Passaic Canoe & Kayak Trail Action Plan

9





US Department of the Interior National Park Service Rivers, Trails & Conservation Assistance



Lower Passaic & Saddle River Alliance



Two Bridges Lincoln Park Suchorsky Park Little Falls Lijoi Riverfront Park West Paterson Pennington Park Paterson West Side Park Patersor Hinchcliffe Stadium Paterson River Street Paterson Hawthorne Ballfields Hawthorne Memorial Park Fair Lawn Elmwood Park Ramp Elmwood Park Langan Site Elmwood Park Garfield Ramp Dundee Preserve Dundee Island Park Passai End Lester St. Wallington Parkway Ramp Nereid Boat Club Nutley Boat Ramp/Rt 21 Riverside County Park N. Arlington Fire House North Arlington Riverbank Park Kearny Riverbank Park Kearny Point





Table of Contents

Introduction	pg. 4-7
Trail Planning	pg. 8-9

Launch Sites

pg. 10-11
pg. 12-13
pg. 16-17
pg. 18-19
pg. 20-21
pg. 22-23
pg. 24-25
pg. 28-29
pg. 30-31
pg. 32-33
pg. 34-35
pg. 36-37
pg. 38-39
pg. 40-41
pg. 44-45
pg. 46-47
pg. 48-49
pg. 98-99
pg. 50-51
pg. 52-53
pg. 54-55
pg. 56-57
pg. 58-59
pg. 100-101
pg. 60-61
pg. 62-63
pg. 64-65

Emergency Take-Outs

First Street	pg. 67
Lester Street	pg. 68
PVSC Pump Station	pg. 69
Nereid II	pg. 70
Lyndhurst Ballfields	pg. 71
Kearny/Nutley Boathouse	pg. 72

Portages

Little Falls	pg. 14-15
PVWC	pg. 96-97
Great Falls	pg. 26-27
Dundee Dam	pg. 42-43

Supporting Materials

Water Quality	pg.	73
Dam Safety	pg.	74
Launch Design	pg.	75-81
Water Trail Signs	pg.	82-87
Water Trail Logo	pg.	88
Map & Guide	pg.	89-91
Appendices	pg.	92-95
Addenda - PVWC Portage Wallington VFW Sea Scout Bldg	pg.	96-101



Canoe &Kayak Trail





ไตน์หอดไบเลนีเอต

The Lower Pessele River

cradle of america's industrial revolution

Powering the mills of America's first planned industrial city, the Passaic River's Great Falls and the city of Paterson were at the epicenter of the American Industrial Revolution.

More than a century of manufacturing and industry made its enduring mark on the region's economy and environment. Biologically speaking, the Lower Passaic River once teetered on the brink of utter annihilation.

"The water is objectionable for the reason that it receives the drainage of manufacturing towns, among which prominently stands the city of Paterson.

That in some cases the water is decidedly bad, is proved by the dying of all the fish in that river, when the dead bodies of course make matters worse.

For a distance of a dozen miles from above Paterson down to the dam, the dead fish were everywhere - some estimating the number among the millions... they were taken out by the cart load...

An "ancient and fish-like smell" swept for a considerable distance.... the stench was something beyond the endurance of a Cape Codder".

Excerpts from "Water of the Passaic River" Manufacturer & Builder Volume 9, Issue 10, October, 1877 American Memory Collection - Library of Congress

The story of the Lower Passaic River's industrial past is still evident. It is written in the sediments of a seventeen-mile stretch of river bottom - a toxic legacy that has earned it a spot among the nation's most vexing Superfund sites.



SUM Hydroelectric Powerhouse turbines National Park Service HAER

Alexander Hamilton founded the Society of Useful Manufacturers (SUM) to harness the power of the Great Falls and help create America's first planned industrial city in Paterson.



Passaic River at Newark 1844 - Historic Map

Library of Congress The map is an early depiction of the intense development taking place in the Passaic River's

The Disappearing River

The process of intense industrialization and urbanization led to the creation of many physical barriers to the River.

The River began fading from the collective consciousness of the communities through which it flowed.

The vast expanse of concrete, asphalt, abandoned industrial sites, and the dizzying maze of roads and highways have severed the physical and psychological connections communities once had to the River.

To this day, the Lower Passaic River has all but disappeared as a natural feature amidst the urban landscape.

We have, over time, turned our backs on the River - literally and figuratively.

watershed.



A River Reappearing

Abused and neglected for nearly two centuries, the Passaic River has suffered long enough. Its reemergence as a resource to be valued, restored and protected is long overdue. Fortunately, the time has come and people are taking action. After a long absence from the collective conscience of its communities, the Passaic is truly a river reappearing.



The Alliance is working to **preserve**, **protect & restore** the Lower Passaic River by improving public access, monitoring tributary streams for sources of pollution and working with partner organizations to **reconnect communities to the River**.

The Lower Passaic River Canoe & Kayak Trail is a Path to Discovery

In addition to the goal of providing a unique outdoor recreational experience in the heart of the urban metropolis, the Alliance believes that getting out ON the river will encourage and empower people to:

🖌 rediscover

the Passaic River looking past old liabilities & seeing the new possibilities the river has to offer

🧹 reclaim

the Passaic River and become part of its recovery as a healthy & vibrant community resource

🖌 reconnect

with the Passaic River as a valuable asset for their communities to be enjoyed and protected

An Urban Adventure

LIQUID Assets



32 miles of new adventure in the heart of the urban metropolis

A recent survey by the National Association of Homebuilders found that TRAILS were the number one amenity desired by prospective homebuyers.

We believe the most important recreational opportunities are those closest to home.

The twenty or so proposed access points along Lower Passaic Water Trail are located within a 20 minute drive of nearly 8 Million Americans.

Physical activity and access to quality outdoor recreation opportunities have never been more important to Americans as we fight an epidemic of obesity and related disease. The Surgeon General lists among the impacts of the obesity epidemic as 300,000 deaths a year and a cost to the US economy of \$117 Billion in 2000 and the numbers are rising.

The most effective tool to combat this problem is an increase in physical activity. Creating opportunities close to home makes it easier and more convenient for people to get outdoors and be active.

Our goal is to improve the health of the river while improving the health of communities through which it flows.



The Passaic River Canoe & Kayak Trail



Whet exactly is a Weter Trail ?

The term implies a route from one place to another. Water trails come in a dizzying variety, from the 740- mile Northern Forest Canoe Trail snaking through four states and two countries, to island-hopping sea kayak routes, to trails completely contained within city parks. But they all share a common purpose: to expose people to the joy of paddling.

The American Canoe Association (ACA), the nation's largest nonprofit promoting paddlesports and river conservation, recently created this provisional list of water trail criteria:

- The trail should be a contiguous or semi-contiguous waterway or series of waterways that is open to recrectreational use;
- It should have public access points for paddlers;
- Organizers should publish a map of the route or it should be detailed on a web site. Some trails have both resources;
- The published materials should communicate low-impact ethics to trail users; and
- The trail should be supported and/or managed by one or more organizations.

Ultimately, a water trail is like any other paddling adventure. *It's what you make of it.*

Why establish a Water Trall ?

Water trails connect people with places and simultaneously enrich and protect both.

Stewardship: Water trails espouse minimum-impact practices and the Leave No Trace Code of Outdoor Ethics for waterways and adjacent lands. They cultivate stewards of the water, land, vegetation, wildlife, and other resources.

Education: Serving as outdoor classrooms, water trails promote an awareness of the natural and cultural attributes of the Chesapeake Bay and its tributaries through experiences involving the senses.

Conservation: Water trail activities support the conservation of the aquatic ecosystem and contiguous lands and build a constituency of resource protection and restoration advocates and watch-dogs.

Connecting People and Places: Water trails connect individuals, families, and groups with a variety of hiking trails, bikeways, greenways, museums, historic sites, parks, and preserves. They cultivate a sense of place and love of community.

Diversity: Water trails benefit the able-bodied and the disabled, the young and the old, the disadvantaged and the advantaged. Through shared work and play, they foster tolerance and understanding.

Wellness and Well-being: Water trails provide wholesome, fresh-air activities that promote the overall fitness and health of participants.

Excerpt from ACA's Paddler Magazine Water Trails Supplement November/December 2005

site evaluation

Sites were evaluated for public access and paddlecraft launch suitability, taking into consideration issues such as:

- Ownership
- Existing site amenities
- Resource significance
- Access from roadways
- Distance to next launch
- Nearby businesses and amenities
- Ecological sensitivity
- Tidal impact to launch

Over time, more than 100 site surveys (*Figure i*) were conducted to gather information about potential launch sites and evaluate their suitability at different phases of tide and in different seasons.

Many of the sites recommended for inclusion in the trail require nothing more than an agreement with the land owner or managing agency, the installation of a sign, and its inclusion in the map and guide.

Others require further development to enable safe, convenient access to the river, particularly in the tidal portion of the river. Each site evaluation in this Action Plan includes brief descriptions of existing conditions, proposed conditions, recommendations, and required actions.



Representatives of the Clifton Fire Department, Passaic Valley Sewerage Commissioners, and NJ Department of Environmental Protection survey the shoreline in Dundee Preserve for boat access.

National Park Servic US Department of In	e nterior	NATIONAL PARK SSRUCE
Rivers, Trails & Cons Passaic River Pa	ervation Assistance	s Survey
Location: Suchorsk	y Park	Municipality: Little Falls
Intersecting Streets: Parke	e /av	county. Passaic
intersecting streets. I div	,	
GPS Coordinates		Photos Difes LINO File names or Numbers:
40° 53' 16.96" ₪		
074° 14' 22.66" W		
		Ecological Sensitivity
Ownership 🛛 Municipa	al ∏County ∏Private	High Moderate ZNormal (standard practices) Notes:
Resource Significan	ce (interpretive sign?)	
Natural Resource	Historical Other	
Describe:		Access
		Access from Road ☑ Drive in ☑ Walk from Road □ Signage to site from road ☑ Site easily visible/obvious from road
Existing Site Ameni	ties	Put-In/Take-out
Parking No Fee	#Spaces	Ramp Ramp suitable for paddle craft
Day Parking only	Overnight type	Shore Launch Sandy Mud Gravel Rocky High Bank
	0	Bulkhead
	- 	□ Dock (fixed) □ Dock (floating) □ Dock suitable for paddle craft
Restrooms LYes VNo	Portable Seasonal	Hazards (Currents, obstacles, tidal, wing dam, slippery surfaces, etc.)
Potable Water Yes	No	Possibly last take out before Little Falls.
Picnic Tables Yes	No #	
BBO Grills Yes	٦No	General Site Description (Describe overall character)
	_	is degrading. High bank eroding into a 2:1 slope- exposed gravel soil. Could be
		converted to designated access. Playground.
Describe.		
Locking Boat Storage	Yes 🛛 No	
ADA Accessibility	one 🛛 Restroom	Recommended Improvements
□Potable Water □Pa	arking ZRiver Access	End of ramp needs improvement. Should be done with ADA requirements. Talk to town about converting eroded slope into stabilized access point
Picnic Tables	nelter Telephones	town about converting eroded alope into atabilitzed access point.
BBQ Grills	terpretive signs	
Notes:		
Surface and slope need to be	investigated further.	
		See Back

Figure i



A scene from the 2nd annual Passaic River Paddle Relay

the traff

The trail is located on the Lower Passaic River defined by NJDEP as Watershed Management Area 4. This section of river is between Two Bridges in Lincoln Park/ Wayne and Newark Bay.

