

Introduction and Purpose

With outstanding new parks and multiuse connections being completed in the upper Charles and in the lower basin below the Esplanade the time has come to restore the aging paths and parkland along the historic Charles River Basin. The Charles River Basin Master Plan published in 2002 provides a comprehensive framework for this work. This Watertown riverfront project together with the Nonantum Road restriping initiative, the bank restoration work in Squibnocket Park, and the plans for a new community rowing boathouse next to Daly field, work on the Watertown riverfront could begin to unlock the full potential of the Charles River Basin in its upper reaches. A three mile fully accessible walking and running loop here would be a major new amenity for the neighborhoods in Watertown, Brighton, and Newton and could be used as a 5K running course for fund raisers.

Restoring the one-mile Watertown riverfront below the falls is the logical next step in building on the tremendous success of the new path system between Watertown and Waltham. This mile long crescent shaped park together with the river offers a rare opportunity to revitalize an existing “park within the park” and reconnect a community to its riverfront. With intelligent design, judicious capital investments and a more serious commitment to long term stewardship the “Watertown crescent” could emerge as one of the loveliest natural settings and accessible parks along the seventeen miles of Charles River Basin shoreline. The challenges are many but the return on investment of time and money in this particular stretch of river would be significant. The purpose of this project is two fold: 1) to develop a complete set of plans and obtain all necessary permits for the restoration of a riverfront park in Watertown that is a critical link in the regional Charles River Reservation system, and 2) to plan and commit to a more sustainable partnership approach to programming and maintenance of this resource.

Sponsors

Advocates have been thinking about working on this stretch of riverfront for decades. This current initiative resulted in part, from a trip along the Charles River corridor taken by Commissioner Stephen Burrington, DCR planner Dan Driscoll, and David Solomon and Herb Nolan of the Lawrence and Lillian Solomon Fund in the spring of 2006. The Solomon Fund is a family foundation that was begun in 2005 and is committed in large part to the revitalization of parks and open space in the Boston Metropolitan area. A unique public private partnership was proposed and agreed to in principle. Such a partnership would rely on private partners to co manage and fully fund planning, design, and permitting for park restoration and enhancements. Public partners would then take the lead in procuring public funding and implementing the design improvements. While commitments for public funding cannot be made in advance, there are few DCR projects that have gotten through design and permitting that have not been fully funded. Private partners could also play a role in the ongoing programming and maintenance of the resource working with the DCR as lead management agency.

A Riverfront Stewardship Group made up of representatives of the Department of Conservation and Recreation, the City of Watertown, Watertown residents, and the Solomon Fund was convened in October of 2006 to begin work on this planning effort and will continue to meet throughout the planning process.

Roles and responsibilities

- The Riverfront Stewardship Group will oversee the planning process, interface with and represent the broader community, and help identify and procure additional sources of funding if needed. Subcommittees may be formed to address design issues and maintenance issues
- The town staff will facilitate committee meetings and public outreach and coordinate with the Solomon Fund and DCR
- The Department of Conservation and Recreation will co manage this effort with the Solomon Fund and provide timely technical advice.
- The Solomon Fund will manage the park planning and design process, help develop a scope of services, assist in selecting a consultant, and manage the design contract. The Solomon Fund will fund senior staff support and pay for design services in whole or in part.

Focus area

The proposed focus area includes a mile long crescent shaped swath of parkland along the south bank of the river between Watertown Square and the Watertown Yacht Club. The mostly wooded parkland encompasses some sixteen acres from the edge of water to parkway curb as well as limited parkland on the north side of the parkway. The specific restoration focus would be the riverbanks, woodland, and pathway along the shore that runs for approximately 5,500 linear feet – a bit over a mile.

This focus area does not include Charles River Road itself nor the site of the Watertown Yacht Club and former riverfront arsenal site (Squibnocket Park) just to the east. Establishing a riverfront path in Squibnocket Park and at Daly Field should be actively promoted future phases of work.

