFETY	63
I CONSERVATION & STEWARDSHIP	70
J EDUCATION & INTERPRETATION STRATEGIES.....	72
K BLUEWAY TRAIL IDENTITY PLAN.....	74
L PROJECT SUSTAINABILITY	77
M BLUEWAY IMPLEMENTATION PLAN	80
APPENDIXES	85
APPENDIX A: SOUTH SHORE BLUEWAY TRAIL MAP	
APPENDIX B: TRAIL MILE CHART	
APPENDIX C: 7 SITE DESIGN CONCEPTS WITH COST ESTIMATES.....	
APPENDIX D: MOBI-MAT SPECS	
APPENDIX E: FUNDING SOURCES.....	
APPENDIX F: BLUEWAY IDENTIFY AND SIGNAGE PLAN	

The South Shore Blueway



Overview

The South Shore Blueway Trail Plan sets forth a vision for the structure and organization of a water trail for non-motorized boats that provides residents and visitors with an accessible, safe and enjoyable experience. The Plan contains specific recommendations to expand water access, improve trail infrastructure, boating safety, community connections, and stewardship while it presents approaches to implementing and marketing the blueway.

The Blueway Trail Plan presents an inventory of proposed and existing access points and identifies new trail connections and services for human-powered boaters. It provides a framework for using, managing and maintaining the trail. Plan recommendations came from local stakeholders, public agencies, members of paddling clubs and community organizations, and the general public.

A Blueway Trail is a route for non-motorized boats along a waterway that combines recreation and environmental awareness while linking communities and land-based attractions such as parks, historic sites and natural areas.

Implementing the South Shore Blueway Plan will improve quality of life for local residents and provide economic benefits for communities. The trail is a natural attraction n enduring natural attraction, an ecotourism destination that furthers resilient coastal infrastructure while connecting waterways, greenways, biking and hiking paths, preserves, parks, wetlands, and islands within the South Shore Estuary Reserve. Moreover, the trail grows into a living interpretive center providing educational opportunities that highlight cultural resources, natural history and coastal ecosystems.

Project Area



Figure 1 Project Area

The South Shore Blueway Trail spans the southern coast of Nassau County encompassing the western bays of the South Shore Estuary Reserve (SSER), comprised of West, Middle, and East Hempstead Bays and South Oyster Bay. From the western border of the Town of Hempstead the project area stretches 18 miles to the Nassau-Suffolk County line at Oyster Bay.

One of the largest undeveloped coastal wetlands systems in New York State, the large complex of shallow, interconnected bays is separated from the Atlantic Ocean by Jones Beach and Long Beach barrier islands. Two openings separate the barrier islands and connect the bays with the ocean at

Rockaway Inlet and Jones Beach Inlet. Hundreds of acres of tidal wetlands, barrier beach and back-barrier lagoon, creeks and channels, marshlands, mudflats, and salt marsh islands characterize the south shore region.

The area supports a diversity of fish and wildlife providing vital habitat for migratory shorebirds, wintering waterfowl and finfish. South Oyster Bay and the Hempstead Bays are on the Atlantic Flyway, a major bird migration route. Harbor seals winter in the bays. The South Shore Blueway Trail travels the Towns of Hempstead and Oysters Bay, the Village of Freeport and the City of Long Beach, Jones Beach Island, and several other villages and hamlets.

Historic Background

The scenic Hempstead Bays - South Oyster Bay Complex lies at the heart of the economic, cultural, ecological life of this flourishing coastal region of Long Island and boasts a rich history of development and growth. For thousands of years, Native Americans paddled kayaks and canoes on established bay routes transporting goods and people.

What attracted Native Americans and Europeans to Long Island's south shore was the abundant opportunities offered by the land and sea. Milburn Creek was once within the domain of the Meroke Indians, who left piles of clamshells along its banks. Ancient shell middens have also been discovered near Cedar Creek. Rockaway Indians fished and hunted on Long Beach Island, before selling the area in 1643 to colonists who harvested salt hay and fished there. Dutch and English settlers began cultivating land on the south shore during the 17th century. English Captain John Seaman purchased an area of what is now Seaford in the Town of Hempstead. Edward Raynor

obtained land that later became Freeport, named such because of the lack of cargo fees for colonial shippers. The Dutch purchased property that would eventually become the Town of Oyster Bay. When the English seized the whole of Long Island from the Dutch at the end of the 17th century, the settlers were granted a patent to establish Oyster Bay.

During the 18th and 19th centuries, colonists benefited from the plentiful resources on Long Island's south shore. Major Thomas Jones built a whaling station on Jones Beach Island during the 1700s. During the 1800s, Hempstead became a vital trading post. James H. Doxsee established a clam processing plant on the south shore in 1865 that was so successful it nearly depleted the clam stocks by 1900. Oystering became Freeport's economic staple. Austin Corbin, president of the Long Island Railroad built the Long Beach Hotel and provided rail service, attracting hundreds of thousands of summer visitors. In 1889, Phineas T. Barnum bought land in Island

Park that became the neighborhood of Barnum Island, to be the winter home for his traveling circus. By the end of the 19th century, wetland filling on Freeport's low-lying and marshy southern rim had created new home sites, and with a system of canals more firmly in place, the village was incorporated in 1892. In 1906, architect and entrepreneur William H. Reynolds, the developer of Coney Island's Dreamland, set about making Long Beach a planned Mediterranean-style resort by the sea. Reynolds Channel was dug to widen the waterway for steamboats and seaplane landings.

Prior to the railroad, all development occurred along the waterways. Bay houses became a staple of the Nassau County coastal landscape between 1700 and 1900. These small hand built structures on stilts crafted by Baymen on marsh islands hoping to reap a rich harvest from clam, oyster and scallop beds that flourished there, and taking advantage of the location to eel, fish, and shoot ducks and geese. As the 20th-century progressed, an influential boat-building industry gained momentum. Commercial, recreational, and military

vessels, including trawlers, Coast Guard and Navy ships, flat-bottomed garvey and duck boats were Freeport specialties. New York State officially opened Jones Beach in 1929. With the construction of the Wantagh and Meadowbrook Parkways connecting Jones Beach Island to Long Island, visitors arrived in droves. Increased suburbanization during the 1950s expanded development on the south shore, as many residents settled in the towns and villages, but worked in New York City. Bay houses numbered 300 by 1965, as wealthier New Yorkers began to build them as weekend getaways. Unfortunately, after Hurricane Sandy only 15 bay houses remain in the western bays. Today, the south shore's waterways are mainly used for recreation, though locals continue to capitalize on the abundance of shellfish and game fish in the bays. Nassau County is the busiest recreational motor boating region of New York State. Jones Beach is the most popular and heavily visited beach on the East Coast. The south shore bays offer residents and visitors unspoiled scenery, world-class fishing, plenty of birds and outstanding opportunities for water adventure.

Planning for Preservation

The 20th Century not only brought development and progress, and but also growing conservation awareness. The south shore of Long Island became more developed and simultaneously needed greater protection. But pollution from boats, land runoff and invasive plant species threatened the shore and wildlife. The lucrative oyster and clam trade became damaged by pollution in the 1990s. Several efforts at conservation were initiated. And the U.S. Fish and Wildlife Services named areas around Lido Beach priority wetlands. In 1993, concerned citizens pressed the New York State Legislature to enact the South Shore Estuary Reserve Act creating the South Shore Estuary Reserve and the Council to preserve and manage the unique and fragile estuary, which extends 75 miles from the NYC/Nassau County line to the Village of Southampton.

The South Shore Blueway Trail lets communities to conserve habitat while providing recreational opportunities for the public. The South Shore Blueway Plan benefited from all of the work that had been done by others. The blueway is consistent with the recommendations of the South Shore Estuary Reserve *Comprehensive Management Plan* by enhancing public use and enjoyment of the estuary and promoting public stewardship through increased education and outreach. It enhances and expands partner efforts of the *Bayway*, which develops a network of recognized destinations and connectors in the South Shore Estuary Reserve and has as one of its goals the development of new launches for non-motorized watercraft to improve water access.

Blueway Plan Benefits & Objectives



The South Shore Blueway Trail contributes to high quality of life, healthy communities and resilient coasts. The trail has the potential to stimulate economic activity by identifying independent projects that contribute to revitalization efforts while protecting habitat and water quality by encouraging sustainable infrastructure improvements. Beyond this, the trail fosters protection of environmentally sensitive waterfront resources, engages people in active stewardship and educates residents and visitors about coastal ecosystems.

The South Shore Blueway Trail Plan objectives are to:

1. Identify existing and potential water access points, and determine their suitability to accommodate paddlers of different skill levels.
2. Identify amenities and improvements for 7 priority trail access points.
3. Design an identity plan for marketing and promoting the blueway.
4. Propose a means of providing consistent information through trail map and brochure, wayside signage, and website.
5. Promote conservation ethics, responsible stewardship, and safe boating.
6. Recommend a trail implementation and maintenance strategy



Public Participation

A citizen-led trail advisory committee was organized to provide trail-related guidance and expertise from a broad range of stakeholders and local governments and to review project progress and deliverables. The project engaged the community in trail planning by identifying trailhead sites and determining linkages and routes. A public workshop of residents, local government agencies, paddlers and stakeholders, formally introduced the water trail concept. About 80 participants working in small groups proposed new trail connections and routes, and then each idea was discussed with the entire group to determine trails priorities.

Following this meeting, public outreach was conducted, informational postcards distributed, the trail concept was presented at meetings with local stakeholders, and paddlers participated in an online survey. Periodic updates were emailed to a contact list exceeding 250 people for meeting notices and plan results. Local news media also provided



informative coverage of the trail initiative and plans to establish a recreation water trail. Local newspapers that published articles on the proposed water trail include: Newsday, Long Island Herald, Boating Times, and some community publications and websites.

More than 50 volunteers participated in site assessments and other outreach activities. The project planning website southshoreblueway.com and Facebook page (facebook.com/southshoreblueway) invited additional input and sought the community's preferences for access points, routes and site improvements. All documents, the Community Outreach Report and Paddler Survey Results are publically available on the project website.

Blueway Trail Plan

Trail Access Study

An inventory of all water access points in the project area was undertaken that included a comprehensive study of existing trail and trail related assets to determine location feasibility. Field reconnaissance was conducted, by land and water, to verify the accuracy of spatial data and map data into a Geographic Information System (GIS) database. Essential resources such as physical environment, recreational use and site amenities were identified, mapped and photographed. Existing land and water use reference data was provided by NOAA, New York State Department of State, Nassau County GIS, the Town of Hempstead and the New York State GIS Clearinghouse. Volunteers, recruited from the paddling community, conducted site evaluations to assess the suitability and impediments to access at each potential access point. Throughout the planning process, reference data has been continually revised and refined.

An established set of criteria was used to identify priority access points, guided by the National Park Service in its publication, *Logical Lasting Launches*. These included ease of access, site amenities, portage to water, distance between launches, and access for people of all abilities and skill levels. Based on this criterion, the plan recommends 7 priority sites, 3 of these can become part of the trail immediately while 4 locations require improvements be made in order to become viable access points. In addition, there are 9 boat ramps that can be enhanced for non-motorized boat use. Wherever possible, launch preference was for natural shore requiring minimal modification and impact on the environment. Tidal beaches and boat ramps form the backbone of the South Shore Blueway Trail. In some cases, these sites can serve as bases for trail interpretation, community boating programs and restoration projects.



A Access Point Recommendations

All recommended access points are on existing parkland and most sites require few infrastructure improvements. Overall, four of the possible sites are already heavily used by local paddlers, and provide facilities necessary for creating a formal access point. These primary access points should be the first ones to be established as trailheads. The remaining access points are considered critical links because of their location on the water trail and their potential for future development. These secondary sites are not used currently and require infrastructure and considerable landscaping to work, but will be a huge asset for users accessing the bays and completing the trail.





Proposed Access Points

- 1 Bay County Park
- 2 Oceanside Park
- 3 Baldwin Park
- 4 Waterfront Park
- 5 Newbridge Park
- 6 Cedar Cr Park
- 7 Seamans Neck Park
- 8 Alhambra Road



Alhambra Road Beach

Address: Alhambra Rd, Massapequa

Phone: 516-797-4128

Owner: Town of Oyster Bay

Access: South Oyster Bay

Hours: Dawn to 9:00 PM

Parking spaces: 20

Conditions: strong currents, tidal

Amenities: **P**

Description: Unrestricted water access and parking at sandy beach that is regularly used by paddle groups for instruction.



Issues

- No sanitary facilities
- Retaining wall needs repair
- Low tide can be mud and seaweed
- The beach drops off due to sand loss.
- Increased traffic to quiet neighborhood

Opportunities

- Provide ADA access with installation of seasonal mobi-mat.
- Establishment of an onsite concession to build infrastructure, help control traffic and secure area, while generating revenue.
- Outreach to residents.

Recommendations: The site has great potential for improvement, from fixing the retaining wall and adding seasonal bathrooms and ADA accessibility to developing the old marina property to the east into a full-fledged community boathouse providing programming, storage, and maintenance. Installations of trailhead marker designating launch point and wayside exhibit.

Status: Priority access to South Oyster Bay that is trail-ready.

Baldwin Park

Address: 3232 Grand Ave. Baldwin
Phone: 516-546-4481
Owner: Town of Hempstead
Access: Middle Bay
Hours: 7 AM to 9 PM (Summer 11 PM)
Parking spaces: 465
Conditions: strong currents
Amenities: 
Description: A 300-yard carry from parking across sport's fields to a sand beach. The 147-acre park has paths for biking and hiking, wildlife viewing, picnic area, and grills.



Issues

- Some vegetation encroaches
- Shallow at low tide
- Resident only access
- Long 165-yard portage from parking across well-used ball fields
- Currents can be very strong.

Opportunities

- ADA accessibility by installing mobi-mat
- A clearly designated put-in can mitigate infringement on shore area
- Numerous amenities and staging area for group outings and landings.