The trail will be approximately 32 miles including approximately 20 public launch sites in the urban core of New Jersey.

That is impressive in its own right.

However, the trail planners are well aware of the potential to link the trail to the 22 miles of water trail being developed just around Kearny Point on the Hackensack River.

There is also the strong possibility to extend the Lower Passaic Trail to the upper Passaic and create and additional 43 miles of water trail.

When you combine the Lower Passaic, the Hackensack and the upper Passaic - a network of nearly 100 miles of water trail can be created in the heart of the most densely populated state in America.

We think that's pretty exciting.

Each site will have a launch of the 3 types shown in Figure iv.

Launch type was selected based on the constraints and suitability of each site.

The 3 Launch Types



Figure iv

A detailed discussion of launch types and design considerations can be found in this plan on pages 75-81.

the action plan

This plan of action is the result of extensive field work conducted by staff from the National Park Service Rivers & Trails Program, NJ Dept. of Environmental Protection, Passaic Valley Sewerage Commissioners, and volunteers from the Lower Passaic & Saddle River Alliance.

The following section of the plan contains specific launch site evaluations and recommendations for the trail. The potential launch sites included in this document represent those sites that possess the greatest potential of becoming part of the Lower Passaic Canoe & Kayak Trail.

These are firm recommendations based on site surveys and public comment, but are subject to change upon input from municipalities and land/resource managing agencies.

Symbols are used in the Recommendations section of site evaluations. They represent the following:















Sign

Fishing

Parking

Wastebasket

Shelter

Two Bridges Lincoln Park

location

Principle Street: Two Bridges Rd Intersecting St: Lincoln Blvd 40° 53' 55.48" N 074° 16' 23.37" ₩

Site is an uneven gravel parking lot (*Figure 1.1*) surrounded by open area of grass, shrubs, and trees with a mowed path behind the parking area leading to launch area (*Figure 1.2*) at the water's edge.

existing conditions

- Site is at confluence of Pompton & Passaic Rivers
- Gravel parking area 20+ spaces very visible from road
- Mowed grass path from lot to launch area ~ 100 yds.
- ~4:1 bank, small boulders at toe of slope
- Good canopy cover on bank

recommendations





Shore Launch Proposed

- Streambank restoration (replace invasives w/ native vegetation)
- Regrade parking area
- Seasonal portable toilet and wastebasket

• Naturalized Shore Launch (Figure 1.3)

- Incorporate fishing platform into design
- Signage

Figure 1.0







Figure 1.1 Parking area

This site will not require much investment to include as a public launch for the paddle trail. The proposed launch area (*Figure 1.2*) could conceivably be used as is with the addition of signage. With minimal grading and the addition of geo-textile and sand or gravel, a long lasting and accessible launch as well as a stable platform for fishing can be created. Building the launch could be a great volunteer project.



Figure 1.2 Proposed launch from across river

- □ Schedule meeting w/ managing agency to discuss access
- Design launch
- Determine permitting requirements and secure if necessary
- Secure funding
- □ Build launch/plant native vegetation (good volunteer project)
- Determine sign placements & install



Figure 1.3 Typical proposed naturalized shoreline launch configuration

Suchorsky Park Little Falls

location

Principle Street:	Island Ave	40°	53' 16.96"	Ν
Intersecting St:	Parkway	074°	14' 22.66"	w

074° 14' 22.66" W

Site is a small municipal park with an asphalt path and ramp to river. There is a high eroding bank (\sim 2.5:1) and a pump station building to the west of the ramp.

existing conditions

- Existing park with great river access
- On street parking only
- Existing asphalt ramp launch (Figures 2.1, 2.2, 2.3)
- Severe erosion along slope west of launch (Figure 2.4)





Asphalt Ramp Existing

- Improve existing asphalt launch
- Regrade eroding slope and stabilize (Figure 2.5)
- Incorporate fishing platform into new slope
- Seasonal portable toilet and wastebasket
- Signage







Ĩ

Suchorsky Park 40° 53' 16.96" N 074° 14' 22.66" W



Figure 2.1 Family fishing off asphalt ramp

Figure 2.2 Father & Son fishing off ramp

Figure 2.4 Eroding gravel bank upstream of ramp

- Figure 2.3 View upstream from ramp
- Slope to be re-graded to minimize erosion potential and provide safer access to river.
- Live stakes are cuttings from plants that easily root from nodes along the stems and are harvested when the plant is dormant.
- If live stake method is used (*Figure 2.5*) work must take place in early spring (March).
- Good potential to partner with town and make this a volunteer project
- Streambank restoration will have a positive effect on water quality

- □ Schedule meeting w/Little Falls Parks Department
- Design launch improvements
- Determine permitting requirements and secure if necessary
- Design bank restoration project
- □ Secure funding
- □ Work with town to bring volunteers into project
- Determine sign placements & install



Little Falls Portages Little Falls County: Passaic



Figure 3.0 Aerial photo covering portages at Little Falls

portage options

<u>cer top</u>

- Take out at Suchorsky Park
- Drive along route indicated by magenta line in Figure 3.0
- Park on street by Lijoi Park in West Paterson
- Put In at Lijoi Riverfront Park in West Paterson

CEITTY 0.8 miles

- Take out behind tennis courts at Grey Rock Ave (Figure 3.1a)
- Walk along route indicated by yellow line (.8 mi) in Figure 3 .0
- Put in at end of path near Morris Canal interpretive sign
- Portage cart/wheels necessary or at least highly recommended

carry location

Portage Take-Out Principle Street: Island Ave Intersecting St: Grey Rock Ave Portage Put-In Principle Street: Main St

This portage is less than ideal, but is the only option for paddlers to avoid a car portage. The take-out is near the tennis courts at the end of Grey Rock Ave. and the put-in is near the Passaic Valley Water Commission pipe crossing at the end of the Morris Canal Path. This will require construction of a staircase w/boat slide traversing the rock ledge.

recommendations

- Naturalized shore line take-out near Mills Condo property (3.1a)
- Build stairway w/ boat slide at put-in (Figure 3.1b & 3.2b)
- Signage

Little Falls Portages

40° 55' 02.83" N 074° 10' 47.27" W



Figure 3.1 The Little Falls upstream w/ Mills property on left Figure 3.3 Downstream view w/ fading dam warning sign on river left

Figure 3.2 The Little Falls upstream from Mills property Figure 3.4 Water pipe crossing, steep terrain near proposed area of put-in

the challenge

Portaging around the Little Falls (*Figure 3.1*) will be very challenging. Current land use (e.g. private property, drinking water treatment plant) and steep rock ledges (*Figure 3.4*) near the river below the falls present significant obstacles to a safe and convenient portage.

Private property issues will have to be worked out at the proposed take-out at the end of Grey Rock Ave (*Figure 3.0, pg. 17 Figures 3.1a*). A public right-of-way needs to be confirmed or established for paddlers to get from the edge of the river to the road.

Safe access back into the river will have to be constructed possibly in the form of a stairway and boat slide (*pg. 19 Figures 3.1b. 3.2b & 3.3b*), to enable paddlers to safely traverse the steep, rocky terrain leading down to the river from the Morris Canal Path (*pg. 19 Figure 3.2b*). If this can't be worked out then the only other option is for paddlers to take out at Suchorsky Park in Little Falls and do a 2.3 mile car top portage to Lijoi Riverbank Park in West Paterson.

Grey Rock Take-Out Little Falls

Mile 3.16 Distance to Previous 0.18mi. Distance to Next 0.46 mi.* County: Passaic Ownership: Municipal *Requires portage

recommendations

location

Principle Street	: Grey Rock Ave		4
Intersecting St:	Island Ave	()7

40° 53' 13.09" **N** 074° 12' 12.07" **W**

Site is located behind the Mills Condominium complex at the end of Grey Rock and Island Ave in a residential area. It is most likely on private property. There are two options - Site 1 (*Figure 3.0a*) is behind the tennis courts and allows segregation of the site out to the street (*Figure 3.1a*). Site 2 is closer to the pedestrian bridge on the Mills property and would allow a portage out to Main St. via a pedestrian path.

existing conditions

- Heavily canopied shoreline w/ rock and gravel, mud
- Fence runs nearly perpendicular to river at back of houses
- Gate in fence at end of Island Ave (Figure 3.2a)
- Pedestrian bridge over inlet on Mills property (*Figures 3.0a, 3.1a*)

Image: Constraint of the second se

- Site #2 preferable as it shortens portage (*Figure 3.0a, 3.2a*)
- Site #1 will work with fence if security is concern (Figure 3.1a)
- Need well placed portage signs with either option
- Install boat restraint (Figure 3.1a) w/ more visible dam warnings
- Signage





Grey Rock Take-Out



Figure 3.1a Schematic of potential take-out & portage options

Not to Scale

Portage Option 1 - Place a shoreline take-out behind the tennis courts and install fencing with gate & bollards at the end of Island Ave. Paddlers would then walk south on Grey Rock Ave. then east on Main St. to the Morris Canal Path Put-in (*pg. 19 Figure 3.2b*). This alternative directs paddlers directly off private property and segregates them with a fence.

Portage Option 2 - Place a shoreline take-out at the entrance to the small inlet. Paddlers would then walk over the pedestrian bridge and along the pathway to the stairs leading out of the condominium complex and the head east on Main St. to the Morris Canal Path Put-in (*pg.19 Figure 3.2b*). This may be the preferred alternative because in shortens the portage although not significantly.

- □ Meet w/managing agency to discuss access & easement
- Design launch improvements
- Determine permitting requirements and secure if necessary
- Design boat restraint and dam safety features
- Secure funding
- Determine sign placements & install



Figure 3.2a Gate at end of Island and Grey Rock Ave

Morris Canal Path Put-In Little Falls

Mile 3.62 Distance to Previous 0.46mi.*

County: Passaic

Distance to **Next** 1.38 mi. Ownership: Municipal *Requires portage

location

Principle Street: Main St Intersecting St: Center Ave 40° 52' 58.66" **N** 074° 13' 49.56" **W**

Site is at the western terminus of the Morris Canal Path north of Main St. between the Brownstone Apartments and the river. There is a steep drop-off from the pathway down to the forested floodplain of the river.

existing conditions

- Existing linear park w/asphalt path (Figures 3.0b)
- Steep rocky terrain down to river
- Interpretive sign

recommendations



- Build steel staircase w/ boat slide from ridge down to floodplain
- Define a shore launch outlined w/large rocks on site
- Provide access to Canal Path near apartment complex
- Install trail signs







Morris Canal Path Put-In



Figure 3.2b Schematic of proposed put-in off the Morris Canal Path

Not to Scale

- □ Schedule meeting w/Little Falls Parks Department
- Design staircase & boat slide
- Design launch improvements
- Determine permitting requirements and secure if necessary
- □ Secure funding
- Determine sign placements & install -include portage route



Figure 3.3b River Access Stairs w/ Boat Slide example - Arkansas River, Salida, Colorado Courtesy of Caroline Wolf /National Park Service

Lijoi Riverfront Park West Paterson

location

Principle Street: Bergen Blvd Intersecting St: Passaic Ave 40° 53' 45.35" N 074° 12' 45.76" W

Site is a small municipal pocket park with access to river. There is a concrete sidewalk that stops short of the river where a gravel footpath begins and continues to river's edge.