Planning context

The Charles River Basin Master Plan, published in 2002, is the guiding document for the DCR in its management of the Charles River Basin. It can be accessed on line at the [Charles River Conservancy web page](#). A text only version of the relevant chapter is appended to this document.

Regional Context

The Watertown riverfront park is part of the historic Charles River Basin that stretches for eight and a half miles from the Science Museum at the old Charles River Dam to Watertown Square. The Charles River Basin is considered the heart of the metropolitan park system conceived in the 1890s. This parkway-lined stretch of river is being linked upstream and down stream to a large regional network of shore paths. An extraordinary system of pathways and boardwalks extending from Watertown Square to Moody Street in Waltham is near completion. The upper Charles with its new paths and overlooks at the rivers edge should be considered a model for the Watertown riverfront. To the east, the new parks below the old Charles River dam will connect the river paths to the Boston Harbor. With these new parks and path systems nearing completion attention is returning to the well-worn parklands and pathways of the original basin. These are now the weak link in this regional system.

The western portion of the Charles River Basin near Watertown with its wooded hillsides and broad water surface provides a rare bucolic setting within an intensely urban area. It is a transitional landscape linking the more formal lower Charles River Basin to the more pastoral

upper regions above Watertown. Better access along the shore and onto the water would allow people to enjoy this landscape in a way that is all but impossible today. Hundreds of millions of dollars have been spent over the last thirty years to clean up the river and improve water quality. Improving access to the river will capitalize on this wise investment in clean water.

The Watertown neighborhood at Charles River Road is one of the very few that fronts directly onto the Charles River Basin. Residential neighborhoods near Harvard Square and along the Esplanade are the only others. The advantages of having a residential neighborhood facing a park are significant. Security and the chances of having citizens actively engaged in stewardship are much higher here than elsewhere. Similar to Harvard Square, Watertown Square directly abuts the river. Visitors to this part of reservation will have direct access to restaurants and other services – another significant advantage of this location.

THE CHALLENGE

Challenges – Use

Use and programming

The riverfront park is a linear park for mostly passive enjoyment of the river setting. People come to stroll along the shore, bicycling, sun bathing on the lawn, walk their dog, bird watch, and some to just park their cars and watch from the parkway. Some bicyclers are passing through on a much longer rides along the Charles River. The pathways are the primary facility for these users.

Social gatherings are limited by the lack of benches and obvious places to congregate.
(elaborate)

A limited number of active uses occur in the narrow 600 foot field near the center of the park. Here small groups set up to play volleyball during the summer months and informal soccer games occur. Basketball courts and a tot lot have taken up a portion of this field. While the tot lot is very popular it is not clear how well the basketball courts are used. A group of twenty to thirty people have begun to use the bicycle paths along side Charles River Road for remote control car races. The excessive noise from this use disrupts the passive enjoyment of others in the park and in neighborhood.

Some fishing along the shore occurs in discrete places where access to the water is possible and this activity has increased in recent years. These sites are often littered with things left behind due in part to the lack of trash receptacles. The reintroduction of shad to the Charles River this year could lead to increased fishing in the future.

Given the breadth and beauty of this bend in the river that widens to over 800 feet one might expect to see a lot of public canoeing and rowing. Other than the occasional rowers from Community Rowing Inc, there is little use of the water sheet for public rowing or paddling and no convenient place to put in car top boats.

Some users that one might expect to see along the riverfront are largely absent. Senior citizens seem to be missing to some extent, due perhaps to the condition and seclusion of the shoreline path. Young children are to be found only in the vicinity of the playground and women are largely absent from the shore path below Perkins hill. The lack of visual access and perceived safety is limiting access significantly.

Few blind students from the Perkins School of the Blind dare cross the roadway to walk in the park. The existing shore side path, which brings visitors within sight and sound of the water's edge, is inaccessible to most handicapped individuals. Likewise few people from the growing Arsenal complex venture upstream during their lunch hour or after work. Overall this riverfront park appears to be underutilized by all but those who live near by and understand its hidden qualities.