Recommendations: There is a need for minimal landscaping and grading to allow for easy entry and exit. Lamppost banner or flag at the park entrance and trailhead markers to direct users to the proper area.

Status: Priority access point, Phase I implementation.



Bay Park Beach Access

Address: Marjorie Lane, East Rockaway

Phone: (516) 571-7245

Owner: Nassau County

Access: West Bay

Hours: 9 AM to 7 PM

Parking spaces: 100+

Conditions: motor traffic in channel

Amenities: 

Description: Sandy beach on the western side of the park and a boat ramp. Park amenities include biking and hiking trails, golf course, picnic tables and grills.



Issues

- Glass and debris on beach area



Opportunities

- Local group to steward site and organize beach cleanups.
- Seasonal and transient boat storage.
- Good staging area

Recommendations: There is a paved walkway from nearby parking to the beach launch, which offers an alternative to the busy boat ramp and is large enough to accommodate the simultaneous drop off and launching of multiple crafts. Signs are needed to direct users to the proper area and add a wayside exhibit. With addition of prefab dock to finger floats, the ramp can serve ADA access needs (see Site Design).

Status: Alternative to the busy boat ramp can readily be a trail point of entry.

Cedar Creek Park

Address: 3340 Merrick Rd, Seaford

Phone: (516) 571-7470

Hours:

Parking spaces: 20

Access: South Oyster Bay

Conditions: Shallow at low tide

Amenities:  

Description: Site is located near the aerodrome field for radio-controlled model airplanes and tethered car track, which requires a permit to access and provides a port-o-san. Other park amenities include bike and jogging paths, roller rink, dog run, playground, and ball fields.



Issues

- Thick vegetation, invasive plants and hurricane debris inhibits access
- User access, security gate, and permitting issues.
- Potential user conflict with model plane clubs.
- Shallow water, mudflats at low tide

Opportunities

- Bike/kayak concession to help build-out, maintain and steward the site.
- Offers link to Jones Beach bike trail
- Clearing removes invasive and poisonous plants, clears debris, and restores habitat.
- Relocate the security entrance to the booth nearer the sewage plant.

Recommendations: Provides critical access to South Oyster Bay, which makes the site an attractive candidate. There is a lot of vegetation and debris to be removed. A small, grassy area can easily be converted for parking.

Status: Secondary access point requiring phasing and funding to be viable.

Newbridge Road Park

Address: 2600 Newbridge Rd.

Phone: (516) 783-2518

Owner: Town of Hempstead

Access: East Bay

Hours: 9 AM to 6 PM

Parking spaces: 100+

Conditions: currents

Amenities: 

Description: Wild parrots nest in the light towers of the baseball diamonds at park offering excellent amenities including an indoor pool, but no water access and limited views.



Issues:

- Steep slope to water.
- No water access, fenced shore
- Woody vegetation obstructs access and views
- Long portage through thick brush to southern edge of park

Opportunities:

- Southern tip offers potential water access point through heavy vegetation.
- Site offers good potential for a boathouse and storage (modified shipping container) inside the gate at the end of the parking lot.

Recommendations: An important link in the trail, the site requires extensive landscaping and infrastructure to make it accessible to most users. Vegetation will also need to be managed.

Status: Phased development and funding are needed to create access.

Oceanside Park

Address: 3800 Mahlon Brower Drive, Oceanside

Phone: (516) 546- 4481

Owner: Town of Hempstead

Access: Middle Bay

Hours: dawn to dusk

Parking spaces: 400

Conditions: currents

Amenities:    

Description: A small tidal beach on the southeast edge of park offers access and terrific wildlife viewing.



Issues:

- Need to manage vegetation
- No water access, fenced shore
- Ecologically sensitive areas
- Much of shore is riprap to prevent erosion
- Very shallow water off the beach, mud at low water.

Opportunities:

- Good event staging area
- Potential launch off parking behind dumpsters with gangway and dock off bulk headed shore or near natural cove on canal.

Recommendations: There is a need to pinpoint best shore area for access into deeper water, since there are extensive mudflats.

Status: Phasing and funding are needed to create access point

Seamens Neck Park

Address: 2700 Seamens Neck Rd., Seaford

Phone: (516) 783-3200

Owner: Town of Hempstead

Access: South Oyster Bay

Hours: 9 AM to 6 PM

Parking spaces: 100+

Conditions: low water

Amenities:    

Description: Park offers excellent amenities and possible access to calm waters and wildlife viewing areas at the southern edge of park adjacent to fishing esplanade.



Issues:

- No current water access
- Ecologically sensitive areas
- Steep and heavily vegetated shore

Opportunities:

- Calm waters make it a good spot for beginner programming
- Good spot for community boathouse.

Recommendations: Extensive landscaping, grading and infrastructure needed to make this site accessible to most users. Phase II development and funding. Vegetation needs to be managed.

Status: Priority access that is needed to complete the trail.

Waterfront Park

Address: 954 S Long Beach Ave,
Freeport

Phone: (516) 377-2314

Owner: Village of Freeport

Access: Middle Bay

Hours: dawn to dusk

Parking spaces: 75

Conditions: calm water

Amenities:    

Description: Open parking and free access to natural shore on Baldwin Bay in small neighborhood park featuring playground, fishing pier, picnic area and grills. Good beginner access to calm waters.



Issues:

- No beach at high tide
- Ecologically sensitive areas
- Shore erosion

Opportunities:

- Floating dock
- Kayak concession

Recommendations: The addition of a floating dock will allow better access and prevent further shore erosion. Signs are needed to direct users to the proper area and site would benefit from an interpretive wayside exhibit. Ideal for novice paddlers, so onsite instruction is important.

Status: Beach entry point is currently useable. Phase I priority.

B Boat Ramps



As sites that are already actively managed and maintained, boat ramps can serve as vital links in the South Shore Blueway Trail. There are eight public boat ramps offering access to the waters of the Hempstead-South Oyster Bay Complex plus Inwood Boat Ramp with access to Jamaica Bay connecting to the National Park Service’s water trail and linking to the New York City Watertrail westward.

There is an opportunity for boat ramps, as well as marinas, to expand their market by making them more accessible to the growing crowd of paddlers. The plan recommends installing modular kayak launch docks, wherever feasible, to existing boarding docks, adding secure transient storage and providing other amenities. Modular kayak/canoe docks are economical, versatile and durable to withstand strong wakes and heavy public use, often do not require additional permits, and can be installed in an underutilized boat slip, moored to the bulkhead or attached to existing boarding floats creating a destination point accessible for people of all ability levels to easily and safely access the water. In addition to the ramps listed here, the Town of Hempstead owns and operates two town marinas, Inwood Marina on Jamaica Bay and Guy Lombardo Marina on Middle Bay, which offer more opportunities for providing non-motorized boater access and storage.



Boat Ramps

- 1 Inwood
- 2 Bay Park
- 3 Long Beach
- 4 Millburn Creek
- 5 Albany Ave.
- 6 Cow Meadow
- 7 TOH Marina West
- 8 Wantagh Park
- 9 Burnes Park



Albany Avenue

Address: 185 Albany Avenue, Freeport

Phone: 516-444-0439

Owner: Freeport

Access: Freeport Creek, Middle Bay

Hours: Open 24/7

Parking spaces: 55

Conditions: Tidal creek

Amenities: 

Description: Two concrete ramps located in an industrial area, popular put-in for kayak fishing and duck hunting.



Recommendations: Seasonal sanitary facilities; new boarding docks should incorporate NMB improvements; trash receptacles, fish cleaning station, boat spray, food truck. Reconstruction of boarding docks is in development.

Bay County Park

Address: Marjorie Lane, East Rockaway

Phone: 516-571-7245

Owner: Nassau County

Access: Hewlett Bay, Middle Bay

Hours: Dawn to Dusk

Parking spaces: 90

Conditions: Tidal creek

Amenities:    

Description: A multi-lane concrete ramp with side boarding docks and lanes between a string of boarding floats. Park offers picnic shelters, grills, hiking and biking trails, roller rink, and a golf course.



Recommendations: ADA and NMB improvements suggested at ramp gangway and dock with addition of EZ-dock launch attached to existing structure. A sandy beach on the west shore offers an alternate launch/landing and an excellent staging area for events. (See Site Design)

Cow Meadow County Park

Address: 701 S Main Street, Freeport

Phone: 516-571-8685

Access: Freeport Creek, Middle Bay

Owner: Nassau County

Hours: Dawn to Dusk

Parking spaces: 200

Conditions: Tidal creek

Amenities:    

Description: A small beach launch south of the ramp and marina, which are slated to be rebuilt. The 171-acre park features fishing, hiking trails, natural areas, grills and shelters.



Recommendations: Concessionaire to rebuild ramp/marina, which may include NMB/ADA improvements at ramp, cartop parking, long-term and transient kayak storage and restrooms as well as kayak/canoe concession providing rentals, storage, and programs. Nassau County will issue RFP for rebuilding marina and concession management.

Inwood Ramp

Address: Bayview Avenue, Inwood

Contact: (516) 571-7894

Owner: Nassau County

Access: Jamaica Bay

Hours: 5:00 AM – 11:00 PM in season

Parking spaces: 116

Conditions:

Amenities:    

Description: A wide ramp undergoing reconstruction at the 16-acre park.



Recommendations: Installation of NMB/ADA accessibility to boarding docks; add seasonal/transient storage, cartop loading zone.

John J. Burns Park

Address: 4990 Merrick Rd, E Massapequa

Phone: 516-797-7980

Owner: Town of Oyster Bay

Access: Jones Creek, South Oyster Bay

Hours: 9 am to 6 pm (9 pm summer)

Parking spaces: 92

Conditions: Motor boat traffic

Amenities:    

Description: A multi-lane concrete ramp with side boarding docks and an adjacent floating dock, a boat rinse in the trailer lot. 52-acre park offers bike/hiking paths, playground, tennis courts and ball fields.



Recommendations: The gangway and small transient floating dock would benefit from the addition of a modular launch and handrails (kayAccess) attached to the end of the existing structure. Add cartop loading zone; seasonal/transient kayak storage racks; kayak/bike concession offering rentals, paddling programs and safety outreach.

Long Beach Ramp

Address: 638 National Blvd, Long Beach

Phone: (516) 431-1000

Owner: City of Long Beach

Access: Reynolds Channel, West Bay

Hours: Dawn to Dusk

Parking spaces: 110

Conditions: motor, Jet Ski traffic

Amenities:    

Description: Wide concrete ramp with side boarding dock about .25 mi. from Rec Center facilities. Just blocks to dining, bike rentals, and beaches.



Recommendations: NMB and ADA boarding dock improvements. Add transient or seasonal kayak storage, trailhead signage, cartop drop-off zone, secure lockers, and wayside exhibit with map of area so paddlers can explore Long Beach.

Millburn Creek Ramp

Address: Atlantic Avenue, Freeport

Phone: 516-571-8692

Owner: Nassau County

Access: Millburn Creek

Hours: Open 24 hours, year-round

Parking spaces: 46

Conditions: Water gets murky; ramp slippery.

Amenities: 

Description: A wide concrete ramp with short boarding docks. The 24-acre park north of the ramp has bike and hiking trails. At high tide dock gets swamped. Under the bridge a winding route to Baldwin Bay.



Recommendations: Sanitary facilities. County has a plan in progress to replace boarding docks and makeover the park and can add NMB/ADA access improvements, storage, wayside exhibit, and trailhead marker.

Town Marina West

Address: Lido Blvd., Lido Beach

Hours: Dawn to Dusk

Owner: Town of Hempstead

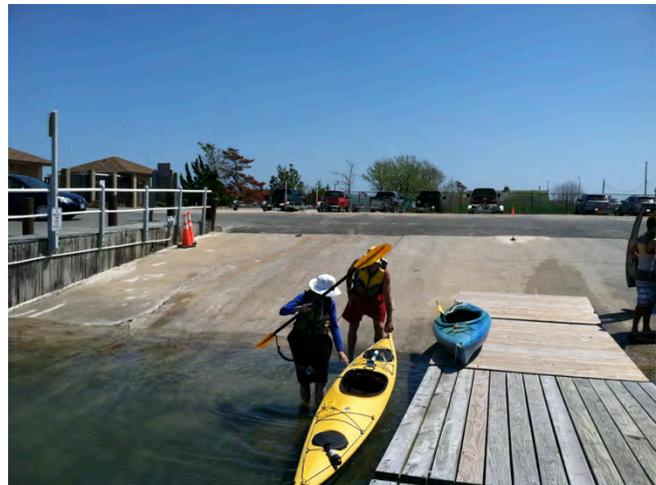
Access: Reynolds Chan, Middle Bay

Parking spaces: ample

Conditions: launch directly into motor traffic in channel

Amenities:   

Description: Multi-lane boat ramp with boarding dock on one-side. Adjacent to Energy Park.



Recommendations: Add NMB/ADA accessibility to boarding dock, cartop drop off zone, trailhead marker, wayside exhibit, and transient storage. About a mile to trails only camping at Nickerson Beach Campground, blocks to beaches.

Wantagh Park Ramp

Address: One King Road, Wantagh

Contact: (516) 571-7460

Owner: Nassau County

Access: Flat Creek, East Bay

Hours: Dawn to Dusk

Parking spaces: 116

Conditions: motor, Jet Ski traffic

Amenities:    

Description: A multi-lane concrete ramp with side docks and center float at the 111-acre park offering boat rinse, walk/bike trail, grills, fishing pier, fitness trail, tennis and swimming pool.



Recommendations: Add NMB/ADA accessibility to boarding float, storage, cartop loading zone, and trailhead marker. Phase II: Develop separate kayak/canoe only launch.