existing conditions

- Existing pocket park with River Access (*Figures 4.0, 4.2*)
- Gravel & mud shoreline (Figures 4.3, 4.4)
- On street parking only
- Small eroded footpath to edge of river (Figure 4.3)
- New benches and concrete path (Figures 4.1, 4.2)



- Stabilized Footpath to Naturalized Shore Launch
- Streambank restoration (replace invasives w/ native vegetation)
- Stabilize slope
- Signage

Figure 4.0





Lijoi Riverfront Park

40° 53' 45.35" N 074° 12' 45.76" w



Figure 4.1 Park Entrance Figure 4.3 Existing condition at shoreline Figure 4.2 Footpath to river Figure 4.4 Existing condition at shoreline



- Slope to be re-graded to minimize erosion potential and provide safer access to river.
- Live stakes are cuttings from plants that easily root from nodes along the stems and are harvested when the plant is dormant.
- If live stake method is used (Figure 4.5) work must take place in early spring (March).
- Good potential to partner with town and make this a volunteer project
- Streambank restoration will have a positive effect on water quality

- □ Schedule meeting w/West Paterson Parks Department
- Design launch improvements
- Design bank restoration project
- Determine permitting requirements and secure if necessary
- □ Secure funding
- Determine sign placements & install



Figure 4.6 Typical proposed naturalized shoreline launch

Pennington Park Paterson

location

Principle Street:	McBride Ave	
Intersecting St.:	Murray Ave	

40° 54' 40.35" N 074° 11' 39.33" ₩

Municipal park w/active recreation. Good access to river with very good shelter. Part of bank is decorative concrete bulkhead with stairs into water near pavilion. Site is located directly across the river from Paterson's West Side Park.

existing conditions

- Existing park with shelter pavilion (*Figures 5.0 & 5.2*)
- Concrete bulkhead w/stairs into natural shoreline (Figure 5.3)
- Plenty of parking

recommendations



Shore Launch Proposed

- Create naturalized shoreline launch at east end of bulkhead (*Figures 5.0 & 5.1*)
- Canoes can use steps west of pavilion (Figures 5.0 & 5.3)
- Install signage
- Provide seasonal portable toilets

Figure 5.0





Ĩ

Pennington Park

40° 54' 40.35" N

074° 11' 39.33" W



Figure 5.1 End of bulkhead - potential shoreline launch area

Figure 5.2 Park Pavilion

Figure 5.3 Steps to river in bulkhead

Figure 5.4 Park Entrance from McBride Ave.

- □ Schedule meeting w/ Passaic County Parks to discuss access
- Design shore launch
- Determine permitting requirements and secure if necessary
- □ Secure funding
- Build launch and restore native vegetation
- Determine sign placements & install



Figure 5.1 Typical proposed naturalized shoreline launch

West Side Park PATERSON

location

Principle Street: Totowa Ave	40° 54' 44.52"	Ν
Intersecting St.: Don Bosco Ave	074° 11' 25.35"	w

Municipal park w/active recreation and an open pavilion shelter close to the river. Part of bank is decorative concrete bulkhead with stair near the pavilion.

existing conditions

- Existing park with shelter pavilion (Figure 6.4)
- Concrete bulkhead w/stairs into natural shoreline (Figures 6.2)
- Plenty of parking

recommendations



Shore Launch Proposed

- Create naturalized shoreline launch at west end of bulkhead (Figures 6.0 & 6.3)
- Canoes use steps southeast of pavilion (Figures 6.0, 6.1 & 6.2)
- Install signage
- Provide seasonal portable toilets

Figure 6.0





West Side Park 40° 54' 44.52" N 074° 11' 25.35" W



Figure 6.1 View from river to steps in bulkhead
Figure 6.2 View from land to steps in bulkhead
Figure 6.3 End of bulkhead - naturalized shoreline launch
Figure 6.4 Park pavilion

- □ Schedule meeting w/ Passaic County Parks to discuss access
- □ Secure funding
- Design launch
- Determine permitting requirements and secure if necessary
- Build launch and restore native vegetation
- Determine sign placements & install



Figure 6.1 Typical proposed naturalized shoreline launch



Figure 7.0 Aerial covering carry and car top portages at Great Falls

portage options

car top

- Take out at Pennington or West Side Park
- Drive along respective routes indicated by magenta lines in Figure 7
- Park at Hinchcliffe Stadium and put-in down red path in Figure 7

CEITTY 0.28 miles

- Take out at McBride Ave. platform
- Walk along route indicated by orange line (0.28 mi) in Figure 7
- Put in at end of path near Hinchcliffe Stadium
- Portage cart/wheels necessary or at least highly recommended

carry location

Carry Portage Take-Out - Libby's Lunch Restaurant Principle Street: McBride Ave

Carry & Car Top Portage Put-In - Hinchcliffe Stadium Principle Street: Maple St. Intersecting St.: Totowa Ave

West Side and Pennington Parks present the least obstacles to establish take-outs, but are too far from the put-in for most people to carry their boats. The McBride platform presents the challenge of working with the city to establish a take-out, but is much closer to the put-in for a non-motorized portage.

recommendations

- Work with the city to establish a take-out
- Signage

Great Falls Portages

40° 55' 02.83" N 074° 10' 47.27" ₩



Figure 7.1 Potential put-in site at bottom of trail

Figure 7.2 Trail stairway below Hinchcliffe Stadium

Figure 7.3

Historic aerial looking southwest of area below Hinchcliffe. Yellow line indicates existing trail. Photo courtesy of National Park Service HABS-HAER



the challenge

Similar to the Little Falls portage, this one requires the paddler to walk along a sidewalk, but it is much shorter. The platform on Mc-Bride Ave. provides a great opportunity to provide new river access (pg. 27 *Figures 8.1 & 8.2*). There is a safety concern at the area where paddlers will have to cross Wayne Ave., a very busy intersection. Crossing for the typical pedestrian is challenging enough - now add a boat to the equation. Warning signs should be placed at the intersection for both drivers and paddlers and the trail's map & guide should caution paddlers to pay serious attention. The put-in below Hinchcliffe Stadium needs to be incorporated into the plans for the new Great Falls Park.



McBride Ave Platform PATERSON

Mile 7.64 Distance to Previous 0.47 mi. Distance to Next 0.39 mi.* County: Passaic Ownership: Private *Requires portage

location

Principle Street: McBride Ave

40° 54' 49.10" N 074° 10' 56.38" W

Site is a wedge of land just south of Libby's Restaurant's parking lot (Figure 8.0). There is a public platform (Figure 8.1) on the west side of the sidewalk along McBride Ave. that has stairs (Figure 8.2) down into proposed take-out area (Figure 8.3).

existing conditions

- Existing platform w/ stairs down to river
- Dam warning signs obstructed by vegetation



- Create a naturalized shore take-out with a small footprint (Figure 8.5)
- Install appropriate dam safety measures (pg. 74)
- Signs including portage route

Figure 8.0





McBride Ave Platform



Figure 8.1 *Platform on McBride Ave.*



Figure 8.2 Steps from platform to river



Figure 8.3 Proposed take-out area looking downstream

Figure 8.4 Dam Warning sign near platform





Figure 8.5 Not to Scale Schematic of proposed take-out & portage south of Libby's Restaurant on McBride Ave.

This site represents the closest opportunity to the falls for a portage while maintaining a safe distance from the dam. There is a platform with stairs down to the river (*Figures 8.1, 8.2*) just south of Libby's parking lot that provide excellent access to the river. Paddlers could take-out at a naturalized shoreline and head north on McBride Ave., cross over the Wayne Ave. Bridge, then over the footbridges where they can follow the portage path down the slope near Hinchcliffe Stadium (*Figures 8.5, 7.2, 7.3*)

- Determine Ownership
- $\hfill\square$ Meet with managing agency to secure access
- Design take-out
- Determine permitting requirements and secure if necessary
- Build take-out and restore native vegetation
- Determine sign placements & install include portage route
- □ Install more visible dam warning signs & buoys

Hincheliffe Stadium Paterson

Mile 8.07 Distance to Previous 0.98 mi.* Distance to Next 0.55 mi. County: Passaic Ownership: Municipal *Requires portage

location

Principle Street:	Maple St	40° 55' 00.49" N
Intersecting St.:	Totowa Ave & Walnut St	074 ° 10' 48.57" W

There is a small parking area at the end of Maple St. at the stadium. There is a path from the parking area that leads down the slope to the river which has some steps built into it. This is the closest opportunity below the falls to establish a put-in.

existing conditions

- Existing steep asphalt footpath in disrepair (Figure 9.1)
- Wood staircase in need of maintenance or replacement (Figure 7.2)
- Small parking area at southwest corner of stadium (Maple St)
- Small eroded footpath to edge of river (*Figure* 9.5)
- Swift current



Shore Launch Proposed

- Repair footpath
- Repair wood staircase

recommendations

- Naturalized shore launch with large rock to hold up to current
- Seasonal portable toilet and wastebaskets
- · Incorporate in plans for new park design





Hincheliffe Stadium

40° 55' 00.49" **N** 074° 10' 48.57" **W**



Figures 9.1 - 9.6 Different segments of the path below Hinchcliffe Stadium

required action



Figure 9.7 Typical proposed naturalized shoreline launch

River Street Paterson

location

Principle Street:	River St
Intersecting St.:	Main St

40° 55' 19.70"	N
074° 10' 19.66"	w

This is a peculiar site at an unnamed cul-de-sac just north of River St. It is very close to the river with adequate parking, but no ammenities. There is a lot of construction going happening on the west side of Main St.

existing conditions

- Undeveloped cul-de-sac adjacent to river
- Makeshift tree limb fence and evidence of homeless
- On street parking only
- Rocky shoreline
- River current is swift



- Develop a naturalized shoreline launch
- Install rock vein upstream of launch to create an eddy in current
- Designate parking w/signs
- Rocky shoreline with good canopy
- River current is swift

Figure 10.0





River Street 40° 55' 19.70" № 074° 10' 19.66" ₩



Figure 10.1	At makeshift fence looking downstream
Figure 10.2	Looking upstream at concrete headwall
Figure 10.3	Potential launch area
Figure 10.4	Looking southeast from river at cul-de-sac

- Determine ownership
- Design launch w/ rock vein
- \Box Determine permitting requirements and secure if necessary
- Determine sign placements & install

Hawythorne Ballfields Hawthorne

Distance to **Next** 1.37 mi. Ownership: Municipal

location

existing conditions

• Existing park w/ river access

• Small eroded footpath to edge of river

• Muddy shoreline

• 3 parking areas

Principle Street: Wagaraw Rd Intersecting St.: Lincoln & Schoon	40° 56' 23.08" N 074° 09' 07.90" W
Site is municipal ballfields	

recommendations



Shore Launch Proposed

- Incorporate into trail
- Provide seasonal portable toilets & wastebasket





Hawthorne Ballfields

40° 56' 23.08" N 074° 09' 07.90" ₩



Figure 11.1 Field House

Figure 11.2 Potential shoreline launch area

Figure 11.3 Alternative potential launch area

Figure 11.4 Path leading from east parking lot to river

Figure 11.5 End of path from east parking lot

- $\hfill\square$ Coordinate with Hawthorne to develop river access
- Design launch and access
- Determine permitting requirements and secure if necessary
- □ Secure funding
- Determine sign placements & install
- Build launch and restore native vegetation