Watertown has never attempted to replicate the Riverbend Park model in Cambridge whereby the parkway is closed for recreational use on Sunday afternoons during the warmer months. The potential of the riverfront field or parkway to be used as a place of celebration has not been explored.

Historic significance

This bend in the river just below the falls was an important location for early Native American's who came here to fish around 8,000 years ago. It was the stepping off point for Roger Clapp and the Dorchester men, the first white settlers of Watertown in 1630. The symbolic offering of welcome by the native American's of a bass fish to the European explorers is engraved in the Watertown seal.

The Saltonstall monument to the founders of Watertown is one of the most impressive monuments in the Charles River Basin. Despite this rich history the significance of the Watertown riverfront remains largely hidden to visitors.

Challenges – Stewardship

Maintenance

The DCR does a credible job of mowing the grass along the parkway and in the field. Mowing and the occasionally cutting back of bank vegetation near the square is where park maintenance ends, however. There is little or no woodland maintenance, minimal effort to control invasive plants, no shore path maintenance, and no bank stabilization. The results are predictable with dead or dieing trees, bank erosion, and invasive plants throughout the shoreline zone.

Partnership support

There is no local friends group that has identified with the parkland and the town does not currently put resources into the park. The Charles River Conservancy has a volunteer coordinator who has organized helpful but sporadic maintenance efforts in the past.

Challenges – Access

Parking

Unlike most other parkways along the Charles River Basin the Charles River Road accommodates parallel parking on the side closest to the river. Over 250 cars can theoretically be parked along the parkway though in practice the cars tend to cluster at the western end where the park and Watertown Square are most accessible. At the eastern end a continuous guardrail and lack of access paths to the river discourages people who wish to park and walk

Pedestrian access

Cross walks: There are no pedestrian cross walks linking the abutting neighborhoods to the park across Charles River Road. The parkway is not heavily used leaving opportunities for pedestrians to cross; however, cars tend to speed on this broad parkway. The vertical and horizontal curves in the vicinity of Perkins School compound the danger to pedestrians. There appear to be three or four desire lines for crossing:

- The western end of the town park (Saltonstall statue) near Riverside Street
- The terminus of Irving Street which is a feeder street from the neighborhoods
- The back side of Perkins School for the Blind (part of a Perkins proposal to reconfigure their parking lot)
- The end of Paul Street (or Pequossette St.) where people have been observed stepping over the guard rail and climbing down the slope.

Once one is safely on the riverside of the Parkway there are substantial barriers to reaching the shore. Hundreds of feet of highway style guardrail and steep slopes limit access on the eastern half of the park. A steep incline and the absence of pathways limit access on the western portion of the park.

Sidewalk: A 5-7 foot wide walkway next to the curb for all but 600 feet of the mile-long Charles River Road accommodates pedestrians. A 600 foot section dips down below to avoid a steep cross slope causing some pedestrians to step out onto the parkway shoulder to continue their walk up above. Occasionally recreational bicyclers and roller bladders will use this path as well making it a de-facto multi-use path. It is too narrow for this type of two way use.

Shoreline Path: The condition of the shoreline pedestrian pathway is extremely poor. This is the area closest to the river where most people would want to go yet this mile long pathway is breaking up and has been for years. It is too narrow in places even for two people to walk abreast of each other. The narrow bituminous paving has been heave by tree roots along much of its length. It is too close to the shoreline in many places making it susceptible to erosion. An entire section has fallen into the river in one place.

This is the one pedestrian route most in need of redesign. The shoreline path is perceived by many to be unsafe due in large part to being screened from view by invasive plants.

Handicapped access: There are no designated handicapped parking spaces and curb cuts to accommodate wheel chairs along Charles River Road. Steep slopes between the parkway and the park proper limit handicapped access to all but the Watertown Landing end of the park. Safe shoreline trails for visually impaired park users are missing entirely thus limiting use by Perkins students.

It should be noted here that the Charles River Master Plan identifies the opportunity for a pedestrian bridge across the Charles River in the general vicinity of where Irving Street meets Charles River Road. Were such a bridge to be built it would shorten the walking loops around the upper basin and connect Watertown and Newton neighborhoods on the other side.