Boat Ramp Enhancement Strategies

Close to half of the existing launch sites are trailered motorboat ramps, where trailered motorboats are given priority access and parking over non-motorized boats, plus the concrete ramps can damage plastic and fiberglass kayaks/canoes. During the planning process there were several issues and opportunities identified as items that should be addressed at boat ramps by the Blueway Plan. The boat ramp enhancement recommendations present cost-effective ways to make consistently accessible facilities available to a broad spectrum of trail users, ease launching and retrieval at ramps, help to avoid user conflicts, and ensure safe boating conditions.

1. **Drop-off zones** allow people to unload and load gear and boats without blocking traffic as close as possible to the ramp before parking.
2. **Cartop parking spaces** Drivers need clear delineation of the intended limits of parking areas and allocating space for cartop parking avoids conflicts with trailer parking. In addition, trailers carrying multiple kayaks or canoes should be accommodated in trailer lots.

3. **Non-Motorized Boat (NMB) Ramp Improvements** such as boarding dock cleats, rope handles or other supports to help paddlers balance during put-in and take-out. The installation of a dock system with hand rails, kayak assist platforms, modular docks can ease traffic at the ramp and facilitate safe water access and make launch and takeout easy for persons of all abilities.
4. **Universal accessibility** through the NMB dock enhancements meet ADA requirements. Ideally, a standard launch solution, both NMB and ADA compliant, can be made consistently available at all boat ramps.
5. **Storage** Transient storage to stow gear and equipment so trail users can enjoy the parks and explore upland areas. Where feasible fee-based seasonal storage can deliver a supplemental revenue stream while offering greater access and convenience to paddlers.
6. **Boat rinse station** to reduce the potential spread of invasive plants and where possible shower posts.
7. **Signage** and clear instruction for human-powered boaters regarding ramp rules, regulations and policies to minimize disruptions to other activities.

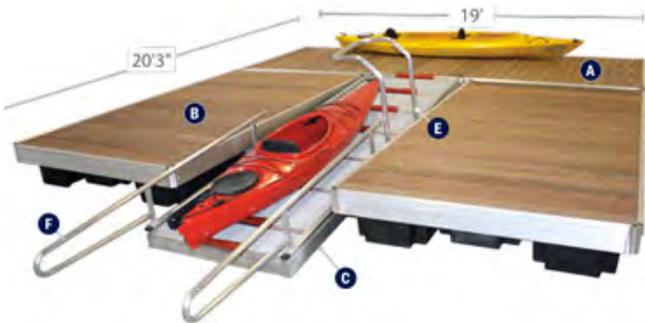


BOAT RAMP ISSUES	OPPORTUNITIES
<p>A Trailered-boats get priority access at ramps.</p>	<ul style="list-style-type: none"> • Institute a policy of first come first serve for all users. • Designate cartop drop-off zones and parking ▪
<p>B Ramps get slick from constant submersion at high tide and algae buildup, which can cause slips and falls during launch.</p>	<ul style="list-style-type: none"> • Outreach: Recommend launch & exit at high tide • Install handrail or rope to aid with balance • Regular power washing of ramp surface to mitigate algae buildup throughout the season • Employ anti-slip coatings • Install precast groove finish and rumble strip planks tongue and groove construction.
<p>C Boat ramp boarding docks are not NMB-friendly. Most sit too high in the water and are too narrow to allow multiple kayaks to simultaneously launch.</p> <ul style="list-style-type: none"> ▪ Wherever feasible, offer an alternative site for hand launched watercraft to put-in, such as a separate dock, beach area or dedicated hand launch ramp. 	<p>A launch assist platform can be added to the outside of an existing floating dock for paddlecraft to enter and exit the water without interfering with other users.</p>  <p>Improvements such as boarding dock cleats, rope handles or other supports help paddlers balance during put-in and take-out. Where feasible, a floating launch might be attached on the outside or end of an existing boarding dock. (See Dock styles below)</p>
<p>D Concrete ramps can wear holes in plastic kayak hulls, boaters have to keep the kayak or canoe floating to avoid damage.</p>	<p>Modify existing launch structures by adding PVC slats to decrease hull damage from the concrete surface.</p>

Dock Styles & Suppliers



AccuDock – <http://www.accudock.com>
(954) 785-7557 A full line of marine-grade aluminum modular gangway and dock configurations, and attachment solutions designed specifically for local wake action, currents, ADA compliance. The deeper the float the more buoyancy and stability.



Dock Doctors 800-870-6756
<http://www.thedockdoctors.com>
New York-based modular nonskid launch systems with hand rails. Heavy-duty version pictured holds multiple boats, costs \$20,000. RECOMMENDED AT SEA BREEZE PARK.



EZ Docks - <http://www.ezdockli.com>
(516)468-3625 info@ezdockli.com
Universal accessibility, rough water applications, installation averages \$22,000 for gangway-dock-launch system with 8-yr. floatation warranty. Prefab elevated walkways over ecological areas. Floating dock installed at Downtown Boathouse at 72nd Street, Manhattan. Ohio reported issues with damage from boat wakes. NJ dealer says docks withstood Sandy.



GatorDock - <http://www.gatordock.com>
(866) 730-9119 x 1133. Durable ADA kayak/canoe marine-grade aluminum custom launches built to spec. Design incorporates a kayak launch and motorboat transient dock custom designed for pre-existing dock structure worked with installation at Jones Beach, East Rockaway and Operation SPLASH.



Kay-aKcess - www.kay-akcess.com
941-662-5935 ADA compliant safe launch with assist bar for kayaks providing stability attached to dock end., an 8-foot slip with “cylinders” that attach the floating dock to the main dock and allow the dock to float up and down as needed; cost is about \$5,000. Installed on Arkansas River water trail with favorable results.



Kayak Dock - www.kayakdock.com
Polyethylene modules easy paddle-on and slide-off dock stand-alone or integrated with an existing dock, includes boat lockdown, a limited lifetime warranty and custom ADA solutions. Double-wide (shown) approx. \$4500. Recommended for Sea Breeze Park installation.



C Existing Trailheads

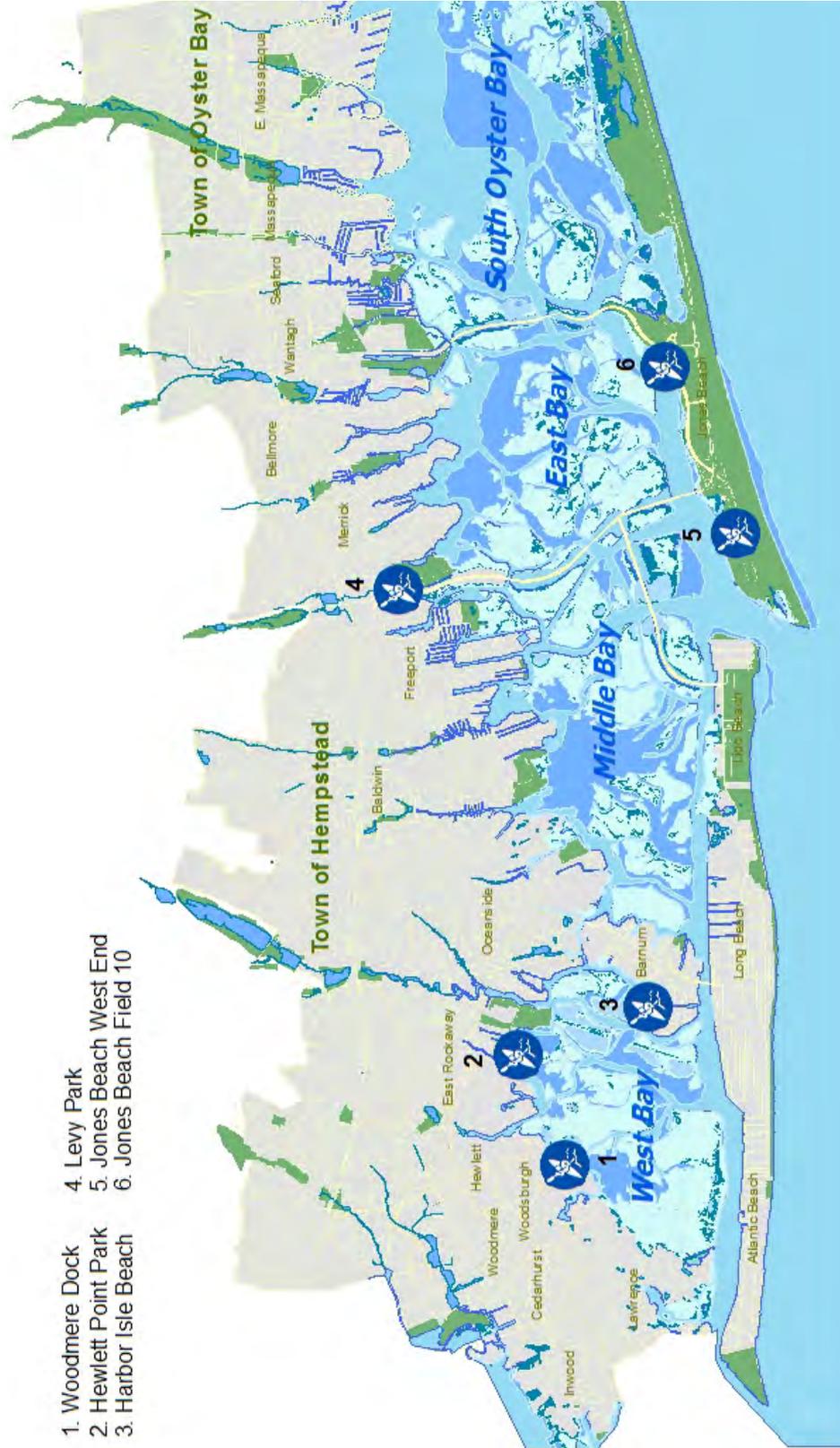


There are several established amenity-rich access points in the western bays, varying from beach access at Jones Beach State Park, kayak tours at Norman Levy Preserve and the Town of Hempstead’s new West Bay Trail access points. These sites should be integrated into the South Shore Blueway Trail. Trail markers and wayside exhibits would be nice enhancements at these trailheads to delineate the boat entry point and give details about the blueway. Also, where feasible, these trailheads would benefit from boat storage.



Existing Trailheads

- 1. Woodmere Dock
- 2. Hewlett Point Park
- 3. Harbor Isle Beach
- 4. Levy Park
- 5. Jones Beach West End
- 6. Jones Beach Field 10



Harbor Isle Beach

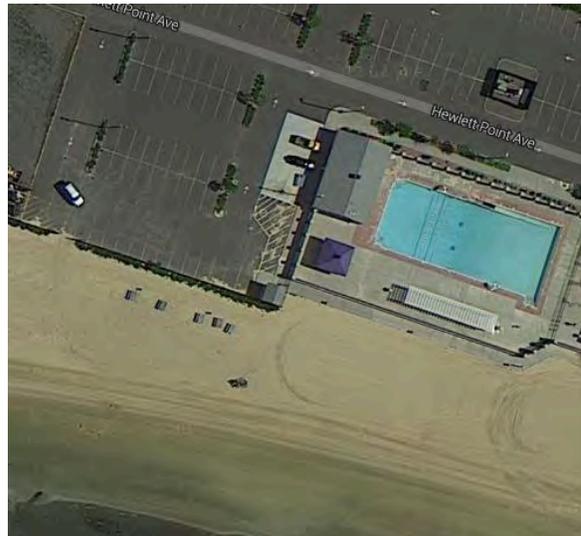
Address: 130 Washington Ave.,
Island Park
Phone: 516-432-5554
Owner: Town of Hempstead
Access: West Bay
Hours: 9:00 AM to 6:00 PM
Parking spaces: street parking
Conditions: Low tide is an issue
Amenities: 
Description: A small beach,
seasonal permits are required for
picnics and the beach is for local
residents only.



Recommendations: Clear signage indicating entry point and park policy

Hewlett Point Park

Address: Hewlett Point Ave., Bay Park
Phone: 516- 599-4064
Owner: Town of Hempstead
Access: West Bay
Hours: 9 am to 6pm (9pm summer)
Parking: seasonal fee \$5 residents, \$6 non-
residents
Conditions: Motor boat traffic
Amenities: 
Description: Bathing beach open seasonally
for town residents only. In addition to a
pool, there are athletic courts, a concession
stand, and playground.



Recommendations: Clear trailhead marker delineating entry to beach and trail access point; post trailhead access policy (residents only); introduce occasional events and programming such as free community paddling days for residents

Jones Beach Field 10

Address: Ocean Pkwy, Jones Island

Phone: 516-785-1600

Owner: NYS OPRHP

Hours: 8:00 AM to 6:00 PM

Parking spaces: \$10 fee

Access: Natural, sand beach

Conditions: State Boat Channel

Amenities:    

Description: Beach access near fishing piers and tackle shop offering parking, grills, picnic area, showers, and food stand.



Recommendations: Trailhead marker and wayside exhibit with trail map; good spot for staging a kayak fishing event or safety day.

Jones Beach Boat Basin

Address: Bay Pkwy., Jones Beach

Phone: 516-785-1600

Owner: NYS OPRHP

Hours: Dawn to Dusk

Parking: \$10 fee

Access: Natural, sand beach

Conditions: motorboat traffic; mud is an issue at low tide; rocks

Amenities:    

Description: A 500-yard carry on paved path to cove beach beyond the boat basin, offering food stand, grills, picnic area.



Recommendations: A very long portage to access water, especially at low tide. Closer access near boat basin dock – install ADA accessible dock. State Parks launch signage is in the tall grass difficult to read policy.

Norman Levy Park

Address: 1600 Merrick Rd., Merrick

Phone: 516-804-2000

Owner: Town of Hempstead

Access: Merrick Bay, East Bay

Hours: 7 AM to 7:30 PM varies

Parking spaces: ample

Conditions: High tide access only

Description: Former landfill where kayakers launch. Ranger-led kayak eco-tours to Merrick Bay. No fee to launch.



Recommendations: Trailhead marker and wayside exhibit; warning sign regarding tidal creek. Offer shuttle service to pick up paddlers at a different landing or launch location.