Figure 11.6 Typical proposed naturalized shoreline launch

Memorial Park Fair Lawn

Mile 11.96 Distance to Previous 1.37 mi. County: Bergen

recommendations

Distance to Next 0.7 mi.* Ownership: Municipal *Emergency Take-Out ONLY

location

Principle Street: Berdan Intersecting St.: First St 40° 55' 44.10" N 074° 08' 31.98" ₩

Site is a large municipal park adjacent to an elementary school. Town and local group are building a riverfront walkway with interpretive signs.

existing conditions

- Gravel ramp near walkway project
- Ample parking and a new open pavilion
- BBQ area with picnic tables
- Ramp adjacent to a DPW building





- Incorporate riverwalk as trail feature
- Provide seasonal portable toilets & wastebasket
- Provide a fishing platform

Figure 12.0






Figure 12.1	Ramp looking down towards river
Figure 12.2	Ramp
Figure 12.3	Ramp looking up from river's edge
Figure 12.4	BBQ area with new pavilion

- □ Work with town and teachers to incorporate educational signs
- □ Secure funding
- Determine sign placements & install

Elmwood Park Ramp

ELMWOOD PARK

Mile 13.79 Distance to Previous 1.13 mi.* County: Bergen

Distance to Next 1.1 mi. Ownership: Municipal *Emergency Take-Out ONLY

location

Principle Street: River Drive	40° 54' 34.80"	N
Intersecting St.: Gilbert & Washington	074° 07' 55.15"	w

Site is an existing gravel parking area and ramp across River Dr. from Elmwood Park High School. Ramp is currently chained by the fire department.

existing conditions

- Existing gravel parking area and ramp
- Ramp kept chained and locked
- Site adjacent to high school & middle school
- Site adjacent to riverfront park area

Figure 13.0









Gravel Ramp Existing

- Incorporate site into trail
- Designate canoe & kayak access
- · Provide seasonal portable toilet & wastebasket
- Provide fishing platform



Elmwood Park Ramp 40° 54' 34.80" N 074° 07' 55.15" W



Figure 13.1 Gravel parking area contiguous with ramp

Figure 13.2 Ramp with locked chain across it

- □ Work with Elmwood Park to include site in trail
- □ Secure funding
- Determine sign placements & install

ELMWOOD PARK

location

Principle Street:	River Drive	40° 53' 44.10"	Ν
Intersecting St.:	Birchwood	074° 07' 45.09"	w

Site is part of a new private development that will include a riverfront walkway and a facility for rowing which will include a floating dock.

existing conditions

- Site is under construction/drainage in place
- Most of site is disturbed by grading operations
- There are rowing sculls on site





- Provide access for canoes & kayaks
- Install floating kayak module on new dock structure (pg. 78)
- Provide parking area

recommendations

- Provide seasonal portable toilet & shelter
- Provide fishing area







40



Figure 14.1	Site w/ boat club rowing sculls in background
Figure 14.2	Looking south west across site
Figure 14.3	Looking south towards Rt 80
Figure 14.4	Completed building on northern portion of site

- □ Work with developer, rowing club, and PVSC to include in trail
- □ Secure funding
- Determine sign placements & install

Dundee Dam Portages Clifton & Garfield

County: Passaic /Bergen



Figure 15.0

Potential Portage Options

There are two potential route options for paddlers to make the portage around Dundee Dam indicated by blue lines and numbered take-out points (*Figure 15.0*).

Option 1 (*Preferred*) is to take-out on the north side of the river in Garfield, approximately 121 meters upstream of the dam, where the town has plans to create a bicycle & pedestrian path between River Dr. and the river (*Figure 16.6*). The paddler can then use the newly created ramp to get below the dam and use the new launch there (*Figure 16.1 - 16.3*).

Option 2 is to paddle into the Dundee Canal on the south side of the river and takeout on a proposed small floating dock module (*Figure 15.0*), cross over the access road into the Dundee Preserve and put-in at a proposed shoreline launch (*Figure 15.0 & Figure 15.3*). This is the less desirable option due to cost, access, & safety concerns.



Figure 15.1 Concrete Ramp There is an existing, newly installed concrete ramp just below the dam on the Garfield side.



Figure 15.2 Shore Launch There is an opportunity to create a naturalized shoreline launch along the banks of the Dundee Preserve as a put-in for paddlers portaging around the dam.



Figure 15.3 Floating Dock This illustration depicts the possibility of a small floating dock module in the Dundee canal to provide recreational access around the dam and through the Dundee Preserve.



Figure 15.4 Courtesy Hudson River Valley Greenway Polyethylene floating canoe & kayak module



the challenge

The portage on the southwest bank of the river (river right, Clifton) around Dundee dam requires careful planning and the cooperation of many agencies including North Jersey Water District, United Water and the City of Clifton. Dundee Canal could provide a way to get out of the river and is located directly above the preserve, allowing a fairly straightforward portage to a put-in site at the preserve's river edge (*Figure 15.6*). There are concerns about cost, access and safety with this approach.

Designing a safe paddling access into the canal will be paramount and may be accomplished by placing buoys and/or a boat restraining barrier out on a diagonal from the canal across and away from the dam (*indicated by red dots in Figure 15.6*).

Another consideration is the design of a transition from the water surface to the road surface on the north side of the canal and then from the road into the preserve. This may be accomplished through the installation of a small floating dock module designed for canoes & kayaks (*Figure 15.3*)

The portage on the northeast bank of the river (river left, Garfield) is locate approximately 121 meters above the dam below an unused parking area. This is the preferred alternative when the city of Garfield builds the planned riverfront walk (*Figure 16.6*). Currently there are private property issues as well as pedestrian safety issues along River Rd. that makes this portage difficult.

Garfield Ramp Garfield

Mile 15.75 Distance to Previous 0.86 mi. County: Bergen

Distance to Next 1.53 mi.* Ownership: Municipal *Requires Portage

location

Principle Street:	River Dr.
Intersecting St.:	Division Ave.

40° 53' 01.14" N 074° 07' 33.30" ₩

Site is a steep concrete ramp built as part of the dam renovation project. The ramp provides excellent access to the river just below the dam. Currently there is a lack of parking and a safe & convenient portage route from above the dam. Garfield has plans for a riverfront park in the area and it would be ideal to work a portage into these plans.

existing conditions

- Existing concrete ramp
- No off street parking
- Keep Out signs posted at base of ramp
- Erosion along toe of slope at base of ramp
- New benches & flagpole

Figure 16.0

recommendations





- · Incorporate into trail
- Incorporate portage into riverfront walk
- Provide off-street parking area, fishing platform
- Re-stabilize slope from road to ramp w/ native veg.
- Provide seasonal portable toilet and wastebasket
- Install appropriate dam safety measures (pg. 74)

Proposed Barfield Optimizer



Garfield Ramp 40° 53' 01.14" N

074° 07' 33.30" 🛛 🖤



Figure 16.6 Proposed Riverfront Bicycle & Pedestrian Path - Garfield, NJ

Plan as displayed on the Passaic Valley Sewerage Commissioners website http://pvsc.com/rr/dundeelindex.htm

- U Work with town of Garfield and coordinate w/ plans for riverfront park
- □ Work with municipality & water company, secure safe river ingress & egress
- Secure funding
- Determine sign placements & install



Schematic of proposed launch

Dundee Preserve Clifton

Mile 15.93 Distance to Previous 1.04 mi. County: Passaic

Distance to Next 1.35 mi.* Ownership: State DOT *Requires Portage

location

Principle Street: Ackerman Ave	40° 52' 55.25'
Intersecting St.: Route 21	074° 07'26.04"

Leased by NJDOT to the City of Clifton, site is a adjacent to Rt 21 northbound and is a small forested parcel just below Dundee Dam. The parcel is bound on three sides by the river to the north and the Dundee Canal to the southwest.

existing conditions

- Forested slope with some fill
- Crushed stone path from parking area to river
- River is wide and shallow with rocky bottom and swift current
- Monument with sign



- Establish a take-out along the north side of Dundee Canal
- Stabilized footpath from take-out to naturalized shoreline put-in
- Create an narrow low-flow channel for canoes & kayaks through rocks
- Provide wastebasket and seasonal portable toilet
- Signage

N W







Dundee Preserve 40° 52' 55.25" N

074° 07'26.04" W



Figure 17.2 Courtesy Hudson River Greenway



Figure 17.1 Representatives of the Clifton Fire Department, Passaic Valley Sewerage Commissioners, and NJ Department of Environmental Protection survey the shoreline in Dundee Preserve for boat access.



Figure 17.2 Typical proposed naturalized shoreline launch

Dundee Island Park PASSAIC

location

Principle Street: Passaic St /Wall St	40° 51' 54.28"	Ν
Intersecting St.: Veteran's Court (unsigned)	074° 06' 40.80"	w

Site is a newly constructed city park with concrete ramp, play area and ballfield. It is located behind a church and between a larger park, railroad tracks and the river. It is impossible to see from the street and the turn into the park entrance is unsigned.

existing conditions

- Newly constructed park
- Difficult to find from street
- Limited parking
- Existing concrete ramp
- Play area and ballfield

Figure 18.0





• Incorporate into trail

recommendations

w

- Install signs especially from street
- Provide seasonal portable toilets and wastebasket



Dundee Island Park

40° 51' 54.28" № 074° 06' 40.80" ₩



Figure 18.1 View of gravel path leading down to concrete ramp

Figure 18.2 Close-up of concrete ramp

Figure 18.3 View of ramp under flood stage of record setting April 2007 nor'easter



- Coordinate with City of Passaic to incorporate into trail
- □ Secure funding
- Determine sign placements & install

Parkway Ramp Wallington

Mile 18.85 Distance to Previous 0.39 mi.* County: Bergen

Distance to Next 0.16 mi.* Ownership: Municipal *Emergency Take-Out ONLY

location

recommendations

Principle Street: Parkway	40° 51' 39.99"	N
Intersecting St.: Maple Ave	074° 07' 06.30"	w

Site is at end of Parkway cul-de-sac. There is a concrete ramp through bulkhead. The ramp is kept locked.

existing conditions

- Cul-de-sac w/ limited parking
- Concrete ramp
- Locked gate at top of ramp



- Provide bypass access to ramp (bollards)
- Incorporate into trail
- · Install signs especially from street and river
- Remove silt from end of ramp

Figure 19.0







Figure 19.1 End of cul-de-sac looking at locked ramp entrance

Figure 19.2 Locked gate at top of ramp



Figure 19.2 Sign located adjacent to ramp

notivas beriupen

- $\hfill\square$ Coordinate with city of Wallington to provide access to ramp
- Determine sign placements & install
- □ Secure funding

Nereid Boat Club Rutherford

Mile 20.97 Distance to Previous 1.91 mi.* County: Bergen

recommendations

Distance to **Next** 0.49 mi.* Ownership: Municipal *Emergency Take-Out ONLY

location

Principle Street:	Riverside Ave
Intersecting St.:	West Newell

40° 49' 47.8" N 074° 07' 14.65" W

Site is an existing historic boat club with a club house, floating docks and concrete ramps. There is a plan to build a small park next to the club house that will include improved river access.

Add floating dock kayak modules to existing docks

- Add floating dock l
 - Incorporate into trail

• Existing ramp & floating dock access

existing conditions

- Private club, but land is leased from town and is public
- On street parking only

Figure 20.0

• Site is currently used exclusively for rowing







Figure 20.1 Nereid boathouse, floating docks & ramp

A Golden Restoration Opportunity The current plan calls for bulkheading the entire property and placing a fence on top of that. The Alliance feels this approach diminishes the appeal of the waterfront to the public and squanders a rare opportunity to restore the shoreline by removing fill and creating marsh and upland habitat (below). We also recommend establishing a river and wildlife viewing platform as an opportunity to educate the public about urban river restoration and wildlife habitat.