Bicycle Access

The narrowing of Charles River Road during the Charles River Basin master plan process six years ago dramatically improved access for bicyclists and increased parking along the parkway for visitors to the reservation. Six foot lanes in either direction accommodate serious bicyclers who are comfortable bicycling with traffic. As mentioned above some recreational bicyclers will use the sidewalk and mountain bikers are not uncommon on the shoreline path. There is only one small bicycle rack provided in the park at the Watertown landing.

Water access

The narrow 100 foot wide channel near the square widens to over 800 feet wide near the Watertown yacht club making it one of the largest areas for boating in the upper basin. The formal granite landing and fixed dock at Watertown Square is the only one of its kind in the upper basin. This is a wonderful asset for the riverfront park but is limited by the fact that it is not handicapped accessible and is fixed and therefore of limited use to small hand powered boats such as canoes and kayaks.

Site amenities

There are very few park benches along this portion of the Charles River and no trash receptacles. The lack of vehicular access to the shore path limits the placement of trash barrels that tend to become a nuisance if they are not emptied on a regular basis. Littering is a problem in high use areas such as the playground and Watertown landing.

Bathrooms are absent as they are along most of the Charles River reservation. The bathroom at the Watertown Yacht Club is made available upon request but is not advertised.

Challenges – Landscape

Woodlands and invasive plants

It is possible to drive along Charles River Road or walk along the paths and not know you are next to a river. A wall of crowded trees and invasive plants have chocked off visual access to the river along much of the mile long shore. Historic photographs of Perkins School for the Blind from the beginning of the 20th century show a mostly open landscape along the river. This has changed dramatically. This is a river park where the river is largely absent from people's experience. Because large portions of the shoreline path are obscured from view there is a perception of danger by some users who elect to stay on the walkway next to the parkway.

Poison Ivy is particularly aggressive on the banks and in the woodland discouraging use of the reservation by families with young children. Aggressive vines have covered and killed entire trees. These invasive plants do have habitat value, however, and any management plan aimed at controlling invasive plants will have to find substitutes which function as well or better in providing habitat and food for wildlife.

Bank erosion

The river bank and the steep slopes opposite the Newton shore are severely eroded and compacted in places as a result of undirected pedestrian traffic, poor drainage patterns, and, possibly, wave erosion. Vegetation is scoured off, tree roots are being compacted, and land is eroding into the river. This has destroyed habitat in the riparian zone.

THE VISION

Guiding principles and goals

The replacement of the existing shoreline path and the restoration of the shoreline woods and eroded bank are the main objectives of this plan. The design of these elements needs to be guided by the following principles and goals.

USE

- Do not duplicate uses that are or could be provided in nearby city parks.
- Promote only those uses that rely on or are enhanced by direct water access and river scenery. Prioritize passive uses such as walking, picnicking, sunbathing, recreational boating and bicycling, educational activities and the like.
- Provide a welcoming park for children, seniors, and handicapped individuals
- Provide more places to sit and socialize along the river
- Accommodate only those active uses that do not unduly impinge on the passive enjoyment of the reservation. Limit active uses to designated areas to limit conflicts.
- Maintain the open field as a flexible space able to accommodate informal pick up games of volleyball or soccer, and occasional larger town gatherings if desired. Maintain the smaller size field spaces to discourage over use.
- Support community wide gatherings for special occasions but strictly limit the number and scope of these with safeguards in place for park clean up. Consider parkway closures for special occasions.
- Support river access for car top boaters (canoes and kayaks) and for handicapped individuals if possible.
- Encourage dog walkers to use the park by providing doggie mitts and waste tubes in key locations (Fresh Pond system).
- Provide a few long picnic benches in an accessible location for social gatherings. Make them movable so they can be joined together and/or moved to avoid erosion.
- Provide trash receptacles at key gathering points once a system is devised for emptying and maintaining them.

Explore the feasibility and suitability of the following elements

- A boat and bicycle rental program based in the park. This would require a new boat ramp and float and, possibly, a storage facility.