Woodmere Town Dock

Address: Woodmere Blvd.

Phone: 516-571-7801

Owner: Town of Hempstead

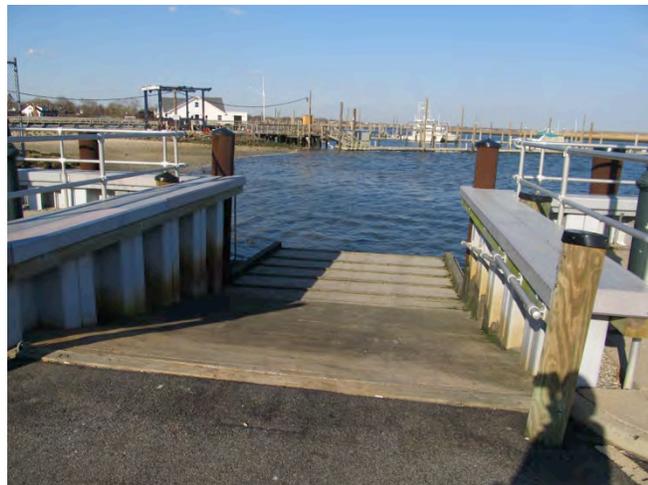
Access: West Bay

Hours: Dawn to Dusk

Parking spaces: street

Conditions: ramp can be slippery

Description: A hand launch only paved ramp. The park offers no amenities other than seating and a fishing pier.



Recommendations: Restroom facilities; storage. Institute measures to reduce/prevent slippery dock, such as more frequent clearing of algae.



D Launch Fees and Access Limits

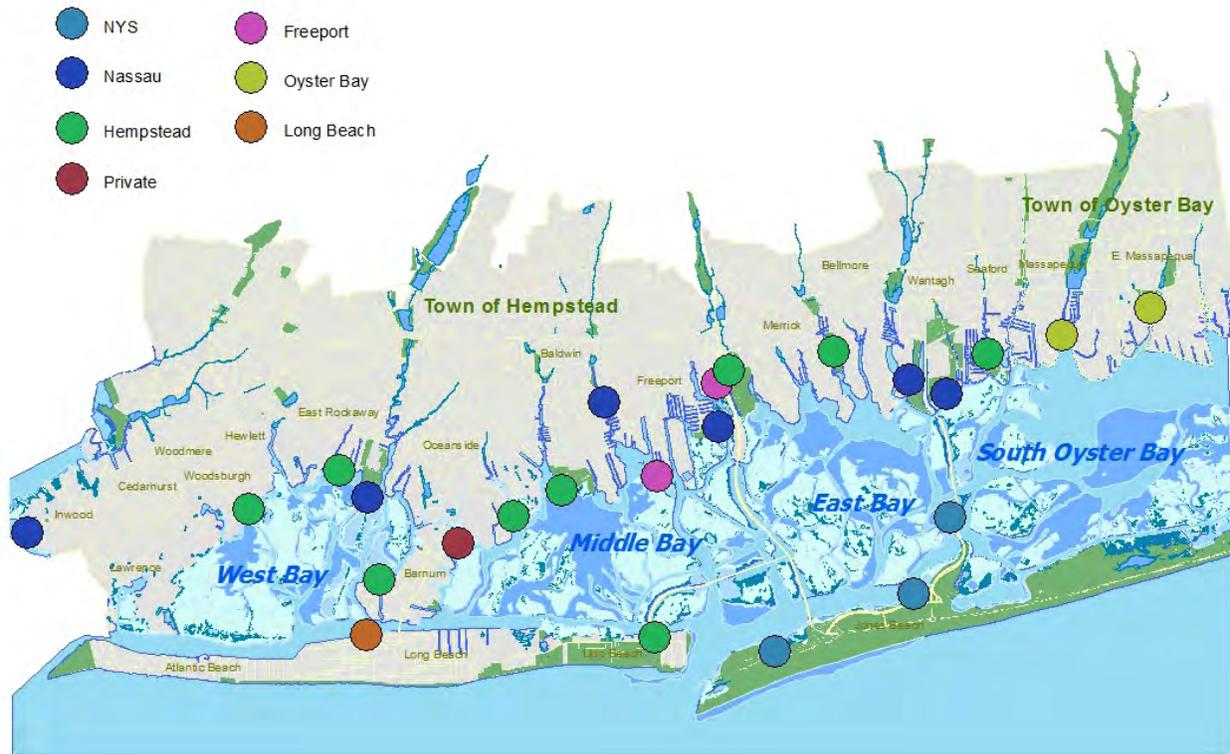


It presents a challenge for resident and nonresident paddlers to navigate the various launch jurisdictions. Permits and/or residency requirements apply at most access points on the Blueway Trail. Nonresidents can purchase a day use or season launch permit for county boat ramps, still many town parks are limited to resident-only parking. The South Shore Blueway Trail Plan recommends several options for improving public access, while advancing safe boating and benefiting local economies. Research conducted on how other regions manage the permit issue informs the discourse. Permits generally apply to put-ins and not to landing sites. Paddlers are able to land at any trail access point.

For the most part, “off season” paddlers do not need a permit and seasonal parking fees do not apply. In the Blueway Trail user Survey, 60% of paddlers surveyed indicated they are launching outside of the normal boating season, especially paddling in the fall when water temperatures are remain mild. Also, a growing number of people are paddling in the winter to view the unique wildlife, specifically winter waterfowl and seals, and enjoy fairly traffic-free boating.



Access Point Jurisdiction



Access Point Permit Requirements

<p>NYS OPRHP 1 Ocean Parkway Wantagh, NY 11793 (516) 785-1600 http://www.nysparks.com/parks/10</p> <p>Green Island Fishing Station Jones Beach Field 10 Jones Beach West</p>	<p>Entry fee: \$10 day use parking permit</p> <p>Empire Passport: \$65 unlimited day use vehicle entry to most New York's State parks and recreational facilities. http://nysparks.com/admission/empire-passport/</p> <p>Senior citizens, 62 years of age and older, can show a New York State driver's license or non-drivers I.D. to obtain free entrance to any New York State Park, Monday through Friday.</p>
<p>Nassau County Dept. of Parks, Recreation & Museums (516) 572-0200 http://www.nassaucountyny.gov</p>	<p>Seasonal Launch Ramp Permit: \$50.00 residency permit fee, sticker issued to Nassau County residents only allowing use of ramp and parking. Permit stickers are placed on the vehicle bumper. Patron must have valid New York State registration and Leisure Pass to purchase permit.</p> <p>One Day Launching Permits: \$20.00 fee per day, permit to be displayed on car dashboard.</p>

<p>Bay County Park Cow Meadow Park & Preserve Inwood Park Milburn Creek Boat Ramp Wantagh Ramp</p>	<p>Leisure Pass \$25 identifies its holder as a Nassau County resident and is required for entry into many recreational facilities, beaches, marinas</p> <p>Nonresident Parking fees: \$10 on weekends, beginning Memorial Day through Labor Day.</p> <p>Ramp Rules: All vessel operators launching from Nassau County boat ramps, whether using motorized or non-motorized craft, must obtain a county parks-issued vessel launch permit. No inflatables are permitted on ramps.</p>
<p>City of Long Beach Long Beach Boat Ramp</p>	<p>Resident-only, fee \$45 a season. Vehicles with trailers get priority parking. Use of the launch is “at your own risk.” No onsite enforcement.</p>
<p>Town of Hempstead (516) 292-9000 Baldwin Park Newbridge Park Oceanside Park Seaman’s Neck Park West Marina Boat Ramp</p>	<p>Free to residents.</p> <p>Town Boat Ramp: No permit required. Vehicles with trailers get priority launch access and nearby parking. No onsite enforcement.</p>
<p>Town of Oyster Bay Parks Dept. Beach Division http://www.oysterbaytown.com Alhambra Road Beach John J. Burns Boat Ramp</p>	<p>No fee for hand-launched boats.</p> <p>Boat Ramp: Resident fees seasonal trailer sticker is \$65.00; daily use \$15.00, Resident Senior Seasonal Sticker – No fee Non-Resident Fee Seasonal trailer sticker \$150.00; Day use \$30.00.</p>
<p>Village of Freeport Albany Avenue Boat Ramp Waterfront Park</p>	<p>Free access 24/7. No onsite enforcement.</p>



Permit Analysis

Non-motorized boating fees and regulations are inconsistent from state to state. A breakdown of water trail access policies in other regions follows:

- A nationwide *Non-Motorized Boating Survey* review of permitting was conducted by the Oregon Marine Board in April 2013. Of the 49 states responding, only 3 required permits. (IL & NM daily permit; OH 3 year permit), though some states require vessel title registration or taxed paddlecraft.
- In 2013, the National Park Service at Gateway National Recreation Area rescinded the permit fee (\$50) for the Jamaica Bay Watertrail after it was determined that paddlers received little for the fee and it limited access.
- Westchester County cartop launch fees range from \$5 to \$15 for daily use and \$40 for a yearly permit, which differs widely from trailered motor boat launching, which runs \$100 per year, plus \$5 per use.
- The Minnesota Department of Natural Resources (DNR) only participates in public water access projects that ensure access to the general public. This includes all of the 662 the access points on Minnesota State Water Trails system. No launch fees, unless the site is located in a park requiring a vehicle admission/parking permit.
- In 2012, New Jersey began charging a fee at all state parks and state-owned ramps, a Five-Area Permit \$60 for residents, \$80 nonresidents, daily access pass, cost is \$12 for a New Jersey resident and \$20 for nonresident. The state also sells a statewide Annual Boat Launch Permit that allows access to boat launches at all state parks for \$170 per year for residents and \$200 for nonresidents.
- Connecticut has numerous resident-only parking access points and, wherever possible, provides information in outreach materials about nearby unrestricted public access points in outreach materials and website.
- The Pennsylvania Fish & Boating Commission offers two permit options to launch at state parks, either the Launch Permit (one year \$10 or two years \$18, December to December) or register the boat with DMV (two years \$26).
- Water trails coursing through multiple jurisdictions, such as the Northern Forest Trail or John Smith Trail, note the various permitting requirements in all trail materials, maps and guides. A recent report on economic benefits of the Northern Forest Trail suggests that permit issues may be hampering paddle-through rates.

Permit Recommendations

An important objective of the Blueway Plan is to promote trail use by residents as well as visitors, to increase day-trips and tourism and, in turn, impact economic development. A common goal among jurisdictions is to promote safe, handy water access. The main reason to implement fees and permits is to find out who, how, and when an asset is used. The permit process can also inform trail users about safe boating, “Leave No Trace” ethics and provide a mechanism for paddlers to file a float plan.

Nassau County Ramp Permits

Revenue from permitting fees for use of the five Nassau County boat ramps averaged about \$55,000 a year for 2011 and 2012. The fiscal reports do not distinguish between trailered or cartop launching, nor does the county fee structure, which charges \$50 for a seasonal resident launch permit, in addition to \$25 cost for a Leisure Pass. Consider that cartop boats take up half the parking area. They are low impact on facilities in contrast with motor watercraft. A cartop boat, usually a

kayak, canoe or paddle board, is any boat that can be carried to the water. Surveys of paddlers indicate that very few are purchasing a ramp permit.

There is an opportunity to increase ramp revenue by growing the cartop user population through reduced permit pricing for a year-round cartop permit and increased services to paddlers with low cost NMB boat ramp improvements (cartop loading zones, boarding dock add-ons). In addition, by building on the popularity of paddlesports, installing seasonal kayak storage and/or kayak rental/tour concessions, where possible, can serve as hubs for educating people about Nassau County coastal ecology. Beyond this, the new permit provides a method for tracking cartop usage, which would offer a means of measuring results.

Day Use Pass

With daily permits, the same is true - an increase in cost, can reduce the profit. A Bay specific day-use pass for visiting paddlers would allow people to explore

one of the four bays, from launch to landing with shuttle service.

Day-use fees at county facilities are the same for trailered and cartop boaters. A second step to increasing revenue while improving service is to simplify the nonresident day use system. A self-issued day-use pass through a pay and display permit system whereby visitors pay online and print a receipt prior to their visit or pay at an on-site machine accepting cash or credit cards that produces a receipt (similar to parking meter), which is then displayed face-up on the vehicle's dashboard. A self-issued day use pass is also convenient for visiting trail users.

Reciprocity

A cartop pass could open the trail up for broader local use by offering reciprocity between jurisdictions at all boat ramps on the South Shore Blueway Trail, whether Nassau County, Town of Hempstead, Town of Oyster Bay, Village of Freeport or the City of Long Beach. An evenhanded approach of realizing reciprocity is for each jurisdiction to charge a cartop permit

fee and provide special decals. A limit could be set on the number of reciprocal passes sold on a first-come, first serve basis each year. A result of the reciprocity system will be that paddlers travel to new places and look at access points all across the map.

Group Outings and Paddle Event Permits

Paddle clubs, meetups and outfitters organize group paddle excursions. They introduce new paddlers to the sport and educate them about safe boating practices. Many offer a public benefit and park programming through free walk-up paddling events, youth and beginner paddles, charity paddles, and site maintenance activities. Permit fees could be waived in these instances with advance notice to park administrators or through an online reservation system.

Recreational group, guided tours and outfitter day-trips use trailers holding multiple kayaks to drop-off then shuttle people back from the paddle destination. Reservations for groups of 8 or more boaters, during the boating season and can avoid user conflict, control entry point traffic. A reservation

and group float plan can further preservation efforts mitigating damage from large pods of paddlers by raising awareness of environmentally sensitive areas at put-ins, destinations and take-out points. A reservation system can serve to increase visitor traffic at nature centers and preserves, where paddlers can make arrangements to take-out, walk the trails and enjoy the wildlife viewing. Furthermore, many trail access points offer picnic areas and barbeque grills for use with advance reservation. For commercial non-motorized boat tours and rentals, concessionaires, all

commercial outfitters, tour guides, and community paddling events should register in advance with appropriate park administrators and be responsible for an assertion of safety measures and any applicable insurance. Beyond this, kayak/canoe trailers take-up the same amount of space in parking areas as one motorboat trailer and, therefore should be charged the trailered permit fee and adhere to all other permit requirements, rather than a per boat launching fee, thus introducing new paddlers to the facility.