Figure 20.2 Nereid Boat Club existing conditions



Figure 20.3 Conceptual schematic of new park area w/shoreline restoration incorporated based on landscape plan from Hakim Assoc.



- Coordinate with Nereid Boat Club & Borough of Rutherford to incorporate into trail
- Assist Nereid in developing a shoreline restoration plan and funding strategy
- □ Secure funding
- Determine sign placements & install

Nutley Boat Ramp Nutley

Mile 22.69 Distance to Previous 0.82 mi.* County: Essex

Distance to Next 0.44 mi. Ownership: NJDOT *Emergency Take-Out ONLY

location

Principle Street: Route 21 On-Ramp Intersecting St.: Park St /Kingsland 40° 48' 42.52" N 074° 08' 20.63" W

Site is an existing concrete boat ramp located at the beginning of the on-ramp to Rt. 21 northbound. The ramp is suitable only to mid-tide when a mud flat condition develops to low-tide. The Passaic River Boat Club (Power Boating) is working to have the site improved and the mud flat dredged. The site is in the Rt. 21 ROW and is assumed to be owned by NJDOT.

existing conditions

- Existing concrete ramp (Figure 21.2)
- Mud flat condition at low-tide
- Small parking area
- Tricky ingress & egress due to location at on-ramp

recommendations



Concrete Ramp Existing

- Incorporate into trail if/when mud-flat issue is resolved
- · Use only as emergency take-out until site is improved
- · Provide seasonal portable toilet and wastebasket

Figure 21.0





Nutley Boat Ramp 40° 48' 42.52" № 074° 08' 20.63" ₩



Figure 21.1 Local fisherman w/ catfish



Figure 21.2 Existing condition of ramp at mid-tide

required action

□ Coordinate Passaic River Boat Club on future developments

Riverside County Park

NORTH ARLINGTON SECTION

location

Ave. 40)°49'10.76" N
ve. 074	4° 07' 45.30" 🛛 🛛
Ave. 40 ve. 074)° 49' 10.76" 4° 07' 45.30"

Site is the southern section of Riverside County Park where the Passaic River Rowing Association operates the new Bergen County Rowing Center. There is a large floating dock for crew teams and a boathouse.

existing conditions

- Large aluminum floating dock
- Parking lot
- Bergen County Rowing Center



- Incorporate into trail
- Add canoe/kayak floating modules to existing dock

Figure 22.0





Riverside County Park 40° 49' 10.76" N

074° 07' 45.30" W



Figure 22.1 Ramp to floating dock at low tide

Figure 22.2 Floating dock at low tide

Figure 22.3 Large parking lot

Figure 22.4 Open pavilion and rest rooms

Figure 22.5 View from top of ramp to dock

Figure 22.6 Bergen County Rowing Center bldg.

Figure 22.7 Rowing Center sign

- Coordinate with County to incorporate into trail
- Coordinate with County to add kayak modules to dock
- □ Secure funding
- Determine sign placements & install



Figure 22.7

North Arlington Fire House

NORTH ARLINGTON

Mile 24.03 Distance to Previous 0.90 mi. County: Bergen

Distance to **Next** 0.59 mi.* Ownership: Municipal *Emergency Take-Out ONLY

location

Principle Street: River Road	40° 47' 35.37"	Ν
Intersecting St.: Belmont & Arlington	074° 08' 29.62"	w

Site is adjacent to firehouse and vest pocket park. There is a few off-street parking spaces for the park. There is also parking adjacent to firehouse, but "No Parking" signs should be posted.

existing conditions

- Existing gravel ramp through bulkhead
- Offstreet parking

recommendations



- Incorporate into trail
- Provide platform for fishing
- Provide seasonal portable toilet and wastebasket

Figure 23.0





North Arlington Fire House

40° 47' 35.37" N

074° 08' 29.62" W



Figure 23.2 Parking area adjacent to park and ramp

- Coordinate with North Arlington to incorporate into trail
- Design fishing platform
- $\hfill\square$ Secure funding
- Determine sign placements & install

Riverbank Park Kearny Kearny

Mile 26.27 Distance to Previous 1.65 mi.* County: Hudson

Distance to Next 2.64 mi. Ownership: Municipal *Emergency Take-Out ONLY

location

Principle Street: Passaic Ave	40 %
Intersecting St.: Bergen Ave	074

40° 45' 50.15" N 074° 09' 31.37" ₩

Site is an existing concrete boat ramp within a municipal park. There is adequate parking but no other amenities relating to boating.

existing conditions

- Existing concrete boat ramp
- Ramp inundated with floatables
- Plenty of parking





- Incorporate into trail
- Install floatable debris control boom
- Provide seasonal portable toilet & wastebasket
- Provide platform for fishing

Figure 24.0





Ĩ

Riverbank Park Kearny 40° 45' 50.15" N 074° 09' 31.37" W



Figure 24.1 Concrete ramp inundated with floatable debris

Large parking area adjacent to ramp

Figure 24.3 Gate at top of ramp

required action

- Coordinate with town of Kearny to incorporate into trail
- Coordinate w/ Kearny and PVSC on floatables control

Figure 24.2

Determine sign placements & install

Riverbank Park Newark Newark

Distance to Next 3.75 mi. Ownership: County

location

Principle Street: Raymond Blvd	40° 43' 59.26"
Intersecting St.: Van Buren & Somme St	074° 09' 04.34"

Site is on a small wedge of land on the north side of Raymond Blvd across from the park proper (Figure 25.0). This is a very important launch because it provides critically needed public access to the river in NJ's largest city. There is an opportunity to incorporate the access with the Army Corps salt marsh restoration project. (Figure 25.4)

existing conditions

- · County park with ballfields, fieldhouse and open pavilion shelter
- · Shoreline is decaying wooden bulkhead
- Low-tide mudflats w/rock & gravel
- · Presence of trash and broken glass & evidence of homeless

recommendations

Ν w



- · Incorporate into trail
- Incorporate floating dock access into Army Corps restoration plan
- Create stronger visual & physical connection from park
- Provide safer pedestrian crossing
- Provide drop-off/pick-up pull-off on Raymond Blvd.
- Install interpretive signs describing salt marsh
- Provide fishing platform











an exceptional opportunity

We cannot overstate the critical importance of this site to the entire trail effort. By virtue of its location in Newark, New Jersey's largest city, we consider it a requirement of the project to provide public access here. The city presently suffers from a lack of sufficient public access to the river and this is an opportunity to increase it.

Furthermore, federal dollars have been allocated to complete a salt marsh restoration at the site and we are presented with an exceptional opportunity to provide public education and access to a unique urban salt marsh. We have a strong educational component built into the trail and we plan to use this site as an outdoor, experiential classroom. This is entirely in keeping with our mission and our efforts to create increased citizen stewardship of the river.

- Coordinate with Army Corps of Engineers, Essex County, and Newark
- Meet with managing agency to secure access
- Design launch
- Determine permitting requirements and secure
- Secure funding
- Determine sign placements & install include interpretive panels



Kearny Point

Kearny

Mile 32.66 Distance to Previous 3.75 mi. County: Hudson Distance to Next 1.60 mi.*

Ownership: Private *To Lincoln Park, Jersey City on the Hackensack River Water Trail

location

recommendations

Principle Street: Central Ave

This site has not been thoroughly surveyed yet because of private property issues. It is a very important location in that it would provide a direct link to the Hackensack River Water Trail (HRWT) and serve the dual purpose of anchoring both the HRWT and the Passaic River Canoe & Kayak Trail.

existing conditions

- Industrial area and potential brownfield
- Private ownership
- Potential access through Kearny Municipal Utilities Authority

Investigate site further

Figure 26.0







Floating Dock Proposed



Figure 26.1 A conceptual schematic of Kearny Point showing potential launch location and salt marsh restoration



Figure 26.2 Sign in front of Kearny Municipal Utilities Authority

- Determine ownership of potential parcels
- Check w/ Kearny Municipal Utilities Authority
- □ Coordinate with managing agency/owner to provide access

emergency take-out points

The following sites are included in the plan to be designated as emergency take-out points. They are so designated for a variety of reasons including, but not limited to, proximity to other priority launch sites, lack of parking or other amenities. All that is required is including them in the map & guide and perhaps a small sign visible to paddlers on the river indicating as an emergency take-out point.

This area intentionally left blank

End 1st Street

FAIR LAWN

Emergency Take-Out ONLY

Mile 12.66 Distance to Previous 0.70 mi. County: Bergen

Distance to Next 1.13 mi. Ownership: Municipal

40° 55' 24.17" N



67

End Lester Street Emergency Take-Out ONLY

Mile 18.51 Distance to Previous 1.23 mi. Distance to Next 0.39 mi.

County: Bergen Ownership: Municipal

WALLINGTON

location

40° 51' 30.58" N

074° 06' 47.30" W

recommendations

Principle Street: Lester St Intersecting St.: Hathaway





Shore Launch Existing

existing conditions

- Existing pocket park with River Access
- Muddy shoreline
- Very limited on street parking only
- Decaying wood stairs to river





PVSC PUMp Station Emergency Take-Out ONLY Mile 19.01 Distance to Previous 0.16 mi. Distance to Next 1.91 mi.

WALLINGTON

County: Bergen Ownership: Municipal

40° 51' 24.12" **N**



Nereid II Emergency Take-Out ONLY	Mile 21.46 Distance to Previous 0.49 mi.	Distance to Next 0.41 mi.
KUTHERFORD	County: Dergen	40° 49' 22.89" N
location	recommendations	074 07 22.75
Principle Street: Riverside Ave Intersecting St.: Route 3		<mark>}</mark>
existing conditions		Floating Dock Existing
 Secondary boat storage for Nereid Boat Club Existing floating docks No Parking Portable toilet 	Sign on water as emergency take-out	
Figure 27.0c	The Dright of the Drive of	morial Park Fer Law Emmod Park Ramp Emmod Park Lamod Park Lamod Park Carfield Ramp Arfield Ra

Lyndhurst Ballfields Emergency Take-Out ONLY Mile 21.87 Distance to Previous 0.41 mi. Distance to Next 0.82 mi.

LYNDHURST

County: Bergen Ownership: Municipal

40° 49' 10.76" N



Kearny /Nutley Boathouse Emergency Take-Out ONLY

Mile 24.62 Distance to **Previous** .59 mi. Distance to **Next** 1.65 mi. Ownership: Municipal

> 40° 47' 08.74"" N 074° 08' 50.92" ₩

location

Principle Street: Passaic Ave Intersecting St.: **Hathaway**

existing conditions

- Existing floating dock
- Boathouse for High School programs
- Limited parking



Floating Dock Existing

• Sign on water as emergency take-out




Figure 29.0

State Water Classifications & Designated Uses on the Lower Passaic

Segment I

Osborn Pond (Bernardsville) to Dundee Lake Dam (Garfield) FW2-NT (Freshwater-2 Non trout production or maintenance).

Based on this classification the designated use INCLUDES fishing and swimming.