- A food vender probably in the vicinity of the Watertown landing. (Could this be boat based at the landing?)
- A portable bathroom that would be handicapped accessible and located at a central point in the park.

STEWARDSHIP

- Provide a well-balanced ecology-based maintenance regime
- Increase the level of maintenance significantly to sustain a healthier landscape and higher levels of use.
- Establish an active friends group to champion and directly support the park

DESIGN

Character

- The dual character of the Watertown waterfront as both a managed recreation area and a nature preserve must be understood and harmoniously balanced.
- The look and feel of the park should remain as natural and pastoral as possible in keeping with its setting.
- All site furnishings and structures should be made of natural materials and subsumed to the landscape.

Access

- Provide universal access (ADA) at logical routes. A fully accessible loop from the sidewalk to the river path at the west end of the park is easily achieved. More difficult would be universal access along the base of Perkins Hill or down off the hill. Coordinate with Perkins School for the Blind.
- Provide for safe pedestrian crossings of the parkway in several locations. Consider traffic calming devices if warranted. These may be as simple as cross walks and yield signs.
- Where the existing sidewalk leaves the parkway and descends a steep slope into the woods (a distance of 600 feet), explore options to keep the sidewalk at the curbside. This will provide better access for handicapped individuals coming from Perkins School for the Blind.
- Anticipate a new pedestrian bridge across the river as a future phase of work
- Shoreline path:
 - Provide a continuous shoreline pathway from the sidewalk near Watertown Square to the Watertown yacht club. This path should be broad enough to accommodate three people walking abreast but may need to narrow down at the base of Perkins hill. This path should ideally be accessible to a golf cart or a policeman on a motorcycle.
 - Set this pathway back from the shore by a minimum of six to ten feet to restore a buffer zone and prevent shore erosion.
 - The shore path should feel natural, diverse, and inviting for exploration. Provide a curvilinear layout that emphasizes walking and discourages speed on mountain bicycles.
- Provide numerous designated access points to the riverside through the use of stone embankments (in order to discourage shore access elsewhere). Consider the use of very large boulders to hold the bank and provide sitting places close to the water. Bracket small gravel beaches with boulders for use by canoers and fishermen

- At the base of Perkins Hill explore two options: 1) a pathway cut into the slope with a stone retaining wall similar to those along the parkway, and 2) a boardwalk similar to ones used upstream which would require the removal of shore side vegetation. Assess the long-term sustainability and costs of both.
- Provide vehicular access into the park for utility vehicles on either side of Perkins hill.
- Remove unnecessary guardrail at the east end and provide openings in the guardrail to facilitate access to the shore. Consider alternatives to the standard highway guardrail.
- Avoid the use of bituminous concrete, if possible, and explore the use of pervious pavements similar to those used on the upper Charles River. Assess the long-term maintenance requirements of alternative approaches.

Landscape

- Identify ten year maintenance back log; remove dead trees
- Selectively clear trees to reclaim key scenic vistas.
- Restore the woodland to a diverse and health condition with selective clearing and planting of new trees over time.
- Reduce or eliminate invasive plants and substitute other native and non-native plants that can be better managed to both preserve views of the water and preserve habitat. (A suggested planting list prepared by Peter Del Tredici of the Arnold Arboretum is appended).
- Stabilize and replant the eroded slopes along the river embankment and at Perkins hill.
- Consider wild flower meadows instead of mowed turf in certain well-defined areas.

Signage and interpretation

- Limit signage to avoid graffiti.
- Integrate any interpretive materials into the natural materials of the park and keep these low key and unobtrusive. Let the natural environment speak for itself.
- Use natural materials for any interpretive markers. Upper Charles example.
- Clear several trees from in front of the Founders Monument to improve sightlines to and from the river.
- Work with Perkins School for the Blind to provide tree labels in brail for areas where students are apt to visit. Provide brail description at existing monuments.

Maintenance

- Link maintenance requirements to design
- Design all elements to be sustainable based on our emerging maintenance model. Keep maintenance requirements as simple as possible.