E Boat Storage Solutions



Onsite storage allows non-motorized boaters to safely store kayaks, canoes, paddleboards, and small sailcraft conveniently at the trailhead while it provides supplemental income to support site management and maintenance. Additionally, seasonal or year-round storage can increase access and eliminate financial barriers to participation by eliminating the need for home stowage and the need to have a way to transport a boat to the launch site. From T-shaped racks, H-shaped racks and J-cradles to custom kayak storage bins and modified shipping containers, a variety of storage facilities can serve the needs for transient, overnight, seasonal, and year-round storage options.

Local parks departments or community organizations, such as the boy scouts or paddling clubs, can install storage structures. Storage assemblies ought to be designed to keep boats secure and prevent any damage, while not diminishing the character of an access point or disrupting the coastal viewscape. If feasible, covered, dry storage is preferable for seasonal storage as it protects plastic and fiberglass from weather, sunlight and heat exposure. Well-built sturdy supports that can prop the boats weight are important, since if not set firmly on supports it can distort the shape of the hull. Allow enough loading space (4-feet) around the storage area to easily lift and carry the boat without obstruction.



Transient Storage

Transient storage allows boaters to partake in other park amenities and visit nearby commercial areas and attractions. Temporary, non-overnight storage is recommended at passively managed trailheads, such as West Marina, Milburn Creek, Long Beach, and Woodmere Dock. Transient storage generally happens on a first-come, first serve basis with boaters providing lockable cables to secure the boat and tie-down to prevent the wind from lifting it and causing damage. Owners accept all liability for damage to and security of their property.

Seasonal Storage

Seasonal storage and a few transient spaces are recommended at actively managed access points where there is onsite management, staff or a concessionaire. Space on storage racks can be assigned April to October,

leased for fees ranging from \$60 residents to \$150 nonresidents per season. Properties that require a launch permit can incorporate the permit fee in with storage costs. Blueway trailheads that have sufficient space and onsite management for seasonal storage include John J. Burns Park, Bay Park, and Wantagh Park, and depending upon demand could be considered at Town of Hempstead marinas.

Boathouse or Concession Storage

Where possible, seasonal or year-round storage structures can be set up as part of an onsite concession or community boating operation that not only builds the required infrastructure for the launch but also provides storage, boat and bike rentals, lessons, and community programming. This can be part of future planning for parks such as Cow Meadow, Cedar Creek, Alhambra Road, Newbridge, and Seaman's Neck.

Storage Styles & Suppliers



Transient Boat Tree

Suitable for short-term storage, each pair of J-cradles holds one kayak or canoe, good for rustic sites needing little maintenance. The National Park Service has installed free transient kayak J-cradles at trailheads on the Jamaica Bay Watertrail. Cost is about \$180 for a pair of J-cradles, mounted to park supplied posts, installed by parks.

Supplier: Oak Orchard Canoe, NY
(800) 452-9257 oakorchardcanoe.org



Transient Boat Rack with Locker

Custom racks with storage boxes installed at 50 Hudson River Greenway trailheads recommended for secure short-term storage at unmanned sites. Each rack has the capacity to store two boats and gear. Fabrication plans are available online so buyer can work locally http://www.hudsongreenway.ny.gov/Libraries/H2OtrailDocs/KAYAK_RACK_final.sflb.aspx.

Fabricator: White Marine, Perth Amboy, NJ
(800) 826-4491 whitemarineinc.com \$3200



Free Standing Storage Systems

Easy to assemble racks can be custom-made for seasonal multi-craft storage.

Supplier: Atlantic Beach Clubs (954) 658-7600 <http://seaductionfloats.com>

Recommended for durability, Lesstor KS rack: stores 14 kayaks costs \$1200 (pictured) is constructed out of 4x4 inch pinewood coated with white exterior PVC plastic, Galvanized Steel Arm Bars Encased with PVC Rollers, UV Resistant, lifetime warranty.



Modified Shipping Container Boathouse

Adaptive reuse of a shipping container for boat storage has many advantages, its secure, vandal-proof, durable, and does not require a building permit. The price for a 20' shipping container (not including delivery) can range from \$900 used to \$4000 new, it weighs almost 5000 lbs., is 8' wide and about 8.5' to 9.5' in height, and also available in 40', which is suitable for community boating programs. It should be "corten steel" capable of withstanding saltwater and storm intrusion, and must be rolled off a tilt bed truck in place onto a concrete slab, parking lot or railroad ties. In the summer heat, a container becomes an oven inside, so it is recommended to paint it white and add ventilation.



Local Suppliers:

MODSNY (631) 254-0272 mods.com (free local delivery) 20' \$3200; 40' \$3700

Mobile-mini (973) 515-4721 40' used \$3000, new \$3500, with delivery

Port Containers (888) 307-2420 portcontainers.com



F Routes and Destinations



Having defined the South Shore Blueway Trail framework of access points, each Bay segment was analyzed to identify routes, connections and potential gaps. Paddlers participating in public mapping workshops and online route mapping submitted paddle routes, rest stop and destination recommendations for this plan. The trail is designed to promote safe boating conditions by spacing access points three to five miles apart and providing rest stops for boaters to take breaks and seek assistance if needed.

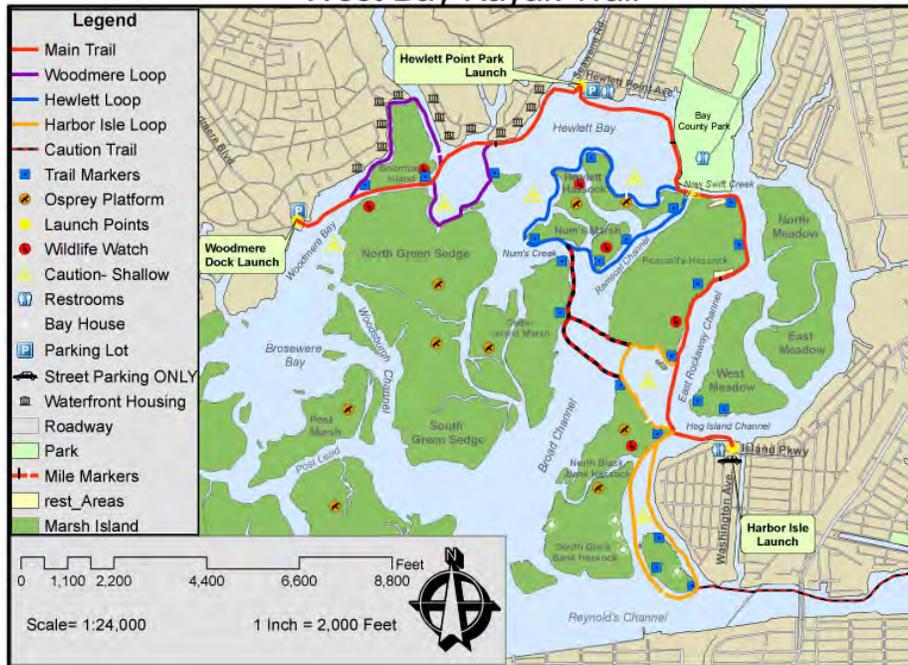
The South Shore Blueway Trail offers a wide variety of trip experiences for all skill levels. Trip options range from one-hour, a half-day, to multi-site, multi-day paddling experience. Most paddle trips are within about a 5-mile radius of the launch. Paddlers travel about 2 to 4 miles per hour depending on skill level, currents and winds. For overnight or paddle-through boaters, the distance between put-in and take-out locations is about 8 miles.



West Bay

West Hempstead Bay offers nearly 400 acres of calm waters, abundant wildlife viewing and a connected network of channels and tidal creeks passing through sheltered bays and salt marsh islands. Popular pastimes on the bay include birding, recreational fishing and waterfowl hunting. A kayak or canoe is a perfect way to explore West Bay. Knowledge of the tide timing is critical to safely navigating West Bay. The shallow tidal flats are exposed at low tide and can leave a paddler stuck in the mud. With Bay Park Plant discharging millions of gallons of treated sewage into the southern portion of the bay, it is advisable to check with the county hotline for spills as part of trip planning. Take in osprey nests and wildlife viewing along the marsh islands, paddle up to Pop's Seafood Shack, or land and rent a bike on Long Beach. The lights of the New York City skyline are visible at dusk from the marshy waters in the western part of the Bay. The Town of Hempstead has created a comprehensive trail with trail markers, mapped trip loops and the precise locations of Osprey platforms, and bay houses, as well as clearly marking places of to use caution.

West Bay Kayak Trail



Middle Bay

Timing is essential when planning a trip on Middle Bay to ensure paddling with the strong currents in each direction. The Village of Freeport is the focal point of Middle Bay, home to the shellfishing fleet, fishmongers and the Nautical Mile stretch of restaurants and shops.

The entirety of Middle Bay is fish and wildlife habitat, a wetlands conservation area featuring open water, undeveloped salt marsh, tidal flats and islands. The Town of Hempstead owns most of the bay. The bay supports wading bird rookeries and nesting pairs of raptors on the windswept grass islands. Bluefish and sea bass gather in deeper open waters making the bay a first-rate fishing spot.

Empire Kayaks has a private launch, rents kayaks and offers instruction and tours from the shores of Island Park. Baldwin Bay offers calm, quiet paddling for beginners. Bringing the trail right into the Nautical Mile area will allow trail users to stop and enjoy the maritime heritage



centerpiece of the blueway trail. Motorboat traffic is heavy in channels and currents are swift across the Freeport and Baldwin points. At West Marina boaters launch directly into the very active Reynolds Channel, the restricted 5-mile zone allows paddlers to quickly cross to the adjacent salt marsh where the pace slows. Paddlers can pause for the night at Nickerson Beach Campground. It is advised that only advanced paddlers travel east crossing under the bridge and around Jones Inlet where winds, currents and chop can be extremely challenging.

Destinations and Rest Stops

Marine Nature Study Area

Address: 500 Slice Dr., Oceanside

Phone: (516) 766-1580

Owner: Town of Hempstead

Hours: Tue-Sat 9 AM-5 PM

Description: Landing is a small tidal beach on the western shore of the 52-acre preserve featuring abundant wildlife viewing of osprey nests and shorebirds, nature trails, interpretive center and educational programs.



Recommendations: The landing beach is small and bordered by environmentally sensitive habitat, so not suited for multiple kayaks landing. Develop and post landing policy and mark landing area to avoid plants being trampled.

Nickerson Beach Campground

Address: Lido Blvd. Lido Beach

Phone: (516) 571-7702

Owner: Nassau County

Open: April to November

Description: Campground located on Long Beach Island offers 13 tent sites, 74 RV, and group tent camping near bay access and ocean beaches. Leisure pass discounts and early booking in January.



Recommendations: Promote to paddle clubs, guides and outfitters for group camping and pass to county launches shoulder season

Point Lookout

Address: 1300 Lido Blvd. Lido Beach
Phone: (516) 801-5650
Owner: Town of Hempstead
Waterway: Jones Inlet
Description: Sand dunes and private beach at the eastern tip of Long Beach Island offers a nice rest stop before crossing Jones Inlet or rounding the barrier island to the Atlantic coast.



Recommendations: Only skilled boaters should broach the inlet and channel, which can have strong currents, swells and heavy motorboat and Jet Ski traffic.

Sea Breeze Park

Address: Woodcleft Ave., Freeport
Phone: (516) 431-3900
Waterway: Middle Bay
Owner: Village of Freeport
Conditions: fast currents, motor traffic
Description: Transient stopover at the southern end of the Nautical Mile where there are restrooms, showers and restaurants.



Recommendations: A priority destination for promoting paddle-tourism. Install kayak-landing dock capable of handling multiple craft at the bulkhead or affix to existing transient floating docks. Determine and post policy for transient secure tie-up. **NOTE: Best for experienced paddlers traveling as a group.**



East Bay

East Hempstead Bay is situated between the Meadowbrook and Wantagh Parkways and bordered by the Town of Hempstead on the north and Jones Beach State Park to the south. Intertidal mudflats and salt marshes attract migrating birds. From November to May, harbor seals haul out to sun and rest on the beaches of marsh islands off the north side of Jones Beach State Park, including Deep Creek Meadow and Crow Islands. Seals are federally protected, so boaters must keep at a safe distance. Sloop Channel connects Middle and East Bay. Jones Beach Field 10 provides good access to fishing grounds and salt marsh. First, paddlers have to cross the busy motorboat traffic on State Boat Channel

A good place for beginners to start paddling is at Norman Levy Preserve, which the shallow Meadowbrook and offers eco-tours. Since the park rangers figure the tides you are sure to return to the park before the creek dries and is impassable. It's a long paddle from Levy to the popular fishing on Merrick Bay. Wantagh County Park boat ramp provides the best boat access, both motorized and non-motorized, on the north shore of East Bay. Non-motorized boater water access is dangerous, paddlers share the busy ramp with trailered boats, the basin is busy with large boats and jet skis, and the narrow passage into the basin is demanding as the bulk headed shore intensifies currents and motorboat wakes. Once out of the basin, circumnavigating Olivers Island is a nice short paddle. The currents at the bridge crossing are treacherous and should only be navigated by advanced paddlers. Jet ski traffic speeds through the narrow rivulets through marshlands and can be hazardous for human-powered boaters. There is a gravel beach at Green Island, where anglers cast from the new fishing pier into the swift moving channel waters that has a small beach-resting place available.

There is a gap in the trail on East Bay due to a lack of water access. Most of the shoreline is residential property. The plan recommends that Nassau County develop access at Cedar Creek Park. In addition, Newbridge Park, owned by the Town of Hempstead, offers the most favorable site for resident access, as well as programming opportunities for the community.