The designated uses for this classification are as follows:

1. Maintenance, migration and propagation of the natural and established biota;

2. Primary and secondary contact recreation ("Primary contact recreation" means water related recreational activities that involve significant ingestion risks and includes, but is not limited to, wading, swimming, diving, surfing, and water skiing. "Secondary contact recreation" means recreational activities where the probability of water ingestion is minimal and includes, but is not limited to, boating and fishing);

3. Industrial and agricultural water supply;

4. Public potable water supply after conventional filtration treatment (a series of processes including filtration, flocculation, coagulation, and sedimentation, resulting in substantial particulate removal but no consistent removal of chemical constituents) and disinfection; and

5. Any other reasonable uses.

 Segment II
 Dundee Lake Dam to confluence with Second River

 FW2-NT/SE2 (SE- Saline waters of estuaries) See note.

In all SE2 waters the designated uses are:

- 1. Maintenance, migration and propagation of the natural and established biota;
- 2. Migration of diadromous fish;
- 3. Maintenance of wildlife;
- 4. Secondary contact recreation; and
- 5. Any other reasonable uses.



Figure 29.2

******NOTE: FW2-NT/SE2** (or a similar designation that combines two classifications) means a waterway in which there may be a salt water/fresh water interface. The exact point of demarcation between the fresh and saline waters must be determined by salinity measurements and is that point where the salinity reaches 3.5 parts per thousand at mean high tide. The stream is classified as FW2-NT in the fresh portions (salinity less than or equal to 3.5 parts per thousand at mean high tide) and SE2 in the saline portions.

Segment III Second River to mouth SE3

Downstream of Second River is considered safe for boating but not swimming or fishing.

- In all SE3 waters the designated uses are:
- 1. Secondary contact recreation;
- 2 Maintenance and migration of fish populations;
- 3 Migration of diadromous fish;
- 4. Maintenance of wildlife; and
- 5. Any other reasonable uses.

Based on the 2006 integrated water quality monitoring report the Lower Passaic is **not** meeting the standards for its designated uses of primary contact recreation, fish consumption, aquatic life and drinking water supply. Specific to primary contact recreation - the river is not meeting the standard for pathogens (*i.e. E. coli in freshwater*) which is the determining factor for meeting this designated use.

Is it safe to paddle on the Passaic ?

The short answer is yes. However, paddlers need to take the proper precautions that go along with paddling on a post-industrial, urban river with combined sewer overflow outlets, especially after a large rainfall in the watershed when pathogen counts increase.



Dam Safəty

There are 3 dams that need to be addressed on the Lower Passaic:

- Little Falls Little Falls
- The Great Falls Paterson
- Dundee Dam Clifton /Garfield

Paddlers need to be aware of the locations of these hazards and warned of their significant dangers **before ever getting out on the water**. This can be accomplished through the published Map & Guide both printed and on the web site.

Once on the water paddlers need to look for warning indications such as signs (*Figure 30.4*) and warning buoys (*Figure 30.0*).

Take-out points before the dams need to be well marked and highly visible from the water. The take-out should be located a minimum of 300 feet from the hazard.

Warning buoys using the uniform waterway marking system (*Figure 30.1*) should be deployed in front of the dam where boat restraints (*Figure 30.3*) should be deployed as well.



Figure 30.1 Symbols of the Uniform State Waterway Marking System - Source USCG



Figure 30.2

Warning buoys and boat restrain indicated by red dotted line in this conceptual schematic of the Dundee Dam portage.



Example of a boat restraint to keep boats out of hazard areas



Figure 30.4 Dam warning sign on the Passaic River before the Great Falls in Paterson



3 types of launches for the Lower Passaic Canoe & Kayak Trail, some exist, others are proposed.

All three types work for canoes and kayaks.

Kayaks however, require special consideration at floating docks. Because they are designed with a cockpit and have a very narrow beam, keeping them stable during entry and exit is more challenging.

Modifying the design of a floating dock with a sloped surface will increase the safety and enjoyment of the trail experience for the kayaker. (pg. 78 Figures 33.0 & 33.1)

launch considerations

It is important to consider a variety of factors when developing a launch design.

The following goals should be considered:

- Accessibility
- Design best-suited to site constraints
- Cost-effective
- Durable
- Environmentally sensitive/low impact

Paddlers of all abilities want to launch and land smoothly without capsizing or damaging their boats.

They need firm surfaces that support their movements and sufficient space to accommodate the length of their boats during put-in and take-out. Paddlers must be able to stabilize their boats during transition to and from the water.

Climbing in and out of boats can be especially challenging when there is significant height difference between seat levels and shoreline.

general recommendations for designing an accessible launch

• Height above water: Between 9" and 2' from highest expected water level

- Width: At least 5' wide, preferably 6' to 12'
- Length: At least 25' to allow paddlers "dry" access to entire length of their boats
- **Slope:** The Americans with Disabilities Act Accessibility Guidelines require that slopes not exceed 8.33% whenever possible; A slope exceeding 15% will make transition from land to water difficult for any paddler
- **Support:** Handrails or other support structures, including step-down designs or ropes, help paddlers balance their weight during put-in and take-out
- Location: Ideally in areas without heavy flow, erosion, exposure to elements, heavy boat traffic, or fragile riparian habitats



ADA accessible wooden floating launch has tapered ramps that allow canoes to slide up onto the deck *Courtesy of Roger Lewis: Lower Colorado River Authority*

Ramps

Extering:

 Suchorsky Park (Asphalt) Memorial Park (Gravel) Elmwood Park Ramp (Gravel) Garfield Ramp (Concrete) Dundee Island Park (Concrete) Portuge Romp (Concrete) 	Little Falls Fair Lawn Elmwood Park Garfield Passaic Wollington
 7) Lyndhurst Ballfields (Concrete) 8) Nutley Ramp (Concrete) 9) Nu Adia stars Fincherses (Concrete) 	Lyndhurst Nutley
9) N. Arlington Firehouse (Gravel) 10) Riverbank Park Kearny (Concrete)	North Arlington Kearny

Advantages

- Provides the most stable, sturdy surface for launching
- Durable; not subject to rot or rust
- Easy to shape and work with, adaptable to slope needs; minimal additional construction needed
- Can be relatively inexpensive to construct, depending upon type of application
- Relatively low maintenance (depending on sedimentation levels); easy and inexpensive repairs
- Can be used to help mitigate erosion problems or assist with vegetative restoration

Proposed

1) Nereid Boat Club (Gravel)

Rutherford

Disadvantages

- Can cause damage to riparian ecology
- Surface can be slippery using corrugated concrete, or exposed aggregate can provide effective traction
- Can be damaged easily due to freeze and thaw conditions, but can also be easily and cheaply repaired
- Can be expensive to clean if there is heavy flooding and mud build-up
- Usually not aesthetically "pleasing," although their noticeable presence can assist paddlers with locating take-outs from the river. They can also be surfaced for an improved appearance with materials such as river rocks, fieldstones, or salt-finishing.



Figure 32.0 Concrete ramp under floatable debris, Kearny



Figure 32.1 Concrete ramp between docks at Laurel Hill Park

Launch Design

Design & Tides

The tidal portion of the Passaic River encompasses approximately 17 miles of the river from Newark Bay to just below the Dundee Dam in Clifton/Garfield.

Tidal changes can pose risks to paddlers when rocks or other hazards such as abandoned piers are exposed in lower water levels.

The primary risk is where the river channel becomes a mud flat within a period of hours preventing safe shore access in large areas of the river and its tributaries. (*Figure 32.2*)

Designing a launch is a very site specific undertaking and many factors such as tide differential, current, type of stream bank, etc., need to inform the design.

Some general guidelines for developing a launch that is best suited to a site are:

• Provides safe access, away from potential river hazards, especially at different tide and flow levels

- Can withstand flow levels, currents, and exposure to elements of a particular site
- Accommodates paddlers in varying water depths

• Provides a firm surface for launching, despite changes in sedimentation levels

• Will not be easily damaged due to climatic or seasonal conditions

• Does not cause damage to riparian habitats or vegetation during its construction and is unlikely to have environmental impacts over time and through usage

• Is not constructed in an area vulnerable to erosion

• Is constructed with consideration to its intended uses and frequency of use

• Is constructed in accordance with any applicable regulations

A good example illustrating the importance of designing the correct type of launch in the right location is the concrete ramp at *KB George Memorial Park* in River Edge. At high tide the river is easily accessible from the ramp. At low tide there is a significant mud flat between the river channel and the end of the ramp preventing access to and from the river. (*Figures 32.3 & 32.4*)

Placing the ramp in a different location not affected by mud flats or installing a floating dock would have been better options to consider.



Figure 32.2 Mudflat Johnson Park, Hackensack



Figure 32.3 KB George Memorial Park Launch High Tide



Figure 32.4 KB George Memorial Park Launch Low Tide

Floating Docks

Existing:

1) Nereid Boat Club 2) Nereid II Rutherford Rutherford

Advantages

- Adjusts to fluctuating water levels
- Provides a sturdy surface with access over mud flats and to the river channel
- Has few long-term environmental effects
- Is easy to purchase and assemble; allows for flexibility in design
- When wet, is not as slippery as launches with sloped surfaces
- Is less likely to scratch boats
- Keeps feet dry during cold weather paddling

Proposed

- 1) Langan Site
- 2) Riverside County Park*
- Riverbank Park
 Kearny Point

Elmwood Park North Arlington Newark Kearny

*addition of floating kayak module to existing/proposed dock

Disadvantages

- Not "appropriate" for all access locations; not suited to strong or swift currents, exposure to high winds and heavy wave action, etc.
- May not consistently meet ADA accessibility guidelines, since slopes of connecting structures may alter with changing water levels
- May be exposed to stronger currents than it can withstand in order for the launch to be in water of sufficient depth, additional structures may be needed
- Not effective for use in areas where tidal fluctuations are rapid and extreme; floats may be "beached" at low tide or floats can disrupt sediments as they rise with high tide



Figure 33.0 Floating kayak access ramp

Courtesy Hudson River Valley Greenway



Figure 33.1 Courtesy MD Dept. of Natural Resources

(Figures 33.0 & 33.1)

Vented polyethylene modules adjust to accommodate needs of paddlers by regulating the degree of slope. They are especially useful for kayakers - giving them a stable surface to enter and exit the kayak cockpit which is more difficult than entering/exiting a canoe.

Launch Design

Diagram 5L: Plan view of floating dock at Annsville Creek

Courtesy of Ken Allen, White Mountain National Forest





Figure 33.2 Plan drawings of floating dock Courtesy Ken Allen



Figure 33.3 Floating dock at Riverside County Park, North Arlington (*notice mud flat behind dock*)



Figure 33.4 Floating dock as built Courtesy Ken Allen



Figure 33.5

Courtesy Hudson River Valley Greenway



Figure 33.6 ADA accessible wooden floating launch has tapered ramps that allow canoes to slide up onto the deck *Courtesy of Roger Lewis: Lower Colorado River Authority*

Floating Docks on the Passaic Trail

The three sites where floating docks are proposed on the Passaic River Water Trail have:

- Tide fluctuations that create mud flat conditions
- Will be a shared facility with rowing clubs
- Shoreline configurations such as bulkheads or board walks

While the most costly of the launches proposed, floating docks may be the best suited for these particular sites and provide the safest, most convenient access.

Naturalizad Shoralina

Extering:

1) Two Bridges*
 2) Hawthorne Ballfields*
 3) End of Lester St*

Lincoln Park Hawthorne Wallington

*existing but needs improvement

Advantages

- Cost-effective/low maintenance -- native materials can be easily added or shifted to suit needs and changing conditions of launch area
- Less environmental impact due to little or no construction
- Can be combined with simple construction to restore habitats or control erosion
- Aesthetically pleasing; minimal visual alteration to natural shoreline
- Shorelines and beaches can provide easy anchorage

Proposed

1) Grev Rock Ave Take-Out	Little Ferry
T) GIEV ROCK / WE Take-Out	Entrie Terry
2) Morris Canal Path Put-In*	Little Ferry
3) Lijoi Riverfront Park	West Paterson
4) Pennington Park	Paterson
5) West Side Park	Paterson
6) Libby's Take-Out	Paterson
7) Hinchcliffe Stadium Put-In	Paterson
8) River Street Put-In	Paterson
9) Garfield Riverfront Take-Out	Garfield

*addition of floating kayak module to existing/proposed dock

Disadvantages

- May not be accessible to physically challenged paddlers
- Not easily spotted from rivers paddlers may pass them by if there is no signage or clear indication of the access site
- May not be consistently accessible due to varying flows, water levels, amount of exposure, or climatic factors
- Can be slippery or difficult to manage when wet
- Can be steep
- Could cause damage to wetland habitats, depending on frequency of use



Figure 35.0

Hawthorne Ballfields, Hawthorne

This launch area could use some improvements such as a firmer substrate and better delineation of the launch area to minimize impacts from trail users.



Figure 35.1 Sauk River, Washington

Photo: Thomas O'Keefe

A well delineated gravel path confines use to desired area and provides firm substrate for paddlers to access river.

Launch Design

Naturalized Shoreline Launches

The simplest and most cost-effective launches require little or no construction. Paddlers may use "natural" features (e.g., riverbanks, rock outcrops, banks adjacent to bridges) or existing shorelines with decks, bulkheads, or boardwalks. Any of these can suffice as long as: currents in the area are not too strong, water depth allows for stable launching without damage to boats, and the vertical space between the shore and surface of the water is not excessive. Paddlers must also have enough space to place their boats in the water and easily step in or out of them.

Materials

- Native soil, sand, gravel, or vegetation may be added to improve drainage and control erosion; fist-sized rip-rap can be added to trap sediment and fill in over time
- Natural materials, unique to a particular area, may blend with the natural landscape and be most easily accessible (e.g., in the Chesapeake Bay region, native crushed oyster shells may be used to reinforce surface landings)
- Flat rocks can sometimes provide firm surfaces, however pointed or jagged rocks are not recommended, as they are unstable surfaces that can damage boats or injure paddlers
- Beaches with firm substrates; matting can be used to temporarily stabilize a sandy beach
- Gravel can be used to form simple ramps, preferably in areas of minimal wave action or water level fluctuation
- Braided rope, tied to a tree or other shoreline anchor, can serve as a makeshift handrail
- Existing shoreline configurations (e.g., bulkheads, board walks, uneven rocks) can be converted into beach areas by adding firm sand substrates and/or gravel; these are called "implanted" beaches



Figure 35.2 Restored streambank & launch Arkansas River Salida, CO Photo Courtesy Natioanl Parks Service /Caroline Wolf

Design variations/specifications

- Graded banks are preferable, 12' wide at water line tapered to 9' wide at top by 15' long (length will depend on water levels and shoreline stability)
- Launch area should be at least 20' at sites that are used for both rafting and paddling
- Preferred slopes meet ADA accessibility standards of 8.33%; slopes should not exceed 15%
- Water level should be deep enough to enable launching without damaging boat (preferably at least 2')



Figure 35.2 High use impact causing erosion Delaware River Photo Courtesy: Tim Palmer

Vegetated banks with informal launch and take-out sites can be fragile and subject to trampling by paddlers who may be unaware of their impact (*Figure 35.3*).

Good design and management practices can prevent these negative impacts. Properly graded slopes and a well delineated launch site (*Figures 35.1 & 35.2*) can confine paddlers to the area designed to absorb the impact.

Rocks, certain types of plants or other natural materials may be placed in a way that directs paddlers toward specified areas and paddlers can be educated about their potential impacts.

Water Trail Identify & Signs

4 types of signs are required for the trail:

- 1 Wayfinding Directional
- 2 Orientation
- 3 Hazard Warning
- 4 Interpretive Wayside

Water trail signs:

- provide exposure of the trail to attract more users
- educate them about the trail
- create a more environmentally sensitive outdoor experience
- increase a water trail's identity and public support

Wayfinding signs along the trail, particularly those noting hazards and dangerous conditions, can be helpful in safe use of the trail.

Wayside signs can provide interpretive information to the trail user and guide proper behavior on the trail.



Figure 36.0

Figure 36.1

Sign Ingenuity (Figure 36.3)

provided a wildlife benefit at the same time.

Figure 36.2

Wayfinding Road Signs

(Figures 36.0 - 36.2)

Road signs can help guide users to the put-in and take-out points and should be located at key intersections near the public access sites. But it is probably just as important to have a guidebook, map, and/or web page that users can access in order to find these areas and they can always use GoogleTM or MapQuestTM.

The Susquehanna River Trail Association identifies camping islands by placing a duck box at the head of the island and a Leave No Trace sign at the site itself. This addressed concerns about signs having a negative impact on a "wild" experience and this method



Figure 36.3

Water Trail Sign Examples



Figure 36.3

Wayfinding Trail Signs

Signs to mark the route are generally not necessary on water trails.

Signs marking trail takeouts (*Figures 36.3 - 36.7*) and side trails (*Figure 36.4*) from the water are a good idea. It is not always obvious from the water which facilities like docks and launch ramps are public and part of the trail.

It is also a good idea to mark major bridges from the water (*Figure 36.8*) so paddlers can more easily orient themselves on a map.



Figure 36.6

WARNING

Figure 36.11

AHEAD!

Figure 36.7



Figure 36.8

Hazard Warning Signs

(Figures 36.9 - 36.12) Hazards such as waterfalls, dams, shipping channels, or blockages may be marked with signs or buoys.







Figure 36.12



Trail Launch Orientation Signs

These signs establish the identity of the trail and should:

- Be located at each water trail access point
- Be uniform in overall design
- Include critical information users need (i.e. map, river conditions to expect, hazard warnings, etc.)

Design should keep in mind that the average person spends no more than 45 seconds reading signs.



Figure 37.2 Upper Delaware River

Figure 37.0 Iowa Department of Natural Resources



Figure 37.1 Minnesota Department of Natural Resources



Figure 37.3 Hudson River Water Trail

Wayside Interpretive Sign Examples

birds that can be found there.

This is a local example of a wayside interpre-

tive sign developed by the NJ Meadowlands

Commission. It is located along the Mill Creek

Trail in Secaucus and shows the diversity of

000

The Wood Duck is one of the most colorful of North Ar

waterfowl. Its scientific name translates as "water bird in bridal dr

Figure 37.4

Wayside Interpretive Signs

Because they are located outdoors, close to the features they interpret, wayside exhibits can readily answer the questions visitors have - when they have them. By engaging visitors at the times and places they want information, the visitors' experiences can be made more meaningful and much more rewarding.

Wayside exhibits are effective for a variety of reasons:

- Wayside exhibits are always on duty
- They are available to visitors 24 hours a day, 7 days a week

Despite their simple, low-tech character, wayside exhibits can provide a compelling visual format. Current technologies allow the presentation of large, full-color illustrations, photographs, and maps.

Wayside exhibits foster a direct interaction between visitors and trail & park features. As visitors gain knowledge about a subject from one exhibit, they can look for related features or sites and along the trail and enjoy a more meaningful experience.



Figure 37.5





eted

Sign Materials

Material Recommendations for Wayfinding and Hazard Warning Signs:

The following are specifications from the Minnesota Department of Natural Resources for aluminium and plastic signs. Signs with these types of specifications are readily available from sign vendors. www.vosssigns.com Price Range

Stock 12"x12" .063 gauge aluminum reflective \$7.15

Custom 9"x12" .063 gauge aluminum custom 2 color \$17.95 + set up fee

Figure 38.0 Examples of sign materials specifications from Minnesota Department of Public Resources





Figure 38.1 Phenolic panel installation

Materials Recommendations for Launch Site and Wayside Signs:

Effective interpretive signs rely on good graphic design and visual details and therefore they require different substrates and processes than standard wayfinding signs. They are a considerable investment and should be made with materials that will last, resist fading, vandals, and theft. DHPL Phenolic panels fit those requirements and allow for full color, detailed graphics to be embedded in them. They have a 20 year warranty. www.fossilinc.com

Price Range

.5" dHPL Phenolic Graphic Panel 24" x 36" \$468 .5" dHPL Phenolic Graphic Panel 30" x 40" \$721

	Cateline .	
 X		
		+

38.2 Trail-side interpretive sign Mill Creek Trail, Secaucus

Analysis of outdoor display sign materials* Iowa Department of Natural Resources

Material	Price range	Longevity
1/8" aluminum thermal printed with UV coating	\$250-400	Three to four years before images begin to fade due to UV; may be able to extend life by posting vertically facing printed side north. Not "vandal resistant"
Fiberglass- embedded	\$900-\$1,500	Warranted for 10 years; can last 20 years and more; considered "vandal resistant" because image penetrates into fiberglass layer (scratchproof), and paint/etc. can be burned off. No UV fading. Still not bulletproof!
Fossil Phenolic laminate/ composite	\$500-700 (including design, layout, production, layout proofs, color proofs, and shipping	Warranted 20 years, can last 20- 30 years; exceedingly vandal/UV resistant.

*Prices may be dated and will vary



Figure 38.3 Sign post specification sheets Fossil Graphics Inc.

Trail Identity

Perhaps one of the most important components of identifying a trail is its logo. The logo will be included in trail signs and in any published trail guidance and maps, so considerable time should be invested in creating a visually distinguished logo. The logo should create a recognizable impression in the mind of the trail user.

There are three basic types of logos, which can be used alone or combined within one design:

- Illustrative logos (a logo which clearly illustrates what the trail represents)
- Graphic logos (a graphic, often an abstraction, of what the trail represents)
- Font-based logos (a text treatment which represents the trail)

A good logo catches the eye - it makes the observer curious or engaged, if only for a short moment.

So what makes a "good" logo? "I know it when I see it!" is a typical answer and there is some truth to this. But even if a good logo 'just is', there are elements for making it happen. Important things to consider are simplicity, color, contrast, line and form, especially simplicity.

It is a good idea to have a professional graphic artist work with you to come up with a distinctive logo.

Adapted from "Building, Managing & Marketing Water Trails: A Practical Guide" North American Water Trails in cooperation with the National Park Service Rivers & Trails Program















Trail Guidance

Trail guides and guidebooks, including a detailed map, are the fundamental tools for communication with trail users. Properly designed, they can greatly enhance the water trail experience by aiding in navigation and geographic orientation and by deepening the appreciation of the natural, cultural, and historical attributes of the waterway.

Guides and brochures can also entice trail users to get involved with river and bay stewardship and to become the trail champions that every waterway needs.

For many water trails, a foldout map and guide brochure will suffice. Such a format may be perfect for short dayuse trails like the HRWT. The maps can be made available for download on a web site.

No matter what option is selected, beware the tendency to provide too much information. While the safety of users is paramount, revealing every nuance of the waters and the shoreline detracts from the user's sense of discovery and minimizes the challenge of the outdoor adventure. Developing a good trail brochure or guidebook requires a keen understanding of all facets of a trail, but also an artistic flair.