Destinations and Rest Stops

Green Island

Address: Wantagh Parkway

Phone: (516) 785-1600

Owner: NYSOPRHP

Access: East Bay

Hours: 9:00 AM to 7:00 PM

Parking spaces: 30

Conditions: swift currents at bridge crossing, Sloop Channel

Description: A 4,000-foot fishing pier complex just south of the tollbooth offers a natural beach on an eroded shore just west side of the bridge



Recommendations: Limited parking and relative newness of access make it undesirable as a trailhead at present. Community support and improved parking for kayak fishing or permit only kayak fishing may improve consideration for cartop launching. The preferred launch is the beach west of the fishing pier away from the strong currents.

South Oyster Bay

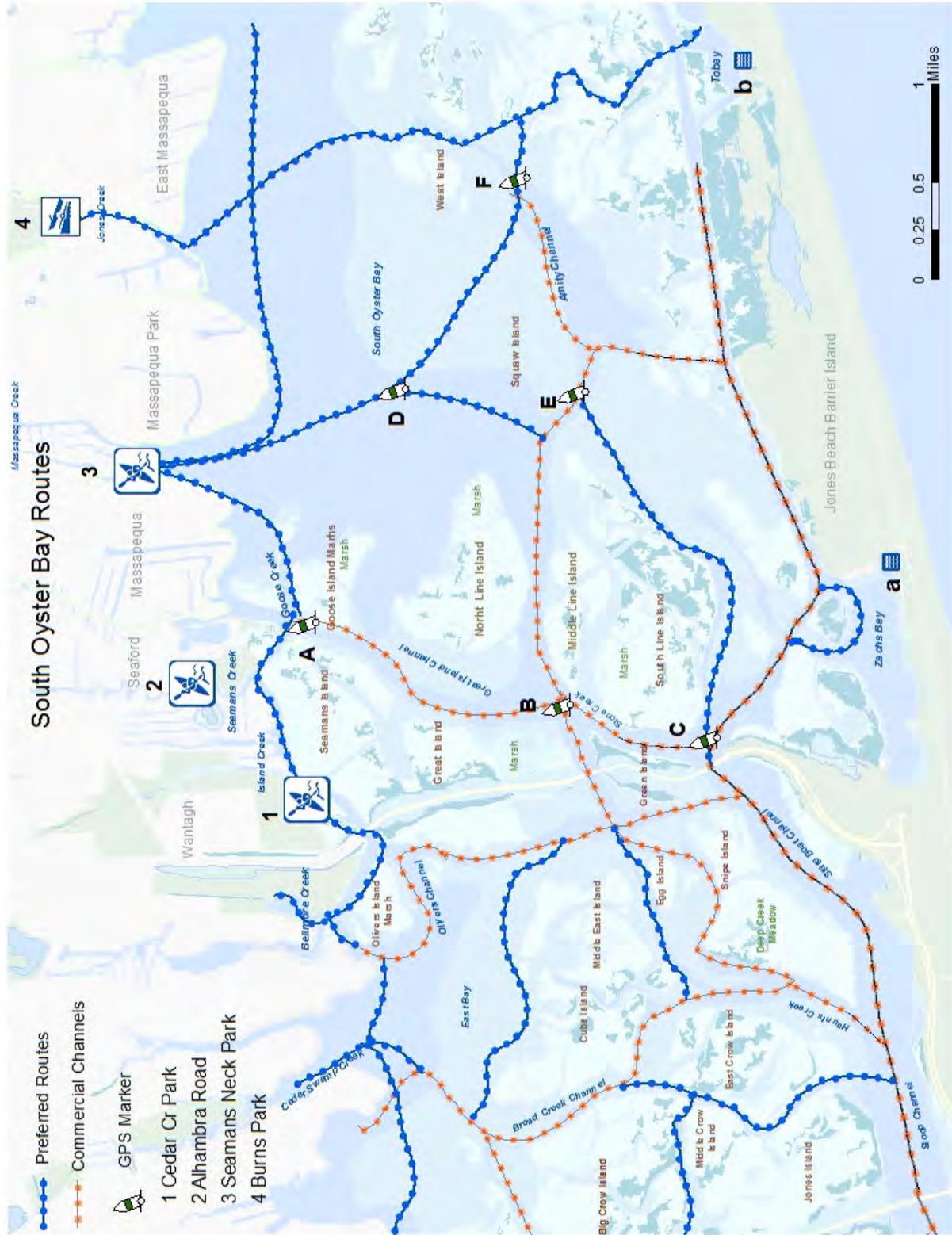
In contrast to the Hempstead Bays, South Oyster Bay is characterized by open water, in addition to tidal marshes, mudflats and marsh islands.

Extending from the Wantagh Parkway to the county-line, ownership of the bay is shared by the Town of Oyster Bay and the Town of Hempstead. Motorboats extensively use State Channel along the north shore of Jones Beach Island and Great Island Channel in the northern reach. There are generous fishing, scenic vistas and wildlife viewing in bay waters.

A small beach at the foot of Alhambra Road offers unsurpassed access for beginners and learners, as well as intermediate and advanced paddlers navigating across the open waters to Tobay Beach. Put-in is easy, waters are calm and there is sufficient off-road parking. Adjacent to the beach are two former marina sites, cleared and awaiting new purpose. The site offers excellent community economic development opportunity for low impact, quiet growth by developing a full-fledged community boating platform for non-motorized boats and coastal ecosystem ecology programs for South Oyster Bay, and compliment Oyster Bay's north shore Waterfront Center.

John J. Burns Park has a transient dock adjacent to the boat ramp that can add ADA accessibility and improve kayak access at this lovely open space, though it presents a long paddle down Jones Creek to the bay. The back barrier sands of Tobay Beach and Zach's Bay are trip destinations for swimming, dining and exploring, as well as connection to ocean beaches and bicycles trails.

In the western part of South Oyster Bay, there is need for new access at Seamans Neck Park and Cedar Creek County Park, both sites offer have good potential for community programming and coastal ecosystem education for residents that were previously obstructed from viewing and accessing the bay. The sites are critical to the completion of the South Shore Blueway Trail.



Destinations and Rest Stops

Tobay Beach

Address: Ocean Pkwy. Jones Beach Island

Phone: (516) 785-9412

Owner: Town of Oyster Bay

Conditions: Traffic in channel

Waterway: South Oyster Bay

Description: Bayside town beach featuring facilities, seafood and salsa shacks and outdoor showers. Fine day-trip for veteran paddlers through the marsh islands of the bay.



Recommendations: Best to go off-season in organized outing when there are fewer restrictions and fees (\$50 nonresident parking)..

Zach's Bay

Address: Ocean Pkwy. Jones Beach Island

Phone: (516) 797-4128

Owner: Town of Oyster Bay

Waterway: South Oyster Bay

Description: Bay-side town beach featuring facilities, restaurants and swimming beach. Fine day-trip for veteran paddlers through the marsh islands of the bay.



Recommendations: Concession operation to offer walk-up paddling for beginners (combined with bike rentals for Jones Bikeway) on weekends during summer months.



G Community Connections

There are more than 150 designated water trails throughout the United States that connect people to water resources. The Blueway Trail fits within a regional system of New York State watertrails. It connects with the National Parks Service Jamaica Bay Water Trail and the New York City Water Trail in the west, where it links with the Hudson River Watertrail and Greenway. Other water trails on Long Island include the developing trails on the north shore in the Towns of North Hempstead and Oyster Bay and the Peconic Water Trail between Riverhead and Montauk.

The South Shore Blueway Trail is part of a larger system of parks, preserves, and open spaces that connect people to nature, cultural heritage and recreation in Nassau County. It provides a vital link between local communities and the Hempstead – South Oyster Bay complex, together with the South Shore Estuary Reserve. The South Shore Estuary Reserve Council and Bayway can incorporate the watertrail in alignment on their trail mapping through the trail shapefiles.

By far, the best way to experience the South Shore Blueway is to obtain adequate training and paddle with a local club. Empire Kayaks provides quality instruction and is very active in kayak tour outings and rentals, as well as kayak fishing and stand-up paddleboard training. The local clubs and Meetups lead group paddle trips, skills clinics, speakers, and shore cleanups that support and encourage a safe and enjoyable Blueway Trail for years to come.

Outfitters

- Empire Kayaks empirekayaks.com
- Harbor Surf & Sports harborsurfandsports.com
- Sea Kayaking Skills & Adventure, Ltd. sksa-ltd.com

Paddlesport Clubs

- Kayak Fishing Association of NY <http://kfa-ny.org/forum/>
- Long Island Kayak Club longislandkayakclub.com
- Long Island Kayaking Enthusiasts (LIKE) [meetup.com/LIKEMEETUP](https://www.meetup.com/LIKEMEETUP)
- Long Island Paddlers lipaddlers.org
- North Atlantic Canoe & Kayak get-the-nack.org

Community Boathouses

Encouraging local paddle groups to establish onsite boathouses can provide numerous benefits to the community, such as free paddling days, beginner paddle tours and site restoration and stewardship, as well as work to establish relationships across the neighborhood. Community boathouses are grassroots membership groups that partner with the local park administration to operate non-motorized boating programs at a particular park location or at several. An onsite shipping container boathouse can serve to stow boats and gear. Boats, lifejackets and other gear are often donated, sponsored or grant funded. The American Canoe Association offers the groups liability insurance and other programs to ensure instructors and tour leaders have adequate training.

Boat Rentals

Non-motorized boat concessions offer kayak, canoe and SUP rentals, lessons and storage, tours, and security while maintaining the shore and generating revenue for the municipality. Inviting

concessions, through a competitive process, to operate on public parkland can provide infrastructure improvements and community programming. Requests for proposals should outline the needs and insurance requirements, and include: a minimum of three (3) years experience safely operating a kayak rental concession, quality equipment, instructor certification requirements, and knowledge of local waters, safe boating and outdoor ethics (ie: stay off marsh islands, leave no trace). Experienced staff and testing participant skill competency can help minimize problems

Freeport Kayak Rentals

(freeportkayakrentals.com) operated at Waterfront Park during the 2013 summer season providing kayaks to people on a reservation basis. Wheel Fun Rental (wheelfunrentals.com) operates boat/bike rentals at Jamaica Bay trailheads seasonally. Jones Beach Field 10, Burns Park, Wantagh Park, Cow Meadow Park, Waterfront Park and phased trailheads would benefit from a similar service.

Blueway Guides

Offering guided trips can improve trail safety and provide interpretive and educational experiences for participants. Guided trips, bundled with accommodations and other local amenities, are a good way for novice boaters and tourists to safely enjoy the trail. For example, a short beginner's wildlife viewing paddle introduces new people to the sport and educates about the local ecology.

Shuttle Service

A shuttle service can ensure that boaters and their boats, and even their vehicles are picked up at the end of the day. For paddlers wanting to paddle one-way with the tide, see a bay and not have to worry about having to re-trace their route to return, a shuttle service provides one-way connection for trail users. Often clubs with trailers arrange shuttled trips. Norman Levy Preserve is a location where a shuttle is desirable so paddlers can avoid a muddy return in low water. Freeport Water Taxi offers shuttle by boat to trailheads on the back barrier beaches, where boaters can then paddle to a destination.

Multi-modal Connections

The Blueway Trail creates opportunities for multi-modal experiences, including bicycling, hiking, nature walks and cultural experiences at several trailheads. The Jones Beach Bike Path, one of the most popular biking trails on Long Island, has several possible connections with the water trail where outfitters and guides can offer visitors multi-modal adventure. Many trailheads are located in parks that offer hiking and biking trails, nature walks and other links between the water and land based trails. Long Beach ramp and Sea Breeze Park stop feature the ability to walk to downtown with restaurants, shops and bike rentals.

Overnight Stays

Overnight stays can increase the tourism value of the trail, provide local residents prospects for longer trips, and offer opportunities for water trail partners. Few of the take out sites have nearby overnight facilities. Only one camping option at Nickerson Beach Campground . Few waterside overnight accommodations are available, the Freeport Inn and Marina offers water access on a canal. The need for trail motels, hostels, and campgrounds presents a growth opportunity.

H Recreation and Safety

The Hempstead Bays – South Oyster Bay Complex is crowded with motorboats, jet skis and commercial vessels during the warmer months. In low water, larger vessels are limited to dredged channels, which are noted on trail maps and navigational charts. Aids to Navigation, “road signs” of the water, mark channels and identifying hazards and low wake zones where power vessels must keep speeds to five-miles-an-hour. They assist boaters in navigating safely from place to place. The Blueway Trail Safety Plan recommends specific precautions to assist paddlers in navigating safely from place to place in these shared waterways.

Motor Boats and PWC

There is need for improved coordination and communication between paddlers and motorized boaters to minimize on the water conflicts and accidents in vessel-to-vessel interactions. Recreational motorboats and personal watercraft traffic operating at excessive

speeds on the western bays is frustrating to many paddlers. Boat wakes can capsize a kayak or canoe.

More aggressive monitoring and patrolling of these waterways can help address these issues. Non-motorized boaters need to work with local municipalities to enforce regulations that discourage unsafe actions. The US Coast Guard, Nassau County Police Marine Unit, Town of Hempstead and Oyster Bay constables enforce navigational safety issues.

Currents

Bridge crossing and inlets produce the most challenging conditions characterized by faster moving currents, eddies and variable water conditions dependent upon tidal flow. Such currents are caused by ebb (outgoing) and flood (incoming) tidal flows. Due to these factors trail users navigating between bays at bridge abutments and across inlets need to be at an advanced skill level.

Tidal Conditions

The changing tides alter the currents in the bays. Plan to travel with the tidal current then after the tidal current has turned, paddle with it in the return direction. There are a number of tidal flats, passageways between marsh islands, and creeks that become completely mud during lower tides. Paddlers can become stranded, stuck in the mudflats at low water and must wait for the tide to turn. Tide charts are available at most park offices. Check tide charts as part of trip planning, online at <http://www.lishore.org> or <http://tidespy.com>.

Weather

Severe weather can come up quickly, listen to National Weather Service radio. If a Small Craft Advisory is posted, head to safety immediately, as winds may become too strong to operate your vessel safely. <http://www.erh.noaa.gov/okx/marine.shtml>

Water Temperature

Cold water is very unsafe. During much of the year the water can be cold, a wet suit is a must in water as warm as 50 – 60 degrees, which can result in hypothermia or “Cold Water Shock”. Check water temperatures online at <http://www.surf-forecast.com>. More at NOAA Cold Water Guide: <http://www.nodc.noaa.gov/dsdt/cwtg/natl.html>.

Water Quality

Water quality issues, effluent, and high bacteria counts can make water contact unsafe. The Nassau County Department of Health conducts routine monitoring at beaches and provides a message of beach closings and sewage spills on its helpline (516) 227-9700 or sign up for email notice of sewage leaks at <http://www.nassaucountyny.gov/agencies/DPW>.

KNOW BEFORE YOU GO RULE

A general rule of trip planning is to “know before you go.” Know your route, your capabilities, your limits, and plan well. Expect to get wet. Know how to self-rescue. Awareness of local conditions is critical for a safe, enjoyable day on the water. Check the weather, water conditions and water temperature. Understand wave height, wind speed (Beaufort Scale), fetch and how it will impact your travel. Know the navigation “Rules of the Road.” Obtain qualified instruction in on-water skills and take a boating safety class. Before taking to the water, file a float plan.

Paddler Skill Levels

Paddlers new to the blueway may overestimate their abilities and underestimate the risks. More outreach is needed to ensure that safety efforts are reaching new and tourist boaters. Trips are generally described by skill level: Beginner to Intermediate, Intermediate to Advanced. This year, the US Coast Guard has begun development of a set of entry level, skill-based human-powered boat operation standards for recreational paddling and rowing (canoes, kayaks, rowboats, paddleboards, etc.). The Long Island Paddlers Club has devised trip ratings for conditions and skills, as well as endurance ratings, which is recommended as a guide when planning a trip on the South Shore Blueway Trail.

Conditions - Skills Trip Levels	Required Skills In Trip Level Conditions	Wind Conditions (MPH) Sustained Gusts	Water Conditions / Distance From Shoreline	Miscellaneous Requirements
1	Wet exit or permission from the trip leader	S 0 - 5 G 0	Flat water Less than ¼ mile from shore in protected waters	Entry and exit on soft beach sand
2	Perform in level 2 conditions: <ul style="list-style-type: none"> Wet exits Assisted rescues 	S 5 - 10 G 15	Waves 1 foot or less Current 2 knots or less Less than ½ mile from shore Minimal boat traffic	Entry and exit from a dock and/or pebbled beach
3	Perform in level 3 conditions: <ul style="list-style-type: none"> Assisted rescues Self rescues Bracing 	S 10 - 15 G 20	Waves 1 - 2 feet, may break over kayak Current 3 - 4 knots Less than 1 mile from shore Moderate boat traffic with sufficient distance for safety	Spray skirts required for Level 3 and above. Entry and exit from a dock and/or rocky beach.
4	Perform in level 3 conditions: <ul style="list-style-type: none"> Assisted rescues Self rescues Instinctive bracing 	S 15 - 20 G 25	Waves 2 - 3 feet Currents 4 - 6 knots Exposed crossings up to 10 miles Heavy boat traffic in close proximity	Entry and exit into breaking waves and/or rocky coast line
5	Perform in level 5 conditions: <ul style="list-style-type: none"> Assisted rescues Self rescues Instinctive bracing Kayak roll preferred 	S > 25 G > 30	Waves greater than 4 feet Currents greater than 6 knots Exposed crossings greater than 10 miles Heavy boat traffic in close proximity Possible crossing of shipping lanes	

Endurance Rating	Duration*	Single-Segment Duration**	Pace	Suggested Rest Stops***
A	Up to 3 hours / 6 miles	Up to 1 hour	Up to 2.5 MPH	Minimum of 1 stop. Not less than ½-hour duration
B	Up to 4 hours / 10 miles	Up to 2 hour	Up to 3.5 MPH	Minimum of 1 stop. Approx. ½-hour duration
C	Up to 6 hours / 15 miles	Up to 3 hour	No Limit	TBD by the trip-leader
D	Greater than 6 hours / 15 miles	Greater than 3 hours	No Limit	TBD by the trip-leader

* **Duration** - considered total time paddling, exclusive of rest stops. Actual trip time will be longer.
** **Single-Segment Duration** - the longest time paddling between rest stops.
*** **Suggested Rest Stops** - to be used as a guide. Actual quantity and duration of rest stops will be determined by the trip leader.

Figure 2: Compiled by the Long Island Paddlers http://www.lipaddlers.org/trips/paddle_trip_levels.

Float Plan

Leave a Float Plan with a responsible person, letting them know the trip itinerary: paddlers names, address and telephone number; point and time of departure; destination and estimated time of arrival or return; intended route; a description of your vessel and an emergency contact. A plan can be filed with the Nassau County Police Marine Bureau by calling (516) 573-4450. The Blueway Trail website will provide a Float Plan template. The NYC Watertrail App (free on iTunes and Android store) provides an easy to use Float Plan, complete with safety checklist that can be easily emailed to friend before launching. The plan recommends the development of an easy to use Blueway Float Plan App that can be accessed and filed by smart phone. All blueway materials could carry the QR code to directly open the app by scanning.

Boater Safety Precautions

1. Always wear a US Coast Guard approved, properly fitted life jacket.
2. Paddle in a group or use a “buddy” system. There’s safety in numbers.
3. Paddle as close to shore as is safe, avoiding channels used by larger craft.
4. Dress for the weather and water temperature. Do not wear cotton.
5. Be visible. Wear bright colors. Kayaks and canoes are extremely difficult to see from a distance, especially in marginal conditions.
6. Boarding and exiting can be challenging, especially for novice boaters. Note potential hazards putting in and exiting the water by examining the launch and landing areas carefully checking the water depths, uneven surface conditions, broken glass or shore debris, currents and potential hazards.
7. Floating debris presents a hazard, especially after a heavy rain.
8. Knowledge of the access point and potential underwater hazards such as rocks and pier pilings, and ensuring proper balance, having something to hold onto in wet entry and exit can help prevent injury and damage to watercraft.
9. Waves near shore make it challenging to launch and, if a wet exit in surf is necessary, the kayak can become a great danger.
10. Use caution at bridge crossings, where currents can be extremely swift at ebb and flood tide.
11. Watch for motorboats, stay to the right and turn your bow into the wake

12. Keep clear of motorboats, jets skis and large ships in the channels.
13. Avoid the shipping channels whenever possible or cross quickly as a group.
14. Never leave your boat unsecured while empty and in the water.
15. Operate in accordance with homeland security measures keeping a safe distance from military and commercial vessels and observing restrictions in security zones.
16. For more planning and safety tips visit the America Canoe Association at americacanoe.org

Emergency Contacts

A trail safety plan should be prepared and filed with all enforcement and emergency services departments who have jurisdiction on the water and land abutting the trail that includes trail maps and GPS points for trailheads

It is recommended that all paddlers carry a marine radio and a cell phone, which are often not very reliable on the water. The Coast Guard and all marine patrol vessels monitor VHF marine radio channel 16, 24 hours a day. "Mayday" is an international distress signal and should be used only if grave danger exists, there's been a collision, or someone on board has a serious injury.

In the event of a marine emergency, dial 9-1-1

U.S. Coast Guard

<http://www.uscgboating.org>
VHF 16

Nassau County Police Marine Bureau

<http://www.ncpdmarinebureau.com>
516-573-4450 VHF 16

N.Y. State, Office of Parks, Recreation and Historic Preservation

Marine Services. 518-475-0445 or 518-474-1889.

New York State Department of Environmental Conservation

<http://www.dec.ny.gov>
Marine Enforcement Unit (631) 444-0460
Tidal Wetlands (516) 444-0295
24-hour dispatch (877) 457-5680

Town of Hempstead

Division of Harbor & Marine, Bay Constable

(516) 897-4100, (516) 801-5608 or (516) 801-5609.
VHF 9 and 16

Town of Oyster Bay

Bay Constable Marine Bureau

(516) 797-7986

US Coast Guard Auxiliary

Division 13 – South Shore LI
<http://a01413.uscgaux.info>

US Power Squadrons

District 3, South Shore PS
<http://www.usps.org/localusps/d3>



I Conservation & Stewardship

The main attraction of the South Shore Blueway Trail among paddlers is the enjoyment of viewing wildlife, scenic vistas and tranquil waters close to home. The Blueway Trail Plan aims to protect natural habitats for a variety of plant, aquatic, bird, and wildlife. Non-motorized boating is a low impact activity. Furthermore, the designated trailheads can keep people from disturbing areas needing protection, such as marsh islands and critical piping plover habitats by directing users away from these areas. Water trails often become centers of restoration and stewardship projects.



Boater Stewardship

It is essential for paddlers to understand how to boat in a manner that safeguards wildlife and resources. The establishment of community boathouses and organized cleanup days at access points and watertrail maintenance projects help to engage paddlers trail stewardship. For the conservation and protection of the fragile coastal ecosystem, it is recommended that trail users be instructed to:

- Launch and land at only designated access points.
- Do not land on marsh islands or step out of the boat in mudflats, which support tremendous numbers of fragile life.
- Leave nothing behind. Practice Leave No Trace Ethics.
- Observe wildlife from a safe distance.
- Avoid directly approaching a seal haulout.
- Be extra cautious at beaches where pairs of endangered piping plovers are active.
- Cooperate and advance conservation efforts of the South Shore Estuary Reserve Council, Nassau County, Towns of Hempstead and Oyster Bay and regional organizations.

Leave No Trace Ethics

Leave No Trace Outdoor Ethics (<http://lnt.org>) promotes conservation in the outdoors by providing a framework for decision-making through its seven principals, summarized here:

1. ***Plan Ahead and Prepare***
2. ***Travel and Camp on Durable Surfaces***
3. ***Dispose of Waste Properly***
4. ***Leave What You Find***
5. ***Minimize Campfire Impacts***
6. ***Respect Wildlife***
7. ***Be Considerate of Other Visitors***

Partnership level membership (\$100 annually for nonprofit organizations) is a prerequisite of brand alignment and access to teaching and outreach materials.

J Education & Interpretation Strategies



Boating safety, environmental education and interpretive programming enables trail users to have a high quality experience.

Boater safety education

North Atlantic Canoe and Kayak and Long Island Paddlers are two local clubs that promote paddle safety and focus on members improving skills.

Empire Kayaks outfitter in Island Park provides advanced training in paddling skills and rescue techniques and tour experiences, boat rentals and a variety of other services, which serve to attract new people to the sport. Other local businesses offer skills clinics and Stand Up Paddling training. The U.S. Coast Guard Auxiliary and the U.S. Power Squadron offer general boating safety

courses and Paddle Smart program (paddlesmart.com). Additionally, there are numerous online boating safety courses that cover navigation, Rules of the Road and other topics.

Recommendations:

- Coordinate with paddle groups on safety awareness
- Organize Boater Safety Day events with paddle clubs, motorboat groups and local enforcement

Ecosystem education

- Blueway Trail environmental education should compliment existing programs that can enhance the trail experience and foster stewardship.
- On water experience for youth and adults helps resident to learn about the nature of the South Shore Estuary Reserve, marine conservation, preservation, and history.
- Blueway Trail experiences can incorporate academic disciplines for all grade levels.

Historical/Cultural Heritage interpretation

- Of interest within the Blueway Trail are cultural and maritime heritage resources: Bayhouses, Freeport's Nautical Mile.
- Future actions should include the creation of site-specific, route and trail historic and cultural interpretive themes in collaboration with local historians and Long Island Traditions.
- Work with academic and cultural institutions to document and develop interpretive content.
- Created by Native Americans in North America hundreds of years ago, kayaks and canoes are cultural time machines providing everyone who digs a paddle in the water a sea level perspective of the history of transportation and trade.
- The Blueway Trail can readily incorporate Bayway topics and interpretations in wayside signage and the website.

K Blueway Trail Identity Plan

Community outreach distributing information about the trail, access, safety and cultural resources will be important to providing boaters with crucial information about the Hempstead Bays – South Oyster Bay Complex and South Shore Blueway Trail access and amenities. The Blueway Plan creates trail identity graphics and provides three essential tools for education, interpreting promoting and marketing the South Shore Blueway Trail, including a website, brochure and trail signage. **The complete Trail Identity Proposal is provided in a separate report made available on the project website.**

Website:

www.southshoreblueway.com

The Blueway website should offer pertinent safety, educational and resource information, emergency contact information, water conditions, trail difficulty rating, local hazards, and Leave No Trace principles for the South Shore Blueway Trail. The project website is developed in the Wordpress

free platform because of ease of use. Additionally, Wordpress is supported by a majority of web servers, is social networking friendly, and can expand functionality as needed. The website itself should engage user help in developing content and assessing site conditions. Website content strategies include:

- Work with the Blueway Advisory Committee and municipalities to determine links and content.
- Interactive trail maps, which feature much more detail than print, including suggested routes, trail conditions, skill levels, relevant maritime heritage sites, attractions, and points of interest.
- Basic trail information: Access points, boater services, safety, outdoor ethics, and ecosystem and cultural heritage information.
- Real-time weather, tides, wind and water quality conditions.
- Links should include tourism offices, chambers of commerce, like-minded organizations, paddlesport services

and other organizations concerned about trail issues.