The services of a graphic designer can help insure the design of a successful map & guide.

Adapted from "Building, Managing & Marketing Water Trails: A Practical Guide" North American Water Trails in cooperation with the National Park Service Rivers & Trails Program



Figure 39.1 Tennessee River Blueway Map & Guide

Figure 39.0 Tennessee River Blueway Map & Guide

Map Examples



Figure 40.0 Section Map - Susquehanna River Trail





Seattle Area Lakes to Locks Trail Map



Figure 40.2 Lake

4" x 6" closed, 23" x 17" open Lake Superior Water Trail Section Map

Trail Maps

It is important for trail maps to be clear and concise, relaying information that is critical to paddlers well being. Besides the standard information such as launch locations and amenities it is important to include information about local weather extremes, tide information, dams and other hazards. In the case of the Lower Passaic River, information about water quality and minimizing primary contact will be included. The maps can be printed on waterproof paper (suggested) and put on a web site for download.

Downloadable Maps

Click on a map image below to download a PDF version of the map for that section of the Lake Superior Water Trail.



NOTE: These maps are not adequate for sole use as navigational aids. Figure 40.3 Web site for Lake Superior Water Trail w/ downloadable section maps

Trail Guidance on the Web

It is a good idea to include information about the trail on a web site. Increasing numbers of people rely on the internet as a major source of information. Internet search engines such a Google[™] have transformed the way people look for information on topics they are interested in or need information on. A search of "Lower Passaic River Water Trail" can lead people to a web page with in depth information about the trail including maps. People are more likely to spend time reading trail information on the internet than at a wayside sign. A web site is a good place to post a Map & Guide in PDF format for users to download. This makes the maps available to anyone with a computer and internet access and can save on printing and postage costs.

Appendices

Appendix A

Proposed Garfield Riverfront Walk Not to Scale





Plan as displayed on the Passaic Valley Sewerage Commissioners website http://pvsc.com/rr/dundee/index.htm

Signage water trail orientation signs

Water Trail Orientation Signs

Water Trail Orientation Signs are located at water trail access points. They orient users to the water trail, providing concise information about the relevant section of the water trail, including safety and emergency information, resource regulations, recreational information, and a description of the nature of the experience, with photos. A detailed map is the focal point of the signage. Water trail orientation signs are used by multiple types of users, from novices and recreational day paddlers to experienced users on extended trips. While the signage may also note points of interest and potential wildlife sightings, they do not truly serve the interpretive or navigational functions of a printed map and guide.

Panel Specifications:

SIZE: 36 x 48. Unique conditions may warrant flexibility.

Orlentation: Portrait or landscape for North-South or East-West water trails, respectively.

Graphic Appearance: Layout is flexible, but the information should be logically organized and meet ADA standards for readability. Text should be minimal and relevant to the immediate section of water trail. A visually-appealing balance should be struck between text, graphic content and "white" space. As with other types of Chesapeake Bay Gateways Network signage, all panels must include the signature black bar and Chesapeake Bay Gateways Network logo.

Signage water trail orientation signs

Water Trail Orientation Signs

The information below and the example on the next page indicate basic content and layout for typical water trail orientation signs. Detailed design of actual signs for an entire water trail system may very somewhat from this template, but should include the basic elements indicated.

Header

Trail Name and Section on solid color bar

Nature of experience

- Narrative description of water trail
- Whitewater areas and/or water class ratings
- Suggested time between access points
- Cultural and natural points of interest
- Potential wildlife encounters

Safety

- Relevant seasonal issues
- Emergency Contact Information
- Weather Contact Information
- Major Safety Concerns and hazards
- Basic Safety information such as lifejackets
- Water traffic issues
- Dam releases
- Tides
- Portages

Recreation

Camping

Resource Issues

- Leave no trace
- Sanitation
- Sensitive resources such as seasonal nests, endangered species, etc.
- Other relevant resource regulations

Photos

- Water trail experience
- Local points of interest
- River conditions,
- Key resources

Map

- Generally consistent with NPS Wayside map standards
- Named access sites with available services
- Points of interest labeled
- Scale
- North arrow
- River miles
- Major roads
- Legend
- Fueling stations for power boaters

Context Map

- Shows water trail map in relation to the wider region
- Shows major roads and highways

Footer

- Black Bar
- Logos and Branding: Use of logos on panels should be limited to the major identity brands of the water trail, such as the water trail segment itself and the Chesapeake Bay Gateways Network. The black bar and Gateways Network logo shall be included. To avoid visitor confusion and visual clutter, logos should not be affixed to identify organizational partners or funders (e.g. the National Park Service).

Signage water trail orientation signs

Information on panels should be relevant and may include the following*:



* Also reference previous page.

Addendum i PVWC Portage LITTLE FALLS

location

Principle Street: Union Blvd. Intersecting St: Main St.

40° 53' 07.10" N 074 ° 14' 04.96" **W**

Portage take-out is approx. 40 yds. upstream of the Passaic Valley Water Commission intake gate house. Paddlers would need to cross the intake canal at the gate house and continue on the asphalt roadway towards Union Blvd. Paddlers would then descend the slope just before the bridge to the proposed put-in. (Figures 41.0 & 41.1)

existing conditions

- Passaic Valley Water Commission owns land (Figure 41.1)
- Green Acres program in negotiations to purchase
- Fence in place at gate house and along Union Blvd. (Figure 41.2)
- Asphalt roadway from gate house to Union Blvd. (Figure 41.0)
- Rocky shore requires little for launch development (Figure 41.4)

Mile 3.3 Distance to Previous 0..34mi. County: Passaic

Distance to Next 1.7mi. Ownership: PVWC

recommendations



Shore Take-Out & Put-In Proposed

Park Ramp

ld Ramp

End Lester St. arkway Ramp

eid Boat Club

- Establish take-out above gate house at least 300 ft. above dam
- Route portage across canal to area just before bridge
- Establish put-in on shoreline near bridge
- Install trail & portage signs

Figure 41.0



PVWC Portage



Figure 41.2 Passaic Valley Water Commission gate house at intake canal



Figure 41.3 Possible platform next to gate house for portage over canal



Figure 41.4 Potential portage take-out above gate house



Figure 41.1 Schematic of proposed portage over Passaic Valley Water Commission intake canal and around the Little Falls. Not to Scale

the challenge

The Passaic Valley Water Commission owns most of the land along the north side of the river where a portage is possible. A portage route here would be approximately 275 yards long (*Figure 41.1*) as compared to the 0.8 mile portage on the south side of the river (*Pg. 14 Figure 3.0*). The most significant obstacles to the portage on the north side are crossing the intake canal and private property issues. We were recently made aware that the NJDEP Green Acres Program is in negotiations to purchase riverfront property from the Passaic Valley Water Commission. A successful negotiation and acquisition would bring a portage here closer to reality and would make the northern portage the preferred alternative because of the significant reduction in the length of the portage route.

required action

- Coordinate w/ NJDEP Green Acres Program
- Design portage around gate house
- Design launch improvements
- Determine permitting requirements and secure if necessary
- Secure funding
- Determine sign placements & install -include portage route

Addendum ii Wallington VFW

WALLINGTON

location

Principle Street: Hathaway		
Intersecting St:	Main Ave	

40°51'19.96"**N** 074°06'44.31"**W**

Existing VFW Hall with paved parking area behind main bldg. Lot has mature trees around perimeter but not at the edge - cars park in between the trees. The parking area perimeter is fenced in including the riverside and potential launch area. The parking area has "members only" signs posted. There is a small park adjacent to the north with a roller hockey rink, bathrooms. The DPW is across the street.

existing conditions

- Existing ramp (steep & needs upgrade)
- Existing parking behind VFW building
- Small park adjacent to the north
- Shelter on front porch of VFW

Mile 18.29 Distance to Previous 0.97 mi.

County: Bergen

Distance to Next 0.22mi. Ownership: Public

recommendations





Ramp/ Shore Launch Proposed

- Improve ramp materials in accordance with grade
- Remove invasives & replant natives
- Provide sign indicating location of shelter
- Install trail signs

Figure 3.0b





Figure 42.1 Front of VFW Hall on Main Ave

Figure 42.2 Parking area behind VFW hall. Launch area in yellow rectangle

Figure 42.3 Invasive Japanese knotweed stand on both sides of launch area

Figure 42.4 Ramp from top down



required action

- Coordinate w/ mayor on launch development
- Design launch improvements, address steepness issues
- Determine permitting requirements and secure if necessary
- □ Secure funding
- Determine sign placements & install

Addendum iii

Sea Scout Site

KEARNY

location

Principle Street	Passaic Ave
Intersecting St:	Rt. 7

40° 47' 07.12" **N** 074° 08' 51.46" **W**

This is the site of the former Sea Scouts. There is a main building w/ smaller ones. There is a backyard that leads down to a decaying wood bulkhead and pier. The town has purchased the property and is the process of renovating the building. The town would like to reestablish river access here via a floating dock attached to the pier.

existing conditions

- Building under renovation
- · Decaying wood bulkhead and pier structure
- Small park adjacent to the south
- Shelter on front porch of VFW

Mile 24.66 Distance to Previous 0.63 mi.

County: Hudson

Distance to **Next** 1.62mi. Ownership: Municipal

recommendations



- Renovate pier structure and attach floating dock w/kayak module
- Create overhang from rear of building to provide shelter
- Remove invasives & replace w/ native plantings
- Designate parking area
- Install trail signs

Figure 43.0





Figure 43.1 Former Sea Scout building on Passaic Ave.

Figure 43.2 *Rear of Scout building*

Figure 43.3 View of rear yard from side gate looking towards river

Figure 43.4 View of rear yard from front to river

Figure 43.5 Existing bulkhead & pier conditions

Figure 43.6 Adjacent parkland to south of building



required action

- Coordinate w/ business administrator on site development
- Design pier renovation & floating dock w/ kayak module
- Determine permitting requirements and secure if necessary
- □ Secure funding
- Determine sign placements & install





preserve, protect & restore reconnect communities to the River.

For more information contact:



Jerry Willis NJ Project Director Rivers, Trails & Conservation Assistance jerry_willis@nps.gov



Tom Pietrykoski Scientist, PVSC Chair, LPSRA tpietrykoski@pvsc.com



Michele Bakacs Watershed Manager NJDEP Division of Watershed Mgmt. michele.bakacs@dep.state.nj.us

Department of Environmental Protection Division of Watershed Management

State of New Jersey

Hawthorne Ballfields 🧕

The Great Falls

Pennington Park Paterson

McBride Ave Platform

Hinchcliffe Stadium 🦲

Lijoi Riverfront Park West Paterson

Paterson

he Little Falls

Little Falls

Two Bridges

Suchorsky Park

Little Falls

West Side Park Paterson

River Street

Paterson

Paterson

Dundee Dam Clifton/Garfield

Dundee Island Park

Dundee Preserve

Passaic

Clifton

Nutley Boat Ramp/Rt 21

Riverbank Park

Newark

Nutley

Memorial Park Fair Lawn

Elmwood Park Ramp

Langan Site Elmwood Park

Garfield Ramp

Elmwood Park

- End Lester St. Wallington Parkway Ramp Wallington

Nereid Boat Club Rutherford

Kearny Point

Keamv

Riverside County Park

N. Arlington Fire House North Arlington

Riverbank Park Kearny