- Trip planning tools including printable .PDF route maps of each bay, emergency contacts and Float Plan templates.
- Providing basic information in Spanish as well as English.
- Have a means of collecting data and feedback

Blueway Map & Guide

The Blueway Trail map and guide is a companion to the website intended to manage expectations of conditions and distances when exploring the trail and will include access points, rest stops, site amenities, important safety and trail condition information, emergency contacts, and facts about the south shore estuary environment. For on water use, waterproof paper is durable, though it is oil-based, not biodegradable and more costly. Future development of a mobile application with map, trail guide, safety information and the ability to complete and email a float plan to a friend is recommended to enhance safety.

Trail Signage Plan

South Shore Blueway Trail signage needs to be integrated into the water trail infrastructure just as it is with hiking and biking trails. The signage plan is designed to visually connect the Blueway providing a consistent message at all trail access points and wayside exhibit. The signage can function as a unifying element raising awareness of the trail as a recreational destination. Where the South Shore Estuary Reserve or local agencies requires their own designs for signage, the South Shore Blueway identity can be incorporated into those designs. The South Shore Blueway Identity Plan for signage is delivered a separate report and marketing signage is discussed in the Implementation and Marketing section of the plan.

Trailhead Markers

Uniform trail identification markers featuring the South Shore Blueway logo should be placed at all access points to ensure that boaters are using the proper entry and exit areas. Trailhead markers can also include directional information

noting the distance to the next access point or designate cartop loading zones. Additional signage may be needed to direct drivers to appropriate parking areas or portage pathways. Markers can indicate exact put-in location and even be used as water mileage markers. It is designed to have a secondary sign on the post to indicate GPS coordinates, cartop drop-off zones, or on-water trail mile markers.

Wayside Exhibits

The South Shore Blueway Wayside Exhibit provides a system for wayfinding along with educational and interpretive opportunities. The sign is designed to deliver three types of information:

1. Orientation and wayfinding
2. Trail safety and ethics
3. Interpretative

The South Shore Blueway Trail modeled its wayside signage on that of the National Park Service standard sign specifications, and in accordance with the New York State New York State Coastal Resources Interpretive Program

(NYSCRIP). The Blueway Plan has designed a single-panel with upright grid orientation designed to offer two sizes – 36” by 38” for installation and 24” by 36” for printing and posting existing bulletin cases. Panel and base material choices, signage materials selection considers appearance, visibility and durability. Wayside signage installation recommendations are noted for each specific Access Point. Installation and maintenance of wayside exhibits should be the responsibility of the property owner.

Wayside Sign Fabricators:

Carsonite Composites
(803) 321-1185
carsonite.com
Pannier Graphics
(800) 544-8428
<http://panniergraphics.com>

Signage Resources:

Wayside Exhibits, Signs, and Frames
US Forest Service Center for Design and Interpretation, www.fs.fed.us/r2/cdi
Wayside Exhibits: a guide to developing outdoor interpretive exhibits National Park Service, 2009
<http://www.nps.gov/hfc/pdf/waysides/wayside-guide-first-edition.pdf>.

L Project Sustainability



Sustainability means being able to support, expand and nurture Blueway Trail implementation and growth. Financing for trail development, site infrastructure and maintenance is only one aspect of building and sustaining the trail. There is also need for an organizational framework for oversight and activism in carrying out the Blueway Trail Plan. A primary goal of trail sustainability should be to continue the blueway trail through the entire South Shore Estuary Reserve.

Blueway Advisory Committee

It is recommended that upon acceptance of the Final Blueway Plan, the Blueway Trail Advisory Committee, a diverse group of local stakeholders, agency and nonprofit leaders and resource managers, grow to adopt the role of Blueway Steering Committee. The Steering Committee should be tasked with advocacy, advising and facilitating the implementation of the Blueway Plan. The committee should

develop partnerships with local businesses, government agencies, conservation organizations, civic groups, and others in forming a collaborative public/private alliance to facilitate the implementation of the Plan in accord with other regional and local plans. To this end, the committee will need to engage a broader range of stakeholders to include those organizations and agencies that play a central role in developing and managing the trail, such as the South shore Estuary Reserve Council. Among other tasks to be determined by the group, the committee will:

1. Interpret and, as needed, make adjustments to the trail plan.
2. Determine funding and phasing priorities.
3. Provide strategic planning for site development
4. Build community support for the plan.
5. Have advisory boards and elected bodies pass resolutions of support endorsing the Blueway Trail Plan.
6. Have the plan adopted as a component of Local Waterfront Revitalization Plans, and regional local trails and greenways system plan.

7. Respond to opportunities for new trail sites and establish selection criteria.
8. Determine outreach and programming needs
9. Ensuring public input in all phases of plan implementation and developing strategies to resolve trail user conflicts.
10. Act as advisor to the Friends of the Blueway

Friends of the Blueway

The formation of an effective organization to support project development, funding and outreach is important to the plan execution and the future sustainability of the trail. The plan highly recommends the establishment of a “Friends of the Blueway” as a 501(c)(3) nonprofit voluntary membership organization that consists of trail users; local constituents and affiliates who are interested in trail issues. The group could seek and accept funds from private foundations, institutions, government agencies, businesses and other sources and provide the trail education, outreach and stewardship programming. Friends

of the Blueway are well placed to raise awareness of the water trail, engage the community, and coordinate safety and other activities with user groups. Member dues, fundraising activities and grant funding can provide base support.

Though long-term stewardship and management of access points is the responsibility of the property owner, the Friends of the Blueway can provide vital services to site owners and trail users. It is recommended that local municipal partners contribute to the start up and sustainability of the trail stewards organization through direct funding, providing staff to administer the Blueway Trail Plan, giving office space, hosting the website, printing outreach materials, and other ways to lower overhead and ensure a solid foundation. Once a permitting structure is in place a portion of trail permit fees can support the group. The establishment of the Friends of the Blueway Boathouse can provide supplemental funds through storage fees, tours and merchandise sales. It will be beneficial to enlist representative involvement in Friends from young

people. The benefits of membership may include Blueway Trail merchandise, private website forums and other elements to entice people to join. Working in partnership with the Blueway Steering Committee, the Friends of the Blueway can serve to be trail ambassadors:

1. Providing information to local communities about the trail.
2. Monitor the water trail and assess needs.
3. Identify resources for specific trail and trailhead improvements
4. Recommend new access points and trail improvements.
5. Raise funds for specific trail projects, equipment and programs.
6. Act as for establishing trailhead steward groups and boathouses.
7. Organize stewardship actions and youth programs for the local community.
8. Carry out tasks to restore habitat, remove invasive plants, clear paths and improve access.
9. In partnership with paddle clubs and outfitters, host public paddle days, skills clinics, talks and demonstrations.

M Blueway Implementation Plan

A Draft Blueway Trail Plan including conceptual plans for launch sites was prepared for review by the Project Advisory Committee and the New York State Department of State (DOS). The Draft Blueway Trail Plan will be made available to stakeholders and the public for comments and potential revisions. A Final Blueway Trail Plan will be prepared based on the comments received.

The consultant team will request a meeting with the New York State Department of Environmental Conservation (DEC) prior to preparation of detailed design drawings. The consultant team will review the conceptual plans at the ‘pre-application meeting’ with the agency. Conceptual plans may be modified based on DEC input.

Design drawings will then be prepared for submission to the involved municipalities – the Towns of Hempstead and Oyster Bay, the Village of Freeport, and Nassau County. Those

drawings will be submitted through the municipal representatives on the Project Advisory Committee. Letters will be requested from the municipalities authorizing the submission of permit applications for the launch sites in their municipality.

A single permit application for all sites requiring permits will be prepared for submission by the Village of Freeport. The permit applications will include submissions to the DEC, the Army Corps of Engineers (ACOE), and the DOS. These will be detailed plans and cross sections with accompanying forms, narrative, and photographs as required by the agencies. It is anticipated that 6-12 months may be required for receipt of permits from all three agencies.

The involved municipalities will be notified that they can prepare for the construction process once permits are received. The permits may limit construction activities to a particular time of year. Some municipalities may

choose to utilize their own budgets, equipment, and personnel to do the grading, install the Mobi-Mat, and install the plantings and snow fence. Others may require outside funding before proceeding with construction. In other cases, bid requests may be prepared for construction by outside contractors.

Construction phasing will be dependent on the availability of funding and personnel and equipment should the municipality choose to perform the work themselves. Funding opportunities include possible grants from New York State agencies including Parks, Recreation, and Historic Preservation and the DOS Office of Communities and Waterfronts. Private funding may be possible from various local, state, and national kayaking organizations as well as foundations that support outdoor marine recreation.

Phased Approach

A coordinated effort of state, county and local partners, including government agencies, non-profit and for-profit organizations and individual stakeholders is needed to realize this

plan. The plan recommends a phased approach to trail implementation. Phase I projects are simple improvements that can be implemented within a year to provide safe access at 16 trail-ready sites by spring 2014, which provides sufficient access to open the South Shore Blueway Trail. This lays the foundation for subsequent phases, in which boat ramp and soft shores will be improved for ADA accessibility. In most instances, the property administrator can perform accessible-grade improvements where needed, such as at Baldwin Park. The addition of the dock at Waterfront Park will improve access immediately. This phase should increase use of access points, show trail development progress and should initiate outreach, education and recreation programming activities. This phased set of improvements should include interpretive development and installation of signage. The focus of Phase II is on new construction and infrastructure improvements at critical access points needed to fill gaps and complete the trail. As funds become available, priority projects need to be implemented.

Trail Maintenance

Finally, ensuring access sites are maintained by monitoring throughout the year, trimming vegetation as needed to allow for unimpeded access, removal of trash and debris makes the area safer and keeps waterways clean, is an ongoing responsibility of the property owner. Local clubs or businesses that specialize in kayaking, outdoor recreation, or coastal education may be willing to lease space from the municipality to host events, rent equipment, and give lessons. Those leases could offset the cost to the municipality of maintaining the launch sites. Several of the sites have space that could be leased to these groups. Even if there is no leased space, management by an outside for-profit or non-profit entity could relieve the municipality of the financial and personnel burden associated with maintenance and access issues. These arrangements common and can benefit all involved. There are funding opportunities to support trail maintenance and assistance is offered by volunteer programs, community

organizations, clubs, and school groups, including the following tasks:

1. Some companies provide volunteers for cleanup, simple construction, plantings and other site-specific maintenance needs.
2. Scout troops, church groups, civic clubs, and others undertake community service projects like trail building, habitat restoration, clearing vegetation and planting trail buffers.
3. Collecting and cataloging data about trail use and monitoring the site.
4. Engineering, architecture and landscape architecture students can provide site and infrastructure design work, such as secure storage and trail ground-truthing at Cedar Creek and Newbridge Park.
5. Conducting a design competition among local firms can provide innovative plans for community boathouses or waterfront structure, such as Alhambra Road.
6. Local paddle clubs and the Friends of the Blueway can obtain funding to perform stewardship and conduct programs and community outreach at individual park sites or create trail-wide programming and events.

Funding Strategies

A mixture of funding strategies is needed for trail site development and long-term management. The federal and state governments are the primary sources for funding infrastructure projects and supporting the planning, construction, right of way acquisition and maintenance of water trails. Furthermore funding sources are linked to specific purposes including recreation, water access, environmental education, healthy lifestyles, quality of life, wildlife protection, habitat restoration, community partnerships, and economic development. The plan identifies some of the funding opportunities to design sites, do outreach and programming, and build and manage specific top-priority projects within specific jurisdictions available through federal, state, nonprofit and corporate sources. One key to obtaining funding is for local and state governments to pass a Resolution of Support endorsing the Blueway Plan.

Water trails are eligible for funding under several federal and state

programs outlined in the Funding Source Sheet that follows.

Trail Sponsorship

A sponsorship or Adopt-a-Trailhead program for trail amenities, programs or events can be solicited from both individuals and businesses. The Friend's group should administer the program with donations applied to certain construction, programming or procurement projects associated with the blueway. Recognition of the sponsors can be accomplished through the naming of a trail segment, branding a fleet of kayaks, and/or special recognition at the trail opening ceremony. Types of gifts other than cash could include donations of services, equipment, labor, or reduced costs for supplies. Local banks, regional power authorities and hometown companies, such as Cablevision, P.C. Richard and Sons, Canon, Nikon, Newsday, Verizon, etc. are good sources for sponsorship

Blueway Marketing Strategies

The South Shore Blueway Trail access points are within a few miles of the most densely populated urban centers in Nassau County and approximately 22 miles from New York City. The Blueway Trail can offer a variety of accessible activities through upland links and themed day-trips. Paddlers will have easy access to restaurants (dozens of waterside clam shacks, Nautical Mile), wildlife viewing, calm waters...

Events

The official trail launch event should be held at an access point with a large staging area and easy access for novice paddlers. Local official, trail stakeholders and residents can be invited to cut the ribbon and paddle a kayak to officially inaugurate the Blueway Trail. The event can provide good media and photo opportunities.

Simultaneously, an event for advanced paddlers can take place to travel trail routes, perhaps in a poker run or GPS

driven race or BIG events attempting to attract a large number of paddlers to one spot. The trail launch event can be combined with a Paddle Smart Safety Symposium and showcase of Long Island's paddlesport offerings.

Organized paddle events, festivals, workshops, and competitions build a strong boater community, help raise awareness of trail development efforts, build community support and invite participation from water trail stakeholders, local governments, and environmental organizations. Events help an area become known as a kayak destination.

Examples include Paddle Battle Long Island on the Peconic River offering race competition for paddlers of all skill levels with 2.5 mile to 12-mile race legs. Captain Kayak's Jamaica Bay Fishing tournament leverages the rising popularity of kayak fishing to raise money for charity attracting 300 participants each May who pay an entry fee, campout and fish over a three-day period.



Appendixes

Appendix A: South Shore Blueway Trail Map

Appendix B: Trail Mile Chart

Appendix C: 7 Site Design Concepts with Cost Estimates

Appendix D: Mobi-Mat Specs

Appendix E: Funding Sources

Appendix F: Blueway Identify and Signage Plan



